Curriculum Vitae

I. Biographical Data

A. Name of candidate: Rajendra P Shrestha

B. Education:

D. Tech.Sc., Natural Resources Management from Asian Institute of Technology (AIT), Bangkok, 1999

M. Sc., Natural Resources Planning and Management, AIT, Bangkok, 1993

B. Sc. (Hons.) Ag., Haryana Agril. University, Hisar, India, 1984

C. Positions held:

Nov 2013 – Dec 2015: Coordinator, Natural Resources Management Field of Study Nov. 2009 - to date: Associate Professor, Natural Resource Management (NRM), School of Environment, Resources and Development (SERD), AIT, Thailand Jan 2013- Dec 2014: Thematic area leader of Society, Resources and Development thematic area of SERD Feb/Mar 2011: Associate Dean for UG of SERD Jan 2003 – Nov 2009: Assistant Professor, NRM, SERD, AIT, Thailand Mar 2011 - Dec 2012: Coordinator, Natural Resources Management Field of Study Jan 2007 - Jul 2010: Coordinator, Natural Resources Management Field of Study Jan 2001 - Dec 2002: Senior Programme Officer, United Nations Environment Programme (UNEP) May 1999- Dec 2000: Research Scientist and Affiliated faculty, Natural Resource Management, School of Environment, Resources and Development, AIT, Thailand May 1994 - Apr 1999: Teaching and research associate, Natural Resources Planning and Management Program, AIT, Thailand Training and Development Officer, Natural Resources Planning and Sep 1993 - Apr 1999: Management Program, AIT, Thailand Agriculture officer, Ministry of Agriculture, Nepal Jul 1985 – Dec 1991: Jul 1984 - June 1985 Lecturer, Institute of Agriculture and Animal Science, Tribhuwan University, Nepal

D. Special honors and awards:

- Guest Researcher (Forskningsnemnd fellow), Norwegian University of Life Sciences, Norway, June/July 2012
- Asian Scientific Award 2009 Recipient of the World Association of Soil and Water Conservation
- AIT/SERD Teaching Award 2005 for the course ED76.08 Land evaluation and Resource Management (Student class size -33) of NRM, SERD
- RRIAP Exchange Researcher –at Nihon university, Japan [one month, May/June 2006]
- ASEM-DUO Denmark Fellow at Roskilde Univ., Denmark [one month, May 2005]
- UNEP/GRID Fellow, UNEP-GRID, North America, [one month, April 2003]
- Recipient of Mahendra Vidya Bhusan Class I from Nepal's Late King Birendra B.B.S. Dev., 2000
- CIDA/AIT scholar from January 1992 to August 1993
- USAID scholar from July 1981 to June 1984
- IAAS/Tribhuwan University scholar from 1977-1979

II. Pedagogy

A. Experience as a teacher

- 1. Courses taught, including courses taught at partner institutions. Student enrollment in each course taught and average grade in each course.
 - a. Taught the following courses at AIT.
 - ED76.02 Natural Resources Management Issues in Asia [RP Shrestha & NRM faculty]
 - ED76.13 Natural Resources Degradation and Conservation
 - ED76.15 Research design and methods [C. Grunbuhel, RP Shrestha and D. Jourdain]
 - ED76.16 Land resources management
 - ED76.17 Geospatial techniques in NRM
 - ED82.9005 Land use, climate change and adaptation [RP Shrestha and C Grunbuhel]
 - UG303 Environmental studies
 - ED76.06 Spatial Information System in natural resources planning management;
 - ED76.08 Land evaluation and resource management;
 - ED12.13 Natural resources mapping techniques;
 - ED76.10 Land degradation monitoring and management;
 - ED76.12 Integrated Watershed Development and Management Workshop [Co-taught with GB Thapa]
 - IN00.9025 Climate, Energy and Food Security in the Asia Pacific 1(1-0) [Video-based course between many universities in Asian, Pacific and North America]
 - ED76.9005 Land use and climate change

Note: Italicized courses are not-active now as they have been revised and carry new course codes.

Courses taught in Aug 2006- Aug 2013 [during 2003-2005 also, I taught ED76.02, ED76.06, ED76.08, ED12.13, ED76.10, ED76.12]

Semester	Course	Credit	Crediting Student No.	Average grade	Instructor
Jan 2006	ED76.08	3	22	3.41	RP Shrestha
Aug 2006	ED76.10	3	6	3.6	RP Shrestha
	ED76.06	3	8	3.56	RP Shrestha
	ED76.02	1	32	3.66	NRM faculty+RP Shrestha
Jan 2007	ED76.08	3	22	3.45	RP Shrestha
Aug 2007	ED76.13	3	20	3.5	RP Shrestha
	ED76.06	3	18	3.55	RP Shrestha
	ED76.02	1	31	3.55	RP Shrestha +NRM faculty
Jan 2008	ED76.08	3	21	3.5	RP Shrestha
Aug 2008	ED76.13	3	14	3.53	RP Shrestha
	ED76.06	3	10	3.7	RP Shrestha
	ED76.02	1	30	3.48	RP Shrestha +NRM faculty
	Coordinated a	nd lecture	e API lectures	on Climate,	energy & food security
Jan 2009	ED76.08	3	19	3.42	RP Shrestha
	ED76.13	3	12	3.46	RP Shrestha
Aug 2009	ED76.02	1	25	3.5	RP Shrestha + NRM Faculty
-	ED76.06	3	19	3.45	RP Shrestha
	IN00.9025	2	10	No	Asian Pacific Network Video
				grading	course between many

	-		and the state of t		universities.
Jan 2010	ED76.13	3	6	3.6	RP Shrestha
	ED76.16	3	15	3.47	RP Shrestha
Aug 2010	ED76.02	1	22	3.43	RP Shrestha + NRM Faculty
	ED76.17	3	11	3.45	RP Shrestha
	ED76.9005	3	17	3.4	RP Shrestha
Jan 2011	ED76.13	3	11	3.4	RP Shrestha
	ED76.16	3	21	3.36	RP Shrestha
Aug 2011	ED76.02	1	23	3.54	RP Shrestha + NRM Faculty
	ED76.17	3	12	3.5	RP Shrestha
	ED76.9005	3	11	3.55	RP Shrestha
Jan 2012	ED76.13	3	9	3.56	RP Shrestha
	ED76.15	3	23	3.75	C Grunbhel, RP Shrestha
					(15%), D Jourdain
	ED76.16	3	20	3.5	RP Shrestha
Aug 2012	ED76.02	1	23	3.57	RP Shrestha + NRM Faculty
	ED76.17	3	9	3.61	RP Shrestha
	ED82.9010	3	18	3.33	RP Shrestha (50%), C Grunbuhel
Jan 2013	ED76.13	3	13	3.5	RP Shrestha
	ED76.15	3	18	3.67	C Grunbuhel, RP Shrestha (15%), D Jourdain
	ED76.16	3	15	3.43	RP Shrestha
Aug 2013	ED76.02	1	20	3.5	RP Shrestha + NRM Faculty
C	ED76.17	3	9	3.56	RP Shrestha
	ED82.9010	3	8	3.5	RP Shrestha (50%), C Grunbuhel
Jan 2014	ED76.13	3	9	3.56	RP Shrestha
	ED76.15	3	19	3.37	C Grunbuhel, RP Shrestha (15%), D Jourdain
	ED76.16	3	17	3.47	RP Shrestha
Aug 2014	ED76.02	1	19		RP Shrestha + NRM Faculty
=	ED76.17	3	8		RP Shrestha
	ED82.9010	3	12		RP Shrestha (50%), C Grunbuhel

Italicized course codes are required courses

- Invited lecturer for the following AIT courses
 - AT76.11 RS/GIS for Environmental applications
 - ED79.13 Strategic environmental assessment for urban development
 - Institute-wide course on Disaster Risk Management
 - Other specific invited lectures are listed in Section A.7
- Co-taught following AIT courses as an affiliated faculty (1999-2000).
 - Land evaluation and resource management;
 - Natural resources mapping techniques;
 - Land degradation modeling and management;
 - Research design, data analysis and report preparation
 - Advanced technologies in GIS
- b. Courses taught in the partner universities

- Delivered lecture on *Management of Land Resource* to MSc Sustainable Land use (SLUSE) at Kasetsart University, Thailand, October 2010.
- 'EVS 336: Principles of NRM' at Sirindhorn International Institute of Thailand, Thammasat University, Pathumthani in 2005, 2007
- 'NRM 522: Spatial analysis in natural resources management' at <u>Andalas University</u>, Padang, Indonesia in 2005, 2006, 2007
- c. Taught plant science/animal sciences courses as a lecturer at the IAAS, <u>Tribhuwan</u> University, Nepal during 1984-1985 and as part-time lecturer during 1985-1991.

B. Evaluation of teaching

- 1. Summary of student teaching evaluations
- Received "AIT/SERD Teaching Award 2005" in recognition of outstanding teaching performance the course ED76.08 based on students' evaluation

Summary of student teaching evaluations (2006-2013)

Semester	Course	Strongl	Disagree	Neutral	Agree	Strongly	Instructor
		У				Agree	
		disagree					
				%			
Jan 2006	ED76.08	0	1.8	9.2	53.3	35.7	RP Shrestha
Aug 2006	ED76.10	0	0	1.9	45.9	52.2	RP Shrestha
	ED76.06	0	0	1.1	32.9	66.0	RP Shrestha
	ED76.02	0.2	0.1	2.5	53.0	44.2	D Schimdt-
					***************************************		Vogt+NRM
							faculty
	ED76.02	0	0.1	7.4	33.3	59.2	RP Shrestha
							+NRM faculty
Jan 2007	ED76.08	0	0.4	6.1	39.4	54.1	RP Shrestha
Aug 2007	ED76.13	0	0	0.2	14.4	85.4	RP Shrestha
	ED76.06	0.3	1.3	14.9	21.6	61.9	RP Shrestha
Jan 2008	ED76.08	3.86	1.71	7.57	29.86	57.0	RP Shrestha
Aug 2008	ED76.02	0.62	1.11	10.1	39.41	48.77	RP Shrestha
							+NRM faculty
	ED76.06	.32	0	9.84	42.86	46.98	RP Shrestha
	ED76.13	0	0	10.48	24.08	65.44	RP Shrestha
	IN00.9025	0	6.9	79.31	13.79	0	Several
							instructors
Jan 2009	ED76.08	0	.5	19.01	39.24	41.24	RP Shrestha
	ED76.13	0	0	4.07	27.9	68.03	RP Shrestha
Aug 2009	ED76.02	0	0	4.95	45.43	49.62	RP Shrestha
C							+NRM faculty
	ED76.06	0	1.68	10.59	43.36	44.37	RP Shrestha
	IN00.9025	12.5	0	.86	55.6	31.03	Several
		water					instructors
Jan 2010	ED76.13	0	0	2.82	28.87	68.31	RP Shrestha
	ED76.16	0	0	2.71	34.98	62.32	RP Shrestha
Aug 2010	ED76.02	0	.19	7.09	34.48	58.24	RP Shrestha
			- Tananana				+NRM faculty
	ED76.17	0	0.32	0.63	24.44	74.61	RP Shrestha

-tv	ED76.9005	0.23	0	6.21	34.94	58.62	RP Shrestha
Jan 2011	ED76.13	10.34	0.77	0	20.31	68.58	RP Shrestha
	ED76.16	5.21	0.58	2.31	26.2	65.7	RP Shrestha
Aug 2011	ED76.02	0	1.74	5.22	57.68	35.36	
	ED76.17	0	0	7.14	62.14	30.71	RP Shrestha
	ED76.9005	0	0	1.15	47.13	51.72	RP Shrestha
Jan 2012	ED76.13	16.67	0	1.15	43.1	39.8	RP Shrestha
	ED76.15	0	2.23	9.94	37.93	49.9	C Grunbuhel, RP
						VARABANIPE	Shrestha, D.
							Jourdain
	ED76.16	0	0	1.6	43.88	54.52	RP Shrestha
Aug 2012	ED76.02	0	.5	4.75	37.5	57.25	RP Shrestha
_						AFF-CONTRACTOR OF THE CONTRACTOR OF THE CONTRACT	+NRM faculty
	ED76.17	.56	5.56	7.22	38.89	47.78	RP Shrestha
	ED82.9010	0	0	6.76	30	63.24	RP Shrestha+ C
V							Grunbuhel
Jan 2013	ED76.13	0	0	0.45	28.18	71.37	RP Shrestha
	ED76.15	6.25	0	0.94	39.38	53.44	C Grunbuhel, RP
						****	Shrestha, D
							Jourdain
	ED76.16	0	0	0	32.31	67.69	RP Shrestha
Aug 2013	ED76.02	5.56	0	2.5	21.67	70.27	RP Shrestha and
							NRM Faculty
	ED76.17	0	0	1.25	21.25	77.5	RP Shrestha
	ED82.9010	0	0	1.88	35	63.13	RP Shrestha+ C
							Grunbuhel
Jan 2014	ED76.13			1.88	26.88	71.25	RP Shrestha
	ED76.15		.29	2.94	29.12	67.65	C Grunbuhel, RP
							Shrestha, D
							Jourdain
	ED76.16	1.67	.33	3	18	77	RP Shrestha

IN00.9025 was delivered via video conference with lectures coming from various universities around the world. No exams was conducted.

Note: detail evaluation provided as attachment.

2. Copies of peer teaching evaluation reports. *NA*

C. Pedagogical Development

Course development

- 1. Publications: textbooks, laboratory manuals, articles in journals oriented towards pedagogy
 - Trisurat, Y., Shrestha R.P. and R. Alkamade (Eds.). 2011. *Land Use, Climate Change and Biodiversity Modeling: Perspective and Applications*, edited book volume, IGI Publishers. p.489 [ISBN 978-1-60960-619-0].
 - Shrestha, R.P. 2012. Lecture Notes for UG303 Environmental Studies. Asian Institute of Technology, 89p. (unpublished).

- Schmidt-Vogt, D. and Shrestha, R.P. 2006. Role of geospatial technologies in training for sustainable natural resources management in Asia. In: GIS DevelopmentWeekly 2 (19), http://www.gisdevelopment.net/ezine/weekly/may0806.htm
- Shrestha, R.P., 2007. Environmental Data and Its Management, In *Environmental Management Tools: A Training Manual* (Ed. J.K. Routray), AIT/UNEP, p 23-34.

2. Grants related to pedagogy and curriculum development

- AIT support to National University of Laos (NUOL), 2007-2010 Extension MSc Forestry Curriculum Development, Jan 2011 June 2012. Sponsor: SIDA [49,873 USD]
- MSU Study Abroad Program. Sponsor: Michigan State University, January July 2010 [900,374 Baht] MSU students of international studies program attended one semester in AIT and their grade/credits were transferred to MSU.
- Tamil Nadu Agricultural University (TNAU) capacity development Nov. 2008 Jan 2009 Sponsor: TNAU [117,087 Baht]

3. Initiations of new courses, degree programs, curricula

- Developed/revised ED82.9010 (Land use, climate change and adaptation) and offered since Aug 2012
- Developed/offered UG303 Environmental Studies (a required course for all SET UG streams)
 since Aug 2012
- Developed new NRM course (ED76.9005 Land use and climate change) and offered since Aug 2010
- Contribution in developing curriculum of Professional Master's in Public Policy designed to launch under NRM and Myanmar Egress
- Developed/Formalized IN00.9025 (Climate, Energy and Food security) as AIT Institute-wide course since Aug 2009
- Modification and development of existing NRM courses, such as ED76.10 to ED76.13 (academic sensate approved in 2007); ED76.06 to ED76.17; and ED76.08 to ED76.16 (approved in 2009)
- Revised ED76.07 Research design course to expand the curriculum from 2 to 3 credits (approved in 2009)
- Developed and taught a course on "EVS 336: Principles of Natural Resources Management" at Sirindhorn International Institute of Technology, Thammasat University in 2005 and 2007
- Developed and taught a course on "Spatial Analysis in Natural Resources Management" at Andalas Univ., Padang, Indonesia in 2005, 2006 and 2007
- Course advisor of two courses, 1) Sustainable land management, and 2) Fundamentals of GIS, developed at the Royal University of Phnom Penh (RUPP), Cambodia by RUPP faculty under USEPAM project
- Developed NRM courses in 2003 1) ED76.06 Spatial Information Systems in NRM, 2)
 ED76.10 Land degradation monitoring and management, 3) ED76.08 Land evaluation and resource management

4. Development and introduction of innovative pedagogical techniques

- I believe that an effecting learning depends upon multiple factors including innovative pedagogical techniques. There is the need of bringing different techniques to suit a particular group of students even teaching a same course but in different years. I do try out several techniques in combination for the benefit of students. These include:
 - o Knowing every student's ability and their learning needs
 - o Encourage every student and make them participate in an interactive learning process
 - o Giving prompt feedback to the students. I encourage students to walk in to my office with their queries instead of making appointments

- o Encourage individual and group work to develop interpersonal relations among themselves
- O Keeping good personal rapport with each student in and outside the classroom and engaging them for critical thinking and analysis not only about the subject matter but also about the ethics of scientific conduct and professionalism
- O Providing ready-reference of learning materials by putting course materials on-line www.serd.ait.ac.th/ed76.06, www.serd.ait.ac.th/ed76.08). After flood of 2011, above websites are not functional, as SERD server is not yet restored. Hence, I have been using www.mediafire.com and Dropbox to make available all lecture notes and reading materials to the students.
- 5. Participation in workshops, short courses etc. relating to improvement of teaching
 - Application of the Bioenergy and Food Security Rapid Appraisal (BEFS RA), 27-31 October 2014, FAO, Bangkok.
 - USAID LEAF training of trainers course on Regional Climate Change Curriculum Development, Kualalumpur, 4-8 August 2014.
 - 2014 MyCOE / SERVIR Initiative in Southeast Asia Association of American Geographers (AAG), NASA, USAID-Regional Development Mission for Asia (15 25 January 2014)
 - Introduction to GHG Measurement for Forest Projects, 18 September 2012, GHG Management Institute, Bangkok
 - Effective performance management workshop, 17 August 2010, Bangkok
 - Attended On-line course delivery by VClass, July 31 August 1, 2003, AIT, Thailand

Note: AIT has not provided formal opportunity for faculty development and mentoring, which was needed in earlier years

III. Student Research Supervision

A. Theses supervised

	Complete	ed .	In-Progre	SS
Students	Chair of the committee	Co-chair of the committee	Chair of the committee	Co-chair of the committee
Doctoral	9	3	13	2
Master's	52	4	8	1

² Doctoral and 2 Master's graduating in Dec 2014 - not included above

Detail is given below.

1. Doctoral students (as Program Committee Chair)

S.N.	Student's name	Dissertation title	Status
1	Nalina	Modeling sustainable land use options for enhancing	Graduated, Dec
	Gnanavelrajah	carbon sequestration, crop diversity and productivity:	2007
		A case of Khlong Yai watershed, Easter Region of	
		Thailand	
2	Anisara Pensuk	Consequences of land use change on land quality,	Graduated, Dec
	**************************************	water resource and food security in Songkhla Lake	2009
	***************************************	Basin, Thailand	
3	Nareeluck	Determinants of land use change in Prasae	Graduated, Dec
	Wannasai	watershed, Thailand	2010
4	Akom Sowana	Influence of Coastal Land Use, Fisheries and	Graduated, Dec
	Per continue de la co	Socioeconomics on Natural Resources Degradation	2010
		in Pattani Bay, Thailand	

5	Thirapong	Biophysical and social dimensions affecting land use	Graduated, May
	Santipop	and reforestation in Kanachanaburi, Thailand	2011
6	Qasim Said	Driving forces and conservation strategies of land degradation in Pakistan: A case of Pishin Sub-basin, Balochistan	Graduated, May 2011
7	EPN Udayakumara	Land degradation and rural livelihood in Samnalawewa catchment, Sri Lanka	Graduated, May 2011
8	Partoyo	An analysis of land use options and strategies for food availability and land conservation in Yogyakarta, Indonesia	Graduated, Jan 2012
9	Somnuck Pongsai	GIS-based decision support system for soil conservation and management: a case study of Huai Nam micro-watershed, Nan province, Thailand	Graduated, Dec 2010 Co-chair with D. Schmidt-Vogt
10	Muhmmad Arshad	Evaluation of sweet sorghum-legume intercropping for food and bioethanol production under selected agronomic practices	Graduated, Jul 2012 Co-chair with S.L. Ranamukkarachc hi
11	Muhammad Ejaz Ul Islam Dar	Human livelihood and impacts on the vegetation of Machira National Park, Azad Jammu Kashmir, Pakistan	Graduated, Dec 2012 Co-chair with R. Cochard
12	Paul Jonas Ligonja	Environmental and socioeconomic effects of soil conservation in the semi-arid region of Tanzania: a case study of Irangi hills in Singida district	Graduated Intersem 2013
13	Onanong Cheablam	Impact of climate change on tourism in Mu Ko Surin National Park, Thailand	Graduating in Dec 2014
14	Man Purotaganon	Water Policy Processes: The Interplay of Politics, Powers and Partnering The Study on Negotiation Process of Multi-stakeholders In Sub-watershed of Prachinburi, Central Thailand	Graduating in Dec 2014. Co chair with D. Schmidt-vogt
15	Phutchard Vicharnakorn	Assessment of above-ground biomass and carbon stock of land use change using multi-temporal Landsat data	Expected graduation- Dec 2014
16	Wirongrong Duangjai	Institutional factors affecting land use-decision making and livelihoods: a case study of Doi Mea Salong, Chiang Rai province, Northern Thailand	Ongoing
17	Tran Thi Phuong	Analyzing land use change and stakeholders conflict on water resource use in Bo river watershed, Thua Thien Hue province, Vietnam	Ongoing
18	Ngo Thanh Son	Effect of land use change on runoff and sediment yield using remote sensing and SWAT model in northwest Vietnam	Ongoing
19	Yutthaphong Kheereemangkla	Consequences of watershed degradation on watershed ecosystem services using SWAT and EM-DSS in the Northeast Thailand	Ongoing
20	Mohd. Saiful A. Mohamad Sahal	GIS-based fuzzy modeling for Oilpalm yield prediction	Ongoing
21	Nguyen Tuan Anh	Developing decision making tools to support district level land use planning in Vietnam: a case of Lynhan district, Ha Nam province	Ongoing

22	Kanda	Land use change from Food crop to pararubber:	Ongoing
	Sakarayote	effect on smallholder farmers and food security in	
		Northeastern Thailand	
23	Kyawt Kay	Impact of land degradation on crop production in dry	Ongoing
	Khaing Tun	zone Myanmar	
24	Rehan Ul Haque	Factors affecting waterbirds abundance, diversity and	Ongoing
		richness in Bung Boraphet marsh, Central Thailand:	
		Role of Local factors, Landscape factors and	
		disturbance	
25	Sunsanee	Effect of land use change on ecosystem services in	Ongoing
	Arunyawat	upper Kwaenoi watershed, Thailand	

Ongoing students are those who have completed their candidacy exams. Those under course works are not included in the above list.

 Served as Program committee member of 24 doctoral students from NRM, RS/GIS, ASE, EEM, TRE, E, ITCZM, RRDP, AARM, CCSD, GDS, UEM, WEM, who have already graduated.

2. Master's students

S.N.	Student's name	Graduated	Thesis title
1	Supaporn Sukpinid	Aug 2003	Land suitability classification for Sugarcane in
			Suphanburi province, Thailand
2	Sansanee	Aug 2003	Ecotourism development for coastal zone
	Wangvoralak*	7146 2005	management: a case study of Mangrove forest
			areas in Koh Chang Tai subdistrict, Trad province,
_			Thailand
3	Somphathay Liengsone	Aug 2003	Assessment of Poverty Alleviation and Sustainable
			Natural Resources Management Program in Nam Tong Watershed, Lao PDR
			Tong Watershed, Edo I Ext
4	Shree Bhagwan P	Aug 2004	Prospect of cultivated and wild Non Timber Forest
	Gupta		species for commercial production in Tropical
			region: A case study of Bara district, Nepal
5	Somsanouk	Aug 2004	Impacts of Road Construction on Biodiversity: A
	Vongsomphou		Case Study of Dong Phou Vieng National
			Biodiversity Conservation Area in Lao PDR.
	ITI Marrala	A 2004	
6	Ubon Musekawat	Aug 2004	Land Use Zoning For Natural Resources Management: Case Study of Bang Khun Sai, Bang
			Leam, Phetchaburi
7	Nguyen Thanh Son	May 2005	GIS aided land evaluation for sustainable
			agricultural development in Tri Ton, An Gian,
	Cast	M 2005	Vietnam.
8	Sathiyavaani Kokularamanan	May 2005	Application of GIS in monitoring the soil erosion in sloping agricultural land in Uma Oya watershed,
	INUNUIAI AIII AIII AII		Sri Lanka
9	Warinya Thothong	May 2005	GIS application for monitoring spatial and
			temporal changes of reservoir water quality in
	G-97-77-77-77-77-77-77-77-77-77-77-77-77-		agricultural watershed: a case study of Mae Thang
	5-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0		reservoir, Phrae province, Northern Thailand
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10	Tran Thi Hoang Anh	May 2006	Land evaluation for sustainable agricultural development in Da Nhim watershed, Vietnam: An application of parametric method in GIS environment
11	Krishna P Osti	May 2006	Collaborative forest management in Parsa district, Nepal: A study on stakeholder's perception and participation
12	Kaisorn Thanthathep	May 2006	An assessment of drought risk area using GIS: a case study in Savannakhet province of Lao PDR
13	Jitsuda Intuman	May 2006	Potential irrigation development in central Yom river basin, Thailand
14	Bipin K Jha	May 2006	Factors influencing Soil conservation practices in Siwalik-Terai region: a case study of the Badhari Sub-watershed of Dhanusa district, Nepal
15	Mom Sitha	May 2006	Community-based fisheries management: a case study of Doun L'A and Spean Krong community fisheries in Kampong Thom Province, Cambodia
16	Cheav Vicheak	May 2006	Participatory fiheries management: a case study of Boeung Chunlen Reservoir community fishery, Kandal province, Cambodia
17	Md. Ruhul Amin	May 2006	Social forestry in the Matamuhuri reserve forest of the Chittagong hill tract, Bangladesh: Impact and implications
18	Ubonwan Sintopan	May 2007	Public participation GIS for community forest
	,		management: case study of Lee watershed,
		3.5 0005	Northern Thailand
19	Rujee Rodcha	May 2007	Land evaluation for agricultural land reform area using GIS: A case study in Rayong Province, Thailand
20	Mai Ky Vinh	May-08	GIS-aided marine conservation planning and management: a case study in Phu Quoc Island, Vietnam
21	Thian Wittayawarakul	May-08	Effect of land use change and climate on surface runoff and water balance: the case of Mae Kam Mee watershed, Northern Thailand
22	Pornpita	May-08	Resource use and conflict in Phu Khieo Wildlife
	Khlangpukhiaw		sanctuary: a case study on people-park interaction
23	Tuy Vao Ban	May-08	Linkage of land use change and climate with soil
			erosion and rice productivity in Ninhthuan, Central Vietnam
24	Chhimi Rinzin	Dec-08	Status, options and challenges in soil and water
			conservation in Bhutan: an implication for
25	No Con-	D 00	sustainable land management
25	Vo Cong	Dec-08	Land use change and its implications on livelihoods in the upper Ca river basin: a case
			study in Ky Son district, Nghe An province, Vietnam
26	Vorn Vichheka	May-09	Land use change and its impacts on indegenous peoples' livelihood in Rattanakiri province, Cambodia
27	Shicai Shen	May-09	Role of animal husbandry in rural livelihood in Gongshan county, Northwest Yunnan Province, China

28	Ajmal Rahimi	May-09	Impact of water resource degradation on rural livelihood through agricultural productivity in
29	Maria Motorina	May-09	Deh-Sabz district, Afghanistan Impact of drying up of Aral sea on land degradation ad its implication on the agricultural
2.0		1	production in Uzbekistan
30	Binaya Paskhala	May-10	Assessing the Vulnerability of People's Livelihood to Climate Change in Far Western Nepal
31	Aisang Aili	May-10	Assessment of the impact of sand-dust storm on oasis agriculture in arid area: a case study of Bugur
32	Syamsul bachri	May-10	county, Northwest China Mapping landslide hazard and developing land capability-based management practice in central
22	Databalant Cananyledaa	Mov. 10	Java province, Indonesia
33	Ratchakrit Sangsukdee	May-10	Factors affecting attitude of shrimp farmers on voluntary environmental management in coastal
			Samut Sakhon province, Thailand
34	Yeshey*	May-10	Comparative assessment of different land management methodological tools and approaches: case study from Dagana and Chukha districts in Bhutan
35	Merina Lohani*	May-10	An investigation of land use and livelihood
33	Mellia Lulialii	May-10	changes generated by commodity-motivated land
			acquisition schemes in Southeast Asia
36	Nguyen Hoai Son	Dec-10	Community-based Fisheries Management: a case
			study in Tam Giang Cau Hai Lagoon, Thua Thien
			Hue Province, Vietnam
37	Kiran Upreti	May-11	Sustainable cultivation of biofuel crop in Nepal:
			case of Jatropha curcas in Palpa district
38	Namita Nepal	May-11	Impact of Climate Change on Food Security: A
			Case Study of Agriculture in Makawanpur District
39	Niramon Kanlaya	May-11	Land reform and farmers' livelihood: a case study
			of Bor Lek Long sub-district, Long district, Phrae
40	Lwin Maung Maung	May-12	province, Thailand Farmers' perception, adaptation to climate change
*+0	Swe	iviay-12	in dry zone area of Myanmar
41	Pech Bunnat	May-12	Predicting the location of vulture colonies in the
''	A VVAL AP VIANAUIU	11,44, 12	northern and eastern plains of Cambodia
42	Theng Lipine	May-12	A socioeconomic impact assessment of floating
		Ţ	village and farming cum fishing village in
			Tonlesap great lake: a case study at Phat Sanday
			commune, Kampong Svay district, Kampong
			Thom Province
43	Phan Thanh Noi	May-12	Detecting land use/cover change using RS/GIS:
***************************************			case of Tam Nong District, Phu Tho province,
11	La Van Duna	Mov. 12	Vietnam Use of multi temporal MODIS data for mapping
44	Le Van Dung	May-12	Use of multi-temporal MODIS data for mapping paddy rice cultivation area in Ninh Binh province,
			Vietnam
45	Hoang Dung Ha	May-12	Community-based fisheries resource management
	aroung some and	1,111,12	in the context of climate change in Tam Giang Cau Hai Lagoon, Thua Thien Hue Province, Vietnam

46	Nguyen Anh Tuan	May-12	Evaluation and prediction of soil erosion using SWAT model at the Black river basin, Hoa Binh
47	Khin Mar Myo	May-12	province, Viet Nam Assessment of soil salinity prblem, its impact on agriculture and coping strategies of local farmers: a case study in Bogale township, Ayeyarwaddy Delta region, Myanmar
48	Sonia Nasrin	May-12	Organic carbon sequestration in soil aggregates under different cropping patterns and conventional tillage practice in Jessore, Bangladesh
49	Lok Mani Sapkota*	May-12	Forest fire management and social ecological systems in community forest of Siwalik region in Nepal
50	Md. Ali Akber	Jul-12	Land use change and it's effects on biodiversity of Doi Mae Sa Long, Chiang rai, Thailand
51	SoeSoe Htway	May 2013	Assessment of farmers' local strategies for coping with water scarcity under rainfed agriculture in dry
52	Nuanwan Chaweewan	May 2013	zone of Myanmar Farmers' perception on and adaptation practices to climate change: study of Doi Mae Salong, Chiangrai Thailand
53	Aung Kyaw Naing	May 2014	Potential socioeconomic impact of private plantation forestry on local livelihood in Yedashe township, east-Bago Yoma region, Myanmar
54	Nguyen Khac Viet Ba	May 2014	Assessment of Coastline Change in Relation to Human Activities in Hai Hau District, Nam Dinh Province of Vietnam Using Remote Sensing and Geographic Information System
55	Tieng Thida	May 2014	Farmers' perception on impact of climate change on rice productivity in Kampong Speu Province, Cambodia
56	Soukphavanh Sawathvong	Intersem 2014	Changing livelihood pattern of peple based on wetland ecosystem: A case study in Beun Kiat Ngong wetland in Champasak province, Lao PDR

Note: for four students' name with *, I served as Co-chair for them

- Served as the <u>thesis committee member</u> of 88 Master's students from NRM, ASE, RRDP, ITCZM, UEM, RS/GIS, E, DPMM, GDS FoS who have already graduated

B. Doctoral students (Graduated under my supervision)

1. Ms. Nalina Gnanavelrajah [Year graduated: December 2007]

a. Title of Dissertation:

Modeling sustainable land use options for enhancing carbon

sequestration, crop diversity and productivity: A case of Khlong Yai

watershed, Easter Region of Thailand

b. Resulting publications:

1. Shrestha, R.P., D. Schmidt-Vogt, D., and N. Gnanavelrajah, 2010. Relating plant diversity to biomass and soil erosion in a cultivated landscape of the eastern seaboard region of Thailand, *Applied Geography*, 30: 606-617.

- 2. Gnanavelrajah, N., Shrestha, R.P., Schmidt-Vogt, D. and Samarakoon, L. 2008. Assessment of carbon stock and soil carbon management in agricultural land uses in Thailand. *Land Degradation and Development*, 19(3)242-256.
- Shrestha, R.P. and N. Gnanavelrajah, 2008. Assessing Biophysical and Socioeconomic Condition for Watershed Management: Case of Khlong Yai Watershed, Thailand. 3rd GMSARN International Conference, 12-14 November, 2008, Kunming. China.
- 4. Gnanavelrajah, N. and R.P. Shrestha. 2007. Assessing Plant Diversity in Cultivated Landscape: A case of Khlong Yai Sub-watershed, Thailand. 2nd GMSARN International Conference, 12-14 December 2007, Pattaya, Thailand.
- 5. Shrestha, R.P., Gnanavelrajah, N. and L. Samarakoon. 2007. A watershed-scale assessment of present and future Carbon stock: GIS application in Khlong Yai watershed of Thailand. 28th Asian Conference on Remote Sensing, 12-16 November 2007, Kuala Lumpur, Malaysia.
- c. Years to graduation: 3.5 yrs
- 2. Ms. Anisara Pensuk [Year graduated: Dec. 2009]
 - a. Title of Dissertation: Consequences of land use change on land quality, water resource and food security in Songkhla Lake Basin, Thailand
 - b. Resulting publications:
 - 1.Pensuk, A., R.P. Shrestha, and R. Clemente, 2010. Effect of Land Use Change on Land Quality and Water Resources in Phatthalung Watershed, Thailand, *International Journal of Environment and Rural Development*, 1(1):158-163.
 - 2. Pensuk, A. and R.P. Shrestha, 2010. GIS application for assessing the effects of land use change on surface runoff and soil erosion in Phathalung watershed, Southern Thailand. 31st Asian Conference on Remote Sensing, 1-5 November 2010, Hanoi, Vietnam.
 - 3.Pensuk, A. and R.P. Shrestha, 2008. Land Use Change and Rural Livelihoods: A Study of Phattalung Watershed in Southern Thailand, *Asia-Pacific Journal of Rural Development*, **18**(2),143-164.
 - 4.Pensuk, A. and R.P. Shrestha, 2008. Effect of Paddy Area Conversion to Rubber Plantation on Rural Livelihoods: A Case Study of Phatthalung Watershed, Southern Thailand, *GMSARN International Journal*, 2, 185–190.
 - 5.Pensuk, A., and R.P. Shrestha, 2011. Effect of Land Use Change and Food Availability in Phatthalung Watershed, Southern Thailand. *The Second International Conference on Environment and Rural Development*, 8-9 January 2011. Phnom Penh. [Best paper award]
 - c. Years to graduation: 5 yrs
- 3. Ms. Nareeluck Wannasai [Year graduated: Dec 2010]
 - a. Title of Dissertation: Determinants of land use change in Prasae watershed, Thailand
 - b. Resulting publications:
 - 1. Wannasai, N. and Shrestha, R.P. 2008. Role of land tenure security and farm household characteristics on land use change in the Prasae watershed, Thailand. *Land Use Policy*, **25**(2)214-224.
 - 2. Wannasai, N. and Shrestha, R.P. 2007. Determinants of rural land use change in Prasae watershed, Thailand. *Asia-Pacific Journal of Rural Development*, 17(2) 47-60.
 - c. Years to graduation: 7 yrs
- 4. Mr. Somnuck Pongsai [Year graduated: Dec 2010]
 - a. Title of Dissertation: GIS-based decision support system for soil conservation and management: a case study of Huai Nam micro-watershed, Nan province, Thailand
 - b. Resulting publications:

- 1. Pongsai, S., D. Schmidt-Vogt, R. P. Shrestha, R. Clemente, and A. Eiumnoh. 2010. Calibration of MUSLE for Simulating Sediment Yield in Steeply Sloping Terrain: A Case Study in Khun Satan Catchment of Northern Thailand, *Canadian Journal of Soil Science*, 90(4) 585-596. [doi:10.4141/CJSS09076].
- 2. Pongsai, S., R. P. Shrestha, D. Schmidt-Vogt, R. Clemente, N.K. Tripathi, V. Trelo-Ges, and S. Paramee, 2010. GIS-based DSS for Optimal Multi-objectives Erosion Management: A case study of the Huai Talupkup Watershed, Thailand, *International Journal of Geoinformatics*, 6(3): 67-78.
- c. Years to graduation: 8 yrs
- 5. Mr. Akom Sowana [Year graduated: Dec 2010]
 - a. Title of Dissertation: Influence of Coastal Land Use, Fisheries and Socioeconomics on Natural Resources Degradation in Pattani Bay, Thailand
 - b. Resulting publications:
 - 1. Sowana, A., R.P. Shrestha, P. Parkpian, and S. Pongquan, 2010. Influence of Coastal Land Use on Soil Degradation in Pattani basin, Thailand. *Journal of Coastal Research* [online: 24 March 2010, http://www.jcronline.org/doi/abs/10.2112/JCOASTRES-D-09-00050.1].
 - c. Years to graduation: 9 yrs
- 6. Mr. Thirapong Santipop [Year graduated: May 2011]
 - a. Title of Dissertation: Biophysical and social dimensions affecting land use and reforestation in Kanachanaburi. Thailand
 - b. Resulting publications:
 - 1. Santiphop, T., R.P. Shrestha, M. Hazarika, 2011. An analysis of factors affecting agricultural land use patterns and livelihood strategies of farm households in Kanchanaburi Province, Thailand, *Journal of Land Use Science*, [Available online 24 June 2011, **DOI:** 10.1080/1747423X.2011.587208.
 - c. Years to graduation: 5.5 yrs
- 7. Mr. Said Oasim [Year graduated: May 2011]
 - a. Title of Dissertation: Driving forces and conservation strategies of land degradation in Pakistan: A case of Pishin Sub-basin, Balochistan
 - b. Resulting publications:
 - 1. Qasim, S., R.P. Shrestha, G.P. Shivakoti and N.K. Tripathi, 2011. Socio-economic Determinants of Land Degradation in Pishin sub-basin, Pakistan. *International Journal of Sustainable Development and World Ecology.* 18(1)48-54.
 - c. Years to graduation: 4 yrs
- 8. Mr. EPN Udayakumara [Year graduated: May 2011]
 - a. Title of Dissertation: Land degradation and rural livelihood in Samnalawewa catchment, Sri Lanka
 - b. Resulting publications:
 - 1. Udayakumara, E.P.N. and R.P. Shrestha, L. Samarakoon, and D. Schmidt-Vogt, 2012, Mitigating Soil Erosion through Farm-level Adoption of Soil and Water Conservation Measures in Samanalawewa Watershed, Sri Lanka, *Acta Agriculturae Scandinavica, Section B Soil & Plant Science*, 62:273-285.
 - 2. Udayakumara, E.P.N. and R.P. Shrestha, 2011. Assessing livelihood for improvement: Samanalawewa reservoir environs, Sri Lanka, *International Journal of Sustainable Development and World Ecology*, 18(4): 366-376.
 - 3. Udayakumara, E.P.N., R.P. Shrestha, L, Samarakoon and D. Schmidt-Vogt, 2010. Assessment, People's Perception and Socioeconomic Determinants of Soil Erosion: a Case Study of Samanalawewa Watershed, Sri Lanka, *International Journal of Sediment Research*, 25(4):323-339.
 - c. Years to graduation: 4 yrs

- 9. Mr. Partoyo [Year graduated: Jan 2012]
 - a. Title of Dissertation: An analysis of land use options and strategies for food availability and land conservation in Yogyakarta, Indonesia
 - b. Resulting publications:
 - 1. Partoyo and R.P. Shrestha, 2011. Monitoring farmland loss and projecting the future land use of an urbanized watershed of Yogyakarta, Indonesia, *Journal of Land Use Science*, [Published Accepted 2 September 2011]. [Impact factor:] **DOI:**10.1080/1747423X.2011.620993
 - 2. Partoyo, R.P. Shrestha, G.P. Shivakoti, and N.K. Tripathi, 2011. Developing a spatially explicit modeling to project future land use: Case study of Yogyakarta, Indonesia, at ASEAN Student Innovation to Contribute on Development of Indonesia, 1 October 2011, Bangkok.
 - c. Years to graduation: 3.5 yrs
- 10. Mr. Muhmmad Arshad [Year graduated: Jul 2012]
 - a. Title of Dissertation: Evaluation of sweet sorghum-legume intercropping for food and bioethanol production under selected agronomic practices
 - b. Resulting publications:
 - 1. Arshad, M., T.A. Cheema, S. Ahmad, R. Nawaz, M.S. Sarfaz, R.P. Shrestha, and S.L. Ranamukhaarachchi. 2013. <u>Yield comparison of nonstructural carbohydrates in Sweet Sorghum and Legume-based cropping systems</u>. *Communications in Soil Science and Plant Analysis*. 44(14) 2186-2206.
 - c. Years to graduation: 4 yrs
- 11. Mr. Muhammad Ejaz Ul Islam Dar [Year graduated: Dec 2012]
 - a. Title of Dissertation: Human livelihood and impacts on the vegetation of Machira National Park, Azad Jammu Kashmir, Pakistan
 - b. Resulting publications:
 - 1. Dar, M.E.U.I., R. Cochard, R.P. Shrestha and S. Ahmad, 2012. <u>Plant resource utilization by local inhabitants around Machiara National Park, district Muzaffarabad Azad Kashmir, Pakistan</u>. *Journal of Food, Agriculture and Environment*, Vol. 10 (3 & 4), 1139-1148.
 - c. Years to graduation: 4 yrs
- 12. Mr. Paul Ligonja [Year graduated: Intersem 2013]
 - a. Title of Dissertation: Environmental and socioeconomic effects of sol conservation in the semi-arid region of Tanzania: a case study of Irangi hills in Singida district
 - b. Resulting publications:
 - 1. Ligonja, P. J. and R.P. Shrestha. 2013. Soil erosion assessment in Kondoa Eroded Area in Tanzania using Universal Soil Loss Equation, Geographic Information Systems and Socioeconomic approach. *Land Degradation and Development*. (published online 25 APR 2013 | DOI: 10.1002/ldr.2215).
 - c. Years to graduation: 4.5 yrs
- 13. Ms. Onanong Cheablam [Year graduated: December 2014]
 - a. Title of Dissertation: Impact of climate change on tourism in Mu Ko Surin National Park, Thailand
 - b. Resulting publications:
 - 1. Cheablam, O. and R.P. Shrestha, 2014. Climate Change Trends and Its Impact on Tourism Resources in Mu Ko Surin Marine National Park, Thailand, *Asia-Pacific Journal of Tourism Research*, (DOI: 10.1080/10941665.2014.904803)
 - 2. Cheablam, O., R.P. Shrestha, and D. Emphandhu. 2013. <u>Does Coral Bleaching Impact Tourists' Revisitation? A case of Mu Ko Surin Marine National Park</u>, *Journal of Food, Agriculture and Environment*, 11(3-4):2648-2654.
 - c. Years to graduation: 5.5 yrs

- 14. Mr. Man Purotaganon [Year graduated: December 2014]
 - a. Title of Dissertation: Water Policy Processes: The Interplay of Politics, Powers and Partnering The Study on Negotiation Process of Multi-stakeholders In Sub-watershed of Prachinburi, Central Thailand
 - b. Resulting publications:
 - c. Years to graduation:

IV. Research

A. Publications

1. Books and monographs

- 1. Kusakabe, K. and R. P. Shrestha (Eds.), [_____ Forthcoming]. *Gender, Land tenure and Disaster*, Springer Publications.
- 2. Shrestha, R.M., Kim Oanh, N.T., Shrestha, R. P., Rupakheti, M., Rajbhandari, S., Permadi, D.A., Kanabkaew, T. and Iyngararasan, M. 2013. <u>Atmospheric Brown Cloud (ABC) Emission Inventory Manual</u>, United Nations Environment Programme, Nairobi, Kenya.
- 3. Trisurat, Y., Shrestha R.P. and R. Alkamade (Eds.). 2011. Land Use, Climate Change and Biodiversity Modeling: Perspective and Applications, edited book volume, IGI Publishers. p.489 [ISBN 978-1-60960-619-0].

2. Book Chapters/Special Publication

1 edited volume and 1 book chapter in progress -not listed

- Trisurat, Y., Shrestha R.P. and R. Alkamade, 2011. <u>Linkage between biodiversity, land use informatics and climate change</u>. In: *Land Use, Climate Change and Biodiversity Modeling: Perspective and Applications* Trisurat, Y., Shrestha R.P. and R. Alkamade (Eds.). IGI Publishers, p.1-22.
- 2. Shrestha, R.P. 2011. <u>Land degradation and biodiversity loss in Southeast Asia</u>. In: *Land Use, Climate Change and Biodiversity Modeling: Perspective and Applications*, Trisurat, Y., Shrestha R.P. and R. Alkamade (Eds.). IGI Publishers. P. 303-327.
- 3. Trisurat, Y., R. Alkamade, and Shrestha R.P., 2011. <u>Conclusion and Recommendations</u>. In: Land Use, Climate Change and Biodiversity Modeling: Perspective and Applications Trisurat, Y., Shrestha R.P. and R. Alkamade (Eds.). IGI Publishers, p.403-413.
- Shrestha, R.P. and K. Roy, 2009. RS/GIS-aided Land Degradation Assessment in the Greater Mekong Subregion, In *Geoinformatics for Natural Resources Management*, Joshi, P.K., P. Pani, and S.N. Mohapatra (Eds.), NOVA Science Publishers, Inc., New York. Pp. 317-331.
- 5. Shrestha, R.P., 2007. *Proceedings* of 'Asia workshop on Sustainable Land Management and National Capacity Self-Assessment', 20-23 November 2006, Asian Institute of Technology, Bangkok [CD version publication], sponsored by UNDP.
- 6. Shrestha, R.P., 2006. <u>Environmental Data and Its Management</u>, In *Environmental Management Tools: A Training Manual* (Ed. J.K. Routray), AIT/UNEP, p 23-34.
- 7. Schmidt-Vogt, D. and Shrestha, R.P., 2006. Role of Geospatial Technologies in Training for Sustainable Natural Resources Management in Asia, GIS Development Weekly. Vol. 2, Issue 19. pp 1-3.
- Eiumnoh, A., Shrestha, R. P., and V.J. Boken, 2005. <u>A Drought Warning Systems for Thailand</u>. In: *Monitoring and Predicting Agricultural Droughts: A Global Study*, (Eds. Boken, V.K., Cracknell, A.P., and Heathcote, R.L.), Oxford University Press, New York. P.323-329.

- 9. Moe, T.A., R. P. Shrestha, A. Patil, and S. Manandhar (Contributors), 2004. Remote Sensing Images. *Greater Mekong Subregion: Atlas of the Environment*. ADB/UNEP.
- 10. Eiumnoh, A. and R. P. Shrestha, 2001. Remote Sensing and GIS-aided Land Degradation Monitoring: A Case of Chi Sub-watershed, Thailand. In: Response to Land Degradation, (Eds. Bridges, E.M., Hannam, L.R., de Vries, F.W.T.P., Scherr, S.J., and Sombatpanit, S.), Oxford & IBH Pub. Co. Pvt. Ltd., New Delhi.
- 11. Eiumnoh, A., R. P. Shrestha, S. Baimoung, P. Kesawapitak and A. Noomhorm, 1996. Field Prediction and Potential Monitoring of Cassava Production in Nakhon Ratchasima, Thailand. In: GAME-Tropics Background Papers. GAME-Tropics Research Materials No. 1, Japan Sub-Committee for GAME-Tropics, August 1996.
- 12. Eiumnoh, A. and R. P. Shrestha (Eds), 1995. Proceedings of the Year-end seminar on Natural Resources Management, Asian Institute of Technology, Bangkok, January 1995.
- 13. Eiumnoh, A. and R. P. Shrestha (Eds), 1995. Proceedings of the Regional seminar on *Environmental Soil and Water Management: Past Experiences and Future Directions*. Asian Institute of Technology, Bangkok, April 1995.

3. Referred Journal Articles

Summary of journal articles published

Referred International	Referred Regional Journals	Referred National Journals
Journals		
36	12	2

	In Progress	
Referred International Journals	Referred Regional Journals	Referred National Journals
4	***	-

3.B Articles in Referred International Journals

4 manuscripts under review process not listed below.

- 1. Ngo, T.S., D.B. Nguyen, and R.P. Shrestha, ______. Effect of Land Use Change on Runoff and Sediment Yield using SWAT in Da River Basin of Hoa Binh province, Northwest Vietnam, *Journal of Mountain Science* [Accepted 9 Dec 2014, Final revision being submitted]
- 2. Shrestha, R.P., and N. Nepal, _____ Food Security of Subsistence Farmers in the Context of Climate Change in Makwanpur, Nepal. Food Security: The Science, Sociology and Economics of Food Production and Access to Food. (Broadly positive for acceptance upon final revision according to Email of Nov. 29).
- 3. Swe, L.M.M., R.P. Shrestha, T. Ebbers, and D. Jourdain, ____ Farmers' perception on and adaptation to climate change impacts in Dry Zone area of Myanmar, *Climate and Development*, (Accepted 30 September 2014)
- 4. Sapkota, L.M., G.P. Shivakoti, R.P. Shrestha, D. Jourdain. _____ Factors affecting collective action for forest fire management: a comparative study in community forest user groups in Central Siwalik, Nepal, *Environmental Management* (DOI 10.1007/s00267-014-0404-x).
- 5. Vicharnakorn, P., R.P. Shrestha, M. Nagai, A.P. Salam, and S. Kiratiprayoon, 2014. Carbon Stock Assessment using Remote Sensing and Forest Inventory Data in Savannakhet, Lao PDR. *Remote Sensing.*, (6, 5452-5479; doi:10.3390/rs6065452, 13 June 2014)

- Cheablam, O. and R.P. Shrestha, 2014. Climate Change Trends and Its Impact on Tourism Resources in Mu Ko Surin Marine National Park, Thailand, Asia-Pacific Journal of Tourism Research, (DOI: 10.1080/10941665.2014.904803, 08 May 2014)
- 7. Cheablam, O., R.P. Shrestha, and D. Emphandhu. 2013. Does Coral Bleaching Impact Tourists' Revisitation? A case of Mu Ko Surin Marine National Park, *Journal of Food, Agriculture and Environment*, 11(3-4):2648-2654.
- 8. Arshad, M., T.A. Cheema, S. Ahmad, R. Nawaz, M.S. Sarfaz, R.P. Shrestha, and S.L. Ranamukhaarachchi. 2013. <u>Yield comparison of nonstructural carbohydrates in Sweet Sorghum and Legume-based cropping systems</u>. *Communications in Soil Science and Plant Analysis*. **44**(14) 2186-2206.
- 9. Akber, N.A., and R.P. Shrestha. Land use change and its effect on biodiversity in Chiang Rai province of Thailand. Journal of Land Use Science. [DOI: 10.1080/1747423X.2013.807315; online on 19 June 2013].
- Ligonja, P. J. and R.P. Shrestha. 2013. <u>Soil erosion assessment in Kondoa Eroded Area in Tanzania using Universal Soil Loss Equation, Geographic Information Systems and Socio-economic approach</u>. *Land Degradation and Development*. (published online 25 APR 2013 | DOI: 10.1002/ldr.2215). (Accepted 23 Feb 2013)
- 11. Kityuttachai, K. N.K. Tripathi, T. Tipdecho, R.P. Shrestha, 2013. <u>How the Sustainable Development Get Benefits from Trending of the Constraint Coastal Urban Growth Medeling: Hua Hin Model, Thailand</u>. *Sustainability.* 5, 1480-1500; doi:10.3390/su5041480.
- 12. Partoyo and R.P. Shrestha, 2013. Monitoring farmland loss and projecting the future land use of an urbanized watershed of Yogyakarta, Indonesia, Journal of Land Use Science, 8(1): 59-84.
- 13. Dar, M.E.U.I., R. Cochard, R.P. Shrestha and S. Ahmad, 2012. <u>Plant resource utilization by local inhabitants around Machiara National Park, district Muzaffarabad Azad Kashmir, Pakistan. Journal of Food, Agriculture and Environment, Vol. 10 (3 & 4), 1139-1148.</u>
- Udayakumara, E.P.N. and R.P. Shrestha, L. Samarakoon, and D. Schmidt-Vogt, 2012, <u>Mitigating Soil Erosion through Farm-level Adoption of Soil and Water Conservation</u> <u>Measures in Samanalawewa Watershed, Sri Lanka, Acta Agriculturae Scandinavica, Section</u> B – Soil & Plant Science, 62:273-285.
- 15. Santiphop, T., R.P. Shrestha, M. Hazarika, 2012. An analysis of factors affecting agricultural land use patterns and livelihood strategies of farm households in Kanchanaburi Province, Thailand, *Journal of Land Use Science*, 7(3): 331-348.
- 16. Thongdara, R., L. Samarakoon, R.P. Shrestha, and S.L. Ranamukhaarachchi, 2011. <u>Using GIS and Spatial Statistics to Target Poverty and Improve Poverty Alleviation Programs: A Case Study in Northeast Thailand, Applied Spatial Analysis and Policy, DOI: 10.1007/s12061-011-9066-8.</u>
- 17. Udayakumara, E.P.N. and R.P. Shrestha, 2011. <u>Assessing livelihood for improvement: Samanalawewa reservoir environs</u>, <u>Sri Lanka</u>, <u>International Journal of Sustainable Development and World Ecology</u>, 18(4): 366-376.
- 18. Bandara, K R M U, L. Samarakoon, R.P. Shrestha, Y. Kamiya, 2011. <u>Automated Generation of Digital Terrain Model using Point Clouds of Digital Surface Model in Forest Area</u>, *Remote Sensing*, 3(5): 845-858.
- 19. Trisurat, Y., R.P. Shrestha, and R. Kjelgren, 2011. <u>Plant Species Vulnerability to Climate</u> Change in Peninsular Thailand, *Applied Geography*, 31: 1106-1114.
- 20. Thuithaisong, C., P. Parkpian, O.V. Shipin, R.P. Shrestha, K. Naklang, R. D. DeLaune and A. Jugsujinda, 2011. Soil quality indicators for predicting sustainable organic rice production. *Communications in Soil Science and Plant Analysis*, 42(5):548-568.

- 21. Qasim, S., R.P. Shrestha, G.P. Shivakoti and N.K. Tripathi, 2011. <u>Socio-economic Determinants of Land Degradation in Pishin sub-basin, Pakistan</u>. *International Journal of Sustainable Development and World Ecology*. **18**(1)48-54.
- 22. Sowana, A., R.P. Shrestha, P. Parkpian, and S. Pongquan, 2011. <u>Influence of Coastal Land Use on Soil Degradation in Pattani basin, Thailand</u>. *Journal of Coastal Research* 27(2) 252-262.
- 23. Udayakumara, E.P.N., R.P. Shrestha, L, Samarakoon and D. Schmidt-Vogt, 2010. Assessment, People's Perception and Socioeconomic Determinants of Soil Erosion: a Case Study of Samanalawewa Watershed, Sri Lanka, International Journal of Sediment Research, 25(4):323-339.
- 24. Pongsai, S., D. Schmidt-Vogt, R. P. Shrestha, R. Clemente, and A. Eiumnoh. 2010. Calibration of MUSLE for Simulating Sediment Yield in Steeply Sloping Terrain: A Case Study in Khun Satan Catchment of Northern Thailand, Canadian Journal of Soil Science, 90(4) 585-596.
- 25. Shen, R.P. Shrestha, and J. Qian, 2010. <u>Participatory technology development for improving animal-technical service system in Gongshan County</u>, Northwest Yunnan Province, China, *African Journal of Agricultural Research*. 5(16), pp. 2143-2152.
- 26. Shrestha, R.P., D. Schmidt-Vogt, D., and N. Gnanavelrajah, 2010. Relating plant diversity to biomass and soil erosion in a cultivated landscape of the eastern seaboard region of Thailand, *Applied Geography*, 30: 606-617.
- 27. Ponza, S., P. Preeda Parkpian, C. Polprasert, R.P. Shrestha, and A. Jugsujinda, 2010, Removal of trichloroethylene (TCE) contaminated soil using a two-stage anaerobic-aerobic composting technique, Journal of Environmental Science and Health, Part A: Toxic/Hazardous Substances and Environmental Engineering, 1532-4117, 45(5) 549 559.
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- 31. Jiang, Y., M. Kang, D. Schmidt-Vogt and R.P. Shrestha, 2007. <u>Identification of Agricultural Factors for Improving Sustainable Land Resource Management in Northern Thailand: A Casestudy in Chiangmai Province</u>, *International Journal of Sustainable Development and World Ecology.* 14, 382-390.
- 32. Halim, R., R.S. Clemente, J.K. Routray, and R.P. Shrestha, 2007. <u>Integration of Biophysical and Socioeconomic factors to Assess Soil Erosion Hazard in the Upper Kaligarang Watershed, Indonesia</u>, *Land Degradation and Development*, **18**, 453-469.
- 33. Shrestha, R.P. 2006. Relating Soil Electrical Conductivity to Remote Sensing and Other Soil Properties for Assessing soil salinity in northeast Thailand. Land Degradation and Development. 17(6)677-689.
- 34. Shrestha, R.P. 2004. <u>Developing Indicators for Assessing Land Use Sustainability in a Tropical Agro-ecosystem: The Case of Sakaekrang Watershed, Thailand</u>. *International Journal of Sustainable Development and World Ecology*. 11, 86-98

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- 36. Eiumnoh, A. and R. P. Shrestha, 2000. <u>Application of DEM data to Landsat Image Classification: Evaluation in Tropical Wet-dry Climate</u>. *Photogrammetric Engineering and Remote Sensing*, 66(3), 297-304.
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3.C Articles in Referred Regional Journals

- 38. Ryadin, A.R., S.L. Ranamukaarachchi, P. Soni, and R. P. Shrestha. 2014. Vegetative Propagation of Five Local Cultivars of Malay Apple (*Syzygium malaccense spp.*) in Ternate Island, *International Journal on Advanced Science Engineering Information Technology*, 4(2) 35-39.
- 39. Pongsai, S., R. P. Shrestha, D. Schmidt-Vogt, R. Clemente, N.K. Tripathi, V. Trelo-Ges, and S. Paramee, 2010. GIS-based DSS for Optimal Multi-objectives Erosion Management: A case study of the Huai Talupkup Watershed, Thailand, *International Journal of Geoinformatics*, 6(3): 67-78.
- 40. Pensuk, A., R.P. Shrestha, and R. Clemente, 2010. Effect of Land Use Change on Land Quality and Water Resources in Phatthalung Watershed, Thailand, *International Journal of Environment and Rural Development*, 1(1):158-163.
- 41. Thuithaisong, C., P. Parkpian, O.V. Shipin, R.P. Shrestha, K. Naklang, 2010. Comparison of Microbial Diversity of Paddy Soils in Sustainable Organic Farming, *International Journal of Environment and Rural Development*, 1(1):152-157.
- 42. Pensuk, A. and R.P. Shrestha, 2008. <u>Land Use Change and Rural Livelihoods: A Study of Phattalung Watershed in Southern Thailand</u>, *Asia-Pacific Journal of Rural Development*, **18**(2), 143-164.
- 43. Pensuk, A. and R.P. Shrestha, 2008. <u>Effect of Paddy Area Conversion to Rubber Plantation on Rural Livelihoods: A Case Study of Phatthalung Watershed, Southern Thailand, GMSARN International Journal</u>, 2, 185–190.
- 44. Son, N.T. and R.P. Shrestha, 2008. <u>GIS-Assisted Land Evaluation for Agricultural Development in Mekong Delta, Southern Vietnam</u>. *Journal of Sustainable Development in Africa*, **10**(2) 875.895.
- 45. Shrestha, R.P. and Roy, K. 2008. Land Degradation Assessment in the Greater Mekong Subregion. *Journal of Environmental Information Science*, 36(5) 29-38.
- 46. Wannasai, N. and Shrestha, R.P. 2007. <u>Determinants of rural land-use change in Prasae watershed area of Thailand</u>. *Asia-Pacific Journal of Rural Development*, 17(2)47-60.
- 47. Shrestha, R. P. and S. Naikaset, 2003. Agro-spectral Models for Estimating Dry Season Paddy Yield in the Bangkok Plain of Thailand. *Asian Journal of Geo-informatics*, 4(1) 11-19.
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- 49. Shrestha, R. P. and A. Eiumnoh, 2000. Determinants of Household Earnings in Rural Economy of Thailand. *Asia-Pacific Journal of Rural Development*, **10**(1) 27-42.

3.D Articles in Referred National Journals

- 50. Duangpatra, P., S. Tumwasorn, and R.P. Shrestha, 1999. <u>Pasture production for dairy cattle in Uthai Thani province</u>: The use of GIS techniques for the development of a physical suitability <u>map</u>, *Thai Journal Agricultural Science*, 32(3)435-442.
- 51. Shrestha, R. P., S. Tumwasorn and H. R. Shrestha, 1996. <u>Performance Evaluation of Crossbred Dairy Cattle in Nepal</u>. *Thai Journal of Agricultural Science*, **29**(2), 229-238.

4. Papers in conference proceedings

- 1. Sakayarote, K. and R.P. Shrestha, 2014. Detecting land use change from food crops to rubber plantation and their factors affecting land use decision making of smallholders in northeast Thailand, *International Conference of Nationwide GIS application* 2014. 28-29 November 2014. Can Tho.
- 2. Ryadin, A.R., S.L. Ranamukaarachchi, P. Soni, R. P. Shrestha, 2014. Vegetative Propagaion of Five Local Cultivars of Malay Apple (Syzygium malaccense spp.) in Ternate Island, International Conference on Sustainable Agriculture, Food and Energy (SAFE), 17-19 September 2014, Bali.
- 3. Kaewkallaya, N., R.P. Shrestha, and A. Pensuk, 2013. Effect of agricultural land reform development project on rural livelihood: experience from Thailand. 4th International Conference on Environment and Rural Development, 19-21 January 2013, Siam Reap.
- 4. Phuong, T.T., R.P. Shrestha and Y. Yoshiki, 2012. The Impacts of land use change on soil erosion in Bo river watershed, Central Vietnam. *International Symposium on Geoinformatics for Spatial Infrastructure Development in Earth and Allied Sciences (GIS-IDEAS)*, 16-20 October 2012, Ho Chi Minh City.
- 5. Partoyo, R.P. Shrestha, G.P. Shivakoti, and N.K. Tripathi, 2011. Developing a spatially explicit modeling to project future land use: Case study of Yogyakarta, Indonesia, at *ASEAN Student Innovation to Contribute on Development of Indonesia*, 1 October 2011, Bangkok.
- 6. Pensuk, A., and R.P. Shrestha, 2011. Assessing the Flood Risk Area of Southern Thailand with an Integrated Curve Number and Flow Accumulation Approach, 32nd Asian Conference on Remote Sensing, 3-7 October 2011, Taipei, Taiwan.
- 7. Adsavakulchai, S. and R.P. Shrestha, 2011. Using Remotely Sensed Data and GIS for Biophysical Processes and Human activities in Coastal Ecosystem, *IPCV'11 15th Int'l Conference on Image Processing, Computer Vision, & Pattern Recognition*, July 18-21, 2011, USA.
- 8. Pensuk, A., and R.P. Shrestha, 2011. Effect of Land Use Change and Food Availability in Phatthalung Watershed, Southern Thailand. *The Second International Conference on Environment and Rural Development*, 8-9 January 2011. Phnom Penh. [Best paper award]
- 9. Trisurat, Y., R.P. Shrestha, and R. Kjelgren, 2010. Plant species vulnerability to climate change in Peninsular Thailand, *International Conference on Biodiversity and Climate Change*, 17-19 November 2010, Manila.
- 10. Shrestha, R.P. and Yeshey, 2010. A comparative assessment of land management approaches in Bhutan: case studies from Chukha and Dagna Disricts, *International Conference on Combating Degradation in Agricultural Lands* (Landcon1010), 11-15 October 2010, Paradise resort, Xi'an, China.
- 11. Pensuk, A. and R.P. Shrestha, 2010. GIS application for assessing the effects of land use change on surface runoff and soil erosion in Phathalung watershed, Southern Thailand. 31st Asian Conference on Remote Sensing, 1-5 November 2010, Hanoi, Vietnam.
- 12. Pasakhala, B. and R.P. Shrestha, 2010. Adaptive Capacity to Climate Variability in Community Level in Nepal, *Proc. of International Conference Workshop on "Livelihood and Health Impacts of the Climate Change: Community Adaptation Strategies*", 24-25 August 2010, Khon Kaen, p51-59
- 13. Thuthaisong, C., P. Parkpian, O. Shipin, R.P. Shrestha, and K Naklong. 2010. Comparison of microbial diversity of paddy soils in sustainable organic farming, *The First International*

- Conference on Environment and Rural Development, Royal University of Agriculture, Phnom Penh. 4-5 March 2010. Phnom Penh.
- 14. Pensuk, A., R.P. Shrestha, and R. Clemente, 2010. Effect of land use change on land quality and water resources in Phattalung watershed, Thailand. *The First International Conference on Environment and Rural Development*, Royal University of Agriculture, 4-5 March 2010. Phnom Penh.
- 15. Shrestha, R.P. and V. Vorn. 2009. Land use and livelihood of ethnic communities of Rattanakiri province, Cambodia, *International Symposium on Impacts of Economic Integration on Upland Farming and Ethnic Minorities in the Greater Mekong Sub-region*, 27-29 November 2009, Khon Kaen, Thailand.
- 16. Shrestha, R.P. and M.K. Vinh. 2009. GIS and Participatory Approach for Zoning Marine Protected Area: A Case of Phu Quoc, Vietnam. 30th Asian Conference on Remote Sensing, 19-23 October 2009, Beijing, China.
- 17. Shrestha, R.P. 2009. Peri-urban agriculture in Nepal: Problems and Prospects. *International Symposium on Status and Tendency of Suburban Agriculture in South and Southeast Asian Countries*, 11 July 2009, Fujisawa, Japan.
- 18. Shrestha, R.P. and N. Gnanavelrajah, 2008. Assessing Biophysical and Socioeconomic Condition for Watershed Management: Case of Khlong Yai Watershed, Thailand. 3rd GMSARN International Conference, 12-14 November, 2008, Kunming, China.
- 19. Thuithaisong, C., P. Parkpian, O. Shipin, R.P. Shrestha and K. Naklang, 2008. Development of Microbial Diversity as Biological indicators for Soil Quality in Sustainable Organic Rice Farming, *BRT Conference*, 10-13 October, Surat Thani, Thailand.
- 20. Gnanavelrajah, N. and R.P. Shrestha. 2007. Assessing Plant Diversity in Cultivated Landscape: A case of Khlong Yai Sub-watershed, Thailand. 2nd GMSARN International Conference, 12-14 December 2007, Pattaya, Thailand.
- 21. Pensuk, A. and R.P. Shrestha. 2007. <u>Effect of land use change on rural livelihoods: A case study of Phattalung watershed, Thailand</u>. 2nd GMSARN International Conference, 12-14 December 2007, Pattaya, Thailand.
- 22. Shrestha, R.P., Gnanavelrajah, N. and L. Samarakoon. 2007. A watershed-scale assessment of present and future Carbon stock: GIS application in Khlong Yai watershed of Thailand. 28th Asian Conference on Remote Sensing, 12-16 November 2007, Kuala Lumpur, Malaysia.
- 23. Shrestha, R.P., Pensuk, A., and K. Roy, 2006. <u>Assessment of land degradation in the Lower Mekong Basin</u>. *Proc. International Conference on the Mekong Research for the People of the Mekong*, 18-21 October 2006, Chiangrai, Thailand.
- 24. R. Halim, R.S. Clemente, J.K. Routray, R.P. Shrestha. 2006. Development of an erosion hazard index for Kaligarang watershed, Central Java, Indonesia based on biophysical and socio-economic indicators, 3rd APHW Conference, 16-18 October 2006, Bangkok, Thailand. [Poster presentation]
- 25. Shrestha, R.P., 2006. An investigation on the relation between the remote sensing data and soil salinity. *Proc.* 27th Asian Conference on Remote Sensing, 9-13 October 2006, Ulaanbaatar, Mongolia.
- 26. Shrestha, R.P., 2006. Geo-information development for environmental management in the Greater Mekong Subregion Countries. 17th United Nations Regional Cartographic Conference for Asia and the Pacific, 18-22 September 2006, Bangkok, Thailand.
- 27. Schmidt-Vogt, D. and R. P. Shrestha, 2004. Landuse and Land Cover Change: Its Potential as a Integrative Theme for INRM Curriculum development. Presented at the *International Seminar on Integrated Natural Resources Management with Special Reference to Sumatra*

- and Workshop for Master's Degree Curriculum Development, 25-27 January 2004, Padang, Indonesia.
- 28. Shrestha, R. P., 2002. Environmental Monitoring and Information System in the Greater Mekong Subregion. Presented at *The Second Conference on Environmental Education and Research for Sustainable Development*, Yangon University, Yangon, 24-28 June 2002.
- 29. Shrestha, R. P. and A. Eiumnoh, 1999. GIS aided Evaluation of Land Use Sustainability in the Sakae Krang Watershed, Thailand. Paper presented at the *International Conference on Geography*, 14-16 October 1999, Chiangmai, Thailand.
- 30. Shrestha, R. P. and A. Eiumnoh, 1997. Can DEM enhance the digital image classification. *Proc.* of The 17th Asian Conference on Remote Sensing, 20-24 October 1997, Kualalumpur, Malaysia.
- 31. Eiumnoh, A. and R. P. Shrestha, 1997. Integration of Remote Sensing and Geographic Information Systems for Cassava Monitoring in the Northeast Thailand: Problems Still Exist. CD ROM Proc. of 'GER' '97; Geomatics in the Era of RADARSAT 1997, Ottawa, Canada, 25-30 May 1997.
- 32. Eiumnoh, A, Shrestha, R. P., and S. Baimoung, 1996. Remote Sensing and GIS Application in Watershed Land Use Planning: A Case Study of Mae Nam Chi sub-basin, Thailand. Watershed Management for the Future, Proc. FORTROP'96, International Conference on Tropical Forestry in the 21st Century (eds. N. Tangtham, S. Thammincha, and L. Puangchit), Kasetsart Univ., Bangkok. Vol. 6, 273-277.
- 33. Eiumnoh, A., F. X. J. Canisius, S. Baimoung, P. Kesawapitak, A. Noomhorm and R. P. Shrestha, 1996. Impacts of Land Use Changes in Macro Watershed Using NOAA-AVHRR Data: A case of Mun Watershed, Thailand. Watershed Management for the Future, FORTROP'96, Proc. International Conference on Tropical Forestry in the 21st Century (eds. N. Tangtham, S. Thammincha, and L. Puangchit), Kasetsart Univ., Bangkok. Vol. 6, pp. 234-244.
- 34. Shrestha, R. P., A. Eiumnoh and S. Baimoung, 1996. <u>Soil Erosion Assessment and Its Policy Implications: A Case Study of RS and GIS Applications in Uthai Thani, Thailand</u>. *Proc. The 16th Asian Conference on Remote Sensing*, 4-8 November 1996, Colombo, Sri Lanka.
- 35. Eiumnoh, A., R. P. Shrestha, S. Baimoung and P. Kesawapitak, 1996. Limitation of Remote Sensing and Geographic Information Systems for Cassava Monitoring in Northeast Region of Thailand. *Proc. The International Conference on Geography and the Development of Southeast Region*, 21-24 October 1996, Chiang Mai, Thailand.
- 36. Shrestha, R. P. and A. Eiumnoh, 1995. Towards Sustainable Land Uses through Land Evaluation, *Proc. Asian Conference on Remote Sensing*, 20-24 November 1995, Nakhon Ratchasima, Thailand.

5. Papers in workshops

- 1. Shrestha, R.P. 2014. International Workshop on Land Cover and Land Use Change (LCLUC) Dynamics in south and Southeast Asia, 3-4 November 2014, ICIMIOD, Kathmandu.
- 2. Bachri, S. and R.P. Shrestha, 2010. Landslide hazard assessment using analytic hierarchy processing (AHP) and geographic information system in Kaligesing mountain area of Central Java Province Indonesia, *AIWEST-DR 2010 (Annual International Workshop and Expo on Sumatera Tsunami Disaster & Recovery)*, 23-25 November 2010, Banda Aceh.
- 3. Shrestha, R.P. 2009. Natural Resources Management Education and Research at the Asian Institute of Technology, Thailand. *International Workshop on Strategic Research Framework of NREMC and the GMS/UniNet on NREM*, 8-9 October 2009Mae Fah Luang University, Chiangrai, Thailand.
- 4. Schmidt-Vogt, D. and R. P. Shrestha, 2008. Landuse and Land Cover Change as an Integrative Theme for INRM Curriculum development. Presented at the *Workshop on*

- Collaboration in Developing Integrated Natural Resources Management Graduate Program at the University of Northern Sumatra (USU), 9-10 June 2008, Medan, Indonesia
- 5. Shrestha, R.P., 2007. Land degradation in the Greater Mekong Subregion: implications on the farming system. Workshop on Cultivation in the Context of Increasing Economic Integration in the Greater Mekong Subregion, June 20-22, 2007, Mekong Institute, Khon Kaen, Thailand.
- 6. Shrestha, R.P., 2004. GIS and Multicriteria Decision Making in Land Use Planning: An Implication for Disaster Management, Final Workshop of Capacity Building in Asia Using Information Technology Applications, 15-19 March 2004, Dehradun, India.
- 7. Shrestha, R.P., 2001. GIS Database Design for Forest Fire Monitoring. *Technical meeting on Establishment of GIS database for Sumatra, Borneo, and Peninsular Malaysia*, 16-18 July 2001, ASEAN Secretariat Headquarters, Jakarta.
- 8. Eiumnoh, A., P. Parkpian, A. Jugsujinda, S. Satawathananont, P. Paiboonrat, and S. Baimoung, Shrestha, R.P., 2000. <u>Estimation of Methane Emission from Lowland Rice in Thailand: A Case of Ayutthaya Province using Remote Sensing and GIS</u>. Presented at the *Seminar on Studies on Global Change*, 7-8 September 2000, Chulalongkorn Univ., Bangkok.
- 9. Baimoung, S., M. Pangpom and R. P. Shrestha, 2000. Global Radiation Observation in Thailand: A preliminary assessment. Paper presented at 2000 GAME-T Workshop, 7-8 March 2000, Long Beach Hotel, Cha-am, Phetchaburi, Thailand.

6. Abstracts: - None

7. Development/research project reports

- 1. Shrestha, R.P. and K. Kusakabe, 2013. Consultation report on Land tenure and disaster and its social and gender impact, submitted to FAP-RAP, Bangkok.
- 2. Shrestha, R.P., 2013. Consultation report on Sustainable land management regional action program formulation to respond to climate change in synergy with the three Rio Conventions, submitted to FAO-RAP, Bangkok.
- 3. Trisurat, Y. and R.P. Shrestha, 2011. "Downscaling global climate data for assessing the impact of climate change on Dipterocarp species in Peninsular Thailand". Final research project report submitted to Royal Thai Government Project Office at Asian Institute of Technology, Bangkok.
- 4. Adsavakulchai, S. and R.P. Shrestha, 2011. "Modeling interactions between human activities and biophysical processes in coastal ecosystem using remote sensing and GIS". Final research project report submitted to Royal Thai Government Project Office at Asian Institute of Technology, Bangkok.
- 5. Wangpakapattanawong, P., N. Kavinchan, D. Schmidt-Vogt and R. P. Shrestha, 2010. "Roles of Natural and Restored Forests in Carbon Sequestration and Climate Change. Final research project report submitted to Royal Thai Government Project Office at Asian Institute of Technology, Bangkok.
- 6. Shrestha, R.P., 2010. Workshop report on Implementation of Improved Agricultural Practices for Sustainable Land Management in South Asia, 30-31 March 2010, Asian Institute of Technology, submitted to FAO, Bangkok.
- 7. Crawford, B., Shrestha, R., Bengen, D., Yakupitiyage, A., Nitivattananon, V., and Tingsanchali, T., 2008. An Assessment of Capacity for Effective Coastal Management Indonesia Country Assessment, Mangroves for the Future (MFF) Programme; Programme of Work #7.1; National capacity and training needs assessments for different stakeholder groups in order to identify gaps, needs, and strengths and opportunities for building capacity in Integrated Coastal Management (ICM), 42 pp.

8. Non-referred publications

- 1. Shrestha, R.P., 2007. Land degradation in Afghanistan. A chapter prepared for the State of the Environment of Afghanistan for UNEP, June 2007.
- 2. Shrestha, R.P., 2006. Soil erosion assessment in mainland Southeast Asia for developing better soil conservation strategies. An exchange researcher's report submitted to Regional Research Institute for Agricultural Production, College of Bioresource Sciences, Nihon University, Fujisawa, Japan (June 2006).
- 3. Shrestha, R.P., 2005. Investigation of Spectral Properties of Salt-affected Soils and Their Mapping Using Remote Sensing Data: A Case of Nakhon Ratchasima Province of Northeast Thailand. A research report submitted to Asian Institute of Technology, Bangkok.
- 4. Shrestha, R.P. 2002. Land resources of Pasak Jonlasid Reservoir area. A consultancy report to ARCBC/Kasetsart University, July, 2002.
- 5. Shrestha, R.P., 1999. Developing sustainable land use options through soil and water conservation: a case of Sakaekrang watershed, central Thailand. PhD Dissertation submitted to Asian Institute of Technology, Bangkok.
- 6. Shrestha, R.P. and C.P. Giri. 1995. Application of GIS for Soil erosion assessment: pros and cons of USLE approach: case study of Uthaithani province of Thailand. Discussion paper. Asian Institute of Technology, Bangkok.
- 7. Shrestha, R.P., 1994. Land degradation: a challenge for sustainability for agricultural growth. A special study submitted to School of Environment, Resources and Development, Asian Institute of Technology, Bangkok.
- 8. Shrestha, R.P. 1993. Land suitability classification for pasture development at Muaklek, Thailand. M.Sc. thesis submitted to Asian Institute of Technology, Bangkok.
- 9. Pariyar, D. and R. P. Shrestha, 1992. Grazing Land Inventory and Potential Study for Bhumisthan VDC, Dhading, Nepal, A consultancy report submitted to GTZ/ Dhading District Development Project, Kathmandu, Nepal.

9. Patents - None

10. Invited lectures

As lecturer and resource person

- 1. Trainer for USAID LEAF Training of Trainers Course on Regional Climate Change Curriculum Development, Kuala Lumpur, 4-8 August 2014.
- 2. Assessment of land degradation in the GMS using geoinformatics, Training on use of geographic technologies for climate change, sustainable landscapes and watersheds, organized by AAG, NASA, USAID, ESRI at USAID/RDMA, Bangkok, 15-25 January 2014.
- 3. "Forest monitoring in the context of REDD+" at Sustainable Community Forestry: innovative ideas, development and management training program, 1-8 July 2013, Geoinformatics Center, AIT, Bangkok
- 4. Four topics, 1. Global situation of forests and REDD+, 2. GIS application in forest management, 3. Watershed management, 4. Soil erosion modeling techniques" in "Workshop on Forest Preservation in Lao PDR" at Forest Inventory and Planning Division (FIPD), DoF, Vientiane, 3-14 June 2013 and 1-2 July 2013.
- 5. Natural Resources Management in Asia' at summer school for University of Chubu, Japan students August 2013 at AIT.
- 6. Natural Resources Management in Asia' at summer school for University of Chubu, Japan students 19 August 1 September, 2012 at AIT.
- 7. Lectured on 'Natural Resources Management for Sustainable Development' in "The Fourth Public Management Executive Development Program on Strategic Management for

- Sustainable Development", conducted for Thai Provincial Vice-Governors, 23 July 5 September 2012, Miracle Grand Convention Hotel, Bangkok.
- 'The Monsoon Asia Land Degradation Overview: Land Use Change Determinants and Consequences on Land Quality, Water Resources, and Food Security' at Land Use System (LUS) Workshop 2: National Capacity Building for Land Degradation Assessment, March 26-30, 2012, Antipolo city.
- 9. 'Soil and Water Conservation Responses to the Challenges of Land Degradation: Best Practices and Applications to Develop Sustainable Land Management Program in Hot Spots', at Land Use System (LUS) Workshop 2: National Capacity Building for Land Degradation Assessment, March 26-30, 2012, Antipolo city.
- 'Geoinformatics for Application in Forest and Natural Resources Management' at Seminar on Forest Resources and Wildfire Fire Monitoring in Africa, 20-21 February 2012, Srinakharin Wirot University Hotel, Bangkok
- 11. Lectured on 'Livelihood options in rural areas' at a Training course on Managing Rural Development, 5-10 September 2011, AIT, Bangkok.
- 12. Lectured on 'Natural Resources Management for Sustainable Development' in "The Third Public Management Executive Development Program on Strategic Management for Sustainable Development", conducted for Thai Provincial Vice-Governors, August 15-31, 2011, Miracle Grand Convention Hotel, Bangkok.
- 13. Lectured on topics: i) Land cover and land degradation assessments, ii) land use and climate change at Mini project for Geoinformatics capacity building in Asia, 15-19 Aug 2011, Geoinformatics Information Center (GIC), AIT, Bangkok.
- 14. Lectured on "Application of RS and GIS for Natural Resources Management" at Application of GIS and RS for Ground Water Salinity and Natural Resources Management, 11-15 July 2011, Geoinformatics Information Center (GIC), AIT, Bangkok.
- 15. Keynote lecture on "Natural Resources Management and Sustainable Development" at Economics Symposium Series: Natural Resources Management organized by Myanmar Institute of Economics Graduates Association, 4 Dec. 2010, UMFCC, Yangon.
- 16. Delivered lecture on *Management of Land Resource* to MSc Sustainable Landuse at Kasetsart University, Thailand, 23 Oct 2010.
- 17. Lectured on 'Land use and climate change' at the Training workshop on mini-projects on NRM organized for country representatives from South and Southeast Asia, 18-29 October 2010, Geoinformatics Information Center (GIC), AIT, Bangkok.
- 18. Lectured on "Community-based Natural Resources Management' in "Gender Mainstreaming and Equality with Focus on MDGs", 9-17 August 2010, Asian Institute of Technology.
- 19. Lectured on 'Geospatial technologies, database structure and change detection techniques" in "Training workshop on Forest Information Management in Lao PDR", July 19 3 September, 2010, Forest Department, Lao PDR.
- 20. Lectured on 'Natural Resources Management for Sustainable Development' in "The Second Public Management Executive Development Program on Strategic Management for Sustainable Development", conducted for Thai Provincial Vice-Governors, June 28-July 14, 2010, Miracle Grand Convention Hotel, Bangkok.
- 21. Keynote lecture on "Role of Natural Resources Management in the Context of Myanmar", AIT-Myanmar seminar organized by AIT-UNCL/Myanmar. 11 Feb 2010, Park Royal Hotel, Yangon.
- 22. Lectured on 'Land management and Geoinformation,' in the Professional development program on 'Application of GIS and RS for Land Use Planning and Agricultural Management', 26 October 6 November, 2009, Geoinformatics Information Center (GIC), AIT, Bangkok.
- 23. Lectured on 'Land Degradation and Management: Context of Afghanistan', Laboratory and field training in agricultural science, 14-25 September 2009, Asian Institute of Technology, Bangkok.
- 24. Lectured on 'Information Technology for Natural Resources Management' in the "Public Management Executive Development Program on Strategic Management for Sustainable Development", Jun 1-11, 2009, Miracle Grand Convention Hotel, Bangkok.

- 25. Lecture on 'Land use and climate change' at the Asia-Pacific Seminar on Climate, Energy and Food Security, 12 December 2008, Asian Institute of Technology, Bangkok.
- 26. Keynote lecture 'Climate change and land management' at the Franco-Thai Seminar on Climate change: Impacts and Mitigation Options', 3-4 September 2008, Dusit Thani hotel, Bangkok.
- 27. Lectured on 'Remote sensing for land cover/use studies' in the Professional Development Training on Application of Remote Sensing to the participants of Malaysian Association of Remote Sensing held on 6-12 August 2008, AIT, Bangkok.
- 28. Graduate seminar on land use and land resource survey at the Natural resources and environmental Management center, MaeFah Lang University, Chiangrai, Thailand, Dec 8-9. 2007.
- 29. Lectured on 'Land development planning for sustainable watershed management' in the training program on sustainable watershed management for officers from Department of Agrarian Development, Sri Lanka, 12-21 September, 2007, AIT, Bangkok.
- 30. Lectured on 'Concepts of Geographic Information Systems' in the Training and workshop on mini-projects on Natural resources management organized for country representatives from South and Southeast Asia, Sept 10- Sep 28, 2007, Geoinformatics Information Center (GIC), AIT, Bangkok.
- 31. Presentation on 'Land Degradation in Afghanistan' for the officials of National Environmental Protection Agency of Afghanistan, UNEP RRC-AP, Bangkok, 15 June 2007.
- 32. Presentation on AIT's role in mainstreaming sustainable land management (SLM) in Asia. The 3rd Annual Global Advisory Committee meeting of SLM Portfolio Project for LDC/SIDS at the 5th meeting of Committee to Review Implementation of CCD (CRIC-5), 9-14 March 2007, Buenos Aires.
- 33. Lectured on 'Concepts of Geographic Information Systems' in the training and workshop on mini-projects on Natural resources management organized for country representatives from South and Southeast Asia, Aug 28- Sep 22, 2006, Geoinformatics Information Center (GIC), AIT, Bangkok.
- 34. Lecture on Towards Better Soil and Water Use and Conservation at the Laboratory of land and water use and engineering of Tokyo University of Agriculture, Tokyo, Japan. June 21 2006
- 35. Lecture on Soil and water Conservation in Southeast Asia. RRIAP lecture series at the Nihon University, 20 June 2006, Kanagawa, Japan. [http://www.brs.nihon-u.ac.jp/content_img/h18idslab.gif]
- 36. Lectured on Environmental data and its management at the AIT-UNEP training program on "Environmental Management Tools for SAARC Member Countries" 27-31 March 2006, AIT.
- 37. Training on Land degradation monitoring for the participants of Central Asia, Mar 20-Mar 24, 2006, GIS Application Center (GAC), AIT, Bangkok.
- 38. Training on 'Bio-Geoinformatics' for the participants of Southeast Asia, Mar13- Mar 17, 2006, GIS Application Center (GAC), AIT, Bangkok.
- 39. Lecture on Soil Salinity Mapping and Modeling using Remote Sensing and Soil Data in the Northeastern Plateau of Thailand, at Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, December 2, 2005.
- 40. Soil and Water Conservation: A Global Agenda of WASWC, at Seabukthorn International Training Center, Ministry of Water Resources, Beijing, December 1, 2005.
- 41. Training and workshop on mini-projects on Natural resources management organized for country representatives from South and Southeast Asia, Oct 10- Nov 4, 2005, GIS Application Center (GAC), AIT, Bangkok.
- 42. Training course on Advanced GIS for Sri Lankan participants, 5-30 Sep 2005, GIS Application Center (GAC), AIT, Bangkok.
- 43. Training course on GIS applications for Biodiversity Management conducted for the participants of Biodiversity Sector Program in Siwalik Terai, Nepal, June 20-July 1, 2005, AIT, Bangkok.

- 44. Land use Sustainability Analysis of a Typical Thai Watershed: A Methodological Approach to Indicators Development, Department of Geography and International Development Studies, Roskilde University Center, May 31, 2005.
- 45. Course Curriculum Development Training course on Natural Resources Management, Gender Development, and Environment, Sep. 27 Oct 12, 2004, organized for Royal University of Phnom Penh Faculty Members at AIT, Bangkok.
- 46. Basic Course on Remote Sensing and GIS, 12-23 July 2004, GIS Application Center (GAC), AIT, Bangkok.
- 47. Seminar presentation on 'Integrating biophysical and socioeconomic factors in modeling the land use alternatives at the watershed level' at the School of Environment, Resources and Development, Asian Institute of Technology, Bangkok. September 6, 2002.
- 48. Training course on GIS/Remote sensing applications for environmental planning and management, 25 Feb—8 March, 2002, UNEP RRC.AP, AIT, Bangkok
- 49. Short training course on GIS-aided Watershed Management, 3-7 December 2001, IWDM/SERD, Asian Institute of Technology, Bangkok.
- 50. Short training course on Concept and institutional issues in Integrated Watershed Management, 6-16 August 2001, IWDM/SERD, Asian Institute of Technology, Bangkok.
- 51. Training on Sustainable watershed management, 25 June 01 July 2001, AASE/SERD, Asian Institute of Technology, Bangkok.
- 52. Training/Workshop on Planning for Environmentally Sustainable Development, 11-29 September, 2000, RDGR/SERD, Asian Institute of Technology, Bangkok.
- 53. Training course on GIS in Schools Management, 4-22 September 2000, GIS Application Center, AIT, Bangkok.
- 54. Training workshop on Sustainable On-farm Water and Soil Quality Management, 18-26 June, 2000, Asian Institute of Technology, Bangkok.
- 55. Training Workshop Program of the IBSRAM/ASIALAND Management of Sloping Lands Network, 24-29 April 2000, IBSRAM, Bangkok.
- 56. Training and Consultancy Unit of Agricultural and Aquatic Systems Program, AIT to teach "RS/GIS application in aquaculture development", Feb 1999.
- 57. Continuing Education Center, AIT to teach GIS application in rural development planning and mobilization, and GIS application in watershed management planning.
- 58. Joint IGBP-DIS/LUCC/SEA START-LUCC/DIS workshop, 13-18 August 1998, Chulalongkorn University, Bangkok on "Application of coarse resolution data for land use/cover monitoring in the humid tropics".
- 59. GIS Application Center (GAC), AIT to teach digital image processing and advanced GIS modules.
- 60. Meteorological Department, Bangkok to present RS/GIS applications in agro-climatic context, Sep. 1998.
- 61. Academic Support Network of AIT for providing counseling and teaching the needed AIT master's student. 1997-1998.

Seminar and workshop participation

As Presenter

- 1. Shrestha, R.P. 2012. MultiCriteria Decision Analysis Techniques, TNA Capacity building workshop, 25-26 January 2012, Kathmandu.
- 2. Shrestha, R.P. and S. Dhar, 2012. Barrier analysis: the different tools at the Regional Capacity Building Workshop on Technology Needs Assessment for Climate Change Mitigation and Adaptation, Novotel Siam Square, Bangkok, 21-24 February 2012.
- 3. Presentation on 'Climate change and land management in ASEAN+3 countries' at *Climate change and food security in ASEAN+3 countries*, 29-31 March 2011, Beijing Friendship Hotel, Beijing.

- 4. Land degradation assessment using Geospatial technologies, 2009. Workshop on Remote Sensing Applications to land degradation 21-25 November 2009, Sultan Qaboos University, Oman,
- 5. Presentation on 'Biomass burning -forest fire' at Expert meeting on Atmospheric Brown Cloud (ABC) emission inventory, 19-20 May 2008, Asian Institute of Technology, Bangkok.
- 6. Presentation on 'Mainstreaming sustainable land management: Role of AIT". Asia Regional workshop on sustainable land management and national capacity self assessment, 20-24 November 2006, Asian Institute of Technology, Bangkok.
- 7. GMSARN Greater Mekong Subregion Academic Research Network. Experts meeting on Environmental Management and Sustainable Development in the GMS, 18-19 August 2003, ADB Headquarters, Manila.
- 8. Inception meeting of GMS National Performance Assessment and Strategic Environmental Framework II, 20-21 August 2003, ADB Headquarters, Manila.
- 9. First expert group meeting GMS National Performance Assessment and Strategic Environmental Framework II, 23-24 January 2003, Bangkok.
- 10. UNEP RRC-AP programs and activities. 11th Ministerial Conference of Greater Mekong Subregion, 23-26 September 2002, Phnom Penh.
- 11. Subregional Environmental Monitoring and Information Systems Activities and Progresses Eighth meeting of Greater Mekong Subregion (GMS) working group on environment 3-4 April 2002, Yangon, Myanmar.
- 12. Subregional Environmental Monitoring and Information Systems Activities and Progresses. Seventh meeting of Greater Mekong Subregion (GMS) working group on environment, 28 Aug. 01 Sep. 2001, Luang Prabang, Lao PDR.

As Participant

- 1. Workshop on Sustainable Land Management to Enhance Food Production of APEC members, 28-30 November 2012, Imperial Maeping Hotel, Chiangmai, Thailand.
- 2. From GMS to AEC 2015: Prospects for human resource development and capacity building in regional cooperation and integration, Pullman Khon Kaen Raja Orchid hotel, 12-13 July 2011.
- 3. International workshop on "Oriental wisdom: Alternative pathways towards environmental and natural resources management, 10-11 April 2008, Bangkok.
- 4. Developing Sustainable Strategies in Asia, 8-9 March 2007, UN Conference Center, Bangkok, Organized by OECD and UNESCAP.
- 5. Final workshop of Strategic Environmental Framework and National Performance Assessment, 24 April 2006, Bangkok.
- 6. Workshop on Integrated Assessment Models for Developing Countries –Assessing Sustainable Development and Greenhouse Gas Mitigation Opportunities, 9-10 August 2004, Asian Institute of Technology, Bangkok.
- 7. Second expert group meeting of GMS National Performance Assessment and Strategic Environmental Framework II, 19-20 Nov. 2003, Kunming.
- 8. Use of Space technology for disaster management for Asia and the Pacific, 11-15 November 2002, Bangkok.
- 9. Making science more policy relevant: A new generation of assessments. 13-14 June 2002, Prague, Czech Republic.

11. Total number of Citations (as of 8 Dec 2014)

SCOPUS records

• 44 Documents; 166 citations, h-index 7

Google Scholar records

• 79 documents; 294 citations (220 since 2009), h-index 9

B. Research in progress

1. Brief description of current projects

I have been engaged in developing my professional research portfolio in the following areas through students' research and sponsored research activities:

- Assessment and monitoring of land use/cover and land degradation
- Understanding human interactions with land use and natural resource systems with regard to prevailing social, economic and policy context
- Sustainable Land Management
- GIS/RS applications and Geoinformation in Decision making

Following two projects are recently been confirmed for funding from NASA and ADB to be implemented soon.

- Land Cover and Land Use Changes and Their Effects on Carbon Dynamics in South and South East Asia: A Synthesis Study funded by NASA, PI- A. Jain, University of Illinois – starting from April 2014.
- Improving land-use change simulation to reduce conflict from competing land demands funded by ADB, PI P Vurburg, VY University, The Netherlands. I was Co-PI when writing the proposal. This project is already awarded but later ADB told that they need Thai national to look at activities related to Thailand. Hence, I am out of the project now because of that condition.

Selected ongoing sponsored activities:

Details about these and other projects including on given in Section C.2 below.

2. Brief description of plans for future projects

I plan to work in the area of sustainable land management including conservation agriculture, land use and climate change, and natural resource management, e.g. REDD+. Hence, I am working on with few partners from Europe and Asia to develop project proposals in the area of

- Capacity development for conservation agriculture to address climate change impact in Myanmar seeking funding from EU or Norwegian council
- REDD+ preparation and implementation

C. Research grants and sponsored projects

1. List of proposals submitted

1. Mainstreaming climate change adaptation processes with local development planning in Nepal and Thailand, submitted to APN, Co-PI with Forest Action, Nepal. – *under review*

Few recent unsuccessful proposals were:

- 1. Making Alliance for Social and Environmental Safeguards, submitted to USAID/ RDMA, PI: RP Shrestha and RC Bhujel, June 2013.
- 2. Supporting methodological innovations and capacity building on REDD+ MRV in Asia through Triangular collaboration among Norway, Nepal and Indonesia,), submitted to NORAD, PI- B. K. Sitaula, University of Life Sciences
- 3. Quantifying the impacts of climate and land use changes on water budgets and balances in Mekong river basin. Submitted to NASA, PI- J. Qi, Michigan State University.

- 2. List of research grants and sponsored projects (Co-PI mentioned wherever applicable)
 - 1. Technology needs assessment in Asia for climate change mitigation and adaptation, Dec 2014

 Dec 2016. Co-PI with S. Kumar, A. Salam

Sponsor: UNEP DTE Denmark

Budget: 2,514,000

2. Land Cover and Land Use Changes and their Effects on Carbon Dynamics in South and South East Asia: A Synthesis Study Nov 2014 – Dec 2015, PI-Atul Jain, University of Illinois.

Sponsor: NASA

Budget:

3. Climate technology center and networking [Sep 2013 – Dec 2014] - Co-PI with M Babel and S Shrestha

a. Sponsor: UNEP

b. Budget: 3,900,000 Baht

c. Status: Ongoing

4. Land tenure and disaster and its social and gender impact. [July 2013– March 2014] - Co-PI with K Kusakabe

a. Sponsor: FAO RAP

b. Budget: 50,000 USD

c. Status: Ongoing

5. Enabling sustainable land management for sustainable use of soil and land resources. [Dec 2012 – Nov 2013]

a. Sponsor: FAO RAP

b. Budget: 900,000 Baht [OH-75,938 Baht; Faculty time/pay roll – 88,342 Baht]

c. Status: Ongoing

6. Technology needs assessment in Asia and Europe for climate change mitigation, [Jul 2010 – May 2013] - Co-PI with S. Kumar, A. Salam, C. Marpaung.

a. Sponsor: UNEP RISOE

b. Budget: 12.948,000 Baht [OH – 460,549 Baht, Faculty time/pay roll – 241,470 Baht]

c. Status: Ongoing

7. Making the Mekong Connected (MMC): Developing carbon and biodiversity assets for multifunctional landscapes in the Upper Mekong. [March 2009-June 2013]

a. Sponsor: World Agroforestry Center

b. Budget: 2,187,588 Baht [OH- 292,692 Baht]

c. Status: Ongoing

8. Climate change and adaptation to water scarcity: strategies for integrated water and land use management to enhance the resilience of rural communities in the Gangatic basin. [Feb 2011-Jan 2012] - Co-PI with Dr S. Shrestha, Dr M. Babel.

a. Sponsor: IGES

b. Budget: 500,000 Baht [OH – 20,384 Baht]

c. Status: Completed

9. AIT support to National University of Laos (NUOL), 2007-2010 Extension - Forestry Curriculum, [Jan 2011 – June 2012].

a. Sponsor: SIDA

b. Budget: 1,498,630 Baht [OH - 245,574 Baht; Faculty time/payroll recovery - 353,371 Baht]

- c. Status: Completed
- 10. Development of regional TCP project on mitigating climate change through implementation of improved agricultural practices in south Asia, [Feb-Sep 2010]
 - a. Sponsor: FAO
 - b. Budget: 822,000 Baht [OH 142,466 Baht; Faculty time/payroll recovery 132,516 Baht]
 - c. Status: Completed
- 11. MSU Study Abroad Program [Jan Jul 2010]
 - a. Sponsor: Michigan State University
 - b. Budget: 900,374 Baht [OH 215,477 Baht; Faculty time/payroll recovery 58,896 Baht] Status: Completed
- 12. Downscaling global climate data for assessing the impact of climate change on Dipterocarp species in Peninsular Thailand [July 2009- September 2010] Co-PI: Yongyut Trisurat
 - a. Sponsor: Royal Thai Government
 - b. Budget: 999,600 Baht [OH 143,760 Baht]
 - c. Status: Completed
- 13. Roles of natural and restored forests in carbon sequestration and climate change [Nov 2008 Sep 2010] Co-PI with Prasit Wangpakapattanawong, Dietrich Schmidt-vogt.
 - a. Sponsor: Royal Thai Government
 - b. Budget: 900,000 Baht [OH data not available]
 - c. Status: Completed
- 14. Modeling interactions between human activities and biophysical processes in coastal ecosystem using remote sensing and GIS [Nov 2008 October 2009] Suwannee Adsavakulchai
 - a. Sponsor Royal Thai Government
 - b. Budget: 608,000 Baht [OH 90,400 Baht]
 - c. Status: Completed
- 15. Tamil Nadu Agricultural University capacity development Nov. 2008 Jan 2009 Sponsor: TNAU
 - a. Budget: 117,087 Baht [OH 9,709 Baht]
 - b. Status: Completed
- 16. Assessment and inventorying ABC emission [Jan 2009 Dec 2010]
 - a. Co-PI with Prof. R.M Shrestha (PI) and Dr Kim Oanh
 - b. Sponsor: UNEP
 - c. Budget: 4,235,945 Baht [OH 716,413 Baht; Faculty time/payroll recovery 653,876 Baht]
 - d. Status: Completed
- 17. National Capacity and Training Needs Assessments for Different Stakeholder Groups in order to Identify Gaps, Needs, Strengths and Opportunities for Building Capacity in Integrated Coastal Zone Management (ICM) [15-Jul-07 30-Sep-08]
 - a. Co-PI with Amararatne Yakupitiyage, Mokbul Morshed Ahmad, Dhirendra P Thakur, Tawatchai Tingsanchali, S L Ranamukhaarachchi, Jayant K Routray, Vilas Nitivattananon, Oleg Shipin.
 - b. Sponsor: IUCN
 - c. Budget: 5,288,250 Baht
 - d. Status: Completed
- 18. Sustainable land management knowledge-hub/website [Jul 2007-Jun 2008]

a. Sponsor: UNDP

b. Budget: 200,880 Baht [OH-26236 Baht; Faculty time/pay roll 64500 Baht]

c. Status: on-going

- 19. Land degradation in Afghanistan. [Jul 2007 Mar 2008]
 - a. Sponsor: UNEP
 - b. Budget: 68,760 Baht [OH-8552 Baht]

c. Status: Completed

- 20. Sustainable land management and national capacity self-assessment workshop [Oct 2006 Apr 2007]
 - a. Sponsor: UNDP
 - b. Budget: 1,591,362 Baht [OH 160,000 Baht, Residual 7384 Baht, Faculty time/Pay roll recovery 129002 baht]
 - c. Status: completed
- 21. Training course on GIS Applications in Biodiversity Management [June 2005]
 - a. Sponsor: BISEPT-ST, Nepal
 - b. Budget: 288,000 Baht [OH-57600 Baht]
 - c. Status: completed
- 22. Investigation of Spectral Properties of Salt-affected Soils and Their Mapping Using Remote Sensing Data: A Case of Nakhon Ratchasima Province of Northeast Thailand [June 2003- Jul 2004]

Sponsor: AIT Faculty Initiation Grant

Budget: 50000 Baht Status: completed

V. Service/Outreach

A. Professional Service

- 1. Leadership in policy and program development in professional organizations
 - Established the first website (waswc.ait.ac.th) of the World Association of Soil and Water Conservation (WASWAC)
- 2. Participation in organizational responses to policy, practice, or structural issues, which affect the field

I had served as AIT Focal point for Sustainable Land Management (SLM) Activities in Asia since 2006 [UNDP selected AIT as Regional Support Institution to provide SLM backstopping to participating countries and I led the AIT team during the process]. Then, I provided expert advices for implementing portfolio projects intended to mainstreaming SLM in selected countries in Asia.

I also participated in UNCCC COPS meeting.

3. Significant elective or appointed offices held

Councilor, Senior Associate editor of World Association of Soil and Water Conservation (WASWAC)

4. Organization of training courses, conferences, seminars, and workshops

- 1. Program Committee of *The 1st IASTED Asian Conference on Environment and Water Resource Management ~AsiaEWRM 2014~*, November 24-26, Bangkok.
- 2. Co-organizer with K. Kusakabe of the Expert Consultation workshop on Land Tenure and Disaster and its Social and Gender Impact, 14-15 November 2013, Ambassador Hotel, Bangkok.
- 3. Organizer of Expert Consultation Workshop on Sustainable Land Management (SLM) Regional Action Programs Formulation to Respond to Climate change in Synergy with the three Rio Conventions, 2-3 September 2013, Bankok.
- 4. Seminar coordinator for *Tropical Forests and the REDD+ Scheme: Accounting for Carbon Emission Reductions and Removals* delivered by Dr Nophea Sasaki, University of Hyogo, Kobe 650-0047, Japan on 12 November 2012.
- 5. Technical Program Coordinator of 6th GMSARN International conference on Social-Energy-Environmental Development: SEED towards Sustainability, 19-21 December 2012, Prince D'Angkor Hotel and Spa, Siem Reap.
- 6. Co-organizer with S. Kumar, A. Salam, C, Marpaung of the *Technology Needs Assessment for Climate change: Experience Sharing Workshop*, 10-12 September 2012, Pullman Bangkok Kingpower Hotel, Bangkok.
- 7. Technical Program Coordinator of 6th GMSARN International conference on Social-Energy-Environmental Development: SEED towards Sustainability, 28-30 March 2012, Nongkhai.
- 8. Co-organizer with S. Kumar, A. Salam, C, Marpuang of the Second Regional capacity building workshop for Asia and CIS countries (Second Round countries) on Technology, 8-11 August 2011, Novotel hotel on Siam, Bangkok
- 9. Co-organizer with S. Kumar, A. Salam, C, Marpuang of the First Regional capacity building workshop for Asia and CIS countries (Second Round countries) on Technology, 21-24 February 2012, Novotel hotel on Siam, Bangkok
- 10. Co-organizer with S. Kumar, A. Salam, C, Marpuang of the Second Regional capacity building regional workshop for Asia and CIS Countries (First Round Countries) on Asia on barrier analysis, enabling environment and development of technology action plans, 18-21 January 2011, Novotel hotel on Siam, Bangkok
- 11. Organizer of an International Workshop *Implementation of Improved Agricultural Practices* for Sustainable Land Management in South Asia, 30-31 March 2010, Asian Institute of Technology.
- 12. Seminar Coordinator for *Floral Diversity, Vegetation Composition, Medicinal and Endemic Plants of Balochistan, Pakistan*, By Prof. Dr. Rasool Bakhsh Tareen, Chairman, Department of Botany, University of Balochistan, Quetta, Pakistan 22 February 2008.
- 13. Seminar coordinator for Integration of Remote Sensing, Biogeochemical Modeling, and Traditional Knowledge to Assess Carbon Sequestration in the Sahel: Management and Climate Change, delivered by Dr. Larry L. Tieszen, U.S. Geological Survey Center for Earth Resources Observation and Science (EROS) 47914 252nd Street, Sioux Falls, SD 57198-0001 USA. 7 September 2007.
- 14. Workshop coordinator of Asia workshop on Sustainable Land Management and National Capacity Self-Assessment, 20-23 November 2006, Asian Institute of Technology, Bangkok. Sponsored by UNDP.
- Seminar coordinator for Incentive-based conservation in Nepal: A Comparative analysis of the Annapurna Conservation Area and Royal Chitwan National Park, delivered by Dr Sanjay K. Nepal, Department of Recreation, Park and Tourism Sciences, Texas A&M University College Station, USA. - 28 Feb 2006.
- 5. Editing or serving on advisory boards of journals

- 1. Member of Editorial board. *International Soil and Water Conservation Research Journal*, 2013-2016
- 2. Member of Editorial advisory board of International Journal of Environment and Rural Development, ISERD (April 2010 todate)
- 3. Associate Editor, International Journal of Ecology and Development [May 2006 to date]
- 4. International Editorial Board Member, Asian Journal of Geoinformatics (Jul 2005 -to date)
- 5. Senior Associate editor, Journal of WASWC (Jul 2007 June 2010)
- 6. Associate editor, Journal of WASWC (Feb 2006 June 2007)
- 7. Associate editor, WASWC Newsletter (Jan 2005 June 2007)
- 6. Government or international organization panels, expert witness, reports to government or international agencies
 - Expert services to FAO
 - Member of Expert Network on Management of Climate Change Induced Risks" established by German Climate Center and KfW, German Development Bank, www.climate-service-center-de (Since Sep 2013)

7. Participation in development projects

FAO and UNEP funded projects mentioned above in C.2 are of development in nature, mostly addressing the land management and soil and water conservation issues at policy and program level.

B. Significant institute committee service

1. Field-of-Study/Program

Represented FoS at inter-FoS, school and institutes activities on research/teaching collaboration initiatives

2. School

- Chair, SERD Academic Matter Committee [Mar 2014-Feb 2015]
- Member, SERD Academic Matter Committee [Feb 2014 to date; May 2011 Dec 2012]
- Member, SERD Management Team [Jan-Oct 2013]
- Teaching reviewer of SERD faculty (Dr Roland Cochard, Dr Abdul Salam, Dr D Jourdain)
- Member, Geoinformatics Center Board, SET [April 2012 to date]
- Member, SERD/Restructuring Working group [Jan-March 2013]
- Member, SERD/Undergraduate Task Force [April –June 2012]
- Member, AIT/SERD Restructuring Committee [March July 2012]
- Member, AIT/SERD Salary Reclassification Task Force [Jan 2011 July 2012]
- Member, SERD Information Technology Committee (May 2004 to Oct 2005)
- Member, SERD School Promotion Committee (Mar 2003 Oct 2005)
- Editor, SERDNews [Newsletter of School of Environment, Resources, and Development of AIT – Jan 2003 – July 2005]
- Member, Faculty/Staff recruitment selection panel [of NRM faculty in 2009, 2010; AIT Community School teacher 2008; SERD Planning/Outreach officer 2008, SERD II secretary, 2008]

3. Institute

- Chair of AIT Senate (May 2014 May 2016)
- Ex-officio member of AITMT and AIT Board of Trustees
- Member, CTCN Steering Committee AIT (April 2014 to date)
- Member, AIT Faculty Evaluation Panel [Dec 2010 June 2013]

- Chair, Taskforce on Grade distribution and Inflated grades [Sept-Oct 2013]
- Member, Taskforce on UG program finances [June 2013- Aug 2013]
- Member, AIT-Nepal Satellite Campus Task Force [Jan June 2011]
- Chair, AIT Institute-wide Library Committee [Jan 2011 Dec 2011]
- Member, AIT Institute-wide library Committee [Mar 2006 Dec 2010]
- Member, AIT Academic Senate [2003 to date]
- Chair, Nepal Local Currency Fund [2011]
- Executive Member, Nepal Local Currency Fund at AIT [2009 2010]
- Member, AIT-Norwegian Scholarship Selection Committee [Jan 2007 2010]
- Member, PRAM task force, [March 2009- Dec 2009]
- Member, SERD Academic Matter Committee, [Oct 2008 July 2010]
- Member, Wetland Alliance Scientific Advisory Committee, [Jan 2007 2009]
- Focal Person of Greater Mekong Subregion Academic and Research Network for the UNEP Regional Resource Center SEF II project [June 2003 April 2006]
- Secretary, AIT Arboretum Working Group [Dec. 2003 Dec 2005]
- Secretary, AIT Campus Environment Committee [Oct 2003-Mar 2004]
- Member, AIT Campus Environment Committee [Apr 2004-Feb 2005]

C. Administrative service

1. Field-of-Study/Program

- Coordinator, NRM Field of Study, SERD, AIT [Nov 2013 Dec 2015]
- Thematic area leader, Society, Resources and Development, SERD [Jan 2013 Oct 2013]
- Associate Dean for undergraduate, SERD [Feb-Mar, 2011]
- Coordinator, NRM Field of Study, SERD, AIT [Mar 2011 Dec 2012]
- Coordinator, NRM Field of Study, SERD, AIT [Jan 2007 July 2010]

D. Promotion and marketing

- Have served as
 - o Member, SERD Task force on Promotion (March June 2012)
 - o SERD School Promotion Committee member (Mar 2003 Oct 2005)
- Promotion trip to many universities of Thailand over the years
- Participated SERD promotion trip to Vietnam in April 2007
- I have been informally doing promotion activities in all of my visits outside the campus while attending conferences, workshops and also timely responding every email queries/phone calls related AIT academic activities. I am equally active in promoting our activities by emails and social network sites.

E. Community service

1. Consulting activities / expert services

- Course advisor for Land and Water management course of MSc Forestry Curriculum (Rural Development Major) at the National University of Laos, Vientiane, 2011.
- Course advisor for Spatial Analysis for NRM of Master's level Natural Resources Management curriculum development at Hanoi University of Agriculture and Hue University of Agriculture and Forestry, Vietnam, 2009.
- Curriculum development in Integrated Natural Resources Management and Sustainable Development as the project activities of "Education for Sustainable Development project" coordinated by AIT in Asia regional level, 2009.

- Course Advisor for two courses, Sustainable land Management and Fundamentals of GIS developed at Royal Univ. of Phnom Penh, Cambodia, 2007.
- AIT Focal point for Sustainable Land Management (SLM) Activities in Asia 2006-2007 [UNDP selected AIT as Regional Support Institution to provide SLM backstopping to participating countries and I led the AIT team during the process]
- Land use/GIS specialist for the project "Strategies for Sustainable Management of Fishery Resources in Pasak Jonlasid Reservoir, Thailand through Ecological and Socioeconomic Assessment, ARCBC/Kasetsart University, Bangkok, January-June, 2002.
- GIS Specialist GIS for the project "Wildlife Monitoring and Management at Khao Yai national Park, Thailand" conducted by Wildlife Conservation Society Thailand Programs, Aug.-Oct. 2000.
- Conducted UNEP/EAP-AP case study through GAC/AIT on 'Application of GIS/RS on land degradation monitoring: a case study of soil erosion assessment in Sakae Krang watershed, central Thailand', April — August 1997.
- GIS Specialist for the project 'Nakhon Nayok Eco-tourism Project' conducted by NREM, Ministry of Interior and Tourism Authority of Thailand, May 1997.
- Consultant for the study of Grazing Land Inventory and Potential Study for Bhumisthan VDC of Dhading, Nepal for GTZ/ Dhading District Development Project, Nepal. June - November 1991.

2. Serving on program committees

Some selected community services are the following sessions, which I served as the Chair person

- 1. Session Moderator of a session on 'Climate change Mitigation from Agriculture and Forestry sector', *Technology Needs Assessment for Climate change: Experience Sharing Workshop*, 10-12 September 2012, Pullman Bangkok Kingpower Hotel, Bangkok
- 2. Session chair, First Regional Technology Needs assessment capacity building workshop, August 8-11, 2011
- 3. Session on Groundwater at the Water for Cities: Responding to the Urban Challenges, 22 March 2011, Kathmandu.
- 4. Session on Land Degradation and Combating at the International Conference on Combating Land Degradation in Agricultural Areas, October 11-15, 2010, Xi'an.
- 5. Session on Environment-I and Natural Resources Management at the 3rd GMSARN International Conference on Sustainable Development: Issues and Prospects for the Greater Mekong Subregion, 12-14 November 2008, Kunming.
- 6. 'Technical Session 8 on 'Hydrology' at the 28th Asian Conference on Remote Sensing (ACRS), November 12-16, 2007, Kuala Lumpur.
- 7. Session on "Agro-ecosystem dynamics of upland/shifting cultivation systems' of the workshop on upland cultivation in the context of increasing economic integration in the Greater Mekong Subregion, June 20-22, 2007, Khon Kaen.
- 8. 'Developing Sustainable Strategies in Asia', 8-9 March 2007, UN Conference Center, Bangkok, Organized by OECD and UNESCAP.
- 9. Session on 'Natural Resources Management and Development I' of GMSARN International Conference 2006 on Sustainable Development: Issues and Prospects for the Greater Mekong Subregion, 6-7 December, 2006, Asian Institute of Technology, Bangkok.
- 10. Session on 'Best Practices and Applications' session of 17th United Nations Regional Cartographic Conference for Asia and Pacific, 18-22 September 2006, UN ESCAP, Bangkok.
- 11. 'Keynote speech session' of International Workshop on Disaster Monitoring and Assessment through Images (DMAI'2005)', 4-5 Nov. 2005, Asian Institute of Technology, Bangkok.

3. Referring journals articles, books, grant proposals, etc.

Served as a *Reviewer* to the followings (2010-2013). Number of parenthesis is number of manuscript reviewed that year.

S.N.	Name	Category	Publisher	Year (number of manuscript reviewed)
1.	Land degradation & Development	Journal	Wiley	2014(1)
2.	International Soil and Water Conservation Research	Journal	World Association of Soil and Water Conservation	2013(1)
3.	Journal of Soil and Water Conservation	Journal	Soil and Water Conservation society, USA	2013 (1)
4.	Management of Environment Quality	Journal	Emerald	2013 (1) 2012 (1)
5.	Journal of Hydrology	Journal	Elsevier	2011(1)
6.	Advances in Space Research	Journal	Elsevier	2010(1)
7.	Arid Land Research Management	Journal	Taylor and Francis	2011 (1)
8.	Journal of Land Use Science	Journal	Taylor and Francis	2014 (1) 2010 (1)
9.	International Journal of Remote Sensing	Journal	Taylor and Francis	2010 (1)
10.	Environmental Management	Journal	Springer	2011 (1)
11.	Arabian Journal of GeoSciences	Journal	Springer	2010 (1)
12.	Journal of Soil Science and Environ. Management	Journal	Academic Journals	2012 (1)
13.	Journal of Geography an Regional Planning	Journal	Academic Journals	2011 (1)
14.	Biotechnology and Molecular Biology Reviews	Journal	Academic Journals	2010 (1)
15.	The Philippine Agricultural Scientist	Journal	University of the Philippines Los Baños	2010 (1)
16.	Remote Sensing of Land Use and Land Cover: Principles and Applications	Book Chapter	CRC Press	2011
17.	Environmental Engineering and Management (EME 2010)	International conference	IASTED	2010 (4)
18.	AITAA Masters Research Grants	Research grant proposal	Asian Institute of Technology Alumni Association	2010 (5)

4. Served as external examiner

PhD external examiner of the following students

- 1. Mr Nguyen Lam Dao, <u>University of Southern Queensland</u>, Australia. *Dissertation title: Rice crop monitoring using new generation synthetic aperture radar (SAR) imagery [2009]*.
- 2. Mr Bed Mani Dahal, Norwegian University of Life Sciences, Norway. Dissertation title: Agricultural intensification in a mid-hill watershed of Nepal: Socioeconomic and environmental implications [2010].
- 3. Mr Laxmi Prasad Sharma, <u>Birla Institute of Technology</u>, India. *Dissertation title: Landslide Vulnerability Assessment And Zonation Through Geo-Informatics* [2012]

- 4. Ms Salma, <u>University of Peshawar</u>, Pakistan. *Dissertation title: Climate Change and Variability Trends in Pakistan and Its Environmental Effects [2012]*
- 5. Mr Sisira Ediriweera Patabendige, Southern Cross University, Australia. Thesis title: Refinement of Predictions of Forest Structure and Biomass Using Remote Sensing Techniques in a Topographically Complex Landscape. [2013]

VI. Ability to Cooperate

1. Joint research activities

• List of research projects mentioned in Section IV.C above enlists number of researchers with whom I have worked/teamed up with representing organizations, like AIT, CIRAD, IRSTEA, IRRI, Montpellier SupAgro, INRA, KU, DOA, RID, UMB/Norway, Andalas University/Indonesia, National University of Laos, Kasetsart Univ., Chiangmai Univ. and University of Thai Chamber of Commerce, Michigan State Univ./USA, Tamilnadu Agri. Univ/India, University of Illinois at Urbana-Champaign.

2. Joint pedagogical activity

- INRM course development (Spatial information systems), Hue University of Agriculture and Forestry; Hanoi Agricultural university, 2010
- Curriculum development (Education for sustainable development, IRM course NEC, Nepal under ISD project in 2009, PI: GB Thapa)
- Course coordinator from AIT of the Asia-Pacific Initiative seminar on 'Climate, energy and food security', jointly organized by the universities from Japan, USA, Samoa, India, Indonesia, and AIT, delivered via live-video conferencing, 2008 and 2009
- Co-teaching of NRM course ED76.02 with NRM faculty every year since 2004, ED76.15, ED82.9010 as mentioned in Section II.A.1 above
- Co-teaching of NRM 522 in Andalas University with the instructor from Andalas University in the year 2005, 2006, 2007
- Some contribution to other courses too offered by RS/GIS and UEM faculty (detail in Section II.A]
- Serving as thesis/dissertation committee member of the students from 13 FoS of AIT [NRM, RS/GIS, ASE, EEM, TRE, E, RRDP, ITCZM, UEM, GDS, CCSD, WEM, AARM]

3. Interaction with public and private sectors

Through research projects, seminars, conferences, and personal visits. Most direct interactions included the workshops I conducted which were attended by public and private sectors

VII. Personal Statement

As a teacher, I believe that my role is to guide the students through a logical learning process of the problems at hand. My intention is to equip them with adequate knowledge and skills to deal the problems on their own in their professional life when they are back home in their country or elsewhere. I emphasize the 'learner-centered' approach in the classroom teaching by encouraging students into a participatory learning process through questioning and providing critique. I value my students and give them the priority by being open and available to them anytime to enhance their learning process. Students' evaluations of my courses have been so far very good and teaching award I received in 2005 in recognition of outstanding teaching performance is a testimony of engaging students' satisfactorily in their learning process. Meanwhile, I give very high respect of and take the students' comments seriously if any improvement is necessary. I take great satisfaction as those graduated students writing back to thank me to help them be a better learner and seeker of scientific wisdom.

With respect to research, I have been following a specific research theme focusing on the interrelation between land use, ecosystem and human interaction through my own research and also through my doctoral/master's students research to accumulate a body of knowledge on this aspect in the region. This has led to a publication of a book "Land use, climate change and biodiversity modeling: perspectives and applications", which was possible due to strong network of professionals working in the similar areas. I believe I am doing satisfactory progress in terms serving the community through publication of scholarly articles in my areas of interest, and I hope to even do more in the near future with the collaboration of group of researchers in the region who have been trained with me and fellow researchers.

While teaching and research are important, I have been continuously trying to involve in the outreach activity by involving myself in various capacities, i.e. FoS, thematic area, school and institute level, and also at various international professional society's activities as the service to the community, which I will continue to do so. Now onward, I am also focusing on bringing research results to the field through engaging in field level activities, such as consulting activities.

CERTIFICATION:	I, the undersigned, certify that, to the best of my knowledge and belief, these biodata correctly describe myself, my qualifications and my experience. I understand that any willful misstatement described herein may lead to my disqualification.
SIGNATURE:	
DATE:	

Day / Month / Year

ASIAN INSTITUTE OF TECHNOLOGY



POLICY AND PROCEDURE STATEMENT

Reference	PA	Issued By	PRESIDENT
Section	1	Responsible Officer	VPAA
Serial No.	2-5	Date Issued	14 June 2006
No. of Pages	7	Date Revised	12 September 2012

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TITLE:

FACULTY EVALUATION CRITERIA

I. PURPOSE

- 1. To set forth the evaluation criteria for faculty evaluation and the conditions and qualifications for appointment and promotion to the various ranks.
- 2. The evaluation process at AIT serves the purposes of advising the Institute on the suitability of candidates for promotion and contract renewal and of providing feedback to the candidate on his/her performance in research, pedagogy, and service. The Institute uses the evaluation process to encourage and reward academic excellence and to rectify mediocrity and marginal contribution in a fair and constructive manner.

II. CONDITIONS AND QUALIFICATIONS FOR APPOINTMENT AND PROMOTION

A. Lecturer

- 1. A faculty member is appointed to the rank of Lecturer if he/she possesses a doctoral degree with professional knowledge and two years' experience in the related field. He/she should have good communication skills in English both in written and spoken. A candidate for this rank must be creative with an ability to adapt to a multi-culture setting in order to handle students of different nationalities.
- 2. A Lecturer is appointed in order to participate in the educational and research programs of the Institute. A Lecturer will be expected to teach, advise students and serve as a member or chairperson of master degree student program committees. A Lecturer may also serve as a member of a doctoral program committee, but not as a chair.
- 3. A Lecturer must serve at least two years in the rank of Lecturer before he/she is considered for the rank of Assistant Professor. He/She will be evaluated by the Faculty Evaluation Panel and will be required to give a seminar.

B. Professorial Ranks

- 1. An earned doctoral degree from a reputable institution is required for all professorial ranks.
- 2. The three ranks can be thought of as a continuum of performance from potential to actual potential at the Assistant Professor level to actual at the Professor level.

3. Assistant Professor

- i. A member of faculty is appointed to the rank of Assistant Professor if there is promise of his/her development toward the rank of Associate Professor. A strong academic record should be present and there should be a clear indication that he/she has the aptitudes of a successful faculty member and will grow in stature and eventually qualify for the rank of Associate Professor. A candidate for this rank must have at least, two years of teaching/research experience and must show promise of successful research and scholarship. At least two research papers in refereed international journals, including publications resulting from his/her doctoral dissertation, may be accepted as evidence of such promise.
- ii. A faculty member may not serve more than eight years at the rank of Assistant Professor.

4. Associate Professor

An Associate Professor should demonstrate mature and independent scholarship. Research and pedagogy should indicate creativity, significance and effectiveness. It should be emphasized that in all cases the candidate for promotion must have publications in internationally recognized refereed journals of high stature or have published one or more textbooks with a leading press. The required number of publications shall be a function of their quality and significance.

5. Professor

The rank of Professor at AIT is given only to those having made significant internationally recognized contributions in research, pedagogy, or their profession and who have demonstrated leadership in the Institute, their profession, or their field. Candidates to this rank must demonstrate that their research, pedagogical, or professional contributions have had a significant impact on the advancement of knowledge. Isolated contributions are not sufficient; rather candidates must show evidence of significant sustained contribution.

III. EVALUATION CRITERIA

- 1. Candidates for promotion and contract renewal are evaluated in the three broad areas of research, pedagogy, and service. To be considered for promotion, a faculty member must demonstrate above average competence and professional accomplishments in all three areas and must excel in at least one of pedagogy, research, or service to the candidate's profession.
- 2. In all three areas, AIT attaches great significance to the ability to co-operate. This includes the capacity to work jointly with colleagues. In this regard, it is important for faculty members to be present on campus for a sufficient amount of time each week to allow for interaction with colleagues. A faculty member may also show ability to cooperate in interaction with the public and private sectors.
- 3. In addition, the financial well-being of the Institute demands that each faculty member contributes sufficiently to the generation of revenue. This is primarily in the form of tuition from teaching and overhead from sponsored projects, including research, training, and consulting.

A. Research

In general, quality is more important than quantity, although there must be sufficient quantity to provide evidence of a significant level of scholarly productivity.

Several factors serve as measures of the quality of a scholarly record.

- a) The impact of research can be measured by the number of citations to a candidate's published work.
- b) The quality of the journals in which the individual publishes can be measured by the impact factors of the journals. For books the quality of the publisher and particularly the popularity as indicated by the number of editors/reprints is important.
- c) An important measure of the significance of research comes in the form of comments from external evaluators who are internationally recognized scholars in the candidates' field. External evaluators play a key role by providing a degree of objectivity, independent of any institutional, political, or financial factors, and expert assessment of the significance and impact of a faculty member's work.
- d) Outside funding of research from prestigious foundations and institutes can be viewed as a significant part of the research record, depending on the relative size of the grant and the significance of the questions posed.

- e) The composition of the portfolio of published works also matters. A collection of good, but unconnected articles, may not produce the same sense of impact that a set of articles advancing a coherent line of scholarship would. It is not unprecedented, though, for faculty to shift scholarly areas of focus. The personal statement provided by the candidate is, therefore, a very important guide to the significance of each scholarly piece and their connection to each other.
- f) Another issue is the connection of published work to the dissertation. Highly regarded articles from the dissertation do count, but not as much as highly regarded articles reflecting scholarship beyond the dissertation.
- g) The scholarly record should provide clear evidence of independent thinking and research. Thus, although many junior scholars continue to do some collaborative work with a former Ph.D. or postdoctoral advisor, it is important to establish a record of growing independence from former advisors.
- h) Invitations to talk at other universities and prestigious events add to the scholarly record but generally play a relatively minor role independent of other measures of the scholarly record.
- i) AIT values the ability to collaborate, so coauthored articles are an important factor. It is, however, necessary to identify the contributions of the candidate to these articles. A significant portion of the overall research record should include articles and works to which the candidate has made the primary conceptual contributions.

B. Pedagogy

Pedagogy includes teaching/learning, student research supervision, pedagogical development, and publications of a pedagogical nature.

The following factors are considered in evaluation of pedagogical performance:

- a) Teaching/learning effectiveness. In the area of teaching/learning, the candidate should demonstrate mastery of knowledge in the areas taught, competency in organization and presentation of course materials, conscientiousness and fairness in relationships with students, skill in instruction, and commitment to developing better approaches to teaching/learning.
- b) Teaching load. This includes the number of courses taught and their enrollments.

- c) Student research. The number and quality of student research study projects, theses, and dissertations supervised.
- d) Student course evaluations. At a minimum, candidates are expected to have numeric scores above 3.0 on the typical 5-point scale. Special interest is placed on evaluations of the instructor's contribution to the class, the overall quality of the class, and, especially, the amount students learned.
- e) Peer teaching evaluations. It is best if the file includes peer reviews from several different faculty colleagues. Especially in cases of interdisciplinary courses, it may be useful to have peer reviews by faculty in different disciplines.
- f) Courses co-taught with other instructors from either within or outside AIT.
- g) Mentoring record. A very important part of our teaching/learning responsibilities takes place outside of any specific course. The advising of students is a significant contribution to the teaching/learning mission of the Institute.
- h) Initiation and participation in curriculum development (e.g. new courses, new programs, flexible degree programs).
- i) Demonstrated effectiveness in the development and use of innovative methods in teaching/learning.
- j) Publications of a pedagogical nature (e.g. textbooks, articles on pedagogical techniques).
- k) Formal personal pedagogical development. This includes participation in workshops and short courses on pedagogy.

C. Service

Communities thrive when all members contribute to the common good. Thus we expect that candidates will have been involved in the life of the Institute, of the local and regional community, and of their professional associations.

a) Professional Service. Impact on and acceptance in the profession as measured by dissemination in scholarly and professional journals. Leadership in policy and program development in professional organizations. Participation in organizational responses to policy, practice, or structural issues, which affect the field. Holding significant elective or appointed offices. Receipt of awards or citations for professional contributions. Organization of training courses, conferences, seminars, and workshops.

- b) Community Service. Serving on program committees. Consulting activities. Refereeing of journal articles, books, grant proposals, etc. Serving as external examiner.
- c) Institute Service. Committee service. Administrative service. Promotion and marketing.
- D. Personal Statement. The personal statement is a self-reflection by a faculty member of his/her work. The reflective statement should indicate what the faculty member thinks of his/her most important accomplishments and the significance of the accomplishments in achieving Field of Study, School, institutional, and/or professional goals. The faculty member may organize his/her reflective statement under these categories: pedagogy, research, and service and outreach, and indicate time spent on each activity and specify which activity or activities he/she has excelled. The faculty member should also explain how he/she integrated pedagogy, research, and service and outreach to achieve synergy and balance. The faculty member may illustrate how his/her one activity has benefited other activity/activities; for example, how research has benefited pedagogy and teaching/learning and vice versa. The faculty member may state how the earlier feedback from the Faculty Evaluation Panel/President helped him/her to improve quality of his/her work. The faculty member should indicate a plan of his/her future portfolio of activities and the expected impact.

The personal statement should not exceed two pages in length.

IV. CRITERIA FOR CONTRACT RENEWAL

Contract renewal requires a continued level of performance consistent with that required for promotion to the faculty member's current rank. In addition, each faculty member is expected to have generated sufficient revenue over the previous contract period to at least equal his/her salary cost over that period. This includes revenue from teaching and overhead from sponsored projects, including research, training, and consulting.

	1 st Revision	20 June 2012	
3.6 1101 /1 221		AIT Management Team (12 September 2012, 20 June 2012, 13	
Modification History:	Reviewed By:	June 2012, 16 May 2012) Academic Senate (25 July 2012)	
	2 nd Revision	Academic Schate (25 July 2012)	
		oloyment of Faculty: General Work Regulations	
Related Policies		redure for Recruitment and Appointment of Direct-Hire Faculty redure for Evaluation of Faculty for Promotion	
		reduce for Evaluation of Faculty for Contract Renewal	
Keywords	(20 June 2012 /	12 June 2012 / 16 May 2012 AJTMT\	
		13 June 2012 / 16 May 2012, AITMT) ethe position of Instructor.	
Rationale for Revisions:	• Developed criteria for the rank of Lecturer linked with the professorial ranks		
		num of performance.	
_	Required a	more comprehensive personal statement.	

ASIAN INSTITUTE OF TECHNOLOGY



POLICY AND PROCEDURE STATEMENT

Reference	PA	Issued By	PRESIDENT
Section	1	Responsible Officer	VPAA
Serial No.	2-2	Date Issued	14 June 2006
No. of Pages	6	Date Revised	13 June 2012

Personnel Affairs

TITLE:

PROCEDURE FOR EVALUATION OF FACULTY FOR PROMOTION

I. PURPOSE

To set forth the procedures for evaluation of faculty for promotion.

II. PROCEDURE

- 1. Twice per year the Faculty Evaluation Panel (FEP) (see PA-1-2-4 for the panel's Terms of Reference) issues a call for applications for promotion to all faculty members.
- 2. The processing of each promotion case is initiated within the School in which the faculty member holds his/her primary appointment. Faculty members, including School Deans and/or equivalent positions, wishing to be considered for promotion must submit a letter and all required documentation to the Vice President for Academic Affairs (VPAA), with a copy of the letter sent to the concerned School Dean, within four weeks of the call for applications.
- 3. All promotion cases within the School are handled by a standing School Promotions Committee consisting of all faculty members holding the rank of Professor with primary appointment in that School. The committee is chaired by the Dean.
- 4. When a School does not have sufficient number of professors, the School Promotions Committee will be supplemented with professors from outside the School/Institute.
- 5. The faculty members of the evaluated faculty member's thematic area (including faculty members familiar with the academic contribution of the evaluated faculty) are requested to provide their assessment of the candidate and the Dean collects and summarizes the individual assessments for presentation to the Promotions Committee.
- 6. The School conducts an assessment to determine whether the strengths of the case warrant soliciting external evaluations. The School Promotions Committee shall meet and issue a recommendation within four months after

receiving the complete required documentation from the faculty members wishing to be considered for promotion. A positive recommendation requires a positive vote from a simple majority of the committee members present.

- i) Upon positive recommendation, the case, with all current documentation, is transmitted to the VPAA in order to obtain external evaluations. The School Promotions Committee is responsible for the organization, accuracy and completeness of all materials submitted.
- ii) Upon negative recommendation, the Dean communicates the result to the candidate, along with specific recommendations that will help the candidate progress towards promotion.
- 7. The promotion cases of School Deans and/or equivalent positions are handled by the VPAA in consultation with a faculty member of Professor rank of the evaluated Dean's thematic area or an external expert familiar with the academic field of the evaluated Dean (replacing the standing School Promotions Committee).
- 8. The promotion cases of Associate Professors in the School, where the Dean is in the rank of Associate Professor and where there is only one Professor or none, will be handled by the VPAA in consultation with the School Professor or a faculty member of the evaluated faculty member's thematic area or an external expert familiar with the academic field of the evaluated faculty member.
- 9. Upon receiving a positive recommendation as per the procedure laid down in points 2. to 8. above for promotion cases to the rank of Professor, the VPAA will solicit written evaluations from external experts. (See Section IV and Annex 1 below for specification of the number of evaluations required and the content of the letter soliciting the evaluations.)
- 10. Once all external letters of evaluation are received, the VPAA schedules the cases for promotion to the rank of Professor to be considered at the next available FEP meeting and informs the School Dean, as well as the School's representative for the case. Cases for promotion to the rank of Professor shall be heard only by the FEP members holding the rank of Professor.
- 11. Upon receiving a positive recommendation from the School for cases for promotion to the rank of Associate Professor, the VPAA schedules the case to be considered at the next available FEP meeting and informs the School Dean, as well as the School's representative for the case.
- 12. At the hearing, the case is presented to the FEP by the chosen representative. After a period of discussion with the representative, the FEP goes into closed session, debates the merits of the case, and votes on the case. A case must receive a positive vote from two-thirds of the committee members present and eligible to vote on that case in order to pass. The FEP writes a summary of its recommendation, discussing the strengths and weaknesses of the case and justifying its decision. In the case of a split vote, a report prepared by the

panel members holding a minority point of view may also be included. The FEP shall issue a recommendation within two months after receiving the School Promotions Committee's recommendation.

- i) In the case of a negative recommendation, the VPAA communicates the result to the candidate along with specific recommendations that will help the candidate progress towards promotion, with copies furnished to the School Dean and the President.
- ii) In the case of a positive recommendation, the panel's recommendation along with all case documents are transmitted to the President for his/her consideration, with a copy furnished to the School Dean.
- 13. In the case of negative action by the President, the VPAA and School Dean are informed by the President's Office. The President's Office issues a letter informing the candidate along with specific recommendations that will help move the candidate closer to promotion.
- 14. In the case of positive action by the President for promotion to the rank of Associate Professor, the President's Office informs the VPAA and the School Dean and issues a letter to the candidate.
- 15. In the case of positive action by the President for promotion to the rank of Professor, the President's decision along with all case documents are transmitted to the Executive Committee of the Board of Trustees for their consideration.
- 16. In the case of positive action by the Executive Committee, the President's Office informs the VPAA and the School Dean and issues a letter to the candidate.
- 17. In the case of negative action by the Executive Committee, the VPAA and School Dean are informed by the President's Office. The President's Office sends a letter informing the candidate along with specific recommendations that will help the candidate progress towards promotion.

III. COMMUNICATION WITH THE CANDIDATE AND CAMPUS COMMUNITY

- 1. In the case of negative recommendation or action at any point in the promotion process, the Dean shall provide the candidate with a summary of the institute and/or School decision and with specific recommendations that will help move the faculty member closer to promotion. The recommendations should point out areas of strength, identify areas requiring further development, and recommend strategies for achieving the needed improvement.
- 2. In the case of negative recommendation or action at any point in the promotion process for a School Dean, the VPAA shall provide the Dean with a summary of the institute and/or external experts' decision and with specific

recommendations that will help move the Dean closer to promotion. The recommendations should point out areas of strength, identify areas requiring further development, and recommend strategies for achieving the needed improvement.

3. In the case of conclusive positive action on a promotion case, the candidate's curriculum vitae, as submitted for evaluation, shall be posted on the FEP web page. CVs will be Internet-published, while the anonymous external evaluations will be Intranet-published.

IV. EXTERNAL EVALUATION

- 1. External evaluations will not be solicited for Assistant Professors considered for promotion to the rank of Associate Professor. (See Section V on Appeals below.)
- 2. For promotion or appointment to the rank of Professor, letters from at least five external evaluators are required.
- 3. The choice of external evaluators and all communication with them is the responsibility of the VPAA.
- 4. The packet sent to the external evaluators should include the candidate's curriculum vitae in the standard format (see PA-1-2-6 Format for the Promotion and Contract Renewal Document), copies of selected publications, and the standard cover letter (Annex 1 below).

V. APPEALS

Faculty candidates who feel that their case was not given fair treatment have the right to appeal the decision. Appeals must be made in writing within 30 days of notification of the decision. In the appeals hearing, all concerned parties (Faculty Evaluation Panel; School Promotions Committee) should have representation.

- 1. Appeal of a negative decision at the School level is made to the VPAA who shall schedule the case to be considered by the FEP.
- 2. Appeal of a negative decision by the FEP is made to the President.

In the case of an appeal, external evaluations from at least three external evaluators may be solicited for Assistant Professors considered for promotion to the rank of Associate Professor.

VI. RE-APPLICATIONS

- 1. In case of internal rejection (either by the Dean/School Promotions Committee or by the VPAA/Faculty Evaluations Panel), the applicant can only resubmit his/her application after a lapse of one year from the date of rejection.
- 2. In case of negative recommendations by external reviewers, the applicant can resubmit his/her application after a lapse of two years from the date of rejection.

	1 st Revision	27 July 2006	
	Reviewed By:	AIT Management Team (13 June 2012, 16 May 2012, 18 April	
		2012)	
	Reviewed by.	Academic Senate (25 April 2012)	
Modification History:		VPAA; Decision Meeting	
	2 nd Revision	23 August 2006	
	3 rd Revision	19 January 2007	
	4 th Revision	6 July 2011 (AITMT)	
	5 th Revision	13 June 2012	
	PA-1-1-1 – Emp	ployment of Faculty: General Work Regulations	
Related Policies		tute Faculty Evaluation Panel Terms of Reference	
Kelated Folicies	PA-1-2-5 – Facu	ulty Evaluation Guidelines	
	PA-1-2-6 – Format for the Promotion and Contract Renewal Document		
Keywords			
Rationale for Revisions:	 (13 June 2012 / 16 May 2012, AITMT) Revised evaluation process: when School Deans are considered for promotion and when a School does not have sufficient number of Professors. Revised the cover letter to external evaluators Establishment and refinement of procedures (6 July 2011, AITMT) New School management structure (with effect from 1 September 2011). Extension of application period. Nomination of qualified faculty. School's full assessment at the onset. No external evaluations for Assistant Professors considered for promotion to the rank of Associate Professor (but may be solicited in the case of appeals). Representation in appeals hearing. (7 June 2011, AITMT) Timeframe for School Promotions Committee and Faculty Evaluation Panel's issuance of recommendations. Publication of CVs and external evaluations. 		

Annex 1

COVER LETTER TO EXTERNAL EVALUATORS

Dear Professor:
Dr is being considered for promotion to professor in the program in the School of The institute faculty evaluation panel seeks your confidential evaluation of the materials Dr has submitted for consideration, and your conclusion as to whether these materials establish a record of (a) research, scholarship, and professional activities, (b) pedagogical qualifications, and (c) service that warrants promotion to this rank at an institution of AIT's caliber. I am forwarding to you the materials submitted for review. Please use these materials as the basis for your evaluation and conclusion. Please note that this is a request for evaluation, not a request for endorsement or recommendation. As such, the use of superlatives without analysis or mention of specific indicators that support such assessments will not be helpful in our deliberations. We would particularly value your assessment of the quality and originality of Dr 's work and the impact it has had on the field. A copy of our criteria for promotion is enclosed to aid you in your assessment.
In your response, we also ask that you indicate the nature and length of your acquaintance with Dr
We highly regard your support, and request you to provide us with a brief resume for our record and further reference.
External reviews are an integral and critical part of the review process for promotion at AIT. We recognize the burden this request entails and sincerely thank you for your willingness to undertake such a time-consuming task.
We would appreciate receiving your review at your earliest convenience, and if possible by (date).
Sincerely,
Vice President for Academic Affairs
Enclosures: Institute criteria for promotion Institute procedure for promotion materials forwarded for review