



The Common Property Resource Digest

No. 11

Devoted to community-based resource management

July 1989

Common Property News & Notes

Center for Indigenous Knowledge for Agriculture and Rural Development

"CIKARD, the Center for Indigenous Knowledge for Agriculture and Rural Development was established at Iowa State University in 1987 as part of that university's Technology and Social Change Program. Its goal is to collect indigenous knowledge and make it available to development professionals and scientists. CIKARD concentrates on indigenous knowledge systems (such as local soil taxonomies), decision making systems (such as knowledge of which crops are best suited to particular types of soils), organizational structures (such as farmers' problem-solving groups) and innovations (such as local methods for pest control). The Center has four functions:

- (1) acting as a clearinghouse for accessing, storing and disseminating indigenous knowledge
- (2) developing methodologies for recording this knowledge
- (3) conducting training courses and designing materials on indigenous knowledge for extension workers and other host-country nationals
- (4) facilitating cross-disciplinary research in indigenous knowledge."

Since most existing common property regimes are examples of indigenous knowledge systems, there is substantial overlapping of interests between CIKARD and the Common Property Network. About one third of the members of CIKARD's external advisory board are also CPR Network members.

Funded with grants or contracts from the GTE Foundation, Pioneer Hi-Bred International, Ltd and the Food and Agriculture Organization and others, CIKARD is involved in a number of activities. It organized a workshop on "Indigenous Knowledge

Systems: Implications for Agriculture and Agricultural Development" in Washington, D.C. in December 1988.

In February 1989, CIKARD began publication of a quarterly newsletter, *CIKARD News*. It is apparently available to anyone with a professional interest in indigenous knowledge, no subscription price is indicated. The May issue of *CIKARD News* included an insert listing 22 bibliographies, studies and reports about technology and social change that are available from the program.

More information about CIKARD or *CIKARD News* can be obtained from its director and editor:

D. Michael Warren
CIKARD
318B Curtiss Hall
Iowa State University
Ames, Iowa 50011, USA

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Rockefeller Foundation - African Dissertation Internship Awards

Doctoral students from sub-saharan Africa are invited to apply to The Rockefeller Foundation for dissertation research support. The program enables Ph.D students enrolled in U.S. and Canadian universities to return to Africa for extensive field research in areas relevant to economic development or poverty alleviation. Priority is given to research topics in the fields of agricultural health, and life sciences, but other proposals are welcome.

Applicants are responsible for arranging affiliation with an African institution able to provide needed research support, such as laboratory facilities, access to study sites, and technical advice. The candidate's faculty advisor, the host institution in Africa, and the agency with primary responsibility for financing the student's graduate work must all send letters of endorsement.

Deadlines for applications are October 1, 1989 and March 1, 1990. Candidates should apply well in advance of the expected field work starting date.

For a full description of the competition and the application requirements, write to:

African Dissertation Internship Awards
The Rockefeller Foundation
1133 Avenue of the Americas
New York, New York 10036, USA

CPR & Family Linkages

William Condon, Program Assistant for Asia at Winrock International submitted the following request to the Network:

"Dr. Bruce Currey, Winrock Program Leader of the Policy Analysis in Agriculture and Natural Resource Management Project in Bangladesh, asked on behalf of Dr. S. Zahir Sadeque, for references on common property resources related to family lineages, and on extended family ownership of these resources. Dr. Sadeque apparently is involved in social forestry research in Bangladesh.

Could you please suggest to us references directly related to these areas and/or the names of individuals we might contact to get such information? Once received, we would forward this information on to Dr. Currey."

Any network members who can respond to this inquiry are requested to correspond directly with:

William Condon
Winrock International Institute
Petit Jean Mountain
Morrilton, Arkansas 72110, USA
Telephone: (501) 727-5435
Telex: 910-720-6616 WI HQ UD
FAX: (501) 727-5242
DIALCOM 41:TCN400

The Common Property Research Network

The *Common Property Resource Digest* is the primary communication medium of the Common Property Resource Network. Funded with grants from the Ford Foundation and the Rockefeller Brothers Fund, the CPR Network seeks to disseminate information dealing with common property resources, their management, and policies related to their use. It also seeks to foster communication between professionals who work with common property resources; whether as policymakers, administrators, researchers, or educators. The ultimate goal of the network is to improve the conservation and wise use of these resources, and to improve the wellbeing of those people who depend on common property for their livelihood. Membership in the network is open to any individual or institution having an active professional interest in common property resources. At present, there is no charge for membership.

The *Common Property Resource Digest* is published and the CPR Network is administered by the Center for International Food and Agricultural Policy of the University of Minnesota. Facilities are provided by the Department of Agricultural and Applied Economics. Dr. C. Ford Runge is the project director and Edward D. Lotterman is the network administrator and *Digest* editor.

Functioning of the network depends on active participation by its members. Members are asked to report on their professional activities, as well as publications, conferences, and other items of interest. News items, announcements, publications for review, suggestions, and questions should be sent to the *Digest* editor at the following address:

Common Property Resource Digest
332e C.O.B.
1994 Buford Avenue
St. Paul MN 55108 U.S.A.
Tel: (612) 625-7019
FAX: (612) 625-6245

Forestry Courses in Indonesia

"The Director, Central Forestry Education and Training, Bogor, Indonesia has announced the availability of training courses at the following institutions: 1) The School of Environmental Conservation Management; 2) The School of Watershed Management; 3) Central Forestry Education and Training.

Courses start in July and end in February of the consecutive year. There is a policy of reserving vacancies for 10 foreign participants for every academic year per course. The cost (for eight months) of each training course is US\$6,540.

For further information and details please write to:

Ir Soenarso Sastrodimedjo, Director
Central Forestry Education and Training
Jalan Gunung Batu
Kotak Pos 42
Bogor 16001
INDONESIA

Institute of Social Studies - CPR Project and Courses

The Institute of Social Sciences, a post-graduate educational institution located in the Hague, the Netherlands, which offers a variety of degree and non-degree courses in development studies recently announced a new research project on the management of common property resources. At the same time, the Institute has added a specialization on Common Property Resource Management, Environment and Development as part of their post-graduate program in Rural Policy and Project Planning.

The new research effort is described in a letter written by Dr. A.J.M. van de Laar.

"The Institute of Social Studies has recently embarked upon a research project on options and implications for the management of common property resources, in an effort to attempt to reconcile environmental concerns with the needs of development of people in developing countries.

"The focus of the research is on grazing, forest and fish resources in specified project or (micro) regional contexts, where the problems of land use competition in the short and medium term can be analyzed with the necessary degree of specificity and detail.

"In our experience, as one of the largest and oldest post graduate training and research institutes for mid-career officials, teachers and researchers from developing countries, and through our extensive experience in project implementation and evaluation work, we frequently encounter considerable problems of communication between natural scientists and social scientists when it comes to suggest viable options to combine efforts to maintain and possibly improve the natural physical environment with the subsistence and development needs of the population

dependent upon what are often seen to be 'common' resources.

"In our literature search we found that you and your institute may share the same concerns. If so, we would greatly appreciate to receive information on completed or ongoing research in these areas, publications and references on the above topic.

"As social scientists, our concerns are primarily with access to, and use of, the commons by different socio-economic groups, especially of the poor.

"The following situations come to mind:

When privatization of the commons is suggested, we would like to study their effects on access by inclusion or exclusion of the poor, as well as the actual patterns of use after privatization of the resource.

When governmental regulation is suggested, we would like to study types and forms of regulation of the use of the commons, and issues in respect of the enforceability of the regulatory regimes.

Where traditional patterns of commons management prevail, we are interested in how such management systems are organized, and, above all, how such systems persist or evolve under conditions of change, for instance as a result of population growth or rising incomes.

"We hope that the information provided is sufficiently clear and focused, to avoid that the current research project itself becomes unmanageable.

"We are looking forward to your reactions and response."

Network members are strongly encouraged to respond directly to Dr. van de Laar by sending the information he requests to him at the following address:

Dr. A.J.M. van de Laar
Convenor, Rural Policy & Project Planning
Institute of Social Studies
P.O. Box 90733
2509 LS, The Hague
The Netherlands

The ISS has also instituted a CPR management specialization within their existing course on Rural Policy and Project Planning. This non-degree program lasts approximately seven months. The following information about this course is taken from the ISS *Prospectus*:

"Objective: to enhance analytical and executive skills necessary to design, implement and monitor rural and agricultural projects and programmes with emphasis on the technical aspects of these skills and on their appropriateness and effectiveness in different and changing social, economic and political settings.

"Intended participants: planners, project or programme coordinators and specialized staff at various levels of policy formulation and project

managers of agricultural programmes and projects initiated by governments or non-governmental agencies. The programme is also of interest to social scientists specializing in rural development.

"Course approach: much attention is given to organized efforts to change and improve the performance of the agricultural sector - input supplies, production systems and post-harvesting processes - and the living conditions of those who profit the least from the agricultural sector yet are mainly dependent on it. The scope of study can be widened to cater for the specific professional interests and needs of participants. The programme comprises lectures, seminars, workshops and study visits, and includes the writing of essays and a major research paper.

"In the basic studies section, concepts and theories of technical and social change are introduced. A discussion of important agronomic concepts and the operating characteristics of some widely practiced agricultural systems is followed by an analysis of key problems in rural development and of different strategies used for their solution within a broad national and international framework.

The Core studies section has two parts. The first concentrates on policies and programmes: it covers major policy areas and analyses themes in a comparative empirical framework. It is concerned with structural change (e.g. land reform), the formation of cooperatives, agricultural inputs (including technological aspects) and agricultural marketing and pricing, rural industrialization and social services in rural areas. The second part studies the techniques of designing, implementing and monitoring rural projects and programmes and their effectiveness in different and changing political and policy contexts.

"Specializations comprise lectures, tutorials and individual supervision of the research paper."

Admission to all ISS programs is on a competitive basis. Some fellowships are available from the Development Coordination Programme or the Ministry of Education and Science of the government of the Netherlands. Other agencies, including the UN, the World Bank, and private foundations have paid the costs for some participants in the past. Applications for courses and fellowships are separate processes. Applicants for the non-degree programs should have an appropriate bachelor's degree, proficiency in the English language and relevant experience. Anyone desiring more information or application forms should write to:

Academic Registrar
c/o Student Office
Institute of Social Studies
P.O. Box 90733
2509 LS, The Hague
THE NETHERLANDS
Telephone: (70)-510100
Telex: 31491 ISS NL

NCRI Call for Proposals

The National Coastal Resources Research and Development Institute is now receiving preliminary proposals for Fiscal Year 1990 funding of research and demonstration projects that promote environmentally sound economic expansion and diversification in the coastal United States, including the Great Lakes and U.S. Territories. Priority program areas presently include aquaculture development, fisheries and seafood technology, marine product development, coastal recreation and tourism. All preliminary proposals should be submitted by August 31, 1989 to be considered in this funding cycle. Successful respondents will be asked to submit full proposals by December 1.

For application materials contact:

NCRI
ATTN: National Grants Program Solicitation
OSU-HMSC
2030 S. Marine Science Drive
Newport, Oregon 97365
USA

Gum Arabic as Common Property

Mark Schoonmaker Freudenberger, a new network member forwarded the following description of his work.

"For the past year and a half I have been conducting field work for a doctoral dissertation through the auspices of the UCLA graduate school of Architecture and Urban Planning, on the history in northern Senegal of the gum arabic (*Acacia Senegal*) commodity and the role of the state in reforestation projects of this semi-arid tree species. The field research is identifying a number of interesting common property questions pertaining to the management of natural populations of the *Acacia Senegal*. Much to my surprise, the black Maure populations who collect wild gum, descendants of slaves who settled in northern Senegal in the late nineteenth century, have developed a sophisticated gum forest management system. Presently the system is under tremendous stress as other ethnic groups attempt to wrestle the bundle of tree tenure rights away from the Maures. As I write up this dissertation research, I would certainly be interested in sharing the information through the network."

Mark can be contacted at the following address:

Mark Schoonmaker Freudenberger
s/c Centre Culturel Americain
B.P. 49
Dakar
SENEGAL

Conferences

Agroforestry for Sustainable Development - Swaziland

A workshop on "Agroforestry for Sustainable Development - Economic Implications" was held in Swaziland in April 1989. This event was organized by the Commonwealth Science Council and funded by the Ford Foundation, IDRC and SADCC. Participants were largely economists and natural scientists from sub-saharan Africa.

Michael Stocking and Nick Abel, from the University of East Anglia, together with Jan Bojö from the Stockholm School of Economics, prepared a background paper for the workshop. Entitled "Financial and Economic Analysis of Agroforestry: Key Issues", the 73-page paper is available from:

Dr. Michael Stocking
School of Development Studies
University of East Anglia
Norwich NR4 7TJ
UNITED KINGDOM

Other information about the conference or the proceedings are available from:

Dr. Roslyn Prinsley
Commonwealth Science Council
Marlborough House
Pall Mall
London SW1Y 5HX
UNITED KINGDOM

Tropical Hydrology & Caribbean Islands Water Resources

"A symposium on Tropical Hydrology is being organized by the American Water Resources Association; the Asociacion Puertorriquena de Recursos de Agua; the Water Resources Research Institute, University of Puerto Rico; the Water Resources Research Center, University of the Virgin Islands; UNESCO and the U.S. Geologic Survey. The event will be held in San Juan, Puerto Rico during June 25-29, 1990." The Fourth Caribbean Islands Water Resources Congress will be held concurrently. For more information, contact the General Chairperson:

Dr. Rafael Munoz-Candelario
Water Resources Research Institute
University of Puerto Rico
Mayaguez Campus
P.O. Box 5000
Mayaguez, Puerto Rico 00709-5000
USA
Telephone: (809) 832-4040 ext.3540

Water Resources: 1990 and Beyond

The American Water Resources Association announces that its 26th Annual Conference and Symposium will be held in Denver Colorado,

November 4-9, 1990. The conference is entitled "The Science of Water Resources: 1990 and Beyond." Contributed papers, including oral, poster, and student papers, are invited on the following topics:

Hydrologic Trends
Extreme Events
Acid Precipitation
Global Climate
Forecasting
Legal Issues
Regulations and Permitting
Water Rights
Scientific Ethics
Remediation
Interstate Issues
Water Resources Development
International Issues
Economics
Water Use and Reuse
Water Supply Controversies
Emerging Issues
Nonpoint Source Pollution
Urban Impacts on Water Quality
Water Resources Education
Radon
Hazardous Waste

A concurrent symposium on "Transferring Models to Users" will also be held and papers are also solicited for this event. The models in question are computer hydrologic models.

The deadline for submission of abstracts for either event is November 1, 1989. Abstracts must be submitted in "three copies, cannot exceed 200 words and must include the title of the paper or poster, all authors' names, and their affiliations. The submitting author must include, on a separate page, the full mailing addresses (including position, student status if any, firm or institution, department, city, state, zip code and country) and a telephone number for each author."

Abstracts for the conference should be sent to

Jim Loftis
Colorado State University
Room 100, Engineering South
Fort Collins, Colorado 80523
USA
Telephone: (303) 491-7923

Requests for information or abstracts for the symposium should be sent to:

Eric B. Janes, SC-325
Bureau of Land Management
Bldg. 50, Box 25047
Denver, Colorado 80225-0047
USA
Telephone: (303) 236-0170

About Books

The Himalayan Dilemma

Over the past two decades, a powerful "Theory of Himalayan Environmental Degradation" has become widely accepted as a result of both scientific and popular publications, such as Erik Eckholm's *Losing Ground* (1976). The Theory concerns not only the Himalaya, but also the regions downstream, especially on the Indian Subcontinent. Aspects of the Theory were most recently cited in connection with last year's floods in Bangladesh, which were widely identified as having been caused by deforestation in the Himalaya. As often before, dams and other flood control measures were proposed as the "technological fix" required to decrease the likelihood of future floods.

Jack Ives and Bruno Messerli, authors of a new book examining the validity and implications of the Theory, describe it as "a series of vicious circles operating inexorably to drive a downward spiral." The first circle is: (1) modern medicine and malaria suppression, combined with massive immigration from lowland areas, result in rapid population growth; (2) demands for wood (for fuel and construction), fodder, and agricultural land increase rapidly; (3) massive deforestation results; (4) catastrophic increases in soil erosion and loss of productive land occur; (5) the hydrological cycle is disrupted, so that more floods occur, dry-season water supplies become less reliable, river courses move and siltation increases; and (6) islands develop in the Bay of Bengal from the increased sediment load. This is linked to a second circle: (1) continued loss of agricultural land leads to further deforestation, so more terraces can be constructed to grow subsistence crops; (2) as fuelwood becomes scarcer, animal dung is used for fuel; and (3) as animal dung is used less for fertilization, crop yields decline, soil structure weakens, and more landslides occur.

Ives and Messerli admit that, at the beginning of their research in the Himalaya in the mid-1970s, they accepted the Theory. However, as studies accumulated, it became evident that many of its parts and links were not as real, simple, or clear as they seemed. The situation was characterized by considerable complexity and, as Michael Thompson and Michael Warburton stated in a 1985 paper, "Uncertainty on a Himalayan Scale." For instance, estimates of fuelwood consumption in Nepal varied by a factor of 67. Uncertainty also stemmed from the pattern of research in the region. Most expatriate scientists (and also trekkers) visited the Himalaya during periods of good weather and were appalled by the landslides which had occurred on agricultural terraces during the previous monsoon. This destruction was taken as evidence of the first circle. However, the picture changed when foreign scientists returned in successive seasons or stayed year round,

indigenous scientists began studies, and local people were asked about the "problem." It was discovered that many landslides are eventually re-terraced and irrigation systems repaired. In fact, some local people perceive landslides as beneficial, since the earth is worked more easily, facilitating terracing; they may even intentionally trigger landslides to permit new terracing.

Separate chapters in the book treat the parts of the circles and the links between them individually, showing that many of the assumptions embedded in the Theory are invalid and that others are unproven, or even dangerous in terms of the policy implications drawn from them. The evidence comes from a large number of recent studies, mainly in Nepal, but also in other parts of the Greater Himalaya from Afghanistan to China's Hengduan Mountains. The authors present a convincing case, though the substantial use of unreferenced, unpublished data in some sections is somewhat disconcerting. However, the main findings appear well substantiated: particularly that massive deforestation is not a new problem, and that mountain subsistence farmers should be recognized as the key to solving environmental problems in the Himalaya, rather than the cause of these problems. Support for communal forestry and land tenure are seen as critical issues to be resolved within larger institutional and economic frameworks, at scales from the local to the international.

In many ways, the book poses more questions than it answers; it concludes with a long research strategy. Yet it is an important publication, showing that international attitudes, beliefs, and policies can develop very easily on the basis of fragmentary and often misleading information, especially in developing countries where historical land use patterns and traditional cultures are unknown or highly dissimilar to those of developed countries. Both the countries of the Himalaya and those downstream face real dilemmas of resource management; this book provides crucial information for developing the research and policy strategies necessary to help resolve them.

Ives, Jack D. and Bruno Messerli, *The Himalayan Dilemma*. London and New York, Routledge, 1989. 295 pp. US\$35.00/#35.00, ISBN 0-415-01157-4.

Reviewed by Martin Price, National Center for Atmospheric Research, Boulder Colorado

Innocents Abroad in the Forests of Nepal

This slim volume by D.M. Griffin, Professor of Forestry at Australian National University, is subtitled "An account of Australian aid to Nepalese forestry." It is not just an in-house institutional history, but also is an introspective examination of the general phenomenon of "development projects". Echoing some of the themes in Robert Chamber's *Rural Development, Putting the Last First*, Griffin questions assumptions and procedures which are all too common in international aid efforts. While the focus wobbles a bit, any book which begins with two paragraphs from Mark Twain and ends with scripture from Paul's Letter to the Romans is likely to be far more readable for most people than the average academic monograph.

Griffin, D.M., *Innocents Abroad in the Forests of Nepal: An Account of Australian Aid to Nepalese Forestry*. Canberra, Anutech, 1988. pp. 188, ISBN 0-86420-001-3, price not stated.

Anutech Pty. Ltd.
GPO Box 4

Canberra, ACT, 2601, AUSTRALIA

Cooperative Management of Local Fisheries

Cooperative Management of Local Fisheries: New Directions for Improved Management & Community Development is a sixteen chapter edited volume which grew out of the conference on fisheries comanagement held at the University of British Columbia in 1986. The author of the preface argues that the book is unusual in that the authors come from various disciplines but focus on the same problems, that they are concerned with both theory and practice, and that they write in a straightforward manner accessible to the general reader. These assertions are largely born out in the chapters that follow. The book is divided into sections covering four somewhat different resource management situations.

1. Evelyn Pinkerton, "Introduction: Attaining Better Fisheries Management through Co-Management -- Prospects, Problems and Propositions"

PART ONE; INDIAN-STATE CO-MANAGEMENT IN THE U.S. PACIFIC NORTHWEST

2. Fay G. Cohen, Treaty Indian Tribes and Washington State: The Evolution of Tribal Involvement in Fisheries Management in the U.S. Pacific Northwest"
3. Norman Dale, "Getting to Co-Management: Social Learning in the Redesign of Fisheries Management"
4. Danny Jordan, "Negotiating Salmon Management on the Klamath River"

PART TWO; NON-INDIGENOUS COMMERCIAL FISHERMEN CREATING REGIONAL AND LOCAL CO-MANAGEMENT

5. John F. Kearney "Co-Management or Co-Optation?: The Ambiguities of Lobster Fishery Management in Southwest Nova Scotia"
6. Bonnie J. McCay, "Co-Management of a Clam Revitalization Project: The New Jersey 'Spawner Sanctuary' Program"
7. Donald F. Amend, "Alaska's Regional Aquaculture Associations Co-Management of Salmon in Southern Southeast Alaska"

PART THREE; CREATIVE INSTITUTIONAL RESPONSE: EVOLVING ABORIGINAL MANAGEMENT REGIMES UNDER NEW STATE REGULATION

8. Milton M.R. Freeman, 'The Alaska Whaling Commission: Successful Co-Management under Extreme Conditions'
9. Steve J. Langdon, "Prospects for Co-Management of Marine Animals in Alaska"
10. Thomas J. Busiahn, 'The Development of State/Tribal Co-Management of Wisconsin Fisheries

PART FOUR; PROVISIONS IN COMPREHENSIVE CLAIMS FOR NATIVE SELF-MANAGEMENT

11. Fikret Berkes, "Co-Management and the James Bay Agreement"
12. Nancy C. Doubleday, "Co-Management Provisions of the Inuvialuit Final Agreement"

PART FIVE: B.C. NATIVE FISHERMEN: TRADITION AND INNOVATION

13. Mike Morrell, "The Struggle to Integrate Traditional Indian Systems and State Management in the Salmon Fisheries of the Skeena River, British Columbia"
14. Miles Richardson and Bill Green, 'The Fisheries Co-management Initiative in Haida Gwaii'
15. J.R. McLeod, "Strategies and Possibilities for Indian Leadership in Co-Management Initiatives in British Columbia"
16. R. Bruce Rettig, Fikret Berkes and Evelyn Pinkerton, 'The Future of Fisheries Co-Management: A Multi-Disciplinary Assessment'

Pinkerton, Evelyn, ed. *Cooperative Management of Local Fisheries: New Directions for Improved Management & Community Development*. Vancouver, University of British Columbia Press, 1989. pp. 424, ISBN 0-458-80990-X, Canadian \$21.95 Paperback.

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Uncommon Property in British Columbia

Uncommon Property: The Fishing and Fish-Processing Industries in British Columbia is yet another edited volume, but with seven authors contributing 15 chapters it is more coherent than many conference volumes. The jacket description is adequate.

Uncommon Property describes Canadian West Coast fisheries in the 1980's, focusing on the social and economic structure of the industry. It is the product of a three-year research project conducted by the Anthropology and Sociology Department at the University of British Columbia. There are three parts to the book, plus an introduction and conclusion.

"Part 1 is concerned with the history of the industry, the role of the federal and provincial governments, international markets, significant differences in raw fish markets and their importance for the processing sector, and the international context for British Columbia fisheries.

"Part 2 considers the labour process. This includes chapters on shoreworkers and fishers, with descriptions of their characteristics and their working conditions. It also examines their history of organization, the special place of native Indians in the fishery and the perspective of history by the Union of Fishermen and Allied Workers Union newspaper.

"Part 3 considers fishing communities: their viability when they are dependent on a diminishing resource and their responses to resource depletion."

The contents are as follows:

INTRODUCTION

1. Patricia Marchak, "Uncommon Property"

PART 1 CAPITAL AND THE STATE

2. John McMullan, "The Organization of the Fisheries: An Introduction"

3. Alicja Muszynski, "Major Processors to 1940 and Early labour Force: Historical Notes"

4. Evelyn Pinkerton, "Competition Among B.C. Fish-Processing Firms"

5. Stephen Garrod, "The Production and Distribution of B.C. Salmon in the World Context"

6. John McMullan, "State, Capital, and the B.C. Salmon-Fishing Industry"

7. Patricia Marchak, "'Because Fish Swim' and Other Causes of International Conflict"

PART 2 LABOUR AND ORGANIZATION

8. Neil Guppy, "Labouring at Sea: Harvesting Uncommon Property"

9. Neil Guppy, "Labouring on Shore: Transforming Uncommon Property into Marketable Products"

10. Patricia Marchak, "Organization of Divided Fishers"

11. Evelyn Pinkerton, "Indians in the Fishing Industry"

12. Alicja Muszynski, "Shoreworkers and the UFAWU Organization: Struggles between Fishers and Plant Workers within the Union"

PART 3 COMMUNITY AND REGION

13. Evelyn Pinkerton, "The Fishing-Dependent Community"

14. Keith Warringer, "Regionalism, Dependence, and the B.C. Fisheries: Historical Development and Recent Trends"

CONCLUSION

15. Patricia Marchak, "Uncommon History"

Marchak, Patricia, Neil Guppy, & John McMullan, eds. *Uncommon Property: The Fishing and Fish-Processing Industries in British Columbia*. Methuen, Toronto, 1987. pp. 402, ISBN 0-458-809900-X, Canadian \$21.95, paperback.

NOTE: While this book was published by Methuen, the entire stock is now being distributed by the University of British Columbia Press which can be contacted at the address given following the review of *Cooperative Management of Local Fisheries* on the previous page.

Ownership and Productivity of Marine Fishery Resources

The jacket of the above-cited book on co-management of fisheries asserts: "As the cost of centralized government rises and as resource-dependent regions demand greater control over development, co-operative management will become one of the most important means of regulating the use of certain natural resources."

Elmer A. Keen, in *Ownership and Productivity of Marine Fishery Resources: An Essay on the Resolution of Conflict in the Use of Ocean Pastures*, takes the opposite tack and argues for privatization or "full ownership" of fisheries. His arguments and the book's contents are summarized quite accurately on the back cover.

"The common ownership of marine fishery resources has contributed to the demise of fishery stocks throughout the world, particularly during the last several decades as consumer demand for finfish has increased and harvesting technology has been improved. Recent efforts by many of the major fishing nations to manage marine fisheries have caused excessive waste of the fisheries resources and human effort, imposed unnecessarily high costs on the fishing industry and consumers, and led to the depletion of fisheries stocks.

"Keen presents a compelling argument for changing from the present system of common ownership and management of marine fishery resources to a system based upon full ownership with profit incentives. A full ownership system would

increase fisheries productivity, improve harvest efficiency, and provide consumers with easier access to a higher quality product. Fishers, managers, consumers and governments would benefit from the changes proposed by Keen."

Keen's starting point is best illustrated by the following definition in the book's glossary. "Common property resource: A natural resource open to harvest by anyone, synonymous with open-access resource. As used here, a resource which yields no economic rent." The author is Professor of Geography at San Diego State University in San Diego California.

Keen, Elmer A. *Ownership and Productivity of Marine Fishery Resources: An Essay on the Resolution of Conflict in the Use of the Ocean Pastures*. Blacksburg, McDonald & Woodward, 1988. pp. 122, ISBN 0-939923-05-X, U.S. \$10.95 paperback

McDonald & Woodward Publishing Company
P.O. Box 10308
Blacksburg, Virginia 24062-0308
USA

CPR: Ecology and Community Based Sustainable Development

"This volume explores ways of integrating resource management science with traditional ecological knowledge and resource use systems. Common property resources dealt with in the book - fish, wildlife, forests, grazing lands and water - are all crucially important resources for sustainable development, but often suffer from over-exploitation. As a class, common property resources are subject to individual use but not to individual possession, and this often leads to their misuse. However, there are several ways in which the commons dilemma can be solved: this book concentrates on community based approaches."

Common Property Resources includes papers presented at the Conference on Conservation and Development held in Ottawa in June or at the Fourth International Congress of Ecology at Syracuse NY in August of 1986.

Contents

1. Fikret Berkes & M. Taghi Farvar, "Introduction and Overview"

Part 1 Perspectives on the Commons Debate

2. Christopher J.N. Gibbs & Daniel W. Bromley, "Institutional Arrangements for Management of Rural Resources".
3. A.P. Lino Grima & Fikret Berkes, "Natural Resources: Access, Rights-to-Use and Management"
4. Dwight J. Watson, "The Evolution of Appropriate Resource-Management Systems"
5. Fikret Berkes, "Cooperation from the Perspective of Human Ecology"

Part 2 Critique of Conventional Resource management Systems

6. Milton M.R. Freeman, "Graphs and Gaffs: A Cautionary Tale in the Common-Property Resources Debate"
7. Henry A. Regier, Richard V. Mason & Fikret Berkes, "Reforming the Use of Natural Resources"
8. Susan J. Buck (Cox), "Multi-Jurisdictional Resources: Testing a Typology for Problem Structuring"
9. Robert Goodland, George Ledec & Maryla Webb, "Meeting Environmental Concerns Caused by Common-Property Mismanagement in Economic Development Projects"

Part 3 Single-Resource Case Studies

10. Kenneth Ruddle, "Solving the Common-Property Dilemma: Village Fisheries Rights in Japanese Coastal Waters"
11. David L Miller, "The Evolution of Mexico's Spiny Lobster Fishery"
12. James M. Acheson, "Where Have All the Exploiters Gone? Co-management of the Maine Lobster Industry"
13. Ma. Concepcion J. Cruz, "Water as Common Property: The Case of Irrigation Water Rights in the Philippines"

Part 4 Multiple-Resource Cases and Integrated Development

14. Madhav Gadgil & Premya Iyer, "On the Diversification of Common-Property Resource Use by Indian Society"
15. Richard Moorhead "Changes Taking Place in Common-Property Resource Management in the Inland Niger Delta of Mali"
16. Graham B.K. Baines, "Traditional Resource Management in the Melanesian South Pacific: A Developmental Dilemma"

Berkes, Fikret ed. *Common Property Resources: Ecology and community-based sustainable development*. London, Belhaven Press, 1989. 320 pp. ISBN 1-85293-080-2. UK£32.50

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25 Floral Street
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Book Blurbs

Editor's Note: We have received advertisements or notices for the following books that may be of interest to many network members. Extracts from the publishers' notices are reproduced verbatim, but since I have not been able to personally examine these volumes, no endorsement or recommendation is made!

Slash And Burn: Farming in the Third World Forest

"Shifting cultivation is a way of life for tropical forest peoples the world over. Fire is the indispensable tool of the shifting cultivator, almost the only method whereby cut vegetation can be cleared from a forest site and the soil prepared for cultivation with, among other benefits, the deposit of a layer of nutrient-rich ash. Frequent resort to burning as a prelude to farming can also, however, change the face of the land dramatically.

Contemporary politics and economics in the Third World today threaten to eradicate not only shifting cultivation and the use of fire upon which it depends, but the very ways of life that support it. This thoughtful and penetrating study of the use of fire in forest agriculture in the tropics demands that politicians and economists not disregard the ecological soundness of traditional methods of cultivation or the cultures of their practitioners."

Peters, William J, & Leon F. Neuenschwander,
Slash and Burn: Farming in the Third World Forest.
Moscow Idaho, University of Idaho Press, 1988.
156 pp., ISBN 0-89301-123-1, US\$29.95.

University of Idaho Press
Moscow, Idaho 83843
USA

Telephone: (208) 885-6245

Policy and Practice in the Management of Tropical Watersheds

"The important role of tropical watersheds in land-use policies and management is the focus of this useful volume. The competing demands on watersheds - agriculture, animal husbandry, agroforestry, fuelwood - are examined both in theory and in case studies illustrating the author's systemic approach to viewing watersheds as an ecological and policy unit in and of themselves."

Pereira, H.C., *Policy and Practice in the Management of Tropical Watersheds.* Boulder, Westview Press, 1989. 252 pp., ISBN 0-8133-7731-5, US\$27.85

Westview Press
5500 Central Avenue
Boulder, Colorado 80301
USA

Telephone: (303) 444-3541

Biodiversity: Traditional Management and Development of Biological Resources

"The dual themes of conservation of biological resources and rural development are explored in this book by biologists, anthropologists, agricultural scientists, and policy analysts. Using traditional resource management systems as the basis of study, the contributors assess traditional management of plant and animal diversity, explore the rationale for *in situ* conservation, and discuss existing and Possible linkages between development and conservation."

Contents:

- Margery L Oldfield & Janis B. Alcorn, "Introduction"
 - Raymond F. Dasmann, "The Importance of Cultural and Biological Diversity"
 - M.L. Oldfield & J.B. Alcorn, "Conservation of Traditional Agroecosystems"
 - Garrison Wilkes, ""*In situ* Conservation of Agricultural Systems"
 - J. Artie Browning, ""Conserving Crop Plant-Pathogen Coevolutionary Processes *in situ*"
 - Dorothea Bedigian, "Diversity of Traditional Cultivars of Sesame in Sudan"
 - Stephen Brush, "Conservation of Cultivar Diversity in Andean Potato Fields"
 - Gary P. Nabhan, et al, "Conservation of Rare Wild Plants by Traditional Cultures in the U.S. Mexico border states"
 - Hank Fitzhugh & Ann Wilhelm, "Value and Uses of Indigenous Livestock Breeds in Developing Countries"
 - Lyle MacNeal, "The Navajo Sheep Project"
 - Raymond Hames, "Prudent Predators or Instantaneous Maximizers? Problems in the Analysis of Tribal Foraging Strategies"
 - Stephen Gliessman, "The Ecological Basis of Traditional Knowledge for Agroecosystem Development"
 - Victor M. Toledo, "The Patzcuaro's Lesson: Nature, Production and Culture in an Indigenous Region of Mexico"
 - Jason Clay, "Cultural Survival and Conservation: Lessons from the Last Twenty Years"
 - Mac Chapin, "The Seduction of Models: An Evaluation of Technology Transfer Projects"
 - William P. Gregg, "The Role of UNESCO-MAB Biosphere Reserves in Conserving Traditional Resource Management Systems"
 - Molly Kux, "AID Programs Linking Rural Development Needs with Biological Conservation"
- Oldfield, Margery L & Janis B. Alcorn eds., *Biodiversity: Traditional Management and Development of Biological Resources.* Boulder, Westview Press, 1989. 320 pp., ISBN 0-8133-7680-7, US\$30.95
(Ordering address given in previous note)

Local Organizations for Social Development

"Although many of the world's landscapes are dominated by dams, reservoirs, and canals, the story of typical irrigation projects is one of failure to fulfill projected economic returns. Farmers often do not understand how to exploit their relatively expensive water supplies, producing disappointing yields and refusing to cooperate with managers who in turn are unable to administer their systems according to plan. The characteristics of intervening local organizations fundamentally affect the use of state- mobilized resources - in this case state-supplied irrigation. Professor Freeman defines the strategic dimensions of the problem and examines four specific cases - a large-scale gravity flow system in Pakistan, a small-scale reservoir system in India, and two large-scale reservoir systems in Sri Lanka."

Freeman, David M. *Local Organizations for Social Development: Concepts and Cases of Irrigation Organization*. Boulder, Westview Press, 1989. 256 pp., ISBN 0-8133-7817-6, US\$28.50.

(Order from Westview address on previous page)

Agroforestry in Agricultural Education

The main objective of this publication is to study and identify the ways in which agroforestry can become a vital part of agricultural education, and a sustainable way of farming for School and College farms.

"All climatic regions of the world are included in the study, and there is some emphasis on the tropical and sub-tropical regions, however the book is of great value for all countries, climates and continents."

Boehnert, Joachim *Agroforestry in Agricultural Education with a Focus on the Practical Implementation*. Weikersheim, Verlag Josef Margraf, 1988. 182 pp., ISBN 3-8236-1117-8, DM49.00 or US\$35.00

Verlag Josef Margraf
Mühlstrasse 9
Postfach 105
D-6992 Weikersheim
FEDERAL REPUBLIC OF GERMANY
Telephone: 07934/3071

Application of Farming Systems Research to Community Forestry

"Rapid deforestation has caused a serious energy crisis and severe ecological degradation in many developing countries. This present study develops and applies a methodology for the design of a community forestry programme in a rural area."

Poschen-Eiche, Peter *Application of Farming Systems Research to Community Forestry: A Case Study in the Hararge Highlands, Eastern Ethiopia*.

Weikersheim, Verlag Josef Margraf, 1987. 250 pp., ISBN 3-8236-1111-9, DM49.00 or US\$35.00

(Order from address above)

Other Publications

Climate-Related Impacts Network

The Environmental and Societal Impacts Group at the National Center for Atmospheric Research in Boulder Colorado has compiled an Institutional Directory for their Climate-Related Impacts Network. The directory lists some 160 groups, centers, institutes and individuals involved in climate-related impacts research. Each entry lists the institutions address, key personnel, general purpose, major research areas, special areas of expertise, special facilities, collaborating groups, and recent reports or publications. The directory comprises 253 pages. No information about price or availability of the report is given, but interested network members should direct inquiries to the lead author at the address below.

Krenz, Maria E, D. Jan Stewart & Beverly G. Chavez, *Institutional Directory: Climate-Related Impacts Network*. Boulder, NCAR, 1989.

Environmental and Societal Impacts Group
National Center for Atmospheric Research
P.O. Box 3000
Boulder, Colorado 80307-3000
USA

Women in Forestry

The Nepal-Australia Forestry Project has published three short papers on women's participation in forestry. The preface to one of them, *Towards Effective Participation: A Guide for Working with Women in Forestry*, adequately describes all three.

"Over the past few years women's participation in forestry has been the subject of detailed research and debate in Nepal forestry programs and other development programs with forestry components have tried to analyze and document their own experiences. Various reports prepared during the course of planning, implementation and evaluation of programs have also listed so "dos" and "don'ts".

The gap we felt at the Nepal-Australia Forestry Project was that no guide had been prepared on the subject for field workers. This is an attempt to produce such a document. This guide should not be seen as an instruction sheet for working with women. Nor does it give a formula for achieving women's participation in forestry.

"We have limited the effort to a description of the present situation in Nepal with regard to women in forestry, and to the elaboration of a strategy to work with women based on our understanding of this

situation. A method and tools for required field work have also been developed. For a more detailed discussion of some of the ideas presented here, you may refer to *Women in Forestry: Part 1 and 2*, NAFF 1989, by the same author. References made in the text are in the list of suggested readings.

"It will be useful to read this guide together with Forestry Work in *Villages: A Guide for Field Workers*, 1987, prepared by R.J. Fisher and Y.B. Malla, as a technical note for NAFF. This should give a better understanding of forestry field work as visualized and developed during the course of NAFF's experience.

"It is expected that field workers will use this guide as reference material to plan and organize their work with women. It can also be used by policy makers, planners and implementors to familiarize themselves with the situation in the field.

Siddiqi, Najma *Towards Effective Participation: A Guide for Working with Women in Forestry*. Kathmandu, NAFF, 1989. 38 pp. No price stated.
Siddiqi, Najma *Women in Forestry: Part I, Report of a Training Workshop*. Kathmandu, NAFF, 1989. 16 pp. No price stated.

Siddiqi, Najma *Women in Forestry: Part II, NAFF with a Difference*. Kathmandu, NAFF, 1989. 24 pp. No price stated.

Nepal-Australia Forestry Project
P.O. Box 208
Kathmandu
NEPAL

Irrigation Management Improvement for Rice

The Department of Agricultural Engineering at Gadjah Mada University in Indonesia is engaged in an active collaborative research project with the International Irrigation Management Institute (IIMI) with the purpose of improving irrigation management in rice-based farming systems. The department has published a number of research reports related to this project, some of which may be of interest to Network members.

Rintis Hadiani, "Reliability Analysis of Extrapolated Rainfall Data Over Irrigated Area of Rice-Based Cropping System"

Sigit Supadmo Arif, "Development Process of Surface Groundwater in Irrigated Area"

Abdul Rozaq, "Preliminary Investigation on the Development of Soil Cracks in the Irrigated Areas of Ricefield"

Suprodjo, "Potential Utilization of Surface Groundwater to the Supply of Soil Moisture Requirement of Upland Crop in Cikeusik Irrigation Area"

Muhjidin Mawardi, "Correction on the Allocation of Time Distribution along Main Canal in Rotational System"

Sukirno, "Soil Moisture Status in Tertiary Block of Irrigated Area"

A research summary and the project research plan are also available. The Department is "happy to cooperate with any person/agency who is interested in this research activity or to exchange the results of research." For more information about this project, contact:

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Department of Agricultural Engineering
Faculty of Agricultural Technology
Gadjah Mada University
Bulaksumur, Yogyakarta
INDONESIA
Telephone: 88688, ext. 615

Sylvanet

The International Programs Network in the College of Forest Resources at North Carolina State University published a bi-monthly newsletter entitled *Sylvanet*. The newsletter is a good source of information on development programs and projects, conferences, fellowships, grants, and employment opportunities in international forestry. No cost is stated, and availability may be limited, but interested CPR Network members should write to

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