

**Intergovernmental Science-Policy  
Platform on Biodiversity and  
Ecosystem Services**

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**Plenary of the Intergovernmental Science-Policy  
Platform on Biodiversity and Ecosystem Services  
Third session**

Bonn, Germany, 12–17 January 2015

Item 7 (a) of the provisional agenda\*

**Rules and procedures for the operation of the Platform:  
nomination and selection of members of the  
Multidisciplinary Expert Panel****Compilation of curricula vitae of proposed members of the  
Multidisciplinary Expert Panel****Proposed members from Asia-Pacific States****Note by the secretariat**

1. The annex to the present note, prepared by the secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, compiles the curricula vitae of the candidates proposed for the Multidisciplinary Expert Panel, as submitted by Asia-Pacific States. The curricula vitae are reproduced as received, without formal editing.
2. The candidates are the following:
  - Ghulam Mohd Malikyar, Afghanistan
  - Rashed Al Mahmud Titumir, Bangladesh
  - Bojie Fu, China
  - Yi Huang, China
  - Junsheng Li, China
  - Haigen Xu, China
  - Randolph Thaman, Fiji
  - Vinod Mathur, India
  - Rosichon Ubaidillah, Indonesia
  - Yoshihisa Shirayama, Japan
  - Leng Guan Saw, Malaysia
  - Hussein Zahir, Maldives
  - Krishna Chandra Paudel, Nepal
  - Syed Najam Khurshid, Pakistan
  - Vincent V. Hilomen, Philippines
  - Nina Rivera Ingle, Philippines
  - Perry S. Ong, Philippines
  - Elpidio Ven Peria, Philippines

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\* IPBES/3/1.

## **Annex**

### **Compilation of curricula vitae of proposed members from Asia-Pacific States for the Multidisciplinary Expert Panel**

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# SEA

## **Ghulam Mohd Malikyar**

Name of Firm: Save the Environment-Afghanistan (SEA)  
Areas of Expertise: Agro-economy/ Agro-biodiversity/Air quality  
Date of Birth: 1962  
Marital status: Married  
Nationality: Afghan  
Add: H # 1, 1<sup>st</sup> i road, Karte Parwan, Kabul-Afghanistan  
Tel: 0093 700202719, E-mail:malikyar@gmail.com

### **Summary of Key Qualification & Experience:**

Mr. Ghulam Mohd Malikyar is the founder of the first Afghan Environmental Protection entity in Afghanistan (Save the Environment-Afghanistan (SEA) and worked as technical advisor with the organization for 10 years. His routine assignment is working for the environmental management and conservation of biodiversity in Afghanistan. In June 2010, he joint the government entity (National Environmental Protection Agency (NEPA) as Sr. Environmental Advisor. In June 2009 he supported the EIA studies of Kabul Metropolitan Area (Dehsabz project). March 2009, he joint SNC-Lavalin technical team to support the environmental management of Dhala Dam rehabilitation in Kandahar. During 2008, he has supported a program for municipal waste management plan for various cities in Afghanistan and greenery planning in eastern province of Afghanistan, coordinated an EIA training program for the World Bank partners in and associated the Environmental Impact Assessment of ASAP/USAID project in Afghanistan. He has been engaged under the Asian Development Bank/ADB for "Preparing the Energy Sector Dialogue and SAARC Energy Center Capacity Development/SAARC Regional Energy Trade Study (SRETS) from Dec-07 to May 08. During 2007 he's been Environmental Technical Advisor with the Asian Development Bank (ADB) to support the implementation of three main projects namely Kabul Air Quality Management Program, Renewable Energy and Poverty Reduction, and Natural Resource Management. Environment management program, protected areas, designated national park in Afghanistan has been major parts of his assignment. During 2004-2007 he has been coordinator for Kabul Air Quality Management to support NEPA in provision, installation and data analysis of Air monitoring system including development of Air Quality Management Strategy. During the years of 1998-2005 he has developed various reports on the status of environment, natural resources and biodiversity in Afghanistan. He has supported the development of various strategies, policies and reports for biodiversity, ecotourism development, GHG inventories, Air quality and protected areas management. His interest has been sustainable development of natural resources and biodiversity.

Mr. Malikyar has 20 years of professional experience in environment management, conservation of biodiversity, project implementation, analysis related to environment and renewable energy, including 9 years of consulting experience. He has worked in Pakistan, and Afghanistan (21% remote areas, 35% urban areas, 44% environmentally sound areas). He has worked on community mobilization for natural resource management, urban greenery and reforestation in areas with potential resources of natural forests.

### **2. Academic Degrees:**

- BS in Agro-economy and Ecology

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- Post-supplementary graduate in Agro-biodiversity, Natural Resources, and ecosystem management
- Post-Supplementary studies in Air quality management systems.
- Environmental Impact Assessment and Sound Design
- **Studies on remote communities behavioral systems, Agro-Ecosystem and ecosystem management, bio-technology, field research and conservation of wildlife, wildlife management and enforcement, wetland management, Habitat analysis, wildlife survey and research technology, agriculture power systems, forestry technology, natural resources and reclamation, ornamental horticulture, floriculture, nursery and greenhouse management, landscape architecture, irrigation and chemical management, turf and landscape management, food science and processing, and feedlot management**

## **3. Wildlife studies**

- Habitat Ecology
- Applied Population Ecology & Conservation Biology
- Environmental and Social Impact Assessment
- Policies and Laws in Wildlife Management
- Principles and Practices of Wildlife & Protected Area Management
- Visitor Use Management and Interpretive Planning in Protected Areas
- Management of Wetland and Coastal Habitats
- Eco-development Planning for Biodiversity Conservation
- Management of Wild Animals in Distress

## **Relevant Work Experience:**

1. Deputy Director General/Technical-NEPA
2. Environment Technical Advisor/ NEPA & SEA/permanent assignment
3. Member of technical board - SNC-Lavalin-Hydrosult/CIDA
4. Support environmental Impact Assessment of different development projects
5. Development of waste management and greenery plan for Jalalabad city
6. EIA training coordinator/World Bank/2008
7. National Advisor/SAARC Energy Trade Studies 1<sup>st</sup> Dec 2007-31<sup>st</sup> May 2008. Asian Development Bank (ADB). Reviewing the current status of the energy sector, identifying viable energy sector programs and projects enhancing efficient connectivity with other SAARC member states and other countries; preparing a national energy sector review report, including maps and transmission links, with special attention to regional projects.
8. ***Environmental Technical Advisor (Mar-Nov 2007)***: Mr. Malikyar supported the implementation of three different projects of Air quality management, renewable energy and poverty reduction, and natural resource management and biodiversity conservation under the **Asian Development Bank's** technical assistance.
9. **National Coordinator/ Kabul air quality management (Dec 2004-Dec 2006/Asian Development Bank (ADB))**: Mr. Malikyar has supported a number of international consultants in developing Air quality strategy, data collection and implementation of the project. During the course of the project implementation, he developed the emission inventory assets and data collection on different emission

## SEA

sources in Kabul. At the meantime, he supported in capacity building of Afghan counterparts and NEPA staffs. Facilitate participation of NEPA's staffs in International training programs in Air Quality control. Organizing training workshop at the national level for Afghans, site selection for AQ monitoring stations, emissions inventory, establishing AQ network and prepare guideline. In addition, Mr. Malikyar was directly involved in assessment of protected areas in supporting international experts in identifying areas, the challenges and the impacts of implementation of project in traditional livelihood and amenities.

10. ***Environment Management Advisor, June 2003 to Dec 2004 (Asian Development Bank)***. Mr. Malikyar has been working closely with the ministry of irrigation, water resources and environment to assist in developing environmental strategies for capacity building in environment, supported the ministry in environmental multilateral Agreements and environmental law and has been member of EA peer review committee. During the course of TA implementation, Mr. Malikyar facilitated various seminars, workshop, field visits and preparation of a number of environmental document including informal EA and EIA course curriculum. Translate the environment in Transition (strategic guideline) and the first EIA guideline and supporting capacity building of line ministries and staffs of MIWRE in environmentally sound design ). He drafted a number of guideline for environment protection and conservation feasibility in Afghanistan. translation of guidelines and environmental documents into local languages also been part of the activities. Mr. Malikyar has been involved in restructuring environment department for the government and support in developing Terms of Reference to all environmental department under the framework of MIWRE.
11. ***Renewable Energy*** and poverty alleviation in Afghanistan rural electrification: Under this program, Mr. Malikyar compiled and translated the first Community mobilizers guideline for rural electrification. Support ADB's renewable energy experts in developing renewable energy policy for the ministry of Energy and Water.
12. ***Executive body for environment Management and conservation, July 1999 to May 2003/SEA***. Mr. Malikyar has been involved in design, develop and implementation of environment and conservation projects in Afghanistan. In this periods, good number of reports, education materials, conservation strategies, capacity building and others were drafted and developed.
13. ***Study the status of environment: July 1999-May 2003***. Mr. Malikyar has been involved in inventory of natural resource, study the status of environment in Afghanistan and a report on the issue in two languages (English and Persian). An overall report on the status of Kabul zoo as the only education and recreation site in the city, resulted motivating the international zoo cares to invest for rehabilitation. As an active member of Environment Advisory Group, motivated the committee to emphasize on the environmental law and participation of the country in multilateral environmental agreement. Briefing the status of environment in Afghanistan in various occasions and a comparative solutions to mitigate the harms. Developing the conservation feasibility guideline.

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## **Employment History:**

June 2010-present: Sr. Environmental Technical Advisor/National Environmental Protection Agency (NEPA)

Dec 2008-30<sup>th</sup> May 2010: Environment Specialist/Dahla Dam Rehabilitation program supported by CIDA and Environmental Technical Advisor (SEA)

Dec 2007-May 08 Energy sector advisor/ADB/SAARC

Mar 07-Nov 2007: Environmental Technical Advisor (ADB)

Dec 04-Dec 2006: National Coordinator for Kabul Air quality program (ADB)

2003-Dec2004 Environmental management advisor/Asian Development Bank

1999-2003: Exe. Director/Save the Environment-Afghanistan (SEA)

1995- 1998: Prog. Officer/SAVE

1992-1995: Private company

1988-1992: Prog. Assistant/United Nations Humanitarian Assistance office for Afghanistan

## **Honors and Membership:**

- Member of professionals for Snow Leopard Survival Strategy/Seattle of USA
- Member of zoo educators/Zoo outreach/zoo federation/India
- Advisor to CMS/UNEP from Afghanistan
- Member of BBC consultation committee on environment
- Membership focal point for IUFRO in Afghanistan
- Member of IUCN in Afghanistan
- Focal point for cranes conservation in Afghanistan
- Member of climate change campaign/south Asian countries
- Member of South-Asia network on Wildlife Illegal trade
- Chairman of Governors Board (SAARC Coastal Zone Management Program)
- Member of SAARC experts (Environment and Climate Change Management)
- Focal point of Afghanistan in SAARC environmental programs

## **Languages:**

	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
Persian	Native	Native	Native
Pushtu	Good	Excellent	Excellent
English	Excellent	Excellent	Excellent
Arabic	fair	Excellent	Excellent

## **Selected Publications:**

- The environmental status in Afghanistan/research book
- A number of reports on environmental issues in Afghanistan
- Coordinate and Compiled workshops and report on Afghanistan's environment
- Report on the state of environment in Afghanistan/mountain environment
- Work on Afghanistan's environmental assessment
- The impacts of long lasting war on environment

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- Conservation feasibility in Afghanistan
- Environmental Impact Assessment's guideline for Afghanistan/translated
- Translate/audit Environment in transition (report)
- technical training modules for EIA
- compile/translation of renewable energy extension guideline for community mobilize
- author of air quality control guideline for Afghanistan
- author of progress in environment and conservation in Afghanistan (2001-2007)
- author of SAARC Energy trade report for Afghanistan (2008)
- conduct studies on the hazards of antenna radioactive on human health and environment
- support good number of environmental strategies, reports, policies, guidelines etc

## **Articles:**

- The problems of environment in Afghanistan
- Mountain environment in Afghanistan
- Community based natural resource management (case study)/published in report on Strategic Consideration for Development of Central Asia (CoDoCA)
- Fire storms in Kunar forest/research
- Impacts of drought on environment
- Falcon and houbara bustard status in Afghanistan
- The importance of lake Abe-Estada, Kole Hashmat Khan, Band-e-Amir, Ajar Valley, Pamirs, and others in Afghanistan
- Compilation of Communicable pictures on environmental issues as part of environmental education in Afghan refugee schools
- War and its backdrop on social environment in Afghanistan
- Develop informal environmental education curricula
- the status of Kabul zoo
- air quality in Kabul
- wetlands of Afghanistan
- wildlife of Afghanistan

## **Attend Conference/fora:**

- SAARC expert meetings on Climate change/Columbo, Nepal, Bhutan, and Male.
- Regional Conference on Climate change
- Expert meeting on Mountain of the world and climate change
- Conference on Strategic Development of Central Asia CoDoCA)/ China
- Seminar on environment problems in Afghanistan (Pakistan)
- Role of Women in development (Pakistan)
- Conference on biodiversity (Uzbekistan)
- 4<sup>th</sup> meeting of range states on conservation of cranes/USA
- meeting of American professors on conservation of birds/USA
- Meeting on Snow Leopard Survival Strategy in Seattle USA
- Better Air Quality Conference/2004/Agra India
- Conference on Asian City's Air Quality/Bangkok/2006

# SEA

- Water Eco-system and Biodiversity program/2006/Koshiro/Japan
- Member of Natural resource management writshop/Katmandu/NEPA/2008
- SAARC preparatory meeting/Maldives-Male/2008

**Skills:** Computer / latest programs (35-40 w/m), Pushtu and Parsian typing skills, others

**Rational experience:** Conservation of biodiversity, Management, Air quality management, Technical Advisory, EIA process, project design and implementation.

## Reference/s

1. Mr. Mostapha Zaher/DG/NEPA [dq.nepa@nepa.af](mailto:dq.nepa@nepa.af) tel: 0093 799400600
2. Dr. Ali Azimi/Senior environment specialist ([ali08@gmail.com](mailto:ali08@gmail.com))
3. Dr. Asif Ali Zaidi/ Prog. Manager/UNEP Post conflicts

Signature \_\_\_\_\_



Date \_January 2011\_\_\_\_\_



## **RASHED AL MAHMUD TITUMIR**

Chairperson  
Unnayan Onneshan  
16/2 Indira Road, Farmgate, Dhaka-1215, Bangladesh  
Tel.: +880 (2) 8158274, 9110636  
Mobile: +88 01711592612  
Email: rtitumir@unnayan.org

### **Profile**

Dr. Rashed Al Mahmud Titumir possesses a unique combination of working in diverse constituencies, namely, academia, governments, think-tanks, international organisations, and media. He is widely acclaimed for pioneering new approaches to public policies and designing innovative alternative solutions on the ground. He has led numerous projects for diverse organisations including governments, development partners and international organisations. He has led numerous projects for diverse organisations including governments, development partners and international organisations. As a senior staff member and an advisor, he has vast experience in working with international organisations, civil society and non-government organisations across the world in multicultural, multinational and diverse environments. He has provided advisory services to the government on multilateral negotiations such as WTO, UNFCCC, UNCBD, besides actively participating in those negotiations. He has been contributing to the multilateral processes as a member of different UN committees of experts. Dr. Titumir is on the boards of different regional and national organisations and is the founding Chairperson of the Unnayan Onneshan, a multidisciplinary independent think-tank and served on the Syndicate, the decision making body of university. He has been teaching economic theories as the founding faculty of the Department of Development Studies, University of Dhaka and also has taught economics at the Department of Economics, Royal Holloway, University of London, and at the Bangladesh Open University. He has written articles and books on macroeconomics, structural adjustment, poverty reduction, trading system, regional economic cooperation, climate change, agriculture, biodiversity, education and health. He has taught on theories of development and political economy in universities at home and abroad. Dr. Titumir received education from the universities of Dhaka, London and Carleton in economics, development and financial economics, and trade policy and commercial diplomacy respectively.

<b>Nationality</b>	Bangladeshi			
<b>Countries of Work Experience</b>	Bangladesh, United Kingdom, India, Pakistan, Nepal, Thailand, Vietnam, Cambodia, China and South Africa.			
<b>Language Skills</b>		<b><u>Speaking</u></b>	<b><u>Reading</u></b>	<b><u>Writing</u></b>
	English	Excellent	Excellent	Excellent
	Bengali	Mother tongue	Excellent	Excellent

### **A. EXPERIENCE IN PROJECTS**

#### **Team Leader - Key Projects**

<b>SL. No</b>	<b>Period</b>	<b>Name of activity/Project/funding organisation, if applicable</b>	<b>Job Title and Activities undertaken/Description of actual role performed</b>
1.	October, 2011 to June, 2013	Regenerative Agriculture and Sustainable Livelihood for Vulnerable Ecosystems (RESOLVE) - Pilot Phase Government of the Kingdom of Netherlands	Chief Technical Advisor Steering the project on-behalf of the Technical Partner, Unnayan Onneshan

		and Oxfam Novib	in a multi-partnership programme, involving international and national organization.
2.	February, 2011 to January, 2012	Enhancing the responsiveness of the government to address exclusion and inequality Christian Aid	Principal Advisor Provided guidance and conceptualization of Bangladesh Economic Update, presided multi-stakeholders' consultations and held policy dialogues
3.	May 2008 to December 2009	Agrarian Transition and the Livelihoods of the Rural Poor Oxfam International	Lead Consultant Contributed writing of the reports
4.	January 2007 to August 2009	Bangladesh Trade Support Programme (BTSP), Ministry of Commerce, GoB under-Local Consultants Tenders (LCT -1 and 2) Ministry of Commerce, Government of Bangladesh European Commission Amount to Unnayan Onneshan: Euro – 3,72, 760	Principal Representative of Unnayan Onneshan.  Led the management of the local experts, comprising over 40 persons, including top-ranking former bureaucrats and experienced academics and professionals
5.	January 2007 to December 2008	Trade Negotiations and Livelihood of the People: Advancing Evidence to Underpin Bangladesh's WTO Negotiations G8 Japan Global Project DfID Key Stakeholder Perceptions of Multilateral Organisation Effectiveness Survey Overseas Development Institute (ODI) under PPA of the UK DFID Total Grant size: GBP 91,000	Lead Specialist  Contributed as the lead author
6.	January 2010 to June 2013	Frost People's, Biodiversity Conservation and Sustainable Livelihoods' (FPBP) Forest People's Programme, U.K Grant size: EURO 78324	Senior Advisor Contributing management of the long-running partnership-based programme between Unnayan Onneshan and FPP, UK and participating in different conferences as key-note speaker.
7.	July 2006 – July 2009	Perspective building and Capacity Development Nijera Kori/ UK DFID Grant size: BDT 6030000	Principal Researcher

8.	August 2005 to July 2007	Trade Negotiation and Livelihood Programme Oxfam Grant size: BDT 6335872	Principal specialist Read numerous policy papers and participated the WTO meeting as an expert.
9.	September 2004 to December 2004	Knowledge, Attitudes and Practices (KAP) Study and Prevalence Survey on Disability in Bangladesh Handicap International/UK-DFID Grant size: BDT 2025000	Team Leader  Led the team and wrote on the survey findings
10.	September 2003 to August 2005	Primary Education Policy Watch (1 and 2) Commonwealth Education Fund of UK-DFID, managed by Actionaid Grant size: BDT 4411311	Team Leader Managed the team and wrote two books as the lead author

## **B. EMPLOYMENT RECORD**

### **B.1 Government**

1. From May 2003: December 2005

Position : Member, National Advisory Committee on WTO Issues

Executing Agency : Ministry of Commerce,  
Government of Bangladesh

Areas : *to provide advisory guidelines on WTO issues*

2. From May 2003

: March 2004

Position : Consultant Trade Economist on WTO Issues

Employer : Ministry of Commerce,  
Government of Bangladesh (under a CIDA grant).

Areas : *provided advisory services in the context of ongoing multilateral trade negotiations and participated in negotiations including 5<sup>th</sup> WTO Ministerial Conference at Cancun, Mexico*

3. From October 2001

: December 2001

Position : National Consultant

Executing Agency : Bangladesh Tariff Commission, Maxwell Stamp Plc, sponsored by  
UK-DFID

Areas : *to provide two-month-long WTO-GATS Training Programme for senior government officers of different Ministries and Bangladesh Tariff Commission*

### **B.2 Tripartite Setting - Civil Society Organisations, Governments and World Bank**

From June, 1998 : to March, 2001

Position : Economist and Coordinator of Research

Employer : Structural Adjustment Participatory Review Initiative (SAPRI) Bangladesh, a joint project of a global network of civil society organisations, governments and World Bank for evaluating impacts of structural adjustment programmes.

### **B.3 Non-government Organisations**

1. From August 2003 : to date

Position : Chairperson

Organisation : Unnayan Onneshan (The Innovators)  
Dhaka, Bangladesh

Areas	: <i>To provide leadership of the progressive think-tank</i>
2. From August 2007	: February, 2010
Position	: Regional Policy Coordinator, Asia Region
Employer	: ActionAid International
3. From October 1999	: to December 2001
Position	: Fellow
Employer	: Centre for Policy Dialogue (CPD), Dhaka, Bangladesh
<b>B.4 Teaching</b>	
1. From April 2012	: to date
Position	: Associate Professor
Employer	: Department of Development Studies University of Dhaka, Dhaka – 1000, Bangladesh
Areas	: <i>Economic theories of development, public policy and institutional economics</i>
2. From November 2002	: March 2012
Position	: Assistant Professor
Employer	: Department of Development Studies University of Dhaka, Dhaka – 1000, Bangladesh
Areas	: <i>Development theories and practice; development policies of Bangladesh; macroeconomics and trade theory; and multilateral trade regime and negotiation skills</i>
3. From October 1998	: to November 2002
Position	: Assistant Professor of Economics
Employer	: Bangladesh Open University, Gazipur, Bangladesh.
Areas	: <i>Macroeconomics and economics of development and planning</i>
4. From August 1999	: December 2001
Position	: Part-time Teacher
Employer	: Institute of Business Administration, University of Dhaka, Bangladesh
Areas	: <i>Development and Policy Economics; and International Economic Order</i>
5. From September 1996	: to September 1997
Position	: Teaching and Research Fellow Department of Economics
Employer	: Royal Holloway, University of London, U.K.
<b>B.5 Media</b>	
1. From May 1993	: to November 1997
Position	: Economic Correspondent (also In-charge of Development, and Women on the Move Sections)
Employer	: <i>The Daily Star</i> , Dhaka, Bangladesh
2. From November 1991	: to April 1993
Position	: Staff Writer

**C. PUBLICATIONS****C.1 Articles in Journals**

1. Titumir, R. A. M. and M Kamal. 2013. "Growing Together Sustainably: A zero-poverty post-2015 development framework," *Development*, Vol. 56. No. 2.
2. Titumir, R. A. M. and J K Basak. 2013. "Climate Change and Food Security in Bangladesh: An Application of DSAAT Model," *Asia Pacific Journal on Environment and Development* , Vol. 20-21.
3. Titumir, R. A. M. and J K Basak. 2012. "Effects of Climate Change on Crop Production and Climate Adaptive Techniques Agriculture in Bangladesh," *Social Science Review* (Dhaka University Studies, Part – D). Vol. 29. No. 1.
4. Titumir, R. A. M. and J K Basak. 2010. "A Long Run Perspective on Food Security and Sustainable Agriculture in South Asia," *Development Studies*, Vol. 1. No. 1.
5. Titumir, R. A. M. 2004. "The Collapse of Cancun: A Perspective on the Problematic," *Social Science Review* (Dhaka University Studies - Part-D), Vol. 21, No. 2. December.
6. Titumir, R. A. M. and J Hossain. 2004. "Barriers to Access to Public Services for the Urban Poor: An Enquiry into Dhaka Slums," *Journal of Institute of Bangladesh Studies*, Vol – 17.
7. Titumir, R. A. M. 2002. "International Restructuring and Bangladesh Women Garment Workers," *Social Science Review* (Dhaka University Studies - Part-D), Vol. 19, No. 2.
8. Titumir, R. A. M. and J Hossain. 2003. "Learning for Skills Formation and Employability: A Strategic Framework for Informal Sector in Bangladesh," *Journal of Institute of Bangladesh Studies*, Vol – 16.
9. Titumir, R. A. M. 2002. "South Asian Integration: The Hamletian Way?" *Journal of Social Science and Humanities*. Vol. 1. No. 2.
10. Titumir, R. A. M. 1998. "An Enquiry into Fungibility of Foreign Aid in Bangladesh," *Social Science Review* (Dhaka University Studies - Part-D), Vol - 15, No. 2.
11. Titumir, R. A. M. and D Bhattacharya 1999. "Towards Demystifying a Process: The Structural Adjustment Policies in Bangladesh, *Discourse*, Summer, Vol. 3 No. 1.
12. Titumir, R. A. M. and Bhattacharya 1998. "In Search of Unheard Voices: A Pre-Study Consultation Exercise on Structural Adjustment Policies in Bangladesh," *Discourse*, Summer, Vol. 2 No. 1.
13. Titumir, R. A. M. 1999. "An Introduction to Theories and Empirics of Growth," *Dhaka Viswavidyalaya Patrika* (University of Dhaka), No. 64.
14. Titumir, R. A. M. and M.U. Ahmad. 1998. "Attracting Foreign Direct Investment and Technological Flows in Asia and the Pacific- An Analysis of Policy Perspectives", *BISS Journal*, Vol – 19, No. 3.

**C.2 Chapters in Books**

1. "Countering the Contraction: The Emerging Stylised Facts and the Way Forward," in R A M Titumir (ed.) *Dealing with Deceleration: State of Bangladesh Economy and Development 2014*.

- (with Ebney Ayaz Rana). Dhaka: Shrabon Prokashani
2. "Poverty Measurements: Comparing Different Approaches" in R A M Titumir (ed.) *Measuring Multidimensionality: State of Poverty in Bangladesh 2013*. (with K M Mustafizur Rahman) Dhaka: Shrabon Prokashani
  3. "Emerging Trends: Exigency or Expediency?" in R A M Titumir (ed.) *Exigency or Expediency?: State of Bangladesh Economy and Development 2012- 2013*. Dhaka: Shrabon Prokashani.
  4. "Accumulation by Dispossession: State of Labour in Bangladesh," in R A M Titumir (ed.) *Accumulation and Alienation: State of Labour in Bangladesh 2013*. Dhaka: Shrabon Prokashani.
  5. "Compulsive Structures and Embedded Institutions" in R A M Titumir (ed.) *Institutions Matter: State of Women in Bangladesh 2013*. Dhaka: Shrabon Prokashani.
  6. "Poverty in Bangladesh: Slowing Down in Decline," in R A M Titumir (ed.) *Decelerated Decline: State of Poverty in Bangladesh 2012*. Dhaka: Shrabon Prokashani.
  7. "Approaching Food Security in Bangladesh," in R A M Titumir (ed.) *Elusive Progress: State of Food Security in Bangladesh 2012*. Dhaka: Shrabon Prokashani.
  8. "A Fork in the Path: Growth or Contraction," in R A M Titumir (ed.) *Growth or Contraction?: State of Bangladesh Economy and Development 2011- 2012*. Dhaka: Shrabon Prokashani.
  9. Skills Formation for the Informal Sector in Bangladesh: A strategic Framework," in Madhu Singh (ed.)
  10. *Meeting Basic Learning Needs in the Informal Sector: Integrating Education and Training for Decent Work, Empowerment and Citizenship*, 2004. Dordrecht, The Netherlands: Kluwer Academic Publishers B.V.
  11. "Bangladesh Section – Policy (In) Coherence in European Union Support to Developing Countries: A Three Country Case Study," 2003. Brussels: ActionAid Alliance.
  12. "Economic Restructuring and Chandabaji: An Expository Sketch," in S A Khan and S Afroze (eds.) *Chandabaji versus Entrepreneurship*. 1999. Dhaka: Academic Press and Publishers Ltd. and Bangladesh Institute of International and Strategic Studies (BIISS).
  13. "Touts: Influential Component of Rural Power Structure --- A Politico-economic Study," in G. Hossain (ed.) *Government and Politics*. 1992. Dhaka: Academic Publishers for Jahangirnagar University.

### C.3 Books

1. Titumir, R. A. M. 2002. *Principles of Economics: Macroeconomics*, Gazipur: Bangladesh Open University.
2. Titumir, R. A. M. and D Bhattacharya. 2001. *Reforms and Consequences: Stakeholders' Perceptions*, Dhaka: Shrabon Prokashani.
3. Titumir, R. A. M. and Jakir Hossain. 2004. *Encountering Exclusion - Primary Education Policy Watch*, Dhaka: Samabesh.
4. Titumir, R. A. M., Sk Md Mamunur Rahman Malik, and S M Moazzem Hossain. 2000. *Public Health Expenditure in Bangladesh: Do We Need a Reform Agenda?* Dhaka: Save the Children.
5. Titumir, R. A. M. and Jakir Hossain. 2004. *Listening to the People Living in Poverty: Oral Testimony of Dhaka Slum-Dwellers*.

### C.4 Editors of Books

1. *Dealing with Deceleration: State of Bangladesh Economy and Development 2014*. Dhaka: Shrabon Prokashani.
2. *Measuring Multidimensionality: State of Poverty in Bangladesh 2013*. Dhaka: Shrabon Prokashani.
3. *Exigency or Expediency?: State of Bangladesh Economy and Development 2012- 2013*. Dhaka:

Shrabon Prokashani.

4. *Accumulation and Alienation: State of Labour in Bangladesh 2013*. Dhaka: Shrabon Prokashani.
5. *Institutions Matter: State of Women in Bangladesh 2013*. Dhaka: Shrabon Prokashani.
6. *Decelerated Decline: State of Poverty in Bangladesh 2012*. Dhaka: Shrabon Prokashani.
7. *“Elusive Progress: State of Food Security in Bangladesh 2012*. Dhaka: Shrabon Prokashani.
8. *Growth or Contraction?: State of Bangladesh Economy and Development 2011- 2012*. Dhaka: Shrabon Prokashani.

#### **C.5 Occasional Papers/ Monographs**

1. Poverty and Employment Lost in The Queue? Background paper for ILO contribution to the PRSP in Bangladesh, Geneva: ILO
2. Scaling Up: Gender Equality in Primary Education in Bangladesh, February 2006, Dhaka: Unnayan Onneshan.
3. Undercutting Small Farmers: Rice Trade in Bangladesh and WTO Negotiations, Dhaka: Unnayan Onneshan
4. Unkept Promises; Non-agricultural Market Access at the WTO – A Case Study of Apparel Trade of Bangladesh, Dhaka: Unnayan Onneshan
5. Dodging Development; Doha Round and Least Developed Countries, Dhaka: Unnayan Onneshan
6. “Cancun Conundrum: A Perspective on the Problematic,” Department of Development Studies, Dhaka.
7. “EU-Bangladesh Aid and Trade policy Regime: A Citizen’s Perspectives,” ActionAid Alliance, Brussels.
8. “Spinning the Chain, Lost in the Queue: International Restructuring and Bangladesh Women Garment Workers,” CIDA - Nari Uddug Kendra, Dhaka
9. “The Saga of PRSP: Penned in a Pegged Perspective,” ActionAid Asia, Thailand.
10. “Bangladesh’s Compliance with WTO-GATS,” Bangladesh Tariff Commission, Dhaka.
11. Titumir, R. A. M. and M Asaduzzaman, “WTO Negotiations on Agriculture: Major Issues and Possible Positions for Bangladesh,” International Food Policy Research Institute, Washington and Bangladesh Institute of Development Studies, Dhaka.
12. “Skills Development for Informal Sector in Bangladesh: A Strategic Approach,” UNESCO Institute for Education, Germany.
13. “Social Dimensions of Globalisation: Role of Policy,” ILO, Dhaka.
14. Titumir, R. A. M. and D Bhattacharya: “Poverty Reduction in Bangladesh: Absence of a National Framework, Abundance of Donors’ Strategies,” Centre for Policy Dialogue (CPD) Occasional Paper No. 4, CPD, Dhaka.
15. Titumir, R. A. M. , M Rahman and D Bhattacharya: “Setting the Agenda for the Next WTO Round: Perspectives from Bangladesh on the Seattle Ministerial,” Centre for Policy Dialogue (CPD) Occasional Paper No. 3 CPD, Dhaka.
16. “South Asia in Multilateral Trade Regime: Current Position and Future Strategy,” Centre for Policy Dialogue, Dhaka.
17. Titumir, R. A. M. , D Bhattacharya and A Rabbani: “Structural adjustment and macroeconomic Performance of Bangladesh Economy,” Centre for Policy Dialogue, Dhaka.
18. “A Note on Participatory Techniques for Assessment, Monitoring and Evaluation,” Centre for Our Common Future, Geneva.

19. "The Infinite Variety between being Restrictive and Losing Perspective: Debates in Economic Methodology" mimeo.
20. "Foreign Aid and The Question of Fungibility: The Case of Bangladesh," dissertation submitted as requirement for the degree of M. Sc. in Development and Financial Economics, University of London.

### **Educational and other Qualifications**

#### **Academic Qualifications**

1. Ph. D in *Economics*, University of London
2. M. Sc. in *Development and Financial Economics*, University of London.
3. Certificate in *Trade Policy and Commercial Diplomacy*, Centre for Trade Policy and Law, Universities of Carleton and Ottawa, Canada.
4. B. S. S. (Honours) in *Economics*, University of Dhaka.
5. H.S.C and S.S.C, Jhenidah Cadet College, BISE, Jessore.

#### **Professional Training**

1. Sustainable Development Training Programme, Centre for Our Common Future, Geneva, Switzerland, 1995.
2. Reporting on Complexity, Arizona University and the USIS, Dhaka, 1994.
3. Script Writing and Production for Educational Television, Commonwealth of Learning, Canada.



# CURRICULUM VITAE of Bojie FU

**First Name:** Bojie

**Family Name:** FU

**Sex:** Male

**Date of Birth:** Jan. 4, 1958

**Place of Birth:** Shaanxi, China

**Nationality:** Chinese

## **Present Position and Address:**

Professor

State Key Lab. of Urban and Regional Ecology

Research Center for Eco-Environmental Sciences

Chinese Academy of Sciences

PO Box 2871, Beijing, 100085, CHINA

E-mail: [bfu@rcees.ac.cn](mailto:bfu@rcees.ac.cn);

## **EMPLOYMENT**

- **2012-present**, *Professor, Chair of Steering Committee*, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
- **2009-2011** *Professor*, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
- **2001-2008**, *Director-General, Professor*, Bureau of Sciences & Technology for Resources & Environment, Chinese Academy of Sciences
- **1996-2001**, *Deputy-Director, Professor*, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
- **1994-1996**, *Division Director, Professor*, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
- **1992-1994**, *Post-doctoral Research Fellow*, Institute for Land and Water Management, Catholic University of Leuven, Belgium
- **1991-1992**, *Associate Professor*, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
- **1989-1990**, *Assistant Professor*, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences

## **QUALIFICATIONS**

**PhD.** (1989) *Landscape Ecology and Environmental Sciences*, Split PhD Programme in Peking University (Beijing, China) and University of Stirling (Stirling, UK)

**MSc.** (1984) *Physical Geography*, Shaanxi Normal University (Xi'an, China)

**BSc.** (1982) *Geography*, Shaanxi Normal University (Xi'an, China)

## **RESEARCH ACTIVITIES**

### **Research Area**

Water, Vegetation and Soil Interaction in Semi-Arid Environments;  
Ecosystem Services and Management;  
Landscape Pattern and Ecological Processes;  
Land Use Change and Environmental Effects.

### **Professional Services and Honors**

- Academician of the Chinese Academy of Sciences, 2011.
- Fellow of the Academy of Sciences for Developing World (TWAS), 2012.
- Director-General, Department of Earth Science, National Natural Science Foundation of China (NSFC), 2014-
- Vice President of International Association for Ecology (INTECOL), 2013-
- MEP (Multidisciplinary Expert Panel) member of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES), 2012-
- Vice President of Future Earth China Committee (CNC-FE), 2014-2017
- Deputy Director, Department of Geosciences, Chinese Academy of Sciences, 2012-
- Vice President of International Association of Landscape Ecology (IALE), 2009-2013
- Vice Chair of International Long-term Ecological Research Network (ILTER), 2009- 2014
- The Member of Steering Committee of the Global Climate Change Adaptation Network in Asia-Pacific Region, 2009-2012
- The Executive Board Member of International Association for Ecology (INTECOL), 2005-2013
- The Member of Steering Committee of Chinese Academy of Sciences, 2013-
- The Member of Education Committee of Chinese Academy of Sciences, 2013-
- President of IALE China, 2005-2013
- Consultative Group Member of the Intergovernmental science-policy platform on biodiversity and ecosystem services of UNEP, 2009-2011
- The Member of State Environment Consultative Committee, 2012-
- Vice President of IGBP China Committee, 2001-2009
- Vice President of SCOPE China Committee, 1999-2012
- Vice President of IHDP China Committee, 2005-2013
- Vice Chairman of Scientific Committee of Chinese Ecosystem Research Network, 2000-
- Vice President of the Chinese Society of Geography, 2004-2014

- Vice President of the Ecological Society of China, 2009-2013
- The Executive Council Member of Soil Science Society of China, 2003-2014

### **Editorial Board Member**

*Landscape Ecology* (Springer) 2006-  
*Landscape and Urban Planning* (Elsevier), 2006-  
*Soil Use and Management* (Blackwell), 2007-2011  
*Landscape and Ecological Engineering* (Springer), 2005-  
*Journal of Ecology and Field Biology* (Korea), 2004-2012  
*Acta Ecologica Sinica*, 1996-  
*Chinese Journal of Plant Ecology*, 1999-  
*Scientia Geographica Sinica*, 1996-2009  
*Journal of Natural Resources* (China), 1996-  
*Geographical Research* (China), 1999-  
*Resources Science* (China), 2000-  
*Quaternary Sciences* (China), 2004-  
*Progress in Geography* (China), 2004-

### **Vice Editor in Chief**

*Sustainability Sciences* (Springer), 2006-2009  
*Advance in Earth Sciences* (China), 2003-2009  
*Journal of Ecology* (China) 2007-  
*Arid Zone Research* (China) 2007-  
*Chinese Journal of Applied Ecology*, 2003-2007.

### **Editor in Chief**

*Chinese Geographical Science* (Springer), 2009-

### **Research Projects**

- The interactions of Ecosystem and Hydrology in Semi-Arid Loess Plateau of China. (2014-2018), Key project of NSF China.
- Trade-off and integration of ecosystem services-take an example of the Yanhe Watershed. (2013-2017), Key project of NSF China.
- Integration of Eco-hydrological Processes in Heihe River Basin. (2011-2016), Key project of NSF China.
- Impacts of climate change on multiple ecosystem services: processes and adaptation options at landscape scales (CLIMES). (2012-2014), Project of CAS and Academy of Finland.
- Integrated analysis of China's terrestrial carbon budget, a comprehensive assessment and countermeasures. (2011-2015), Project of CAS.
- The effect of ecological restoration on runoff and sediment in the Loess Plateau. (2010-2013). Special Fund for Forestry Scientific Research in the Public Interest, China.

- Coupled landscape pattern and soil erosion processes. (2010-2013), Key project of NSF China.
- Soil carbon sequestration for “Grain to Green” project in the loess plateau of China. (2010-2012), supported by NSF China.
- Ecosystem Processes and Services. (2009-2013), Project of CAS.
- China’s Ecosystem services and Ecological security. (2009-2013), Key project of National basic research Programme of MOST.
- Land use pattern and ecological processes. (2004-2009), Key project of NSF China.
- Regional ecological security pattern assessment, (2006-2008), supported by NSF China
- Ecosystem restoration in the western China. (2001-2005), Key project of Ministry of Sciences and Technology
- Farming system analysis and land use evaluation towards sustainable land use in the loess hilly area of China. (2002-2005).Cooperation Programme Project of China and Belgium.
- Land use change and biodiversity conservation, (2000-2005), Key project for National basic research Programme of MOST.
- Landscape pattern change and soil erosion in the Loess hilly area. (2002-2004), Key project of NSF China.
- China’s Ecosystem Assessment, (2000-2003), Key project of Chinese Academy of Sciences.
- Land use change and sustainable land use in the circum-Bo Hai region, China, (1999-2001), Key project of NSF China.
- Landscape pattern, ecological process and sustainable land use in the loess plateau of China, (1998-2001), Project of state outstanding young scientist foundation of China of NSFC.
- A participatory approach for soil and water conservation planning, integrating soil erosion modeling and land evaluation, to improve the sustainability of land use on the Loess Plateau in Northern China, (1998-2000), INCO-DC Project of European Commission.
- Ecological Regionalization of China, (1998-2000), Key project of Chinese Academy of Sciences.
- The effect of landscape spatial pattern on soil erosion and element transportation, (1996-1998), supported by NSF China
- The forest landscape pattern and landscape diversity, (1996-1998), supported by NSF China
- Land evaluation in the loess plateau of China, (1994-1996), supported by NSF China
- Early warning of environmental issues in China, (1990-1992), Key project of Ministry of Sciences and Technology

## ACADEMIC PRIZES AND AWARDS

- National Natural Sciences Prize, the State Council, 2005.
- National Sciences & Technology Advanced Prize, the State Council, 2012
- Award of Distinguished Service, International Association for Landscape Ecology, 2011.
- "Eleventh Five-Year" National Award for outstanding contributions to science and technology plan implementation, Ministry of Science and Technology, 2011.
- National Award for Outstanding Science and Technology Workers, China Association for Science and Technology, 2010.
- The Sciences & Technology Advanced Prize, Ministry of Environmental Protection, 2009.
- Award of Outstanding Teachers of Chinese Academy of Sciences, 2006.
- Visiting Scholars and Artists Award, Western Michigan University, USA, 2005.
- Chief Scientist of Innovation Research Group Fund, National Natural Sciences Foundation of China (NSFC), 2003
- Award for Young Scientist, Chinese Academy of Sciences (CAS). 2001
- The Sciences & Technology Advanced Prize, Ministry of Land Resources, 1998.
- "National Science Fund for Distinguished Young Scholars", NSFC, 1997
- The Sciences & Technology Advanced Prize, CAS, 1993.
- Prize for Young Geographer, Chinese Society of Geography, 1991

## LIST OF PUBLICATIONS

More than 380 articles and books on Eco-hydrology, ecosystem services, landscape ecology, land use, land evaluation, and physical geography, more than 210 are published in Chinese and 160 in English.

### Peer-Reviewed Journal Papers (in English only)

1. **Fu BJ**, Wang S, Su CH, Forsius M. 2013. Linking ecosystem processes and ecosystem services. *Current Opinion in Environmental Sustainability*, 5, 4-10.
2. **Fu BJ**, Forsius M, Liu J. 2013. Ecosystem services: climate change and policy impacts. *Current Opinion in Environmental Sustainability*, 5, 1-3.
3. Feng XM, **Fu BJ**, Lv N, Zeng Y, Wu BF. 2013. How ecological restoration alters ecosystem services: an analysis of carbon sequestration in China's Loess Plateau. *Scientific Reports*, 3, doi:10.1038/srep0284.
4. Gao GY, **Fu BJ**, Zhan HB, Ma Y. 2013. Contaminant transport in soil with depth-dependent reaction coefficients and time-dependent boundary conditions.

- Water Research*, 47, 2507-2522.
5. Hou J, **Fu BJ**. 2013. Vegetation dynamics during different abandoned year spans in the land of the Loess Plateau of China. *Environ Monit Assess*, doi:10.1007/s10661-010013-13444-10664.
  6. Liu Y, **Fu BJ**, Lu YH, Gao GY, Wang S, Zhou J. 2013. Linking vegetation cover patterns to hydrological responses using two process-based pattern indices at the plot scale. *Science China-Earth Sciences*, 56, 1888-1898.
  7. Su CH, **Fu BJ**. 2013. Evolution of ecosystem services in the Chinese Loess Plateau under climatic and land use changes. *Global and Planetary Change*, 101, 119-128.
  8. Wang S, **Fu BJ**. 2013. Trade-offs between forest ecosystem services. *Forest Policy and Economics*, 26, 145-146.
  9. Wang S, **Fu BJ**, Gao GY, Liu Y, Zhou J. 2013. Responses of soil moisture in different land cover types to rainfall events in a re-vegetation catchment area of the Loess Plateau, China. *Catena*, 101, 122-128.
  10. Wang S, **Fu BJ**, Wei YP, Lyle C. 2013. Ecosystem services management: an integrated approach. *Current Opinion in Environmental Sustainability*, 5, 11-15.
  11. Xu YD, **Fu BJ**, He CS. 2013. Assessing the hydrological effect of the check dams in the Loess Plateau, China, by model simulations. *Hydrology and Earth System Sciences*, 17, 2185-2193.
  12. Yao XL, **Fu BJ**, Lu YH, Sun FX, Wang S, Liu M. 2013. Comparison of Four Spatial Interpolation Methods for Estimating Soil Moisture in a Complex Terrain Catchment. *Plos One*, 8, doi: 10.1371/journal.pone.0054660.
  13. Zhao WW, **Fu BJ**, Qiu Y. 2013. An upscaling method for cover-management factor and its application in the Loess Plateau of China. *Int. J. Environ. Res. Public Health*, 10, 4752-4766.
  14. Li HX, Liu GH, **Fu BJ**. 2013. Spatial variations of rain-use efficiency along a climate gradient on the Tibetan Plateau: A satellite-based analysis. *International Journal of Remote Sensing*, 34, 7487-7503.
  15. Lu N, Sun G, Feng XM, **Fu BJ**. 2013. Water yield responses to climate change and variability across the North-South Transect of Eastern China (NSTEC). *Journal of Hydrology*, 481, 96-105.
  16. Sun FX, Lu YH, **Fu BJ**, Ma ZM, Yao XL. 2013. Spatial explicit soil moisture analysis: pattern and its stability at small catchment scale in the loess hilly region

- of China *Hydrological Processes*, doi: 10.1002/hyp.9940.
17. Zheng YM, Cao P, **Fu BJ**, Hughes JM, He JZ. 2013. Ecological Drivers of Biogeographic Patterns of Soil Archaeal Community. *Plos One*, 8, doi:10.1371/journal.pone.0063375.
  18. Lu YH, Feng XM, Chen LD, **Fu BJ**. 2013. Scaling effects of landscape metrics: a comparison of two methods. *Physical Geography*, 34, 40-49.
  19. Lu YH, Ma ZM, Zhang LW, **Fu BJ**, Gao GY. 2013. Redlines for the greening of China. *Environmental Science & Policy*, doi:10.1016/j.envsci.2013.1005.1007.
  20. Wu X, Brüggemann N, Butterbach-Bahl K, **Fu BJ**, Liu GH. 2013. Snow cover and soil moisture controls of freeze–thaw-related soil gas fluxes from a typical semi-arid grassland soil: a laboratory experiment *Biol Fertil Soils*, doi:10.1007/s00374-00013-00853-z.
  21. Wu X, Liu GH, Butterbach-Bahl K, **Fu BJ**, Zheng X, Brüggemann N. 2013. Effects of land cover and soil properties on denitrification potential in soils of two semi-arid grasslands in Inner Mongolia, China. *Journal of Arid Environments*, 92, 98-101.
  22. Lü Yihe, **Fu Bojie**, Feng Xiaoming, Zeng Yuan, Liu Yu, Chang Ruiying, Sun Ge, Wu Bingfang. 2012. A Policy-Driven Large Scale Ecological Restoration: Quantifying Ecosystem Services Changes in the Loess Plateau of China. *PLoS ONE* 7(2):e31782. doi: 10.1371/journal.pone.0031782.
  23. Yao Xueling, **Fu Bojie**, Lü Yihe, Chang Ruiying, Wang Shuai, Wang Yafeng, Su Changhong, 2012. The multi-scale spatial variance of soil moisture in the semi-arid Loess Plateau of China. *Journal of Soils and Sediments*, Doi: 10.1007/s11368-012-0481-5.
  24. Su Changhong, **Fu Bojie**, He Chansheng, Lü Yihe. 2012. Variation of ecosystem services and human activities: A case study in the Yanhe watershed of China. *Acta Oecologica*, doi:10.1016/j.actao.2011.11.006.
  25. Xu Yanda, **Fu Bojie**, He Chansheng, Gao Guangyao. 2012. Watershed discretization based on multiple factors and its application in the Chinese Loess Plateau. *Hydrology and Earth System Sciences*, 16:59-68.
  26. Liu Yu, **Fu Bojie**, Lü Yihe, Wang Zhi, Gao Guangyao. 2012. Hydrological responses and soil erosion potential of abandoned cropland in the Loess Plateau, China. *Geomorphology*, 138: 404-414.
  27. Su Changhong, **Fu Bojie**, Wei Yongping, Lü Yihe, Liu Guohua, Wang Daolong,

- Mao Kebiao, Feng Xiaoming. 2012. Ecosystem management based on ecosystem services and human activities: a case study in the Yanhe watershed. *Sustainability Science*, 7(1): 17-32.
28. Chang Ruiying, **Fu Bojie**, Liu Guohua, Wangshui, Yao Xueling, 2012. The effects of afforestation on soil organic and inorganic carbon: A case study of the Loess Plateau of China. *Catena*, Doi:10.1016/j.catena.2012.02.012.
  29. Lü Yihe, Liu Shuguang, **Fu Bojie**. 2012. Ecosystem Services: from virtual reality to ground truth. *Environmental Science & Technology*, 46:2492-2493.
  30. Gao Guangyao, Zhan Hongbin, Feng Shaoyuan, **Fu Bojie**, Huang Guanhua. 2012. A mobile-immobile model with an asymptotic scale-dependent dispersion function. *Journal of Hydrology*, doi:10.1016/j.jhydrol.2011.12.041.
  31. Chang Ruiying, **Fu Bojie**, Liu Guohua, Yao Xueling, Wang Shuai. 2012. Effects of soil physicochemical properties and stand age on fine root biomass and vertical distribution of plantation forests in the Loess Plateau of China. *Ecological Research*, 27: 827 – 836.
  32. Feng Xiaoming, Sun Ge, **Fu Bojie**, Su Changhong, Liu Yu, and H. Lamparski. 2012. Regional effects of vegetation restoration on water yield across the Loess Plateau, China. *Hydrology and Earth System Sciences*, 16:2617–2628.
  33. Gao Guangyao, **Fu Bojie**, Lü Yihe, Liu Yu, Wang Shuai, and J. Zhou. 2012. Coupling the modified SCS-CN and RUSLE models to simulate hydrological effects of restoring vegetation in the Loess Plateau of China. *Hydrology and Earth System Sciences*, 16: 2347–2364.
  34. Liang Di, **Fu Bojie**, Lü Yihe, Liu Yu, Gao Guangyao, Li Yifeng & Li Zhaoxia. 2012. Effects of retired steep-land afforestation on soil properties: A case study in the Loess Plateau of China. *Soil and Plant Science*, doi:10.1080/09064710.2012.673008.
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  36. Zhao Wenwu, **Fu Bojie**, and Chen Liding. 2012. A comparison between soil loss evaluation index and the C-factor of RUSLE: a case study in the Loess Plateau of China. *Hydrology and Earth System Sciences*, 16: 2739–2748.
  37. **Fu Bojie**, Liang Di, Lü Nan. 2011. Landscape Ecology: Coupling of Pattern, Process, and Scale. *Chin. Geogra. Sci.*, 21(4):385–391.
  38. **Fu Bojie**, Liu Yu, Lü Yihe, He Chansheng, et al. 2011. Assessing the soil erosion



- control service of ecosystems change in the Loess Plateau of China. *Ecological Complexity*, 8:284–293.
39. **Fu Bojie**, Su Changhong, Wei Yongping, Ian R. Willett , Lü Yihe, Liu Guohua. 2011. Double counting in ecosystem services valuation: causes and countermeasures. *Ecol Res* ,26: 1–14.
  40. Chang Ruiying, **Fu Bojie**, Liu Guohua , Liu Shuguang. 2011. Soil Carbon Sequestration Potential for “Grain for Green” Project in Loess Plateau, China. *Environmental Management*, 48:1158–1172.
  41. Jin.T.T, **Fu .B. J**, Liu.G. H, andWang. Z. 2011. Hydrologic feasibility of artificial forestation in the semi-arid Loess Plateau of China. *Hydrol. Earth Syst. Sci.*, 15:2519–2530.
  42. Lü Yihe, **Fu Bojie**, Wei Wei, Yu Xiubo, Sun Ranhao, 2011, Major Ecosystems in China: Dynamics and Challenges for Sustainable Management. *Environmental Management* , 48:13–27.
  43. SU Changhong, **FU Bojie**, Lü Yihe, LU Nan, ZENG Yuan, HE Anna, Halina LAMPARSKI. Land Use Change and Anthropogenic Driving Forces:A Case Study in Yanhe River Basin. *Chin. Geogra. Sci.* 21(5): 587–599.
  44. Wang Yafeng, **Fu Bojie**, Lü Yihe, Chen Liding, 2011, Effects of vegetation restoration on soil organic carbon sequestration at multiple scales in semi-arid Loess Plateau, China. *Catena*, 85 : 58–66.
  45. Wang Shuai , **Fu Bo-Jie**, He Chan-Sheng, Sun Ge, Gao Guang-Yao. 2011. A comparative analysis of forest cover and catchment water yield relationships in northern China. *Forest Ecology and Management*, 262 : 1189–1198.
  46. JIN Tiantian, LIU Guohua, **FU Bojie**, DING Xiaohui, YANG Lei. 2011. Assessing Adaptability of Planted Trees Using Leaf Traits: A Case Study with *Robinia pseudoacacia* L. in the Loess Plateau, China. *Chin. Geogra. Sci.* 21(3) :290–303.
  47. Li Zong Shan, Liu Guo Hua, **Fu Bo Jie**, Zhang Jin Long. 2011. The Potential Influence of Seasonal Climate Variables on the Net Primary Production of Forests in Eastern China. *Environmental Management* , 48:1173–1181.
  48. Sun Ranhao, Chen Liding, and **Fu Bojie**. 2011. PREDICTING MONTHLY PRECIPITATION WITH MULTIVARIATE REGRESSION METHODS USING GEOGRAPHIC AND TOPOGRAPHIC INFORMATION. *Physical Geography*, 32( 3): 269–285.
  49. Zhang Yuxin , Ma Keming, Madhur Anand , **Fu Bojie**, 2011. Multifractal pattern

- and process during a recent period of forest expansion in a temperate mountainous region of China. *Ecological Informatics*, 6 : 384–390.
50. Cao Shixiong, Sun Ge, Zhang Zhiqiang, Chen Liding, Feng Qi, **Fu Bojie**, et al. 2011. Greening China Naturally. *AMBIO*, 40:828–831.
  51. **Fu Bojie**, Su Chang-Hong, Wei Yong-Ping, Willett Ian R., Lu Yi-He<sup>1</sup>, Liu Guo-Hua, 2010, Double Counting in Ecosystem Services Valuation: Causes and Countermeasures. *Ecological Research*, DOI 10.1007/s11284-010-0766-3.
  52. **Fu Bojie**, Li Shenggong, Yu Xiubo, Yang Ping, Yu Guirui, Feng Renguo, Zhuang Xuliang, 2010, Chinese ecosystem research network: Progress and perspectives. *Ecological Complexity*, 7:225–233.
  53. Liu Zhanfeng, **Fu Bojie**, Zheng Xiaoxuan, Liu Guohua, 2010, Plant biomass, soil water content and soil N:P ratio regulating soil microbial functional diversity in a temperate steppe: A regional scale study. *Soil Biology & Biochemistry*, 42: 445–450.
  54. Hu Chanjuan, **Fu Bojie**, Liu Guohua, Jin Tiantian, Guo Lei, 2010, Vegetation patterns influence on soil microbial biomass and functional diversity in a hilly area of the Loess Plateau, China. *J Soils Sediments*, 10:1082–1091.
  55. Qiu Y., **Fu B.**, Wang J., Chen L., Meng Q., Zhang Y., 2010, Spatial prediction of soil moisture content using multiple-linear regressions in a gully catchment of the Loess Plateau, China. *Journal of Arid Environments*, 74:208–220.
  56. Wang Yafeng, **Fu Bojie**, LüYihe, Song Chengjun, Luan Yong, 2010, Local-scale spatial variability of soil organic carbon and its stock in the hilly area of the Loess Plateau, China. *Quaternary Research*, 73: 70-76.
  57. Liu Zhanfeng, Liu Guohua, **Fu Bojie**, Wu Yaqiong, Hu Huifeng, Fu Shenglei, 2010, Changes in the soil microbial community with a pine plantation restoration in a dry valley of the upper reaches of the Minjiang River, southwest China. *Ann. N.Y. Acad. Sci.*, 1195 :E82–E95.
  58. Song Cheng Jun, Ma Ke Ming, **Fu Bo Jie**, Qu Lai Ye, Xu Xian Li, Liu Yang, Zhong Jian Fei, 2010, Distribution patterns of shrubby N-fixers and non-N fixers in an arid valley in Southwest China: implications for ecological restoration. *Ecol Res*, 25: 553–564.
  59. Wei Wei, Chen Liding, **Fu Bojie**, Chen Jin, 2010, Water erosion response to rainfall and land use in different drought-level years in a loess hilly area of China. *Catena*, 81: 24–31.
  60. Zhang Jieyu, Ma Keming, **Fu Bojie**, 2010, Wetland loss under the impact of

- agricultural development in the Sanjiang Plain, NE China. *Environ Monit Assess* , 166:139–148.
61. Zheng XiaoXuan, Liu GuoHua, **Fu BoJie**, Jin TianTian, Liu ZhanFeng, 2010, Effects of biodiversity and plant community composition on productivity in semiarid grasslands of Hulunbeir, Inner Mongolia, China. *Ann. N.Y. Acad. Sci*, 1195: E52–E64.
  62. Chen Liding, Wang Jiping, Wei Wei, **Fu Bojie**, Wu Dongping, 2010, Effects of landscape restoration on soil water storage and water use in the Loess Plateau Region, China. *Forest Ecology and Management*, 259: 1291–1298.
  63. Feng Xiaoming, Wang Yafeng, Chen Liding , **Fu Bojie**, Bai Gangshuan, 2010, Modeling soil erosion and its response to land-use change in hilly catchments of the Chinese Loess Plateau. *Geomorphology*, 118:239–248.
  64. Guangyao Gao, Hongbin Zhan, Shaoyuan Feng, **Bojie Fu**, Ying Ma, Guanhua Huang, 2010, A new mobile–immobile model for reactive solute transport with scale–dependent dispersion. *Water Resources Research*, 46: W08533, doi:10.1029/2009WR008707.
  65. Song C.-J. , Ma K.-M., Qu L.-Y. , Liu Y. , Xu X.-L. , **Fu B.-J.** , Zhong J.-F., 2010, Interactive effects of water, nitrogen and phosphorus on the growth, biomass partitioning and water-use efficiency of *Bauhinia faberi* seedlings . *Journal of Arid Environments*. 74:1003–1012.
  66. **Fu Bojie**, Wang Yafeng, Lv Yihe, He Chansheng, Chen Liding, Song Chengjun. 2009, The effects of land use combination on soil erosion-a case study in Loess Plateau of China. *Progress in Physical Geography*, 33(6):793-804.
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  68. Wei Wei, Chen Liding, **Fu Bojie**, Lü Yihe, Gong Jie, 2009, Responses of water erosion to rainfall extremes and vegetation types in a loess semiarid hilly area, NW China, *Hydrological Processes*, 23: 1780-1791.
  69. Xu Xianli, Ma Keming, **Fu Bojie**, Song Chengjun, Liu Wen, 2009, Soil and water erosion under different plant species in a semiarid river valley, SW China: the effects of plant morphology, *Ecological Research*, 24:37-46
  70. Chen Liding, Tian Huiying, **Fu Bojie**, Zhao Xinfeng, 2009, Development of a New Index for Integrating Landscape Patterns with Ecological Processes at Watershed Scale, *Chinese Geographical Science*. 19(1) 37–45.

71. Lu Tao, Ma Keming, **Fu Bojie**, et al. 2009, Diversity and composition of wetland communities along an agricultural drainage ditch density gradient. *Polish Journal of Ecology* 57: 113-123
72. **Fu Bojie**, 2008, Blue Skies for China. *Science*, 321:611.
73. **Fu Bojie**, Lu Yihe, Chen Liding 2008, Expanding the bridging capability of landscape ecology. *Landscape Ecology*, 23:375-376.
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#### **Peer-Reviewed Book and Chapters**

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2. Chen Yiyu, Jessel Beate, **Fu Bojie**, Yu Xiubo and Pittoc Jamiek (Eds). 2013. *Ecosystem Services and Management Strategy in China*. Springer.
3. Hong S.-K., Nakagoshi, N. **Fu B.J.** and Morimoto Y. (Eds.). 2007. *Landscape Ecological Applications in Man-Influenced Areas: Linking Man and Nature Systems*, Springer.
4. **Fu Bojie**, Niu Dong, Lu Yihe, Liu Guohua, 2010, Land degradation and ecological restoration in China. In *Ecological Restoration: A global Challenge*. Comin F. A (Edited.), Cambridge University Press. P140-174.
5. **Fu B.J.** Niu D, Yu G.R., Chen L.D., Ma K.M., Luo Y., Lu Y. H., Zhao W.W. 2007, Application of landscape ecology in long-term ecological research-Case study in China, in *Landscape Ecological Applications in Man-Influenced Areas: Linking Man and Nature Systems*. Hong S.-K., Nakagoshi, N. Fu B.J. and Morimoto Y. (Eds.), Springer. Dordrecht, the Netherlands, p33-56.
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*Geoinformation '97*. Taiwan, 135-142.

7. **Fu Bojie**, 1991, Evaluation of Eco-Environmental qualities in the Provinces of China, “*Haman System Ecology*”, (Wang, Ruson et. Al. Eds), Chinese Science & Technology Press, 219-222.
8. **Fu Bojie**, 1989, An optimum model for land use in Xizhuanggou basin, China, 《*Land Qualities in Space and Time*》, PUDOC., The Netherlands, 317-320.



## HUANG Yi Professor

Research Areas: Environmental Ecology/Biotechnology

Tel./Fax: +86-10-62757867

Email: yhuang@pku.edu.cn

## Education and Work Experiences

- 1983: B.Sc.(Agri.) from Central-South Forestry University, China;
- 1990: M.Sc. (Ecology) from Central-South Forestry College, China;
- 1997: Ph.D. (Natural Science) from Bielefeld University, Germany;
- 1998: Post-Doctoral Fellow, College of Urban and Environment, Beijing University, China;
- 2000 – Present: Associate Professor/Professor, Center of Environmental Sciences/College of Environmental Sciences and Engineering, Peking University, China;

## Teaching

Graduate Courses: Environmental Ecology; Integrated Watershed Management

Undergraduate Course: Environmental Microbiology

## Main Research Interests

- Adaptive Responses of Ecosystem Structure/Functions to Environmental Stresses.
- Resistant Mechanisms of Plant-Microorganism Symbiosis to Heavy Metal / POPs Pollution;

## Brief Description

Prof. Dr. Yi HUANG is a Full Professor in the College of Environmental Sciences and Engineering, Peking University, China.

Prof. Yi HUANG is Coordinator of Collaborating Center of China for Global Environment Outlook (GEO), and is the Leading Author of Asia Chapter of GEO 4 and Coordinating Leading Author of Water Chapter of GEO5. She is the leading scientist for UNEP Project on Vulnerability Assessment of Freshwater Resources to Environmental Change in Asia, and leading author of Methodological

Guidelines of the project and report entitled Freshwater Under Threat – North East Asia. Meanwhile, Because of her deeply involved into Convention for Biological Diversity (CBD) and GEO, She is just invited by IPBES (International Platform for Biodiversity and Ecosystem Service) under CBD to be a member of scientist consultation group in UNEP.

Holds a Doctor of Science (major in Environmental Ecology, Germany), Prof. Yi HUANG has experience in teaching and researching in China, Germany, Canada and Australia. Her current research focuses on aquatic ecosystem function and service assessment and degraded ecosystem rehabilitation. She is leading a national key project on fresh water pollution prevention and control in China. The project emphasizes on ecoregioning for selected lake basins in China, which aims to identify the function zones of lake basins to support the policy making process to institutionalize effective protection and management strategy.

## Selected Publications

1. Yi Huang, Xi Zhao, Shengji Luan 2007 Uptake and Biodegradation of DDT by 4 Ectomycorrhizal Fungi; Science of the Total Environment; 2007; 385: 235 – 241;
2. Huang, Y, Zwiazek J. Responses of ectomycorrhizal Populus tremuloides and Betula papyrifera seedlings to salinity. Environmental and Experimental Botany; 2008; 62: 357 – 363;
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7. HUANG Yi, ZOU Li, ZHANG ShuYing, XIE ShuGuang; Comparison of Bacterioplankton Communities in Three Heavily Polluted Streams in China; Biomed Environ Sci. 2011; 24(2):56-61.
8. Yi HUANG, MT CAI. Methodological Guidelines for Vulnerability Assessment of Freshwater Resources to Environmental Change; UNEP ; 2007. ISBN : 978-92-807-2953-5 , Job Number : DEW/1106/BA;
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10. TAO Shu; LUO Yongming; CAO Jun; LIU Wenxin and HUANG Yi. Species and the

Bio-availability of Trace Heavy Metals in Aquatic and Territorial Ecosystems. Science Press,  
Beijing. 2006. ISBN: 7030162498;

## Curriculum Vitae

Name: **Junsheng LI**  
Degree: Doctor  
Title: Professor / Research Fellow, Chief Expert  
Duty: Vice president of Institute of Environmental Ecology, CRAES  
Tel: +86-10-84915330  
e-mail: [lijsh@craes.org.cn](mailto:lijsh@craes.org.cn)

### 1. Education and professional experience

1988-1992: BSc, University of Northeast Forestry;  
1992-1996: Research Assistant, Institute of Wild Animal Protection, Heilongjiang Academy of Forestry;  
1996-1998: MSc, University of Northeast Forestry;  
1998-2001: PhD, University of Northeast Forestry;  
2001-2003: Post-Doctor, Associate Professor, Institute of Zoology, Chinese Academy of Sciences;  
2003: Research Associate, Institute of Zoology, Chinese Academy of Sciences;  
2004 onwards: Research Fellow, Vice president of Institute of Environmental Ecology, Chinese Research Academy of Environmental Sciences.

### 2. Current research fields

Dr. Junsheng Li serves as chief scientist for ecosystem effects of environmental changes and innovative base, foundation members of the National Nature Reserve Review Committee, Experts of the Chinese Biodiversity Conservation and Green Development Foundation Committee .

Main interests on ecosystem effects of environmental changes and region ecological response to global change, including:

- a) Climate change and biodiversity protection;
- b) Ecology risk assessment of transgenic organisms;
- c) Service function and health evaluation of wetland ecosystems;
- d) Ecology effects and risk evaluation of large engineering constructions;
- e) Regional and urban ecology protection and planning.

### 3. Presided and participated research projects

Presiding or participating research projects of tackle hard-nut problems in science and technology, public welfare projects, nature science fund, major projects of Ministry of Science and Technology, National Nature Science Foundation of China, Ministry of Environmental Protection, Chinese Academy of Sciences, and some other projects from International cooperation and local government.



## **A. Projects of Ministry of Science and Technology**

- 1) Project of tackle hard-nut problems in science and technology (THPST): ‘Key technique research on ecological risk evaluation and pollution emission reduction of continent petroleum exploitation in China’ (2008-2010); 40 millions Yuan grants; President of the project; and presided the first part of the project;
- 2) THPST subproject: ‘Habitat assessment technique research of national continent animals and plants’ (2008-2010); 800 thousands Yuan grants; project leader;
- 3) THPST subproject: ‘Assessment techniques research of ecology effects of ecotourism resource exploitation’ (2007-2009); 400 thousands Yuan grants; project leader;
- 4) Public welfare project: “Technique research of monitoring and evaluating national biodiversity” (2007-2009); 3.65 millions Yuan grants: project leader;
- 5) Public welfare project: “Effects of climate change on the distribution pattern of endangered species in the Qinling mountainous region” (2007-2009); 800 thousands; project leader;
- 6) Public welfare project: “key techniques of standardized construction and management National Nature Reserve” (2012-2014); 15 millions Yuan grants: project leader;
- 7) Public welfare project: “Effects of climate change on biodiversity conservation priority area for land impact assessment technology in China” (2012-2014); 6 millions Yuan grants: project leader;

## **B. National Special Projects**

- 1) Species resource monitoring network construction and monitoring technical standards and specifications research (2008-2011)
- 2) Subproject of water-special project: “Key technique research of ecological restoration in wetlands of Songhua River basin” (2009-2011); project leader;
- 3) Subproject of water-special project: “Ecology risk assessment research in Songhua river basin” (2009-2010); major participant;
- 4) Special project of transgene biotechnology: “Biosafety assessment technique research on the effects of transgenic Bt rice on small-type mammals in agriculture fields” (2009-2010); project leader;
- 5) Special project of transgene biological technology: “Fast monitoring and testing technique research of transcription proteins in transgenic Bt cotton in fields” (2009-2010); major participant.
- 6) Special project of transgene biological technology: “Monitoring and testing new technique of transgenic crops based on soil animals”(2009-2010). project leader;
- 7) Special project of transgene biological technology: “Effects of ecosystem and monitoring technique of transgenic rice and maize based on soil animals” (2011-2015). project leader;

### **C. Projects of National Nature Science Fund**

- 1) Project of Nature Science Fund (NSF): “The relationship between spatial distribution of minitype mammals and habitat heterogeneity in wilderness-oasis ecotone of Hei river: pattern and process” (2008-2010); 300 thousands; project leader;
- 2) NSF project: “Effects of climate change and artificial interference on rodents resource and distribution in northwest type areas” (2003-2005); 250 thousands; project leader;
- 3) NSF project: “Spatial pattern research of biodiversity of medium and small mammals in composite landscape of mountain-wilderness-oasis of Heihe river basin” (2004-2006); 100 thousands; project leader;
- 4) Special project of NSF: “Spatial niche research of serow and gnu in the Qinling mountainous region” (2002-2004); 200 thousands; project leader.

### **D. Key Projects in Ministry of Environmental Protection**

- 1) Public welfare project: “key techniques of standardized construction and management National Nature Reserve” (2012-2014), project leader;
- 2) MEP Biodiversity protection special project: Qinling area biodiversity comprehensive assessment (2012).
- 3) MEP Biodiversity protection special project: Ecosystem diversity evaluation of Biodiversity conservation priority region in the southern Hengduan mountain, (2011-2012)
- 4) Public welfare project: Monitoring and evaluation technology research on biodiversity in china (2007-2010);
- 5) MEP project: Global climate change on the influence of the fragile ecological regions of biological diversity in China "(2009-2010),
- 6) MEP project: “Effects of climate change on biodiversity in regions with vulnerable ecosystem” (2007-2008); project leader;
- 7) MEP project: “Evaluation technique research on environmental effects of exotic species” (2007-2008); project leader;
- 8) MEP project: “Prophase research of protection planning on environmental safety of national transgenic organism” (2006-2007); project leader;
- 9) MEP project: “Investigation of ecological environment in central and eastern regions” (2003-2005); major participant;
- 10) MEP project: “Regionalization research on key ecological functional areas throughout the country” (2004-2005); major participant.
- 11) MEP project: Ecological safety evaluation method research on import environmental protection with microorganisms, (2006-2007);
- 12) MEP project: “Ecosystem diversity evaluation in the southwest of country” (2009—2010) ; project leader;
- 13) MEP project: “Comprehensive evaluation and research on biodiversity conservation priority area in the eastern of Hengduan Mountains” (2011—2012) ; project leader;

14) MEP project: “Comprehensive evaluation and research on biodiversity conservation priority area in Qinling mountains” (2012—2013) ; projector leader.

#### **E. Projects of Other Ministries and Provinces**

- 1) Associated Law Enforcement inspection and investigation on biological species resources---- Investigation on ecosystem diversity of the typical area in Yunnan. (2010)
- 2) Ecological and environmental protection and implementation plan in xijiang river basin of Guangxi. (2010)
- 3) Epa regional sea : Database update project on marine nature reserves. (2010)
- 4) State Council Gorges Project Construction Committee (SCGPCC): “Demonstration research on techniques of ecology protection and restoration in islands of the Three Gorges” (2008-2010); project leader;
- 5) State Forestry Administration: “The status and CITES commercial register of national musk deer industry” (2002-2003); project leader;
- 6) SCGPCC: “Mitigation technology research on eutrophia and pollution of tributaries in the Three Gorges” (2004-2005); major participant;
- 7) China postdoctoral science foundation: “Effects of environment fragmentation in northwest regions on the biodiversity of mintype mammals” (2001-2003); project leader;
- 8) Knowledge innovation projects of Chinese Academy of Sciences: “Research on succession rules of ecological environment and sustainable use of land and water resources in the western area of China” (2001-2003); project leader;
- 9) NSF of Heilongjiang Province: “Research on ingestion strategy of moose in winter” (1998-2001); project leader.

#### **F. International Cooperation Projects**

- 1) GEF special project: “Monitoring evaluation of environmental synthesis protection and water resources in the Haihe river basin” (2006-2010); project leader;
- 2) PAP special project: “National action plans of the biodiversity protection in the Ring of the Northwest Pacific” (2007); project leader;
- 3) PAP special project: “Database construction of natural reserves in the Ring of the Northwest Pacific” (2007); project leader;
- 4) China-German: “Planning research on representative area construction of biodiversity protection in China type regions” (2008-2009); project leader of China;
- 5) China projects of WWF: “Effects of Lan-Yu railway (autoroute) construction on Panda population and habitat quality in Qinling and Min Mountainous regions” (2007-2008); project leader of China;
- 6) China projects of WWF: “Effects of hydroelectricity construction on Panda population and habitat quality in Qinling and Min Mountainous regions” (2008-2009); project leader of China;
- 7) Research on management technique and countermeasure of alien invasion species

- in China-New Zealand (2010-2012); project leader of China.
- 8) Comparative study on biodiversity and ecosystem services between China and Canada.(2011-2012), the project director.

#### **G. Local Government Projects**

- 1) Planning of ecological civilization of WenJiang region in Chengdu district. (2012-2013)
- 2) Leading “The overall planning of urban ecological civilization of Heping region in Shenyang district” (2011-2012)
- 3) Leading “The overall planning of ecological civilization in pilot cities of Guiyang” (2010-2011)
- 4) Ecological civilization construction planning in Taishun, Zhejiang. (2010-2011)
- 5) Leading “Shanxi reservoir basin ecological environment protection planning in Wenzhou” (2011)
- 6) The ecological environment impact assessment on oil pipeline explosion in Dalian. (2010)
- 7) Leading “Assessment of environment effects of Feng county railway in Jiangsu province” (2007);
- 8) Leading “Assessment of environment effects of the No. 3-4 wharfs construction of the Humeng port in Dongguan city” (2007);
- 9) Leading “Strategic environment assessment in Miyun county of Beijing” (2006-2007);
- 10) Regional strategic environmental assessment in Miyun, Beijing. (2006—2007)
- 11) Biological diversity and nature reserve protection national report of the yellow sea coast. (2006)
- 12) Leading “The investigation research of species germplasm resources in Dongguan city” (2005-2006);
- 13) Leading “General planning of ecological city in Rongcheng, Henan province” (2005-2006);
- 14) Leading “General planning and scientific investigation of natural reserves in the Guiqingshan mountain, Gansu province” (2005);
- 15) Participating “The general planning of ecology city in Shenzhen”, preside over the part of “ecological bearing capacity and land resources planning”
- 16) Participating “The general planning of ecology city demonstration in Chaoyang district, Beijing”, preside over the part of “ecological landscape and safety layout planning”;
- 17) Participating “Assessment of environment effects of development zones in Qinhuangdao city”;
- 18) Participating “General planning of ecological zones in Haidian district, Beijing” (2004-2005).

#### **4. Society Membership and Professional Activities**

- 1) Member of the State Council National Nature Reserve Evaluation Committee;
- 2) Deputy director of the Nature reserve professional committee of Ecological

society

- 3) Member of the Chinese Biodiversity Conservation and Green Development Foundation Committee .
- 4) Experts of The ministry of health national biological safety of pathogenic micro-organism laboratory.
- 5) Member of panel of experts in national major special projects of “transgenic biotechnology research”.
- 6) Member of panel of experts in national major special projects of “prevention and cure technique research on water pollution”;
- 7) Member of panel of experts in China-USA TDM of “Techniques assessment of China-USA trade in transgenic agricultural products”;
- 8) Technical expert of the Convention on Biological Diversity of Ministry of Environmental Protection
- 9) Deputy director of the rural ecological environment branch of the China Environmental Sciences Society.
- 10) Member of Ecological Society of China, Animal Society, Environmental Society, Ecotoxicology Society, Wetlands International Union and so on;
- 11) Short-term visiting and training in University of Maryland (USA), University of Venice (Italy), European Union Committee on Biodiversity (Belgium), Natural resources protection administration of Germany Ministry of Environment (German), Ministry of Environment Protection (the Netherlands) and so on.
- 12) Graduate and postdoctoral advisors in Chinese Research Academy of Environmental Sciences, Beijing Normal University, Renmin University of China, Minzu University of China, Nanjing Agricultural University and so on.

## 5. Recent Monographs

- [1] **Junsheng Li**, Guo Li, Xiaopu Wu et al.. Terrestrial Ecosystem Biodiversity Assessment Research. Beijing, China Environmental Science Press, 2012
- [2] **Junsheng Li**, Zhongkui Ji, Xiaopu Wu et al. Landscape Diversity Monitoring and Assessment in National Reserves. Beijing, China Environmental Science Press, 2010
- [3] **Junsheng Li**, Lile Hu, Jianmin Shu. 《秦岭林线树种太白红杉生态特征及其对气候变化的响应》. 北京：科学出版社. 2012.
- [4] Qin Xu, Nengwen Xiao, **Junsheng Li**. Terrestrial earthworm in China. China Agriculture Press, 2010.

## 6、Recent Publications

At least 67 papers were published since 2000. The most related publications are:

- [1] **Junsheng Li\***, Xin Lin, Anping Chen, Townsend Peterson, Keping Ma, Monika Bertzky, Philippe Ciais, Valerie Kapos, Changhui Peng, Benjamin Poulter. Global Priority Conservation Areas in the Face of 21st Century Climate Change. PLOS one, 2013, 8(1):e54839.
- [2] Wei Wang, Peter Pechacek, Mingxia Zhang, Nengwen Xiao, Jianguo Zhu, **Junsheng Li\***. Effectiveness of Nature Reserve System for Conserving Tropical

- Forests: A Statistical Evaluation of Hainan Island, China. PLOS one, 2013, 8(2):e57561
- [3] Linhai Zhu, Xuechun Zhao, Liming Lai, Jianjian Wang, Lianhe Jiang, Jinzhi Ding, Nanxi Liu, Yunjiang Yu, **Junsheng Li\***, Nengwen Xiao, Yuanrun Zheng, Glyn M. Rimmington. Soil TPH Concentration Estimation Using Vegetation Indices in an Oil Polluted Area of Eastern China. PLOS one, 2013, 8(1): e54028.
  - [4] Peter Pechacek, Guo Li, **Junsheng Li\***, Wei Wang, Xiaopu Wu, Jing Xu. Compensation Payments for Downsides Generated by Protected Areas. AMBIO, 2013, 42: 90-99.
  - [5] Chunyu Liu, Wen Xiao, **Junsheng Li\***, Peter Pechacek. Attitude of tourists visiting nature reserves in China. Tourism Management Perspectives, 2013, 5:1-4.
  - [6] Yongbo Liu, Fengqiao Liu, Xubin Pan, **Junsheng Li\***. Protecting the Environment and Public Health from Pesticides. Environ. Sci. Technol. 2012, 46: 5658–565962. S. L. Piao, A. Ito, S. G. Li, Y. Huang, P. Ciais, X. H. J. S. Li, M. R. Lomas, J. F. Mao, E. Mayorga, A. Mohammat, H. Muraoka, C. H. Peng, P. Peylin, B. Poulter, Z. H. Shen, X. Shi, S. Sitch, S. Tao, H. Q. Tian, X. P. Wu, M. Xu, G. R. Yu, N. Viovy, S. Zaehle, N. Zeng, and B. Zhu. The carbon budget of terrestrial ecosystems in East Asia over the last two decades. Biogeosciences, 2012, 9: 3571–3586.
  - [7] Jing Xu, **Junsheng Li\***, Dayuan Xue. Negotiation progress of the Nagoya Protocol on the access of genetic resources and benefit-sharing and countermeasures. Biodiversity, 2012, **20** (6): 779–783(in Chinese with English abstract).
  - [8] Jing Xu, **Junsheng Li\***, Dayuan Xue, Senlu Yin. Core Contents Interpretation of Nagoya Protocol on Genetic Resources Access and Benefit-sharing and the Prediction of its Entry into Force. Journal of Plant Genetic Resources, 2012, **13**(5): 720-725(in Chinese with English abstract).
  - [9] Xuhui Wang, Shilong Piao, Philippe Ciais, **Junsheng Li\***, Pierre Friedlingstein, Charlie Koven, and Anping Chen. Spring temperature change and its implication in the change of vegetation growth in North America from 1982 to 2006. PNAS, 2011, 108 (4): 1240-1245.
  - [10] Juntao Fan, **Junsheng Li\***, Zhanjun Quan, Xiaopu Wu, Lile Hu, Queping Yang. Impact of road construction on giant panda's habitat and its carrying capacity in Qinling Mountains. Acta Ecologica Sinica, 2011, 31:145-149
  - [11] Nengwen Xiao, Deyan Xie, **Junsheng Li\* et al.** (2011) Effect of Time Duration of Oil Well Exploitation on Soil Nematode Communities in Shengli Oilfield. Research of Environmental Sciences, 2011, **24**(9):1008-1015 (in Chinese with English abstract).
  - [12] Xuexia Wang, Nengwen Xiao, Chunhong Yan, Deyan Xie, **Junsheng Li\***. Toxic Effects Assessment of Water Bodies in Shengli Oilfield By Oryzias Latipes. Research of Environmental Sciences, 2011, **24**(9):1047-1051(in Chinese with English abstract).
  - [13] Junsheng Li\*, Nengwen Xiao, Caiyun Zhao, Xiao Guan, Gang Wu. Effect of Transgenic Rice Diets on the Food Utilization Indices of the Kunming Male

- Mouse. Hubei Agricultural Sciences, 2011, **50**(9):4013-4017.
- [14] Xuhui Wang, Shilong Piao, Philippe Ciais, **Junsheng Li\***, Pierre Friedlingstein, Charlie Koven, and Anping Chen. Spring temperature change and its implication in the change of vegetation growth in North America from 1982 to 2006. PNAS, 2011, 108 (4): 1240-1245.
- [15] Shilong Piao, Philippe Ciais, Yao Huang, Zehao Shen, Shushi Peng, **Junsheng Li**, Liping Zhou, Hongyan Liu, YuecunMa, Ding Yihui, PierreFriedlingstein, ChunzhenLiu, KunTan, YongqiangYu, TianyiZhang, JingyunFang. The impacts of climate change on water resources and agriculture in China. Nature, 2010, 467: 43-51.
- [16] Wei Wang, Wen-jie Wang, **Jun-sheng Li**, Hao Wu, Chao Xu, Tan Liu. The Impact of Sustained Drought on Vegetation Ecosystem in Southwest China Based on Remote Sensing. Procedia Environmental Sciences, 2010 (2):1679–1691.
- [17] Lin, X., Li, G., Bertzky, M., Kapos, V., Wu, X., Li, J.Sh\*, Dickson, B. (2010) Carbon, biodiversity and ecosystem services: Exploring co-benefits. Jiangxi Province, China. Part II. UNEP-WCMC, Cambridge, UK.
- [18] Hu L L, Yan B Q, WU Xiaopu, Li J S\*. Calculation method for sunshine duration in canopy gaps and its application in analyzing gap light regimes. Forest Ecology and Management. 2010, 259(3): 350-359.
- Hu Lile, **Li Junsheng\***, Yan Boti. Estimation of canopy gap size and gap shape using a hemispherical photograph. *Trees*, 2009, 23:1101-1108
- [19]**Li Junsheng**, Song Yanlin, Zeng Zhigao. Elevation gradients of diversity for rodents in the middle section of northern slopes of Qilian Mountains, China. *Journal of Global Ecology and Biogeography*, 2003, 12 (4): 449-460.
- [20]Jiang Zhaowen, Seiki Takatsuki, **Li Junsheng**. Seasonal changes in parotid and rumen papillary development in Mongolian gazelle (*Procapra gutturosa* Pallas). *Ecological Research*. 2003, 18: 65-72.
- .....

# CURRICULUM VITAE

Dr. Haigen XU, professor and Deputy Director-General, Nanjing Institute of Environmental Sciences under the Ministry of Environmental Protection of China, has been conducting research work on biodiversity conservation for more than 20 years, in the areas such as conservation planning, policies and laws, monitoring and assessment, nature reserves, invasive alien species, biosafety, database and information system, with many projects supported by the Ministry of Environmental Protection, the Ministry of Science and Technology, the Ministry of Finance, UNEP, GEF, EU, and many awards, 23 books and over 100 papers, including 19 papers in international peer-reviewed journals.

1. **Name:** Haigen XU

2. **Present Employment:** Nanjing Institute of Environmental Sciences (NIES) under the Ministry of Environmental Protection of China

3. **Address**

8 Jiang Wang Miao Street, P.O.Box 4202, Nanjing 210042, P.R. China

Tel: (+86-25)85287081, 85473713

Fax: (+86-25)85473713, 85411611

Email: xhg@nies.org, xuhgs@sina.com

Mobil: 13851685395

4. **Education**

1997.09-2000.06, Department of Geography, Nanjing University, China, Ph.D.

1985.09-1988.06, Department of Biology, Lanzhou University, China, Master of Science.

1981.09-1985.07, Department of Mathematics, Southeast University, China, Bachelor of Science.

5. **Position and Title**

Deputy Director-General and Professor, NIES

Director, State Key Environmental Laboratory on Biosafety

6. **Record of Services**

Period	Service
2008-	Leading the project on Demonstration on Technology for Monitoring and Recovery of Key Species in China supported by the Ministry of Science and Technology
2008	Leading the project on China's Fourth National Report on the Implementation of the Convention on Biological Diversity supported by UNDP-GEF



2008-2010	Leading the development of national environmental standards “Standard for the assessment of biodiversity” and “Technical guideline for the evaluation of biological genetic resources”
2008-2009	Leading the project on Biodiversity Information-sharing and Monitoring System supported by EU-China Biodiversity Programme
2007-2010	Key experts for the project on China Biodiversity Strategy and Action Plan organized by the Ministry of Environmental Protection
2007-	Leading the project on Biodiversity Indicators supported by the Ministry of Environmental Protection
2007-	Leading the project on the Establishment of National Biological Species Database and Information System support by the Ministry of Environmental Protection
2007-2009	Leading the project on Research on Environmental Risk Assessment of Alien Species support by the Public Research and Development Program for the Environment
2007-2010	Main Partners of the project on Biodiversity Conservation in the Limestone Area of Southwest Guangxi, China supported by China-EU Biodiversity Program
2005	Leading the project on China’s Third National Report to Implementation of the Convention on Biological Diversity, supported by UNEP-GEF
2003	Leading the project on Regional Distribution, Economic Loss Estimation and Prevention Strategy for Invasive Alien Species in China, supported by SEPA
2002 till now	Leading the project on Study on Models and System of Risk Assessment and Environmental Economic Assessment of Invasive Alien Species, supported by National Basic Research and Development Program
2003-2005	Leading the project on Support to the Implementation of the National Biosafety Framework of China, supported by UNEP/GEF
2003-2005	Leading the project on Capacity Building of Biodiversity Clearing House Mechanism, supported by UNEP/GEF
2003-2001	Leading the project on Study on Key Issues under the Convention on Biological Diversity, supported by the State R & D Plan in the Tenth Five-Year
2001	Leading the project on Construction of Biodiversity Clearing House Mechanism of China, supported by SEPA
2001-2000	Leading the Preparation of the Second National Report to the COP (China), supported by UNEP/GEF
2000-1999	Leading the Development of Planning of Science and Technology for Biodiversity Conservation in the Tenth Five-Year Plan of China, supported by the Ministry of Science and Technology
2003-1999	Leading the project on technical Standards for the Construction of Conservation Infrastructure of Nature Reserves, supported by SEPA
2000-1997	Leading the project on Information Sharing of Nature Reserves and Biodiversity, supported by national Ninth Five-Year R & D Program

1999-1998	Main participant of the project on Study on Sustainable Management Policies of Nature Reserves in China , supported by UNESCO/CIDA
1998-1995	Main participant of UNEP/GEF project on Biodiversity Data Management and Information Networking Capacity Building in China, responsible for the subproject on Demonstration on Biodiversity Information System
1997-1995	Main participant of UNEP/GEF project on China Country Study on Biological Diversity, involving in the economic assessment of biodiversity

## 7. Academic Speciality

Biodiversity conservation planning, policies and laws; nature reserves; invasive alien species; biosafety; database and information system

## 8. International meetings and workshops attended

The sixteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), Montreal , 30 April to 5 May 2012

The fifteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), Montreal , 7 to 11 November 2011

Ad Hoc Technical Expert Group Meeting on Indicators for the Strategic Plan for Biodiversity 2011-2020, High Wycombe, United Kingdom, 20-24 June 2011

International Expert Meeting: Assessment of the Adequacy of Existing Observation Capabilities for the CBD 2020 Targets, Wageningen, The Netherlands, 1-3 March 2011

Tenth meeting of the Conference of the Parties to the Convention on Biological Diversity (COP-10), Nagoya, Japan, 8 to 29 October 2010

Fourteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA/14), Nairobi, Kenya, 10-21 May 2010

Expert Workshop on International Biodiversity, hosted by UK Government (Defra), London, UK, 18-20 January 2010

Regional Workshop for East, South and Southeast Asia on the Updating the CBD Strategic Plan for the Post-2010 Period, Tokyo, Japan, December 15-18, 2009

2<sup>nd</sup> EU-China Biodiversity Strategy Workshop, September 15-26, 2009, Belgium and Spain

ASEAN Regional Workshop on Global Taxonomy Initiative (GTI): Needs Assessment and Networking, Los Banos, Laguna, Philippines, May 18-23, 2009

Capacity Building Workshop for South, Southeast and East Asia on National Reporting, Tsukuba, Japan, 1-5 December, 2008

Ad-hoc Intergovernmental and Multi-stakeholder Meeting on an Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Kuala Lumpur, Malaysia, 9-13

October, 2008

Ninth meeting of the Conference of Parties to the Convention on Biological Diversity, Bonn, Germany, 19–30 May 2008

Regional Workshop on the Biosafety Clearing-House, Cairo, Egypt, 3 to 7 March 2008

Thirteenth meeting of SBSTTA to the Convention on Biological Diversity, Rome, Italy , 18 - 22 February 2008

Twelfth meeting of SBSTTA to the Convention on Biological Diversity, UNESCO, Paris, 2–6 July 2007

Liaison Group Meeting of the Global Strategy for Plant Conservation, 23-25 October 2006, Dublin, Republic of Ireland

Visit to Norwegian Institute of Gene Ecology, 7-11 May, 2006

WP4 and WP5 Workshop of INCOFISH (Integrating multiple demands on coastal zones with emphasis on aquatic ecosystems and fisheries) Project. London, 12-18 Feb 2006, London

Start-up meeting of the EU INCO project 003739 INCOFISH (Integrating multiple demands on coastal zones with emphasis on aquatic ecosystems and fisheries), 4- 7 October 2005, Leibniz Institut für Meereswissenschaften in Kiel, Germany

Inception Meeting Framework for a Nature Conservation Programme in North-East Asia, 18-21 July 2005, Kangwon National University, Chuncheon, the Republic of Korea

Second meeting of National Coordinators of the UNEP-GEF Project on the Implementation of the National Biosafety Frameworks in Geneva, Switzerland, Mar. 20 to Mar. 24, 2005

Third Meeting of Working Group on Nature Conservation in North-East Asia, 30 Sept. -1 Oct. 2004, Bangkok, organized by UNESCAP

Meeting of the National coordinators of the UNEP-GEF Projects on Implementation of National Biosafety Frameworks, 19 - 30 January 2004, organized by UNEP

First Meeting of Working Group on Nature Conservation in North-East Asia, 21-22 July 2003, Bangkok, organized by UNESCAP

UNEP-GEF Biosafety Sub-Regional Workshops on Risk Assessment and Public Participation for Asian countries, Kuala Lumpur, Malaysia, 21-24 Jan. 2003

First Steering Committee Meeting of the EU project on Enhancing the Outreach of Aquatic Biodiversity and Ecosystem Research in Support of the Transition towards Global Sustainability (ECOFISH), 15-18 December 2002, Kiel, Germany

Study tour to Denmark, Norway, Sweden on Biosafety and Alien Species, May 23-June 3, 2001

Chinese Freshwater Fishes: Training and Workshop on Research Priorities in Fish Biology and Informatics at the Aquatic Frontier, 3-10 Nov. 2000, Stockholm, Sweden, organized by Swedish Museum of Natural History under the support of EU

OECD Workshop on Unique Identification Systems for Transgenic Plants, 2-4 Oct. 2000, Charmey,

Switzerland

Eastern Himalayan Biodiversity Workshop, 1-3 Dec. 1999, Kathmandu, Nepal, organized by WWF/ICIMOD/UNDP

Nature reserve study tour to Canada, August 14-Sept. 6, Canada, supported by Canadian International Development Agency

Sub-Regional Meeting on "Conserving Himalayan Heritage-The Role of the World Heritage Convention", August 30-Sept. 4, 1998, Kathmandu, Nepal, organized by WWF/UNESCO

Nature conservation study tour to Russia, 2-17 March 1997, Moscow, Russia

#### **9. Academic prizes and awards**

"Biodiversity Data Management and Information Networking Capacity Building in China" which was awarded the Second-Class Ministerial Prize of Science and Technology by SEPA in 1998

"Biodiversity Data Management and Information Networking Capacity Building in China" which was awarded the Third-Class State Prize of Science and Technology in 1999

Awarded Experts with Eminent Contribution by the State Council in Oct. 2001

Awarded the Priority Expert at Second Level of the "333 Experts Engineering in the New Century", by Government of Jiangsu Province, 2002

"Information Sharing for Biodiversity and Nature Reserves" which was awarded the Third-Class Ministerial Prize of Science and Technology by SEPA in 2003

Awarded Excellent Model in Research Institutes in Jiangsu, by Government of Jiangsu Province, 2004

"Study on Key Techniques for the Implementation of the Convention on Biological Diversity" which was awarded the Third-Class Ministerial Prize of Science and Technology by SEPA in 2005

Awarded National Expert of the "Expert Engineering in the New Century" by the Ministry of Human Resources, Ministry of Science and Technology, Ministry of Education, Ministry of Finance, State Development and Reform Commission, National Natural Science Foundation, and China Science and Technology Association, 2006

"Risk Assessment Techniques and Environmental Safety Research for Important Genetically Modified Organisms" which was awarded the First-Class Ministerial Prize of Science and Technology by SEPA in 2008

Award of Excellent Contribution to the Implementation of National Science and Technological Programme issued by the Ministry of Science and Technology

"Study on Risk Assessment and Control of Alien Species" which was awarded the Second-Class Ministerial Prize of Science and Technology by the Ministry of Environmental Protection

#### **10. Books**

Haigen Xu. The Theory and Methodology on Ecological Security Design for Nature Reserves, China Environmental Science Press, Beijing, 2000.

Policy Study on Sustainable Management of Nature Reserves of China, Scientific and Technological Literature Publishing House, Beijing, 2000. (Co-author)

China's Second National Report on Implementation of the Convention on Biological Diversity. China Environmental Science Press, Beijing, 2001. (Editor-in-Chief)

Haigen Xu et al. Demonstration of Biodiversity Information Networking Based on the Internet. Xueyuan Publishing House, Beijing, 2002

Haigen Xu et al. Study on Key Issues under the Convention on Biological Diversity: Alien Species Invasion, Biosafety and Genetic Resources. Science Press, Beijing, 2004

Haigen Xu and Sheng Qian. Inventory of Invasive Alien Species of China. China Environmental Science Press, Beijing, 2004

Theory and Methodology of Mathematical Ecological Stability. Science Press, Beijing, 2004 (third author)

China's Third National Report to Implementation of the Convention on Biological Diversity. China Environmental Science Press, Beijing, 2005 (Editor-in-Chief)

Haigen Xu et al. Biosafety Assessment and Risk Management for Genetically Modified Organisms in China. China Environmental Science Press, Beijing, 2005

China's Fourth National Report to Implementation of the Convention on Biological Diversity. China Environmental Science Press, Beijing, 2009 (Editor-in-Chief)

Haigen Xu et al. Environmental Risk Assessment and Control of Alien Species. Science Press, Beijing, 2011

Haigen Xu et al. Biodiversity of Karst Region in Southeast Guangxi. Encyclopedia of China Publishing House, Beijing, 2011

Haigen Xu et al. Protecting the Life System on Which Humans Rely ----Review and Prospect on the Convention on Biological Diversity. Science Press, Beijing, 2011

Haigen Xu et al. China's Invasive Alien Species. Science Press, Beijing, 2011

Haigen Xu et al. Introduction to Species Monitoring. Science Press, Beijing, 2013

Haigen Xu et al.. Baseline Assessment of Biodiversity in China. Science Press, Beijing, 2013

## 11. Papers

More than 100 papers have been published. Main papers are as follows:

- [1] Haigen Xu and Fengxiang Yang. Age Classification and Growth Model of *Phrynocephalus przewalskii*. *Ecological Modelling*, 70: 127-135, 1993
- [2] Haigen Xu and Fengxiang Yang. Simulation Model of Activity of *Phrynocephalus przewalskii*. *Ecological Modelling*, 77:197-204, 1995
- [3] Haigen Xu, Zhenning Gao, Dayuan Xue et al. China National Biodiversity Information Query System. *Journal of Environmental Management*, 56(1): 45-59,1999
- [4] Haigen Xu, Shunqing Wang and Dayuan Xue. Biodiversity Conservation in China: Legislation,

- Plans and Measures. *Biodiversity and Conservation*, 8(6): 819-837, 1999
- [5] Haigen Xu, Dehui Wang and Xuefeng Sun. Biodiversity Clearing-House Mechanism in China: Present Status and Future Needs, *Biodiversity and Conservation*, 9(3): 361-378, 2000
  - [6] Haigen Xu, Yimin LI and Hui DING. The establishment of China's core Biodiversity Metadata Standard. *Biodiversity and Conservation*, 2004,13(5): 1009-1022
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  - [9] Biao Liu, Qing Zeng, Fengming Yan, Haigen Xu & Chongren Xu. Effects of transgenic plants on soil microorganisms. *Plant and Soil*, 271: 1–13, 2005
  - [10] Johansson. F, Fang. F and Xu Haigen. Fish communities in small and intermediate streams in Guangxi Province, China. *Journal of Freshwater Ecology*, 21(1): 39-45, 2006
  - [11] Xu Haigen, Sheng Qiang, and Zhengmin Han et al. The Status and Causes of Alien Species Invasion in China. *Biodiversity and Conservation*, 15(9): 2893-2904, 2006
  - [12] Haigen Xu, Hui Ding, Mingyan Li et al. The Distribution and Economic Losses of Alien Species Invasion to China. *Biological Invasions*, 8:1495–1500, 2006
  - [13] Jiang Hong, Cheng Heqin, Xu Haigen, Francisco Arregu'ín-S ' anchez, Manuel J. Zetina-Rej 'on, Pablo Del Monte Luna, William J.F. Le Quesne. Trophic controls of jellyfish blooms and links with fisheries in the East China Sea. *Ecological Modelling*, 2008, 202: 492–503
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  - [15] JIANG H., Cheng H.Q., LeQuesne, W.J.F., Xu, H.G., Wu J.,Ding H.,Arreguín-Sánchez F.(accepted) Ecosystem model predictions of fishery and conservation trade-offs resulting from marine protected areas in the East China Sea. *Environmental Conservation*, 2008, 35(2):137-146
  - [16] Hui Ding, Haigen Xu et al. An overview of spatial management and marine protected areas in the East China Sea. *Coastal Management*, 2008, 36(5): 443 - 457(
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  - [19] Haigen Xu, Hui Ding, Jun Wu. National indicators show biodiversity progress. *Science*, 2010, 329:900

**RANDOLPH R. THAMAN**  
**Professor of Pacific Islands Biogeography**  
**Brief Summary Curriculum Vitae of Relevant Entries)**  
**(August 2013)**

**I. BIOGRAPHICAL/PERSONAL DATA**

**Address:** School of Geography, Earth Science and Environment (SGESE)  
Faculty of Science, Technology and Environment  
The University of the South Pacific  
Private Bag, Suva, Fiji

**Phone:** (679) 323 1000

**Fax:** (679) 301487, 300482

**E-mail:** Thaman\_r@usp.ac.fj

**Place of Birth:** Stockton, California, USA

**Date of Birth:** October 14, 1943

**Citizenship:** The United States of America

**Marital Status:** Married

**Wife:** Dr. Konai Helu Thaman (Tongan citizen; Professor of Pacific Education and Culture; UNESCO Chair as Professor of Teacher Education and Culture; Pro-Vice Chancellor, 1990-93; Head of School of Humanities, 1996-2003; Pro-Vice Chancellor 2004-2005)

**Children:** Batiri (daughter - 36 yrs); Baravi (son – 32 yrs)

**Grandchildren:** Keanu (grandson - 5 yrs.), Logan (2 yrs.)

**II. EDUCATIONAL HISTORY**

**1961** High School Graduation, Miramonte High School, Orinda, California

**1966** B.A. (Geography), University of California, Berkeley.

**1968** M.A. (Geography), University of California, Berkeley. Thesis Title: "The Feasibility of Mapping Vegetation on a World-Scale Using Satellite Photography".

**1975** Ph.D. (Geography), University of California, Los Angeles. Thesis Title: "The Tongan Agricultural System: With Special Emphasis on Plant Assemblages".

**III. FOREIGN LANGUAGE PROFICIENCY**

Tongan: Fluent reading and speaking ability

Fijian: Fluent speaking and reading ability

French: Adequate reading and speaking ability

Spanish: Adequate reading and speaking ability

New Guinea Pidgin: Adequate reading and speaking ability

**IV. SELECTED HONOURS/ACHIEVEMENTS**

- Eagle Scout (1959)
- Dick David Memorial U.C. Alumni Scholarship for the Outstanding Scholar-Athlete in Contra Costa County (1961)
- Member Order of the Golden Bear Honor Society (1965-67)

## 2

- Captain, Universities of California Representative Rugby Touring Team to New Zealand and Australia (1970)(Record 7-1-1)
- National Science Foundation (NFS) Grant to conduct Ph.D. Research in Tonga (1971)
- Recipient of MacArthur Foundation, Chicago \$US 210,000 grant to promote Community-Based Biodiversity Conservation in Melanesia (August 1993 - 1996).
- Invested as a Member of the Order of Fiji (MF) for service to Fiji by the Chancellor of the Order of Fiji, his Excellency, Ratu Sir Kamisese Mara, The President and Commander-in-Chief of Fiji (20 March 1997).
- Recipient of the 1996 Fiji Amateur and Sports Association and National Olympic Committee (FASANOC) Coach of the Year Award (March 1997).
- Had a deepwater garden eel, *Gorgasia thamani*, named after him by Dr. David Greenfield in recognition of assistance provided to a 1997-2001 study of cryptic marine finfishes in Fiji (2002).
- Awarded Honorary Membership of IUCN at the IUCN World Conservation Congress, Jeju, Korea, September 2012
- Elected as an Asia-Pacific UN Region member of the Multidisciplinary Expert Panel (MEP) from 2013 - 2015 for the recently established Intergovernmental Science Policy Panel on Biodiversity and Ecosystem Services (IPBES), November 2012
- Made a member of the Ramsar Wetlands Convention Scientific and Technical Review Panel 2013-15, Dec. 2012
- Awarded Inaugural Pacific Islands Environment Leadership Award, Lifetime Achievement at the 9<sup>th</sup> Pacific Islands Conference on Nature Conservation and Protected Areas, Dec. 2013

### V. RELEVANT EMPLOYMENT HISTORY

**July 1966 - September 1967:** Laboratory Assistant, Forestry Remote Sensing Laboratory, University of California, Berkeley.

**October 1967 - April 1969:** Peace Corps Volunteer; secondary school teacher at Tonga High School, Nuku'alofa, Tonga, teaching General Science, Mathematics, Biology and Physical Education and coaching athletics and rugby teams.

**May 1969 - December 1970:** Project Leader NASA Earth Resource Inventory Project, Forestry Remote Sensing Laboratory, University of California, Berkeley.

**January 1971 - January 1972:** Ph.D. Research on Tongan Agriculture and part-time 6th Form Biology and Physical Education teacher Tonga High School, Nuku'alofa, Tonga.

**February 1972 - January 1974:** Research Coordinator Geography Remote Sensing Unit and part-time Lecturer in Cultural Geography, University of California, Santa Barbara.

**February 1974 - Present:** Lecturer (1972-78), Senior Lecturer (1979-85), Reader (1986-1991), Professor of Pacific Islands Biogeography (1991-present), Geography Department, School of Social and Economic Development, The University of the South Pacific, Suva, Fiji.

**February 1984 - December 1986:** Head of School of Social and Economic Development.

**December 1990 - January 1992; February - December 1995; January – July 1998:** Acting Head of Geography, **April 2009- Dec. 2010:** Head, School of Islands and Oceans,

### VI. RELEVANT RECENT PART-TIME RESPONSIBILITIES/CONSULTANCIES

The University of the South Pacific representative to the South Pacific Regional Environment Programme (SPREP), 1982 to 1997.

Expert witness to give testimony on Nauruan ethnobotany and vegetation rehabilitation to The Commission of Inquiry into the Rehabilitation of the Phosphate Mined-out Lands of Nauru, July 1987.

Resource person, rapporteur and co-organiser of An International Conference on Developing an Agricultural Research Programme for the Atolls, Pacific Harbour, Fiji November 1990.

Consultant to the Institute of Pacific Studies (IPS) and the South Pacific Regional Environment Programme (SPREP) to prepare (with U. Neemia) the Republic of Kiribati and Tuvalu National Reports for the United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, Brazil, June 1992.(May to August 1991)



### 3

- Consultant to the Food and Agricultural Organisation of the United Nations South Pacific Regional Forestry Project to conduct a review of the uses and status of trees in agricultural and agroforestry systems in Western Samoa, Tonga, Kiribati and Tuvalu, June - September 1993.
- Consultant to the South Pacific Regional Environment Programme (SPREP) and the Forestry Division (Tonga) to design and implement a "Coastal Protection and Reforestation Project, Houma, Tongatapu, Tonga" - August 1993 to July 1995.
- Consultant to the SPREP South Pacific Biodiversity Conservation Programme (SPBCP) and the Government of the Republic of Kiribati to prepare the Project Preparation Documents for the North Tarawa and Cook Islet (Kiritimati) Conservation Areas, June 1995 - present.
- Consultant to the South Pacific Regional Environment Programme (SPREP) and the Government of Nauru to prepare the Nauru National Environmental Management Strategy, Feb. 1995 to April 1996.
- Consultant to the SPREP South Pacific Biodiversity Conservation Programme (SPBCP) and the Government of Tonga to conduct the biodiversity survey of, and prepare a Community-based Biodiversity Conservation Action Plan for the Ha'apai Conservation Area, Sept. 1996 – Nov. 1997.
- Founding and continuing member, Pacific Islands Roundtable on Nature Conservation, 1997-Present.
- Member Fiji National Biodiversity Strategy and Action Plan (BSAP) Steering Committee, June 1997 – present.
- Pacific Island Member Oceania Regional Committee (ORC) of the World Conservation Union (IUCN) January 1998 – 2004.
- Member, Tuvalu and USP Delegations to the United Nations Rio+10 Johannesburg Summit on Sustainable Development, 2002.
- Member SPREP and Tuvalu Delegations to COP 8, Curitiba, Brazil, March 2006.
- Senior Consultant and Team Leader (with D.C. Hassall, S. Takeda and C. Padolina) for the Secretariat of the Pacific Community (SPC) Forest and Trees Programme and Land Resources Division to resurvey the vegetation and flora of Nauru to produce a guide on the plants of Nauru and a report containing the up-dated flora and suggestions for the restoration, rehabilitation, agroforestry and food, health and economic security in Nauru, Nov. 2007.
- Member Technical Advisory Group (TAG) for the EU-funded Facilitating Agricultural Commodity Trade (FACT) Project, Secretariat of the Pacific Community, Suva. Jan. 2009- 2012.
- Co-Team Leader with D. Dominey-Howes of the UNESCO-IOC International Tsunami Survey Team of over 100 scientists to assess the impacts of the 29 September 2009 Tsunami in Samoa, October 2009.
- Founding member Pacific Invasives Partnership (PIP), 2009 – present.
- Member Technical Advisory Committee on Invasive Species Management, Birdlife International, 2011 to present.
- Member of Fiji Delegation to the 2<sup>nd</sup> Session of the Plenary Meeting on the Intergovernmental Science Platform on Biodiversity and Ecosystem Services, Panama City, 16-21 April, 2012.
- Consultant to the National Trust of Fiji (with J. Niukula and Shingo Takeda) to carry out a baseline assessment of the vegetation and flora of Monuriki Island in the Mamanuca Islands of Fiji as a basis for assessment of the impact of the eradication of goats and rats from the island, which is a globally significant wedge-tailed shearwater nesting site and one of the few island with natural breeding populations of the endemic Fiji crested iguana.
- Member UNEP SIDS Foresight Panel on Emerging Environmental Issues for the SIDS 2013 – 2014.
- Member Ramsar Scientific and Technical Review Panel (STREP) 2013 – present.
- Member Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) Multidisciplinary Expert Panel (MEP), 2013 – present.
- Member IPBES Task Force on Indigenous and Local Knowledge, 2013 – present.
- Member IPBES Expert Group on Regional Assessments 2013 – present.

## VII. SELECTED PUBLICATIONS

### BOOKS, MONOGRAPHS, PROCEEDINGS OR REPORTS ON CONFERENCES/WORKSHOPS AND OTHER MAJOR WORKS

- Thaman, R.R. 1976. *The Tongan agricultural system: With special emphasis on plant assemblages* (published version of Ph.D thesis, University of California, Los Angeles, 1975). University of the South Pacific, Suva. 433pp.
- Thaman, R.R. (ed.). 1976. Food production in the South Pacific (The R.W. Parkinson Memorial Lecture Series). The University of the South Pacific, Suva. 52pp.
- Thaman, R.R. and Clarke, W.C. (eds.). 1983. *Food and national development in the Pacific Islands*. Ray Parkinson Memorial Lectures 1982. The University of the South Pacific, Suva. 156pp.
- Thaman, R.R. 1985. *Health and nutrition in the Pacific Islands*. Commissioned Theme of Conference publication for the Pacific Islands Conference, Rarotonga, Cook Islands, August 7-10, 1985. Pacific Islands Development Programme (PIDP), East-West Center, Honolulu. 136pp.
- Thaman, R.R. 1988. Environmental issues in the Pacific Islands: Constraints to sustainable island development. *Pacific Issues* 1:1-77 (complete). Pacific Circle Consortium, Woden, Canberra, Australia.
- Thaman, R.R. (ed.). 1989. *Applied atoll research for development: Proceedings of the Kiribati Applied Atoll Research for Development Consultation, Tarawa 27 February to 2 March 1989*. Ministry for Natural Resource Development, Bairiki, Tarawa, Kiribati. 253pp.
- Thaman, R.R. and Neemia, U. 1991. *Republic of Kiribati: National Report for the United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, Brazil, June 1992*. Ministry of The Environment and Natural Resources Development, Bairiki, Tarawa and South Pacific Regional Environment Programme (SPREP), Noumea. 279pp.
- Thaman, R.R. and Neemia, U. 1991. *Tuvalu: National Report for the United Nations Conference on Environment and Development (UNCED), Rio de Janeiro, Brazil, June 1992*. Office of the Prime Minister, Vaiaku, Funafuti, Tuvalu and South Pacific Regional Environment Programme (SPREP), Noumea. 231pp.
- Chase, R. and Thaman, R.R. (eds.). 1991. *Atoll agricultural research: Problems and prospects. Proceedings of the International Conference on Developing Agricultural Research Programmes for Atolls, Pacific Harbour, Fiji, November 9 - 13, 1990*. Institute for Extension, Research and Training in Agriculture (IRETA), University of the South Pacific, Alafua, Western Samoa.
- Clarke, W.C. and Thaman, R.R. (eds.). 1993. *Pacific Island agroforestry: Systems for sustainability*. United Nations University Press, Tokyo. 297pp.
- Thaman, R. R., Fosberg, F.R., Manner, H.I. and Hassall, D.C. 1994. *The Flora of Nauru. Atoll Research Bulletin* No. 392:1-223. National Museum of Natural History, Smithsonian Institution, Washington, D.C.
- Thaman, R.R. and Whistler, W.A. 1996. *A review of uses and status of trees and forests in land-use systems in Samoa, Tonga, Kiribati and Tuvalu with recommendations for future action*. Working Paper 5, June 1996 (RAS/92/361). South Pacific Forestry Development Programme, Suva. 171pp.
- Atherton, J., Martel, F., Clarke, W. and Thaman, R. 1996. *Guidelines for the collection & development of baseline data in conservation areas*. South Pacific Biodiversity Conservation Programme, Apia. 96pp.
- Thaman, R.R. and Hassall, D.C. 1998. *Republic of Nauru NEMS: National Environmental Management Strategy and Action Plan*. Prepared for the Department of Island Development and Industry, Nauru and produced with financial assistance from the United Nations Development Programme (UNDP). South Pacific Regional Environment Programme (SPREP), Apia. 204 pp.
- Wilkinson, K., Elevitch, C. and Thaman, R. 2000. *Choosing timber species for Pacific Island agroforestry*. Agroforestry guides for Pacific Islands No. 6. Permanent Agricultural Resources, Holualoa. 25pp.

- Thaman, R.R., Bulai, S. and Pouru, K. (eds.). 2002. *Report on Sub-regional Training Workshop on Agroforestry/Drum Ovens for Atoll Islands, 17 October – 1 November, 2000*. Working Paper No. 3. Forests and Trees Programme, Secretariat of the Pacific Community, Suva, Fiji Islands.
- Thaman, R.R. and Vander Velde, N. 2003. The vascular plants of Majuro Atoll, Republic of the Marshall Islands. *Atoll Research Bulletin* No. 503: 1-141 (complete).
- Thaman, R.R., Bulai, S. and Mathias, A. (eds.). 2004. *Trees outside forests in the Pacific Islands: Proceedings of the Regional Forestry Workshop on Trees Outside Forests, Raffles Gateway Hotel, Nadi, Fiji Islands, 10-14 December 2001*. Food and Agricultural Organization of the United Nations Pacific Regional Office Apia, Samoa and Pacific Islands Trees and Forests Programme, Secretariat of the Pacific Community, Suva. 219pp.
- Taafaki, I.J., Fowler, M.K. and Thaman, R. R. (eds.). 2006. *Traditional medicine of the Marshall Islands: The women, the plants, the treatments*. IPS Publications, University of the South Pacific, Suva. 300pp.
- Taafaki, I.J., Fowler, M.K. and Thaman, R. R. (eds.)(M.K. Fowler, trans). 2007. *Uno in aelōñ in Majōl: Kōrā ro, marin uno ko, uno ko*. IPS Publications, University of the South Pacific, Suva. 199 pp.
- Thaman, R.R., D. C. Hassall, and S. Takeda. 2008. *Plants of Nauru: Guide to indigenous and introduced plants of particular cultural importance and weeds of potential threat to Nauru*. Secretariat of the Pacific Community Forests and Trees Programme, Suva, Fiji Islands (222 pp. - photos).
- Thaman, R.R., Hassall, D.C. and Takeda, S. 2008. *The vegetation and flora of Nauru: Current status, cultural importance and suggestions for conservation, restoration, rehabilitation, agroforestry and food, health and economic security*. Secretariat of the Pacific Community, Forests and Trees Programme, Suva. 149 pp.
- Thaman, R.R. with Gregory, M. and Takeda, S. 2012. *Trees of life: A guide to trees and shrubs of The University of the South Pacific*. The University of the South Pacific Press, Suva. 335 pp.
- Thaman, R.R., Fihaki, E. and T. Fong. 2012. *Plants of Tuvalu: Lākau mo mouku o Tuvalu*. University of the South Pacific, Press, Suva. 259 pp.
- Thaman, R., Lyver, P., Mpande, R., Perez, E., Cariño, J. & Takeuchi, K. (eds). 2013. *The Contribution of Indigenous and Local Knowledge Systems to IPBES: Building Synergies with Science*. (IPBES Expert Meeting Report, 9 – 11 June 2013, Tokyo, Japan and Towards principles and Procedures for working with indigenous and local knowledge systems. (Nakashima, D. & Rubis, J., drafting and editorial support), UNESCO, Paris. 86pp.

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- Thaman, R.R. 1974. Remote sensing of agricultural resources. Chapter 8 Estes, J.E. and Senger, L.W. (eds.), *Remote sensing techniques for environmental analysis*. Hamilton Publishing Co., Santa Barbara. California. Pp. 189-224.
- Thaman, R.R. 1976. The Role of indigenous agricultural systems in fulfilling the needs of Pacific societies. Chapter III in Thaman, R.R. (ed.), *Food Production in the South Pacific* (R.W. Parkinson Memorial Lectures), University of the South Pacific, Suva. Pp. 35-52.
- Thaman, R.R. 1977. Urban gardening in Papua New Guinea and Fiji. Chapter 15 in Winslow, J.M. (ed.), *The Melanesian Environment*. Australian National University Press, Canberra. Pp. 146-168.
- Thaman, R.R. 1978. Cooperative yam gardens: An adaptation of a traditional agricultural system to serve the needs of the developing Tongan market economy. Chapter 8 in Fisk, E.K. (ed.), *The adaptation of traditional*

- agriculture*. Development Studies Center Monograph No. 11. Australian National University, Canberra. Pp. 116-130.
- Thaman, R.R. 1982. Urban taro production in the South Pacific. In Lambert, M. (ed.), *Taro cultivation in the South Pacific*. Handbook No. 22. (1982). South Pacific Commission, Noumea. Pp. 103-122.
- Thaman, R.R. 1982. The impact of tourism on agriculture in the Pacific Islands. In Rajotte, F. (ed.), *The Impact of Tourism in the Pacific*. Environmental and Resources Studies Programme Environmental Center, Trent University, Peterborough. Ontario. Pp. 130-155.
- Thaman, R.R. 1984. Intensification of edible aroid cultivation in the Pacific Islands. Chapter 14 in Chandra, S. (ed.), *Edible aroids*. Clarendon Press, Oxford. Pp. 102-122.
- Thaman, R.R. and Thomas, P.M. 1985. Cassava and change in Pacific Island food systems. Chapter 9 in Cattle, D.J. and Schwerin, K.H. (eds.), *Food energy in tropical ecosystems*. Gordon & Breach, New York. Pp. 191-228.
- Thaman, R.R. 1990. The evolution of the Fiji food system. In Jansen, A.A.J, Parkinson, S and A.F.S. Robertson, A.F.S. (eds.), *Food and nutrition in Fiji: A historical review. Volume One: Food production, composition and intake*. Department of Nutrition and Dietetics, Fiji School of Medicine and the Institute of Pacific Studies, The University of the South Pacific, Suva. Pp. 23-107.
- Thaman, R.R. 1990. Mixed home gardening in the Pacific Islands: Present status and future prospects. In Landauer, K. and Brazil, M. (eds.), *Tropical home gardens*. United Nations University Press, Tokyo. Pp. 41-65.
- Thaman, R.R. 1992. Agroforestation as a major threat to sustainable development. Box 19.4 in Thistlethwaite, R. and Votaw, G., *Environment and development: A Pacific Island perspective*. Asian Development Bank, Manila and South Pacific Regional Environment Programme, Apia. Pp. 194-195.
- Thaman, R.R. 1993. One hundred Pacific Island agroforestry trees. In Thaman, R.R. and Clarke, W.C. (eds.), *Pacific island agroforestry: Systems for sustainability*. Prepared for the United Nations University, Tokyo, Japan. Geography Department. The University of the South Pacific, Suva. Pp. 216-266.
- Thaman, R.R. 1993. Moana nui, vanua and wantoks. In Waddell, E., Naidu, V. and Hau'ofa, 'E. *A new Oceania: Rediscovering our sea of islands*. A USP 25th Anniversary publication. School of Social and Economic Development, University of the South Pacific, Suva. Pp. 38-48.
- Thaman, R.R. 1993. Pacific Island biodiversity: A basis for ecological, cultural and economic survival. In Waddell, E. and Nunn, P.D. (eds.), *The margin fades: Geographical itineraries in a world of islands*. Institute of Pacific Studies, the University of the South Pacific, Suva. Pp. 49-65.
- Thaman, R.R. 1994. Pacific Island agroforestry: An endangered science. In Morrison, J., Geraghty, P. and Crawl, L. (eds.), *Science of Pacific Island peoples. Vol. 2: Land use and agriculture*. Institute of Pacific Studies, University of the South Pacific, Suva. Pp. 191-221.
- Thaman, R.R. 1994. Ethnobotany of Pacific Island coastal plants. In Morrison, J., Geraghty, P. and Crawl, L. (eds.), *Science of Pacific Island peoples. Vol. 3: Land use and agriculture*. Institute of Pacific Studies, University of the South Pacific, Suva. Pp. 147-184.
- Thaman, R.R. 1999. Coastal biodiversity and ethnobiology: An ecological, cultural, and economic safety net for Pacific peoples. Chapter 12 in Eldredge, L.G., Maragos, J.E., Holthus, P.F. and Takeuchi, H.F. (eds.), *Marine and coastal biodiversity in the tropical island Pacific Region. Vol.2. Population, development, and conservation priorities*. Programme on Environment, East-West Center and Pacific Science Association, Bishop Museum, Honolulu. Pp. 235-265.

- Mueller-Dombois, D., Thaman, R.R., Juvik, J.O., MacClatchy, W.C., and Kitayama, K. 1999. The Pacific-Asia Biodiversity Transect (PABITRA): A new conservation biology initiative. In Chou, C.-H., Waller, G.R. and Reinhardt, C. (eds.), *Biodiversity and allelopathy: From organisms to ecosystems in the Pacific*. Academia Sinica, Taipei. Pp. 13-20.
- Thaman, R.R., Elevitch, C.R. and Wilkinson, K.M. 2000. Multipurpose trees for agroforestry in the Pacific Islands. In Elevitch, C.R. and Wilkinson, K.M. (eds.), *Agroforestry guides for Pacific Islands*. Permanent Agriculture Resources (PAR), Holuahu, Hawaii. Pp. 24-69. Web Site: <http://www.agroforestry.net>.
- Thaman, R.R., Elevitch, C.R. and Wilkinson, K.M. 2001. Traditional Pacific Island agroforestry systems. In Elevitch, C.R. and Wilkinson, K.M. (eds.), *The overstory book: Cultivating connections with trees*. Permanent Agriculture Resources, Holualoa, Hawai'i. Pp. 21- 26.
- Thaman, R.R., Tukiuha, C., Tukiuha, V., Kulatea, M. and Aue, S. 2004. Niue's biodiversity: A foundation for ecological, cultural and economic survival of a small island nation. In Terry, J. and Murray, W. (eds.), *Niue island: Geographical perspectives on the Rock of Polynesia*. International Scientific Council for Island Development (INSULA), Paris. Pp. 125-202.
- Thaman, R.R., Elevitch, C.R. and Kennedy, J. 2006. Urban and homegarden agroforestry in the Pacific Islands: Current status and future prospects. In Kumar, B.M. and Nair, P.K.R. *Tropical home gardens: A time-tested example of sustainable agroforestry*. Springer, Dordrecht, The Netherlands. Pp. 25-42.
- Thaman, R.R. 2008. The ecosystems and flora of Majuro Atoll. In J.P. Terry and F. R. Thomas (eds.), *The Marshall Islands: Environment, history and society in the atolls*. Faculty of Islands and Oceans, The University of the South Pacific, Suva. Pp. 23-68.
- Thaman, R.R. 2009. Sustainability. In Gillespie, R.G. and Clague (eds.), *Encyclopedia of Islands*, University of California Press, Berkeley. Pp. 888-896.
- Thaman, K.H. and Thaman, R.R. 2009. Pacific Island principles: Learning to live wise and sustainable lives. In P.B. Corcoran and P.M. Osano (eds.), *Young people, education and sustainable development: Exploring principles, perspectives and praxis*. Wageningen Academic Publishers, Wageningen. Pp. 63-76.
- Thaman, R., Smith, A. and Faka'osi, T. 2011. Coastal reforestation in Tonga to protect coastlines. Case study 22 in Wilkinson, C. and Brodie, J. (eds.), *Catchment management and coral reef conservation: A practical guide for coastal resource managers to reduce damage from catchment areas based on best practice case studies*. Global Coral Reef Monitoring Network and Rainforest Research Centre, Townsville. Pp. 82-83.
- Faka'osi, T. and Thaman, R. 2011. Tonga. In Moorhead, A. (ed.) *Forests of the Pacific Islands: Foundation for a sustainable future*. Secretariat of the Pacific Community, Suva and Noumea. Pp. 138-143.
- Lausaveve, I. and Thaman, R. 2011. Tuvalu. In Moorhead, A. (ed.) *Forests of the Pacific Islands: Foundation for a sustainable future*. Secretariat of the Pacific Community, Suva and Noumea. Pp. 144-150.
- Moorhead, A. and Thaman, R. 2011. Introduction. In Moorhead, A. (ed.) *Forests of the Pacific Islands: Foundation for a sustainable future*. Secretariat of the Pacific Community, Suva and Noumea. Pp. 1-12.
- Moorhead, A. and Thaman, R. 2011. Tokelau. In Moorhead, A. (ed.) *Forests of the Pacific Islands: Foundation for a sustainable future*. Secretariat of the Pacific Community, Suva and Noumea. Pp. 133-137.
- Moorhead, A., Thaman, R. and Ohlson, J. 2011. Nauru. In Moorhead, A. (ed.) *Forests of the Pacific Islands: Foundation for a sustainable future*. Secretariat of the Pacific Community, Suva and Noumea. Pp. 78-84.

Thaman, R. 2014 (contributing author as a member of the UNEP SIDS Foresight Panel 2013) UNEP. 2014. *Emerging issues for Small Island Developing States. Results of the UNEP/UN DESA Foresight Process*. United Nations Environment Programme (UNEP), Nairobi, Kenya.

Thaman, R. R., A Balawa and T. Fong. 2014. Putting ancient winds and life into new sails: Indigenous knowledge as a basis for education for sustainable development (ESD) – a case study of the return of marine biodiversity to Vanua Navakavu, Fiji. In, M. Otunuku, U. Nabobo-Baba and S. Johansson-Fua (eds.). *Of waves, winds and wonderful things: A decade of rethinking Pacific Education*. University of the South Pacific press, Suva. Pp. 163-184.

## JOURNAL ARTICLES

Thaman, R.R. 1974. *Lantana camara*: Its introduction, dispersal and impact on the islands of the tropical Pacific Ocean. *Micronesica* 10(1):17-40.

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## **CURRICULUM VITAE OF DR. VINOD B. MATHUR, D.Phil. (Oxon.)**

**Name** : **Dr. Vinod Bihari Mathur**



**Present Designation**

**& Address** : Director  
Wildlife Institute of India, Chandrabani,  
Dehradun (Uttarakhand State), INDIA  
*Tel.:* +91-135-2640910 (Off.); +91-135-2652659 (H);  
*Mob:* +91-94120-54648; *Fax:* +91-135-2640117  
*Email:* [ybm@wii.gov.in](mailto:ybm@wii.gov.in)

**Date of Birth/** : 03 August, 1959

**Age and Gender** : 55 years, Male

**Nationality** : Indian

### **Summary**

Dr. Vinod B. Mathur is the Director of Wildlife Institute of India (WII), Dehradun and *ex-officio* Director of the UNESCO Category 2 Centre on '*Natural Heritage Management and Training*' for the Asia-Pacific Region located in WII. He obtained his doctorate degree in wildlife ecology from the University of Oxford, United Kingdom in 1991. He is also the Regional Vice-Chair of the IUCN-World Commission on Protected Areas (WCPA-South Asia); Deputy Coordinator, IUFRO (Wildlife Conservation and Management) and member of the International Association of Impact Assessment (IAIA). He is currently serving as member of Ministry of Environment & Forests (MoEF), Government of India Committees on World Heritage Conservation, Biosphere Reserves, Management Effectiveness Evaluation and Environment Appraisal of Coal and Thermal Projects. He started his career as a professional forester by joining the Indian Forest Service in 1983 and has now spent over two and half decades in WII, actively contributing to its wide range of training, research and academic programmes in the field of biodiversity conservation and research-policy interface. He has extensive experience as an international trainer and his special interest include biodiversity conservation, environmental and strategic impact assessment, biodiversity informatics and natural heritage conservation.

He has been actively contributing on research-policy interface issues and is currently the member of UN-IPBES Multidisciplinary Expert Panel (MEP) for Asia-Pacific region and also a member of the UN-IPBES Task Force on Capacity Building. He has been part of the official Indian delegation for CBD and UNESCO World Heritage Convention Meetings since 2006 and has in-depth knowledge about the working of these Conventions.

## Detailed CV

### Education:

Degree	Year	University	Subjects	Marks obtained with %	Remarks
D.Phil*	1991	University of Oxford, United Kingdom	Wildlife Ecology	-	-
M.Sc.	1981	University of Rajasthan, Jaipur	Zoology	931/1200 <b>77.5%</b>	First in the Order of Merit
B.Sc.	1979	University of Rajasthan, Jaipur	Zoology, Botany & Chemistry	1079/1350 <b>79.9%</b>	First in the Order of Merit

**\*Thesis Title:** *The ecological interaction between habitat composition, habitat quality and abundance of some wild ungulates in India.*

### Summary of Professional Qualifications:

Degree/ Diploma etc.	Year	Institution	Subjects	Marks obtained	Remarks
Associate of Indian Forest College (A.I.F.C)	1985	Indian Forest College, Dehradun	Forestry & Allied Subjects	Honours Diploma	First in the Order of Merit
X.L.V. Foundational Course	1985	LBS National Academy of Administration, Mussoorie	Law, History, Economics & Public Administration	325/500	First in the Order of Merit

### Area of Specialization

*Major discipline* : Biodiversity Conservation

*Subject specialization* : ♦ Forest, Wildlife and Protected Area Management  
♦ Natural/ World Heritage Conservation  
♦ Environmental & Strategic Impact Assessment  
♦ Information Technology, Remote Sensing & GIS Applications  
♦ Project Monitoring and Evaluation

### Membership of Professional Bodies/Societies

- ♦ UN-IPBES Multidisciplinary Expert Panel (MEP), Asia-Pacific Region.
- ♦ Expert Member, UN-IPBES Task Force on Capacity Building.
- ♦ Regional Vice Chair, IUCN-World Commission on Protected Areas (WCPA), South Asia
- ♦ CBD Focal Point for Programme of Work on Protected Areas
- ♦ UNESCO Focal Point for World Heritage Conservation

- ◆ Member, IUCN Commission on Ecosystems Management (CEM)
- ◆ Member, International Association for Impact Assessment (IAIA)
- ◆ Member, Oxford University Society
- ◆ Member, Indian Institute for Public Administration (IIPA)
- ◆ Member, Computer Society of India
- ◆ IUFRO, Dy. Coordinator, Division 8.06 (Wildlife Conservation and Management).
- ◆ Member, Board of Studies of Saurashtra University and Indian Institute of Forest Management, Bhopal.
- ◆ Member, Expert Appraisal Committee for Coal and Thermal projects, Ministry of Environment, Forests and Climate Change, Government of India.

### **Professional Experience**

The Wildlife Institute of India (WII) is a premier national institute with a mission to nurture the development of wildlife science and promote its application in the field conservation ([www.wii.gov.in](http://www.wii.gov.in)). To foster the above mission, the Institute has a wide array of capacity building and research development programmes in the field of forest and wildlife conservation, protected area management and conservation of biological diversity, strongly supported by national and international agencies. The WII is also the technical arm of the Ministry of Environment, Forests and Climate Change, Government of India and provides vital support in the planning and implementation of government policies and programmes relating to biodiversity and wildlife conservation, management, education, research & training and application of information technology in biodiversity conservation. I have been providing professional inputs in these programmes for the last 28 years and have contributed significantly in their development at the policy level as well as their implementation in the field. As Dean, Faculty of Wildlife Sciences at the Wildlife Institute of India from 2004-2014 my major responsibilities were to plan, develop, coordinate and monitor the wide array of capacity building programmes in the field of natural resource and biodiversity conservation and to lead '*action focused*' research in new and emerging areas of biodiversity conservation and to deliver high quality conservation outcomes.

The Institute has an annual budget of ca. US \$ 6 million, 33% of which is earmarked for research activities. I am directly responsible to steer the research mandate and lead a competent multidisciplinary team of 40 full time scientists and over 75 researchers.

### **Academic and Professional Qualifications**

I possess an outstanding scholastic record having passed with top honours both at the college and university levels and also in the professional forestry course at the Indira Gandhi National Forest Academy, Dehradun. I am a recipient of the prestigious Overseas Research Scholarship (ORS) Award by the Committee of Vice-Chancellors and College Principals (CVCP) of the United Kingdom, which culminated in the award of doctorate degree to me by the University of Oxford in 1991. I am currently an active member of the IUCN World Commission on Protected Areas (WCPA) and the IUCN Commission on Ecosystem Management (CEM) and have been an Associated Fellow of the United Nations Institute for Training & Research (UNITAR), Hiroshima, Japan.

## Work Experience

In my professional career spanning over two and half decades, I have gained vast experience in the design, development, implementation, coordination and oversight of research and conservation programmes and in dealing with research-policy interface issues. I have worked in various capacities viz. as forest and wildlife manager, researcher and scientist, teacher and trainer and administrator and policy maker. In each of these roles, I have excelled and have contributed significantly to the professional growth of my organization, which is now an internationally acclaimed institution in the field of natural resource conservation. I have substantial experience at the national as well as international level having worked on research and collaborative projects of institutions/organizations such as the World Bank, FAO, UNDP, GEF, UNEP, UNESCO, ADB, UNITAR, SCBD, WWF and IUCN. I have considerable project formulation, implementation, assessment and monitoring experience. I led the formulation and fund-raising of a 4 year '*World Heritage Biodiversity Programme for India*', which received a funding support of US \$ 5 million from the United Nations Foundation (UNF) and its partners. I was also assigned the responsibility by the UNEP-GEF in 2003 for conducting an independent evaluation of a mountain ecosystem project in which UNEP-WCMC was one of the implementing agencies. I also conducted the final in-depth evaluation of a UNEP project on networking and capacity development in the Asia-Pacific region in 2005. I have considerable capacity building experience in the field of natural resource conservation. I have worked as an international protected area trainer in 1994 and as an international protected area planner in 1998-99 under a FAO-GEF project in Sri Lanka. I have also worked as national counterpart of the mission members of the project evaluation teams sponsored by the FAO, UNDP, UNESCO, World Bank for various international projects at the Wildlife Institute of India. As Head of the Computer & GIS Centre of the Wildlife Institute of India, I gained considerable experience in design and development of spatial databases for biodiversity conservation especially their role in monitoring and assessment of landuse/landcover changes. I have been spearheading the e-governance initiative for strengthening natural resource management and am well versed with the modern tools of remote sensing and GIS.

I am actively involved in the process of mainstreaming biodiversity in development planning and conducting Environmental Impact Assessments (EIA) of developmental projects as well as Strategic Environmental Assessments (SEA). I have proven ability to identify key-issues in a complex environment and make informed-decisions.

I have extensive experience of dealing with matters relating to the CBD and natural heritage conservation including international negotiations. I was part of the official delegation of the Government of India for the COP-8 in Curitiba, Brazil in March, 2006 and for COP-11 in Hyderabad, India and also for the UNESCO World Heritage Committee meetings in Christchurch, New Zealand in July, 2007, Quebec City, Canada in July, 2008, Brasilia, 2010, Paris, 2011, Saint Petersburg, Russian Federation in July, 2012, Cambodia in July, 2013 and Qatar, July, 2014.

I have formulated the Research Development Plan (2013 to 2017) of the Institute that focuses on 9 thrust areas. This plan is under active implementation under my direct supervision. I have an excellent track record of planning and delivering high quality, multidisciplinary and action oriented conservation outcomes. I possess extensive networking and communication skills along with proven strategic leadership and resource management capabilities. I also have a proven track record of being an institution '*builder*' as well as '*moulder*'. I have adequate experience of research administration including recruitment, implementation, supervision, fundraising and oversight.

### Professional Inputs in Capacity Building Programmes (1999-2014)

Agency/Programme	Year	Thematic Area
FAO Capacity Building Programme, Sri Lanka	1999	Protected Area Management Planning
IUFRO Capacity Building Programme, Malaysia	2000	Forestry Research Strategy Formulation, Planning & Management
UNEP Capacity Building Programme, Zambia	2001	Biodiversity Impact Assessment
IUCN Capacity Building Programme, Thailand	2001	Protected Areas Systems Planning
UNESCO Capacity Building Programme, Tanzania	2001	Biodiversity Monitoring
UNESCO World Heritage Centre, Capacity Building Programme, France	2003	Biodiversity Project Formulation
IUCN Regional Biodiversity Capacity Building Programme	2003	Biodiversity and Climate Change
UNITAR Capacity Building Programme, Japan	2004, 2007, 2008 & 2009	Natural Heritage Conservation
IUFRO Capacity Building Programme, Australia	2005	Information Technology
GBIF Capacity Building Programme, India	2009-2014 Ongoing	Bioinformatics
WWF Conservation Assured for Tigers through Standards (CATS)	2011- Ongoing	Management Effectiveness Evaluation and Tiger Conservation
IAIA Capacity Building Programme	2005- ongoing	Environmental Impact Assessment (EIA), Cumulative Impact Assessment (CEA) and Strategic Impact Assessment (SEA)
World Bank Biodiversity Conservation and Rural Livelihood Project	2012-2017 Ongoing	Biodiversity Conservation

### Consultancy/ Collaborative Work with International Organizations (1999-2012)

Agency/Organization	Thematic Area	Duration	Status
United Nations Food & Agriculture Organization (UN-FAO)	Preparation of Management Plans for Protected Areas in Sri Lanka	1999	<b>Completed.</b> 8 PA Management Plans prepared
World-Bank-Canadian Environmental Collaborative Ltd. (WB-CEC)	Preparation of Environmental Guidelines for South Asia	1999-2000	<b>Completed.</b> Output in the form of a book 'Roads, Sensitive Habitats and Wildlife: Environmental Guideline for India and South Asia' published in October, 2000



Agency/Organization	Thematic Area	Duration	Status
United Nations Food and Agriculture Organization (UN-FAO)	Biodiversity Information Management	1997-2003	<b>Completed.</b> Output in the form of functional Forest Management Information System : Biodiversity Information Module in the States of Uttar Pradesh & Uttaranchal
United Nations Environmental Programme (UNEP)	Preparation of Guidelines for Integration of Biodiversity in Environmental Assessment	2001	<b>Completed.</b> Output in form of a report 'National EIA Framework for Integration of Biodiversity Concerns in EIA' produced.
IUCN-Asia	Preparation of Guidelines for National System Planning for Protected Areas	2001	<b>Completed.</b> Inputs provided in Asia Region Workshop as a Resource Person
IUCN	Project on 'Linking Conservation with Nature' in the Indian Himalayas	2001-2002	<b>Completed.</b> Report on 'Evolving Sustainable Livestock Grazing Practices' and 'Biodiversity Conservation through Ecotourism and Community Participation in the Himalayan Landscape' submitted to IUCN
United Nations Foundation (UNF) and UNESCO	Development of World Heritage Biodiversity Programme for India (WHBPI)	2002-2005 (Phase I)	<b>Completed.</b> Funding for the implementation of WHBPI approved by UNF
UNEP-Global Environmental Facility (GEF)	Independent Evaluation of GEF-UNEP Project 'Barriers and Best Practices in Integrated Management of Mountain Ecosystems'	2003	<b>Completed.</b> Report accepted and acclaimed by Chief, Evaluation & Oversight Unit, UNEP, Nairobi
United Nations Institute for Training and Research (UNITAR)	Conservation and Management of World Heritage Sites	2004, 2007 & 2008	<b>Completed.</b> Inputs provided in International Workshop on Natural World Heritage Conservation in Hiroshima, Japan
UNEP, Nairobi	Independent Evaluation of UNEP Project 'Asia and the Pacific: Networks for Data-Information Generation, Analysis, Observation and Assessment'	2005-2006	<b>Completed.</b> Report accepted and acclaimed by Chief Evaluation & Oversight Unit, UNEP, Nairobi.

Agency/Organization	Thematic Area	Duration	Status
UNESCO	Technical backstopping of UNESCO Project 'Enhancing Our Heritage: Managing and Monitoring for Success in World Natural Heritage Sites	2001-2008	<b>Completed.</b> Project under implementation in 3 South Asian Sites viz. Keoladev National Park, Kaziranga National Park and Chitwan National Park, Nepal
Asian Development Bank (ADB)	Natural Resource Management Expert for the expert panel for preparing the ' <i>Inclusive Tourism Development Project</i> '	2008-2009	<b>Completed.</b> Project under formulation in 4 States in India
UNESCO	Building partnerships to support UNESCO's World Heritage Programme: India	2008-2012	<b>Completed.</b> Project implemented in 4 natural world heritage sites in India
IUCN, Switzerland	Conservation Outlook Assessment	2013-2014	<b>Ongoing.</b>
Global Biodiversity Information Facility (GBIF)	Bioinformatics	2009-2014	<b>Ongoing.</b>
Intergovernmental Platform for Biodiversity and Ecosystem Services (IPBES)	Bioinformatics	2011-2014	<b>Ongoing.</b>
Global Environment Facility (GEF)	GEF Portfolio Evaluation in India	2012-2014	<b>Ongoing.</b>

#### Supervision of Doctorate Thesis:

I have supervised the following doctorate studies leading to award of D.Phil. degrees to ten candidates between 1998 to 2012.

S. No.	Name of the Researcher	Thesis Title	University	Year
1.	H.S. Pabla	Development of a user-friendly wildlife monitoring methodology for protected areas in India	Forest Research Institute	1998
2.	Yogesh Dubey	Application of Geographic Information System (GIS) in Assessing Habitat, Resource Availability and its Management in Tadoba Andhari Tiger Reserve, Maharashtra	--do--	1999
3.	Suneet Naithani	Habitat Characterization in Great Himalayan National Park (GHNP) using Remote Sensing and Geographical Information System Technologies with Special Emphasis on Geobotanical Aspects	--do--	2000

S. No.	Name of the Researcher	Thesis Title	University	Year
4.	Sanjay Srivastava	Development of community based participatory approaches for resource conservation in Dalma Wildlife Sanctuary in Jharkand	--do--	2004
5.	Rashid Raza	Diversity and rarity in avifaunal assemblages in the Western Himalaya: A study of patterns and mechanisms	--do--	2006
6.	Panna Lal	Developmental of Spatial Database in Geographical Information System Domain for Bandhavgarh Tiger Reserve and Assessment of Landuse/ Landcover Changes	--do--	2007
7.	Ambica Paliwal	Geospatial Modelling of Ungulate Habitat Relationships in Tadoba-Andhari Tiger Reserve, Maharashtra	Saurashtra	2008
8.	Tej B. Thapa	Habitat Suitability Evaluation for Leopard ( <i>Panthera pardus</i> ) using Remote Sensing and GIS in and around Chitwan National Park, Nepal	Saurashtra	2011
9.	Bitapi Sinha	Evaluating Effectiveness of Interpretive facilities in Enhancing Conservation Awareness in select Tiger Reserves in India	Bhartiya Vidhyapeth	2012
10.	Pradeep Vyas	Biodiversity Conservation in Indian Sundarban in the context of Anthropogenic Pressures and Strategies for Impact Mitigation	Saurashtra	2012
11.	Shivani Chandola	An Assessment of Human-Wildlife Interaction in the Indus Valley, Ladakh, Trans-Himalaya	Saurashtra	2012
12.	Samir Sinha	An Evaluation of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Implementation in South Asia with Special Reference to India	Saurashtra	2012 (ongoing)
13.	Brij Raj Sharma	Evaluating the Efficacy and Conservation Impact of <i>Ex-situ</i> Breeding on Wildlife Conservation in India	TERI	2012 (ongoing)
14.	Sahas Barve	Determinants of altitudinal range limits in West Himalayan Birds	Cornell, USA	2012 (ongoing)

**Publications:**

Category	Number
(1) Peer-reviewed Papers	21
(2) Technical/ Research Reports	66
(3) Books/ Manuals	24
(4) Protected Area Management Plans	7
(5) Others	135
<b>Total</b>	<b>253</b>

**Language Competence****Mother tongue**

: *Hindi* : (Read, Write, Speak, Understand: Excellent)

*English*: (Read, Write, Speak, Understand: Excellent)

*French*: Understanding: Very modest (Have done a Certificate Course in French Language; can pick up fast).



{Dr. Vinod Bihari Mathur, D.Phil. (Oxon.)}  
Director

Wildlife Institute of India,  
Chandrabani, Dehradun  
(Uttarakhand State), INDIA

2 August, 2014  
Dehradun

## CURRICULUM VITAE

NAME : Rosichon Ubaidillah  
DATE OF BIRTH : 14 February 1958  
CURRENT POSITION : Head of Zoologi Section – Centre for Biological Research  
The Indonesian Institute of Sciences)

EDUCATION :  
B.Sc.( Biology ): :Faculty of Biology- Gadjah Mada University  
Drs. (Entomology) : Faculty of Biology- Gadjah Mada University  
DIC (Diploma of Imperial College in Systematic Hymenoptera). Department of  
Biology, Imperial College London, UK  
MPhil (Systematic Eulophidae). Department of Biology, Imperial College  
London, UK  
PhD (Systematic) College of Science and Engineering, Ibaraki University, Mito  
Japan

### EMPLOYMENT

1985 - 1986 Assistant research on The National Institute of Biology-LIPI,  
Bogor  
1986 - now Researcher at the Laboratory of Entomology - Museum  
Zoologicum Bogoriense (MZB)  
1986 - 1991 Lecturer Entomology, Faculty of Mathematics and Science,  
Pakuan University, Bogor Indonesia  
1993 - 1993 Curator of Entomological Laboratory MZB  
1995 - 1998 Collection Manager of Insect at the MZB.  
1998 - now Researcher at Entomology Laboratory MZB

### EXPERIENCES

1986-88 Member, Research Project on Impact of utilisation to the Natural  
Resources in dry land area, LIPI  
1985-1993 Member, Research Project on Biological Resources, Working  
group on Insect pest, LIPI  
1989 Counterpart, Exploration of Hymenoptera, Homoptera and  
Coleoptera of Sumatra and Java (Museum D'Naturelle Route De  
Malagnou. Case Pastake 434 Geneva and Museum Zoologicum  
Bogoriense Indonesia )  
1990-1992 Expedition, Krakatau Expedition 1990 (La Trobe University  
Australia - Museum Zoologicum Bogoriense)  
1992- Co-ordinator Program of Project Research of Human Development  
program, Wamena Irian Jaya, LIPI  
1991 Counterpart of Water bug expedition of Indonesia (Bishop  
Museum Honolulu - Hawaii and Museum Zoologicum  
Bogoriense - Indonesia  
1990-1991 Member, Research Project of speciation and Population Dynamics

	of Insect Pest of Crops in Indonesia. A Cooperation between Puslitbang Biologi and Kanazawa University – Japan
1993- 1996	Member of committee advisor of <i>Museum Serangga</i> The Indonesian Miniature (TMII), Jakarta Indonesia
1991- 1996	Counterpart of Indonesian Insect Project Royal Ontario Museum, Canada and Bogor Zoological Museum - Indonesia
1992-1993	Co-ordinator programme, Project Research for Human Development, Puslitbang Biologi, LIPI
1993-1994	Curator of Entomological Laboratory MZB
1994-1995	Darwin Fellow on Taxonomy study (IIE-NHM, London, UK)
1995 - 1998	Collection Manager of Insect at the Bogor Zoology Museum, LIPI, Indonesia
2000	Demonstrators of the International Training course on The Taxonomy and Biology of Parasitic Hymenoptera. Imperial Collage, Silwood Park. UK. 24 April – 1 May 1999
2004-now	Editorial Board Journal Fauna Indonesia (Masyarakat Zoologi Indonesia)
2007-now	Editorial Board Journal Pengendalian Hayati
2009-now	Consultant in management of the flora and fauna collection of the Indonesian Miniatures (Taman Mini Indonesia Indah)

## MEMBERSHIP IN SCIENTIFIC SOCIETIES

- Member of Indonesian Biology Society
- Member of Indonesian Entomological Society
- Member of Indonesian Zoological Society
- Member of Indonesian Plant Protection
- Member of Chalcid Forum
- Member of the International Hymenoptera Society.
- Member of Royal Entomological Society, London
- Member of Japan Entomological Society

## PUBLICATIONS

### *a. Scientific Publication*

1. **Ubaidillah, R.** & M. Amir. 1986. Pengaruh Penggunaan pestisida terhadap Lebah Madu **Proc. Lokakarya Pembudidayaan Lebah Madu.** 77-79
2. **Ubaidillah, R.** and M. Amir. 1987. The stem borer insect pest on *Albizia valcataria* (L.) and its variation of type of the damage. **Supl.Berita Biologi.** **1987: 66-69**
3. Erniwati, **R. Ubaidillah,** S. Kahono and L.E. Pudjiastuti. 1990. Komposisi serangga hama pada beberapa tingkatan umur. **Kongress of Plant Protection,**

**Jakarta 8-10 February 1990.**

4. **Ubaidillah, R.** and L. E. Pudjiastuti, 1990. The Biology of Lady beetle *Synonymycha grandis* Thumb (Col.: Coccinellidae) **Congress on Plant Protection**, Jakarta 8-10 February 1990
5. **Ubaidillah, R.** 1990. Diversity and density of Orthoptera (Insecta) on the differences of habitat in The Bogor Botanical Garden. **Proc. National Basic Biology I, Bogor**
6. **Ubaidillah, R.** 1991. The important pest on the agriculture area in Wamena Jayawijaya Irian Jaya. **Proc. Seminar Hasil Penelitian Dan Pengembangan Sumber Daya Biologi**. p 26-30
7. **Ubaidillah, R.**, H.J.D. Latupapua & S. Kahono. 1993. Observation on the Flies (*Ophiomyia phaseoli*) Pest to Soybean (*Glycine max* var. *Willis*) in Wamena, Jayawija Irian Jaya. **Proc. Seminar Hasil Penelitian Dan Pengembangan Sumber Daya Biologi 14 Juni 1993. 249-255**
8. Kahono, J. Rosanti & **R. Ubaidillah** 1993. Preliminary Study on Honey Bees (*Apis cerana*) in Wamena Jayawijaya, Irian Jaya. **Proc. Seminar Hasil Penelitian Dan Pengembangan Sumber Daya Biologi 14 Juni 1993. 173 – 181**
9. **Ubaidillah, R.**, W. A. Nurdjito & D. Peggie, 1994. Papilionids of Irian Jaya and adjacent islands. **Proc. Seminar Hasil Penelitian Dan Pengembangan Sumber Daya Biologi. 4 April 1994: 463-473**
10. Matsumoto, K., Erniwati., **R. Ubaidillah**, Ashol.H and K. Nakamura. 1995. Parasite Fauna of Banana Skipper *Erionota trax* (Lepidoptera, Hesperiiidae) in the province of West Jawa and West Sumatra, Indonesia. **TROPICS 4 (2/3) 247-252**
11. **Ubaidillah, R.** & J. LaSalle 1996. A New Genus and Three New Species of Tetrastichinae (Hymenoptera: Eulophidae) from Brunei. **Journal of Tropical Biodiversity 3(2) 1996:69-84**
12. **Ubaidillah, R.** 1996. A New Species of *Brachymeria* (Hymenoptera: Chalcididae) Parasitic the Cocoa Husk Borer, *Cryptophlebia encarpa* (Meyrick) (Lepidoptera: Tortricidae). **Bulletin of Entomological Research. (1996) 86. 481-484**
13. Sureka, K., **R. Ubaidillah** & J. LaSalle 1996. A New Genus and Species of Eulophidae (Hymenoptera: Eulophidae) from Brunei. **Oriental Insects. 1 30:131-135**
14. **Ubaidillah, R.**, Erniwati 1997. Egg Parasitoid of *Erionota trax* (L.) (Lep.: Hesperiiidae) and Egg- shell Description in Bogor, West Java. **Seminar Nasional Biologi VX: 232-239**
15. **Ubaidillah, R.** M. R. Sofyan, H. Kojima, S. Kamitani and Masaaki Yoneda. 1998. Survey on Butterflies in Gunung Halim, un National Park. **Research and Conservation of Biodiversity in Indonesia. Vol IV. 155-161**
16. **Ubaidillah, R.** 1999. Pengelolaan Koleksi Serangga dan Arthropoda Lainnya. Halaman : 137-173. Dalam. Y.R. Suhardjono. **Buku pegangan Pengelolaan Koleksi Spesimen Zoologi. Balai penelitian dan Pengembangan Zoologi LIPI. 1999**
17. **Ubaidillah, R.**, J. LaSalle and D. J. Quick. 2000. A Peculiar New Genus and

Species of Entedoninae (Chalcidoidea: Eulophidae) from South East Asia. *Journal of Hymenoptera Research*. Vol 9 (1). 170-175

18. Abdulhadi Rochadi, A.S Adhikerana, **R. Ubaidillah** and N. Suharna, 2000. Preliminary study of the Ecological impact of Forest fire in G. Masigit, G. Gede Pangrango National Park West Java. *The Korean Journal of Ecology*. Vol. 23. No. 2: 125-129.
19. **Ubaidillah, R.**, J. LaSalle and A. Rauf. 2000. A Species of *Zagrammosoma* (Hymenoptera: Eulophidae) from the Indo-Australian region, A Parasitoid of the invasive pest species *Liriomyza huidobrensis* (Diptera: Agromyzidae). *Oriental Insects*. Vol. 34: 221-228.
20. **Ubaidillah, R.** and Z.. Yefremova. 2001, A new species of *Diglyphus* Walker, 1848 (Hymneoptera: Eulophidae) from Kazakhstan displaying sexual dimorphism in the male antenna. *Entomologist's Gazette* 52: 71-75.
21. **Ubaidillah, R.** and Jun-ichi Kojima, 2002. Checklist of the species in the chalcidoid subfamily Eulophinae in Indonesia (Hymneoptera: Eulophidae). *Natural History Bulletin of Ibaraki University – Japan* 6:11-22. 2002.
22. Gumovsky, A & **R. Ubaidillah**. 2002. Revision of the genus *Parzaommomyia* Girault (Hymenoptera: Eulophidae), with taxonomic notes on related genera.. *Zoologische Mededelingen, Leiden* 76 (14) 271-308. 2002.
23. **R. Ubaidillah**, LaSalle, J., Quicke, D. & J. Kojima. 2003. Cladistic analysis of morphological characters in the eulophinae Tribe Cirrospilini (Hymenoptera: Eulophidae). *Entomological Science* 6: 259-279.
24. Jun-ichi Kojima and **R. Ubaidillah**. 2003. Two new Species of cryptic chrysidid parasitoid subfamily Loboscelidiinae: The second species in *Rhadinosceldia* and the first *Loboscelidia* for the Indonesia Fauna. *Entomological Science* 6: 199-207.
25. Yayuk, R. Suhardjono and **R. Ubaidillah**. 2004. Arthropods in Indonesian Soil. *Conservation and sustainable managementof Below-ground Biodiversity in Indonesia* 9-18, 2004.
26. **Ubaidillah, R.** 2003. Parasitoid wasps of Eulophinae (Hymenoptera: Eulophidae) in Nusa Tenggara Timur, Indonesia. *Treubia* 33(1): 43 – 70
27. **Ubaidillah, R.** and J. Kojima, 2004. Record of *Smicromopha*, possible parasitoids of weaver ants, from Halmahera, The North Moluccas (Hymenoptera Chalcididae:Smicromorphinae). *Treubia* 33(2): 199-201
28. Ko jima J., F. Saito, T.P. Nguyen, **R. Ubaidillah** and S. Hartini. 2004. Taxonomy of social Wasps of the Polistine Tribe Ropalidiini (Hymenoptera: Vespidae) in the Eastern Part of the Lesser Sunda Islands. *Treubia* 33(2): 165-180.
29. Saito S., J. Kojima, **R. Ubaidillah** and S. Hartini. 2005. Paper Wasps of the Genus *Polistes* in Eastern Lesser Sunda Islands (Hymenoptera: Vespidae). *Journal of Hymenoptera Research*, 14(1): 102-114
30. Kojima J., F. Saito, T.P. Nguyen, **R. Ubaidillah** and S. Hartini. 2004. Taxonomy of social Wasps of the Polistine Tribe Ropalidiini (Hymenoptera: Vespidae) in the Eastern Part of the Lesser Sunda Islands. *Treubia* 33(2): 165-180.
31. Kamitani, S., S. Kahono, **R. Ubaidillah**, S. Herwint, & T. Partomihardjo.



2004. A New Species of the Genus *Cofana* (Hemiptera: Auchenorrhyncha: Cicadellidae) Associated with a Climbing Vine of Bamboo in Java, Indonesia, *Esakia*, (44): 135-141.
32. Kamitani, S., S. Kahono, **R. Ubaidillah**, S. Herwint, & T. Partomihardjo. 2005. Notes on the genus *Balclutha* (Hemiptera: Auchenorrhyncha: Cicadellidae) in Indonesia, *Esakia*, (45): 61-67.
  33. Saito S., J. Kojima, **R. Ubaidillah** and S. Hartini. 2005. Paper Wasps of the Genus *Polistes* in Eastern Lesser Sunda Islands (Hymenoptera: Vespidae). *Journal of Hymenoptera Research*, 14(1): 102-114.
  34. **Ubaidillah, R.** and J. Kojima, 2006. First Record of the Parasitoid Wasp Genus *Alophomorphella* Girault (Insecta: Hymenoptera Eulophidae) from Indonesia, with Description of Three New Species. *Species Diversity* 11(1): 45-55.
  35. **Ubaidillah, R.** 2006 Eulophine parasitoids of the genus *Trichospilus* in Indonesia, with the description of two new species (Hymenoptera: Eulophidae) *Entomological Science* 9: 217-222.
  36. Kamitani, S., **R. Ubaidillah**, S. Kahono, S. Herwint, & T. Partomihardjo, 2006. Two new species of Selenocephalinae (Auchenorrhyncha, Cicadellidae) in Java, Indonesia, *Esakia*, (46): 83-87.
  37. **Ubaidillah, R.** 2006. Review of Parasitic Wasp Subfamily Eulophinae (Hymenoptera: Eulophidae) with Special Reference of the Tribe Cirrospilini. *Treubia* 34: 75-88
  38. Kojima, J, F.Saito, **R. Ubaidillah** and L. T. P. Nguyen 2007. Distributional Summary, Taxonomic notes and a Putative Scenario of Dispersal of Social Wasps (Hymenoptera: Vespidae) in The Sunda Islands, *Serangga* 11:1-43
  39. **Ubaidillah, R.** 2007. A contribution to the knowledge of the parasitic wasps subfamily Eulophinae (Hymenoptera: Eulophidae) of Java, Indonesia. *Treubia* 35: 1-98
  40. Purnamasari, H and **R. Ubaidillah**. 2007. Notes on parasitic wasps genus *Pediobius* Walker (Hymenoptera, Eulophidae) of Java with five new records. *Treubia* 35: 117-136
  41. **Ubaidillah, R.** 2007. Diversity of The Parasitic Wasps of The Eulophid subfamily Eulophinae (Insecta: Hymenoptera, Eulophidae) of Java, Indonesia and their Distribution. *Berita Biologi* 8 (4a): 59-72
  42. Sofyan, M.R dan **R. Ubaidillah**. 2008. Parasitoid Chalcidoidea (Insecta: Hymenoptera) Sebagai Agen Pengendalian Hama Pada Terong (*Solanum melongena* L.) dan Pare (*Momordica charantia* L.). *Jurnal Biologi Indonesia* V (1): 45-55
  43. **Ubaidillah, R** 2008. Discovery of the eulophid wasp genus *Stenopetius* Bouček (Insecta: Eulophidae: Eulophinae) in Indonesia, with description of a new species. *The Raffles Bulletin of Zoology* 56 (2): 289-292
  44. Dhian Dwibadra, Sri Hartini dan **R. Ubaidillah**, 2008. Asosiasi Kumbang Kotoran (Coleoptera: Scarabaeidae) dengan Tungau Macrochellidae di Cagar Alam Pangandaran (Jawa Barat) dan Taman Nasional Gunung Merapi (Yogyakarta) . *Zoo Indonesia* 17(2): 55-66
  45. **R. Ubaidillah dan** Hari Sutrisno 2009. Pengantar Biosistematik: Teori dan

Praktek. LIPI Press

46. **Ubaidillah, R.**, G. Yamaguchin & J. Kojima. 2010. new *Arthula* Cameron (Ichneumonidae, Cryptinae) parasitoid of *Ropalidia plebeiana* Richards (Vespidae) and host of *Amoturoides breviscapus* Girault (Torymidae) (Hymenoptera), ZOOTAXA 2274: 45-50
47. Nugroho, H, **R. Ubaidillah, J.** Kojima, 2010. Potter Wasps of the Genus *Eumenes* Latreile (Hymenoptera: Vespidae: Eumeninae) in the Western Part of The Papuan Region, with Description of Two new Pspecies and Taxonomis Notes on *E. inconspicuous* Smith. *The Raffles Bulletin of Zoology* 58 (2): 179-187
48. Cruaud, A., Jabbour-Zahab, R., Genson, G., Kjellberg, F., Kobmoo, N., Van Noort, S., Da-Rong, Y., Yan-Qiong, P., **Ubaidillah, R.**, Hanson, P.E., Santos-Mattos, O., Farache, F.H.A., Pereira, R.A.S., Kerdelu  , C. & Rasplus, J.Y. 2011. Phylogeny and evolution of life-history strategies in Sycophaginae non-pollinating fig wasps (Hymenoptera, Chalcidoidea). BMC Evolutionary Biology 11: 178 doi:10.1186/1471-2148-11-178
49. Cruaud, A., Cook, J., Da-Rong, Y., Genson, G., Jabbour-Zahab, R., Kjellberg, F. Pereira, R.A.S., R  nsted, N., Santos-Mattos, O., Savolainen, V., **Ubaidillah, R.**, Van Noort, S., Yan-Qiong, P. & Rasplus, J.Y. 2011. Fig-fig wasp mutualism, the fall of the strict cospeciation paradigm? Pp 68-102. In: *Evolution of plant-pollinator relationships*. Patiny S. (ed.). Cambridge University Press.
50. Cruaud, A., Jabbour-Zahab, R., Genson, G., Couloux, A., Yan-Qiong, P., Da Rong, Y., **Ubaidillah, R.**, Pereira, R.A.S., Kjellberg, F., van Noort, S., Kerdelhu  , C. & Rasplus, J.Y. 2011. Out of Australia and back again: the world-wide historical biogeography of non-pollinating fig wasps (Hymenoptera: Sycophaginae). *Journal of Biogeography* 38: 209-225. doi:10.1111/j.1365-2699.2010.02429.x
51. Cruaud, A., N. R  nsted, B. Chantarasuwan, L.S. Chou, W. L. Clement, A. Couloux, B. Cousins, G. Genson, R. D. Harrison, P.E. Hanson, M. Hossaert-Mckey, R. Jabbour-Zahab, E. Jousselin, C. Kerdelhu  , F. Kjellberg, C. Lopez-Vaamonde, J. Peebles, Y.Q. Peng, R. Augusto, S. Pereira, T. Schramm, **R. Ubaidillah**, S. van Noort, G. D. Weiblen, D-R. Yang, A. Yodpinyanee, R. Libeskind-Hadas, J. M. Cook, J-Y. Rasplus & V. Savolainen. In press. An Extreme Case of Plant-Insect Co-Diversification: Figs and Fig-Pollinating Wasps. *Systematic Biology*
52. Nugroho, H., J. Kojima and **R. Ubaidillah**, 2013. Review of potter wasps with a petiolate metasoma excluding so-called "Zethinae" (Hymenoptera: Vespidae: Eumeninae) in the Lesser Sunda Islands of the Indonesian Archipelago. *Zootaxa* **3608** (1): 1–25
53. Balke, M., S. Schmidt, A. Hausmann, E.F.A. Toussaint, J. Bergsten, M. Buffington, C.L. H  user, A. Kroupa, G. Hagedorn, A. Riedel, A. Polaszek, **R. Ubaidillah**, L. Krogmann, A. Zwick, M. Fik    ek, J. H  jek, M.C. Michat, C. Dietrich, J. La Salle, B. Mantle, P. KL Ng, and Hobern, D. 2013. **Biodiversity into your hands - A call for a virtual global natural history ‘metacollection’**. Front Zool. 2013; 10: 55.
54. Sutrisno, H., Suputa, H. Purnomo, S. Polandono, C. Waluyo, **R. Ubaidillah**, Darmawan, Ismail, I. Hidayati and Widyastuti, N., 2013. Notes on Some

Biological Aspects of *Arctornis riguata* Snellen (Lepidoptera: Lymantriidae). HAYATI Journal of Biosciences, Vol. 20 No. 1, p 47-50

55. Nugroho, H., J. Kojima and **R. Ubaidillah**, 2014. Synonymy of the potter wasp genus *Philippodynerus* Gusenleitner (Hymenoptera, Vespidae, Eumeninae) with *Apodynerus* Giordani Soika, with taxonomic notes on *Apodynerus* species. *Journal of Hymenoptera Research*. 36, 131-151

**b. Technical reports**

1. **Ubaidillah, R.**, Erniwati & M. Amir. 1986. Hama Penggerek batang *Albizia falcataria* (L.) Fosb. ( The stem borer pest of *Albizia falcataria* (L.) Fosb. ). *Technical Report* 1986-1987 Puslitbang Biologi LIPI, Bogor
2. Atmowidjoyo, A.H., **R. Ubaidillah**, T.W. Hardi & Sudarmo,S.,1986. The damage of *Heteropsylla spp* on Some varieties of *Leucaena leucocephala* and Local *Leucane*. *Technical report*. Vol. III. SEAMEO-BIOTROP, Bogor-Indonesia
3. Atmowidjoyo,A.H.,**R. Ubaidillah**, T.W. Hardi & S. Sudarmo. 1986. Current status of studies on forest Entomology of Indonesia. *Technical Report*. Voll III. SEAMEO-BIOTROP., Bogor-Indonesia
4. **Ubaidillah, R.** & S. Wirjoatmodjo. 1987. Komunitas Fauna Perombak serasah di Bogor. (The community of soil Animals in decomposing leaf litter in Bogor) *Technical Report* 1987-1988. Puslitbang Biologi LIPI, Bogor.
5. **Ubaidillah, R.**, S. Kahono, L.E. Pudjiastuti and Erniwati. 1988.Insect community on Pddy field of Second field in Riverside Cisadane Bogor. *Technical Report 1988/1999*. Puslitbang Biologi LIPI
6. **Ubaidillah, R.**, I. Maryanto, S. Kahono and Erniwati. 1989 Seed dispersal and seed predator. *Technical report* 1989-1990 - Puslitbang Biologi LIPI
7. Matsumoto, K., Erniwati, **R. Ubaidillah**, K. Nakamura. 1992. Head Capsule Width of Larva and duration of Developmental Stages of The Banana Skipper, *Erionota thrax* (Lapidoptera, Hespriidae). Project Report of MZB- Kanazawa Univeristy, Japan, 1990-1991
8. Miller, S.E., **Ubaidillah, R.**, Peggie, D., Yaku, A., Polhemus, D. A. & Polhemus, J. T. (1998) Insects of the PT Freeport Indonesia Contract of Work Mining and Project Area, Irian Jaya, Indonesia. ix + 80 pp. (also issued on CD-ROM). *PT Hatfindo Prima, Bogor, for PT Freeport Indonesia*
9. Kahono, S and **R. Ubaidillah**. 2003 Diversity ad Abundance of Dung Beetle (Scrabaeidea:Coleoptera) in the Tropical Rainforest Around Pa'raye Village, Kayan Mentarang National Park, East Kalimantan. *Joint Biodiversity Expedition in Kayan mantarang National Park* (edited by: A. Mardiasuti and T. Soehartono) Ministry of Forestry-WWF-Indonesia-ITTO Jakarta. 2003: 248-257.
10. **R. Ubaidillah**, and Kahono, S. 2003. Species Richness of Parasitic wasp superfamily Chalcidoidea (Insecta: Hymneoptera) at North Kayan Mentarang National Parks, East Kalimantan, Indonesia. *Joint Biodiversity Expedition in Kayan mantarang National Park* (edited by: A. Mardiasuti and T. Soehartono) Ministry of Forestry-WWF-Indonesia-ITTO Jakarta. 2003: 236-

**c. Populer Publications**

1. Roemantyo, Ibnu Maryanto, **R. Ubaidillah**, M. Amir, M. Noerdjito, W. Widiono. 2003 Pola Perubahan Pemanfaatan Lahan DAS Cisadane Hulu. *Manajemen Bioregional Jabodetabek: Tantangan dan Harapan*. Editors, R. Ubaidillah, Ibnu Maryanto, M. Amir, M. Noerdjito, E. B. Prasetyo dan Rudi Poloskan. Pusat Penelitian Biologi, LIPI. 2003: 69-80
2. Mas Noerdjito, Ibnu Maryanto, **R. Ubaidillah**, 2003 and Eddy bambang Prasetyo. Usulan Penyempurnaan Pola Pengembangan Wilayah Jabodetabe. *Manajemen Bioregional Jabodetabek: Tantangan dan Harapan*. Editors, R. Ubaidillah, Ibnu Maryanto, M. Amir, M. Noerdjito, E. B. Prasetyo dan Rudi Poloskan. Pusat Penelitian Biologi, LIPI. 2003: 29-56
3. Noerdjito, M, **R. Ubaidillah** dan D. I. Hartoto. 2003 Evaluasi Kondisi Situ: Studi Kasus Beberapa Situ dan Rawa di DKI Jakarta. *Manajemen Bioregional Jabodetabek : Profil dan Strategi Pengelolaan Situ, Rawa dan Danau*. Editor. Rosichon Ubaidillah dan Ibnu Maryanto. Pusilt Biologi, LIPI. 2003:325-361.
4. Tukirin Partomihardjo dan **Rosichon Ubaidillah**, 2004. *Daftar Jenis Flora dan Fauna Pulau Nusa Kambangan, Cilacap-Jawa Tengah*. Pusal Penelitian dan Pengembangan Biologi. Lembaga Ilmu Pengetahuan Indonesia Bogor, 2004. 75 pp.
5. **Ubaidillah, R.** and S. Yamane, 2005. Current Status of Entomology in Indonesia. *The Nature and Insect*. 40 (1) 4-7.

**d. Electronic Publication**

1. Miller, S.E., **Ubaidillah, R.**, Peggie, D., Yaku, A., Polhemus, D. A. & Polhemus, J. T. (1998) Insects of the PT Freeport Indonesia Contract of Work Mining and Project Area, Irian Jaya, Indonesia. ix + 80 pp. (also issued on CD-ROM). *PT Hatfindo Prima, Bogor, for PT Freeport Indonesia*.
2. Fisher, R. **Ubaidillah**, P. Reina and J. La Salle. **Liriomyza** Parasitoids of Southeast Asia. [http://www.ento.csiro.au/science/Liriomyza\\_ver3/index.html](http://www.ento.csiro.au/science/Liriomyza_ver3/index.html)

## Curriculum Vitae

date prepared: January 22, 2013

Name: Yoshihisa SHIRAYAMA (Male)

Date of Birth: February 15, 1955

Place of Birth: Tokyo, Japan

Nationality: Japanese

Current address (home): 1-13-2, Hanegi, Setagaya-ku, Tokyo 156-0042, Japan

TEL/FAX: +81-3-3325-4104

Professional Affiliation: Japan Agency for Marine-Earth Science and Technology

Address:, 2-15 Natsushima Cho, Yokosuka City, Kanagawa 237-0061, Japan

TEL: +81-46-867-9000 FAX:+81-46-867-9005

e-mail: yshira@jamstec.go.jp

### **Education:**

1970-1973: Toyama Metropolitan High School

1973-1977: Institute of Zoology, Faculty of Science, The University of Tokyo

1977-1982: Graduate School, Faculty of Science, The University of Tokyo

### **Occupation:**

1982-1984: Postdoctoral Fellow, Japan Society for Promotion of Sciences

1984-1991: Assistant Professor, Ocean Research Institute, University of Tokyo

1991-1997: Associate Professor, Ocean Research Institute, University of Tokyo

1997- : Professor, Seto Marine Biological Laboratory, Faculty of Science, Kyoto University

1998- : Director and Professor, Seto Marine Biological Laboratory, Graduate School of Science, Kyoto University

2003- : Director and Professor, Seto Marine Biological Laboratory, Field Science Education and Research Center, Kyoto University

2007- : Director, Field Science Education and Research Center, Kyoto University

2011- :Executive Director of Science, Japan Agency for Marine-Earth Science and Technology

### **Awards:**

1988: Okada Prize (Distinct Young Scientist Award, Oceanographical Society of Japan)

1988-1989: Postdoctoral Fellowship, Smithsonian Institution

2007: Nobel Peace Prize as a member of IPCC

2011: Prize of Minister, Ministry of Environment Japan

### **Activities in Scientific Societies**

Oceanographic Society of Japan ( member (1980-) Editorial Board, Journal in Japanese (1990-1994)•Editorial Board, Journal of Coastal Oceanography (1991-)• Secretary (1995-1997))

Zoological Society of Japan (member (1981-) Editorial Board, Zoological Science (1994-97)  
Ecological Society of Japan (member (1982-)  
Japanese Society for Systematic Zoology (member (1980-) Editorial Board (1990-1994, 1996-1999) • Election Manager (1994-1997, 2007-2008) • Executive committee member (1995-1996, 1999-2002, 2003-2005, 2007-))  
Japanese Association of Benthology (member (1980-) Executive committee member (1990-1997, 2000-2003) • Secretary in Chief (1990-1997))  
Nematological Society of Japan (Member (1989-) Editorial Board (1993-); Executive committee member (1995-1996))  
International Association of Meiobenthologists (Member (1980-) Board of correspondence (1985-1992) Executive committee member (1992-); **President** (1999-2001))  
The Society of Nematologists (member (1980-))  
American Microscopical Society (member (1982-))  
Biological Society of Washington (member (1988-))  
Science Counsel of Japan (cooperate member (2008-))

#### **Scientific Committee**

Ministry of Environment, Japan, Coastal Ocean Environmental Assessment Committee, member (1992-) Monitoring 1000 program designing committee, Chair (2007-) London Convention CO2 disposal WAG discussion group, member (2006-2007) CCS discussion committee, chair (2008-)  
Metal Mining Agency Japan, Manganese Nodule Mining Environmental Research Advisory Committee, member (1991-2000) Hydrothermal Vent Metal Mining Committee, member, working group “Environmental conservation” chair (2008-) Cobalt Rich Crust Mining Committee, member (2011-)  
RITE, Technical Committee, member (1994-2009)  
UNESCO, C-GOOS Steering Committee, member (1998-2000)  
Census of Marine Life (CoML at CORE), Science Steering Committee member (1999-); OBIS Steering Committee member (2001-2004)  
JAMSTEC, Deep-sea Research Planning Committee, member (2000-2004)  
BROD Research Advisory Board (2002-2006, 2008-)  
GBIF Japanese Node Technical Committee (2002-)  
IPCC Special Report Lead Author (2002-2005)  
DINRAC Focal Point (2006-)

#### **Publications**

Original Papers: 83 (in English), 5 (in Japanese)  
Reviews (refereed): 2 (in English) 13 (in Japanese)  
Other articles: 59 (in Japanese)

# Curriculum Vitae

**Name:** Saw Leng Guan  
**Born:** 14 December 1955, Taiping, Perak, MALAYSIA  
**Sex:** Male  
**Nationality:** Malaysian  
**Home Address:** 7 Lebuhr Palas  
Taman Selatan  
41200 Klang  
Selangor  
Tel.: +603-3371 0162  
Mobile: +6019-274 5512  
**Office Address:** Forest Research Institute Malaysia  
52109 Kepong  
Selangor  
Malaysia  
Tel.: +603-6279 7218  
Fax: +603-6273 1041  
e-mail: sawlg@frim.gov.my



## Academic Qualifications

- a. Bachelor of Science (Forestry), Agriculture University of Malaysia (UPM), 1981
- b. Master of Science (Pure and Applied Plant and Fungal Taxonomy), University of Reading, 1990
- c. Doctor of Philosophy, University of Reading, 1994

## Thesis

1. Saw L.G. (1981). Progress of crop: Composition, density and growth patterns of *Rhizophora* dominated stands before first thinning in Matang Mangroves Forest Reserve, Perak. Final year thesis. U.P.M.
2. Saw L.G. (1990). A revision of the genus *Licuala* (Palmae) subgenus *Libericula*. M.Sc. thesis. University of Reading.
3. Saw L.G. (1994). The taxonomy and ecology of the genus *Licuala* (Palmae) in Malaya. Ph.D. thesis, University of Reading.

## Schools attended

- a. Anglo Chinese (Primary) School, Malacca  
1962–1967
- b. Anglo Chinese (Secondary) School, Malacca  
1968
- c. High School, Klang  
1968–1975

## Previous Employment

- a. Audit clerk with Price Waterhouse & Co.  
1976–1977
- b. Teaching in a secondary school

1981

### **Present Employment**

Forest Research Institute Malaysia (FRIM)  
from 11 June 1982

### **History of Employment at the Forest Research Institute Malaysia**

- a. 11 June 1982  
Hill Forest Silviculturist
- b. 1 March 1985  
Forest Botanist
- c. 1 September 1990  
Promoted to Senior Research Officer, Scale Q2
- d. 1 September 2001  
Promoted to Senior Research Officer, Scale Q1
- e. 4 October 2002  
Deputy Director, Forest Environment Division
- f. 1 August 2004  
Programme Director, Tropical Forest Biodiversity Centre
- g. 1 September 2007  
Promoted to Principal Research Officer, Senior Director, Scale VU7
- h. 1 January 2009  
Division Director, Forest Biodiversity Division

### **Research Project Involvement**

- 1. Tree Flora of Malaya Project – contributor to the revision of families, 1985–1989.
- 2. The conservation of economically important, and rare, threatened or endangered forest plants in Peninsular Malaysia – project leader, 1996–1999.
- 3. To determine the optimum size of Virgin Jungle Reserves to enhance the conservation of flora and their attended management prescriptions for each of the ecological forest types – project leader, 1998-2002.
- 4. Krau Game Reserve, a totally protected forest in Peninsular Malaysia for the conservation of higher plants – project collaborator, 1999-2004.
- 5. Coordinator to: Plant Diversity Centre with 14 projects in the Centre. Project leader to two of the projects in the programme.
- 6. South East Asian Botanical Collections Information Network (SEABCIN), funded by European Commission, joint project with National Herbarium Netherlands, University of Oxford, Forest Research Institute Malaysia, Forest Department Sabah, Forest Department Sarawak, Philippine National Herbarium, Forest Herbarium Bangkok and Herbarium Bogoriense.
- 7. FRIM-GEF project on the Conservation of Biological Diversity through Improved Forest Planning Procedures. GEF funded project.
- 8. Population and conservation biology of selected threatened Malaysian ornamental species with special emphasis on *Johannesteijsmannia* (Palmae), joint project funded by ARCBC Research Funds, with National University of Singapore, Royal Botanic Gardens Kew and FRIM. My input here is as co-supervisor to a student that will conduct this study.
- 9. Tree Flora of Sabah and Sarawak Project – initiated the project and currently editor and contributor to revision of families, 1991 till present.
- 10. Flora of Peninsular Malaysia Project – project initiated in 2005 to revise the about 8,300 species of vascular plants in Peninsular Malaysia.



11. Conservation of Rare and Threatened Plants of Peninsular Malaysia – project initiated in 2005 to develop conservation tools and conserve rare and threatened plants of Peninsular Malaysia.
12. Planning and Development for a Natural History Museum (NHM) in Malaysia, a project to develop a NHM for Malaysia (2007-2009).
13. Documentation of the Flora of Malaysia – project started in 2010 as a follow-up project for the Flora of Peninsular Malaysia and the Tree Flora of Sabah and Sarawak projects.

### **Experiences**

1. As an undergraduate, I have completed 24 weeks of practical training in different aspects of forestry activities.
2. Assisted in the Lanjak-Entimau Wildlife Sanctuary Expedition in Sarawak, Malaysia in 1981. The expedition was organised and sponsored by the World Wildlife Fund, Malaysia.
3. Participated in the Endau-Rompin Expedition in Johor in 1986–1987. The expedition was organised by the Malayan Nature Society.
4. Participated in the Maliau Basin Expedition, Sabah as botanist/ecologist between 26 April and 6 May 1988. The expedition was organised by the Sabah Foundation and the World Wildlife Fund, Malaysia.
5. Participated in the Pulau Redang Expedition, Terengganu between 2 and 10 February 1989. The expedition was organised by the Malayan Nature Society.
6. Participated in the Belum Expedition, Perak in 1993–1994.
7. Organised numerous collecting expeditions in Malaysia in the course of my work in the Botany Section in FRIM.
8. Between 1985 and 1990, I managed the FRIM Research Station at Pasoh Forest Reserve, Negeri Sembilan.
9. Conducted taxonomic and botanical work in FRIM. I am also in charged of the herbarium as Curator.
10. The Arboretum and the development of the Kepong Botanic Gardens are also under my charge.
11. Planning and development of Kepong Botanic Gardens.
12. Liaison officer for the Tree Flora of Sabah and Sarawak in Royal Botanic Gardens Kew, U.K. and the Rijksherbarium, Leiden, the Netherlands from 23 March to 3 May 1997.
13. Organised the Fourth International Flora Malesiana Symposium in Holiday Villa Subang, Kuala Lumpur, Malaysia, 20–24 July 1998.

### **Main Research Interests**

1. Palm taxonomy and ecology
2. Taxonomic revision of Malaysian plants (in particular, tree families)
3. Ecology of Malaysian forests including plant geography
4. Conservation of Malaysian flora and ecosystems

### **Language Skills**

1. Chinese; speak conversational Hokkien dialect fairly well.
2. English; written and spoken both well.
3. Bahasa Malaysia; written and spoken both fair.

### **Society membership**

1. Malaysian Nature Society – Council member (1997-1998)
2. FRIM sports club – Ordinary member
3. Church of Shekinah Glory – Secretary (since August 2001, Treasurer 2000 until August 2001)

4. Klang Club – Ordinary member
5. International Palm Society – Ordinary member
6. Malaysian Scientific Association – Ordinary member
7. Harvest Christian Assembly – Board member (2012)

## **National Committees and International Involvement**

### ***International***

1. Member to the Brahms (Botanical Research and Herbarium Management System) Advisory Group, since 2001, a database management system for the curation of herbarium specimens and research
2. Member to the International Advisory Committee to the Fifth International Flora Malesiana Symposium, Sydney, Australia, 9–15 September 2001
3. Board member of the International Flora Malesiana Foundation, since September 2004
4. Appointed as a member of Science Audit to the Royal Botanic Gardens, Kew, U.K., June 2006
5. Board member of the Kew Bulletin, since January 2007.
6. Editorial member of the Journal of Tropical Ecology, since April 2007.
7. Editorial member of Pertanika Journal of Tropical Agriculture Science, since February 2009.
8. Editorial board member of Blumea, since June 2010.
9. National Focal Point for the Convention on Biological Diversity for Global Taxonomy Initiative (GTI), Clearing House Mechanism (CHM) and the Global Strategy for Plant Conservation (GSPC), since 2010
10. Member of the Global Partnership for Plant Conservation, since 2011
11. Member of Global Taxonomy Initiative Coordination Mechanism – June 2011.

### ***National***

1. Member of the National Technical Biological Diversity Committee
2. Member of the Sungai Buloh Botanic Gardens Committee, 1994
3. Member of the National Technical Committee of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)
4. Represented Malaysia in the Standing Committee for CITES on the Working Group on Timber
5. Party of the Malaysian delegation to the Sixth Conference of Parties, Convention for Biological Diversity, 2002, The Hague, Netherlands
6. Malaysian scientific expert to Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) of the Convention on Biological Diversity since 2003.
7. Party of the Malaysian delegation to the Seventh Conference of Parties, Convention for Biological Diversity, February 2004, Kuala Lumpur, Malaysia
8. Party of the Malaysian delegation to the Eighth Conference of Parties, Convention for Biological Diversity, 2006, Curitiba, Brazil
9. Chair to the Vulnerability & Adaptations for Biodiversity of the Second National Communications for Climate Change, since 2007.
10. Party of the Malaysian delegation to the Ninth Conference of Parties, Convention for Biological Diversity, 2008, Bonn, Germany
11. Panel of experts on Advanced Informatics for MIMOS, since November 2009
12. Party of the Malaysian delegation to the Tenth Conference of Parties, Convention for Biological Diversity, 2010, Nagoya, Japan

13. Party of the Malaysian delegation to the Eleventh Conference of Parties, Convention for Biological Diversity, 2012, Hyderabad, India,

### **Citation Indices (January 2013)**

#### **Reviewer for Journals**

I regularly review scientific articles for the Journal of Tropical Forest Sciences, Sandakania, Malayan Nature Journal, Gardens' Bulletin Singapore, Kew Bulletin, Blumea, Journal of Tropical Ecology, Thai Forest Bulletin (Botany) and Journal of Tropical Agricultural Science (Pertanika).

#### **Editor of publication series**

1. Tree Flora of Sabah and Sarawak, since 1995
2. Flora of Peninsular Malaysia, since 2005
3. Series editor for FRIM Research Pamphlet, 1996-2005
4. Malaysian Nature Journal, 1997–1998
5. Sandakania, 1998-1999
6. Flora Malesiana Series I – Spermatophyta, since 1998
7. Series editor to Conservation Malaysia, a periodical highlighting conservation in Malaysia, since 2005 (until 2012, 16 issues published)

#### **Supervisor to Post-graduate Students**

1. Dr. Tam Sheh May, M.Sc. supervisor, graduated 1999, Universiti Putra Malaysia, Serdang, Malaysia
2. Dr. Adrian Loo Hock Beng, Ph.D. supervision, graduated 2001, National University of Singapore, Singapore
3. Dr. Look Su Lee, Ph.D. supervisor, graduated 2007, National University of Singapore, Singapore
4. Ms. Chan Yoke Mui, M.Sc. supervisor, graduated in 2010, University of Malaya, Malaysia
5. Ms. Sam Yen Yen, Ph.D. student currently being supervised with University of Malaya, Malaysia

#### **Examiner for Post-graduate Students**

1. Berhaman Ahmad, 1998. A taxonomic revision of *Nyctocalos* (Bignoniaceae) in Malesia, and aspects of its comparative morphology and biogeography. M.Sc. thesis submitted to University of Malaya, Malaysia.
2. Tam Sheh May, 1998. Floristic diversity and conservation importance of Bukit Bauk (Terengganu) in Peninsular Malaysia. M.Sc. thesis submitted to Universiti Putra Malaysia, Malaysia.
3. Subhasis Panda, 2007. Taxonomic revision of some selected genera of Ericaceae in India. Ph.D. thesis submitted to the Vidyasagar University, India.

#### **Recent Courses or Lectures Conducted**

1. Malaysian plants under the CITES list. Course given to Agriculture Department officers of the Quarantine Section. 12 June 1995
2. Tree identification course. Course conducted for new or newly promoted officers of FRIM since 1996 and on a yearly basis.
3. Herbarium Techniques Course. Course conducted together with staff of the Royal Botanic Gardens, Kew. 4 – 22 March 1996
4. Identification of Fruit Tree species. Course conducted for Quarantine officers of the Department of Agriculture, 3 – 5 September 1996
5. "Managing Biological Diversity", lecture presented at the Second International Short Course on Sustainable Tropical Forest Management, Agriculture University of Malaysia, Serdang, Malaysia. 4 – 16 November 1996

6. "Advances in Dendrology", course conducted for senior officers of the Forest Department, Peninsular Malaysia, Forestry Training School, Kepong. 13 – 15 July 1999
7. BRAHMS workshop for ITTO project in Sarawak. Kuching, Sarawak, 20–25 November 2000
8. Threatened plants of Malaysia under CITES – Identification course to Plant Quarantine Officers of the Agriculture Department of Malaysia, 16-18 July 2001
9. Herbarium and Plant Collection Techniques for Botanic Gardens Course, Forest Research Institute Malaysia, Kepong, 15-24 October 2001
10. Bamboo Collection, Identification and Documentation course – Course jointly organised by International Plant Genetic Resources Institute (IPGRI), Forest Research Institute Malaysia and Rimba Ilmu, University of Malaya, 26 November to 1 December 2001
11. Guest lecturer to training course on "Aspects of plant taxonomy on biodiversity inventory and conservation of protected ecosystems in Southeast Asia", Bogor, Indonesia, 8-21 July 2002.
12. Guest lecturer to Training programme on forest management certification, 16-20 September 2002, Kuala Lumpur. Lectured on Biological diversity – Floral diversity in Peninsular Malaysia, conservation of the rare, threatened and endangered plant species and procedure for assessing changes in biological diversity.
13. Guest lecturer to ASEAN-Korean Environmental Cooperation Project Short-term Training Course: Fundamentals of Forestry Field Research, 20-24 January 2003, Kuala Lumpur. Lectured on "Effective Seminar Presentation".
14. Guest lecturer to Biodiversity Lecture Series to Senior Forest Department Officers of the Forest Department of Peninsular Malaysia, 30 September 2003, Forest Training School, Kepong, Kuala Lumpur. Lectured on "Palms of Malaysia".

#### **Consultancies**

1. Preparation of the Environmental Impact Assessment (flora component) for the Kemasah Heights Golf Resort, Kuala Lumpur.
2. Environmental Impact Assessment (flora component) of the development of the Sungai Murum Hydro-electric Power Dam, Sarawak.
3. Preparation of the Environmental Impact Assessment (flora component) of the Klang Valley Outer Ring Road.
4. Preparation of the Conceptual Plan for the Development of Bukit Malawati Botanic Gardens, Kuala Selangor for the Kuala Selangor District Office.
5. Plant and Vegetation survey on the proposed Cameron Highlands–Gua Musang Road — 1999.
6. Develop plan and proposal for the setting up of a Herbarium at the Kulliyah of Architecture and Environmental Design, International Islamic University Malaysia – 2001
7. Botanical consultant to the Putrajaya Botanic Gardens – 2002-2003
8. Plant checklist and vegetation survey of the Bukit Chahaya Botanic Gardens, Shah Alam – 2006

#### **Conference, Seminar and Workshop Participation**

1. Planning Meeting for setting up an Asia-Oceania Network of Biological Sciences, Singapore, 13-15 February 1995
2. 35th Meeting of the Standing Committee on Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Geneva, Switzerland, 21-24 March 1995
3. Flora Malesiana Symposium, Royal Botanic Gardens, Kew, UK, 10-14 July 1995
4. International Palm Symposium, Florida, USA, 19-20 October 1995
5. Tree Flora of Kalimantan Workshop, Punchak, Bogor, Indonesia, 28-30 November 1995
6. Fourth Conference on Forestry and Forest Products Research. Forest Research Institute Malaysia, Kepong, Malaysia, 2–4 October 1997
7. International Conference on Long-Term Ecological Research (LTER) and Biodiversity Studies. Taipei. Republic of China, 12–13 November 1997.
8. Workshop on Biodiversity, Conservation and Utilisation – Present Status and Future Directions. Joint Working Committee on Forestry (Malaysia-Indonesia). Forest Research Institute Malaysia, Kepong, Malaysia, 27–28 November 1997.

9. First Workshop on Botanic Garden Policy on Access and Benefit-Sharing – Pilot Project. Royal Botanic Gardens Kew, UK, 15–16 December 1997.
10. Field work and visit to University Brunei Darussalam, Kuala Belalong Field Study Centre and Ulu Temburong National Park, Brunei, for the "Tree Flora of Brunei Project", 20–26 April 1998.
11. Stone Memorial Symposium, Rimba Ilmu, University of Malaya, Kuala Lumpur, Malaysia, 16–18 July 1998.
12. Fourth International Flora Malesiana Symposium, Holiday Villa, Subang Jaya, Kuala Lumpur, Malaysia, 20–24 July 1998.
13. Second Workshop on Botanic Garden Policy on Access and Benefit-Sharing – Pilot Project. Kirstenbosch National Botanic Garden, Cape Town, South Africa, 21–22 September 1998.
14. Third Workshop on Botanic Garden Policy on Access and Benefit-Sharing – Pilot Project. Institute of Botany, The Chinese Academy of Sciences, Beijing, 17–19 May 1999.
15. Forty-second Standing Committee Meeting Convention on International Trade in Endangered Species Of Wild Fauna and Flora (CITES), Lisbon (Portugal), 28 September – 1 October 1999
16. Fourth Workshop on Common Policy Guidelines on Access and Benefit-Sharing for Botanic Garden– Pilot Project. Cartagena, Colombia, 6–8 November 2000.
17. Third Meeting of the Scientific Expert Committee and Second Research Conference of ASEAN Regional Centre for Biodiversity Conservation (ARCBC), Tagaytay City, the Philippines, 7–10 February 2001.
18. Fifth International Flora Malesiana Symposium, Royal Botanic Gardens, Sydney, Australia, 9-15 September 2001.
19. Conference on Forestry and Forest Products Research, Kuala Lumpur, 1-3 October 2001.
20. Workshop on the South East Asian Botanical Collections Information Network (SEABCIN), Saraburi, Thailand, 11-15 March 2002.
21. Asia and the Pacific Regional Preparatory Meeting for the Sixth Meeting of the Conference of the Parties to the Convention on Biological Diversity, Bangkok, Thailand, 18-20 March 2002.
22. Sixth Conference of the Parties for the Convention on Biological Diversity at The Hague, Netherlands, 7-19 April 2002.
23. Experts Meeting on "Access to Genetic Resources, Traditional Knowledge and Intellectual Property Rights" among the Mega-diverse Like-minded groups of countries held on 27-29 November 2002, Urubamba Valley, Cusco, Peru.
24. Experts Meeting among Mega-diverse Like-minded groups of countries held on 21-23 July 2003, Kuala Lumpur, Malaysia.
25. Conference on Forestry and Forest Products Research, Crown Princess Hotel, Kuala Lumpur, 6-8 October 2003.
26. Second workshop on the South East Asian Botanical Collections Information Network (SEABCIN), Forest Research Institute Malaysia, Kepong, 27-31 October 2003.
27. Ninth Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice for the Convention on Biological Diversity, Montreal, Canada, 10-14 November 2003.
28. Regional Workshop on Important Plant Areas and Standardization of Habitat Classification for ASEAN, Bangkok, Thailand, 27-31 January 2004.
29. Seventh Conference of the Parties for the Convention on Biological Diversity at Kuala Lumpur, Malaysia, 9-20 February 2004.
30. The International Palm Society – 2004 Biennial Meeting, Hawaii, United States of America, 8-19 May 2004.
31. Species 2000 & Global Strategy for Plant Conservation (GSPC) workshop – Towards a working list of known plant species: Coverage, gaps and metadata, Royal Botanic Gardens, Kew, UK, 28-30 Jun 2004.
32. International Symposium 2004 – Asian Plant Diversity and Systematics, International Association of Plant Taxonomy, 29 July to 2 August 2004, Sakura, Japan.
33. Organised the Plant Conservation Strategy for Malaysia Workshop held in Forest Research Institute Malaysia, Kepong, Malaysia, 12-13 October 2004
34. Second Regional Workshop on Important Plant Areas and Standardization of Habitat Classification for Asean, Kota Kinabalu, Malaysia, 27-30 October 2004.

35. International Palm Symposium, Linnean Society, Natural History Museum, London, 6-8 April 2005.
36. Eighth Conference of the Parties for the Convention on Biological Diversity at Curitiba, Brazil, 20-31 March 2006.
37. Delegation with Hon. Minister, NRE visiting the Natural History Museum, London and signing of MOU with Royal Botanic Gardens, Kew, UK, 17-20 May 2006
38. Appointed as a member of Science Audit to the Royal Botanic Gardens, Kew, U.K., 4-7 June 2006
39. Fourth International Symposium on the family Zingiberaceae: Singapore Botanic Gardens, 3-6 July 2006.
40. South East Asia Botanic Gardens Network Director's Meeting, Singapore Botanic Gardens, 7-9 February 2007.
41. Invited plenary speaker for the Third Global Botanic Gardens Congress, Wuhan China, 14-21 April 2007.
42. Workshop on Plant Conservation Assessment for Southeast Asia, Los Banos, Philippines, 5-9 June 2007.
43. Seventh Flora Malesiana Symposium, Leiden, the Netherlands, 17-22 June 2007.
44. Strategies for the sustainable use and management of timber tree species subject to international trade, Kuala Lumpur, 5-7 September 2007.
45. *Ad hoc* technical expert group on technology transfer and scientific and technological cooperation, Geneva, 10-12 September 2007.
46. Organised the consultative workshop for Natural History Museum in Malaysia, 15 November 2007, Legend Hotel, Kuala Lumpur.
47. Study tour for the establishment of a Natural History Museum in Malaysia. Field Museum, Chicago, Smithsonian National Natural History Museum, Washington, Natural History Museum, London, Naturalis, Leiden, the Netherlands. 3-19 December 2007.
48. Second Opened Ended Working Group on Protected Areas (WGPA2) and Thirteenth Subsidiary Body for Technology and Technological Advice (SBSTTA13). Rome, Italy. 9-25 February 2008
49. Eighth Conference of the Parties for the Convention on Biological Diversity at Bonn, Germany. 19-30 May 2008.
50. The ASEM Seminar on Adaptation to Climate Change, Tokyo, Japan, 2-3 October 2008.
51. 5th International Symposium on the Family Zingiberaceae, Xishuangbanna, China, 5 –12 July 2009
52. Plant Conservation for the next decade: A celebration of Kew 250th Anniversary, Royal Botanic Gardens, Kew, United Kingdom, 12-16 October 2009.
53. International Meeting for Promoting Asia-Pacific Biodiversity Observation Network (AP-BON) and the Intergovernmental Meeting on ESABII, East and Southeast Biodiversity Information Initiative, United Nations University, Tokyo, 11-14 December 2009.
54. 4th GEOSS Asia-Pacific Symposium and International Meeting for Promoting Asia-Pacific Biodiversity Observation Network (AP-BON), Bali, Indonesia, 10-12 March 2010.
55. Fourteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA 14) of the Convention on Biological Diversity, Nairobi, Kenya, 17-22 May 2010
56. Third meeting of the Ad Hoc Open-ended Working Group on Review of Implementation of the Convention (WGRI 3), Nairobi, Kenya, 24-28 May 2010.
57. 8th International Flora Malesiana Symposium, Singapore Botanic Gardens, Singapore, 23-27 August 2010.
58. Tenth Conference of Parties, Convention on Biological Diversity (CBD), Nagoya, Japan, 17-30 October 2010.
59. Third Scientific Advisory Committee Meeting (SAC) of the ASEAN Centre for Biodiversity, Manila, Philippines, 12-13 November 2010.
60. Expert Meeting on the Modalities of Operation of the Access and Benefit-Sharing Clearing-House of the Convention on Biological Diversity, Montreal, Canada, 11-14 April 2011.
61. Regional Workshop for South, East and Southeast Asia on Updating National Biodiversity Strategy and Action Plans, Xi'an, China, 9-16 May 2011.
62. The role of the Penang Botanic Gardens: Meeting the Challenges of the 21<sup>st</sup> Century, Science University Malaysia, Penang, 24-25 May 2011.
63. 22nd Pacific Science Congress, Kuala Lumpur, 14-17 June 2011.
64. Ad Hoc Technical Expert Group Meeting on Indicators for the Strategic Plan For Biodiversity 2011-2020, Wycombe, United Kingdom, 20-24 June 2011.

65. Global partnership for plant conservation conference & GSPC Liaison group meeting, Missouri Botanical Garden, Saint Louis, USA. 2-11 July 2011.
66. XVII International Botanical Congress, Melbourne, Australia, 25-30 July 2011.
67. Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Nairobi, Kenya, 3-7 October 2011.
68. Seventh meeting of the Ad Hoc Open-ended Working Group on Article 8(j) and related provisions (WG8J-7), Montreal, Canada, 30 October – 4 November 2011.
69. Fifteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA-15), Montreal, Canada, 6 – 11 November 2011.
70. 4th Workshop on Asia-Pacific Biodiversity Observation Network (AP-BON), Tokyo, Japan, 2-4 December 2011.
71. Project Implementation Inception Meeting and Workshop on “Expanded Taxonomic Capacity Building and Governance for Conservation and Sustainable Use of Biodiversity”, Hanoi, Vietnam, 5-7 March 2012.
72. Capacity building workshop “Indicators as part of National Biodiversity Strategy and Action Plan (NBSAP) updating for ASEAN countries”, Hanoi, Vietnam, 25-28 March 2012.
73. World Flora Online Workshop, Missouri Botanical Gardens, St. Louis, USA, 16-18 July 2012.
74. GTI Subregional Capacity-building Workshop to Address Invasive Alien Species and to Achieve Aichi Biodiversity Targets in East and South East Asia, Bangkok, Thailand, 31 July to 1 August 2012.
75. NIES-FRIM-UPM Collaboration on Tropical Forest Ecology and Biodiversity Steering Committee meeting, International Symposium on Southeast Asian Tropical Forest Research Related to Climate Change and Biodiversity and REDD workshop, Tokyo & Hiroshima, 24-29 September 2012.
76. Eleventh Conference of the Parties of the Convention on Biological Diversity, Hyderabad, India, 8-19 October 2012.

## Awards

1. Group award for excellence service for Botany section in 1995
2. Individual excellence service award in 1997 in FRIM
3. Best research paper award for FRIM in 1998 – “A revision of *Licuala* (Palmae) in the Malay Peninsula”, Sandakania (1997) 10: 1–95”
4. British High Commission’s Chevening Scholarships Scheme: Royal Society – Malaysian Fellowship, 1999/2000 (15 January 2000 – 15 June 2000)
5. Second prize Publication Award – Technical Publication category for 2000 Annual FRIM Awards – “Saw L.G. & Y.Y. Sam (2000). Conservation of Dipterocarpaceae in Peninsular Malaysia. Journal of Tropical Forest Science 12: 593–615”
6. Second prize Publication Award – Technical Publication category for 2005 FRIM Annual Awards – “Chua L.S.L., H. Nurulhuda, M. Hamidah & L.G. Saw (2004). Conservation status of *Hopea subalata* (Dipterocarpaceae) in Peninsular Malaysia. Journal of Tropical Forest Science 16: 271-282”.
7. First prize Publication Award – Book category for 2007 FRIM Annual Awards – “Chua L.S.L. & L.G. Saw (2006). Plants of Krau. FRIM Research Pamphlet No. 126. Forest Research Institute Malaysia. 227 pp”.
8. First prize Publication Award – Technical Publication category for 2007 FRIM Annual Awards – “Lee S.L., K.K.S. Ng, L.G. Saw, C.T. Lee, N. Muhammad, N.Tani, Y. Tsumura & J. Koskela (2006). Linking the gaps between conservation research and conservation management of rare dipterocarps: A case study of *Shorea lumutensis*. Biological Conservation 131: 72–92”.

9. Second prize Publication Award – Technical Publication category for 2007 FRIM Annual Awards – “Ng K.K.S., S.L. Lee, L.G. Saw, J.B. Plotkin & C.L. Koh (2006). Spatial structure of three tropical tree species with different habitat preferences in hill dipterocarp forest. *Tree Genetics & Genomes*. 2: 121–131”.
10. Best Research Award for 2007 FRIM Annual Awards – Tree Flora of Sabah and Sarawak project.
11. Long Service Award for 2007 FRIM Annual Awards.
12. FRIM Best Researcher Award for 2009 FRIM Annual Awards.
13. FRIM Best Research Award for 2010 FRIM Annual Awards – Safeguarding the forest plant diversity of Peninsular Malaysia project
14. First prize Publication Award – Book category 2010 FRIM Annual Awards – Malaysia Plant Red List – Peninsular Malaysian Dipterocarpaceae.
15. National Book Award 2012 – Technical Book – Wild Orchids of Peninsular Malaysia.
16. First prize Publication Award – Book category 2012 FRIM Annual Awards – Wild Orchids of Peninsular Malaysia.

## Papers and Publications

### Publications in Journals

1. Wong K.M., L.G. Saw & K.M. Kochummen (1987). A survey of the forests of the Endau-Rompin Area, Peninsular Malaysia: Principal forest types and floristic notes. *The Malayan Nature Journal* 41: 125–144.
2. Wong K.M., L.G. Saw & K.M. Kochummen (1987). Some new and interesting plant species from the Endau-Rompin area of Peninsular Malaysia. *The Malayan Nature Journal* 41: 267–274.
3. Saw L.G., T. Uji & J.F. Veldkamp (1988). Notes on the *Setaria palmifolia* group (Graminae) in Malesia. *Floribunda* 1: 21–24.
4. Wong K.M., Y.S. Wong & L.G. Saw (1988). Notes on the early exploration and botanical collecting in the Endau-Rompin area of Peninsular Malaysia. *The Gardens' Bulletin Singapore* 41: 83–91.
5. Srivastava P.B.L., L.G. Saw & Ashari Muktar (1988). Progress of crop: Composition, density and growth patterns of *Rhizophora* dominated stands before first thinning in Matang Mangroves Forest Reserve, Perak. *Pertanika* 11: 365–374.
6. Saw L.G. & J. Dransfield (1989). A new species of *Licuala* (Palmae) from Peninsular Malaysia. *The Gardens' Bulletin, Singapore* 42: 71–73.
7. Saw L.G., J.V. LaFrankie K.M. Kochummen & S.K. Yap (1991). Fruit trees in a Malaysian rain forest. *Econ. Bot.* 45(1): 120–136.
8. Saw L.G. (1991). Forest resources and ecosystem conservation in Malaysia. *Forest Ecology and Management* 43: 32–40.
9. Maschwitz U., B. Fiala & L.G. Saw (1991). Two new myrmecophytic associations from the Malay Peninsula: Ants of the genus *Cladomyrma* (Formicidae, Campinotinae) as partners of *Saraca thaipingensis* (Caesalpinaceae) and *Crypteronia griffithii* (Crypteroniaceae). *Ins. Soc.* 38: 27–35.
10. Maschwitz U., B. Fiala, L.G. Saw, Norma-Rashid & I. Azare (1994). *Ficus obscura* Bl. var. *borneensis* (Miq.) Corner, a new unspecific ant-plant from Malesia. *Malayan Nature J.* 47(4): 409–416.
11. Dransfield J. & L.G. Saw (1995). A preliminary checklist of palms in Temengor Forest Reserve, Hulu Perak, Malaysia. *Malayan Nature J.* 48: 209–214.
12. Chua L.S.L., Hawthorne W.D., Saw L.G. & Quah E.S. (1996). Biodiversity database and assessment of logging impacts. *Conservation, Management and Development of Forest Resources*: 30–40.
13. Saw L.G. (1997). A revision of *Licuala* (Palmae) in the Malay Peninsula. *Sandakania* 10: 1–95.
14. Lim C.K., J. Dransfield, R. Kiew & L.G. Saw (1998). Four new *Pinanga* Blume (Palmae) species from Peninsular Malaysia. *The Gardens' Bulletin Singapore* 50: 99–114.



15. Tam S.M., S.C. Quah, R. Kiew, L.G. Saw, L. Chua, K. Salleh & S. Anthonysamy (1998). Floristic survey of Bukit Bauk, Terengganu, Peninsular Malaysia. *Malaysian Applied Biology* (Supplementary Issue) 27: 78–82.
16. Rajaseger G. H.T.W. Tan, I.M. Turner, L.G. Saw & P.P. Kumar (1999). Random amplified polymorphic DNA variation among and within selected *Ixora* (Rubiaceae) populations and mutants. *Annals of Botany* 84: 253–257.
17. Loo A.H.B., H.T.W. Tan, P.P. Kumar & L.G. Saw (1999). Population analysis of *L. glabra* Griff. var. *glabra* (Palmae) using RAPD profiling. *Annals of Botany* 84: 421–427.
18. Saw L.G. & Y.Y. Sam (2000). Conservation of Dipterocarpaceae in Peninsular Malaysia. *Journal of Tropical Forest Science* 12: 593–615.
19. Vermeulen J.J. & L.G. Saw (2000). *Bulbophyllum* sect. *Hirtula* (Orchidaceae): A new species and a new record for Peninsular Malaysia. *The Gardens' Bulletin Singapore* 52: 289–292.
20. Loo A. H. B., H. T. W. Tan, P. P. Kumar, L. G. Saw (2001). Intraspecific variation in *Licuala glabra* Griff. (Palmae) in Peninsular Malaysia – a morphometric analysis. *Biological Journal of the Linnean Society* 72 (1): 115–128.
21. Chua, L.S.L. & L.G. Saw (2001). A reassessment of the flora of Gunung Ulu Kali, Genting Highlands, Malaysia – Preliminary findings and trends. *The Malayan Nature Journal* 55 (1&2): 65–76.
22. Lee S.L., Ng K.K.S., Saw L.G., Norwati A., Siti Salwana M. H., Lee C. T., & Norwati M. (2002). Population genetics of *Intsia palembanica* (Leguminosae) and genetic conservation of Virgin Jungle Reserves in Peninsular Malaysia. *American Journal of Botany*. 89(3): 447–459.
23. Saw L.G. (2002). A new species of *Vatica* (Dipterocarpaceae) from Peninsular Malaysia. *The Gardens' Bulletin Singapore* 54: 247–251.
24. Lee S.L., Ng Kevin. K.S., Saw L.G., Norwati A., Salwana S. H., Lee C.T., & Norwati M. (2002). Population genetics of *Intsia palembanica* (Leguminosae) and genetic conservation of virgin jungle reserves in Peninsular Malaysia. *American Journal of Botany* 89(3): 447–459.
25. Barfod A.S. & Saw L.G. (2002). The genus *Licuala* (Palmae: Coryphoideae) in Thailand. *Kew Bulletin* 57: 827–852.
26. Saw L.G. (2003). A new stoloniferous *Pinanga* from Peninsular Malaysia. *Palms* 47(3): 139–142.
27. Saw L.G., J. Dransfield & D.M. Keith-Lucas (2003). Morphological diversity of the genus *Licuala* (Palmae). *Telopea* 10(1): 187–206.
28. Chua L.S.L. & Saw L.G. (2003). A new record of *Dryobalanops beccarii* (Dipterocarpaceae) from Peninsular Malaysia. *The Gardens' Bulletin Singapore* 55: 1–6.
29. Chua L.S.L. & Saw L.G. (2003). Conservation notes on *Vatica yeechongii* (Dipterocarpaceae) from Peninsular Malaysia. *The Gardens' Bulletin Singapore* 55: 7–12.
30. Saw L.G. (2004). A new species of *Polyosma* (Escalloniaceae) from Sabah, Malaysia. *Sandakania* 14: 57–59.
31. Chua L.S.L., H. Nurulhuda, M. Hamidah & L.G. Saw (2004). Conservation status of *Hopea subalata* (Dipterocarpaceae) in Peninsular Malaysia. *Journal of Tropical Forest Science* 16: 271–282.
32. Moog, J., L.G. Saw, R. Hashim & U. Maschwitz (2005). The triple alliance: how a plant-ant, living in an ant-plant, acquires the third partner, a scale insect. *Insectes Sociaux* 52 (2): 169–176.
33. LaFrankie, J.V. & L.G. Saw. 2005. The understorey palm *Licuala* (Palmae) suppresses tree regeneration in a lowland forest in Asia. *Journal of Tropical Ecology* 21: 703–706.
34. Saw L.G. (2005). Ecology and distribution of *Licuala* in Peninsular Malaysia. *Palms & Cycads* 86: 4–13.
35. Sam Y.Y. & L.G. Saw (2005). Three new species of *Scaphochlamys* (Zingiberaceae) in Peninsular Malaysia. *Singapore Gardens' Bulletin* 57:253–261.

36. Ng K.K.S., S.L. Lee, L.G. Saw, J.B. Plotkin & C.L. Koh (2006). Spatial structure of three tropical tree species with different habitat preferences in hill dipterocarp forest. *Tree Genetics & Genomes*. 2: 121–131.
37. Lee S.L., K.K.S. Ng, L.G. Saw, C.T. Lee, N. Muhammad, N.Tani, Y. Tsumura & J. Koskela (2006). Linking the gaps between conservation research and conservation management of rare dipterocarps: A case study of *Shorea lumutensis*. *Biological Conservation* 131: 72–92.
38. Lee C.T., S.L. Lee, K.K.S. Ng, H. Siti Salwana, M. Norwati & L.G. Saw (2007). Allozyme diversity of *Koompassia malacensis* (Leguminosae) in Peninsular Malaysia. *Journal of Tropical Forest Science* 19(2): 63–78.
39. Wiens, F., A. Zitzmann, M.-A. Lachance, M. Yegles, F. Pragst, F.M. Wurst, D. Von Holst, L.G. Saw & R. Spanage. (2008). Chronic intake of fermented floral nectar by wild treeshrews. *Proc. Natl. Acad. Sci. USA*. Vol. 105 (30): 10426–10431.
40. Wen J. Zhu Y.P., Lee C.H., Widjaja E. & Saw L.G. (2008). Evolutionary Relationships of Araliaceae in the Malesian Region: a Preliminary Analysis. *Acta Metallurgica Sinica* 2008, 30(04) 391-399 DOI: 10.3724 SP.J.1143.2008.07267
41. Chan Y.M. & Saw L.G. (2009). The use of *Johannesteijsmannia* by indigenous communities and the current trade in the genus. *Palms*: 53: 147–152.
42. Sam Y. Y., Ibrahim H. & Saw L. G. (2010). *Scaphochlamys krauensis* and *S. pusilla* spp. nov. (Zingiberaceae) from Krau Wildlife Reserve, Pahang, Peninsular Malaysia. *Nordic Journal of Botany* 28: 673-679, 2010.
43. Jutta M., Chew K.L. & Saw L.G. (2010). A new species of *Cycas* (Cycadaceae) from Peninsular Malaysia. *Blumea* 55: 249–252.
44. Sam Y.Y., Ibrahim H. & Saw L.G. (2010). *Scaphochlamys krauensis* and *S. pusilla* spp. nov. (Zingiberaceae) from Krau Wildlife Reserve, Pahang, Peninsular Malaysia. *Nordic Journal of Botany* 28: 673–679.
45. Saw L.G. & Chua L.S.L., Suhaida M., Yong, W.S.Y. & Hamidah M. (2010). Conservation of rare, endangered and threatened plants of Malaysia. *Kew Bulletin* 65: 681-689.
46. Chan Y.M., Lim A.L. & Saw L.G. (2011). Reproductive biology of the endangered and endemic palm *Johannesteijsmannia lanceolata* (Arecaceae). *Journal of Tropical Forest Sciences* 23(2): 213-221.
47. Chan Y.M., Chua L.S.L. & Saw L.G. (2011). Towards the conservation of Malaysian *Johannesteijsmannia* (Palmae). *Gardens' Bulletin Singapore* 63: 425-432.
48. Saw L.G. (2012). *Licuala* (Arecaceae, Coryphoideae) of Borneo. *Kew Bulletin* 67: 577-654. DOI 10.1007/s12225-012-9414-0

## Books

49. Saw L.G. & R.S. Raja Barizan. (1991). Directory of Plant Genetic Resources in Malaysia. FRIM Research Pamphlet No. 109. 161 pp.
50. Larsen L., H. Ibrahim, S.H. Khaw & L.G. Saw (1999). Gingers of Peninsular Malaysia and Singapore. Natural History Publications (Borneo), Kota Kinabalu. 134 pg.
51. Chua L.S.L. & L.G. Saw (2006). Plants of Krau. FRIM Research Pamphlet No. 126. Forest Research Institute Malaysia. 227 pp.
52. Saw L.G., Ng F.S.P., Ahmad Mustaffa B., Singh M., Inger R.F., Ng P.K.L. & Freeman E. (2008). (Project team). Natural History Museum Malaysia – Planning and Development. UNDP and Forest Research Institute Malaysia. 217 pp.
53. Saw L.G., Chua L.S.L. & Abdul Rahim N. (2009). Malaysia – National Strategy for Plant Conservation. Ministry of Natural Resources and Environment & Forest Research Institute Malaysia. 73 pp.

54. Chua L.S.L., Suhaida M., Hamidah M. & Saw L.G. (2010). Malaysia Plant Red list - Peninsular Malaysian Dipterocarpaceae. Research Pamphlet No. 129. Forest Research Institute Malaysia, Kepong.
55. Ong P.T., O'Byrne P., Yong W.S.Y. & Saw L.G. (2011). Wild Orchids of Peninsular Malaysia. Forest Research Institute Malaysia. 196 pp.

### Guidebooks

56. Chua L.S.L. & Saw L.G. (2006). Malaysian Plant Red Data Book. Guide to Contributions. Forest Research Institute Malaysia.
57. Kiew R., R.C.K. Chung, L.G. Saw & E. Soepadmo. (2006). Guide to preparing manuscripts for the Flora of Peninsular Malaysia. Forest Research Institute Malaysia. 39 pp.

### Chapters in Books

58. Saw L.G. & C.W. Marsh (1989). Vegetation classification and mapping. **In** C.W. Marsh (ed.), Expedition to Maliau basin, Sabah, April – May 1988. Yayasan Sabah Information paper No. 30: 117–125.
59. Saw L.G. (1989). Sabiaceae. **In** F.S.P. Ng (ed.), Tree Flora of Malaya. Vol. 4. Malayan Forest Records No. 26. Longmans Malaysia.
60. Saw L.G. (1989). Saxifragaceae. **In** F.S.P. Ng (ed.), Tree Flora of Malaya. Vol. 4. Malayan Forest Records No. 26. Longmans Malaysia.
61. Saw L.G. (1989). Urticaceae. **In** F.S.P. Ng (ed.), Tree Flora of Malaya. Vol. 4. Malayan Forest Records No. 26. Longmans Malaysia.
62. Wong K.M. & L.G. Saw (1989). Caprifoliaceae. **In** F.S.P. Ng (ed.), Tree Flora of Malaya. Vol. 4. Malayan Forest Records No. 26. Longmans Malaysia.
63. Saw L.G. & H.T. Chan (1995). Vegetation and Plants. **In** S.S. Lee (ed.), A guide book to Pasoh. FRIM Technical Information Handbook No. 3. Forest Research Institute Malaysia.
64. Saw L.G. (1998). *Caryota*. Lesser-known timbers. PROSEA 5(3): 140–142. Pudoc Scientific Publishers, Wageningen.
65. Saw L.G. (1998). *Cyrtostachys*. Lesser-known timbers. PROSEA 5(3): 177–178. Pudoc Scientific Publishers, Wageningen.
66. Saw L.G. (1998). *Licuala*. Lesser-known timbers. PROSEA 5(3): 329–331. Pudoc Scientific Publishers, Wageningen.
67. Saw L.G. (1998). *Livistona*. Lesser-known timbers. PROSEA 5(3): 332–334. Pudoc Scientific Publishers, Wageningen.
68. Saw L.G. (1998). *Pholidocarpus*. Lesser-known timbers. PROSEA 5(3): 444–445. Pudoc Scientific Publishers, Wageningen.
69. Saw L.G. (1998). *Pinanga*. Lesser-known timbers. PROSEA 5(3): 448–449. Pudoc Scientific Publishers, Wageningen.
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71. Saw L.G. (1998). Rattans. **In** E. Soepadmo, Plants. Encyclopaedia of Malaysia. Volume II, pg. 106–107, Editions Didier Millet, Kuala Lumpur.
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73. Saw L.G. (1998). Partial treatment on *Alstonia angustiloba*, *Anisoptera scaphula*, *Artocarpus lanceifolius*, *Dyera costulata*, *Macaranga gigantea*, *M. hypoleuca*, *Mangifera caesia*, *M. foetida*, *Shorea acuminata*, *S. curtisii*, *S. glauca*, *S. maxwelliana*, *S. multiflora*, *S. ovalis* and *S. teysmanniana*, Electronic Forestry Compendium in CD-ROM. CAB International.

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### Conference Proceedings

81. Zakri A.H., L.G. Saw & N. Rajanaidu (1989). National conservation strategies in Malaysia. **In** A.H. Zadri (ed.), Genetic resources of under-utilised plants in Malaysia. Proceedings of the National workshop on plant genetic resources held in Subang Jaya, Malaysia. Malaysian National Committee on Plant Genetic Resources.
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87. Ng, K. K. S., S. L. Lee, L. G. Saw & C. L. Koh (2000). Comparison of microsatellite data generated by using high resolution agarose gel and denaturing polyacrylamide gel. **In** M. S. Saad, Q. Z. Faridah, M. A. Kadir, M. Z. M. Khalid, O. Mohamad, G. B. Saleh & J. M. Panandam (eds.). Genetic Manipulation – Challenges and Advances. Proceedings of the 4<sup>th</sup> National Congress on Genetics, 26-28 September 2000, Genting Highlands, pp. 271-279

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112. Soepadmo E., L.G. Saw & R.C.K. Chung (2002) (eds.) *Tree Flora of Sabah and Sarawak*, Vol. 4. Forest Research Institute Malaysia.
113. Soepadmo E., L.G. Saw & R.C.K. Chung (2004) (eds.) *Tree Flora of Sabah and Sarawak*, Vol. 5. Forest Research Institute Malaysia.
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21. Palmae, *Licuala whitmorei* Saw – Sandakania 10: 78 (1997).
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23. Orchidaceae, *Bulbophyllum setuliferum* J.J.Verm. & Saw – Gard. Bull. Singapore 52(2): 289. 2000
24. Dipterocarpaceae, *Vatica yeechongii* Saw – Gard. Bull. Singapore 54(2): 247 (2002).
25. Palmae, *Pinanga sarmentosa* Saw – Palms (1999+). 47(3): 141 (2003).
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27. Zingiberaceae, *Scaphochlamys abduhahii* Y.Y.Sam & Saw – Gard. Bull. Singapore 57(2): 253 (-256; fig. 1). 2005 [30 Dec 2005]
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31. Palmae, *Licuala atrovirens* Saw – Kew Bulletin 67(4): 588 (2012) [15 Nov. (2012)]
32. Palmae, *Licuala bruneiana* Saw – Kew Bulletin 67(4): 594 (2012) [15 Nov. (2012)]
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43. Palmae, *Licuala lambii* Saw – Kew Bulletin 67(4): 615 (2012) [15 Nov. (2012)]
44. Palmae, *Licuala leopoldii* Saw – Kew Bulletin 67(4): 617 (2012) [15 Nov. (2012)]
45. Palmae, *Licuala leucocarpa* Saw – Kew Bulletin 67(4): 618 (2012) [15 Nov. (2012)]
46. Palmae, *Licuala maculata* Saw – Kew Bulletin 67(4): 620 (2012) [15 Nov. (2012)]
47. Palmae, *Licuala meijerii* Saw – Kew Bulletin 67(4): 615 (2012) [15 Nov. (2012)]
48. Palmae, *Licala micholitzii* var. *leeana* Saw – Kew Bulletin 67(4): 628 (2012) [15 Nov. (2012)]
49. Palmae, *Licuala miriensis* Saw – Kew Bulletin 67(4): 628(2012) [15 Nov. (2012)]
50. Palmae, *Licuala mukahensis* Saw – Kew Bulletin 67(4): 629 (2012) [15 Nov. (2012)]
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53. Palmae, *Licuala pseudovalida* Saw – Kew Bulletin 67(4): 637 (2012) [15 Nov. (2012)]
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55. Palmae, *Licuala rubiginosa* Saw – Kew Bulletin 67(4): 640 (2012) [15 Nov. (2012)]
56. Palmae, *Licuala sabahana* Saw – Kew Bulletin 67(4): 642 (2012) [15 Nov. (2012)]
57. Palmae, *Licuala yiiana* Saw – Kew Bulletin 67(4): 650 (2012) [15 Nov. (2012)]

#### **Plants named after L.G. Saw**

1. *Schizostachyum lengguanii* K.M.Wong in Wong K.M. (1995). Bamboos of Peninsular Malaysia. Malayan Forest Records No. 41.
2. *Begonia lengguanii* R.Kiew in R. Kiew (2005). Begonias of Peninsular Malaysia. Natural History Publications (Borneo). Kota Kinabalu.
3. *Thrixspermum lengguanianum* P.T.Ong & P.O'Byrne in Ong P.T. & P. O'Byrne (2011). A new terete-leaved species of *Thrixspermum* from Peninsular Malaysia and Borneo. Malesian Orchid Journal 7: 35–39.

## Curriculum Vitae

### Proposed Position

#### Member of Multidisciplinary Expert Panel of IPBES

<b>Name</b>	Hussein Zahir
<b>Date of Birth</b>	10 February 1966
<b>Nationality</b>	Maldivian
<b>Education</b>	<p><b>Masters of Philosophy (MPhil)</b> in Coral Reef Ecology, University of Newcastle upon Tyne. Newcastle Upon Tyne, United Kingdom 2007</p> <p><b>Marine Biology B.Sc. (Hon)</b>, University of Newcastle Upon Tyne. Newcastle Upon Tyne, United Kingdom, 1993-1996</p>
<b>Membership of Professional Associations</b>	International Coral Reef Society (ICRS), Member Society for Conservation Biology (CSB), Member Baa atoll Biosphere Reserve Advisory Council, Member Maldives Environmental Protects Agency, Registered EIA Consultant
<b>Other Training</b>	<p>1990. Department of Marine Sciences. Chulalongkorn University, Bangkok, Thailand <b><i>Workshop on Taxonomy of Soft Bottom Invertebrates (ASEAN-Australian Coastal Living Resources Project)</i></b></p> <p>1991. Mc Master University, Hamilton, Ontario. Canada <b><i>Training on Boring Sponges of Coral reefs in Maldives</i></b></p> <p>Turtle Specialist Group, Convention on the Conservation of Migratory Species of Wild Animal (CMS) and government of India, Bhubaneswar, India <b><i>Workshop and Strategic Planning Session for the Conservation of Sea Turtles of the Northern Indian Ocean</i></b></p> <p>1999. United Nations Environment Program. Environment for South Asia and Pacific, organized by SACEP and Ministry of Home Affairs, Housing and Environment <b><i>National Training for State of the Environment and Data Collection and Reporting</i></b></p>

1988. Marine Science Institute, University of Philippines  
*Training Course on Coral Taxonomy*

**Countries of Work  
Experience  
Languages**

Maldives

Name	SPEAKS	READS	WRITES
Dhivehi	MT	MT	MT
English	Good	Good	Good

**Employment Record**

**Government/Civil Service**

**From October 2011 to present**

Employer: Ministry of Housing and Environment, Male', Maldives.

**Position:** Coral Coordinator, CCTF Wetland Conservation and Coral Reef Monitoring (WCCRM) project funded by Climate Change Trust Fund (CCTF) administered by World Bank

**From Nov 2007 to Dec 2010 (retired)**

Employer: Marine Research centre, Ministry of Fisheries Agriculture and Marine Resources, Male', Maldives.

**Position: Senior Reef Ecologist/Assistant Director General**

**From Feb 2006 to October 2007**

Employer: Marine Research centre, Ministry of Fisheries Agriculture and Marine Resources, Male', Maldives.

**Position: Reef biologist**

**From July 2001 to January 2006**

Employer: Marine Research centre, Ministry of Fisheries Agriculture and Marine Resources, Male', Maldives.

**Position: Senior Research Officer**

**From July 1996 to July 2001**

Employer: Marine Research centre, Ministry of Fisheries Agriculture and Marine Resources, Male', Maldives.

**Position: Research Officer**

**From 1988 to 1992**

Employer: Marine Research centre, Ministry of Fisheries Agriculture and Marine Resources, Male', Maldives.

**Position: Biological Aid**

**From: 1986 to 1988**

Employer: Marine Research centre, Ministry of Fisheries Agriculture and Marine Resources, Male', Maldives.

**Position: Trainee**

**From: June 2000 to Present**

Employer: Land and Marine Environmental Resource Group of Pvt Ltd.

**Position: Marine Biologist/ Director/Registered EIA Consultant**

## Detailed Tasks Assigned

### **Coral Reef Research and Management related projects**

**Name of assignment or project:** *Maldives Environmental Management Project; sub component: Strengthening coral reef monitoring in the Maldives*

**Year:** 2008-2010

**Location:** Maldives

**Client:** Marine Research Centre, Ministry of Fisheries, Agriculture and Marine Resources

**Positions held:** National Coordinator/focal point

This project is a World Bank financed environmental education and management capacity building project among multi stakeholders in the country. The duration of the project is 2008-2013.

**Responsibilities:** Including Implementation and management of the program relevant to MRC. Specific target and output of the project include strengthening of existing coral reef monitoring program in the country with special focus on monitoring coral reef ecosystem health in the context of climate change impacts

Name of assignment or project: **Global Coral Reef Monitoring Network**

**Year:** 1997-2003

**Location:** Maldives

**Client:** Marine Research Centre, Ministry of Fisheries, Agriculture and Marine Resources

**Main project features:** Establishing and monitoring of coral reefs to assess the recovery processes after the 1998 bleaching and to monitor the temporal changes to the reef system.

**Positions held:** National Coordinator

**Responsibilities:** Responsibilities include implementation and management of the program activities in the country through the GCRMN Regional Node for South Asia Region in Sri Lanka. Responsibilities also include coordination and implementation of socioeconomic monitoring at designated pilot sites to assess the livelihood and their dependence on coral reef resources. Coordinating the establishment of the national coral reef database to share information at national, regional and global level is also part of the program of activities.

**Name of assignment or project:** *Coral Reef Degradation in the Indian Ocean (CORDIO) Program*

**Location:** Maldives

**Client:** Marine Research Centre, Ministry of Fisheries, Agriculture and Marine Resources.

**Main project features:** Bio-physical assessment of reef, ecological factors influencing coral reef recovery such as bio erosion, coral reproduction and larval recruitment has been the main focus of the studies.

**Positions held:** National Coordinator

**Activities performed:** implementation and management of the identified projects/studies funded by CORDIO. Currently involve biophysical studies designed to understand the reef recovery processes after a severe disturbance in coral reefs.

**Name of assignment or project:** *Assessment of Damage to Coral reefs after the Asian Tsunami, 2004*

**Location:** Maldives

**Client:** Marine Research Centre, Ministry of Fisheries, Agriculture and Marine Resources.

**Main project features:** Bio-physical assessment of reef, physical alteration to the reef environment due to tsunami and recommendations on restoration and management efforts.

**Positions held:** National Coordinator.

**Activities performed:** implementation and management of the identified projects/studies funded by CORDIO. Currently involve biophysical studies designed to understand the reef recovery processes after a severe disturbance in coral reefs

## **Environmental Impact Assessments Reports**

**Name of assignment or project:** *EIA report for Borehole construction at K. Dhoonidhoo*

**Year:** 2013

**Location:** K. Dhoonidhoo

**Client:** Maldives Police Service, Maldives

**Project features:** Construction of a 8 inch borehole at northern side of the island as RO plant feed water

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Coastal modification at Robinson Club Maldives*

**Year:** 2013

**Location:** Ga. Funamaudua

**Client:** Robinson Club Maldives, Maldives

**Project features:** Coastal modification at the NW side of the island, construction of geo-bag revetment and harbor basin maintenance dredging works

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for construction of gravity type waste water collection system a ADh Omadhoo*

**Year:** 2013

**Location:** ADh Omadhoo

**Client:** ADh Omadhoo Island Council Office

**Project features:** construction of gravity type waste water collection system and sea outfall pumping system

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for upgrading of Maldivian Gas Pvt Ltd Gas jetty*

**Year:** 2013

**Location:** Thilafushi

**Client:** Maldivian Gas Pvt Ltd

**Project features:** Reconstruction of existing gas jetty head and expansion of jetty head

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Borehole construction at K. Gulhi*

**Year:** 2013

**Location:** K. Gulhi

**Client:** STELCO, Maldives

**Project features:** Construction of a 8 inch borehole at Powerhouse premise for sourcing feed water for Distillation unit

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and

preparation of the EIA report.

**Name of assignment or project:** *EIA report for Resort development at GDh Havvoda*

**Year:** 2013

**Location:** GDh Havvoda

**Client:** Crystal Plaza Pvt Ltd, Maldives

**Project features:** Construction of a resort hotel and all the related amenities

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Coastal protection, coastal modification, beach nourishment, coral nursery setup and entrance channel maintenance dredging work*

**Year:** 2013

**Location:** Gili Lankanfushi

**Client:** Gililankanfushi, Maldives

**Project features:** Coastal protection, coastal modification, beach nourishment, coral nursery setup and entrance channel maintenance dredging work

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Harbor development project at Dh.Maaenboodhoo*

**Year:** 2013

**Location:** Dh Maaenboodhoo

**Client:** Ministry of Housing and Infrastructure, Maldives

**Project features:** Development of harbor facility (dredging of harbor basin, construction of wharfs and breakwater

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *1<sup>st</sup> Addendum for restoration of AA Mathiveri Harbor under Tsunami restoration program*

**Year:** 2013

**Location:** AA Mathiveri

**Client:** Ministry of Housing and Infrastructure, Maldives  
**Project features:** Upgrading of AA Mathiveri harbor facility, including reconstruction of wharf, construction of breakwater and expansion of harbor basin  
**Positions held:** EIA Specialist  
**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Resort development at R. Kudakurathu*

**Year:** 2012  
**Location:** R. Kudakurathu  
**Client:** Kudakurathu Island Pvt Ltd, Maldives  
**Project features:** Construction of a resort hotel and all the related amenities  
**Positions held:** EIA Specialist  
**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Resort development at Vadinolhu*

**Year:** 2012  
**Location:** L.Vadinolhu  
**Client:** Muiri Pvt Ltd, Maldives  
**Project features:** Construction of a resort hotel and all the related amenities  
**Positions held:** EIA Specialist  
**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Development of Domestic Airport Facility*

**Year:** 2012  
**Location:** Th. Thimarafushi  
**Client:** Maldives Airports Company Limited, Maldives  
**Project features:** Construction of runway apron  
**Positions held:** EIA Specialist  
**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Resort development*



*at R. Furaveri*

**Year:** 2012

**Location:** R. Furaveri

**Client:** Ahmed Ibrahim Didi, M. Niyaz Villa, Maldives

**Project features:** Construction of a resort hotel and all the related amenities

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Wharf reconstruction and upgrading of existing berthing facility and slipway*

**Year:** 2012

**Location:** Thilafushi

**Client:** Fuel Supply Maldives Pvt Ltd

**Project features:** Reconstruction of wharf and upgrading of existing berthing facility and slipway

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Flood mitigation and reclamation work at Fareshmaathoda*

**Year:** 2012

**Location:** GDh Fareshmaathoda

**Client:** United Nations Office for Project Services (UNOPS)

**Project features:** Construction of breakwater and reclamation of land

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Resort development at B. Kanifinolhu*

**Year:** 2012

**Location:** B. Kanifinolhu

**Client:** Coastline Hotels and Resorts Pvt Ltd, Maldives

**Project features:** Construction of a resort hotel and all the related amenities

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data

related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Sand filled deck construction at Bandos Island Resort and Spa*

**Year:** 2012

**Location:** K. Bandos Island Resort and Spa

**Client:** Bandos Island Resort and Spa, Maldives

**Project features:** Construction of a sand deck at the southern side of Bandos

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Borehole construction at Cyprea Marine Food Fish Factory*

**Year:** 2012

**Location:** K. Himafushi

**Client:** Cyprea Marine Food Pvt Ltd, Maldives

**Project features:** Construction of a 8 inch borehole at factory premise

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *Environmental and Social Impact Assessment for the proposed North Regional Waste management Facility at Vandhoo, Raa atoll, Maldives*

**Year:** 2012

**Location:** Vandhoo, Maldives

**Client:** Ministry of Environment and Energy, Maldives

**Project features:** Design and construction of a waste management facility including a modern incinerator, waste collection and transport system to dispose majority of the waste from all inhabited island and resorts in Ra, Baa, Noonu and Lhaviyani.

**Positions held:** Deputy Team Leader/EIA Consultant, for the main contractor, NIRAS, Denmark

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *Environmental Impact Assessment for the proposed water supply and sewerage disposal system at Gaafaru, Maldives*

**Year:** 2012

**Location:** Gaafaru, Maldives

**Client:** Sim Mohamed Ibrahim, Maldives

**Project features:** Design and construction of sewerage disposal and water supply system

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *Environmental Impact Assessment for the proposed water supply and sewerage disposal system at Holhudhoo, Maldives*

**Year:** 2012

**Location:** Holhudhoo, Maldives

**Client:** Muni Enterprises Pvt Ltd, Maldives

**Project features:** Design and construction of sewerage disposal and water supply system

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *Environmental Impact Assessment for the resort development at Finolhus, Maldives*

**Year:** 2011

**Location:** Finolhus, Maldives

**Client:** Coastline Hotels and Resorts Pvt Ltd, Maldives

**Project features:** Construction of a resort hotels and all the related amenities

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for resort development at K. Kudavillingili, Maldives*

**Year:** 2011

**Location:** Kudavillingili, Maldives

**Client:** Yacht Tours Pvt Ltd, Maldives

**Project features:** Construction of resort hotels and all the related amenities. In addition a large reclamation of the shoreline as additional land as part of the resort development is also part of the project.

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of

data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for development of city hotel, hospitality institute and resort development at Gasfinolhu and Bodufinolhu, L. Atoll*

**Year:** 2011

**Location:** Laam Gan, Bodufinolhu and Gasfinolhu, Maldives

**Client:** Premier Equities Pvt Ltd, Maldives

**Project features:** Construction of a resort hotel and required amenities including a training hotel for hospitality industry

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and features of the resort and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *EIA report for Dhiraagu domestic submarine cable network (DDSN)*

**Year:** 2010

**Location:** 6 Location in the Maldives

**Client:** Dhiraagu Pvt Ltd, Maldives

**Project features:** Deployment of submarine cables to the strategic location in the Maldives

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the cable layout and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *Environmental Impact Assessment for the proposed Coastal modification of Alimatha Resort*

**Year:** 2010

**Location:** Alimatha Resort, Maldives

**Client:** Safari Tours Pvt Ltd, Maldives

**Project features:** Design and construction of coastal protection structures on the eastside of the shoreline

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis of data related to the design and baseline environmental condition and preparation of the EIA report.

**Name of assignment or project:** *Environmental Impact Assessment Report for the constructing of Harbors at Rasdhoo and Milandhoo*

**Year:** 2010

**Location:** Maldives, Sh. Milandhoo and AA. Rasdhoo

**Client:** GX Associated Pvt Ltd, Maldives

**Project features:** Small scale harbour design and construction for the community.

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis for Environmental Impact Assessment Reporting. Preparation and submission of the Environmental Impact Assessment Report

**Name of assignment or project:** *Wastewater collection and disposal systems in Utheemu*

**Year:** 2009

**Location:** Ha Alif Utheemu

**Client:** Al Habshi of Kuwait

**Project features:** Design and construction of wastewater disposal system

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis for Environmental Impact Assessment Reporting. Preparation and submission of the Environmental Impact Assessment Report.

**Name of assignment or project:** *Environmental Impact Assessment Report for the constructing of Harbour at Kuburudhoo*

**Year:** 2009

**Location:** Adh. Kuburudhoo

**Client:** Maldives Contracting Company Plc.

**Project features:** Small scale harbour design and construction for the community

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis for Environmental Impact Assessment Reporting. Preparation and submission of the Environmental Impact Assessment Report.

**Name of assignment or project:** *Environmental Impact Assessment Report for the constructing of Harbour at Thoddu*

**Year:** 2009

**Location:** AA. Thoddoo

**Client:** Maldives Contracting Company Plc, Maldives

**Project features:** Small scale harbour design and construction for the community

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis for Environmental Impact Assessment Reporting. Preparation and submission of the Environmental Impact Assessment Report.

**Name of assignment or project:** *Initial Environmental Impact Assessment Report for the constructing of Harbour entrance at Eydhafushi*

**Year:** 2009

**Location:** Ba. Eydhafushi

**Client:** Heavy Force Pvt Ltd, Maldives

**Project features:** Design and Construction of harbour channel Entrance.

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis for Environmental Impact Assessment Reporting. Preparation and submission of the Environmental Impact Assessment Report.

**Name of assignment or project:** *Environmental Impact Assessment Report for Resort development at Naagoashi*

**Year:** 2009

**Location:** Haa Dhaal Naagoashi, Maldives

**Client:** GX Associates Pvt Ltd, Maldives

**Project features:** Design and construction of all the infrastructures related to the island resort hotel

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis for Environmental Impact Assessment Reporting. Preparation and submission of the Environmental Impact Assessment Report.

**Name of assignment or project:** *Environmental Impact Assessment Report for Resort development at Vakkaru*

**Year:** 2009

**Location:** Baa Vakkaru Maldives

**Client:** GX Associates Pvt Ltd, Maldives

**Project features:** Design and construction of all the infrastructures related to the island resort hotel

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis for Environmental Impact Assessment Reporting. Preparation and submission of the Environmental Impact Assessment Report.

**Name of assignment or project:** *Environmental Impact Assessment Report for the constructing of Harbours at Maafushi*

**Year:** 2009

**Location:** Kaaf. Maafushi

**Client:** GX Associated Pvt Ltd, Maldives

**Project features:** Small scale harbour design and construction for the community

**Positions held:** EIA Specialist

**Responsibilities:** Surveys and data collection and analysis for

Environmental Impact Assessment Reporting. Preparation and submission of the Environmental Impact Assessment Report.

**Name of assignment or project:** *Environmental Impact assessment for Reethi Rah Resort Redevelopment*

**Year:** 2005

**Location:** Reethi Rah Resort, Maldives

**Client:** Kersner International, Hotel Group

**Project features:** The EIA report involves collection and assessment of baseline and secondary environmental data on marine and terrestrial environment of the project site. This is one of the largest reclamation projects for resort development and assessment of impact of dredging and reclamation on the coastal marine habitats was a major component of this study

**Position Held:** Marine Biologist

**Name of assignment or project:** *Marine Biodiversity assessment, Faafu atoll, Maldives*

**Year:** 2003

**Location:** Maldives, Faafu atoll

**Client:** Asian Development Bank

**Project features:** Marine Biodiversity Assessment, Faafu atoll, Maldives. ADB regional technical assistance for coastal and marine resource management and poverty reduction in South Asia (ADB RETA 5974). A project implemented by Ministry of Fisheries, Agriculture and Marine Resources.

**Responsibilities:** Assignment involved detailed preparation of marine biodiversity and coastal management issues with special reference to grouper fishery and resource management.

**Position Held:** Biodiversity/ Environmental Specialist

**Name of assignment or project:** *Environmental Impact Assessment Report for the development of Fish processing plant at Ha. Huvahandhoo*

**Year:** 2002

**Location:** Maldives

**Client:** Jausa Fishery Links, Maldives

**Project features:** Environmental impact assessment

**Responsibilities:** The EIA report involves collection and assessment of baseline and secondary environmental data both at the marine and terrestrial environment of the project site. It also involved a risk assessment and evaluation report. An environmental management plan was also developed as part of the EIA.

**Position Held:** Marine Biologist

**Name of assignment or project:** *Environmental Impact Assessment Report for Villa Hakatha at Thilafushi, Male Atoll.*

**Year:** 2001

**Location:** Malé atoll, Maldives

**Client:** Villa Hakatha, Maldives

**Project features:** The EIA report involves collection and assessment of baseline and secondary environmental data both at the marine and terrestrial environment of the project site. It also involved a risk assessment and evaluation report. An environmental management plan was also developed as part of the EIA.

**Position held:** Project biologist

**Name of assignment or project:** *Environmental Impact Assessment Study for the Resort Development at Baa. Landaagiraavaru*

**Year:** 2000

**Location:** Baa. Landaagiraavaru, Maldives

**Client:** Club Mediterranee

**Project features:** The EIA study involved collection of oceanographic data, study of the beach environment, vegetation, reef quality and groundwater/seawater quality. The study examined the impacts of the development on the island and mitigation measures where appropriate. The study also forms the baseline data for future monitoring of the environmental changes due to the resort development

**Position Held:** Project Biologist

**Name of assignment or project:** *Environmental Statement for the proposed Channel dredging & associated Barrier Island at Sun Island Resort.*

**Year:** 2000

**Location:** Sun Island Resort Maldives

**Client:** Tekton Design Associates Pvt Ltd, Maldives

**Project features:** The study involved assessment of the potential environmental impacts on the coastal shoreline of the island and on to the reef environment within close proximity of the proposed project site.

**Position Held:** Project Biologist

**Name of assignment or project:** *Environmental Statement for the Proposed Redevelopment of Reethi Rah Resort*



**Year:** 2000

**Location:** K. Reethi Rah Resort, Maldives

**Client:** Reethi Rah Resort

**Project features:** The study involved assessment of the existing status of the islands environment and identification of potential environmental impact areas related to the proposed redevelopment plans. Formulation of an environmental monitoring plan that would enable the client to record the environmental changes that may be related to anthropogenic activities or natural.

**Position Held:** Project Biologist

**Name of assignment or project:** *Proposed Beach Nourishment at M. Medhufushi. An assessment of Environmental Design Parameters*

**Year:** 2000

**Location:** M. Medhufushi Maldives

**Client:** Vaaly Brothers Pvt Ltd, Maldives

**Position Held:** Project biologist

**Project features:** The study involved examination of the beach characteristics including the sediment properties, beach profiles. Identification of a borrow site by comparing the borrow sediment characteristics of the borrow site and the native beach sand.

**Name of assignment or project:** *Environmental Evaluation of Small Bore Sewer System (SBS) in Lh. Hinnavaru and K. Gulhi*

**Year:** 1999

**Location:** Lh. Hinnavaru & K. Gulhi, Maldives

**Client:** Maldives Water and Sanitation Authority

**Project features:** The study involved groundwater / seawater analysis for sewage pollution; reef surveys hydrographic / oceanographic surveys and survey of the slopes of the sewage lines.

**Position Held:** Project Environmental analyst

**Name of assignment or project:** *Assessment of Oil Contamination in Male Groundwater from Vehicle Garages and Petrol Stations*

**Year:** 1999

**Location:** Malé, Maldives

**Client:** Maldives Water and Sanitation Authority

**Project features:** The study involved groundwater analysis for oil contamination and assessment of general working conditions and practices in the Vehicle Garages and Petrol Stations in Male.

**Position held:** Project environmental analyst

**Name of assignment or project:** *Environmental Impact*

*Statement for the Proposed Beach Protection Works at Nika Island Resort*

**Year:** 1999

**Location:** Malé, Maldives

**Client:** Nika Island Resort, Maldives

**Project features:** The project involved assessment of physical environmental conditions such as the wave, current sediment characteristics, bathymetry at the project site (Nika Island Resort). Assessment of the status of the reef at the project site and an evaluation of the possible impacts on the reef and the physical environment as a result of the proposed beach protection work.

**Position Held:** Project biologist

**Name of assignment or project:** *Environmental Monitoring of M. Medufushi Resort Development*

**Year:** 1999

**Location:** M. Medhufushi, Maldives

**Client:** Vally Brothers Pvt Ltd, Maldives

**Project features:** The monitoring programs involve periodic measurements of the beach profiles around the islands, reef quality surveys, groundwater/seawater analysis and environmental auditing

**Position Held:** Project biologist

**Name of assignment or project:** *Environmental Monitoring of R. Meedhupparu Resort Development*

**Year:** 1999

**Location:** R. Meedhupparu, Maldives

**Client:** Cowrie Investment Pvt Ltd, Maldives

**Project features:** The monitoring programs involve periodic measurements of the beach profiles around the islands, reef quality surveys, groundwater/seawater analysis and environmental auditing

**Position Held:** Project biologist

**Name of assignment or project:** *Environmental Impact Assessment for F. Filithayo Resort Development*

**Location:** F. Filithayo, Maldives

**Year:** 1998

**Client:** AAA & Trading Company, Maldives

**Project Features:** The EIA studies involved collection of oceanographic data, study of the beach environment, vegetation, reef quality and groundwater/seawater quality. These studies examined the impacts of the development on the island and mitigation measures where appropriate. The studies also forms

the baseline data for future monitoring of the environmental changes due to the resort development.

**Position Held:** Project biologist.

**Name of assignment or project:** *Environmental Impact Assessment for Lh Madhiriguraidhoo Resort Development*

**Year:** 1997

**Location:** Lh. Madhiriguraidhoo, Maldives

**Client:** Guardian Agency Pvt Ltd, Maldives.

**Project features:** The EIA studies involved collection of oceanographic data, study of the beach environment, vegetation, reef quality and groundwater/seawater quality. These studies examined the impacts of the development on the island and mitigation measures where appropriate. The studies also form the baseline data for future monitoring of the environmental changes due to the resort development.

**Position Held:** Marine biologist

### **Certification**

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications, and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.



Hussein Zahir

Date: 01March 2014

Night Queen  
Hithadhoo, Addu City  
Contact Number: + (960) 778 2143  
Email: husseinbe@gmail.com

**Krishna Chandra Paudel, Ph. D.**  
**Permanent Secretary**  
**Government of Nepal**  
**Ministry of Science, Technology and Environment**

**Academic qualifications:**

- Ph.D. in Agroforestry, University of Agriculture and Forest Sciences (BOKU), Vienna, Austria (2001).
- M.Sc. in Environmental Forestry, University of Wales, UK (1993)
- Post Graduate Diploma in Forestry (AIFC), Dehradun, India, 1985
- Batchlors of Science – Tribhuvan University, Nepal

**Memberships:**

- Academician, Nepal Academy of Science and Technology
- Board of Director, Nepal Agriculture Research Council
- Board of Director for several Science and Technological Institutions

**Major Responsibilities in the recent past:**

- Served as Permanent Secretary of the Government of Nepal at the Ministry of Forests and Soil Conservation in 2012- June 2013.
- Also served as Permanent Secretary at the Water and Energy Commission Secretariat, Government of Nepal, June 2013- April, 2014.
- Worked as a Chief Administrator for the Eastern Region of Nepal during 2-12-2013.
- Served as Director General at various Government Departments including the Department of Forests, National Parks, Forestry Research and Plant Resources for over five years.
- Worked as a *National Focal Point for the Convention on Biological Diversity* (four years) in Nepal.
- Engaged in developing and revising National Biodiversity Strategy and Action Plan, drafting National Biosafety Framework and a bill on Access to Genetic Resources and Benefit Sharing.
- Prepared national reports to the UN CBD. Worked as National Project Director to several biodiversity and natural resources management programmes and projects in Nepal.
- Served as an Asia Pacific Bureau Member for the CBD SBSTTA.
- Served as a Steering Committee Member for the IPSI of the SATOYAMA Initiative.
- Pioneering work on documentation of biological resources and associated traditional knowledge.

**Professional Experience:**

- Over 29 years of experience in the field of conservation and management of natural resources including, forests, watersheds, protected area and biodiversity.
- Grass root level experience in planning, implementing and monitoring of community based natural resources management in Nepal.
- Led Biodiversity negotiations from COP-6 to COP-11, and Served for three years as Bureau Member representing the Asia Pacific Region in the UNCBD.

Contributed as a resource person for the capacity building workshop on various Biodiversity Programmes.

- Also Co-chaired several CBD SBSTTA meetings and IPSI workshops and contact groups of CBD and UNFCCC.

#### **E. Major publications:**

##### **Research Papers**

1. **Participatory Domestication of *Choerospondias axillaris* (Lapsi) for Fruit Production in the Middle Mountain Agroforestry Systems of Nepal**, Ph. D. thesis, University of Agricultural Sciences, Vienna, 2001.
2. **Collection and Evaluation of Germplasm of Lapsi (*Choerospondias axillaris*) an Indigenous fruit tree of Nepal** (2002). In *Plant Genetic Resources Newsletter* No 130, Pp 36-46. FAO, IPGRI, Rome.
3. **Chemical Composition of Lapsi (*Choerospondias axillaris*) fruits from Nepal**. In *Mitteilungen Klosterneuburg* (International Scientific Journal, published from Austria), 52 (2002): 45-53.
4. **Participatory Domestication of Lapsi Tree (*Choerospondias axillaris*) in Nepal** (2000). Part I. Occurrence and Distribution in Nepal; Part II. Softwood Cutting Propagation. A research report submitted to the ICIMOD, Kathmandu.
5. **Agroforestry Research Strategy for the Western Development Region of Nepal** (1998) Strategy Paper No 3/1998 Lumle Agricultural Research Centre, Pokhara Nepal.

##### **Working/Seminar Papers**

6. **Documentation of biological resources and associated traditional knowledge in Nepal: In Experience from pilot phase documentation programme**. Seminar paper presented at the "International Environmental Conventions relating to Access to Genetic Resources and Benefit Sharing" held at Pokhara between 31 July -2 Aug 2002.
7. **Provenance trial of *Pinus maximinoii* and comparison with *P. Wallichiana* and *P. Patula*** (1996). Jointly with Dr. S. M. Amatya and A. Harrison. LARC Working Paper No. 96/36.
8. **Tree-crop interaction study of planted Raikhanim (*Ficus semicordata*) on Terrace Risers with maize and finger millet in mid hills of western region of Nepal** (1998). LARC Working Paper No. 98/37. Lumle Agricultural Research Centre, Kaski, Nepal.
9. **Management plan for farm protected forest at Lumle Regional Agricultural Research Centre**. April 1992-February 1997. Working Paper No 3 /1992, LARC, Kaski, Nepal.
10. **Status of Invasive Alien species in Nepal: Sharing experience in agriculture and forestry sectors**. Paper presented at the Regional Workshop on Prevention and Management of Invasive Alien species: Forging Cooperation through South and Southeast Asia, Aug. 14-16, Bangkok, Thailand. Organisers: Global Invasive Species Programme (GISP), Thailand Biodiversity Centre, US government and OEPP.

##### **Review and other Papers:**

11. **Fodder and forage production** (1992) jointly with B. N. Tiwari In: *Sustainable Animal Production in the Mountain Agro- ecosystem of Nepal*. Animal Health and Production series 105 FAO, Rome. Pp 131-154.
12. **Implication of forage and livestock production on soil fertility** (1992). In: *Sustainable Animal Production in the Mountain Agro- ecosystem of Nepal*. Animal Health and Production series 105 FAO, Rome. Pp 155-170.

## **Background Information of Dr. Syed Najam Khurshid**

### **Visionary leader and integrator**

My vast experience and educational background enable me to identify strategic issues, opportunities and risks, and I have ability to work accordingly to generate and communicate them in an organizational direction. I set many examples but the following is an excellent example of my vision and practical approach to make it happen in reality with the integration of partner organisations. It is my privilege to mention here that I have taken The 'Himalayan Wetlands Initiative' (HWI), from the Ramsar Convention's platform to promote a regional cooperation for the conservation and wise use of Himalayan Wetlands. Through this integrated approach I have involved all the concerned governmental and non-governmental organisations of the Himalayan region and bring them on a common platform. In this regard, first meeting was organised at Urumqi, China with the financial support of WWF-International and the Government of China. Outcome of this initiative/workshop was famous as Urumqi declaration. (Information available on web).

My good interpersonal skills helped me a lot especially strengthening my relationship with different governments and concerned departments in Asia region. The Contracting parties allowed to select 3 experts to represent the Asia region in the Ramsar Convention's Scientific and Technical Review Panel and my selection as one of the member of this Scientific and Technical body (STRP) from Asia Region for another 3 years between (2003-2005) by the contracting parties from the Asia region is one of the example of my good communication skills, expertise and understanding of the Convention's work.

I have developed an Environmental Education, Awareness and Interpretation Centre at the Coast of Karachi for this Centre the land was acquired free of cost from the port authority. A range of education and interpretation material was developed for different target groups. A business plan was also developed for the Centre to make it self-sufficient.

### **Policy Advocacy Strategy Setting and Implementation work**

I was actively involved in Policy and advocacy related work and developed **first Wetlands Action Plan for Pakistan**. The plan was approved by the Government of Pakistan. I have also participated in the development of **Biodiversity Action Plan** for Pakistan. I have not only developed these plans but also actively participated in their implementation. At the International level I have participated in the Development of WWF-International's report on Impact of Dams on Life and Rivers, Asia – Pacific Migratory Waterbirds Strategy both the documents available on web.

### **Research Scientist and Scientific Background**

My research focuses on understanding, assessing, and monitoring terrestrial and aquatic ecosystems, and their connection to the global biospheric system. Using field observations, remote sensing data, geographic information systems and high performance computing, I study how land-use, land cover, aquatic system are affecting by climate change, from local to country's scales. I am also deeply involved in conducting Environmental Impact Studies related to the industries and other development projects. My current projects include forest carbon and biodiversity assessment and mapping of different areas of the country. I am a research scientist and most of my work is directly concerned with applied research and testing different methodologies for Freshwater, Marine & Coast and Forest and their Integrated

Management with Ecosystem and Landscape Approaches. More than 30 research papers, two books and many reports are on my credit.

Throughout my career I have been committed to the education of next-generation scientists, peers, and colleagues from Pakistan, policy makers, and the general public through teaching and lecturing at universities, various training facilities, conferences, and public forums.

### **Familiarity with Trade, Environmental Laws and Economic**

I am quite familiar with trade and environmental laws as I involved in multilateral negotiations during my tenure with Ramsar Convention, Switzerland. I am well aware of other multilateral environmental agreements especially those related to the trade and environment for example Basal Convention, Montreal protocol, UNCLOS and CITES. I have written a report on Illegal Wildlife Trade and supervised a research study on economic valuation of natural resources. One of my reports “Root cause of Biodiversity Loss” case study was published by the Earth scans UK is based on the overharvesting of fish and shrimp and their impact on local, regional and international level.

### **Strong experience working on climate change and/or disaster risk reduction issues**

As an environmental Scientist I am well aware with the issue of Climate Change and its possible effects. Pakistan is ecologically rich country due to its geographical location and elevation of the country from second highest peak K2 to the Zero elevation of Arabian Sea due to this variation of Climate make it a very vulnerable to Climate Change. High Temperature causing Glaciers melt and this melt causing Glacial Lake out Burst Flood (GLOF) in downstream areas. Keeping the importance of High Altitude Wetlands, I developed an inventory of High Altitude wetlands. During my recent study on Blind River Dolphin I also observe the impact of Climate Change in the form of super flood in River Indus.

### **Project Development, implementation, monitoring and evaluation**

I developed many projects for Government, Bilateral and Multilateral donors and received funding's from UNDP, GEF, World Bank, EU and DGIS/RNE. These projects range from species to habitat conservation, development of strategies to the capacity building and socioeconomic uplift of the local communities. I was actively involved in the implementation of these projects and also set mechanisms for their monitoring and evaluation for activities and financial levels.

### **Representation**

I have more than 6 years' experience in the context of the intergovernmental process, and directly involved in policy, Scientific and technical discussions, dialogues at the Standing committee, special committees, scientific and technical review panel and working groups level. I am actively involved in exchanges of information with, providing and receiving guidance, enhanced coordination with representatives of contracting parties, UN and other international organizations and bodies, research institutions. I successfully negotiated on many issues on behalf of my Organisations. I served as a secretariat's focal point for Asia Region and leading/focal person on many issues.

## **Understanding of human rights and rights based analysis and approaches**

I can give two examples related to the above mentioned issue. During protected areas management planning exercise I have incorporated this issue through which local community will get their share in the income generating through trophy hunting, tourism and medicinal plant harvesting activities. One of my publications is also based on community rights on sustainable use of natural resources. I made an analysis and define approaches in this publication to address this issue. This publication is also on web.

## **Experience in working with donors and/or fundraising**

During my experience with the Government, WWF and Ramsar Convention, I have not only developed new projects and programme for World Bank, GEF, DGIS/RNE and EU. I also provided guidance to the contracting parties and NGO's to develop projects for Ramsar's Small Grant Funding programme. I also involved in Ramsar Convention's activities with potential donors like Denon group especially by organizing a meeting for Arabic speaking countries in Avian, France.

I would like to mention here that I have been actively involved in fund raising efforts of WWF-Pakistan. As director conservation I involved corporate sector in conservation activities and organise fundraising events and commercial products like Tissue paper packs, fashion shows, carnivals, eco-tourism programmes. Through which we raised funds for different conservation activities and also established an Education Interpretation Centre at the Coast of Karachi with the aim to raise funds and make it self-sufficient. A business plan and fundraising material was also developed for different target groups for the Centre. I also generated funds from corporate sector for Blind Dolphin, Mangroves and wetland projects.

## **Resource Mobilization**

I have support the secretariat's fundraising activities and participated in meetings with donors. I have participated in resource mobilization efforts by identifying and convincing potential donors for certain activities for example Japan has provided support for the organization of sub regional meetings and China has supported in high altitude wetlands initiative. Similarly some other parties has supported in Small Grant Project (SGF).

## **Strong facilitation skills**

I have vast experience in facilitation and conducting of inter-governmental negotiating processes as well as have experience in handling of multidisciplinary portfolio of tasks and duties. My good interpersonal skills helped me a lot especially strengthening my relationship with different governments and non-governmental Organisations. As a result of this relationship I manage to double the number of Ramsar sites in Asia just in 3 years period and many new contracting parties have signed the convention during this period which is a record in the history of the Ramsar Convention.

## **Leadership and networking skills**

I always try to Serves as a role model that other people want to follow; I support and Empowers others to translate vision into results; I always try to play proactive role in developing strategies to accomplish objectives; I always establish and maintain relationships with a broad range of people to understand needs and gain support; Anticipate and resolve conflicts by pursuing mutually agreeable solutions; I always ready and drive for change and improvement and show the courage to take unpopular stands



During my experience with the Ramsar Convention I have utilized my strong interpersonal verbal communication skills together with the ability to defend and explain difficult issues with respect to key policies, decisions and positions in inter-agency, inter-governmental and other fora. I have provided guidance and clear direction to my reporting staff and co-workers establish and maintain relationships with a broad range of people to understand needs and gain support. I have also incorporated gender perspectives into the project and programs activities and work and maintained gender balance in staffing. I made staff assessment and organise capacity building programmes according to their abilities. Similarly I have also organised capacity building programmes for Government officials, decision makers, Local communities and the youth. I established contacts and involved different research institutions and related Civil Society Organisations in project research and development activities.

### **Human resources management**

As a regional director I was responsible for the administration and management of Regional office and five field offices and their staff. I also assess the performance of the reporting staff prepare programmes for their career development. Provide compensation to those who had shown hard work during the whole year. Strongly maintain Discipline and took adverse actions where necessary. Provide support and assist those employee need assistance. Ensure the implementation of equal employment opportunity. Compliance the human resource management fundamentals and also ensure the job analysis according to the qualifications of the staff.

Follow all the rules and regulations related to the labor management relations. Setup a performance management system to ensure that each employee should be managed according to his/her personal assessment. Setup a system of rewards and recognition to motivate those who are working hard for the organization. Setup a transparent staffing and recruiting system.

### **Administration and Financial management**

In my previous jobs I prepared fiscal year expenditure information to the finance department for all on-going projects and activities; as a regional head, I also oversee the performance on financial management and ensure that all the information should be conveyed to the donors timely and accurately about financial and operational performance.

In conjunction with the Finance and Administration, coordinates and provide support those actions/decisions related to the preparation of the financial statements; Supervise in the process of creation of financial reports for the donors on their prescribed formats that meet their requirements and coordinates with them to clarify any outstanding financial or administrative issues or reconciliations;

Provided full support in the preparation of strategic financial reports and comparative analyses for senior management including information related to programme and project financial status, analysis of income, expenditure, delivery rates, assets, liabilities, etc.

### **Judgement/ Decision-making**

I have the ability to identify key issues in a complex situation, and comes to the heart of the problem quickly; Gathers relevant information before making a decision; Considers positive and negative impacts of decisions prior to making them; Takes decisions with an eye to the impact on others and on the Organization. Proposes a course of action or makes a recommendation based on all available information; Determines that the actions proposed will satisfy the expressed and underlying needs for the decision; Makes tough decisions when necessary.

# CURRICULUM VITAE

SYED NAJAM KHURSHID

## Residential Address

Aptt# 605, Ahmed Residency,  
Block 14, Gulistan-e-Johar,  
Karachi-75290,  
Pakistan.  
Phone: +92-21-34661591  
Mobile: +92-300-2299077

e-mail: [najam58@hotmail.com](mailto:najam58@hotmail.com)

## Personal Information

Date of Birth : 18<sup>th</sup> September, 1958  
Marital Status : Married  
Nationality : Pakistani  
Gender : Male  
Languages :

Language	Mother Tongue	Read	Write	Speak	Understand
Urdu	yes	Fluently	Fluently	Fluently	Fully
English	No	Fluently	Fluently	Fluently	Fully

## EDUCATION :

- **Ph.D.** Environment/Natural Resource Sciences (Zoology) focused on Ecology, dissertation on " *Wetland Ecology*" with the University of Karachi, Pakistan.
- **M.Sc.** Environment/Natural Resource Sciences (Zoology) with specialization in Limnology (Freshwater Ecology), Biodiversity & Fisheries Management, 1985. University of Karachi, Pakistan.
- Thesis written as a part of the M.Sc. programme. The title of the thesis was "*Forest Birds of Karachi Division*".

## **WORK EXPERIENCE:**

**Working as a Chief Technical Advisor from August 2010 with Global Environmental Management Services and conducted/organized Baseline studies, IEE and EIA's of the following:**

- Baseline Study And Eia For International Industries L.L.C Ras Al Khaimah **UAE** March 2014
- Baseline Study And Eia For Gulf Cement Company P.S.C Ras Al Khaimah, **UAE** February 2014
- Baseline Study And Eia For Oil Zone Middle East Llc Ras Al Khaimah, **UAE** January 2014
- Baseline Study And Eia For Eversendai Technics Fabrication Ras Al Khaimah **UAE** May 2014
- Baseline Study And Eia For Ras Al Khaimah Company For White Cement and Construction Material Ras Al Khaimah **UAE** May 2014
- Baseline Study and EIA for installation of Heat Recovery Plan for Star Cement L.L.C. Ras Al Khaimah, **UAE**, March 2012 to June 2013
- Baseline Study and EIA for installation of Alternative Fuel System for Star Cement L.L.C. Ras Al Khaimah, **UAE**, March 2012 to June 2013
- Baseline Study and EIA for F.A. Glass processing activity, F.A. Glass L.L.C. Ras Al Khaimah, **UAE**, March 2012 to June 2013
- Baseline Study and EIA for Cement Factory, Ajman – UAE, Ajman Cement Factory Cement L.L.C.Ajman, **UAE**, April to July 2013
- Baseline Study and EIA for Waste Heat Recovery Power Plant, Gulf Cement Cement L.L.C. Ras Al Khaimah, **UAE**, April to July 2013
- Baseline Study and EIA for Cement Factory, RAK Cement L.L.C. Ras Al Khaimah, **UAE**, April to June 2013
- Baseline Study and EIA for Cement Factory, RAK White Cement, L.L.C. Ras Al Khaimah, **UAE**, May to August 2013
- Baseline Study and EIA for Block Factory, Modern Block Factory, Ras Al Khaimah, **UAE**, May to August 2012
- Baseline Study and EIA for Lime Manufacturing Unit, Noora Lime Industries, Ras Al Khaimah, **UAE**, May to August 2012
- Baseline Study and EIA for Chemicals Processing Factory, Asia Petrochemicals, Ras Al Khaimah, **UAE**, May to August 2012
- Baseline Study and EIA of Glass Manufacturing Industry, Future Architectural Glass, Ras Al Khaimah, **UAE**, June to September 2012
- Baseline Study and EIA of Used Oil Refinery, Al Ghail RAK, Pan United Oil Industries, Ras Al Khaimah, **UAE**, June to September 2012
- Baseline Study and EIA of Packaging Industry, Al Hamra, RAK, Elester Packaging, Ras Al Khaimah, **UAE**, June to September 2012
- Baseline Study and EIA for mining operations, GMM International, Ras Al Khaimah, **UAE**, June to September 2012
- Baseline Study and EIA for Packaging Industry, Al Ghail, RAK, Concept Flexible Packaging, Ras Al Khaimah, **UAE**, July to October 2012
- Baseline Study and EIA of Metal Alloys Processing Industry, White Metal Alloys, Ras Al Khaimah, **UAE**, July to October 2012
- Baseline Study and EIA for Mattress Manufacturing Facility, Intercoil Industries, Ras Al Khaimah, **UAE**, July to October 2012
- Baseline Study and EIA for Aluminium Processing Factory, Alumill Tech Gulf, Ras Al Khaimah, **UAE**, August to November 2012

- Baseline Study and EIA for Bathroomware manufacturing facility, Duscholux, Ras Al Khaimah, UAE, August to November 2012
- Baseline Study and EIA for Glassware Manufacturing Facility, Arc International, Ras Al Khaimah, UAE, September to December 2012
- Baseline Study and EIA for Glass Products Manufacturing, Saver Glass, Ras Al Khaimah, UAE, September to December 2012
- Baseline Study and EIA for Metal Containers Manufacturing Facility, Air Liquidue, Ras Al Khaimah, UAE, November 2012 to January 2013
- Baseline Study and EIA for Foundry Manufacturing, Vesuvius, Ras Al Khaimah, UAE, November 2012 to January 2013
- Baseline Study and EIA for Pan Oil Industries L.L.C Ras Al Khama, UAE for re-processing of used oil. April 2012 to June 2012
- Baseline Study and Environmental Impact Assessment For DG Khan Cement industry Balochistan November 2013
- Baseline Study and Environmental Impact Assessment For KDA – Gulshan Transmission Line. (K- ELETRIC) April 2014
- Baseline Study and Environmental Impact Assessment For UG/OH transmission line at Valika Grid Station (K-ELECTRIC) 2013
- Baseline Study and Environmental Impact Assessment for 132KV Gadap Gird Station and 132KV Transmission line from Maripur to Gadap (K-Electric), April 2014
- Baseline Study and Environmental Impact Assessment for 132KV Bath island Gird Station and 132KV Transmission line looping in/out from Gizri-Queens road Circuit (K-Eectric), May 2014
- Baseline Study and Environmental Impact Assessment for 132KV Shadman town Gird Station and 132KV Transmission line looping in/out from Nazimabad-Valika circuit for feeding the gird station (K-Electric), May 2014
- Baseline Study and Environmental Impact Assessment for 132KV for Old Golimar and labor Gird Station and 132KV Transmission line looping in/out from Mauripur-Haroonabad circuit-1 and 2 for feeding these gird stations (K-Electric), May 2014.
- Baseline Study and Environmental Impact Assessment for 132KV UG single circuit Liyari Mauripur Transmission line , May 2014
- Baseline Study and Initial Environmental Examination (IEE) of proposed extension of Artistic Milliners Karachi, May 2014
- Baseline Study and Initial Environmental Examination (IEE) of extension Coal fire power plant in Attock Cement Pakistan limited Balochistan, May 2014
- Baseline Study and Initial Environmental Examination (IEE) of a proposed extension in Combine cycle power plant KTPS Karachi December 2013
- Baseline Study and Initial Environmental Examination (IEE) of a proposed construction of Hosspital for animals and grover yards for cows at Engro dairy farm Nara, Sukkur August 2013
- Baseline Study and Initial Environmental Examination (IEE) a proposed extension of Engro Foods Limited Sukkur November 2013
- Baseline Study and Initial Environmental Examination (IEE) of a proposed construction of waste water treatment Akhtar Textiles (Pvt) Feb-Mar 2013.
- Baseline Study and Initial Environmental Examination (IEE) of Shoaibee Industries Karachi. Dec2012-Jan2013.
- Baseline Study and Initial Environmental Examination (IEE) of 3D seismic survey for MPCL at Daharki Field (800-1000sqk) Sindh. From December 2012 to January 2013 for Mari Petroleum Company limited, Islamabad.
- Baseline Study and Initial Environmental Examination (IEE) of a proposed construction of waste water treatment at Akhtar Textiles (Pvt) Ltd, Karachi. From February to March 2013.

- Baseline Study and Environmental Impact Assessment (EIA) for the establishment of Sindh Industrial Trading Estates Limited Larkana, Sindh. From November 2012 to January 2013.
- Baseline Study and Initial Environmental Examination (IEE) of SHOAIBEE INDUSTRIES Karachi. From December 2012 to January 2013.
- Baseline Study and Initial Environmental Examination (IEE) of a proposed Stone crushing plant setup at Nooriabad, Sindh. From November to December 2012.
- Baseline Study and EIA (Environmental Impact Assessment) of underground and overhead transmission line. ( Baldia to Valika Grid Station and Jacob line) Karachi. From July to September 2012 for Karachi Electric Supply company, Karachi.
- Baseline Study and EIA of Ucch II Gas field for Oil & Gas Development Corporation Limited (OGDCL) Pakistan, April 2012 to date
- Baseline Survey and IEE of Mall Pakistan New Oil and Lubricants Blending Plant Unit January 2012 to May 2012
- Baseline Survey and IEE of Mari Gas field 5 wells and Pipeline installation Jan 2012 to April 2012.
- IEE of US Embassy Islamabad extension project Jan 210 to April 2012.
- Baseline Survey IEE of Waste Water Treatment Plant for Lucky Textile Mills Karachi Jan 2012 to April 2012
- IEE conducted for Kraft foods Extension Project Hub Baluchistan for Kraft Foods from December 2011-Januray 2012
- Environmental Management Plan for Bolan Steel Industries Quetta for Bolan Steel Industries from November-December, 2011
- Environmental Management Plan for Aquagen Power Plan for Kam international from October-December, 2011
- Environmental and Rehabilitation Plan for Fecto Cement industry Islamabad for Fecto Cement industry from Sep/Oct, 2011
- IEE conducted for Engro dairy farm extension project near Sukkur for Engro Foods (Pvt) Ltd from September-October, 2011
- Baseline study and EIA conducted for Deharki Sugar mill Ubaro Sindh for Deharki Sugar Mill from September-October, 2011
- IEE conducted for Polish Oil and Gas Kirther Block blending and pipeline installation at Dadu for Polish Oil and Gas Company from July-August, 2011
- IEE conducted for Habib University to be built near Pahalwan Goth Karachi for IEE Habib University from April-June 2011
- Baseline study and EIA conducted for Nestle Pakistan Extension of Packed Bottle Plant at Port Qasim for Nestle Pakistan (pvt) Ltd from May-Aug 2011
- Baseline study and EIA for the proposed LNG Terminal in Indus Delta near Port Qasim for Global Energy Holding from May-Sep 2011
- IEE for the Extinction of Epoxy Resin product ( Initial Environmental Examination) for Epoxy industries (pvt) Ltd from Aug-Sep 2011
- Environmental Audit of Over 70 Industries in Hub, Balochistan for Lasbela Chambers of Commerce from July –August 2010
- IEE Lubricating Blending Plant for Orient Oil of ORIENT ENERGY SYSTEMS ( pvt) LTD. form September – November 2010
- Baseline study and EIA of Exploration project for 2D/3D Seismic and Drilling Operation in Gurgalot Concession Are, KPK for Oil & Gas Development Company Limited(OGDCL) from August – December 2010
- EIA of Exploration project for 2D/3D Seismic and Drilling Operation in Nashpa Concession Area, KPK for Oil & Gas Development Company Limited(OGDCL) form August – December 2010
- IEE of PGCS- K SUPARCO for SUPARCO from July – August 2010

- IEE for the Establishment of Habib bank branch at Mai Kolachi road Karachi for House of Habib from June – December 2010
- IEE of Clifton Finance & Trade Centre, Clifton, Karachi for Al Wakeel Enterprises from May – June 2010
- Baseline study and EIA of 231.8MW Barge/Ship Mounted Rental Power Plant in Arabian Sea, near Karachi for Karkey Karadeniz Elektirk Uretim A.S, Kagithane. Istanbul /TURKEY from December 2009– March 2010
- EIA of 70-Storeyed Bahria Town Icon Towers, Clifton Karachi for Bahria Town Karachi December 2009- April 2010
- Baseline study and EIA for 2D Seismic Survey in Samandar E.L for Oil & Gas Development Company Limited(OGDCL) from November 2009- February 2010
- Baseline study and EIA of Maize Processing Project in Kotri, Sindh for Rafhan Maize Products Co. Ltd from October 2009- February 2010
- IEE of Bagas based Power Plant for Al-Noor Sugar Mills Limited, Moro from December 2009- February 2010
- Civil Hospital Waste & Recycling Plant, Karachi for Civil Hospital, Karachi from January- Feb 2010
- 5-year environmental monitoring project of National Highway Improvement Program for World Bank (Through National Highway Authority) from 2004- 2009
- Environmental Monitoring Report of Al-Noor Sugar Mills, Taluka Moro District Naushahro Feroz, Sindh for Al- Noor Groups from November- December 2009
- Environmental Monitoring Report of Al-Noor MDF Board Mills, Talika Moro District Naushahro Feroz, Sindh for Al- Noor Groups from November- December 2009
- IEE of Sukkur Plant Expansion Project for addition of Juices Manufacturing Line for Engro Foods Limited, Sukkur from October – November 2009
- IEE for installation of Wastewater Treatment Plant, Karachi for International Textile Limited, Karachi from September – October 2009
- Ship Breaking & Recycling Industry Project (SBRI), Gadani for World Bank from September- oct 2009
- IEE of Trauma Centre at Civil Hospital Karachi for Civil Hospital Karachi from June – July 2009
- IEE for 192MW Gas Power Generation Projects for Karachi Electric Supply Corporation from February – April 2009
- EIA of Refinery Expansion Project, Chittagong, Bangladesh for Eastern Refinery Ltd. Chittagong, Bangladesh from February – April 2009.
- Environmental Audit Report Mining Activities, Saindak Baluchistan for MCC Resources Development Company (Pvt.) Ltd from March- April 2009
- IEE for Gas Turbines for Abbott Laboratories (Pakistan) Ltd from December 2007- January 2009
- EIA for SGM Sugar Mills, Sindh for SGM Sugar Mills, Lahore from October – December 2008
- IEE of Drilling Activities in Kirther E.L. Sindh for Polish Oil and Gas Company, Pakistan Branch from September – November 2008
- IEE of Oil Storage Terminal in Port Qasim Industrial Estate, Karachi for Bakri Trading Company Pakistan (Pvt) Limited from September – October 2008
- EIA of Solid Waste Management Project of Karachi for Ms. Qian Chun Lian PAK S.S.K. Environment and Energy Development Co Limited from June – August 2008
- IEE for Large Dairy Farm for Engro Foods Limited Plant Site, Sukkur from July – August 2008

- IEE of Office Building Complex, Clifton, Karachi for Imperial Developers & Builders (Pvt) Ltd from July – August 2008
- IEE of Shopping Complex, Clifton, Karachi for Imperial Developers & Builders (Pvt) Ltd from July – August 2008
- Baseline Study and IEE of Seismic Survey in Jherruck Block, Sindh for New Horizon Exploration and Production Limited, Karachi from March – May 2008

**Working as a Team Leader for Blind Dolphin and Marine Turtle Conservation and Management Project for Wildlife Department, Government of Sindh from July 2010 to June 2012.**

- Conducted field surveys on River Indus for delineation of the Dolphin Reserve Boundaries.
- Collected water and soil samples for Physico-chemical analysis from different locations of River Indus.
- Collected socio economic data from both sides of the Game reserve.
- GIS mapping of the potential areas and collected information on Geophysical parameters of the area.
- Organize Census programme to determine the population status of this unique and highly endangered species of Blind River Dolphin.
- Conducted field surveys along the coast of Sindh to find out important Turtle breeding areas.
- Collected water and soil samples for Physico-chemical analysis from different locations along the Coast.
- Develop a Conservation and Management Plan for these highly endangered species.

**Major Achievements:**

- More than 50 IEE's, 20 EIA's and 30 Environmental Management Plans and Environmental Audits have been conducted and approved by the concerned Governmental authorities. Suggested mitigation measures taken and a third party monitoring mechanism devised to monitor the implementation process and progress.
- Rehabilitated many degraded areas at various project sites.
- Employment opportunity of local people increased in various projects.
- Through the adaptation of mitigation measures, the level of air pollution reduced, recycling and reuse of waste water increased, degraded habitat improved through afforestation and reforestation programs.
- Health and safety conditions of thousands of employee have been improved.
- Delineation of boundaries of Protected Area established.
- Population estimations and trend of highly endangered species established.
- Habitat assessment provided insight of the future of highly endangered species
- Developed Management Plans for highly threatened species.

**Worked as a Senior Environmental Specialist from July 2008 to July 2010 for Food & Agriculture Organization (FAO) of UN, on a World Bank funded Water Sector Improvement Project (WSIP) in Pakistan with the following responsibilities:**

- Provide technical input in the preparation and review of expression of interest notices.
- Provide technical input in the preparation of evaluation criteria for short-listing of consulting firms, as well as for technical and financial proposals for each assignment;
- Assist in the short-listing of the consultants, preparation of evaluation reports, ranking etc.
- Assist in reviewing and finalization of Terms of Reference and request for proposal packages (RFPs) for consultancy services, in collaboration with the implementing agencies, Sindh Irrigation & Drainage Authority (SIDA) / Area Water Board (AWB), Irrigation and Power Department (IPD) and project Coordination & Management Unit (PCMU).
- Assist in checking overall performance of the consultants, carrying out field visits (together with other PMCA Team members) to see their work, supervision of construction contracts, ensuring quality of construction is maintained according to the specifications as included in the bidding documents and that the Project Implementation Consultants (PICs) perform construction supervision according to the designed schedule;
- Desk review and site visits to ensure projects' compliance with Safeguard Policy of the World Bank.
- Review Environmental Management Plans, Environmental Assessment reports and related documents submitted by Project Implementation and Monitoring and Evaluation consultants.
- Ensure compliance of environmental and impacts related issues and risks addressed in the project document;
- Ensure Project Implementation and Monitoring and Evaluation consultants should adopt effective measures to minimize or mitigate the adverse impacts which are incorporated into the project design;
- Provide support to both the consultants in order to understand and manage properly environmental and social impacts related issues adequately;
- Ensure the consultants should properly complete the consultation process with all the stakeholders in accordance with World Bank requirement.
- Review consultant's report according to the World Bank's safeguard requirements, assist the Consultants in filling such gaps and advise them to address the concerns in documentation and Environmental Management Plans.



- Assist in overseeing the procurement planning exercise.
- Assist in the processes of hiring of staff for the project.
- Deal with the environmental aspects of the project and provide feedback to the FAO Team Leader
- Monitor all Project activities to find their possible adverse impacts on the surrounding environment and provide remedial measures to overcome these impacts
- Screening of Environmental Management Plans of the Project areas.
- Organize stakeholder's consultation meetings and dialogues.
- Provide guidance in the development of Master Plan for Indus Delta.
- Collaboration with other international Technical Specialist in environment and any other task related to environmental issues requested by the PMCA TL.

#### **Major Achievements:**

- Successful completed the hiring process in Sindh Irrigation and Drainage Authority and procurement process of goods and services for a World Bank Funded project.
- Participated in the process of formation of Farmer organizations in each area water board.
- Successfully completed the consultation process with all the stakeholders for remodeling of irrigation canals.
- Provided technical input in the development of Environmental Management Plans.
- Provided technical input in the development of Master plan for Indus Delta.
- Conducted workshops to raise awareness among all the stake holders about concerned environmental issues related to the project.
- Completed monitoring and evaluation of the consultant's work.

#### **Worked as Senior Environment Consultant for World Bank from April 2007 to March 2008 to:**

- Collected Baseline information of a trans-boundary Freshwater Lakes, wetlands, water bodies and established link between the Climate Change and ecology of the system and socio-economic of the area.
- All the baseline information was collected on Biodiversity, physical and chemical parameters of water quality assessment including pesticides and Socio-economic data. Collected information was used for the development of eco-tourism based activities and Management Plan.

**Major Achievements:**

- Ecological data collected and compiled a report on important Trans-boundary wetlands.
- Socio-economic data of surrounded village was also collected and compiled.
- Formulated a management plan for this important area.

**Worked as an independent Environment Consultant from November 2005 to March 2007 in the following areas:**

- Worked as an Environmental Expert (Copper & Gold Mines Project) for Hagler Bailly Pakistan conducting “Baseline Biophysical Survey of Tahlab River and Hamun-e-Mashkhel trans-boundary (Iran-Pakistan) wetlands, Balochistan” for EIA, from January to May 2007 for Tethyan Copper Company Pty. Ltd. Canada.
- Baseline Study and Developed a Conservation, Management and Restoration Strategy for Haleji Lake Wildlife Sanctuary (Freshwater Lake) Ramsar Site for Sindh Wildlife Department, Sindh Pakistan from April – September 2007.
- Worked as a Curriculum Development Coordinator for the **development of curriculum** for MS Environment and Natural Resources Management for IQRA University, Pakistan. September – December 2006.
- Worked as a Senior Environmental Consultant, conducted baseline study for restoration and development of Management Plan of the Marine, Coastal and Freshwater Wetland resources of Coastal areas of Hingol National Park, Balochistan. A World Bank funded project initiated by the Government of Pakistan. July–December 2006.

**Major Achievements:**

- Ecological data of gold and copper mines project completed
- Developed a Restoration Plan for a Ramsar site.
- Curriculum for MS in Environmental sciences was developed
- Participated in the development of a Management Plan for a Protected Area.

**Worked as Head, Aquatic Ecosystems Programme for IUCN-Pakistan from October 2003 to October 2005 and involved in the following activities:**

- Formulate the process of development of National Wetland Policy through a wide consultative process.
- Work on the conceptualisation, development and implementation of a strategic Aquatic Ecosystem Programme.
- Support the Process of development of Red Data list for the Mammals of Pakistan.

- Formulate a strategy and plan for the restoration of degraded protected areas including Wetlands, Forest, Dryland and associated habitats.
- Facilitated a process for the development of National Red List of Freshwater Fish, Molluscs, Crabs, and Odonates in Pakistan.
- Working in the Integration of Aquatic Ecosystem programme with other Mangroves, wetland and water related programmes being implemented in the Asia Region.
- Organise Training and capacity building programmes for Wildlife and Forest Departments
- Organise Training and Capacity building programmes for fishermen in order to promote sustainable fishing
- Preparation of work plans, activity reports and other periodic progress reports relating to the work of Aquatic Ecosystem Programme for donors.
- Setup a monitoring and evaluation system to monitor and evaluate the progress of Aquatic Ecosystem related projects and programmes.
- Co-ordination and maintain liaison with the relevant Government Departments and NGO's in Coastal Marine, Freshwater and other natural resource sectors, especially those involved in or impacting on or benefiting from aquatic ecosystem in the country.
- Working in the development of concepts and funding proposals for dealing with issues faced by the aquatic ecosystem in the country.
- Identification of potential opportunities for joint regional or trans-boundary projects and other;
- Initiate work especially related to **trans-boundary** issues with the neighbouring countries.
- Promotion, establishment and management of protected areas, MAB reserves and Ramsar sites.

### **Major Achievements:**

- Initiated a process for the development of National Wetlands Policy.
- Initiated a process for the development of Red Data list of Pakistan.
- Formulated a strategy for the restoration of degraded protected areas.
- Developed a list of freshwater fish, molluscs, crabs and odonates of Pakistan.
- Organised capacity building/training programmes for wildlife and forest departments.
- Devised projects monitoring and evaluation system for different projects.
- Fisherman agreed, not to use the illegal fishing nets to catch fish fry.
- Developed many project concepts and funding proposals for different donors.

- Identify potential trans-boundary projects and established linkages with neighbouring countries for joint implementation.

**Worked as an independent Environmental Consultant from January to September 2003:**

- Review and updated the Initial Environmental Examination (IEE) Report for “Offshore Seismic Operations” for the exploration of hydrocarbon reserves in offshore block: 2365-1 offshore Indus – E Zone -1, located within Pakistan’s Exclusive Economic Zone for Shell Development & Offshore Pakistan B.V. From April – July 2003.
- Conducted EIA on Farm Water Management project from March – June 2003, World Bank funded project for the lining of water courses and uplift of tributaries.
- Conducted EIA to find out the impact of the project in the surrounding areas (including protected areas and wetlands) for the provincial Government of Sindh. From January-March 2003.

**Regional Coordinator, Asia for the Ramsar Convention Bureau, Switzerland, from January 2000 to December 2002 for 3 years.**

As a **Regional Coordinator Asia** for the Ramsar Convention my responsibilities were:

1. Maintain constant and active working relations with the designated Administrative Authority in each Contracting Party (country) in the region. As far as possible expand contacts in each Contracting Party (country) to include key agencies that could contribute to the effective implementation of the Convention;
2. Maintain active contacts with the diplomatic Missions in Geneva and/or Embassies in Bern, Switzerland, of the Contracting Parties (countries) of the region and visit the countries of the region to provide face to face Technical advice and Policy guidance when required;
3. Promote the Convention in the region by encouraging and assisting:
  - accession of new Contracting Parties to the Convention;
  - designation of additional sites (Protected areas) to the List of Wetlands of International Importance (the "Ramsar List") and the development and implementation of management plans for these;
  - development and implementation of National Wetland /Water Policies and/or other appropriate policy instruments designed to ensure the conservation and wise use of wetlands/fresh water resources;
  - establishment and operation of National Wetland/Ramsar Committees;

- organize education, training, and public awareness activities related to the conservation and wise use of wetlands and river basin management initiative of the Convention;
  - development of projects for wetland conservation and wise use in the region;
  - promote international/regional cooperation.
4. Organise, and facilitate, Ramsar regional and sub-regional meetings and technical workshops;
  5. Establish and maintain working contacts with bilateral and multilateral funding agencies, and assist countries in the region, if so required, with their wetland project proposals submitted to them;
  6. Implement the **River Basin Initiative** on integrating biological diversity, wetland and river basin management (RBI) is a joint initiative by the Ramsar Bureau and the Secretariat of the Convention on Biological Diversity (CBD) being developed under the framework of the 2nd CBD/Ramsar Joint Work Plan
  7. Undertake, technical and financial reviews of the projects submitted by countries in the region to the Ramsar Small Grants Fund (SGF), and follow up on the implementation of approved and funded projects;
  8. Establish a system for better programme design, M&E, audits and evaluations both at the conceptual and practical level for submitted and ongoing projects.
  9. As requested by Contracting Parties, organise, and as appropriate participate in, technical missions to review the status of Ramsar sites, implementation of Small Grant Projects, monitor their implementation process, and provide support in ecological restoration of the degraded sites;
  10. Participate in and help to organise the annual meetings of the Ramsar Standing Committee, the Scientific and Technical Review Panel and the Meetings of the Conference of the Contracting Parties to the Convention;
  11. Co-operate with Ramsar's partner organizations (IUCN, Wetlands International, BirdLife International and WWF) and other international NGOs and networks as appropriate, at both international and regional levels in the development and implementation of programmes of action relating to the mandate of the Convention; and promote the establishment of effective NGO constituencies for wetlands issues in each Contracting Party;
  12. Establish linkages and maintain cooperative working relations with appropriate counterparts in the secretariats of regional and international Conventions to assist with harmonized implementation and joint actions, and in other international and regional intergovernmental bodies working in environmental and natural resources management issues;

13. Advise the Secretary General and the Deputy Secretary General in relation to the overall responsibilities of the Ramsar Bureau at both the global scale and for the region.
14. Supervise the recruitment process and activities of the intern for the region and liaise with other Bureau staff as appropriate in the fulfilment of the above duties.
15. Provide technical support to the contracting parties in Project development; Setup a procedure to monitor the Small Grant Funded Projects.
16. Monitored and evaluated other projects under the direction of Standing Committee or STRP;
17. Worked on fund raising with some joint projects with Danon Group and Evian water including organizing workshops for Arabic speaking country in Evian, France.

### **Major Achievements:**

- Designation of 75 new wetlands as Ramsar sites in Asia.
- Eight new countries signed the convention.
- First two new countries from central Asia join the Ramsar convention.
- Organized capacity building workshop for Arabic speaking countries.
- Organised 3 sub-regional meetings (Tehran, Lebanon, Bangkok) for the preparation of COP.
- Provided support in formulation of Ramsar Committees in different countries.
- Organise awareness workshops on river basin initiative in different countries.
- Finalized small grant pending projects
- Supported and promoted the activities of sustainable fishing in Bangladesh, India and Nepal
- Monitoring and evaluation of Ramsar small grant project progress.
- Established linkages and develop new partnership with other organisations and institutions by signing of MOU with them.
- Developed five years strategic plan for Asia.
- Implementation of Ramsar CEPA programme in many countries.
- Highlighted the importance of High Altitude Wetlands and organise a joint workshop in China to raise this issue of high altitude wetlands with other range countries.
- Raise awareness about the importance of Montreaux record and provided support to the designated authority in delisting of Chilika Lake, India from Montreaux record.

**Conservation Director (Regional Head) and in-charge of WWF-Pakistan's Wetlands Programme from January 1994 to December 1999.**

As Director of Conservation and Regional Head I have successfully completed the following tasks:

- Conduct a visioning exercise with the participation of all stakeholders including partners and donors and provide leadership for the implementation of recommendations.
- Develop projects/programmes and seek funding to implement the new programme developed in the light of the visioning exercise in all three Biomes (Freshwater, Marine and Forest).
- Liaise with corporate/development sector to raise funds for different projects.
- Organise exploratory surveys to find out the status of **Balochistan Black Bear**, the only Arid area species of Bear drastically reduced due to Bear Baiting.
- Participated in the surveys organise for **Brown Bear** in Deosai Planes, Northern Pakistan.
- Develop **Wetlands Action Plan for Pakistan** through wide range of consultations with all relevant stakeholders.
- Participate in the process of development of **Biodiversity Action Plan for Pakistan**.
- Develop an interpretation/education centre in the Mangrove Forests.
- Initiate **Mangrove Forests Conservation and Rehabilitation Programme** with support of local communities with the aim to enhance the fish and shrimp population.
- Establish, manage and supervise Regional and field offices and field projects.
- Liaison with Governmental, Non-Governmental Organizations and all stakeholders, devise mechanism to involve them in the project activities.
- Establish linkages with corporate sector and donors to generate funds for new and ongoing projects.
- Identify more potential areas for conservation through local consultation and resolve conflicting issues relating to freshwater, wetlands, Forest & their Biodiversity.
- Identify degraded habitats and develop plans for their ecological restoration and development of Management Plans.
- Develop new projects concerned with the conservation of nature and natural resources paying particular attention to integrating Freshwater, Marine & Coastal and Forest conservation with rural development and poverty alleviation for Example:
  - o Provide support in the development of Pakistan's Wetlands Conservation Project (Full Grant) for **GEF**
  - o Develop & Implemented **DGIS/RNE** funded project for Mangrove Forest Conservation and rehabilitation through community participation

- Develop & support the Implementation of Eco-toxicological study for Colonial Birds Conservation Project funded by the **EU**
- Develop an internal and external monitoring, evaluation and audit system to monitor and evaluate the progress of running projects.
- Dealt with all financial, administrative and other related matters necessary for smooth office running.
- Develop **Management Plans for Freshwater Lakes** located in different ecological zones for their conservation, management and rehabilitation.
- Develop community based conservation and rehabilitation projects/programmes for e.g. Mangrove Forests, Fish and fisheries, Birds and Wetlands ecosystem.
- Conduct Baseline/ Ecological Surveys for the establishment of Protected Areas on Land and in the Sea.
- Initiated a study on Integrated Pest Management (IPM) and used Barn Owl for Pest management.
- Involve Academic and Research institutions in project and programme's activities.
- Establish and strengthen Community Based Organisations (CBO's) at the project areas in order to mobilize communities to participate in the project activities.
- Organise and conducted training programmes as Master Trainer/Mentor for different levels to produce more people in the field of sustainable management of Natural Resources.
- Represent WWF-Pakistan on various national and international fora.
- Liaison with the secretariats of International treaties and conventions like Ramsar, CMS, CBD, CITES etc.

### **Major Achievements:**

- Developed Wetlands Action Plan for Pakistan.
- Contributed in the development of Biodiversity Action Plan for Pakistan.
- Initiated and successfully completed Mangroves conservation and rehabilitation programme.
- Developed wetlands education and interpretation centre
- Established 5 regional and project offices
- Developed and secured funding for different project from GEF, EU, RNE, World Bank and UNDP.
- Developed Management Plan for National Park
- Developed Management Plans for Wetlands Protected Areas.
- Organise training and capacity building programmes for different target groups



- Established many community based organisations in the project areas for future sustainability of the projects.
- Developed training manuals for different targeted training programmes.
- Established linkages with potential donors, partner organisations and institutions.
- Developed and disseminated Education and Awareness material for different target groups.

**Wetlands Officer with World Wide Fund for Nature-Pakistan from September 1989 to December 1993.**

- Establish a work programme; including the development of a **Wetland Action Plan** for Pakistan;
- Identify, designed and implemented projects aimed to the protection, management and conservation of nature with poverty alleviation.
- Develop and implemented projects/activities on sustainable use of Freshwater resources with equitable sharing of benefits that involve local communities.
- Develop and implemented management plans for important wetlands based on wise use concept;
- Organise training programmes for the National Wetland Managers, students and community representatives.
- Elaborate and developed education and information material on wetlands, Marine & Coast and Forest to support education and information programmes of the provincial wildlife departments;
- Assist WWF-Pakistan in lobbying for improved conservation of wetlands, in particular implementation of international conventions related to wetland and Biodiversity.
- Strengthen cooperation between WWF-Pakistan, provincial wildlife authorities and international organizations active in wetlands conservation;
- Develop material like posters, brochures, maps, booklets and leaflets for promotion of awareness among the rural population, students, wetland managers and conservationists.
- Conduct conservation awareness workshops for different target groups.
- Organised training programme for Health safety and Environment for Industrial groups.

**Major Achievements:**

- Organised consultative workshops for the development of Wetlands Action Plan.
- Organised PRA workshops for the development of site management Plans.
- Conducted many expeditions and exploratory surveys for the development of new projects.
- Organise Training programmes for different target groups.
- Developed CEPA material for different target groups.

**Dy. Sanctuaries Warden, From August 1986 to September 1989, with Sindh Wildlife Management Board, Government of Sindh, Karachi, Pakistan.**

- Monitor all conservation, protection, research and development activities in Freshwater & Wetland Sanctuaries in Sindh Province, Pakistan.
- Monitor Illegal Wildlife Trade activities in the Wetland Sanctuaries.
- Conduct surveys to ascertain the population of different waterbird species in the important wetlands of Sindh Province, Pakistan.
- Initiated Bird's Ringing programme in different locations of the province.
- Developed and involved local communities in conservation and management activities.

**Major Captive breeding Programmes Initiated & Supervised:**

- Marsh Crocodile *Crocodylus palustris* captive rearing and re-introduction programme.
- Hog Deer *Axis porcinus* captive breeding and re-introduction programme
- Indian Python *Python molurus* captive breeding and re-introduction programme
- Indian Monitor *Varanus bengalensis* captive breeding and re-introduction programme

**Major Achievements:**

- Develop new projects targeted to the threatened species and habitat.
- Organized annual Waterbirds survey in the province
- Confiscated illegal animals and their derivatives from poachers and traders.
- Successful breeding of Captive animals
- Successful re-introduction of Marsh Crocodile *Crocodylus palustris* and Indian Monitor *Varanus bengalensis*
- Conducted surveys for the development of new protected areas on Land and in the Sea.

**Research Officer, Avifauna Research Project from November 1984 to May 1986 with the Department of Zoology University of Karachi, Pakistan.**

- Organize surveys for data collection to find out the population status of different avian species in Sindh.
- Monitor the behavioural activities of captive animals.
- Collect data on food preference of different bird species.

**Visiting Faculty /Teaching experience:**

- Presently teaching to the Post-graduate students of Jinnah University for Women, Karachi, Pakistan from August 2010 to August 2012. Supervised Research Work for MSc/BS (Final) on Biodiversity.

- Post-graduate teaching to the students of Jinnah University for Women, Karachi, Pakistan during 1994-96 sessions.
- Developed programmes/curriculum for Environment and Natural Resource Management for the Graduate and Post-graduate levels for Iqra University, Karachi, Pakistan.

### **PROFESSIONAL TRAINING / COURSES ATTENDED :**

- Participated in a **Training of Trainers (ToT)** Workshop organize by the Pesticide Risk Reduction Group, FAO of UN from 28 November to 9 December 2011 in **Izmir, Turkey**.
- **Institutional capacity building** workshop, organised by WWF-International from 3-5 May, 1999. Gland, **Switzerland**.
- Integrated Conservation and Development Programme (**ICDP**), Training workshop was organised by WWF-International from September 15-28, 1999 at **Gabon, West Africa**.
- Project Cycle Management (**PCM**), Workshop for Master Trainers organized by WWF-International from August 31-September 4, 1998, **Bhurban, Pakistan**.
- Organisational Capacity Assessment, Workshop organized by NGO Resource Centre, from 20 - 22 October 1996, at National Institute of Public Administration, **Lahore, Pakistan**.
- Participatory Rural Appraisal (**PRA**) Training Workshop organized by WWF-International from 10 - 21 December 1994, at the Uchali Wetland Complex, **Punjab, Pakistan**.
- Participatory Project Planning, Monitoring & Evaluation, Training for Master Trainers organized by WWF-US Training Programme for Asia from 23 - 30 September 1993, at **Dhulikhel, Nepal**.
- Wetlands and Waterfowl Conservation, Management, Restoration and Ringing, Training Course organized by International Waterfowl and Wetlands Research Bureau (IWRB), from February 20 - April 20, 1990, at **Slimbridge, United Kingdom**.

### **COMPUTER LITERACY:**

I am quite familiar with the current use of computer including MS Word Processing, MS Power Point, Spreadsheets, MS Outlook, MS Excel, MS Publisher, Photoshop, Internet, GIS etc.

### **RESEARCH / PUBLICATIONS**

#### **Papers Published :**

- Khurshid S.N., Barkati, S. and Rehman, S. (2010), "*Seasonal Changes in Waterfowl Community of Hawksbay, Karachi Coast, based on guild structure*". Record, Zoological Survey of Pakistan, 19:pp. 18-24 (2009).
- Khurshid S.N., Barkati, S. and Rehman, S. (2010), "*Guild Based Population Structure of Shorebirds from Karachi Coast, Pakistan*". International Journal of Biology and Biotechnology, 7 (1-2): pp. 127-133.
- Khurshid N. (2005), "*Pakistan's Commitments and Response to the Ramsar Convention on Wetlands*". Paper presented in the National Consultative Workshop on the Implementation

- of CBD, CMS, and Ramsar Convention in Pakistan, Islamabad, 22-23 September 2005, Islamabad, Pakistan. (pp.25-41)
- Khurshid N. & Qaimkhani A. M. (2005), *Desert Wetlands of Pakistan*. Proceeding of Asian Wetlands Symposium 2005, Orrisa, India.
  - Ghalib, S. A, Hasnain, S.A, **Khurshid . N** (2000), *Observation on the Avifauna of Hub Dam*. Pakistan Journal of Zoology.Vol.32 (1).pp.27-32.
  - Khurshid N. and Hai A.A (1999), *Root causes of Biodiversity loss in the Mangrove Forests of Indus delta and Balochistan coast*. National Seminar on Mangrove Ecosystem Dynamics of the Indus Delta in Karachi.
  - Khurshid, N., Jabeen, R. and Hasnain, S.A. (1998), *An overview of Wetlands and Waterfowl of Sindh*. Proceeding of National Seminar on Impact of Environment Pollution on Lakes of Sindh, 24 November 1998. Mehran University of Engineering and Technology, Jamshoro and EPA-Sindh.
  - Jabeen,R., **Khurshid, N.**and Hasnain, S.A. (1998), *Weed Management Strategy for Eutrophic Lakes*. Proceeding of National Seminar on Impact of Environment Pollution on Lakes of Sindh, 24 November 1998. Mehran University of Engineering and Technology, Jamshoro and EPA-Sindh.
  - Khurshid N. (1993) *Threats to Coastal and Estuarine Wetlands in Pakistan*. Proceedings of National Seminar on Study and Management in Coastal Zones in Pakistan from September 23 - 26 1993. Karachi, Pakistan. (p.p. 231-235)
  - Khurshid N. and Chaudhry I.U. (1991) *Peoples Participation in Wetland Conservation*. Proceedings of an International Conference on Wetland and Waterfowl Conservation in South and West Asia, Karachi, Pakistan, from 14-20 December 1991.
  - Ahmad A. and **Khurshid N.** (1991) *Observations of Migration and Migratory Routes of Cranes through Balochistan*. Paper published in *Natura* Vol 13 Issue No.4 8-11
  - Auffenberg W, **Khurshid N.**, and Arain Q.N (1989) *Preferred Habitat. Home Range and Movement Patterns of Varanus bengalensis through Radio telemetry in Southern Pakistan*. Paper published in "Mertensiella" Advance in monitor research, Vol.No. 2, Bonn, Germany, 15 December 1991.(Pp.7-28.)

#### Papers Presented:

- Jabeen R., **Khurshid N.**, Awan F., “*Challenges and Opportunities in Lake Conservation and Management: A Case study of Ucchali Lakes Complex – Pakistan*”. Proceedings of National Seminar on “ILBM for the Sustainability of Himalayan Lakes”, organized by National Lake Conservation Development Committee (NLDC), **Kathmandu, Nepal**, on 26<sup>th</sup> – 29<sup>th</sup> March 2010.Pg:27-32
- Khurshid N. (2005). *Wetlands of International Significance: Pakistan’s perspective*. Paper presented in an international workshop on wetlands and Eco-tourism, organised by the Fulbright (USA) India from 24-30 October 2005, **Kol Kata, India**.

- Khurshid N. and Rasool F. (1998). *"Life of the people living around Pakistani Mangroves forest"* Paper presented in workshop on Coastal Zone Management and Environmental Impact Assessment, 19<sup>th</sup> to 21<sup>st</sup> October 1998. Organized by the British Council, DFID, University of Glasgow, UK and Center of Excellence in Marine Biology University of Karachi, **Karachi, Pakistan**.
- Khurshid N. (1996) *"The Role of Wetland Centres in Community Awareness"*. Paper presented during the 6<sup>th</sup> Ramsar Conference, March 17<sup>th</sup> 1996, **Brisbane Australia**.
- Khurshid N. (1993) *"Conservation of Wetlands in Pakistan"*. Paper presented at the National Training Workshop on "Protected Area Management" June 12-22, 1993. Jointly organized by Sindh Agriculture University & UNESCO. **Tando Jam, Sindh**.
- Khurshid N. (1992) *"Conservation of Wetlands - a neglected subject in Pakistan"*. Paper presented at the IV INTECOL's International Wetlands Conference, September 13-18, **Columbus, Ohio, USA**.
- Khurshid N. (1991). *"A Conservation Plan for Pakistan's Wetlands"*. The Plan was presented during an International Conference on Wetlands and Waterfowl Conservation in South and West Asia, **Karachi, Pakistan**, 14-20 December 1991.

## REPORTS :

- Khurshid N. et al., (2011). *"Baseline Study of Indus Dolphin from Guddu to Kotri Barrage, Sindh, Pakistan"*. Sindh Wildlife Department, Government of Sindh, Pakistan. (p.p.80) Un-publish report.
- Contributed in the development of International Single Species Action Plan for the Conservation of the Lesser Flamingo (*Phoeniconaias minor*) 2008. CMS Technical Series No. 18, AEWA Technical Series No. 34. Bonn, Germany.
- Khurshid N. (2005). *"Situation Analysis of Freshwater & Wetlands Biodiversity of Pakistan"*. IUCN-Pakistan July 2005. Karachi, Pakistan. (p.p. 75) Un-publish report.
- Khurshid N. (2005). *"Managing Salinas for Livelihood and Nature Conservation in Gwadar District, Balochistan, Pakistan"*, IUCN-Pakistan, June 2005, Karachi, Pakistan. (p.p. 38) Un-publish report.
- Finlayson M., **Khurshid N.**, et al, (2001). Ramsar's 50<sup>th</sup> Advisory Mission for Chilika Lake, Orissa India. To remove this Ramsar site from the Montreux Record. (After its ecological restoration), Ramsar Convention Bureau, Gland, Switzerland.
- Khurshid N. et al., (2000) *"Wetland Action Plan of Pakistan"*. A policy document adopted by the Government of Pakistan. WWF-Pakistan.
- Hai A.A, **Khurshid N.**, et al, (2000) *The Root Causes of Biodiversity loss (in economic perspective)*, Earth Scan Publication Ltd, London and Sterling, VA, (pp 255-281).
- Khurshid N. et al., (1999). *"Return of the Sarus Crane"*, WWF-Pakistan, 1999. Karachi, Pakistan (p.p 30) (unpublish report).

- Khurshid N., et al, (1998), "Population Survey and Breeding Areas Identification of Houbara Bustard (*Chlamydotis undulata macqueenii*) in Nag valley, Balochistan, Pakistan, WWF-Pakistan. (un-publish report)
- Khurshid N. and Rasool. F. 1998. Mangrove Forest Re-plantation Project. A quarterly magazine of WWF – Pakistan, Natura 24(1): 5- 6.
- Khurshid N. and Rasool. F. 1997. Mangrove Forest Plantation in Pakistan. Inter Coast Newsletter. University of Rhodes Island. USA.
- Khurshid N., et al, (1995 to 1997), "Population Survey of Houbara Bustard (*Chlamydotis undulata macqueenii*) in Sindh, Pakistan, WWF-Pakistan. (un-publish reports).
- **Khurshid N. & Shah N.**, (1996), "*Illegal Wildlife Trade in Sindh*", WWF-Pakistan, (un-Published Report).
- Khurshid N., et al, (1996), "**Exploratory Survey of Balochistan Black Bear *Selenarctos thibetanus gedrosiansus***", WWF-Pakistan. (Un-published report)
- Khurshid N., et al, (1996) "*Survey of the Indus Dolphin *Platanista minor* in Sindh*", WWF-Pakistan. (Unpublished report)
- Khurshid N., S. A. Hasnain., M. M. Azam and Rasool. F. (1995). "*Astola Island - A Potential Site for Marine National Park*". WWF – Pakistan Wetland Conservation Project Report. (15 pp.)
- Khurshid N.,Hasnain. S. A., Rasool. F., Zaidi. A., Arshad. M., Qaim Khani. A. M and Rajput. R., 1995 Participatory Rural Appraisal of Hub Dam, Balochistan. WWF – Pakistan Wetland Conservation Project Report. 60. Pp.
- Khurshid N., et al (1995) *Management Plan for Hub Dam Lake*, WWF-Pakistan (1995), (Unpublished report).
- Khurshid N. & Chaudhry A.A. (1995), "*Management Plan for Lal Sohanra Lake*", Lal Sohanra National Park, WWF-Pakistan. (Unpublished report).
- Khurshid N., (1991). "*A Step Towards Wetland Conservation*"WWF-Pakistan's Report.
- Rao A. L., **Khurshid N.** (1991) "*Management Plan of Rawal Lake. A Part of the Management Plan of Margalla Hills National Park.. IUCN & WWF Pakistan, and National Council for Conservation of Wildlife Islamabad, Pakistan, (1991).*
- Asian Waterfowl Census 1986 - 1991. Waterfowl survey reports. Annually, joint publication of International Waterfowl and Wetland Research Bureau, U.K. and Asian Wetland Bureau, Malaysia.

## BOOKS :

- "*Seasonal Changes in Waterfowl Community of Clifton Coast, Karachi: Waterfowl Population of Clifton Coast, Karachi* by Sohail Brkati", Dr. Najam Khurshid & Dr. Solaha Rahman (2011). Published by VDM Verlag Dr. Müller (August 4, 2011), Germany.

**ISBN-10:** 3639375947, **ISBN-13:** 978-3639375947, pp 80.

- *ABC of Nature*. An alphabetic book for children on nature, to create awareness and develop interest about nature. Published by WWF-Pakistan 1998.
- **ARTICLES PUBLISHED:**
- 
- More than 60 articles published in different national and International magazines & different newspapers including *Natura*, *Bonjour*, *Wildlife and Environment* and *International Wetlands News*, on “Wetlands”, “Waterfowl”, “Cranes” and “Mangroves”.

#### **MEMBERSHIP AND OTHER RESPONSIBILITIES:**

- Member of the working Group on Inland Waters of Tropical Asia, **International Society of Limnology**, Manitoba, **Canada** (formerly International Association of Theoretical and Applied Limnology; Societas Internationalis Limnologiae, SIL) from 2014.
- Member Technical Committee, Sindh Environmental Protection Agency from 2011.
- Member of a team of referee to review scientific papers submitted to the Journal of Water, Sanitation and Hygiene for Development, IWA Publishing, UK.
- Member of the **Scientific and Technical Review Panel (STRP)** of the Ramsar Convention for 2003-2005, Gland, Switzerland.
- Member **Asia-Pacific Migratory Waterbird Conservation Committee**, Wetlands International - Asia Pacific, 2000-2003.
- Represented Ramsar Convention as a Member of the Technical Committee (2000 - 2003) constituted for the development of **GEF** Funded Wetland Conservation Project for the Government of Islamic Republic of Iran.
- Member of the Conservation Breeding Specialist Group, of **Species Survival Commission, (SSC)** IUCN -The World Conservation Union, Gland, Switzerland.
- Member of **Freshwater Advisory Group**, (1995-1999) WWF-International, Gland, Switzerland.
- Member of **Marine Advisory Group**, (1995-1999) WWF-International, Gland, Switzerland.
- Member of Pakistan's **National Wetland Management Committee**, established by the Government of Pakistan from 1996 to 2000.
- Member of the IUCN-Pakistan's Technical Management Committee for the Conservation of Coastal Ecosystem. (1997-2000)
- Member, Environmental Management Committee, Water and Power Development Authority, WAPDA (South), (1997-2000) Hyderabad, Pakistan.
- Assistant Editor of *Wildlife and Environment* (1996-2000) A quarterly magazine, published from Karachi, Pakistan.

## **References:**

### **Anada Tiega**

Independent Consultant  
Former Secretary General of Ramsar Convention  
146 Rue de Riant Coteau  
CH1196 Gland  
Suisse Skype: anadatiega  
Email: tiegaanada@gmail.com  
anadatiega@yahoo.ie  
tel +41 76 548 23 35

### **Mr. Hans Friederich**

Director-General  
International Network for Bamboo and Rattan  
No. 8, Fu Tong Dong Da Jie, Wang Jing Area,  
Chaoyang District, Beijing 100102,  
P.R. China  
Tel: +86-10-6470 6161, Fax: +86-10-6470 2166  
E-mail: [hansfr55@gmail.com](mailto:hansfr55@gmail.com)

### **Abdul Munaf Qaimkhani**

Deputy Inspector General-Forests,  
Ministry of climate change,  
Government of Pakistan,  
Islamabad.  
Tel # : 0092-51-9245585  
Fax# : 0092-51-9245590  
Cell : 0092-321-5259339  
Email : [amqaimkhani@yahoo.com](mailto:amqaimkhani@yahoo.com)



# VINCENT V HILOMEN, PHD

Email Address: [vvhilomen@yahoo.com](mailto:vvhilomen@yahoo.com)

Mobile Number: +63 919 2097438



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## Personal Details

### Profession:

#### Current Position:

Executive Director for Priority Programs  
Biodiversity Management Bureau  
Department of Environment and Natural Resources  
Ninoy Aquino Parks and Wildlife Center,  
North Avenue, Quezon City

Marine Biologist/Fisheries Biologist/Ecologist

Associate Professor  
Animal Biology Division  
Institute of Biological Sciences  
University of the Philippines Los Baños  
College, Laguna 4031  
Philippines

### Specialization:

Reef Fisheries (small scale fisheries including small pelagic),  
Marine Protected Areas and Coastal Resources Management,  
Marine Biodiversity Studies, Baseline Assessment of Coastal  
Environment, Marine Monitoring Studies, Conduct of  
Environmental Impact Assessment Studies and Preparation of  
Environmental Impact Statements

### Key Qualifications:

Vincent V. Hilomen has nearly 26 years of work experience as a marine biologist specializing in reef fish ecology, fisheries and marine protected areas. His work experience includes 25 years in the academe teaching basic and advance zoology courses, particularly in allied fields of marine science, and research. His academic experience include more than 24 years of research studies for marine protected areas, coastal resources management, fisheries biology, and marine biodiversity projects in marginalized sectors of society in the Philippines for purposes of planning and policy formulation. He has also conducted studies for environmental impact studies, monitoring coastal environment, surveys for baseline assessment of coastal environment for a wide variety of sectors such as oil and gas, mining industry, power plants, coastal industrial areas and ecotourism. His experience covers

projects in coastal baseline assessment in Brunei Darussalam, and the Middle East.

<b>Date and Place of Birth</b>	January 30, 1964 at Koronadal, South Cotabato, Philippines
<b>Civil Status</b>	Married to Maria Teresa Totañes-Hilomen with 4 children
<b>Education and Professional Status</b>	<p>PhD in Marine Biology. 1998 James Cook University of North Queensland Townsville, Queensland 4811 Australia</p> <p>MSc in Marine Biology. 1993 Marine Science Institute University of the Philippines Diliman, Quezon City, Philippines</p> <p>BS Marine Science. 1985 College of Science University of the Philippines Diliman, Quezon City, Philippines</p>
<b>Membership in Professional Organizations</b>	<p>President, Philippine Association of Marine Science (2009-2011)</p> <p>Member, Philippine Association of Marine Science (1990 to present)</p> <p>Member, National Research Council of the Philippines (1991 to present)</p>
<b>Language Ability</b>	<p>Filipino (Mother tongue)</p> <p>English (Spoken excellent, Read and Write excellent)</p>
<b>Other skills and qualifications</b>	<p>Open Water SCUBA Diver (PADI) with over 3,000 hours bottom time (since 1986)</p> <p>Computer literate in MS Office (Word, Excel, Powerpoint)</p> <p>Licensed Speed Boat Driver (Queensland Transport No. 388241: Australia)</p>

Highly skilled in fish identification (visual census)

Highly skilled in survey methods for assessment of tropical marine resources

## **Employment Record**

March 2014 to present	Executive Director for Priority Programs Biodiversity Management Bureau Department of Environment and Natural Resources
June 2012-March 2014	Deputy-Director, Institute of Biological Sciences, UPLB
1988 to present	Freelance Consultant
2009 to present	Associate Professor IV
2008 to 2009	Associate Professor III
2005 to 2008	Associate Professor II
2000 to 2005	Assistant Professor V
1998 to 2000	Assistant Professor III
1995 to 2000	Instructor V
1989 to 1995	Instructor I
	University of the Philippines Los Banos College, Laguna Philippines
1986 to 1989	Research Assistant University of the Philippines Diliman, QC Philippines

## **Grants and Awards**

2009	Outstanding IBS Senior Faculty Award, Institute of Biological Sciences, March 24, 2009, NCAS Auditorium, CAS, UP Los Banos
	Special Citation in Teaching, Institute of Biological Sciences, March 24, 2009, NCAS Auditorium, CAS, UP Los Banos

2007	Outstanding Research Award, Institute of Biological Sciences, March 23, 2007, NCAS Auditorium, CAS, UP Los Banos.
2006	Jorge C. Bocobo Professorial Chair Lecture Award, July 1, 2006 to June 30, 2007, University of the Philippines System, Lecture delivered on June 29, 2007 at Plant Pathology Auditorium, Biological Sciences Bldg. UP Los Banos, College, Laguna
2002	Best Poster Award, "Understanding Spillover of Reef Fish Populations: Implications to Stock Maintenance, Replenishment and Management", First National Conference of the Capture Fisheries Network, Bureau of Agricultural Research, Department of Agriculture, College of Fisheries, University of the Philippines Visayas, 4-6 December 2002
2000	AFMA Best R&D Paper Award, "Status of Philippine Reef Fish Communities", (Senior Author) 12 <sup>th</sup> National Research Symposium, Fisheries and Marine Science Midstream/Downstream Unpublished Category, Bureau of Agricultural Research, Department of Agriculture
	AFMA Outstanding R&D Paper Award, "Status of Philippine Reef Fish Communities", (Senior Author) 12 <sup>th</sup> National Research Symposium, Fisheries and Marine Science Midstream/Downstream Unpublished Category, Bureau of Agricultural Research, Department of Agriculture
1991	Second Place Winner of the 1991 Philippine Science Talent Search, National Academy of Science and Technology (July 10, 1991), Manila, Philippines.

#### **Publications/Technical papers:**

**Hilomen V.V.**, V.S. Ticzon, R. Martinez, F.M. Panga, B.R. Samaniego and M.Deocadiz. 2013. Determining baseline condition of coral communities inside and outside MPAs in Candelaria, Zambales and Sta. Ana, Cagayan: Opportunities for improving management strategies. Paper presented at the 12<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, University of the Philippines Visayas Tacloban College, Tacloban City, October 24-26, 2013.

**Hilomen, V.V.**, R. Martinez, M. Deocadiz, B.R. Samaniego, V.S. Ticzon and F.M. Panga. 2013. Are conditions of associated reef fish communities inside MPAs better than outside? Paper presented at the 12<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, University of the Philippines Visayas Tacloban College, Tacloban City, October 24-26, 2013.

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- Simon, ANP, BR Samaniego, MEB Aurellado, **VV Hilomen**, WRY Licuanan and N Espana. 2011. Response of functional groups of reef fishes to the changes in benthic cover in Lian, Batangas. Paper presented at the 11<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Development Academy of the Philippines, Tagaytay City, October 20-22, 2011.
- Pan, M., **V.V. Hilomen**, M.I.D Palomares. 2010. Size structure of *Acanthaster planci* populations in Tubbataha Reefs Natural Parks, Sulu Sea, Philippines. In: Palomares, M.I.D. and D. Pauly (eds.), Marine Biodiversity of Southeast Asian and Adjacent Seas. Fisheries Centre Research Reports 18(3): 70-77. Fisheries Centre, University of British Columbia [ISSN 1198-6727].
- Sorongon P.M.E., J.M. Acebes, L. Dollar, **V.V. Hilomen**, M.I.D. Palomares. 2010. The effect of tourism on cetacean populations in southern Philippines. In: Palomares, M.I.D. and D. Pauly (eds.), Marine Biodiversity of Southeast Asian and Adjacent Seas. Fisheries Centre Research Reports 18(3): 78-96. Fisheries Centre, University of British Columbia [ISSN 1198-6727].
- Aurellado, MEB, **VV Hilomen**, PM Alino and V Lumbab. 2009. Movement of reef fishes across boundaries of marine protected areas in Danjungan Island, Negros Occidental, Philippines. Philipp. Agric. Scientist 92(1):66-76.
- Mamauag, S, PM Alino, W Campos and **VV Hilomen**. 2009. Vulnerability assessment of coastal fisheries in the Verde Island Passage to climate change. Paper presented at the 10<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Eden Nature Park and Resort, Toril, Davao City, October 22-25, 2009.

- Canlobo, FD, P.M. Garcia, P. Premne, A.J. Songcuan, D.A. Valino, M.E.B. Aurellado and **V.V. Hilomen**. 2009. Variation in diet composition of two size classes of a goatfish (*Parupeneus barberinus*) in Dumaguete City. Paper presented at the 10<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Eden Nature Park and Resort, Toril, Davao City, October 22-25, 2009.
- Esguerra, SS, V. A. J. B. Jareno, M. F. C. Pamatmat, M. J. H. Vega, G.G. S. Villancio, M.E.B. Aurellado and **V.V. Hilomen**. 2009. Composition and abundance of echinoderms in seagrass and coral reef flat areas in Central Visayas, Philippines. Paper presented at the 10<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Eden Nature Park and Resort, Toril, Davao City, October 22-25, 2009.
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- Licuanan WY, PM Alino, WL Campos, **VV Hilomen** and R Geronimo. 2007. Simulation-based rules-of-thumb for fisheries management in Philippine coastal waters. Paper Presented at the 9<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Punta Villa Resort, Iloilo City, October 2007.
- Hilomen VV**. 2006. The condition of coral communities near a coal-fired power plant: Lessons over time. Paper presented during the Symposium series:

Collaborative Research on the Environment, UPLB CAS Anniversary, New CAS Auditorium, November 24, 2006.

**Hilomen VV.** 2006. Spatial and temporal changes in reef fish assemblages near a coal-fired power plant facility in Mauban, Quezon. Paper presented during the Symposium series: Collaborative Research on the Environment, UPLB CAS Anniversary, New CAS Auditorium, November 24, 2006.

**Hilomen VV**, Aurellado, MEB and S. Mamauag. 2005. Tetracycline-validation experiment to estimate age of rabbitfish, *Siganus fuscus*, from Bolinao, Pangasinan. Paper Presented at the 8<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Puerto Princesa, October 2005.

Pangga, GJV and **VV Hilomen**. 2005. Distribution patterns and diversity of demersal resources in Ragay Gulf. Paper Presented at the 8<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Puerto Princesa, October 2005.

**Hilomen VV**, JN Fragillano, RI Crusio, LFF Jimenez and EP Caylan, Jr. 2005. A preliminary determination of the status of demersal fisheries resources in Ragay Gulf. Paper Presented at the 8<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Puerto Princesa, October 2005.

Samaniego, BR, **Hilomen VV**, VS Ticzon, MJB San Luis, VCF Horigue, and RH Maneja. 2005. Changes in structure of reef fish communities in Ragay Gulf. Paper Presented at the 8<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Puerto Princesa, October 2005.

Campos WL, Alino PM, **Hilomen VV**, Samson R, Lasola N. 2004. Summary of results of the AFMA-MFR program and its implications. In: Arceo HO, Campos WL, Fuentes F, Alino PM, editors. The Philippine Marine Sanctuary Strategy. Proc. 3rd and 4th National Workshops. p. 37-48

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**Hilomen, V.V.**, V.S. Ticzon, and B. Samaniego. 2003. Polillo Island Conservation Program: Phase I: A preliminary survey of the coastal habitats of Polillo Island, Flora and Fauna International, Technical Report, 57 pp.

Malayang, MJR, **VV Hilomen** and WY Licuanan. 2003. Videographic methods in assessing benthic community patterns of coral reefs in Talim Bay, Philippines: Minimum frame subsamples for precision of lifeform cover estimates. Philipp. Scient. 40:191-209.

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Alino P.M., **V.V. Hilomen**, E.B. Aurellado, H.G. Alano, D.G. Ochavillo, H.O. Arceo, W.L. Campos, P.D. Beldia II, N.P. Evano, A.S. Santillan and W.Y. Licuanan. 2002. Understanding Spillover of Reef Fish Populations: Implications to Stock Maintenance, Replenishment and Management. [**Abstract**]. Poster presented to the First Conference of the Capture Fisheries Network, Bureau of Agricultural Research, Department of Agriculture, College of Fisheries, University of the Philippines Visayas, 4-6 December 2002.

*[This poster won the BEST POSTER AWARD during the 1st Conference of the Capture Fisheries Network, Bureau of Agricultural Research, Department of Agriculture held at the College of Fisheries, University of the Philippines Visayas on 4-6 December 2002 ]*

**Hilomen V.V.**, W.Y. Licuanan, P.M. Aliño and L.F. Jimenez. 2002. Status of fisheries resources in Lingayen Gulf: Easing the pressure and enhancing the resources. Paper presented to the National Resource and Social Assessment Conference, Fisheries Resources Management Project, DA-BFAR, Development Academy of the Philippines, 6 March 2002.

**Hilomen V.V.** 2002. Strategies to sustain and enhance coastal fisheries in the Philippines: A country report. In. D.A. Cruz (ed.) Coastal Fisheries Management. Report of APO Seminar on Coastal Fisheries Management (SEM-27-00), Asian Productivity Organization, Colombo, Sri Lanka, 2-7 October 2000. pp. 125-135.

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emerging food-borne parasitic zoonosis in southern Philippines. **Southeast Asian J. Trop. Med. Public Health**. 32(2): 36-42.

**Hilomen V.V.**, M.E.B. Aurellado, P.M. Alino, R. Abesamis, H.O. Arceo, T.P.U. Dacles and V. Lumbab. 2001. Reef fish assemblages in Danjungan Island, Negros Occidental: Potential for testing spillover effects. Paper presented to the 6<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Silliman University, Dumaguete City, 20-22 October 2001.

**Hilomen V.V.** and M.E.B. Aurellado. 2001. Testing spillover effects of marine fisheries reserves at Danjungan Island, Negros Occidental, Philippines: A strategy to enhance local fisheries production. A poster presented at the World Conference on Science and Technology. Philippine Association for the Advancement of Science, 13-15 September 2001, Manila Hotel, Manila, Philippines.

Aurellado, M.E.B. **V.V. Hilomen**, H. G. Alano and P.M. Aliño. 2001. Movement patterns of reef fish in Danjungan Island, Negros Occidental. Paper presented to the 6<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Silliman University, Dumaguete City, 20-22 October 2001.

**Hilomen V.V.**, C.L. Nañola, Jr. and A.L. Dantis. 2000. Status of Philippine reef fish communities. Paper presented to the Workshop on Status of Philippine Reefs, January 24, 2000, Marine Science Institute, UP Diliman, QC.

*[This paper won two awards during the 12<sup>th</sup> National Research Symposium of the Bureau of Agricultural Research, Department of Agriculture. These awards were 1) AFMA Outstanding R&D Paper Award and 2) AFMA Best R&D Paper Award]*

**Hilomen V.V.**, 1999. Patterns of inter- and intra-habitat movement of reef fish: Their implications to marine reserves. Paper presented to the 4<sup>th</sup> International Symposium of the South China Sea, UP-MSI, UP Diliman, QC, 20-21 October 1999

**Hilomen V.V.**, 1999. Life history characteristics of reef fish: Their implications to management. Paper presented to the 5<sup>th</sup> Symposium of the Philippine Association of Marine Scientists, UP MSI, UP Diliman, QC, 17-19 October 1999

**Hilomen, V.V.** 1997. Inter- and intra-habitat movement patterns and population dynamics of small reef fishes of commercial and recreational significance. PhD Thesis, Department of Marine Biology, James Cook University of North Queensland, Australia, 277 p.

**Hilomen, V.V.** 1993. Distribution patterns and community structure of reef fishes in Puerto Galera, Oriental Mindoro, Philippines (MSc. Thesis), Marine Science Institute, University of the Philippines, Diliman QC. 73pp.

**Hilomen, V.V.** and H.T. Yap. 1991. Preliminary analysis of trends in individual abundance and species richness of the families Pomacentridae and Labridae in Puerto Galera, Oriental Mindoro. Proceedings of the First Regional Symposium of the Asean-Australia living Resources in Coastal Areas Project, Manila, pp. 141-149.

**Hilomen, V.V.** and N.V. Aragon. 1990. A new record of the damselfish *Chromis ovatifomis* (Fowler) (Perciformes: Pomacentridae), from the Philippines. Philippine Journal of Science. 119(2):149-152.

**Hilomen, V.V.** and E.D. Gomez. 1988. Distribution patterns of fish communities in some Philippine reefs. Proceedings of the Sixth International Coral Reef Symposium, Australia, 3:257-262.

Gomez, E.D., W.Y. Licuanan and **V.V. Hilomen**. 1988. Reef fish-benthos correlations in the northwestern Philippines. Proceedings of the Sixth International Coral Reef Symposium, Australia, 3:245-250.

Dantis, A.L., C.L. Nanola, Jr., F.C. Castrence Jr., J.P. Cabansag, D.V. Valles, M.C. Ranola, W.L. Campos, **V.V. Hilomen**, H.B. Hernandez and P.M. Alino. 1999. Distribution patterns and community structure of reef fishes in some offshore and shelf reefs of the Philippines. In: W.L. Campos (ed.) Proceedings of the Symposium on Marine Biodiversity in the Visayas and Mindanao, University of the Philippines Visayas, 21-23 October 1998. p.86-93

Alino, P.M., M.F. Abdullah, M. Adrim, A. Cabanban, A. Chesire, **V.V. Hilomen**, W. Licuanan, J. Low, T. Luchavez, C.L. Nanola Jr., D. Ochavillo, I. Pamintuan, S. Satapoomin, and S. Stumanatpan. 1994. Patterns in the distribution of reef-associated fish communities in the ASEAN Region. In: (S. Sudara, C.R. Wilkinson and L.M. Chou eds.) Proc. 3<sup>rd</sup> ASEAN-Australia Symp. Living Coastal Resources, Vol.2 p.11-22, Chulalongkorn University, Bangkok.

Alino, P.M., **V.V. Hilomen**, V. Albaladejo and R. Miclat. 1992. The marine environment around Toledo City (1983-1987), Cebu, Philippines: Coral and fish community structure (Abstract). Proceedings of the First National Symposium in Marine Science, Network of Institutions in Marine Science (NIMS), Bolinao, Marine Laboratory, Pangasinan, Philippines, UP Marine Science Institute, 16-18 May 1990, p.103.

**Work Experience: Fisheries, Biodiversity and Management and Policy projects**

Resident Project Manager, Baseline assessments of coral and fish inside and outside of marine protected areas in Regions II and III. Integrated Coastal Resource Management Project,

ADB-DENR, MERF. October to December 2011.

Study Leader, Reef Fish Component, MIRROR Project of Integrated Coastal Enhancement-Coastal Research, Evaluation and Adaptive Management. PCMARRD-DOST Project, March 2009 to March 2012.

Reef fish consultant and Co-Team Leader. Sulu-Sulawesi Seascape Project for Cagayancillo Islands. Conservation International, March to July 2009.

Reef fish consultant and Team Leader. Sulu-Sulawesi Seascape Project for Mabini-Bauan Areas. Conservation International, May to August 2009.

Team Leader, Bio-physical surveys within the Verde Island Passage-Marine Biodiversity Conservation Corridor. Conservation International, August to December 2008.

Fisheries and Habitat Specialist. Fisheries Improved for Sustainable Harvest (FISH) Project Mid-term Evaluation. USAID, July 2006 to February 2007.

Fisheries Specialist, Sustainable Philippine Fisheries Agenda. UPMSI-MERF, June 2005- April 2006

Project Leader, Resource and Socio-Economic Assessment of Ragay Gulf, UPLBFI-FRMP-BFAR, March 2005-February 2006

Member, Philippine Working Group, Biodiversity Research Program for Development in Mindanao, Philippine-Netherlands Project, DENR-PAWB-SEARCA, January 2003 to 2006.

Fisheries specialist, Technical Support for Establishing Baseline Information for the FISH Project, Developmental Alternatives, Inc. (DAI), USAID. October 2003 – May 2004

Component Leader, Fisheries Component, Post-Resource and Social Assessment (RSA) of San Miguel Bay. Fisheries Resources Management Project-BFAR, SEARCA, UP Los Banos (Assumed position November 2002 to February 2003)

Project Leader, Polillo Island Conservation Programme: Coastal habitats of Polillo Island. Flora and Fauna International, April to December 2002.

Component Leader, Coastal Habitat Studies, Post-Resource

and Socio-economic Assessment (RSA) of San Miguel Bay. Fisheries Resources Management Project-BFAR, SEARCA, UP Los Banos. August to December 2001.

Project Leader, Fisheries Component, Malampaya Sound Ecological Studies Program, World Wildlife Fund-Philippines. January to December 2001

Study Leader, Fisheries Component. Resource and Socio-economic Assessment of Lingayen Gulf: An opportunity for better adaptive management. Fisheries Resources Management Project (FRMP). UPMSI-MERF. June 2000 to May 2001.

Project Leader, Enhancing Sustainable Fisheries Through Improved Marine Fishery Reserves (MFR's). Agriculture and Fisheries Modernization Act (AFMA) Project. UP Marine Science Institute, Diliman, QC. 1999 to 2002

Study Leader, Fisheries Component. Ocean Color for Sustainable Fisheries. Agriculture and Fisheries Modernization Act (AFMA) Projects. UP Marine Science Institute, Diliman, QC, 1999 to 2002

Head Consultant, Coral Bleaching in Pagbilao, Quezon, An Intensive Educational Campaign, Pagbilao Power Project, Maunsel Phils. August to September 1998.

Head Consultant, Standardization of field methods for assessment of coastal resources, Sulu-Celebes Project, PCAMRD-DENR, 15 October– 15 December 1998.

Fishery Biologist, Calancan Bay Management Plan, Calancan Bay Rehabilitation Project, Calancan Bay, Marinduque, EMB-SEARCA Project. October-December 1998

Reef fish specialist, SEAFDEC Consultant on sea farming project at Malalison Island, Antique. Southeast Asia Fisheries Development Center, Tigbauan, Iloilo. May 1991.

Fishery Biologist, Naujan Lake Development Project, SEARCA Project, Naujan Lake, Oriental Mindoro. November 1997 to March 1998.

Reef fish specialist, Reef assessment survey of Sombrero Island, Batangas. HARIBON Foundation Project. April 1989

Reef fish specialist, Reef assessment survey of Toledo City, Cebu. UNEP Project, Marine Science Institute, UP Diliman.

April –May 1988

Reef fish specialist, Marine resources assessment of Malampaya Sound and Honda Bay, Palawan. Palawan Integrated Area Development Project (PIADP). October 1987-March 1988.

## **Environmental Impact Assessment and Baseline Assessment**

### **[Oil and gas]**

Marine Biologist, Service Contract 54: Exploration Phase Project, Nido Petroleum Ltd., Northwestern Palawan, Philippines, Geosphere Technologies, Greenhills, Metro Manila, April to December 2008

Team Leader, Marine Module, Environmental Impact Assessment Study of San Andres, Quezon for Oil Exploration Service Contract 43. Premier Oil, Geosphere Technologies, Greenhills, Metro Manila, November 2006 to February 2007

Team Leader, Fishing community study: Bondoc Peninsula and Burias Island in Ragay Gulf, Philippines for Oil Exploration Service Contract 43. Premier Oil, Geosphere Technologies, Greenhills, Metro Manila, November 2006 to February 2007

Team Leader, Marine Module, Environmental Impact Assessment Study of San Andres, Quezon for Oil Exploration Service Contract 43. Premier Oil, Geosphere Technologies, Greenhills, Metro Manila, November 2006 to February 2007

Marine Biologist, EIA of the proposed Galoc Oil Field Area Development (GFAD) Project: Biological environment, Geosphere Technologies, Greenhills, Metro Manila, February 2006.

### **(non-oil and gas)**

Team Leader, Marine Component, Baseline Assessment of Coastal Environment of Lanuza Bay for MMDC Nickel Mining Expansion Project, BMP, May to July 2011.

Team Leader, Marine Component, Benthic Ecology Report of Hidd Bridge Reclamation Project, Manama, Bahrain. Nature Environmental Studies, Consultation & Services, May to July 2010.

Team Leader, Marine Component, Environmental Impact

Assessment Study Sand Mining Project of Northern Access Mining Inc. (NAMI), Geosphere Technologies, Greenhills, Metro Manila, February to May 2010.

Team Leader, Marine Component, Environmental Impact Assessment Study of the Proposed Offshore Sand Quarry Project in Barangay Taburi, Rizal, Palawan, MGEMS Los Banos, Laguna, April 2010 to present.

Team Leader, Marine Environmental Baseline Survey –TDIC Eastern Mangrove Development EIA, Dome Oilfield Engineering and Services, Abu Dhabi, UAE, August to December 2007.

Team Leader, Baseline assessment study of the marine environment and EIA of the Mindoro Nickel Project, Intex Philippines. INTEX Philippines, Licheltechnologies, Ortigas Centre, Mandaluyong, Metro Manila, Philippines, March 2008 to 2010

Team Leader, Environmental Site Assessment Study, Orica Nitrates, Bacong, Negros Oriental. Lichel Technologies, Ortigas Center, MetroManila, April-June 2007

Consultant (Marine Biologist), Coastal Baseline Assessment of Sungai Liang Industrial Park Development Project, Brunei, Halcrow, Philippines February-July 2005.

EIA Preparer (Marine Biologist), Environmental Impact Assessment (EIA) of the Panay River Flood Control Project (Phase I), Capiz, Madecor Group of Companies, Los Banos, Laguna, November 2002 to January 2003.

EIA Preparer (Marine Biologist), Marine and Aquatic Biota Study of the Coastal Environment at Barangay Balacanas, Tagoloan, Misamis Oriental, for the EIA of STEAG 200 MW Coal Fired Power Plant. Hatch Associates Inc., August 2001 to April 2002.

Team Leader, Marine Component, Baseline and Rapid Resource Appraisal Study of Pinamalayan, Oriental Mindoro, Mindoro Nickel Project, Mindex Inc., BHP Environmental Philippines, Inc. August to November 1999.

EIA Preparer and Team Leader, Marine Component, Environmental Impact Study of Nonoc Island, Surigao, del Norte, Philnico, Inc., Geosphere Technologies, Inc. June to September 1998.

Reef fish specialist, Resource Assessment Team, General Santos City (Philippine Aid Plan), Louis Berger International, Inc./Dames and Moore Consultants. February to April 1993

EIA Preparer (Reef Study Component), Environmental Impact Assessment Study, FFPI Bauang Power Plant Project, Bauang, La Union, BHP Engineering Philippines. April 1993

Member, EIA Study Team, De-bottlenecking Project for Caltex Philippines, Batangas Refinery. UP Diliman Science Research Foundation. April 1992

EIA Preparer-Team Leader (Reef fish and coral specialist), EIA Study Team, Reef assessment of impact areas for the Quezon Coal Fired Power Plant, Pagbilao, Quezon. BHP Engineering Philippines. December 1991 to March 1992

Reef fish specialist, EIA Study Team, Assessment of marine impact areas for the Shell Tabangao Refinery, Tabangao, Batangas. UP Diliman Science Research Foundation. April 1991

Team Leader (Reef fish and coral specialist), EIA Study Team, Reef assessment of impact areas in the Moro Gulf, Philippine Geothermal Inc. Mt. Apo Project, Environmental Primemovers of Asia, Inc. October-November 1990

Reef fish specialist, EIA Study Team, Marine resources assessment of Pamilacan Island, Cuyo, Palawan. ANSCOR Group of Companies. May 1990

Reef fish and coral specialist, EIA Study Team, Marine ecological monitoring study of Calancan Bay, Marinduque. MARCOPPER, Inc. November 1987 to February 1988

### **Energy and Power Plants (Environmental monitoring)**

Team Leader, Marine survey of GN Power Facility at Mariveles, Bataan, Geosphere Technologies, Greenhills, Metro Manila September 2010 to present.

Team Leader, Verification of coral reef study in Redondo Peninsula 2 x 150 MW Coal-Fired Thermal Power Plant, Subic Bay, Philippines. GHD, May to July 2009.

Team Leader, Environment Monitoring Project: Marine Biology and Oceanography of the Quezon Power Limited,

Mauban, Quezon, under Halcrow Phils., 2004 to 2006 and under GHD Philippines, 2006 to present.

Team Leader, Monitoring Study of the Aquatic Biota Around the 1000MW Sta. Rita Power Plant in Sta. Rita, Batangas, First Gas Power Corporation, under BHP Environmental Philippines from 2000 to 2001, under Hatch Associates from January 2001 to January 2002 and under Apercu Consultants, Inc. from January 2002 to 2010.

Team Leader, Assessment and valuation of coastal ecosystems in Semirara Island, National Power Corporation (NPC), Diliman, Quezon City. February – June 2008.

Team Leader, Marine survey of GN Power Facility at Mariveles, Bataan, Geosphere Technologies, Greenhills, Metro Manila December 2007

Project Leader, Fish Stock Assessment of Balayan Bay, Batangas, Calaca, Batangas, around the Calaca Coal-Fired Power University of the Philippines Los Banos Foundation, Inc. and National Power Corporation. August to December 2002.

Team Leader, Study of the Immediate Marine Environment of the 210 MW Power Plant in Bauang, La Union. Bauang Private Power Corporation, Hatch Associates, Inc. July 1998 to April 2003.

Team Leader, Monitoring of Marine Environment of the Sual Coal-Fired Power Project, Sual, Pangasinan. BHP Environmental, Phils. June 1998 to May 1999.

### **Seminars/Workshops and Trainings Attended**

2012	Resource Person, Training-Workshop on the Assessment of Management Effectiveness of the Marine Protected Areas in the Six Coastal Sites in Misamis Occidental. USAID, SEARCA, Worldfish and FIN, 14-15 August 2012, Sinacaban, Misamis Occidental.
2012	Mentor, Fisheries Research Training for State Universities and Colleges, Conservation International-Marine Environment Resources Foundation, May 25-26, 2012, San Juan, Batangas.
2011	Resource Person, National ICM Training Course in Vietnam



- with Focus on Fisheries Management. Delivered a lecture on “Ecosystem-based approach to fisheries management: mainstreaming strategies into the ICM process.” PEMSEA, April 25-28, 2011, Haiphong City, Vietnam.
- 2010                      Mentor, Enhancing the roles of State Universities and Colleges in Ensuring the Implementation of Coral Triangle Initiative Plan of Action at the Local Level, Marine Environment Resources Foundation-Conservation International. June 2010 to present.
- 2009                      Resource Person, Coastal Resources Management, Training Workshop on Capacity Building for the Watershed Management Council of the Kanan Water Management Project. World Bank and Global Environmental Facility-Department of Environment and Natural Resources, Grand Villa Resort and Butterfly Center, Tranca, Bay, Laguna, November 24-27, 2009.  
Participant, National Forum on Climate Change, Vulnerability and Poverty, National Academy of Science and Technology Philippines. The Manila Hotel, November 16, 2009.  
Examiner, MSc Thesis of Rollan Geronimo, Marine Science Institute, University of the Philippines, Diliman, QC
- 2008                      Examiner, PhD Candidacy of Rachel Gotanco, Marine Science Institute, University of the Philippines, Diliman QC.
- 2007                      Paper Presenter, 9<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Punta Villa Resort, Iloilo City, October 2007
- Thesis examiner, “The effects of coral transplantation and giant clam restocking on the structure of fish communities on degraded patch reefs”, Patrick Cabaitan, University of the Philippines, Diliman, March 4, 2007
- 2006                      Panelist, Executive Training in Natural Resource Management, May 8-12, 2006, SEARCA
- Paper Presenter, Symposium series: Collaborative Research on the Environment, UPLB CAS Anniversary, New CAS Auditorium, November 24, 2006.
- 2005                      Paper Presenter, 8<sup>th</sup> National Symposium in Marine Science, Philippine Association of Marine Science, Puerto Princesa, October 2005

Trainor, Field Methods in the Assessment of Coastal Resources, Fisheries Improved for Sustainable Harvest (FISH) Project, April 2005, Mactan City, Cebu.

2004                      Paper Presenter, "The Philippine Marine Sanctuary Strategy", Cagayan de Oro City, June 2004  
Lecturer, Biophysical Quality Monitoring of Aquatic Communities, Year 2004 Refresher Course on Environmental Compliance Monitoring, Santa Rita 1000MW and San Lorenzo 500MW CCGT Power Plant Projects, DENR-PENRO and FGPC, Manolo M. Lopez Development Center, Antipolo, Rizal, December 2004

2003                      Resource Person, Methodology Refinement Workshop, The Philippines-Netherlands Biodiversity Research Programme for Development in Mindanao, 19-22 March 2003, SEARCA, College, Laguna.

Resource Person, Operational Planning Workshop, The Philippines-Netherlands Biodiversity Research Programme for Development in Mindanao, 14-17 February, 2003, Oroquieta City, Misamis Occidental.

2002                      Lecturer, Biophysical Quality Monitoring of Aquatic Communities, Year 2002 Refresher Course on Environmental Compliance Monitoring, Santa Rita 1000MW and San Lorenzo 500MW CCGT Power Plant Projects, DENR-PENRO and FGPC, Manolo M. Lopez Development Center, Antipolo, Rizal, December 12, 2002.

Paper Presenter, "Enhancing local fisheries: Testing benefits from marine reserves", Research Highlights 30<sup>th</sup> Anniversary Foundation of the College of Arts and Sciences, UP Los Baños, 18 November 2002

Resource Person, Integration Workshop, The Philippines-Netherlands Biodiversity Research Programme for Development in Mindanao, 5-10 November 2002, SEARCA, College, Laguna.

Review Panelist, Sixth Zonal Research and Development Review, Southern Luzon Zonal Center for Aquatic and Marine R & D, TREES, UP Los Baños, 28-29 October 2002.

Participant, Fisheries Management in the Philippines

Workshop, Coastal Resources Management Project, DENR-USAID, 24-25 September, 2002 Rembrandt Hotel, Quezon City.

Panelist, 3<sup>rd</sup> National Workshop on Enhancing Sustainable Fisheries Through Improved Marine Fishery Reserves (MFR's). Agriculture and Fisheries Modernization Act (AFMA) Project. Cagayan de Oro, 7-9 August 2002

Resource Person, Integrated Coastal Management Meeting for Balayan Bay and Adjacent Bays in Peninsula, Batangas. Environment and Natural Resources Office, World Wildlife Fund-Philippines, Batangas, 11 June 2002

Thesis Reader, "The influence of benthic characteristics and monsoon on fish assemblages in reefs of Lingayen Gulf", Nguyen Van Quan, MS student at the Marine Science Institute, UP Diliman, QC

Thesis Examiner, "Seasonal diversity and abundance of coral reef fish settlers in Darvel Bay, Sabah", Zarinah Waheed, Borneo Marine Research Institute, Universiti Malaysia Sabah. 15 October 2002

Resource Person, Seminar-Workshop on Philippine R&D Agenda on Biodiversity Conservation. Protected Areas and Wildlife Bureau (PAWB) and Ecosystems Research and Development Bureau (ERDB), ERDB Auditorium, Los Banos, Laguna, 20-21 March 2002

Paper Presentor, "Status of the Fisheries Resources in Lingayen Gulf: Easing the pressure and enhancing the resources", National Resource and Social Assessment Conference, Fisheries Resource Management Project, Development Academy of the Philippines, Tagaytay City, 4-7 March 2002

Participant, Training for Post Resource and Socio-economic Assessment, Fisheries Resource Management Project, DA-BFAR, Villa Caceres, Naga City, 10-11 January 2002.

2001

Resource Speaker, Training on Integrated Coastal Resource Management, SEARCA, College, Laguna, 1-5 October 2001

Paper Presentor, "Reef fish assemblages in Danjungan Island, Negros Occidental: Potential for testing spillover effects".,

Philippine Association of Marine Science, Dumaguete City, 20-21 October, 2001

Lecturer, "Coastal Fisheries: Dynamics and effects of fishing", Training Course on Coastal Ecology for Economists, EDSA-Shangrila, Economy and Environment Program for Southeast Asia (EEPSEA), 25-31 May 2001.

Study Leader, Survey of parasites in fish and other aquatic animals in Davao Oriental. A project under Dr. Vicente Belizario of the UP College of Public Health. July 2001.

Resource Person, Orientation and Training Workshop on the Project Components and Methodologies of the Irrawaddy Dolphin Conservation Program in Malampaya Sound, WWF-Philippines, Badjao Inn and Restaurant, Puerto Princessa City, Palawan, 11 February 2001.

2000

Participant, National Biodiversity Conservation Priority-Setting Workshop, PAWB-CI-UP BCP-CIDS, White Rock, Subic Bay, Olongapo City, 4-8 December 2000.

Paper presenter, "Strategies to sustain and enhance coastal fisheries in the Philippines", Seminar on Coastal Fisheries Management (SEM-27-00), Asian Productivity Organization, Colombo, Sri Lanka, 2-7 October 2000

Lecturer, "Reliability of aging techniques in fish stock assessment", Training/Workshop on Fish Aging, International Marinelife Alliance (IMA) and US AID Project, IMA Central Office, Pasig City October 12-13, 2000.

Lecturer, Coastal Resources Management, American Peace Corps Volunteers, April 5, 2000, Caba, La Union

Trainor, Fishery Stock Assessment Tools, Fisheries Resources Management Project, Bolinao Marine Laboratory, UP MSI, March 12, 2000.

Paper Presenter, "Status of reef fish communities in the Philippines", Workshop on the Status of Philippine Reefs, UP Marine Science Institute, Packard Foundation-Australian Institute of Marine Sciences, January 24, 2000

Paper Reviewer, "Deriving Recruitment Patterns from a Survey of Juvenile Grouper (Pisces: Serranidae) Occurrences in the Philippines", Diliman Science. January 2000.

- 1999 Paper Presentor, "Patterns of inter- and intra-habitat movement of reef fish: Their implications to marine reserves", 4<sup>th</sup> International Symposium of the South China Sea, UP-MSI, 20-21 October 1999
- Paper Presentor, Life history characteristics of reef fish: Their implications to management 5<sup>th</sup> Symposium of the Philippine Association of Marine Scientists, UP MSI, 17-19 October 1999
- Member, Panel of Judges, Best Paper Competition, Review of research and development for inland waters of southern Luzon. Southern Luzon Zonal Center for Inland Waters Research and Development. TREES, UP Los Banos, Laguna, 8-9 December 1999
- Lecturer, Coastal Resources Management, American Peace Corps Volunteers, May 5, 1999, Iloilo City.
- 1997 Participant, Review of Marine Protected Areas in the Philippines. Marine Science Institute, UP Diliman, QC, December 15-16, 1997
- Participant, Review of research and development for inland waters of southern Luzon. Southern Luzon Zonal Center for Inland Waters Research and Development. Los Banos, Laguna, 1-2 December 1997.
- Participant, Inter-agency workshop on the marine scientific researches in the Kalayaan Islands, Philippines. Marine Science Institute Auditorium, University of the Philippines, Diliman, QC, September 3, 1997.
- 1996 Abstract submitted, 'Variations in catch rates and composition between day and night soaks from six different reef habitats (Poster Presentation): Second World Fisheries Congress, Brisbane, Australia, 28 July-2 August, 1996.
- 1995 Participant, Fisheries Biology for the Fishing Community Workshop, James Cook University of North Queensland, Townsville, Australia, June 4, 1995.
- 1993 Advanced Tropical Fisheries Conference and Workshop,

Bolinao Marine Laboratory, Marine Science Institute, University of the Philippines, Bolinao, Pangasinan, June 1993.

1992 Seminar-Workshop on Soft Bottom Communities, PCARRD, Los Baños, Laguna.

1991 Workshop on Mangrove Productivity, Philippine Council for Agriculture, Forestry and Natural Resources Research and Development. PCARRD, Los Baños, Laguna.

1989 First Regional Symposium of the ASEAN-Australia "Living Resources in Coastal Areas", Silahis International Hotel, Manila, January 30- February 1, 1989.

Regional Data Integration Workshop, ASEAN-Australia "Living Resources in Coastal Areas", Marine Science Institute, University of the Philippines, February 2-4, 1989.

First General Assembly and Symposium, Association of Southeast Asian Marine Scientists, Sulo Hotel, Diliman, Quezon City, February 6-7, 1989.

UNDP-ACIAR Giant Clam Culture Training Course, Bolinao Marine Laboratory, Marine Science Institute, University of the Philippines, Bolinao, Pangasinan, April 23-27, 1989.

22nd Teaching Seminar and Workshop, University of the Philippines at Los Baños, Laguna, October 23-27, 1989

1988 National Symposium and Workshop of the ASEAN-Australia "Living Resources in Coastal Areas", Philippine Center for Economic Development, University of the Philippines, Diliman, Quezon City, April 6-7, 1988

First Coastal Living Resources Project: National Computer Methods Workshop, Marine Science Institute, University of the Philippines, Diliman, Quezon City, April 8, 1988.

Sixth International Coral Reef Symposium, James Cook University, Townsville, Queensland, Australia, August 8-12, 1988.

UNDP-UPMSI Synthesis Workshop on marine Science

Programs in the Philippines, Asian Institute of Tourism, University of the Philippines, Diliman, Quezon City, November 30- December 2, 1988.

1987 International Tropical Fisheries Conference and Workshop, College of Fisheries, University of the Philippines, October 17-23, 1987.

ASEAN-Australia Coastal Living Resources Project In-country Training Workshop on Soft Bottom Communities, Bolinao Marine Laboratory, Marine Science Institute, University of the Philippines, Bolinao, Pangasinan, November 16-22, 1987.

UPMSI-UNDP Workshop on the Assessment of Marine Physical Science Program in the Philippines, Philippine Center for Economic Development Hostel, University of the Philippines, Diliman, QC, November 25, 1987.

1986 UNEP-UNESCO Coral Taxonomy Workshop and Training Course and Methods of Fish Visual Census Workshop, Bolinao Marine Laboratory, UP Marine Science Institute, Bolinao, Pangasinan, May 12-25, 1986.

National Echo Training Workshop on the Survey Methods of the ASEAN-Australia Coastal Living Resources Project, Bolinao Marine Laboratory, UP Marine Science Institute, Bolinao, Pangasinan, August 2-12, 1986.

1979 National Science Development Board Sixth Youth Research Apprenticeship Action Program (YRAAP VI), University of the Philippines at Los Baños, April-May, 1979.

**NINA RIVERA INGLE**  
**Conservation Ecologist**

nri2@cornell.edu, ninaingle@fastmail.fm  
309 6<sup>th</sup> A St., Ecoland, 8021 Davao City, Philippines  
Cell +63 920-4858, Landline +63 82 299-3870

**EDUCATION**

**Ph.D., Cornell University, Natural Resources, Ithaca, New York, USA (2001)**  
Dissertation: Seed Dispersal in Philippine Montane Rainforest and Successional Vegetation:  
Role of Birds, Bats, and Wind

**M.S., Cornell University, Natural Resources, Ithaca, New York, USA (1990)**  
Thesis: Natural History of Bats in a Philippine Rainforest

**Tropical Biology: An Ecological Approach. Organization for Tropical Studies,  
Costa Rica (1988)**

**B.S. in Biology, *magna cum laude*, Ateneo de Manila University, Philippines (1985)**

**High School Diploma with Honors, Ateneo de Davao University, Philippines (1981)**

**SCHOLARSHIPS and AWARDS**

**Parker Gentry Award for Conservation, The Field Museum (2012)**  
**Biodiversity Emerging Leader Award, Bay and Paul Foundations (2005-2007)**  
**Andrew D. White Fellowship, Cornell University (1987-1989: tuition and stipend)**  
**President's Scholarship, Ateneo de Manila University (1981-1985: tuition and room)**

**WORK EXPERIENCE**

**Acting Principal, High School Unit, Ateneo de Davao University, Philippines (2014-present)**

- Administrative and academic head of a four-year private high school (1870 students, 200 teachers)

**President, Wildlife Conservation Society of the Philippines (2010-present)**

- Oversaw the organizing of four annual Philippine Biodiversity Symposia, which draw 150-250 participants from throughout the Philippines and abroad, including selection of host institution, solicitation and review of presentations, and organization
- Chaired monthly electronic meetings of the 13-member board

**Curriculum Consultant, Ateneo de Davao High School, Philippines (2012-2014)**

- Conceptualized integration of environmental content and research into academic subjects
- Conducted in-house workshops on environmental education for teachers and administrators

**Consultant, Bat Conservation International (2009-2012)**

- Conceptualized and led the Philippine Cave Bat Status report project working with wildlife biologists, cavers, the Department of Environment, for cave bat conservation
- Co-produced the audio-visual presentation *Saving Philippine Cave Bats*
- Designed and served as the lead facilitator for workshops on cave bat conservation



**Member of Steering Committee and the Cave Bat Team, Southeast Asia Bat Conservation and Research Unit (2011-present)**

- Contributes to planning of SEABCRU Cave Bat Team through regular online meetings
- Facilitator, Cave Bat Training Workshop (Hat Yai, Thailand; July 2012)
- Participant at 1st SEABCRU Planning Meeting and 2<sup>nd</sup> International Southeast Asian Bat Conference (Bogor, Indonesia; July 2011)

**Instructor, Graduate School, Ateneo de Davao University, Davao City, Philippines (2009)**

- Mindanao Ecology and Globalization/Agriculture and Environmental Development
- Methods of Research

**Facilitator, Training Workshops**

- Integrating Subjects through Visualizing Relationships in the Environment (with Glenn Depra), Ateneo de Davao High School, (May 2014)
- Writing a Scientific Paper, Cor Jesu College, Digos, Davao del Sur (July 2009)
- Mentoring Thesis Research, Ateneo de Davao University, Davao City, Philippines (Aug 2008)
- Ecological Research, Shrine Hills, Davao City (April 2007)

**Curriculum Developer (2008)**

- Developed a thematic science curriculum for Keys School, Mandaluyong, Metro Manila

**Researcher, Environmental Education, Philippines (2006-2007)**

- Worked with teachers and other collaborators on reviewing environmental education efforts in the Philippines, and identifying entry points in the curriculum, with particular reference to elementary schools in upland areas around forest with indigenous communities

**Biodiversity Consultant, Philippine Eagle Foundation, Mindanao, Philippines (2005)**

- Advised Philippine Eagle Foundation field team on biodiversity surveys in the Eastern Mindanao corridor

**Editor, Proceedings of the Wildlife Conservation Society of the Philippines (2002-2006)**

- Developed guidelines for the submission, review, and proof-reading of articles for the Proceedings of the Wildlife Conservation Society of the Philippines
- Oversaw internal and external review of submitted manuscripts by a pool of over 50 reviewers for three issues of the Proceedings of the Wildlife Conservation Society of the Philippines, a professional organization of over 150 members

**Forest Conservation Consultant, Unifrutti Philippines (2004)**

- Assessed priorities for forest conservation and watershed rehabilitation on Mt. Kitanglad
- Developed a project proposal for forest conservation and restoration and improving the lives of upland dwellers, especially indigenous people, on Mt. Kitanglad in Mindanao

**Co-adviser to 3 M.S. Students, Biology Department, Ateneo de Manila University and Institute of Biology, University of the Philippines, Diliman (2003-2004)**

**Conservation Ecologist, Threatened Species Program, Haribon Foundation for the Conservation of Natural Resources, Quezon City, Philippines (2002-2003)**

- Designed and coordinated a 1-wk field course in Conservation Ecology aimed primarily at graduate students
- Oversaw the administration and review process of a research grants program
- Site visits to the Visayas to assist conservation organizations in proposal development
- Project planning and proposal development

**Teaching Assistantships at Cornell University**

- Religion, Ethics, and the Environment (Fall 2000)
- Environmental Conservation (Spring 2000)
- Introductory Ecology (Fall 1990)
- Introductory Biology (Fall 1989-Spring 1990)

**Ph.D. Field Researcher, Mt. Kitanglad, Bukidnon, Mindanao, Philippines (1996-1999)**

- Designed and ran seed traps in montane rainforest and successional vegetation
- Sampled forest vegetation and collected and identified herbarium specimens, including collecting local names and information from experts from the indigenous peoples' community
- Monitored flowering and fruiting of marked plants
- Sampled bat community with mist nets; collected voucher specimens of non-flying mammals
- Supervised field team of two Filipinos and two US volunteers

**Organizer and Trainer, Mt. Kitanglad Plant and Mammal Identification Workshop, Bukidnon, Mindanao, Philippines (1999)**

- Led workshop on identification of montane forest plants and mammals for staff of Mt. Kitanglad Range Nature Park and representatives of indigenous communities

**Rapid Color Field Guide Developer, The Field Museum, Chicago, USA (1999)**

- Prepared rapid color field guides to common plants of Mt. Kitanglad and to the bats and non-flying mammals of Mindanao in association with Dr. Robin Foster
- Secured funding for reproduction of guides from the Filipino-American community in Chicago

**Tree Plantation and Reforestation Consultant, Bukidnon, Mindanao, Philippines (1995)**

- Developed proposal for a tree plantation and reforestation project on privately-owned grasslands within the ancestral land of indigenous communities
- Visited plantation in Sumatra, Indonesia and consulted CIFOR staff in Bogor, Indonesia

**Protected Areas Consultant, Sibuyan Island, Philippines (1994)**

- Liaised with government offices leading to the proclamation of Mt. Guiting-guiting Nature Park
- Directed construction of a cardboard relief model of the island
- Led discussions of proposed park boundaries with community leaders
- Drafted preliminary management plan

**Biodiversity Consultant, Sibuyan Island, Philippines (1993)**

- Compiled environmental information on Sibuyan for its inclusion in the European Community's National Integrated Protected Areas Project for the Philippines

**Research Associate, Institute for Environmental Science for Social Change, Quezon City, Philippines (1992-1993)**

- Designed a research project on forest conversion in Bukidnon, Mindanao using ecological, anthropological, and remote sensing methods; WWF funding obtained
- Conducted preliminary fieldwork on perceptions of an indigenous community of the forest
- Supervised 3-person project staff

**Field Biologist, Mt. Kitanglad, Mindanao, and Sibuyan Island (1992, 1993)**

- Surveyed vertebrates as part of teams led by biologists from The Field Museum

**Field Research Assistant, Mt. Apo, Mindanao (1986-1987)**

- Observed and radio-tracked wild Philippine flying lemurs (*Cynocephalus volans*)
- Conducted feeding trials on captive flying lemurs

**Assistant Biologist, Philippine Eagle Conservation Program, Davao City (1985-1986)**

- Monitored Philippine Eagles (*Pithecophaga jefferyi*) in captive breeding program
- Surveyed for wild Eagles

**RESEARCH GRANTS**

Cornell International Institute for Food, Agriculture, and Development (1996-1999)

Chicago Zoological Society, Conservation and Research Fund (1999)

Bat Conservation International (1998)

Sophie Danforth Conservation Biology Fund, Rhode Island Zoological Society (1998)

Garden Club of America, Award in Tropical Botany (1997)

**CONFERENCES AND WORKSHOPS**

National Consultation on the National Biodiversity Strategy and Action Plan (Manila, Philippines; December 2013 - invited participant)

IUCN workshop on the identification criteria and delineation of sites that contribute significantly to the global persistence of biodiversity, Washington (Front Royale, Maryland, USA; March 2013 - invited participant)

North American Symposium for Bat Research (Puerto Rico, USA; Oct 2012): *"Assessing the Status of Philippine Cave Bats and Working for their Conservation"*

Bat Conservation International (Austin, Texas, USA; Sept 2012): *"Promoting Bat Conservation in the Philippines"*

Association for Tropical Biology & Conservation (Bali, Indonesia; July 2010): *"Promoting Biodiversity Conservation Research by Undergraduate Thesis Students in the Philippines"*

Association for Tropical Biology & Conservation - Asia Pacific Chapter, (Kuching, Sarawak, Malaysia; April 2008): *"Biodiversity Conservation in the Philippines in collaboration with Educational Institutions: Challenges and Opportunities" (Invited Plenary Address)*

Universiti Malaysia Sarawak (Kuching, Sarawak, Malaysia; April 2008): *"Seed Dispersal by Wind, Birds, and Bats in Montane Forest and Adjacent Successional Vegetation, on Mindanao, Philippines"*

National Aviary (Pittsburgh, USA; August 2006): *"Wildlife Research, Education and Conservation in Rural Communities in the Philippines"*

Philippine Eagle Foundation (Davao City, Philippines; Feb 2006): *"Community Environmental Education, with a focus on Upland Mindanao"*

Philippine Educators for the Environment Conference (Quezon City, Philippines; Dec 2005): *"Role of Upland Schools Near Forest In Conservation"*

Symposium on Network of Tropical Ecology and Biodiversity Conservation in SE Asia (Tunghai University, Taiwan; Dec 2005): *"Recent Developments in Biodiversity Research and Conservation in the Philippines, with Emphasis on Networking"*

Wildlife Conservation Society of the Philippines' Symposium on Philippine Biodiversity (Tuguegarao, Philippines; Apr 2005): "*Elementary Education and Forest Conservation in Upland Mindanao*"

Flora Malesiana Symposium (Los Baños, Philippines; Sept, 2004): "*Floristic Composition of Lower Montane Rainforest and Successional Vegetation on Mt. Kitanglad, Mindanao, Philippines*"

Launching of BirdLife's *Saving Asia's Threatened Birds* (Tokyo, Japan; Nov 2003): "*Conservation of Threatened Species in the Philippines*"

## **SCIENTIFIC PUBLICATIONS**

Ong, P.S. and **N. Ingle**. 2011. A national treasure: Leonard L. Co (1953-2010). *Social Science Diliman* 7:1, 117-119.

Sedlock, J.L., **N.R. Ingle** and D.S. Balete. 2011. Enhanced sampling of bat assemblages: a field test on Mount Banahaw, Luzon. *Fieldiana: Life and Earth Sciences* 2: 96–102.

Gonzales, R. S., **N.R. Ingle**, D.A. Lagunzad, and T. Nakashizuka. 2009. Seed dispersal by birds and bats in lowland Philippine forest successional area. *Biotropica*, 41: 452–458.

Helgen, K.M, D. Kock, R.K.S.C. Gomez, **N.R. Ingle**, and M.H. Sinaga. 2007. Taxonomy and natural history of the Southeast Asian fruit-bat genus *Dyacopterus*. *Journal of Mammalogy* 88(2):302-318.

Heaney, L.R., B.R. Tabaranza Jr., D.S. Balete, E.A. Rickart, and **N.R. Ingle**. 2006. The mammals of Mt. Kitanglad Nature Park, Mindanao, Philippines. *Fieldiana: Zoology, new series*, 112: 1-63.

**Ingle, N.R.** 2003. Seed dispersal by wind, birds, and bats between Philippine montane rainforest and successional vegetation. *Oecologia*, 134:251-261.

Heaney, L.R., D.S. Balete, M.L. Dolar, A.C. Alcala, AT.L. Dans, P.C. Gonzales, **N.R. Ingle**, M.V. Lepiten, W.L.R. Oliver, P.S. Ong, E.A. Rickart, B.R. Tabaranza Jr., and R.C.B. Utzurrum. 1998. A synopsis of the mammalian fauna of the Philippine Islands. *Fieldiana, Zoology, new series*, 88:1-61.

Peterson, A.T., **N. Ingle**, and R. Fernandez. 1995. Notes on the nesting behavior of the White-bellied Woodpecker. *Wilson Bulletin*, 107:182-184.

Wischusen, E.W., **N. Ingle**, and M.E. Richmond. 1994. Rates of digesta passage in the Philippine flying lemur, *Cynocephalus volans*. *Journal of Comparative Physiology B*, 164:173-178.

**Ingle, N.R.** 1993. Vertical stratification of bats in a Philippine rain forest. *Asia Life Sciences*, 2:215-222.

Goodman, S.M. and **N.R. Ingle**. 1993. Sibuyan Island in the Philippines — threatened and in need of conservation. *Oryx*, 27:174-180.

Wischusen, E.W., **N.R. Ingle**, and M.E. Richmond. 1993. Observations on the reproductive biology and social behaviour of the Philippine flying lemur (*Cynocephalus volans*). *Malayan Nature Journal*, 46:65-71.

**Ingle, N.R.** 1992. The natural history of bats on Mt. Makiling, Luzon Island, Philippines. *Silliman Journal*, 36:1-26.

**Ingle, N.R.**, and L.H. Heaney. 1992. A key to the bats of the Philippines. *Feldiana, Zoology, new series*, 69:1-44.

#### **EDUCATIONAL MATERIALS ABOUT PHILIPPINE CAVE BATS**

*Saving Philippine Cave Bats*. 2012. Audio-Visual Presentation designed and produced by **N. Ingle**, D. Waldien, and R. Gomez.

*Cave Bats of the Philippines*. 2010. 12-page color booklet written by J. Sedlock and **N. Ingle**.

#### **RAPID COLOR FIELD GUIDES**

Laminated sheets of color photographs, with illustrations and measurements in mammal guides, produced by Environmental and Conservation Programs, The Field Museum, Chicago

**Ingle, N.R.**, J.L. Sedlock, and L.H. Heaney. 1999. Bats of Mindanao Island, Philippines.

Heaney, L.H., **N.R. Ingle**, J.L. Sedlock, and B.R. Tabaranza Jr. 1999. Non-Flying Mammals of Mindanao Island, Philippines.

**Ingle, N.**, and R.L. Baylomo. 1999. Common Shrubs and Trees of Mt. Kitanglad.

#### **AFFILIATIONS**

Wildlife Conservation Society of the Philippines: Founding Member; President (2010-present); Secretary (1993-1995); Board Member (1993-95, 2002-05, 2010-present); Chair, Editorial Committee (2003-2006)

Chiroptera Specialist Group, Species Survival Commission, International Union for the Conservation of Nature: Philippines representative (1998-present)

Southeast Asia Bat Conservation and Research Unit: member of the Steering Committee and the Cave Bat Committee (2011-present)

Cave Invertebrates Specialist Group, Species Survival Commission, International Union for the Conservation of Nature (2014-present)

Biodiversity Conservation Society of the Philippines: Board member (2014-present)

Research Associate, The Field Museum, Division of Mammals, Chicago, USA

American Society of Mammalogists: Lifetime Member (1988-present)

Advisory Committee, Foundation for the Philippine Environment (2011-present)

Philippine Native Plant Conservation Society, Inc.: Member (2011-2013)

Ateneo de Davao University: Member, Board of Trustees (2012-present)

#### **REVIEW OF MANUSCRIPTS and GRANT APPLICATIONS**

Bat Conservation International

*Ecological Research*

*Journal of Mammalogy*

*Tropical Conservation Science*

*Silliman Journal*

Earthwatch Institute

*Feldiana*

*Malayan Nature Journal*

*Asia Life Science*

#### **LANGUAGES**

**English** - Excellent oral, reading, and writing skills

**Tagalog** - Fair oral, reading, and writing skills

**Cebuano** - Fair oral, reading, and writing skills

**Spanish** - Intermediate comprehension, rusty oral and writing skills

**Bahasa Indonesia** - Beginner's oral, reading, and writing skills

**CURRICULUM VITAE of *PERRY S. ONG***  
(as of 31 July 2014)



**1. Basic Information**

Date of Birth: October 2, 1960  
Place of Birth: Caloocan City, Philippines  
Nationality: Filipino  
Civil Status: Married w/ two children  
Language Proficiency: English and Filipino: Excellent (oral and written)

**2. Contact Information:**

Office address: Institute of Biology, University of the Philippines  
Diliman, Quezon City 1101  
Office Telephone No: (63-2)-920-5471  
Residence: 3rd St. Marymount Village, Años, Los Baños, Laguna,  
Residence Telephone No. (63-49)-536-4460  
Email: [perryong@up.edu.ph](mailto:perryong@up.edu.ph); [ongperry@yahoo.com](mailto:ongperry@yahoo.com)

**3. Current Position(s):**

- a) Professor in Wildlife Biology, Institute of Biology, University of the Philippines Diliman, since July 2005;
- b) Chair, Philippine Long Term Ecological Research Network (PhILTER), since 2011
- c) University Scientist III, University of the Philippines, 2012-2014
- d) Member, National Renewable Energy Board, since 24 September 2013
- e) Member, Board of Trustees, Philippine Eagle Foundation, since December 2010.
- f) Research Associate, Field Museum, Chicago, Illinois, USA, since 1998;
- g) Vice President, Southeast Asian Primatological Association, since 2005;
- h) Member, Editorial Board, Asian Primates Journal, since 2008
- i) Member, Advisory Board, Philippine Scientist, since 2008;
- j) Board member emeritus, Philippine Federation for Environmental Concerns, since January 2009

**4. Areas of Expertise:**

- a) Biodiversity Conservation and Management
- b) Wildlife Biology and Behavioral Ecology
- c) Protected Areas Management

**5. Educational and Training Background:**

Ph. D. Science (Behavioural Ecology and Evolutionary Biology), Monash University, Australia, 1995\*

M. Sc. Zoology (Minor in Wildlife Studies), University of the Philippines Los Baños, Philippines, 1988

B. Sc. Zoology, University of the Philippines Los Baños, Philippines, 1983

\*commenced Ph D in 1987 before completion of MS degree in 1988

**6. Awards received (Attachment I)**

**7. Publications (Attachment II)**

**8. Membership in Organizations: (Attachment III)**

**9. Employment/Work History (Attachment IV)**

**ATTACHMENT I. Awards received (selected from 1999 onwards)**

<b><u>Honors/Awards</u></b>	<b><u>Institution/Organization</u></b>	<b><u>Date</u></b>
UP Scientist III	University of the Philippines	2012-2014
OZOOMS Medal of Excellence	UPLB Zoological Society	30 November 2013
Agham Congressional Medal of Excellence in Research and Development in Wildlife Biology	Congressman Angelo B. Palmones Philippine House of Representatives	6 June 2011
2011 Outstanding Alumni "100 Years of Biology in UP"	UPD Biology Alumni, Inc.	8 January 2011
2009 Kalikasan Awardee	Philippine Society for the Study of Nature (PSSN)	12-14 November 2009
2009 Gawad Chansellor Natatanging Guro Award	University of the Philippines Diliman	27 February 2009
2008 Outstanding Alumni for Environmental Conservation and Sustainable Development	University of the Philippines Alumni Association	21 June 2008
2004 Hugh Greenwood Environmental Science Award	National Academy of Science and Technology	22 April 2004
2002 Most Distinguished Alumnus 25 <sup>th</sup> Year Silver Homecoming	Batch '77 Chiang Kai Shek Alumni Association	6 July 2002
2002 Jose Rizal Inagural Award for Excellence in Science and Technology	Manila Times, Federation of Filipino Chinese Chambers of Commerce and Industry Inc., the Philippine Chinese Charitable Association Inc., the Chinese-Filipino Business Club, Inc., and the Kaisa Para sa Kaunlaran Inc.	19 June 2002
2001 Outstanding Alumnus Award	Chiang Kai Shek College Alumni Association	26 October 2001
2001 CASAA Outstanding Alumnus Award for Research	UP Los Baños College of Arts and Sciences Alumni Association	6 October 2001
2000 Hiyas Environmentalist of the Year	Rotary Club of Hiyas ng Maynila R. I. District 3810	24 October 2000
2000 Outstanding Young Men (Environment/Conservation)	Philippine Jaycees, TOYM Foundation, Gerry Roxas Foundation	18 October 2000
2000 Outstanding Young Scientist Behavioral Ecology and Evolutionary Biology	National Academy of Science and Technology	6 July 2000
Research Performer Award	College of Science, UP Diliman	2 March 2000
1999 Gawad Chancellor, <i>Pinakamahasay na Aklat</i> (Chancellor's Award, Best Book) <i>Philippine Archipelago</i> (Science and Technology Cluster)	University of the Philippines Diliman	22 October 1999

## ATTACHMENT II. Publications (selected from 1998 onwards)

1. Brown, R., J. A. Weghorst, K. V. Olson, M. R. M. Duya, A. J. Barley, L. V. Duya, M. Shekelle, I. Neri-Arboleda, J. A. Esselstyn, N. J. Dominy, **P. S. Ong**, G. L. Moritz, A. Luczon, M. L. Diesmos, A. C. Diesmos, C. D. Siler. 2014 Conservation genetics of the Philippine tarsier: Cryptic genetic variation restructures conservation priorities in an island archipelago primate. *PLOS One* (accepted, in press)
2. Anderson-Teixeira K. J. et al (with 112 other authors). 2014 CTFS-ForestGEO: A worldwide network: Monitoring forests in an era of global change. *Global Change Biology* (accepted, in press)
3. Moritz G.L., Melin A.D., Tuh Yit Yu F., Bernard H., **Ong, P. S.**, Dominy N.J. 2014. Niche convergence suggests functionality of the nocturnal fovea. *Frontiers in Integrative Neuroscience* DOI: 10.3389/fnint.2014.00061
4. Moritz G.L., Melin A.D., Tuh Yit Yu F., Bernard H., **Ong, P. S.**, Dominy N.J. 2014. Nocturnal predation and the isotopic niches of tarsiers and scops owls (Abstract). *Amer. J. Phys Anthropol* **153**: 189.
5. Moritz, G. L., **Ong, P. S.**, Perry, G. H. Dominy, N. J. 2014. The visual and molecular ecology of *Tarsius* (Abstract). *Integrative and Comparative Biology* **54**: E320.
6. Fontanilla, I. K. C., Torres, A. F. Cañasa, J. A. dG. Yap, S. L. and **Ong P. S.** 2014. State of animal DNA barcoding in the Philippines: a review of COI sequencing of Philippine native fauna. *Philippine Science Letters* **7**: 104-137
7. **Ong, P. S.** 2013. Leonardo Co's botanical roots: It all began at the PUH, Herbarium of the University of the Philippines Diliman. *Philippine Journal of Science* **142**: (Special Issue) x- xi.
8. Luczon, A.U., Torres, A.F., Quilang, J.P., **Ong, P.S.** and Fontanilla, I.K.C. 2013. DNA barcoding of birds in the University of the Philippines Diliman campus, with emphasis on striated grassbirds *Megalurus palustris*. *Philippine Journal of Science* **142**: 1-11.
9. Brown C, D.F.R.P. Burslem, J.B. Illian, C.L. Bao, W. Brockelman, M. Cao, L.W. Chang, H.S. Dattaraja, C.V.S. Gunatilleke, I.A.U.N. Gunatilleke, J. Huang, A.R. Kassim, J.V. LaFrankie, J. Lian, L. Lin, K. Ma, X. Mi, A. Nathalang, S. Noor, **P. Ong**, R. Sukumar, S.H. Su, I.F. Sun, H.S. Suresh, S. Tan, J. Thompson, M. Uriarte, R. Valencia, S.L. Yap, W. Ye, R. Law. 2013. Multispecies coexistence in tropical forests: spatial signals of topographic niche differentiation increase with environmental heterogeneity. *Proc of the Royal Society B. Biol Science* **280** doi:10.1098/rspb.2013.0502
10. **Ong, P. S. 2012.** Mainstreaming native species-based forest restoration: A Synthesis-The Need to Change MAPS (Mindsets, Attitudes, and Practices). pp. 49-50. In: Neidel, J.D., Consunji, H., Labozetta, J., Calle, A. and J. MateoVega (eds). Mainstreaming Native Species-Based Forest Restoration: ELTI Conference Proceedings. New Haven, CT: Yale University; Panama City: Smithsonian Tropical Research Institute.
11. Ramsier, M. A., A. J. Cunningham, G. L. Moritz, J. J. Finneran, C. V. Williams, **P. S. Ong**, S. L. Gursky-Doyen and N. J. Dominy. 2012. Primate communication in the pure ultrasound. *Biology Letters* **8**: 508-511.
12. Anticamara, J. A., B. O. Pasion, R. S. Gonzales, M. R. M. Duya and **P. S. Ong**. 2012. Understanding high altitude reforestation in Mt. Apo, Philippines. *Eurasian J. For. Res.* **15**: 31-43.



13. Ramsier, M. A., A. J. Cunningham, G. L. Moritz, C. V. Williams, **P. S. Ong**, N. J. Dominy. 2011. Auditory sensitivity of the Philippine tarsier, *Tarsius syrichta* (Abstract) *Amer. J. Phys Anthropol* **144**: 247-248.
14. **Ong, P. S.** And N. R. Ingle. 2011. A National Treasure: Leonardo L. Co. *Social Science Diliman* **7**: 117-119.
15. **Ong, P. S.**, A. U. Luczon, J. P. Quilang, A. M. T. Sumaya, , J. C. Ibanez, D. J. Salvador and I. K. C. Fontanilla. 2011. DNA barcodes of Philippine accipitrids. *Mol Ecology Resources* **11**: 245-254.
16. Aquilino, S. V. L., J. M. Tango, I. K. C. Fontanilla, R. C. Pagulayan, Z. U. Basiao, **P. S. Ong** and J. P. Quilang. 2011. DNABarcoding of the ichthyofauna of Taal Lake, Philippines. *Mol Ecology Resources* **11**: 612-619.
17. Aquino L. M., J, R. Tango. J. Canoy, I . K. C. Fontanilla, Z. U. Basiao, **P. S. Ong**, J. P. Quilang. 2011. DNA barcoding of fishes of Laguna de Bay, Philippines. *Mitochondrial DNA* **22**(4) 143-153.
18. Luczon, A. U., A. H. M. M. Isa, J. P. Quilang, **P. S. Ong**, I. K. C. Fontanilla. 2010. DNA barcoding of the White-Collared Kingfisher *Todiramphus chloris* (Boddaert 1783) (Alcedinidae) using the mitochondrial cytochrome c oxidase subunit I gene. *Philippine Science Letters* **3**: 74-77.
19. Lohman, D. J., K. K. Ingram, D. M. Prawiradilaga, K. Winker, F. H. Sheldon, R. G. Moyle, P. K.L. Ng, **P. S. Ong**, L. K. Wang, T. M. Braile, D. Astuti, R. Meier. 2010. Cryptic genetic diversity in "widespread" Southeast Asian bird species suggests that Philippine avian endemism is gravely underestimated. *Biological Conservation* **143**: 1885-1890
20. Vallejo, B. J., A. Aloy, **P. S. Ong**. 2009. The distribution, abundance and diversity of birds in Manila's last greenspaces. *Landscape and Urban Planning* **89**: 75–85.
21. Navjot S. S., D. Astuti, A. C. Diesmos, P. Ericson, N. Fernandopulle, S. Kotagama, E. Kudavidanege, H. C. Lim, B. Lee, S. L. H. Lim, Y. Lin, D. J. Lohman, W. Meckvichai, H. Miranda, R. G. Moyle, **P. S. Ong**, K. A. Pan, D. Prawiradilaga, M. A. Rahman, A. Rahmani, F. H. Sheldon, M. Y. Stoeckle, S. Sulandari, L. K. Wang and K. Winker. 2007. Barcoding Indo-Malayan birds. *The Raffles Bulletin of Zoology* **55**: 397-398.
22. Garrity, G. M., L. M. Thompson, D. W. Ussery, N. Paskin, D. Baker, P. Desmeth, D.E. Schindel, **P. S. Ong**. 2009. Executive summary: Studies on monitoring and tracking genetic resources. *Standards in Genomic Sciences* **1**: 78-86
23. Garrity, G. M., L. M. Thompson, D. W. Ussery, N. Paskin, D. Baker, P. Desmeth, D.E. Schindel, **P. S. Ong**. 2009. UNEP/CBD/WG-ABS/7/INF.
24. McKay, G. M. and **P. S. Ong**. 2008. Common Ringtail Possum, *Pseudocheirus peregrinus*. In: S. Van Dyck and R. Strahan (eds), *The Mammals of Australia*. Third Edition, pp. 255-257. Reed New Holland, Sydney, Australia.
25. Vallejo, B. J., A. Aloy, **P. S. Ong**, A. Tamino and J. Villasper. 2008. Spatial patterns of bird diversity and abundance in an urban tropical landscape: The University of the Philippines (UP) Diliman campus. *Science Diliman*, **20**: 1-10.

26. **Ong, P. S.** and E. A. Rickart. 2008. Ecology of native and pest rodents in the Philippines. Pp. 101-115. In: G. R. Singleton, R. C. Joshi and L. S. Sebastian (eds). *Philippine Rats: Ecology and Management*. Philippine Rice Research Institute, Munoz, Nueva Ecija, Philippines.
27. Barreto-Lagunzad, C. G. and **P. S. Ong**. 2006. Endangered Beauty: Mt. Malindang and Its Environs in Mindanao, Philippines. The Philippine-Netherlands Biodiversity Research Programme (BRP) for Development in Mindanao: Focus on Mt. Malindang and Its Environs. College, Los Banos, Laguna, SEARCA.
28. **Ong, P. S.** 2006. Review of the "South-east Asian Biodiversity in Crisis by NS Sodhi & BW Brooks (2005), 202 pp., Cambridge University Press, Cambridge, UK. *Oryx* **40**: 365-366
29. **Ong, P. S.** 2006. Beyond the biodiversity research for development in Mt. Malindang [Misamis Occidental, Mindanao, Philippines] and its environs lessons learned and future directions. Conference Workshop Towards a Regional Cooperation on Biodiversity Research for Development. Manila (Philippines), 28-29 Nov 2005. SEAMEO-SEARCA-BRP
30. Lammerink, M. P. with contributions from B. Huijsman, R. Van Veenhuizen, L. Visser, G. C. Saguiguit, Jr., **P. S. Ong**, V. B. Amoroso and M. V. Ticsay. 2006. Towards Improved Development-oriented Research Partnerships: Lessons Learned from the Biodiversity Research Programme. The Philippine-Netherlands Biodiversity Research Programme (BRP) for Development in Mindanao: Focus on Mt. Malindang and Its Environs. College, Los Baños, Laguna, SEARCA.
31. Fernando, E. S., **Ong, P. S.** 2005. The genus *Rafflesia* R. Br.(Rafflesiaceae) in the Philippines. *Asia Life Sciences* **14**: 263-270.x
32. **Ong, P. S.** 2004. The State of Philippine Biodiversity: Changing Mindscapes amidst the Crisis. Pp. 16-19 in Proceedings of the 7th International Conference on Philippine Studies (ICOPHIL), Leiden, The Netherlands.
33. **Ong, P. S.**, Afuang, L. E; Rosell-Ambal, R. G. 2002. Philippine biodiversity conservation priorities: A second iteration of the National Biodiversity Strategy and Action Plan. Department of Environment and Natural Resources, Conservation International, University of the Philippines Center for Integrative and Development Studies, and Foundation for the Philippine Environment, Quezon City.
34. **Ong, P. S.** 2002. Current status and prospects of protected areas in the light of the Philippine biodiversity conservation priorities. Proceedings of the Fourth Conference on the Protected Areas of East Asia: Benefits Beyond Boundaries in East Asia. Taiwan Organizing Committee for the Fourth Conference of the Protected Areas of East Asia, Taipei, Taiwan.
35. **Ong, P. S.** 2001. Philippine biodiversity hotspot: Opportunities and future directions. Pp 386-391 In: *Tropical Ecosystems: Structure, Diversity and Human Welfare*. Oxford University Press-IBH, New Delhi, India.
36. Brown, W. C., Alcala, A. C., **Ong, P. S.**, Diesmos, A. C. 1999. A new species of *Platymantis* (Amphibia: Ranidae) from the Sierra Madre Mountains, Luzon Island, Philippines. *Proceedings of the Biological Society of Washington*. **112**: 510-514
37. **Ong, P. S.**, Pedregosa, M., de Guia, M. 1998. Wildlife Inventory of the University of the Philippines (UP) Diliman and the Ateneo de Manila University Campus Diliman, Quezon City, Luzon, Philippines. *Science Diliman* **11**: 6-20.

### ATTACHMENT III. Employment/Work History and Tasks Performed (from 1999 onwards)

1. University of the Philippines Diliman
  - a. Professor in Wildlife Biology, Institute of Biology, July 1, 2005 to present
  - b. Director, Institute of Biology, College of Science, 1 June 2006 to 31 May 2012
  - c. Member, University Council Committee Campus Policies and Issues, 2013-2016
  - d. Chair, Fact Finding Committee on NCPAG Issues 10 January 2013- 6 March 2013
  - e. Chair, Ad Hoc Committee to Study the Present Status of the UP Arboretum, Oct 2010- Feb 2011
  - f. Chair, Ad Hoc Committee for Disaster Management, Jan 29, to Feb 16, 2009
  - g. Member, University Council Committee on Academic Programs and Policies, 2008 to 2010
  - h. Chair, University Council Committee on Academic Programs and Policies, 2009
  - i. Member, University Council Committee on Academic Programs and Policies, 2008 to 2010
  - j. Member, Search Committee for the Directorship of the Institute of Chemistry, College of Science, UP Diliman, 2008
2. Conservation International
  - a. Science Director, Nov. 1, 2000 to October 18, 2002 (on secondment)
  - b. Country Director, June 15, 1998 to Oct. 31, 2000 (on secondment)
3. University of the Philippines System
  - a. Member, External Review Team for the School of Environmental Science and Management, UP Los Banos, July-August 2010
  - b. UP President's representative, search committee for the Deanship of the College of Forestry and Natural Resources, UP Los Banos, Dec 2010- January 2011
  - c. Program Development Associate, Office of the Vice President for Academic Affairs, 2007-2011
  - d. UP President's representative, search committee for the Directorship of the Institute of Agroforestry, UP Los Banos, 2007.
  - e. Convenor, Biodiversity Conservation Program, UP Center for Integrative and Development Studies (UP CIDS), Jan. 2002-March 2007
  - f. Research Scholar, Biodiversity Conservation Program, UP Cy-National Academy of Science and Technology, Sept. 1994- Dec. 2001
  - g. Program Development Associate, Office of the Vice President for Development, April 2003-Oct. 2003
4. United Nations Development Programme Global Environment Facility Small Grants Program and the Foundation for Integrative and Development Studies
  - a. Team Leader and Biodiversity Conservation Specialist, *"Technical Assistance to develop a Biodiversity Conservation Vision Map for the Puerto Princesa Subterranean River National Park: Integrating Sub-components of the Baseline Assessment (BA) and the review, Validation and Finalization of the Site Strategy"* April 2003-October 2003
5. United Nations Development Programme (UNDP) and the Global Environment Facility (GEF)
  - a. Member, Mid-term Review of four UNDP-GEF projects in Mt. Isarog, Samar, Bohol and Tubbataha, April to June 2004.
6. World Bank Mission, Manila
  - a. Consultant, preparation of briefing paper for the GEF mission to the Philippines, Oct-Nov. 2004.
7. ENR Consultants, Inc.,
  - a. Wildlife Biologist, Programmatic EIA for the PNOC-PPDC in Bataan, Apr. 2000
  - b. Biodiversity Expert, National Watershed Strategy Project, Nov. 1997 to Feb. 1998

## **8. ATTACHMENT IV.      Membership in Organizations**

### **A. Professional**

1. Member, The Honor Society of Phi Kappa Phi, Chapter 045, University of the Philippines, since April 2009
2. Member, Phi Sigma Society, Alpha Chi Chapter, the Biological Honor Society, since April 2008
3. Regular member, National Research Council of the Philippines, since 2013 (Associate member since 1993)
4. Vice Chair, National Steering Committee, United Nations Development Programme-Global Environment Facility-Small Grants Programme (UNDP-GEF-SGP), December 2010 to present
5. Member, National Steering Committee, United Nations Development Programme-Global Environment Facility-Small Grants Programme (UNDP-GEF-SGP), February 2008 to present
6. Member, National Academy of Science and Technology (NAST) Working Committee on Climate Change, September 2007 to present.
7. Philippine-Netherlands Joint Program Committee (JPC), Biodiversity Research Programme for Development, Focus on Mt. Malindang and its Environs  
Chair, JPC, September 1, 2003 to 2006
8. Philippine-Netherlands Philippine Working Group (PWG), Biodiversity Research Programme for Development, Focus on Mt. Malindang and its Environs  
Chair, PWG, October 1, 2003 to present  
Member, PWG, July 1997 to September, 2003
9. National Technical Committee, Rewarding Upland Poor for the Environmental Services they provide (RUPES), International Center for Agroforestry (ICRAF)  
Chair, February 2003 to 2006
10. International Steering Committee, Rewarding Upland Poor for the Environmental Services they provide (RUPES), International Center for Agroforestry (ICRAF)  
Member, February 2003 to 2006
11. Association of Tropical Biology Inc., Member, July 2001 to 2003
12. Center for Applied Biodiversity Sciences-Conservation International  
Research Fellow, July 2001 to October 2002
13. Declining Amphibian Population Task Force, International Union for the Conservation of Nature, Species Survival Commission  
Member, July 1998 to present
14. Field Museum of Natural History, Chicago, Ill., USA  
Research Associate, Nov. 1997 to present
15. Science Advisory Council, Philippine Eagle Foundation,  
Member, June 1998 to present
16. Experts Advisory Panel, Foundation for the Philippine Environment,  
Member, 1993 to present
17. Environment Management Bureau-DENR  
Associate Environment Professional-EIS Preparer, March 1998-present
18. Wildlife Conservation Society of the Philippines, Inc.,  
President, 2006 to 2010  
Incorporator and trustee, since 1993  
Vice President, 1994-1995 and 1997 to 1999

## **B. Government**

1. Member, National Renewable Energy Board, Dept of Energy, 24 September 2013- present
2. Member, Philippine Eagle Working Group, Protected Areas and Wildlife Bureau, Dept. of Environment and Natural Resources, Member, since 2008
3. Member, National Ecotourism Development Council, Joint Dept of Environment and Natural Resources and Department of Tourism Council, since 2004
4. Member, National Steering Committee, National Protected Areas Congress and the IUCN-World Commission on Protected Areas' Regional Congress for South East Asia, Sept 2001 to Oct 2002
5. National Protected Areas & Wildlife R & D Commodity Team, PCARRD, Dept. of Science and Technology, Member, since Jan. 1998
6. Inter-Agency Wildlife Management Committee, Protected Areas and Wildlife Bureau, Dept. of Environment and Natural Resources, Member, since Feb. 1995
7. Scientific Authority, Convention of International Trade of Endangered Species Flora and Fauna, Protected Areas and Wildlife Bureau, Dept. of Environment and Natural Resources. Member, since Feb. 1995

## **C. Civil Society Organizations**

1. Tanggol Kalikasan, A Public Interest Environmental Law Office, since September 2004
2. Philippine Tropical Forest Conservation Foundation (Joint Philippine Government and US Government Debt for Nature Fund), Treasurer and Trustee, July 2003-December 2011
3. Earth's Rights', People's Rights Inc., President, Incorporator, and Trustee, March 2002 to 2007
4. Foundation for the Philippine Environment, Trustee, July 2008 to June 2012;  
Acting Chair, July 2010  
Vice Chair, August 2010-June 2012
5. Foundation for Integrative and Development Studies, Founding Member, since July 2001  
Trustee, since June 2006
6. First Philippine Conservation, Inc., Trustee, Feb. 1999 to Oct 2002  
Executive Director, Feb. 1999 to Oct. 2000
7. Philippine Federation for Environmental Concerns, Trustee, Jan 1996 to Dec. 2008  
Chairperson, Apr 2003 to Dec 2008, Jan. 1996 to Dec. 1998
8. UNDP GEF Small Grants Program, member, National Steering Committee, member since January 2008;  
Vice-Chair, December 2010 to present
9. Philippine Eagle Foundation, Member, Board of Trustees, since December 2010

**NAME**

**Atty. ELPIDIO VEN PERIA**

Avila Compound, Nursery Road, Lagao

General Santos City 9500

Philippines

Email : [pingperia16@gmail.com](mailto:pingperia16@gmail.com)

Cellphone : (0917) 548-6362 ; PLDT landline : (083)878-0471

**CURRENT  
ENGAGEMENTS**

Practising Lawyer (solo practice)

**ELPIDIO V. PERIA LEGAL & LEGISLATIVE CONSULTANCY**

*August 2011-present*

- provides legal counseling, litigation and legislative advisory services, including notarial work to clients based in SOCKSARGEN region (Southern Mindanao, Philippines)

Legal Adviser

**Office of the Director**

**Protected Areas and Wildlife Bureau**

**Department of Environment and Natural Resources**

**Philippines**

*April 2004 - present*

Responsibilities :

Monitor relevant national and international developments on issues relating to access and benefit-sharing, traditional knowledge (TK) protection and the interface of biodiversity vis-à-vis climate change and integrate these developments in the formulation of country positions/interventions in the meetings of the Convention on Biological Diversity (CBD), including upon consultation with existing mechanisms for public consultation such as the Sub-Committee on Biodiversity of the Philippine Council for Sustainable Development and other related bodies taking into account the current Philippine context and strategic concerns; also provides occasional policy advise on key agency concerns on biosafety-related issues

Lead Convenor, Steering Committee

**Aksyon Klima Pilipinas (AKP)**

- nominated for one year 2012;re-elected, for 2013; term ended Feb.22, 2014; since that date, was a Mitigation, Adaptation , Finance, Technology (MAFT) Focal Person of the network for Technology Transfer issues under the UNFCCC and member of the network's Steering Committee

AKP is a national network of civil society organizations in the Philippines working on issues concerning climate change; collaborates with the Climate Change Commission in developing Philippine positions to the UNFCCC negotiations; formerly known as CSO Working Group on Climate Change and Development, organized in 2008

Position Paper Preparation

**General Santos City Chamber of Commerce and Industry, Inc.**

“General Revision of Assessment, Schedule of Fair Market Value of General Santos City”

*July 15 – present (draft position already submitted 31 July 2014)*

National Researcher

**International Union for the Conservation of Nature - Switzerland**

“Country Study on Stakeholder Participation in the Revision of the National Biodiversity Strategy and Action Plan (NBSAP)”

*May 15 – July 31, 2014*

Consultant

**Climate Change Commission of the Philippines**

“Developing a Philippine Climate Technology Transfer Program”

*April 2013 – June 2013*

Lead Expert-Discussant

**Planning Division, Protected Areas and Wildlife Bureau**

Goal D: Enhancing Benefits from the Utilization of Biodiversity”

Philippine Biodiversity Strategy and Action Plan 2020

*April 2013 – Mar 2014*

Legal Consultant

**ASEAN Center for Biodiversity and DENR-PAWB**

“Building Capacity for Regionally Harmonized National Processes for Implementing CBD Provisions on Access to Genetic Resources and Sharing of Benefits (Philippine Component)

*September 2012 – April 2013*

Observer, through the BITS Policy Center,  
in the Climate Technology Fund Trust Fund Committee

**Climate Investment Funds-World Bank**

- nominated for two years, 2012-2014

CIF is a World Bank initiated funds to pilot innovative projects to demonstrate climate-sensitive initiatives while enhancing developing country capacity to manage and upstream these projects in their national context

Lecturer on *Sustainable Development Law, Policy & Ethics* (SDS 204)

Lecturer on *Policy Formulation, Theories & Interventions* (SDS 207)

**Mindanao State University-General Santos City**

Master in Sustainable Development Studies

*From 1<sup>st</sup> Semester, June 2012- October 2012 to present*

**PREVIOUS  
ENGAGEMENTS**

Executive Director

**Biodiversity, Innovation, Trade and Society (BITS)**

**Policy Center** (blog : <http://bitsinbits.wordpress.com>)

*May 2011 – present*

Responsibilities :

Manages, along with the working Board of Trustees, the fledgling efforts of the start-up policy center to make itself viable and visible in the Philippine public policy arena, by initiating policy workshops in partnership with key players on issues relating to biodiversity, innovation, trade and societal concerns which includes climate change, health, human rights and similar issues while providing policy research, policy advisory and litigation services to walk-in clients from government and non-government sector, including indigenous peoples and local communities

Practising Lawyer

**Cartojano Peria & Associates**

*November 1999- July 2011*

- provided legal counseling and litigation services, mainly general law practice, including notarial work to clients based in SOCSKSARGEN region

associate

**Third World Network**

*September 2004-December 2010*

Responsibilities :

Provided part-time policy advise and research support to issues relating to access to medicine, TRIPS Agreement and Public Health, and related issues, especially their application/implementation to the Philippine setting; in addition, legal and policy advise is also provided to local groups and government agencies on issues relating to biosafety, biodiversity, especially access and benefit-sharing, indigenous peoples' rights not only to land but also their traditional knowledge, development and intellectual property, free trade agreements and recently, climate change, particularly on policy issues relating to the four building blocks of the Bali Action Plan- finance, technology transfer, climate change adaptation and mitigation

Legal Adviser

**General Santos-Sarangani Satellite Office,  
Justice and Peace Desk, Social Action Center,  
Diocese of Marbel**

*March 2005 – December 2008*

Responsibilities :

Provided direct legal services through the use of alternative dispute resolution mechanisms and with the assistance of the MSU College of Law student-interns and SALIGAN; also provides policy advise on the



policy advocacy initiatives of the Diocese of Marbel and its parishes relating to natural resources management, indigenous peoples rights, gender and child rights, urban and social concerns, including good governance issues and related issues

Team Leader

**GTZ-Philippines and Eschborn-contract with PNNI**

“Scoping Study for Access and Benefit-Sharing in Eastern Visayas in the Philippines”

*March – October 2007*

Researcher-Case Writer

**Asian Partnership for the Development of Human Resources in Rural Asia/Asian Farmers Association for Sustainable Rural Development**

“Case Studies on Alternative Models for Fairer Agricultural Trade”

*August-December 2005*

Responsibilities :

Working in a team, do research and documentation of good practices illustrating alternative models for fairer agricultural trade for eventual publication and dissemination to civil society in South East Asia and other relevant audience

Public Attorney II

**Public Attorney’s Office**, General Santos City District

*January- March 1999*

Program Coordinator

**Southeast Asia Regional Initiatives for Community Empowerment (SEARICE)**

*April 1997 – March 2004*

Responsibilities:

Coordinated the country implementation of investigative research and documentation, community awareness-raising and capacity-building activities and policy advocacy work on the issue of access and benefit-sharing, as related to biological and genetic resources in the Philippines, Malaysia and Indonesia and in the ASEAN from 1998-2001;

Identified and helped write policy studies on issues relating to access to genetic resources and intellectual property rights (IPR) and related concerns at the community, municipal, national and regional level (Southeast Asia) and international levels, particularly the documentation of community practices on access and benefit-sharing which was later developed into community protocols, a *sui generis* mechanism to protect community knowledge and assert community rights over biological and genetic resources; integrated these experiences into specific Philippine policy positions, as a legal adviser

to the Philippine Delegation to the Convention on Biological Diversity from COP IV (1998) to COP VII(2004);

assisted the Policy and Information Unit and the Executive Director of SEARICE in its capacity-building, policy advocacy, media advocacy and networking activities in its work on agricultural biodiversity and campaign for Farmers' Rights;

gave advise on the development of a community-based *sui generis* alternative to the Philippine Plant Variety Protection Act, such as the community registry, to protect the rights of farmers and farming communities to their plant genetic resources including the development of a Farmers' Rights bill to implement Art. 9 of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); also assisted in developing innovative approaches in involving communities in policy decision-making, such as the conduct of community participatory dialogue or people's jury, done in Bohol in April 2003 and President Roxas, Cotabato Province in May 2003.

advised the organization on the legal, policy and media aspects of its campaign on the issues concerning genetic engineering and other biosafety-related matters in the Philippines and South East Asia;

Legal Consultant

**Market Division, City Mayor's Office, Quezon City**

*October – December 1997*

**Responsibilities:**

Rendered legal advice on the various initiatives and projects of the office, especially existing build-operate-transfer (BOT) projects and eviction of non-paying market lessees; represents the office in court hearings.

Supervising Legislative Staff Officer (Salary Grade 22)

**Office of Sen. Orlando S. Mercado (Philippine Senate)**

*June 1993 - April 1997*

**Responsibilities:**

Prepared talk points/briefing papers on pending legislative bills and resolutions, drafted and submitted press releases on identified issues for publication in national dailies/newspapers; consolidated and managed identified allies/supporters and constituencies for the principal's initiatives; handled political tasks, including the direction and management of Green Coalition, Inc. as Deputy Executive Director; prepared broadcast clock and talk points for the principal's "KAMBAL KAMAO" radio program on DZRH.

Project Evaluation Officer (Salary Grade 15)

**Philippine Fisheries Development Authority**

*February 1989 - May 1993*

Technical Staff

**Office of Commissioner Dominic A. Simon**

## EDUCATION

### **Regional Consultative Commission for Muslim Mindanao**

*April 1988 - November 1988*

Technical Marketing Representative

**Amalgamated Technologies, Inc.**

*March 1987 - April 1988*

Master in Technology Management ( 9 units earned)

**University of the Philippines in Diliman,**

**Technology Management Center**

*1<sup>st</sup> semester, 1998-1999*

Bachelor of Laws

**University of the Philippines in Diliman, College of Law**

*November 1995 (\* licensed to practice law : 8 May 1997)*

B.S. in Fisheries, major in Fisheries Business Management

**University of the Philippines in Diliman, College of Fisheries**

*March 1987*

Certificate, Philippine Rural Development

**University of New England, New South Wales, Australia**

*May-June 1995*

## SEMINARS & TRAININGS ORGANIZED/ ATTENDED

Climate Negotiations Training for ASEAN

*Lectured on Scope and Bindingness of the 2015 Deal*

Organized by **ASIA-EUROPE Foundation**

Hanoi, Vietnam

*June 18-19, 2014*

Training Workshop on Enhancing Capacities of National Government  
Agencies to Participate in International Climate Negotiations

*Lectured on Technology Development and Transfer negotiations in  
the UNFCCC*

Organized by **Climate Change Commission; Dept of Foreign  
Affairs**

Mabini Social Hall, Malacanang, Manila

*April 21-23, 2014*

Orientation Seminar on Multilateral Environmental Agreements  
(MEAs) and Module Development

*Lectured on UNCBD, with comments on UNFCCC*

Organized by **DENR-FASPO, STREEM Project**

Subic Bay Holiday Villas, Subic Bay Freeport Zone, Pampanga

*March 11-13 2013*

Bootcamp/Workshop in Preparation for

Convention on International Trade in Endangered Species (CITES)

*16<sup>th</sup> Conference of the Parties (COP 16)*

*Lectured on the how-to of international negotiations; facilitated the bootcamp where draft Philippine positions were outlined/formulated*  
**Organized by the Protected Areas and Wildlife Bureau**  
Narra Hall, Sunrise Holiday Mansion, Tagaytay City  
22-26 February 2013

Capacity-Building Activity for Climate Change Advocacy  
*Assisted in Process Facilitation and Resource Person on UNFCCC Processes, Political Dynamics and Updates for Doha COP 18*  
Organized by **Christian Aid, Forum Syd, Cord**  
Khmer Broneth Resort, Sihanouk Ville, Cambodia  
June 22-25, 2012

Using the “Right to Food” to Establish Balanced Plant Regimes  
*Workshop Facilitator and Resource Person on Interface Between Farmers’ Rights, Plant Variety Protection and Indigenous Peoples’ Rights*  
Organized by **UNDP-Philippines**  
National Technical Consultation, Philippines  
Makati City, Philippines *February 9-10, 2011*

Forum-Workshop on the Interface Between Farmers’ Rights and Plant Variety Protection  
Organized by **UNDP-Philippines**  
National Technical Consultation, Philippines  
Quezon City, Philippines *Nov 11-12, 2009*

Training on Indigenous Peoples Rights and International Law  
Organized by **Tebtebba Foundation,**  
*NGO in Special Consultative Status with the UN-ECOSOC*  
Baguio City, Philippines *20-27 June 2005*

Training-Workshop on Drafting of Implementing Rules and Regulations for Provincial Ordinances  
Resource Person and Trainor  
Organized by the **Provincial and Social Welfare and Development Office (PSWDO), Province of Sarangani**  
General Santos City, Philippines *4-6 May 2005*

Workshop on CBD Implementation and the Philippine Indigenous Peoples Rights Act (IPRA)  
Resource Person on the topic : “Overview of CBD Implementation in the Philippines and the Indigenous Peoples Rights Act”  
Organized by **Tebtebba Foundation,**  
*NGO in Special Consultative Status with the UN-ECOSOC*  
Baguio City, Philippines *4-6 May 2005*

Capacity Building on Access and Benefit-Sharing  
Resource Person on the topic : “Practical Experiences in the Negotiation of Access and Benefit-Sharing Agreements” and “Experiences in Community Participation in the Philippines”  
Organized by **IUCN-Vietnam and Vietnam Environment Protection Agency (VEPA) and GTZ**  
Hanoi, Vietnam *1-2 August 2004*  
*Ho Chi Minh City, Vietnam 4-5 August 2004*

National Workshop on Access and Benefit-Sharing  
Resource Person on the topic : "Interlinkages between the Convention on Biological Diversity and Other International Agreements" and "Experiences in the Formulation of Access and Benefit-Sharing Legislation in the Philippines"  
Organized by **IUCN-Vietnam and Vietnam Environment Protection Agency (VEPA) and GTZ**  
Hanoi, Vietnam  
*1 June 2004*

4<sup>th</sup> All-Asia Public Interest Environmental Lawyers' Conference and 1<sup>st</sup> Philippine Public Interest Environmental Lawyers' Conference  
Resource Person on the topic : "Free and Prior Informed Consent In Biodiversity Conservation"  
Organized by **Tanggol Kalikasan, Ford Foundation and Center for International Environmental Law**  
Tiaong, Quezon, Philippines  
*20-26 March 2004*

Roundtable Discussion on the National Biosafety Framework  
Resource Person on the Topic : "Issues on the National Biosafety Framework"  
Organized by **SEARICE**  
Davao City, Philippines  
*30 December 2003*

Biotechnology and the Poor :Democratising Biotechnology in Developing Countries  
Organized by **the Institute of Development Studies (IDS), University of Sussex, United Kingdom and the Rockefeller Foundation**  
Brighton, United Kingdom  
*30 September - 1 October 2003*

Orientation on Biosafety and Biotechnology for DENR Officials  
Resource Person on the Topic : "Sociology and Economics of GMOs"  
Organized by **DENR, National Biosafety Framework Project (NBFP)**  
General Santos City  
*30-31 July 2003*

GMO Speakers' Training for PO and NGO Leaders  
Resource Person on the Topic : "Mechanisms for Control of GM Seeds"; "Economic Issues on Bt Corn"  
Organized by **SEARICE, Freedom from Debt Coalition, Kilusan Karapatang Pantao**  
General Santos City  
*7-8 July 2003*

2003 General Law Practice Institute Seminar  
By the **Integrated Bar of the Philippines & UP Law Center**  
SOCKSARGEN Chapter, General Santos City, Philippines  
*13-15 May 2003*

Governance and Legislative Advocacy Training for NGO and PO Leaders  
Organized by **SEARICE and the UP Center for Leadership, Citizenship and Democracy**  
Antipolo City, Rizal  
*17-22 February 2002*

1999 General Law Practice Institute Seminar  
By the **Integrated Bar of the Philippines & UP Law Center**  
SOCKSARGEN Chapter, General Santos City, Philippines  
*11-12 November 1999*

GMO Speakers' Training for NGOs  
Resource Person on the Topic : "Legal and Policy Framework on GMOs"  
Organized by **SEARICE and the Social Action Center of Lagao Parish**  
General Santos City  
*11-15 August 1999*

Seminar on Land Registration and Other Related Problems  
By the **Land Registration Authority**  
General Santos City, Philippines  
*13 May 1999*

First Public Attorney's Office National Convention  
By the **Public Attorney's Office, Department of Justice**  
Baguio City, Philippines  
*15-17 February 1999*

Orientation Course on Environmental Legislation and the Philippine  
Environmental Impact Statement (EIS) System  
by the **Development Academy of the Philippines**  
Pasig City, Philippines  
*28-29 July 1998*

Seminar-Workshop for Patent Attorneys  
by the **Intellectual Property Office (IPO),  
Department of Trade and Industry**  
Manila, Philippines  
*9 July 1998*

Genetic Engineering Workshop  
by the **Pesticide Action Network – Asia Pacific (PANAP)**  
Penang, Malaysia  
*15-18 April 1998*

Seminar on Solid Waste Management Technologies  
by the **Public Interest Research Group and Greenpeace-Intl.**  
New Delhi, India  
*21-28 March 1996*

GATT-TRIPS Seminar  
by the **Bureau of Patents, Trademarks and Technology Transfer**  
*5-9 December 1994*

**SPECIAL SKILLS  
&  
COMPETENCIES**

Trainors' Training on Pasig River Rehabilitation  
by the **Sagip-Pasig Movement with the DENR/RRS**  
*2-6 May 1994*

Introductory Course on Project Preparation  
by the **River Rehabilitation Secretariat and the DENR**  
*6-10 December 1993*

Situational Analysis and Project Design Workshop  
by the **River Rehabilitation Secretariat and the DENR**  
*15-18 November 1993*

Seminar in Techniques in Financial Analysis  
by the **Philippine Fisheries Development Authority**  
*24-26 October 1989*

bangus (milkfish) and prawn aquaculture pond management  
community training design and facilitation  
events/workshop management  
international law negotiation on biodiversity/climate change issues  
media advocacy work/campaigns management  
legal drafting/conveyancing and litigation  
legislative bill drafting, advocacy and lobby work strategizing  
project feasibility study preparation  
project/program management and coordination  
technical writing  
training design, training module preparation and execution

**PUBLIC SERVICE**

Member, Advisory Board  
**Climate Technology Centre and Network (CTCN)**  
**Technology Mechanism, United Nations Framework Convention on**  
**Climate Change (UNFCCC)**  
**2013-2014**

Chairperson, Social Concerns Committee  
**Integrated Bar of the Philippines (IBP)**  
**South Cotabato-General Santos City Chapter**  
**2007-2009**  
- given a Citation from the IBP Chapter President Raul Miguel for helping the Chapter, working with other Committee Chairs, for making the Chapter the most outstanding IBP Chapter for the year 2007-2009

Member, Board of Trustees  
**Philippine Institute for Traditional and Health Care (PITAH)**  
- a government corporation dealing with traditional medicine in the Philippines, attached with the Department of Health, created by Republic Act 8423  
*Appointed by Pres. Estrada 6 April 1999 for a one year term; re-appointed for year 2000, re-nominated for a third one-year term for the year 2001 and for a fourth term, 2002; served until expiry of term*

INTERNATIONAL/  
REGIONAL  
CONFERENCES  
ATTENDED

*September 2002*

Member, Technical Secretariat

**Inter-Agency Committee on Biological and Genetic Resources (IACBGR)**

- an inter-agency body implementing EO 247, the Philippine ABS regulation

*1997-2004*

Member, Advisory Committee

**ABS (Access and Benefit-Sharing) Management Tool Project, Phase I**

- a project of the Swiss Government with the International Institute for Sustainable Development (IISD)

*October 2003 – April 2004*

**Member, Philippine Delegation to the**

**Subsidiary Bodies Meeting (SBSTA-SBI 40)**

**to the UN Framework Convention on Climate Change (UNFCCC)**

Bonn, Germany

*4-13 June 2014*

**Philippines Representative**

**3<sup>rd</sup> Meeting, Advisory Board, Climate Technology Center and Network**

**UN Framework Convention on Climate Change (UNFCCC)**

Copenhagen, Denmark

*19-21 March 2014*

**Philippines Representative**

**3<sup>rd</sup> Meeting of the Intergovernmental Committee on the Nagoya**

**Protocol (ICNP-3)**

Pyeongchang, South Korea

Organized by the Secretariat, Convention on Biological Diversity

*24-28 February 2014*

**Member, Philippine Delegation to the**

**19<sup>th</sup> Conference of the Parties (COP XVIII)**

**to the UN Framework Convention on Climate Change (UNFCCC)**

Warsaw, Poland

*11-22 November 2013*

**Philippines Representative**

**2<sup>nd</sup> Meeting, Advisory Board, Climate Technology Center and Network**

**UN Framework Convention on Climate Change (UNFCCC)**

Bonn, Germany

*9-11 September 2013*

**Member, Philippine Delegation to the**



**Subsidiary Bodies Meeting (SBSTA-SBI 38)  
to the UN Framework Convention on Climate Change (UNFCCC)**  
Bonn, Germany  
*3-14 June 2013*

**Philippines Representative  
1<sup>st</sup> Meeting, Advisory Board, Climate Technology Center and Network  
UN Framework Convention on Climate Change (UNFCCC)**  
Copenhagen, Denmark  
*14-15 May 2013*

**Member, Philippine Delegation to the  
18<sup>th</sup> Conference of the Parties (COP XVIII)  
to the UN Framework Convention on Climate Change (UNFCCC)**  
Doha, Qatar  
*26 November – 7 December 2012*

**Member, Philippine Delegation to the  
11<sup>th</sup> Conference of the Parties (COP XI)  
to the Convention on Biological Diversity**  
Hyderabad, India  
*8-19 October 2012*

**Member, Philippine Delegation to the  
Subsidiary Bodies Meeting (SBSTA-SBI 37)  
to the UN Framework Convention on Climate Change (UNFCCC)**  
Bangkok, Thailand  
*28 August – 6 September 2012*

**Observer, 4<sup>th</sup> Meeting of the Technology Executive Committee  
to the UN Framework Convention on Climate Change (UNFCCC)**  
Bangkok, Thailand  
*7-8 September 2012*

**Member, Philippine Delegation to the  
2<sup>nd</sup> Meeting of the Intergovernmental Committee on the Nagoya  
Protocol (ICNP-2)**  
New Delhi, India  
Organized by the Secretariat, Convention on Biological Diversity  
*2-6 July 2012*

**Member, Philippine Delegation to the  
Subsidiary Bodies Meeting  
(ADP 1, AWG-LCA 15 , AWG-KP 17, SBI 36, SBSTA 36)  
to the UN Framework Convention on Climate Change**  
Bonn, Germany  
*14-25 May 2012*

**Observer, Joint Meeting of the Strategic Climate Fund/Clean  
Technology Fund Trust Fund Committees, and Meeting of the Clean  
Technology Fund Trust Fund Committee**  
Washington DC. USA  
Organized by the Climate Investment Fund Administrative Unit  
*1-3 May 2012*

**Member, Philippine Delegation to the  
17<sup>th</sup> Conference of the Parties (COP XVII)  
to the UN Framework Convention on Climate Change**  
Durban, South Africa  
*28 November – 10 December 2011*

**Member, Philippine Delegation to the  
3<sup>rd</sup> Meeting of the AWG-LCA-3  
to the UN Framework Convention on Climate Change**  
Panama City, Panama  
*October 1-7, 2011*

**Member, Philippine Delegation to the  
7<sup>th</sup> Meeting of the Adhoc Working Group on Art. 8(j)**  
Montreal, Canada  
Organized by the Secretariat, Convention on Biological Diversity  
*October 31 - November 4, 2011*

**Member, Philippine Delegation to the  
15<sup>th</sup> Meeting of the Subsidiary Body for Scientific,  
Technical and Technological Advice (SBSTTA 15)**  
Montreal, Canada  
Organized by the Secretariat, Convention on Biological Diversity  
*November 7-11, 2011*

**Member, Philippine Delegation to the  
1<sup>st</sup> Meeting of the Intergovernmental Committee on the Nagoya  
Protocol (ICNP-1)**  
Montreal, Canada  
Organized by the Secretariat, Convention on Biological Diversity  
*June 6-10, 2011*

**Member, Philippine Delegation to the  
1<sup>st</sup> Meeting of the AWG-LCA-3  
to the UN Framework Convention on Climate Change**  
Bangkok, Thailand  
*April 4-8, 2011*

**Member, Philippine Delegation to the  
10<sup>th</sup> Conference of the Parties (COP X)  
to the Convention on Biological Diversity**  
Nagoya, Japan  
*October 2010*

**Member, Philippine Delegation to the  
Interregional Negotiating Group (ING)  
Further Resumed 9<sup>th</sup> Meeting of the Ad-Hoc Open-Ended Working  
Group on Access and Benefit-Sharing of the Convention on Biological  
Diversity**  
Montreal, Canada  
Organized by the Secretariat, Convention on Biological Diversity  
*September 2010*

**Member, Philippine Delegation to the  
Resumed 9<sup>th</sup> Meeting of the Ad-Hoc Open-Ended Working Group on**

**Access and Benefit-Sharing of the Convention on Biological Diversity**  
Montreal, Canada  
Organized by the Secretariat, Convention on Biological Diversity  
*July 2010*

**Member, Philippine Delegation to the  
9<sup>th</sup> Meeting of the Ad-Hoc Open-Ended Working Group on Access and  
Benefit-Sharing of the Convention on Biological Diversity**  
Cali, Colombia  
Organized by the Secretariat, Convention on Biological Diversity  
*March 2010*

**Friends of the Co-Chair, Ad-Hoc Open-Ended Working Group on  
Access and Benefit-Sharing of the Convention on Biological Diversity**  
Montreal, Canada  
Organized by the Secretariat, Convention on Biological Diversity  
*January 2010*

**Participant, Conference on the EU-ASEAN Free Trade Agreement :  
Impacts on ASEAN**  
Bangkok, Thailand  
Organized by IDEAS  
*December 2009*

**Member, Philippine Delegation to the  
8<sup>th</sup> Meeting of the Ad-Hoc Open-Ended Working Group on Access and  
Benefit-Sharing of the Convention on Biological Diversity**  
Montreal, Canada  
Organized by the Secretariat, Convention on Biological Diversity  
*November 2009*

**Convenor, Rural Development Working Group  
Solidarity of Asian Peoples' Advocacies (SAPA)  
ASEAN Civil Society Conference**  
Bangkok, Thailand  
*October 2009*

**Member, Philippine Delegation to the  
7<sup>th</sup> Meeting of the Ad-Hoc Open-Ended Working Group on Access and  
Benefit-Sharing of the Convention on Biological Diversity**  
Paris, France  
Organized by the Secretariat, Convention on Biological Diversity  
*April 2009*

**2<sup>nd</sup> Group of Technical and Legal Experts' Meeting  
on the issue of Compliance relating to Access and Benefit-Sharing  
(ABS), International Regime on ABS**  
Tokyo, Japan  
Organized by the Secretariat, Convention on Biological Diversity  
*January 2009*

**Participant, Preparatory Meeting to UNEP  
International Environmental Governance  
Civil Society Conference**  
Sydney, Australia

Organized by UNEP Regional Office, Bangkok *November 2008*

**Observer, Thirteenth Session of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore**

Geneva, Switzerland

Organized by the World Intellectual Property Organization (WIPO)  
*October 2008*

**Member, Philippine Delegation to the  
9<sup>th</sup> Conference of the Parties (COP IX)  
to the Convention on Biological Diversity  
and the 4<sup>th</sup> COP-MOP of the Cartagena Protocol to the Convention on  
Biological Diversity**

Bonn, Germany

*May 2008*

**Member, Philippine Delegation to the  
6<sup>th</sup> Meeting of the Ad-Hoc Open-Ended Working Group on Access and  
Benefit-Sharing of the Convention on Biological Diversity**

Geneva, Switzerland

Organized by the Secretariat, Convention on Biological Diversity  
*January 2008*

**Member, Philippine Delegation to the  
5<sup>th</sup> Meeting of the Ad-Hoc Open-Ended Working Group on Access and  
Benefit-Sharing of the Convention on Biological Diversity**

Montreal, Canada

Organized by the Secretariat, Convention on Biological Diversity  
*October 2007*

**Observer, Eleventh Session of the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore**

Geneva, Switzerland

**Organized by the World Intellectual Property Organization (WIPO)**  
*July 2007*

**Presenter, 2<sup>nd</sup> Access to Knowledge Conference (A2K2)  
Yale University**

New Haven, Connecticut, USA

Organized by the Yale Information Society Project  
*27-29 April 2007*

**Member, Philippine Delegation to the  
8<sup>th</sup> Conference of the Parties (COP VIII)  
to the Convention on Biological Diversity**

Curitiba, Brazil

*March 2006*

**Member, Philippine Delegation to the  
4<sup>th</sup> Meeting of the Ad-Hoc Open-Ended Working Group on Access and  
Benefit-Sharing of the Convention on Biological Diversity**

Granada, Spain

Organized by the Secretariat, Convention on Biological Diversity  
*January 2006*

**15<sup>th</sup> Meeting on the ASEAN Working Group on Nature Conservation and Biodiversity (AWGNCB)**

Resource person on the topic : Biodiversity and Trade

Organized by **the ASEAN Secretariat**

Watergate Amari Hotel, Bangkok, Thailand

*23 June 2005*

**Member, Philippine Delegation to the  
3<sup>rd</sup> Meeting of the Ad-Hoc Open-Ended Working Group on Access and Benefit-Sharing of the Convention on Biological Diversity**

Bangkok, Thailand

Organized by the Secretariat, Convention on Biological Diversity

*14-18 February 2005*

**Member, Philippine Delegation to the  
10<sup>th</sup> Meeting of the Subsidiary Body for Scientific, Technical and Technological Advice (SBSTTA 10)**

Bangkok, Thailand

Organized by the Secretariat, Convention on Biological Diversity

*7-11 February 2005*

**Member, Philippine Delegation to the  
7<sup>th</sup> Conference of the Parties (COP VII)  
to the Convention on Biological Diversity and the  
1<sup>st</sup> Meeting of the Parties (MOP 1) to the  
Cartagena Protocol on Biosafety**

Kuala Lumpur, Malaysia

*9- 27 February 2004*

**2<sup>nd</sup> Meeting of the Ad-Hoc Open-Ended Working Group on Access and Benefit-Sharing of the Convention on Biological Diversity**

Montreal, Canada

Organized by the Secretariat, Convention on Biological Diversity

*1-5 December 2003*

**Member, Philippine Delegation to the 9<sup>th</sup> Meeting of the Subsidiary Body for Scientific, Technical and Technological Advice-Convention on Biological Diversity (9<sup>th</sup> SBSTTA-CBD)**

Montreal, Canada

Organized by the Secretariat, Convention on Biological Diversity

*11-15 November 2003*

**Technical/Legal Panel Meeting on the ASEAN Framework Agreement on Access to Biological and Genetic Resources**

Organized by **the ASEAN Secretariat**

Manila Pavillion, Manila, Philippines *15-19 October 2003*

**Technical Panel Meeting on the ASEAN Framework Agreement on Access to Biological and Genetic Resources and the ASEAN Agreement on the Conservation of Nature and Natural Resources**

Resource Person on the Topic : "Trends and Updates on Access and Benefit-Sharing : The Way Forward for the ASEAN"

Organized by **the ASEAN Secretariat**  
Kuala Lumpur, Malaysia    *24-25 July 2003*

**Asian Social Forum**

Resource Person on the Topic : " People's Responses to WTO-TRIPs" during the Session of the Asia-Pacific Network on Food Sovereignty and the Session of Vandana Shiva's Food Sovereignty Network  
Hyderabad, Andra Pradesh, India            *4-8 January 2003*

**Open-Ended Expert Workshop on Capacity-Building for Access to Genetic Resources and Benefit-Sharing**

Montreal, Canada  
Organized by the Secretariat, Convention on Biological Diversity  
*2-4 December 2002*

**International Conference on Biolaw 2002 :  
Bridging the Gap Between Scientific and Legal Worlds**

Bangkok, Thailand  
Organized by **BIOTEC Thailand, Monsanto Thailand, ISAAA**  
*3-5 September 2002*

**Member, Philippine Delegation to the  
World Summit on Sustainable Development (Rio+10)**

Johannesburg, South Africa  
*26 August – 31 August 2002*

**2<sup>nd</sup> South-South Biopiracy Summit**

Johannesburg, South Africa  
Organized by **Biowatch, SEARICE and GRAIN**  
*22-23 August 2002*

**Multi-stakeholder Dialogue on Trade, Intellectual Property and  
Biological Resources in Asia**

Organized by the International Centre on Trade and Sustainable Development and the Center for Policy Dialogue  
Dhaka, Bangladesh  
*19-21 April 2002*

**Member, Philippine Delegation to the  
6<sup>th</sup> Conference of the Parties (COP VI)  
to the Convention on Biological Diversity**

The Hague, The Netherlands  
*7- 17 April 2002*

**1<sup>st</sup> Meeting of the Ad-Hoc Open-Ended Working Group on Access and  
Benefit-Sharing of the Convention on Biological Diversity**

Bonn, Germany  
*22-26 October 2001*

**National Biodiversity Forum –Germany**

Helped organize Workshop on Community Participation and Access to Genetic Resources, with **German Technical Cooperation for Development (GTZ) and the IUCN** Bonn, Germany

19-21 October 2001

**World Health Organization and the ASEAN Workshop on the TRIPs Agreement and Traditional Medicine**

Organized by the World Health Organization

Jakarta, Indonesia

11-15 February 2001

**South-South Biopiracy Summit**

Miri, Sarawak, Malaysia

Organized by SEARICE and the BRIMAS

19-26 February 2001

**Member, Philippine Delegation to the 5<sup>th</sup> Conference of the Parties (COP V) to the Convention on Biological Diversity**

Nairobi, Kenya

15-16 May 2000

**15<sup>th</sup> Global Biodiversity Forum**

Sponsored by the World Resources Institute and IUCN

Nairobi, Kenya

11-15 May 2000

**2<sup>nd</sup> Technical Experts' Meeting of the ASEAN Working Group on Nature Conservation and Biodiversity (AWGNCB)**

organized by SEARICE and the ASEAN Secretariat

Singapore

21-25 February 2000

**Seminar Workshop on Program Implementation for the Convention on Biological Diversity**

sponsored by the German Technical Cooperation for Development (GTZ), Germany

15-24 October 1999

**International Seminar-Workshop on the TRIPs Agreement And the Convention on Biological Diversity**

sponsored by the African Center for Technology Studies (ACTS)

Nairobi, Kenya

5-7 February 1999

**1<sup>st</sup> Technical Experts' Meeting of the ASEAN Working Group on Nature Conservation and Biodiversity (AWGNCB)**

organized by SEARICE and the ASEAN Secretariat

Cavite City, Philippines

7- 12 December 1998

**4<sup>th</sup> Asia-Pacific People's Assembly**

an NGO meeting held in parallel with APEC

Kuala Lumpur, Malaysia

10-15 November 1998

**Member, Philippine Delegation to the 4<sup>th</sup> Meeting of the Conference of the Parties (COP IV) Convention on Biological Diversity**

Bratislava, Slovakia

**PERSONAL  
INFORMATION**

4-15 May 1998

10<sup>th</sup> Global Biodiversity Forum (GBF 10)  
**World Resources Institute (WRI) and the  
International Union for the Conservation of Nature (IUCN)**

Bratislava, Slovakia

1-3 May 1998

Date of Birth : 16 November 1966, Cotabato City, Philippines

Height : 1.65 m

Weight : 70 kgs

Father : Eulalio B. Peria, with PCIBank from 1966-1988

Mother : Nenita Ven, housekeeper

Wife : Luz Alzate Peria, with the Department of Budget &  
Management, Regional Office XII (retired since July 2009)

Children : Lean Louiel (18 years old), Freanu (16), Jano (14)

**PAPERS  
PREPARED AND  
PRESENTED**

**INTELLECTUAL PROPERTY REGIMES and the COMMONS**

*Issues and Experiences in the Philippine Context*

- commissioned by the Foundation for Media Alternatives (FMA) and presented in a round-table discussion among government and civil society representatives at the Institute of Social Order, Ateneo de Manila University, Quezon City, 15 June 2007

**CROUCHING PEOPLE, HIDDEN PATENTS :**

**Access to Genetic Resources in the Context of Southeast Asia**

- Presented during the **Asian Regional Peoples' Forum on the World Summit on Sustainable Development**  
The Buddhist Institute, Ministry of Religious Affairs  
Phnom Penh, Cambodia  
25-26 November 2001

**THE COMMUNITY PROTOCOL in the ASEAN Framework  
Agreement on Access to Genetic Resources**

- Presented during the **ASEAN Workshop on the TRIPs Agreement and Traditional Medicine**  
Hotel Acacia, Jakarta, Indonesia  
11-15 February 2001

**THE COMMUNITY PROTOCOL : A Mechanism for the Protection of  
the Rights of Local and Indigenous Communities in Access and  
Benefit-Sharing Agreements**

- Presented during the **World Health Organization Seminar-  
Workshop on IPR and Traditional Medicine**



Hotel Intercontinental, Bangkok, Thailand  
6-8 December 2000

**IT's NOW or NEVER** : *The TRIPs Agreement vis-à-vis The Convention on Biological Diversity and Access to Genetic Resources*

- Presented During the **International Seminar-Workshop on the TRIPs Agreement and the Convention on Biological Diversity**  
sponsored by the African Center for Technology Studies (ACTS)  
Nairobi, Kenya  
5-7 February 1999

**TURNING RICE STALKS INTO GOLD :**

*Why the ASEAN Needs a Framework Agreement on Access to Biological and Genetic Resources*

- Prepared for the **Workshop of the ASEAN Working Group on Nature Conservation and Biodiversity (AWGNCB) on the ASEAN Framework Agreement on Access to Genetic Resources**  
Island Cove Resort, Cavite City, Philippines  
3-6 December 1998

**CAN'T WE STOP AND TALK AWHILE ?**

*A Philippine NGO Perspective on Executive Order 247*

- Presented for the **10<sup>TH</sup> Global Biodiversity Forum (GBF 10)**  
Hotel Suza, Bratislava, Slovakia      1-3 May 1998

**INDIGENOUS KNOWLEDGE FOR PROFIT ?**

- Presented during the **Symposium/Workshop on Indigenous Knowledge Systems on Biodiversity Management and Utilization** organized by DOST-PCARRD  
Cebu City, Philippines  
4-6 March 1998

**The Filipino Consumer in the Government's Sustainable Development Agenda**

- Presented during the National Consumers' Workshop sponsored by the Citizen's Alliance for Consumer Protection  
UP INNOTECH, Diliman, Quezon City, Philippines  
2-3 October 1997

**The Great Green Gold Rush :**

*A Glimpse of Unheralded Bioprospecting Activities in*

*Southeast Asia*

- Prepared as an information document for the Anti-Biopiracy Program in Southeast Asia  
*August 1997*

(daterev12May2014)