



FINAL ACTIVITY REPORT

**The Capacity Building Workshop for the Asia Pacific Region
on Vegetation Recovery in Degraded Land Areas (2001)**

and

The 2nd Workshop on Vegetation Recovery in Degraded Land Areas (2002)

Final Activity Report for APN Project

Project Title

The Capacity Building Workshop for the Asia Pacific Region on Vegetation Recovery in Degraded Land Areas (2001) and The 2nd Workshop on Vegetation Recovery in Degraded Land Areas (2002)

Abstract

This paper describes the process and outcomes of the Capacity Building Workshop for the Asia Pacific Region on Vegetation Recovery in Degraded land Areas held in Kalgoorlie, Western Australia, from 27 October to 3 November 2001, and outlines the objectives and outcomes of the 2nd APN Workshop on Vegetation Recovery in Degraded Land Areas held in Kobe, Japan, from 26 to 28 November, 2002. The 2001 Workshop was an opportunity to share information on the subject of vegetation recovery in degraded land area and to hold discussion group to prepare preliminary proposals for research, development and training projects. In three concurrent discussion groups thirteen preliminary proposals were developed. Proposals with similar themes have been amalgamated to produce eight integrated proposals for the consideration of the participants. In the 2002 Workshop it was the main objective to develop project proposals of high quality by polishing the preliminary project proposals derived from the 2001 Workshop and to be submitted to international and regional organization (including APN) and /or funding agencies. In consequence, the final eight project proposals were allocated to the three working groups so that fewer participants divided in three could discuss in detail in parallel manners.

Project Information

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The duration of the project

2001-2002

List of participating countries

Participants from Australia, Cambodia, China, Fiji, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Philippines, Russian Federation, Sri Lanka and Thailand were funded.

Introduction

Vegetation degradation, especially in degraded lands, is of serious consequence to the environments of the Asia-Pacific region and their inhabitants. It is caused by a combination of inappropriate use of land due to the rapid population increase, water deficiency and unstable global climate changes. This vegetation degradation also leads to the desertification, which is one of the global environmental problems we have to tide over urgently. Vegetation rehabilitation and promotion of sustainable land use practices are amongst the most important, practical, on-ground initiatives we can develop to maintain urban and rural communities, since all kinds of organisms living on the lands depend on directly or indirectly vegetation. However, the origin of vegetation degradation differs among regions because not only natural but also sociological conditions are not a characteristic common to all regions. Therefore, even now we are not able to grasp the comprehensive understanding for lands/vegetation degradations, and in consequent, we have not yet certain and effective solution for the problems. It is important for us, firstly, to establish the adequate method to find the way fitted to the individual degraded region, and then develop it gradually to the place where the background situation is similar.

This project under APN has an important capacity building role in the region, and thus in collaboration with Hyogo Prefectural Government and the State Government of Western Australia, organized and supported the 2001 Workshop, hosted by the Center for the Management for Arid Environments, in Kalgoorlie, Western Australia. In the 2002 Workshop were held to develop project proposals of high quality by polishing the preliminary project proposals derived from 2001 Workshop.

Activities Conducted

In the 2001 Kalgoorlie Workshop discussion group sessions were held to grasp proposals for future priority research, development and training projects across the Asia Pacific region on the various topics associated with the subject of Vegetation Recovery in Degraded Land Areas. This followed presentations during the workshop that outlined the situation in member countries and the work that in progress to address problems. In the lead-up to the discussion group sessions participants held a number of informal meetings regarding future priority projects. The three concurrent discussion sessions were:

1. Rehabilitation of Degraded Land
2. The Sociology & Economics of Vegetation Recovery
3. Plant Resources

Participants chose which session they wished to attend. Recorders noted the output of the sessions, and the output was presented and accepted in the meeting. Following the 2001 Workshop a report on the outcomes of the discussions was prepared and circulated. In the report it was recommended to amalgamate some of the thirteen proposals to arrive at a list of the final eight proposals. At that time participants were asked to nominate the research topic or topics they wished to help develop. Thus a number of research teams were formed.

In the 2002 Workshop it was the main objective to develop project proposals of high quality by polishing the preliminary project proposals derived from the 2001 Workshop and to be submitted to international and regional organization (including APN) and /or funding agencies. In consequence, the final eight project proposals were allocated to the three working groups so that fewer participants divided in three could discuss in detail in parallel manners.

In addition to the discussion sessions, each workshop has scientific excursion.

In Kalgoorlie Workshop we had a long excursion with one-night bus tour from Perth to Kalgoorlie. Stations and facilities visited were Avondale Research Station, Machinery museum, Land care Center and Farm drive trail at Beverly, Alcoa Land care Education Center, Catchments Group at Tammin. In Kobe Workshop we had an excursion to Yumebutai, Awaji Island where is known as a beautiful vegetation recovery site.

Outcomes and Products

Table 1 shows the outlines of thirteen projects, which were developed in the discussion sessions at the 2001 Workshop. This was the total number of proposals, very much as they presented to the plenary session. The original thirteen proposals, however, was thought to be too much for the projects to deal with. And then, the reduction of the original thirteen proposals to nine was decided as the final projects and respective team members, and indicates where the original proposals have been amalgamated. But Project 3B (Research into Arid Zone Fruits) failed to attract a group convener interested in this topic. Therefore, the number of the final projects was eight, and these projects are shown in Table 2.

Conclusions

This report outlines the platform we have set for the 2002 Workshop. Our task now is to develop research, demonstration and training project proposals of high standard. These should be broad and generic enough to suit differing conditions in the Asia-Pacific countries while being specific enough for the needs of development priorities in individual countries. While there may have been little co-ordinated effort in the development of proposals since the Kalgoorlie meeting, individual delegates and countries will have been developing project ideas. If these fit the framework we have developed and outlined in this report, and are suitable to form a basis for international research activities, then participants are advised to bring such project proposals to the Workshop for consideration.

Future directions/Follow-up work

Our task is now to develop research, demonstration and training project of high standard. These should be broad and genetic enough to suit differing conditions in the Asia-Pacific countries while being specific enough for the needs of development priorities in individual countries. Individual delegates and countries will be expected to form a basis for international research activities.

References

APN (2001), Workshop Proceedings - Capacity Building Workshop for the Asia Pacific Region, Vegetation Recovery in Degraded Land Areas, Kalgoorlie 27 Oct – 3 Nov, 2001, Promaco Conventions Pty Ltd, Perth, WA.

Table 1. OUTCOMES OF 2001 WORKSHOP ON VEGETATION RECOVERY IN DEGRADED LAND AREAS

TITLE	OBJECTIVES	BENEFITS and OUTCOMES	OUTLINE OF METHODS	PROPOSERS / PARTNERS
1. REHABILITATION OF DEGRADED LAND				
<p><u>Project 1A</u> Environmental rehabilitation and vegetation recovery in arid and semi-arid degraded land areas caused by over grazing. (With special reference to China)</p>	<ol style="list-style-type: none"> 1. To develop an integrated monitoring and evaluating system 2. To improve the life-supporting environment and address the issue of dust storm damage 3. To prevent and rehabilitate desertification 4. To change practices to enable dual goals of rehabilitation and income generation for local people 	<ol style="list-style-type: none"> 1. An integrated monitoring and evaluating system for environmental rehabilitation and vegetation recovery in arid and semi-arid degraded land areas 2. Improvement in the socio-economic and environmental conditions for local populations ('Triple bottom line' benefits) 	<p>Chinese Academy of Sciences would act as the coordinating agency and provide the principal investigators for the project, with the other agencies named providing financial support and research input.</p>	<ul style="list-style-type: none"> • CAS (Guangsheng Zhou) • CAAS (Xiu Yang) • CAFS • National Natural Science Foundation of China • State S & T Committee • Local Governments
<p><u>Project 1B</u> Bioremediation in different ecosystems for the improvement and sustainability of degraded land areas</p>	<ol style="list-style-type: none"> 1. To test soil additives for their ability to improve biological activity in the soils of various degraded areas 2. To examine the micro-environmental effects of soil additives on biomass increment 3. To monitor and assess changes to ecosystem stability & land use sustainability brought about by improvements to soil properties 	<ol style="list-style-type: none"> 1. Improvement in the physical and biochemical properties of soils. 2. Enhancement of the process of rehabilitation 	<ul style="list-style-type: none"> • Select and monitor ecosystem and soil properties at a micro-environmental scale • Select and test introduced microbes and manures on the monitoring sites - using the same range of treatments at all sites • A nil treatment will be maintained to characterise the microenvironments and ecosystems recorded, and will be monitored throughout the project • The biomass changes of native or introduced plants will be monitored to provide a measure of the effect of the 	<ul style="list-style-type: none"> • MARDI (Dr Hawa Jaafar) • Indonesian Inst. of Sciences (Nuril Hidayati) • Akita Prefectural University (Yuichi Ishikawa) • CMAE (Aus) (Adrian Williams) • NYPA (Aus) (John Leake) • Argyle Diamonds (Sunil Samaraweera)

TITLE	OBJECTIVES	BENEFITS and OUTCOMES	OUTLINE OF METHODS	PROPOSERS / PARTNERS
			treatments <ul style="list-style-type: none"> • Develop functional models for References • Periodic reporting of improvement 	
<u>Project 1C</u> Using GIS/Remote sensing technology to monitor land degradation and soil erosion in APN countries	<ol style="list-style-type: none"> 1. To develop a land degradation monitoring system 2. To procure GIS/Remote sensing technology to monitor the system, analyse & interpret data, and allow for the integration of data into existing land information data sets 	<ol style="list-style-type: none"> 1. Better management and use of material resources 2. Information can be easily updated at very little cost & time 	<ul style="list-style-type: none"> • Finalise working group members • Catalogue existing systems from other parts of the world • Prelim' meetings and work plan • Identification of study sites • Demonstration of technology at developed sites • Monitoring project sites (ground truthing) • Accuracy and repeatability of project assessed 	<ul style="list-style-type: none"> • DLRP&D (Fiji) • Madras Uni. (R. Krishnamoorthy) • Pakistan ARC (Zahid Hussain) • Himeji Inst. Tech (Seiji Kodate) • Nepal ARC (Ram Maskey) • MARDI (Malaysia) • DAWA/CSIRO (Australia) • APN Secretariat
<u>Project 1D</u> Sustainable farming systems for the rehabilitation of salt affected land and water	<ol style="list-style-type: none"> 1. Reduce land & water degradation 2. Improve socio-economic conditions 3. Involve community participation in land rehabilitation 	<ol style="list-style-type: none"> 1. Improvements in the socio-economic conditions of the countries involved 2. The efficient conversion of existing water and land into useable resources 3. Strengthen the cooperative approach of farming groups 	<ul style="list-style-type: none"> • Conduct adaptive trials • Socio-economic evaluation • Income earning opportunities for saline water source • Integrated farming systems approach 	<ul style="list-style-type: none"> • NYPA International • Pakistan ARC (Zahid Hussain) • Akita University (S. Matsumoto) • CMAE (Western Australia)

TITLE	OBJECTIVES	BENEFITS and OUTCOMES	OUTLINE OF METHODS	PROPOSERS / PARTNERS
<p><u>Project 1E</u> Soil improvement and pollution control technology in closed mine sites, incorporating rapid revegetation and integrated environmental treatment technology</p>	<ol style="list-style-type: none"> 1. To change closed mine sites into usable land 2. To improve environmental conditions and control pollution 3. To bring economic benefits to local people 	<ol style="list-style-type: none"> 1. Research & technology exchange 2. Benefits from environmental and economic improvements 	<ul style="list-style-type: none"> • Set parameters of project and apply for bi-lateral funding • As a collaborative international research project, the research group can divide the project into sub-projects 	<ul style="list-style-type: none"> • CAAS (Xiu Yang) • Chinese Ministry of Science & Tech' (Jia Jingdun) • Chinese Ministry of Land Resources • Chinese Ministry of the Environment (Rong Den Khem) • CMAE (Western Australia)

TITLE	OBJECTIVES	BENEFITS and OUTCOMES	OUTLINE OF METHODS	PROPOSERS / PARTNERS
2. THE SOCIOLOGY & ECONOMICS OF VEGETATION RECOVERY				
<u>Project 2A</u> Asia Pacific Human Dimensions/Dynamics under global change	<ol style="list-style-type: none"> 1. To increase the understanding of the impacts and interrelation of humans under global change 2. To establish partnerships and cooperation within scientific and policy making areas 3. To include the publication of a book & an international workshop to elaborate proposals and programs 	<ol style="list-style-type: none"> 1. Creation of a regional network of individuals and organizations 2. Improved regional participation 3. Enhancement of regional & national capacity to determine & understand human dimension aspects of global change 4. Attraction of scientific, political and private enterprise into a cooperative approach to the effects of global change 	<ul style="list-style-type: none"> • A Capacity building workshop • Establishment of a working group • Project elaboration, synthesis and analysis • Database compatibility work • Production of a book • International conference • Policy maker's recommendations • Educational programs, possible creation of training centre (Period of implementation 2003-2007)	<ul style="list-style-type: none"> • APN Secretariat (Ryutaro Yatsu) • Asian Development Bank • UNESCO
<u>Project 2B</u> Participatory watershed management to sustain soil erosion control in degraded areas	<ol style="list-style-type: none"> 1. To sustain agricultural production in unpredictable rainfall conditions and arid environments 2. To sustain use of marginal land for improved economic conditions of farmers 	<ol style="list-style-type: none"> 1. Improvement in the capabilities of local communities to achieve sustainable use of water resources 2. Environmental rehabilitation 3. Capacity building 4. Desertification monitoring 	Investigate how to achieve the sustainable use of marginal lands to enhance sustainable economic development	<ul style="list-style-type: none"> • Pakistan ARC (Zahid Hussain) • Nepal ARC (Ram Maskey) • Fiji National Council

TITLE	OBJECTIVES	BENEFITS and OUTCOMES	OUTLINE OF METHODS	PROPOSERS / PARTNERS
<p><u>Project 2C</u> Rehabilitation/Restoration of degraded land areas using an ecosystem approach (with special reference to Sri Lanka)</p>	<p>To identify biological/silvicultural, physical, chemical, socio-economic and policy issues of vegetation recovery in degraded lands using an ecosystem approach</p>	<ol style="list-style-type: none"> 1. Generation of research necessary to ensure successful vegetation recovery 2. Sharing of knowledge and experience would encourage capacity building in Asia Pacific countries 	<ul style="list-style-type: none"> • Organization of stakeholder meetings • Identify main activities to be tested • Formulation of a multi-disciplinary team • Information exchange/ modification of project scope • Implementation of project in Sri Lanka and other participating countries • Monitoring & evaluation – field visits to sites • Final workshop to discuss the outcomes 	<ul style="list-style-type: none"> • APN Secretariat (Ryutaro Yatsu) • Multiple host countries
<p><u>Project 2D</u> Livestock & grazing management for increased productivity and grazing land improvement</p>	<p>To improve grazing systems and address the problem of desertification to bring about improved grazing reserves and land stability in arid and semi-arid areas</p>	<ol style="list-style-type: none"> 1. Desertification control 2. Dust control 3. Improved livestock production 	<ul style="list-style-type: none"> • Develop collaboration with graziers • Learn & understand from them their concerns for land condition and use • Develop with them a few simple steps to improve conditions • As trust grows develop with graziers further steps to improve the condition of livestock and land • Use the examples that develop to prove what is possible • Develop training for scientists, extension workers and graziers • Extend the work to additional areas and countries 	<p>A small group of countries initially to develop the social, technical and economic processes that will be required</p>

TITLE	OBJECTIVES	BENEFITS and OUTCOMES	OUTLINE OF METHODS	PROPOSERS / PARTNERS
<u>Project 2E</u> Maintaining the network of delegates	<ol style="list-style-type: none"> 1. To foster information transfer 2. To develop discussion groups on a range of topics 3. To maintain what has been started in Kalgoorlie 4. To develop international collaboration 	Sharing of information and development of collaboration	<ul style="list-style-type: none"> • Hotlink WebPages to APN • Develop a chat room/discussion room on the internet • Electronic newsletters that are circulated to all delegates 	All organizations represented in Kalgoorlie at the Vegetation Recovery in Degraded Land Areas Capacity Building Workshop

TITLE	OBJECTIVES	BENEFITS and OUTCOMES	OUTLINE OF METHODS	PROPOSERS / PARTNERS
3. PLANT RESOURCES				
<u>Project 3A</u> Training course on statistics and research methods	To provide specialist training on statistics, research methods and principles of selection & improvement	Provide specialised training	<ul style="list-style-type: none"> • Identify a funding source • Organise which institutions will participate • Develop appropriate courses • Invite participants to nominate interest 	<ul style="list-style-type: none"> • CMAE (WA) (Brian Fergusson) • University of the Philippines • University of Peradeniya (Pushpakumara) • APN members
<u>Project 3B</u> Research into Arid Zone Fruits	To test potential tropical and sub-tropical fruit species adapted to arid environments	To determine whether rehabilitation can result in the production of viable and profitable alternate growing industries	<ul style="list-style-type: none"> • Identify key participants • Organise trial between collaborating countries 	<ul style="list-style-type: none"> • University of Rajasthan (India) • University of Pretoria (South Africa) (Danie Venter) • University of the Philippines • Curtin University (Zora Singh) • APN Members
<u>Project 3C</u> Rehabilitation for profit	To explore the opportunity to establish something with future value	<ol style="list-style-type: none"> 1. Costs of rehabilitation would be offset by returns on produce 2. Development of diversified production for triple bottom line benefits 	<ul style="list-style-type: none"> • Call for interest from researchers who would manage the project and put forward ideas • Feasibility study into profitability, social aspects and ecological aspects of potential ideas 	<ul style="list-style-type: none"> • University of Gadjah Mada (Indonesia) (Handojo Hadi Nurjanto) • University of Yogyakarta • ICARDA (Brien Norton) • CMAE (WA) (Adrian Williams)

Table 2. FINAL EIGHT PROJECT PROPOSALS FOR 2002 WORKSHOP

The original 13 proposals have been reduced to eight for the consideration at 2002 Workshop as the result of amalgamation. The final eight project proposals are allocated to three working groups so that fewer participants divided in three could discuss in detail in parallel manners. Allocation and detailed information is below:

WORKING GROUP 1

#1. Vegetation Recovery from Grazing / Grazing and Vegetation Management

(Project Leader: Guangsheng Zhou)

Project Components:

- 1A: Environmental rehabilitation and vegetation recovery in arid and semi-arid degraded land areas caused by overgrazing (China)
- 2D: Livestock and grazing management for increased productivity and grazing land improvement

Focus:

Develop and monitor grazing management systems to both improve grazing land resources and increase animal productivity and incomes

Proposed Team Members:

Radnaabazar Gankhuyag (Mongolia)
Jia Jingdun (China)
Brien Norton (Australia)
Kellie-Jane Pritchard (Australia)
Truong Xuan Tung (Viet Nam)
Adrian Williams (Australia)
Xiu Yang (China)
Qian Yibing (Australia)
Guangsheng Zhou (China) (PROJECT LEADER)

<**BOLD** stands for participants attended in 2002 Workshop.>

Prospective Partners:

Chinese Academy for Forest Science
National Natural Science Foundation of China
State Science and Technology Committee (of China)

#2. Improving and Rehabilitating Minesites

(Project Leader: Hawa Jaafar)

Project Components:

- 1B: Bioremediation in different ecosystems for the improvement and sustainability of degraded land areas

- 1E: i. Soil improvement and pollution control technology in closed mine sites
ii. Rapid revegetation and integrated environmental treatment technology in closed mine sites
3C: Rehabilitation for profit

Focus:

Develop productive land uses through new systems of minesite rehabilitation

Proposed Team Members:

Samantha Crack (Australia)
Glen Creed (Australia)
Radnaabazar Gankhuyag (Mongolia)
Nuril Hidayati (Indonesia)
Noboru Ikawa (Japan)
Yuichi Ishikawa (Japan)
Hawa Jaafar (Malaysia) (PROJECT LEADER)
David Jasper (Australia)
Jia Jingdun (China)
Rong Den Khem (Cambodia)
Leonid Kondrashov (Russia)
Ramasamy Krishnamoorthy (India)
Shigeo Kubo (Japan)
John Law (Australia)
John Leake (Australia)
Satoshi Matsumoto (Japan)
Sandra Maynard (Australia)
Handojo Hadi Nurjanto (Indonesia)
D.K.N.G. Pushpakumara (Sri Lanka)
Sam Samaraweera (Australia)
Adrian Williams (Australia)
Xiu Yang (China)

<**BOLD** stands for participants attended in 2002 workshop.>

Prospective Partners:

Ministry of Land Resources, China
University of Yogyakarta, Indonesia

#3. GIS and Remote Sensing for Vegetation and Land Condition Monitoring

(Project Leader: Radzali Mispan)

Project Component:

1C: Using GIS/Remote sensing technology to monitor land degradation and soil erosion in APN countries

Focus:

Develop a regional land degradation monitoring system compatible with other land resource data

Proposed Team Members:

Maria Elder (Fiji) (in place of Taito Nakalevu)

Radnaabazar Gankhuyag (Mogolia)

Zahid Hussain (Pakistan)

Jia Jingdun (China)

Soichiro Katsuno (Japan)

Seiji Kodate (Japan)

Ramasamy Krishnamoorthy (India)

Ram B. Maskey (Nepal)

Nobuyuki Mino (Japan)

Radzali Mispan (Malaysia) (PROJECT LEADER)

Shanmuganandan Samarajalingam (India)

Takashi Wakisaka (Japan)

<**BOLD** stands for participants attended in 2002 workshop.>

Prospective Partners:

Chan Chee Wan (Malaysia)

Suresh K. Rai (Nepal)

Kamal Sah

R. Joseph Arokiadas (India)

V. Raghu Venkataraman (India)

D. Kaveri Devi (India)

CSIRO, Australia

Dept of Agriculture, WA

WORKING GROUP 2

#4. Sustainable Farming Systems to Overcome Salinity

(Project Leader: Zahid Hussain)

Project Component:

1D: Sustainable farming systems for the rehabilitation of salt affected land and water

Focus:

Develop saline farming systems for land/water rehabilitation and improved socio-economic conditions

Proposed Team Members:

Glen Creed (Australia)

Phil A. Hollington (UK)

Zahid Hussain (Pakistan) (PROJECT LEADER)

Yuichi Ishikawa (Japan)
Hawa Jaafar (Malaysia)
Ian Landsmeer (Australia)
John Leake (Australia)
Satoshi Matsumoto (Japan)
Brien Norton (Australia) (in place of Ed Barrett-Lennard)
Kellie-Jane Pritchard (Australia)
Bruce Radys (Australia)
Tanuwong Sangtiewan (Thailand) (in place of Jirasak Chukwamdee)
Rob Sudmeyer (Australia)
Qian Yibing (Australia)

<**BOLD** stands for participants attended in 2002 workshop.>

#5. Asia Pacific Human Dimensions / Dynamics Workshop (Project Leader: Leonid Kondrashov)

Project Component:

2A: Asia Pacific Human Dimensions/Dynamics under global change

Focus:

Develop or enhance regional capacity to determine and understand human dimension aspects of global change

Proposed Team Members:

Keith Boase (Australia)
Warren Boggs (Australia)
Maria Elder (Fiji) (in place of Taito Nakalevu)
Zahid Hussain (Pakistan)
Hawa Jaafar (Malaysia)
Soichiro Katsuno (Japan)
Ian Landsmeer (Australia)
Leonid Kondrashov (Russia) (PROJECT LEADER)
Theo Nabben (Australia)
Masa Ogawa (Australia)
Kellie-Jane Pritchard (Australia)
Gualberto Tortoza (Philippines)

<**BOLD** stands for participants attended in 2002 workshop.>

Prospective Partners:

Asia Development Bank
UNESCO

#6. A Participatory, Ecosystem Approach to Watershed Management (Project Leader: D.K.N.G. Pushpakumara)

Project Components:

- 2B: Participatory watershed management to sustain soil erosion control in degraded areas
- 2C: Rehabilitation/Restoration of degraded land areas in Sri Lanka and elsewhere using an ecosystem approach

Focus

Develop a participatory, ecosystem approach to sustainable watershed management

Proposed Team Members:

Christina Cox (Australia)
Mangala De Zoysa (Sri Lanka)
Maria Elder (Fiji) (in place of Taito Nakalevu)
John Fox (Australia)
Richard Harper (Australia) (in place of Jonathan Majer)
Zahid Hussain (Pakistan)
Shigeo Kubo (Japan)
Ram B. Maskey (Nepal)
Sandra Maynard (Australia)
Brien Norton (Australia) (in place of Ed Barrett-Lennard)
Handojo Hadi Nurjanto (Indonesia)
D.K.N.G. Pushpakumara (Sri Lanka) (PROJECT LEADER)
Sam Samaraweera (Australia)
Gualberto Tortoza (Philippines)
Truong Xuan Tung (Viet Nam)
Xiu Yang (China)

<**BOLD** stands for participants attended in 2002 workshop.>

Prospective Partners:

Agricultural Research Council - Pakistan
Agricultural Research Council - Nepal
Fiji National Council
Government of Sri Lanka

WORKING GROUP 3

#7. Maintaining the Network of Delegates

(Project Leader: Tohru Nakashizuka)

Dr. Ryutaro Yatsu, former APN Director, was supposed to be a leader for this project, but he left the APN. Prof. Nakashizuka, who is the contact point of DIVERSITAS (International Programme of Biodiversity Science) and whose specialisation is forest ecology, forest dynamics and biodiversity, kindly accepted the role of the coordinator of this team during the 2002 workshop.

Project Component:

2E: Maintaining the network of delegates

Focus:

Develop lasting international collaboration through the facilitation of information exchange

Proposed Team Members:

All delegates.

#8. Training Courses in Research Methodology

(Project Leader: John Fox)

Project Component:

3A: Training courses on statistics and research methods

Focus:

Develop specialized training courses in statistics, research methods and principles of selection and improvement

Proposed Team Members:

Christina Cox (Australia)

Mangala De Zoysa (Sri Lanka)

Maria Elder (Fiji) (in place of Taito Nakalevu)

Brian Fergusson (Australia)

John Fox (Australia) (PROJECT LEADER)

Radnaabazar Gankhuyag (Mongolia)

Richard Harper (Australia) (in place of Jonathan Majer)

Zahid Hussain (Pakistan)

Yuichi Ishikawa (Japan)

Leonid Kondrashov (Russia)

Satoshi Matsumoto (Japan)

Sandra Maynard (Australia)

Brien Norotn (Australia) (in place of Ed Barrett-Lennard)

D.K.N.G. Pushpakumara (Sri Lanka)

Gualberto Tortoza (Philippines)

Adrian Williams (Australia)

Xiu Yang (China)

Qian Yibing (Australia)

<**BOLD** stands for participants attended in 2002 workshop.>

2nd Workshop on Vegetation Recovery in Degraded Land Areas
26 – 28 November, 2002, Kobe, Japan

Agenda

26 November 2002 (Tuesday)

- 09:00-09:30 Registration
- 09:30-09:45 Opening Session**
Welcome Address
- Mr. Sombo T. Yamamura, APN Director
Opening Remarks
- Prof. Satoshi Matsumoto, Akita Prefectural University, Japan
- 09:45-11:15 Session I (Chair: Prof. Satoshi Matsumoto)**
- 09:45-10:15 Presentation 1: Major Outcomes from 2001 WS and Objectives and Deliverables of 2002 WS
- Mr. Adrian Williams, Alxa League Environmental Rehabilitation and Management Project, China
(coordinator of 2001 Workshop)
- 10:15-10:45 Presentation 2: Introduction of Science Plan of DIVERSITAS
- Prof. Tohru Nakashizuka, Research Institute for Humanity and Nature, Japan
- 10:45-11:15 Presentation 3: APN Call for Proposals Process
- Mr. Martin Rice, APN Secretariat
- 11:15-11:30 <Coffee Break>*
- 11:30-13:00 Session II (Chair: Prof. Satoshi Matsumoto)**
- 11:30-11:45 “Restoration of a Degraded Floodplain in a Low Rainfall Region”
- Prof. John Fox
- 11:45-12:00 “Revegetation of Saline Lands in Pakistan: Issues and Options”
- Dr. Zahid Hussain
- 12:00-12:15 “Carbon Sequestration in Relation to Environmental Gradients in Southern Australia”
- Dr. Richard Harper
- 12:15-12:30 “Recovery of Degraded Lands along Coastal India: Applications of Remote Sensing Data and Need of International Collaboration”
- Dr. Ramasamy Krishnamoorthy

- 12:30-12:45 “Land Degradation and its Rehabilitation in Saline Soil Area - How Do We Transfer Technologies from Western Australia to Pakistan or Other Country?”
- Dr. Yuichi Ishikawa
- 12:45-13:00 “Rehabilitation of Degraded Mangrove Lands in Thailand”
- Dr. Tanuwong SangtEAN
- 13:00-14:00 <Lunch> at Hygeia (1st floor of IHD Centre Bldg.)
- 14:00-17:00 Session III**
- 14:00-14:40 Proposals Working Strategy
- Prof. Satoshi Matsumoto
- 14:40-15:30 Proposals Working Group Session
- WG 1
Chair: Dr. Radzali Mispan
Rapporteur: Dr. Hawa Jaafar
 - Vegetation Recovery from Grazing / Grazing and Vegetation Management
(Project Leader: Guangsheng Zhou)
 - Improving and Rehabilitating Minesites
(Project Leader: Hawa Jaafar)
 - GIS and Remote Sensing for Vegetation and Land Condition Monitoring
(Project Leader: Radzali Mispan)
 - WG 2
Chair: Dr. Zahid Hussain
Rapporteur: Dr. Leonid Kondrashov
 - Sustainable Farming Systems to Overcome Salinity
(Project Leader: Zahid Hussain)
 - Asia Pacific Human Dimensions / Dynamics Workshop
(Project Leader: Leonid Kondrashov)
 - A Participatory, Ecosystem Approach to Watershed Management
(Project Leader: D.K.N.G. Pushpakumara)
 - WG 3
Chair: Prof. John Fox
Rapporteur: Prof. Jonathan Majer
 - Maintaining the Network of Delegates
(Project Leader: Tohru Nakashizuka)
 - Training Courses in Research Methodology
(Project Leader: John Fox)
- 15:30-15:45 <Coffee Break>
- 15:45-17:00 Proposals Working Group Session (continued)
- 17:00 Adjourn
- 18:30- <Workshop Reception>

27 November (Wednesday)

09:00-12:30 Session III (continued)

09:00-10:30 Proposals Working Group Session (continued)

10:30-10:50 <Coffee Break>

10:50-12:30 Proposals Working Group Session (continued)
(Final Working Group Session)

12:30-13:30 <Lunch> at JICA Cafeteria (JICA Hyogo International Center)

13:30-17:30 Excursion – Yumebutai, Awaji Island (Vegetation Recovery Site)
- Mr. Yoshikazu Inoue

28 November (Thursday)

09:00-10:45 Session IV (Chair: Mr. Adrian Williams)
Proposals Summary Session
WG Rapporteurs submit reports, followed by a discussion.

10:45-11:00 Closing Session
Closing Remarks
- Prof. Satoshi Matsumoto

11:00-12:30 <Lunch> at Hygeia (1st floor of IHD Centre Bldg.)

12:40 Arrival at Symposium Venue

13:00-17:00 APN International Symposium
“Land Use/Cover Change (LUCC) and Vegetation Recovery”

**APN 2nd Workshop on
Vegetation Recovery in Degraded Land Areas**
(Kobe, Japan, 26-28 November 2002)

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Presentations

Adrian Williams

“Major outcomes from the Capacity Building Workshop for the Asia Pacific Region on Vegetation Recovery in Degraded Land Areas (2001), and Objectives and Deliverables of the 2nd APN Workshop on Vegetation Recovery in Degraded Land Areas (2002)”

Tohru Nakashizuka

“DIVERSITAS: An international framework for biodiversity research”

Martin Rice

“APN Call for Proposals Process”

John Fox

“Restoration of a Degraded Floodplain in a Low Rainfall Region”

Zahid Hussain

“Revegetation of Saline Lands: Issues and Options”

Richard Harper

“Carbon sequestration in relation to environmental gradients in south-western Australia”

Ramasamy Krishnamoorthy

“Recovery of Degraded Lands along Coastal India: Applications of Remote Sensing Data and Need of International Collaborations”

Yuichi Ishikawa

“Land degradation and its rehabilitation in saline soil area: How do we transfer technologies from Western Australia to Pakistan or other countries?”

Tanuwong Sangtuan

“Rehabilitation of Degraded Mangroves in Thailand”