Resilience Project Second Workshop

Date: 2007 / May / 11th (Fri) 14:00-18:00 May / 12th (Sat) 8:30-17:00

Place: Curreac (Center in chamber of commerce and industry)

4597 Murakushi Hamamatsu Shizuoka 431-1207

Tel: 053-484-4155/Fax: 053-484-4150; URL: http://www.curreac.co.jp; E-mail: gd@curreac.co.jp

Program (presentation 10min, discussion 10min)

May 11th (Fri)	Curreac Meeting room No.11
14:00-14:15	Registration (Travel document etc.)
14:15-14:30	Opening and the outline of Resilience Project
	"Vulnerability and Resilience of Social-Ecological Systems"
(Chair UMETS	U)
14:30-14:50	Seasonal and interannual variation of precipitation over Tamil Nadu, India
	Akiyo YATAGAI (RIHN) ,
	V. Geethalakshmi (Tamilnadu Agricultural University)
14:50-15:10	Recovery of salinity damages on soil and ground water from the Tsunami,
	Nagapattinam district, Tamil Nadu, India
	Takashi KUME (Arid Land Research Center, Tottori Univ.)
15:10-15:20	Break
(Chair SHINJO	
15:20-15:40	Spatial variability of soil properties in a Miombo woodland in eastern Zambia
	Yoko NORO (Graduate School of Agriculture, Kyoto Univ.)
15:40-16:00	The diversity of farmers' livelihood systems and their assessment
	Hidetoshi MIYAZAKI (RIHN)
16:00-16:20	Synthesis of soil management options for better targeting of technologies
	Moses MWALE (ZARI)
(Chair LEKPR	ICHAKUL)
16:20-16:40	Determinants of Vulnerability of farm households: The case of Burkina Faso
	Takeshi SAKURAI (Policy Research Institute, MAFF)
16:40-17:00	A plan of meteorological observation in Sinazongwe

Hiromitsu KANNO (National Agricultural Research Center for Tohoku Region)

(Chair SHIMADA)

17:00-17:20 Discussion about coping activities of food shortages in semiarid areas, Sahel

- Case study at a Tamasheq Village, North of Burkina Faso-

Yudai ISHIMOTO (Graduate School of Asian and African Area Studies, Kyoto Univ.)

17:20-17:40 The subsistence strategies under restriction of local power;

Angolan immigrants on Kalahari ands in western Zambia

Rumiko MURAO (Graduate School of Asian and African Area Studies, Kyoto Univ.)

18:00- Sub-group meeting by theme members

May 12th (Sat) Zuno Center Room 212

(Chair UMETSU)

8:30-9:30 Business meeting

9:30-10:30 The progress report and plan of each Theme

Theme I \[\text{Ecological resilience and human activities under variable environment} \]

Hitoshi SHINJO (Graduate School of Agriculture, Kyoto Univ.)

Theme II \[\text{How and when do farm households start perceiving a shock during the rainy season? A design of a detailed household survey in Zambia \]

Takeshi SAKURAI (Policy Research Institute, MAFF)

Theme III 「Political-Ecology of Vulnerability and Resilience: Historical and Institutional Perspective」

Shuhei SHIMADA (Graduate School of Asian and African Area Studies, Kyoto Univ.)

Theme IV 「Integrated Analysis of Socio-Ecological Systems」

Mitsunori YOSHIMURA (RIHN)

10:30-10:40 Break

(Chair SHIMA	DA)
10:40-11:00	Agricultural production and land use in Zambia
	Kazuo HANZAWA (College of Bioresource Sciences, Nihon University)
11:00-11:20	Economic and social factors affecting food security in Zambia
	Shiro KODAMAYA (Graduate School of Social Sciences, Hitotsubashi
	Univ.)
(Chair YOSHIM	
11:20-11:40	Global Monitoring on Environmental Change
	Tazu SAEKI (RIHN)
11:40-12:00	Preliminary Analysis for Vegetation and Land Use/Cover Monitoring in Multi-scale
	Megumi YAMASHITA (Survey College of Kinki)
10.00.10.00	
12:00-13:00	Lunch
13:00-13:20	Political and social factors of food crisis: Preliminary research on early warning
13.00-13.20	
	indicators for drought Keiichiro MATSUMURA (Graduate School of Human and Environmental
13:20-13:40	Studies, Kyoto Univ) Drought impact of the 2004/2005 agricultural season on crop production
13.20-13.40	
13:40-14:00	Thamana LEKPRICHAKUL (RIHN) Large scale household survey and the possibility for integrating with spatial
information	Large scale household survey and the possibility for integrating with spatial
miormation	Chieko UMETSU (RIHN)
14:00-14:20	Data Integration with Location Information and Spatial Application / Analysis
14.00-14.20	Mitsunori YOSHIMURA (RIHN)
	Mitsulon Positiviona (Minv)
14:20-15:20	Discussion
15:20-15:30	Break
15:30-16:00	1. Research program for FY2007 • Field Trip Schedule
	2. Budget (UMETSU)
	3. Acknowledgment in publication and presentation
	4. A website and a logo (SAEKI • LEKPRICHAKUL)

16:00-17:00 Administrative information

- 1. Business trips (Japan , overseas), cost reimbursement (IRIE and UMETSU)
- 2. Field work and insurance of RIHN (UMETSU)
- 3. Research Permission (UMETSU)
- 4. Others (UMETSU and OTHERS)

17:00 Closing

17:30 To MAISAKA station by bus



RIHN's Research Project 1-3FR

Vulnerability and Resilience of Social-Ecological Systems



The First Lusaka Workshop September 3, 2007

Date: Monday, September 3, 2007

Time: 9:00-17:00

Place: Conference Hall, Juls Guest House, Plot 5508 Lusiwasi Rd, Kalundu, Lusaka, Zambia

Tel: 260-1-292-979, 260-1-293-972

9:00 Registration

9:15 Welcome address

Ms. Chieko Umetsu, Project Leader, RIHN

• Mr. Watson Mwale, Director of ZARI

9:25-10:35 Session 1 /Chair: Mr. Moses Mwale, ZARI

9:25 **Project Overview**

Vulnerability and Resilience of Social-Ecological Systems
Ms. Chieko Umetsu

9:45 **Special Lecture**

Vulnerability and Resilience of Social-Ecological Systems: Perspectives from Studies Underway in Zambia of Urban/Rural Food Marketing Systems

Professor Michael Weber, FSRP/MSU

10:35-10:40 Tea Break

10:40-11:40 Session 2/ Chair: Ms. Chieko Umetsu, RIHN

 $10{:}40\,\textsc{Ecological}$ Resilience and Human Activities under Variable Environment (Theme I)

Mr. Hidetoshi Miyazaki & Ms. Yoko Noro

11:00 Evaluation of Agroforestry Plants for Soil Fertility Restoration and Enhanced Sustainable Agricultural Productivity in Context of Resilience Research at Petauke, Eastern Zambia

Ms. Sesele Sokotela

11:20 Household and Community Response to Variable Environment (Theme II)

How and When Do Farm Households Start Perceiving a Shock during the Rainy Season? A Design of a Detailed Household Survey in Zambia Mr. Thamana Lekprichakul for Mr. Takeshi Sakurai

11:40-12:35 Session 3 /Chair: Mr. Thamana Lekprichakul, RIHN

11:40 Political-Ecological Vulnerability and Resilience: Historical and Institutional Perspectives (Theme III)

Ms. Chieko Umetsu for Mr. Shuhei Shimada

11:55 The Socio-Economic Resilience in Rural Zambia in the Era of HIV/AIDS: Case Study of Nchelenge and Chipata

Mr. Chileshe L. Mulenga

12:15 Vulnerability and Resilience of Rural Society in Zambia: From the View Point of Land Tenure and Food Security

Mr. Gear M. Kajoba

12:35-14:00 Lunch Meeting/Break

14:00-17:00 Session 4 / Chair: Mr. Mitsunori Yoshimura

14:00 Integrated Analysis of Social-Ecological Resilience (Theme IV)

Mr. Mitsunori Yoshimura

14:20 Monitoring of Global Climatic Change and Its Impact on Africa

Ms. Tazu Saeki

14:40 Preliminary Analysis of Vegetation and Land Use Change during Drought: Multi-Scale Monitoring Approach

Ms. Megumi Yamashita

15:00 Political and Social Factors of Food Crisis: Preliminary Research on Early Warning Indicators for Drought

Mr. Keiichiro Matsumura

15:20-15:35 Tea Break

15:35 **Drought Impact of the 2004/2005 Agricultural Season on Crop Productions**Mr. Thamana Lekprichakul

15:55 Extensive Household Survey and the Possibility for Integrating with Spatial Information

Ms. Chieko Umetsu

16:10 General Discussion/Comments/ Chair: Ms. Chieko Umetsu

16:50 Closing address

Mr. Mitsunori Yoshimura, Theme IV's Leader, RIHN

Resilience Project Otaru Workshop

Date: March 8, 2008 8:00-18:30

Place: Classic Hall, Otaru Grand Hotel Classic

Shikinai 1-8-25 Otaru 047-1124; TEL.0134-25-9900 FAX.0134-25-9700

Workshop Progran	n
8:00- 9:00	Theme Meeting
9:00-9:15	Summary of Project Activities in FY2007 and plan for the FY2008
	Chieko UMETSU, RIHN
9:15-9:45	Labour Migrants in the City: From the Viewpoint of Ties between City and Village.
	Chihiro Ito, Graduate School of Asian and African Area Studies, Kyoto University
9:45-10:15	The Introduction of Labor Migration and Solution for its Impacts by Sahelian
	Agropastoralists – The Case Study of a Village in Northeastern Part of Burkina Faso –
	Yudai Ishimoto, Graduate School of Asian and African Area Studies, Kyoto University
10:15-10:45	Rethink of African rural Development from Vulnerability Point of View
	Shuhei Shimada, Graduate School of Asian and African Area Studies, Kyoto
	University
10:45-11:30	Applied Research and Socio-ecological Resilience: Social Learning, People-driven
	Development and Climate
	Lawrence Flint, ENDA and RIHN
11:30-12:00	Progress of the Field Studies under Theme-1 "Ecological Resilience and Human
	Activities under Variable Environment'
	Ueru Tanaka, Graduate School of Global Environmental Studies, Kyoto University
12:00-13:00	Lunch
13:00-13:30	Farmers' Risk Management in Drought-Prone Area in Zambia
	Takeshi Sakurai, Policy Research Institute, Ministry of Agriculture, Forestry and
	Fisheries
13:30-14:00	Longitudinal Monitoring Survey on the Growth and Nutritional Status of Children in
	Zambia
	Taro Yamauchi, Graduate School of Health Sciences, Hokkaido University
14:00-14:30	Annual Precipitation Variation in Southern Zambia and ENSO Signal
	Hiromitsu Kanno, Agricultural Research Center for Tohoku Region
14:30-15:00	Installation of Weather Stations in Southern Province, Zambia
	Tazu Saeki, RIHN
15:00-15:15	break

15:15-15:45	Satellite Image Analysis and Field Survey Plans for Vegetation and Landuse/Cover
	Monitoring
	Megu Yamashita, Survey College of Kinki
	Mitsunori Yoshimura, Remote Sensing Technology Center of Japan (RESTEC)
15:45-16:15	RIHN Agricultural Household Survey Report, 2005/2006
	Lekprichakul Thamana, RIHN
16:15-16:45	Research Organization for Trans-disciplinary Research: The Experiences from RIHN
	Watershed Projects'
	Chieko Umetsu, RIHN
16:45-17:30	Discussion
17:30-18:30	Core Member Meeting

Abstract of Resilience Seminar in FY2007

The 17th Resilience Seminar

Date & time: Monday, April 23rd, 2007, 15:30-16:45

Place: RIHN Seminar Room 1&2

Title: Carrying capacity of land and environment of Africa

Speaker: Shigeru Araki, Professor, Graduate School of Asian and African Area Studies, Kyoto

University

[Abstract] Distribution of people in the continent of Africa is extremely uneven, according to the local environment and indigenous agriculture and livelihood systems whose understandings play a key role in analyzing physical and social resilience against drought in southern Zambia. With this in mind, the expansion of arable land and population dynamics will be considered based on field observation in Tanzania, Zambia and Namibia.

The 18th Resilience Seminar

Date & time: Wednesday, June 20th, 2007, 15:30-16:45

Place: RIHN Seminar Room 3 & 4

Title: Synthesis of soil management options for better targeting of technologies and

ecological resilience under variable environmental conditions

Speaker: Moses MWALE (Zambia Agricultural Research Institute)

[Abstract] Lack of access to food and its availability is of central concern in Africa and a fundamental challenge for human welfare and economic growth. Low agricultural production results in low incomes, poor nutrition, vulnerability to risks and lack of empowerment. The New Partnership for Africa's Development (NEPAD) targets an average annual increase of 6% in agricultural productivity to ensure food security and sustained national economies. Land degradation and soil fertility or nutrient depletion are considered as the major threats to food security and natural resource conservation in the semi arid tropics (SAT). What is needed is to break the cycle between poverty and land degradation in Africa by employing strategies that empower farmers economically and promoting sustainable agricultural intensification using efficient, effective and affordable agricultural technologies. Such affordable management systems should be accessible to the poor, small-scale producers and the approach should be holistic and dynamic in order to foster both technical and institutional change. This paper aims to increase the dissemination of our knowledge base on soils and its management in Zambia. This includes issues of soil conservation and conservation farming.

The main activities being to: inventories available technologies for alleviating land degradation and how to demonstrate and adapt the best-bets in farmers' circumstances using farmer participatory approaches; scale up best bet technologies for sustainable land management and marketing options through the use of appropriate tools, methods and strategies; and to study the resulting ecological resilience under variable environmental conditions.

The 19th Resilience Seminar

Date & time: Monday, July 30th, 2007, 15:30-16:45

Place: RIHN Lecture Hall

Title: Living with the Bible: The Growth of Independent Churches in Southern Africa

Speaker: Kenji Yoshida, National Museum of Ethnology

[Abstract] Since around 1990, there has been a rapid growth in the numbers of followers of so called independent churches in the southern Africa. Various activities of one of the independent churches in Zambia, namely Zion Spirit Church, will be discussed, and the origin of the church is to be scrutinized.

The 20th Resilience Seminar

Date & time: November 22nd, 2007, 15:00-16:30

Place: RIHN Seminar Room 3 & 4

Speaker: Prof. Gear Kajoba, University of Zambia

Title: Vulnerability and Resilience of Rural Society in Zambia: From the View Point of Land

Tenure and Food Security

[Abstract]

The paper shows that pre-colonial ecologies of agricultural systems in some parts of rural Zambia were sustainable and resilient to prevailing environmental conditions, and were therefore able to ensure relative food security, under communal land tenure.

However, colonial policies of land alienation and labour migration impacted negatively on food production systems of some ethnic groups like the citemene system of the Bemba and the flood plain cultivation system of the Lozi, making them extremely vulnerable due to the absence of large numbers of males. Paradoxically, the Tonga people in Southern Zambia responded positively to the introduction of modern methods of cultivation, exhibiting resilience by adapting and adopting the cultivation of hybrid maize and the ox-drawn plough.

They also began to transform their land tenure system from being communal to become increasingly individualized.

At independence in 1964, the UNIP government intervened strongly in promoting rural development (1964-1990), by subsidising maize production and by implementing protectionist policies to maintain communal tenure. However, food security could not be guaranteed, and the policies led to over dependence of small-scale farmers on government and on maize at the expense of other food crops. The introduction of neo-liberal policies (from 1991 to 2001) by the MMD government coupled with adverse weather conditions, made food production systems rather vulnerable to both policy and environmental shocks. However, efforts are being made(from 2001- to date) to continue with land tenure empowerment policies to ensure secure land tenure for both men and women, and make targeted interventions with partial subsidies to rebuild the resilience of rural society, so as to promote national and household food security.

The 21st Resilience Seminar

Date & time: February 15th, 2007, 15:00-16:30

Place: RIHN Seminar Room 1 & 2

Speaker 1:

Mr.Tetsuya Nakamura, Graduate School of Asian and African Area Studies, Kyoto University Title: The Livelihood of Tonga Peasant Farmer in Mountainous Area, Southern Zambia [Abstract]

In 1950s, the huge artificial lake was developed by the construction of 'Kariba dam' at Zambezi River in Southern Zambia. As a result, over 50,000 'Tonga' people were forced to migrate to the plane along the lake, where they had the pervasive problems of drought and land shortage. With this background, the study region, which is located on the Zambezi Escarpment covered by Miombo woodland between plateau and vally, is one of candidate sites of remigration. I try to disscuss about the livelihood at mountainous area, through the view of their social structure.

Speaker 2:

Miss Chihiro Ito, Graduate School of Asian and African Area Studies, Kyoto University Title: Labour Migration as Livelihood Strategy: A Case Study in Southern Province, Zambia [Abstract] In African rural area, subsistent agriculture has long been the main mode of living. However, as the rural economy is highly integrated into monetary system, farmers find it harder to make their livings only out of agriculture, especially during the year of climatic and market variation. In response, they diversify their livelihoods in an attempt to mitigate and cope with those risks. Also in Zambia, non-agricultural activities have been the important income source for rural households; especially "labour migration" has played greater roles to sustain the rural economy.

Both international and domestic labour migrations were often seen in colonial period, to supply labour for mining in copper belt and plantations in Southern Africa. However, this kind of migration is different from the current migration patterns in rural area. Therefore, I consider Labour migration as livelihood strategy for peasants and my study aims at what kind of impact does it have on rural society and economy.

In this presentation, I will introduce about the characteristic of labour migration in my research area and discuss about the role of labour migration in my study area.

FY2007 1-3FR Project Research Activity Overview	Research Activ	ity Overview										
2007	4	2	9	7	8	6	10	Ξ	12	1	2	က
Resilience Seminar	13.00-17.00		11.00-17.00	15:30-16:45				15:30-16:45			15:00-16:30	
	23-Apr		20-Jun	30-Jul				22-Nov			15-Feb	
	(17th Seminar)	~	(18th Seminar)	(18th Seminar) (19th Seminar)				(20th Seminar)			(21th Seminar)	
Core-mamber Meeting	* 4/23		* 6/20	* 7/19					* 12/17			*3/8
Workshop		Hamamatsu W				Lusaka WS						Otaru WS
		11-12 May				3-Sep						7-9 March
Study Meeting										*1/19	*2/17	*3/15
Measurement devices	Purchase Order			Delivery	Shipping	Installation, Sta	Start of Measurement	∞	Household Survey			
		RainG	RainGauge Training: 19-Jul	19-Jul								
FR Project Report											FR Repo	FR Report Publication
FB Belated Mostings	Ve M-7 acitocilad 21	7-May			FC Hoseing	01-Con			DIUN Droigot			FO Hooring
ייייים ואוכטרווים	IS Hearing	17–Mav			S	7 0 0 0			Meeting			6-Mar
	20 Cd	- / Wildy							12-14 December			o Mag
RIHN Events				RIHN Forum			RIHN Int'l Symposium	posium	Coop In Kyoto		PEC	
				lnC-7			30-31 October				2/28–29	
				HOIX			Miel Parque Kyoto	/oto				
Field Trip Schedule												
Shijo	3/15-4/18		5/16-6/13				10/20-11/30					3/5-3/24
Tanaka			5/26-6/10					11/2-18				3/14-3/28
						8/31-4/30	(8 months)					
Noro (M1)			5/16-6/13		8/22-9/5		10/6-12/24					
Miura			5/16-6/13									
Shibata			5/27-6/10									
Sakurai	4/2-4/18					9/12-10/12						
Kanno	4/2-4/18					9/15-9/25						
Yamauchi						9/15-9/25						
Shimada			6/16-6/23 (UK)	\circ	7/28-8/11						2/20-2/28(S.A., Lesotho)	, Lesotho)
Ishimoto (D3)								10/29-1/31 (Burkina Faso)	urkina Faso)			3/14-3/28
Narisawa (D1)											2/10-3/29	
Ito(M2)	-March											
Nakamura (M2)				-7/11								
Kyo (M1)											2/18-7/26 (6 months)	onths)
Yoshimura					8/52–9/5							
Saeki						8/31-9/26						
Yamashita					8/52–9/5							
Matsumura						8/31-9/28		10/29-11/9				
Umetsu						8/31-9/26					,	3/19–3/29
Lekprichakul						8/31-10/13			12/26-31(Bangkok)	gkok)	,	3/19–3/29
Kume						-	1 <mark>0/22-31(India)</mark>					3/9-3/21(India)
Mwale(Invited Researcher 4/1-6/30	9/4/1-6/30	RIHN										
Kajoba(Invited Researcher)	er)						10/1-12/31	RIHN				
Flint (Invited Researcher)	$\widehat{}$										2/4-5/3	RIHN