

WORKING WITH PEOPLE

INDONESIAN EXPERIENCES
WITH COMMUNITY-BASED DEVELOPMENT



Edited by

Hasan Poerbo, Fred Carden, William Found and Louise Grenier

The University Consortium on the Environment

IDRC - Lib.

152 868

WORKING WITH PEOPLE

INDONESIAN EXPERIENCES
WITH COMMUNITY-BASED DEVELOPMENT



Edited by
Hasan Poerbo, Fred Carden, William Found and Louise Grenier

The University Consortium on the Environment

Toronto, Faculty of Environmental Studies, York University
Bandung, Centre for Environmental Studies, Institute Technology of Bandung

1995



ARCHIV
no. 01

Copyright ©1995

Faculty of Environmental Studies, York University
Centre for Environmental Studies, Institute Technology of Bandung
ISBN: 1-55014-276-3

Cover and Title Page Design: Sarah Dinnick
Printed in Canada by University of Toronto Press

COVER ILLUSTRATION*

Semar

Semar symbolizes the voice of the people. Although his position is that of a royal servant, no one dares to challenge Semar when he is angry, not even the gods.

Semar is a true Indonesian wayang (shadow puppet) character. In the world of the wayang, Semar is highly placed, respected, and loved. In terms of his formal position, he is a servant, whose duty is as caretaker or guardian of the nobles/knights. In certain situations, Semar reprimands the nobles under his charge.

The role of Semar is to maintain the stability of the world so that the earth and the sky, the universe and its contents can function for the well-being of the people. Semar is invisible and cannot be seen by the naked eye, cannot be physically described, and has no comparison or equal to anything in this world. He takes care, carries, embraces, guides, protects, receives, provides, donates, loves and does everything without expecting or demanding anything in return.

Some have seen the role of the Centre for Environmental Studies at the Bandung Institute of Technology (PPLH-ITB) as akin to the role of Semar. The Centre's role has never been dominant; but it has acted as a catalyst-intermediary in the service of communities. The image of Semar, therefore, serves as a useful theme for the following collection of case studies where those based or trained in universities have served inconspicuously to assist communities with their own self-development.

ILLUSTRASI PADA JILID

Semar

Semar adalah simbol dari suara masyarakat. Meskipun posisinya sebagai abdi seorang raja, akan tetapi apabila dia sedang marah, tidak seorangpun, bahkan para Dewa berani menentangnya.

Semar adalah karakter sejati dalam alam pewayangan Indonesia. Di dalam dunia pewayangan ini, Semar ditempatkan pada kedudukan yang tinggi, dihormati dan dicintai. Dalam hal posisinya yang bersifat resmi, Semar adalah seorang abdi (punakawan), dimana tugasnya adalah sebagai pelindung atau penjaga para ksatria. Dalam situasi-situasi tertentu, Semar dapat menegur para ksatria yang berada di bawah tanggung jawabnya.

Semar berperan dalam memelihara stabilitas dunia, dengan demikian, bumi, udara beserta seluruh alam buana berikut seluruh isinya akan berfungsi bagi kesejahteraan umat manusia. Dia adalah sesuatu yang gaib, tidak dapat dilihat dengan mata telanjang; tidak dapat digambarkan bentuk fisiknya dan tidak mempunyai bandingan dengan sesuatu bentuk apapun yang ada di dunia ini. Dia memelihara, menjaga, melindungi, menerima, memberi, menyumbang, mencintai dan melaksanakan segala sesuatu tanpa pamrih.

Beberapa hal dapat dilihat bahwa Pusat Penelitian Lingkungan Hidup, Institut Teknologi Bandung mempunyai peran yang agak mendekati peran Semar tersebut. Peran pusat penelitian ini tidak pernah dominan, akan tetapi bertindak sebagai katalisator-penengah dalam pengabdianya kepada masyarakat. Oleh karena itu, gambaran Semar dipergunakan sebagai tema dalam studi-kasus studi-kasus berikut, dimana mereka berbasis dan terlatih di perguruan tinggi telah tanpa diketahui membantu masyarakat dengan kemampuan pengembangan yang dimiliki oleh masyarakat itu sendiri.

* Cover Illustration: *Ensiklopedi Nasional Indonesia*, Vol. 14, p.497, Jakarta, PT Gipta Adi Pustaka.

TABLE OF CONTENTS

	Page
Cover Illustration - Illustrasi Pada Jilid - Semar	i
Table of Contents	iii - vii
Glossary and List of Abbreviations	ix - xii
Preface - Kata Pengantar	xiii - xvi
CHAPTER 1: THE FIELD OF RURAL PLANNING, AND ITS RELATION TO THE CIAMIS, JASINGA-LEUWILANG, AND RAWA SRAGI CASE STUDIES (by William Found)	1 - 5
Abstract - Abstrak	1
A History of Rural Planning	1 - 2
Basic Styles of Planning	2 - 4
Recent Developments in Rural Planning	4 - 5
Relation to the Ciamis, Jasinga-Leuwiliang, and Rawa Srugi Case Studies	5
CHAPTER 2: THE DEVELOPMENT OF CRITICAL UPLANDS IN CIAMIS: FROM LOCAL DEVELOPMENT TO THE MANAGEMENT OF WATERSHEDS (by Hasan Poerbo and Gatoet Poerwady)	7 - 34
Abstract - Abstrak	7
Introduction	7 - 9
<i>Project Location Map</i>	8
Background of PPLH - ITB Involvement	9 - 10
Phase I: (1980 - 1982) Background and Early Development	10 - 19
The Mission Statement of the Ciamis Project & Looking for a Location	10 - 11
Starting without Assets	11 - 15
Figure 1: Mechanistic Model vs. Human Action Model	13
Early Breakthroughs	15 - 16
1. Simulation Cards	15 - 16
2. Dr. Peter Naas	16
Local Terracing Groups (LTGs)	16 - 19
Figure 2: Phases of the Development Process	18
Phase II: (1982 - 1989) The Cigaru Model and its Dissemination in the Citanduy Watershed	19 - 27
Diversification, Horizontal Dissemination and Vertical Expansion	19 - 20
Horizontal Dissemination Outside of Cigaru	20 - 22
Project Organization	23 - 24
Figure 3: Organizational Structure of the Ciamis Project	24
Organizational Network in the Management of the Ciamis Project	24 - 27
Financing	24 - 25
Yayasan Bina Lingkungan Hidup (YBLH): 1985 - 1989	25 - 27
Figure 4: Development of KUBES in North Ciamis under YBLH - LSP	27
Phase III: (1990 - 1994) Transfer of Experience and Cigaru Revisited	28 - 30
Cigaru Revisited	28 - 29
The Other Villages	29 - 30
Transfer to other Locations	30
Conclusion and Some Reflections	30 - 31

<i>Photographs of the Ciamis Project</i>	32 - 33
Photo 1: Terracing - Village of Cigaru	32
Photo 2: New housing - Village of Cigaru	33
Photo 3: Cigaru - chicken pen in a fish pond	33
References	34
CHAPTER 3: REFLECTIONS ON THE IMPLEMENTATION OF THE JASINGA - LEUWILANG PROJECT: COOPERATIVES FOR SUSTAINABLE DEVELOPMENT	35 - 77
(by Taufiq Afiff and Louise Grenier)	
Abstract - Abstrak	35
Introduction	35
A Note on How this Assessment was Prepared	36
Organization of this Paper	36 - 37
Part A: The Implementation of an 'Idea'	37 - 44
The Ciamis Model	37 - 38
The General Plan and Approach	38 - 41
<i>Project Location Map</i>	40
The First Proposal to CCA: The Jasinga - Leuwiliang Sustainable Development Project	41 - 42
Figure 1: Conceptualisation of Jasinga Sustainable Development Project	42
The Approved Proposal: Sustainable Development Project: Cooperatives for Sustainable Development	43 - 44
Conclusion to Part A	44
Figure 2: The Implementation of an Idea	45
Part B: The Implementation of the Funded Project:	44 - 61
The Jasinga - Leuwiliang Project:	44, 46
Cooperatives for Sustainable Development	
Section 1: The Jaya Mulya Credit Union	46 - 55
Overview of the Development of the Jaya Mulya Credit Union	46 - 47
Figure 3: Important Actors	47
The Project Staff	47 - 48
The Credit Union Board	48 - 49
Membership Selection	49
Training	49 - 50
Making Regulations	51
Bookkeeping	51 - 52
The Annual Meeting	52
Cooperation, Communication and Organizational Structure	52 - 53
Theft	53
Idle Money...Waiting Lists...Loan Defaults	53 - 54
Loan Policy	54
Overview of the Development of the Nearby Eka Karya Credit Union	54 - 55
Section 2: The Producer Groups	55 - 59
The Role of NGOs	55 - 56
Brick and Tile Producers	56 - 57
Vegetable Producers (Chili Production)	57 - 58

Fermented Cassava	58
Mushrooms	58
The Women's Group	59
Fisheries	59
Small Shops	59
Political Context	59 - 61
The Camat	59 - 60
The Kepala Desa	60 - 61
Part C: Evaluation	61 - 64
Evaluation with Respect to the Approved Proposal	61 - 62
Evaluation with Respect to the First Proposal	62 - 63
Evaluation with Respect to the Model	63 - 64
Part D: Conclusion	64 - 70
Lessons Learned to Date: Reflections on the Implementation Process	64
Project Design and Objectives	64 - 65
The Approach	65 - 66
Beneficiaries: Individuals/Community?	66 - 67
Information	67
Political Relationships	67
Top-Down and Bottom-Up Implementation	67 - 68
Conflict Resolution	68 - 69
Implementors	69
Closing Note	69
Appendix 1:	70
Table 1: The Jaya Mulya Credit Union in Barengkok	
Table 2: The Eka Karya Credit Union in Tegal Wangi	
Appendix 2: The Old Organizational Structure of the Jaya Mulya Credit Union	71
Appendix 3: The New Organizational Structure of the Jaya Mulya Credit Union	72
Appendix 4: Structure of the Government of the Republic of Indonesia	73
Photographs: <i>Scenes from the Jasinga Area</i>	74 - 76
References	77
CHAPTER 4: SUSTAINABLE DEVELOPMENT: A FIELD NOTE FROM THE RAWA SRAGI DEVELOPMENT PROJECT	79 - 99
(by Zainal Abidin)	
Abstract - Abstrak	79
Introduction	79 - 80
Theoretical Aspects	80 - 81
The Rawa Srabi Project Setting	81
Project Design	81, 84
<i>Project Location Map</i>	82
<i>Map: Lay-out of Rawa Srabi Project</i>	83
The Objectives of SAP	84 - 85
Table 1: Action Programmes in Rawa Srabi	85
The Beneficiaries	85 - 86
Organization	86 - 93
Figure 1: The Organizational Structure of PSR3	87
Figure 2: Structure of TP5DRS	90
Evaluation	93 - 95
Conclusion	96

<i>Photographs: Scenes from the Rawa Sragi Project</i>	97 - 98
References	99
CHAPTER 5: CREATING THE SPACE FOR ACTION: URBAN EXPERIMENTS IN COMMUNITY DEVELOPMENT	101 - 108
(by Fred Carden)	
Abstract - Abstrak	101
Conclusion	107
CHAPTER 6: THE GARBAGE INDUSTRIAL ESTATE AS AN ALTERNATIVE WASTE MANAGEMENT SYSTEM	109 - 122
(by Hasan Poerbo)	
Abstract - Abstrak	109
Introduction	109 - 110
The Scavenger Research Project: March 1980 - March 1982	110 - 114
From Fledgling to Maturity and Eviction: 1983 - 1987	114 - 119
Population Growth	114
The School	115
The Mosque	115
Recycling Cooperative	115
Use of Seed	115
Production of Compost	116
Market Gardening	116
Fishing and Animal Husbandry	116
Health Care and Family Planning	116
The Double Pit Latrine	116
Towards the Implementation of the GIE Concept	117 - 119
Concluding Note	119 - 120
<i>Photographs from the Jatidua Scavenger Community</i>	121 - 122
Photo 1: The First Mass Marriage	121
Photo 2: The Pre-School	121
Photo 3: The Fishing Pond	121
References	122
CHAPTER 7: PARTICIPATORY DEVELOPMENT IN THE URBAN CENTRE OF SAMARINDA: THE CITRA NIAGA AND GANG MANGGIS EXPERIENCES	123 - 138
(by Antonio Ismael)	
Abstract - Abstrak	123
Introduction	123 - 124
The Citra Niaga Urban Redevelopment Project	124 - 129
Location Map of Project	125
The Gang Manggis Land Consolidation Experiment	129 - 133
Context and Background	129
Approach	129 - 130
The Roles of the Various Parties	130 - 131
Design	131
Financing	131
Organizational Structure	131 - 132

Lessons from the Gang Manggis Experience	132 - 133
Recommendations in Light of the Citra Niaga and Gang Manggis Experiences	133 - 134
<i>Photographs from the Citra Niaga Project Area</i>	135 - 137
Photos 1 and 2: The Project Site Before Redevelopment	135
Photo 3: Condition of Shops Before the Project	136
Photo 4: Condition of Shops After the Project	136
Photo 5: Shopping Area After Project Completion	137
Photo 6: Building Viewed from Tower	137
CHAPTER 8: CITIES IN PARTNERSHIP: SURABAYA AS A CASE IN POINT	139 - 145
(by Johan Silas)	
Abstract - Abstrak	139
Introduction	139
The Development of Urban Kampungs	140
History of the Kampung Improvement Programme	140
The Case of KIP in the City of Surabaya	140 - 141
Three Kinds of Kampung Improvement Projects in Surabaya	141 - 142
People's Self-Help Project	141
W.R. Soepratman Project	141 - 142
Urban Kampung Improvement Programme	142
Consequences of KIP	142 - 143
KIP and Operation and Maintenance	143 - 144
LKMD as a Forum	144
Conclusion	145
CHAPTER 9: CONCLUSIONS	147 - 153
(by Fred Carden, William Found, Louise Grenier and Hasan Poerbo)	
AUTHOR BIOGRAPHIES	155 - 156

GLOSSARY AND LIST OF ABBREVIATIONS

<i>BAKOR</i>	<i>Badan Koordinasi - Coordination Board</i>
<i>BAPPEDA</i>	<i>Badan Perencanaan dan Pembangunan Daerah - Regional (Provincial) Planning and Development Board</i>
<i>BK3D</i>	<i>Badan Koordinasi Koperasi Kredit Daerah - old name for Regional Federation of Credit Unions</i>
<i>BK3I</i>	<i>Badan Koordinasi Koperasi Kredit Indonesia - The National Federation of Credit Unions</i>
<i>BPN</i>	<i>Badan Pertanahan Nasional - National Land Agency</i>
<i>BPP</i>	<i>Balai Penyuluhan Pertanian - Agricultural Extension Centre</i>
<i>BRI</i>	<i>Bank Rakyat Indonesia - Indonesian People's Bank</i>
<i>BUKOPIN</i>	<i>Bank Umum Koperasi Indonesia - Cooperative Bank of Indonesia</i>
<i>Bupati</i>	<i>Head of Kabupaten (District), or Second Level Adminstrative Area</i>
<i>Camat</i>	<i>Head of Kecamatan (Sub-district), or Third Level Adminstrative Area</i>
<i>CCA</i>	<i>Canadian Cooperative Association</i>
<i>CER-ITB</i>	<i>Centre for Environmental Research, Institute Technology of Bandung</i>
	<i>See also</i> <i>PPLH-ITB</i> <i>PSLH-ITB</i>
<i>CPIS</i>	<i>Centre for Policy and Implementation Studies</i>
<i>CUSO</i>	<i>Canadian University Service Organization</i>
<i>Desa</i>	<i>Kelurahan (Village) - Administrative unit in government hierarchy below kecamatan</i>
<i>DIP</i>	<i>Daftar Isian Projek - Project Implementation Forms</i>
<i>Diperta, Dipertan Dinas Pertanian</i>	<i>Agricultural Office</i>
<i>DKI</i>	<i>Daerah Istimewa Jakarta - Jakarta City Government</i>
<i>DKM</i>	<i>Dewan Kesejahteraan Mesjid - Mosque Prosperity Council</i>

<i>DPRD</i>	<i>Dewan Perwakilan Rakyat Daerah - Regional/Provincial People's Legislative Assembly</i>
<i>DPUP</i>	<i>Dinas Pekerjaan Umum Propinsi - Provincial Public Works Service</i>
<i>DUP</i>	<i>Daftar Usulan Proyek - Project Proposal Forms</i>
<i>GIE</i>	<i>Garbage Industrial Estate</i>
<i>GO</i>	<i>Group Organizer</i>
<i>HUT</i>	<i>Hamparan Usaha Tani - Farmers' Group Area</i>
<i>IMB</i>	<i>Izin Mendirikan Bangunan - Housing Permits</i>
<i>Inpres desa Tertinggal</i>	<i>Subsidy programme established through presidential instruction for directing funds annually (Rp 20 million) directly to the poorest villagers</i>
<i>IPB</i>	<i>Institut Pertanian Bogor - Agricultural Institute of Bogor</i>
<i>IPPA</i>	<i>Ikatan Petani Pemakai Air - Water Users' Association</i>
<i>ISS</i>	<i>Institute of Social Studies, Holland</i>
<i>ITB</i>	<i>Institut Teknologi Bandung - Institute of Technology Bandung</i>
<i>ITS</i>	<i>Institut Teknologi '10 November' Surabaya - Institute Technology of Surabaya</i>
<i>Juru Pengairan</i>	<i>Water Controller or Water Master</i>
<i>Kabupaten</i>	<i>Regency - Sub-province or district, Second Level Administrative Area</i>
<i>Kakan Koperasi</i>	<i>Kepala Kantor Koperasi - Director of Cooperative Office</i>
<i>Kanwil</i>	<i>Regional Office</i>
<i>Kecamatan</i>	<i>Sub-district Administrative District</i>
<i>Kepala desa</i>	<i>Head of Village</i>
<i>KIP</i>	<i>Kampung Improvement Programme</i>
<i>KLH</i>	<i>Kantor Menteri Negara Lingkungan Hidup - State Ministry for the Environment</i>
<i>Kontak Tani</i>	<i>Representative of Farmers' Group</i>
<i>KUBE</i>	<i>Kelompok Usaha Bersama - Economic Cooperative Development Group</i>
<i>KUD</i>	<i>Koperasi Unit Desa - Village Cooperative Unit</i>

<i>LIPI</i>	<i>Lembaga Ilmu Pengetahuan Indonesia - Indonesian Institute of Sciences</i>
<i>LISU</i>	<i>Local Implementation and Support Unit of BAKOR</i>
<i>LSP</i>	<i>Lembaga Studi Pembangunan - Institute for Development Studies</i>
<i>LKMD</i>	<i>Lembaga Ketahanan Masyarakat Desa - Village Community Development Activities Council</i>
<i>LTG</i>	<i>Local Terracing Group</i>
<i>MPK</i>	<i>Mitra Pasukan Kuning - Partner of the Yellow Army</i>
<i>NGO</i>	<i>Non-Government Organization</i>
<i>PAR</i>	<i>Participatory Action Research</i>
<i>PJPT - I</i>	<i>Pembangunan Jangka Panjang Tahap Pertama - First Long-Term Development Plan</i>
<i>Posyandu</i>	<i>Pos Pelayanan Terpadu - Integrated Health Post</i>
<i>PPL</i>	<i>Petugas Penyuluhan Lapangan - Field Extension Workers</i>
<i>PPLH-ITB</i>	<i>Pusat Penelitian Lingkungan Hidup, Institut Teknologi Bandung - Centre for Environmental Research, Institute of Technology Bandung</i>
<i>PPM</i>	<i>Penyuluhan Pertanian Madya - Intermediate Level Agricultural Extension Worker</i>
<i>Prokema</i>	<i>Promotir Kesehatan Masyarakat - Community Health Promoters</i>
<i>PSLH-ITB</i>	<i>Pusat Studi Lingkungan Hidup, Institut Teknologi Bandung - Centre for Environmental Studies, Institute Technology of Bandung</i>
<i>See also</i>	<i>PPLH-ITB CER-ITB</i>
<i>Puskopdit</i>	<i>Pusat Koordinasi Kredit - new name for Regional Federation of Credit Unions</i>
<i>P3RS</i>	<i>Pembinaan Petani Proyek Rawa Sragi - Extension Development Project for Rawa Sragi's Farmers</i>
<i>RT</i>	<i>Rukun Tetangga - Administrative Unit of Neighbourhood Association</i>
<i>RUKO</i>	<i>Rumah & Toko - Shop Houses</i>
<i>RW</i>	<i>Rukun Warga - Neighbourhood Association - below village level in administrative hierarchy</i>
<i>SAP</i>	<i>Special Assistance Programme</i>

SMA	<i>Sekolah Menengah Atas - Senior High School</i>
TP5DRS	<i>Tim Pembina dan Pelaksana Pembangunan Tanaman Pangan Terpadu Daerah Rawa Sragi - The Implementation Team of Integrated Food Crops Development of Rawa Sragi Area</i>
UGM	<i>University of Gaja Mada</i>
UNILA	<i>University of Lampung</i>
WFCP	<i>Women in Food Crop Production</i>
YBLH	<i>Yayasan Bina Lingkungan Hidup - The Foundation for Environmental Development</i>

PREFACE

This book concerns recent, community-based development in Indonesia -- particularly projects where the actions of local community members have been assisted either by the Centre for Environmental Studies at the Bandung Institute of Technology (PPLH-ITB), or by development consultants well known by the Centre. The prevailing theme is that effective development or desired change at the community level is greatly enhanced if members of the community themselves assume a degree of responsibility for identifying local needs, designing appropriate activities, implementing those activities, and evaluating their effectiveness. Six cases studies, three in rural areas and three in urban areas, are used to illustrate the ways in which local initiatives can succeed in harnessing the energy and creativity of local people and institutions in order to bring about useful, sustainable change. They also illustrate how such activities help to build a sense of community, which, in itself, makes communities better equipped to face the challenges of a rapidly changing world.

Preparation of this book is an outgrowth of the collaboration between PPLH-ITB and the Faculty of Environmental Studies (FES) at York University, Toronto, Canada, collaboration undertaken within the University Consortium on the Environment (UCE), which is supported by the Canadian International Development Agency (CIDA). An overriding theme in this inter-university collaboration has been community development, with particular attention to the ways in which community-based projects are designed and implemented. The theme is a very "natural" one, since both university institutions had a long history of interest and work in community-based change before they began their collaboration in the late 1980s. Some of the universities' joint interest has focussed on **action research**¹, a participatory methodology which is particularly effective in community-based work. Another, related area of common interest is **programme implementation**, which was the theme of one of the joint workshops held at ITB in 1991^{2 3}.

The idea of producing this volume first arose while Professor Hasan Poerbo, founding Director of PPLH-ITB, was a Visiting Professor at FES, York University during 1991- 1992. He and Professor William Found collaborated on the planning of a workshop focussing on plan implementation, held at ITB during May 12-14, 1993, a workshop

¹ W. Found and H. Poerbo, Action Research in Environmental Management: Case Studies from Indonesia, Research Paper No. 32, University Consortium on the Environment, Bandung and Toronto, 1992.

² R. Amir, F. Carden, and W. Found (eds.), Program and Policy Implementation: Proceedings of a Workshop at the Bandung Institute of Technology, November, 1991, Research Paper No. 42, University Consortium on the Environment, Bandung and Toronto, 1992.

³ R. Amir, F. Carden, and W. Found (eds.), Program and Policy Implementation: Proceedings of a Workshop at the Bandung Institute of Technology, November, 1991, Research Paper No. 42, University Consortium on the Environment, Bandung and Toronto, 1992.

covering a range of planning initiatives in a variety of contexts. While the workshop was intended to focus on the interface between "top-down" and "bottom-up" planning within Indonesia, most of the discussion centred on the "bottom-up" or community-based projects which had achieved success. Subsequently, the decision was made to collect six of the most interesting of these community-based case studies for this book.

The first chapter of the book considers the general field of rural planning, and the place of the three "rural" cases studies within that field. Chapters 2 to 4 present the cases in detail. Similarly, chapter 5 provides an introduction to the "urban" case studies, which are detailed in chapters 6 to 8. Chapter 9 presents some general conclusions from all of the preceding analyses.

Production of this book represents the work of many people at both PPLH-ITB and FES-York. Particularly important at PPLH-ITB have been, Dr. Benny Chatib, the Director of the Centre, who has given his full support to the publication; Rionita (Nico) Amir-Indra, MDE, the UCE Project Manager based at PPLH-ITB who has been working on this publication since its inception; and Elly Hermaliah, Head Librarian at PPLH-ITB, who has worked as the Book Coordinator in Indonesia.

At FES-York, Janice Loudon has painstakingly prepared the final draft, and ensured that the text was camera-ready. Maggie Gibson and Sean Squires have assisted in a variety of ways, usually when unexpected problems had to be overcome. Grateful thanks are offered to all of the above.

KATA PENGANTAR (PREFACE)

Buku ini berisi tentang kegiatan pembangunan yang bertumpu pada masyarakat di Indonesia-- terutama pada kegiatan proyek-proyek pembangunan dimana dalam melaksanakan kegiatannya anggota masyarakat setempat dibantu oleh Pusat Penelitian Lingkungan Hidup - Institut Teknologi Bandung (PPLH-ITB) atau oleh Konsultan-konsultan pembangunan yang dikenal baik oleh lembaga tersebut. Thema yang umum ialah bahwa pembangunan yang efektif atau perubahan-perubahan yang didambakan oleh masyarakat pada lapisan bawah akan meningkat apabila anggota-anggota masyarakat itu sendiri turut bertanggung jawab dalam menentukan kebutuhan-kebutuhan setempat, merancang kegiatan-kegiatan yang tepat, melaksanakan kegiatan-kegiatan tersebut serta menilai keefektifan kegiatan mereka sendiri.

Enam studi kasus, tiga dari daerah pedesaan dan tiga dari perkotaan disampaikan untuk memberikan gambaran bagaimana prakarsa masyarakat serta lembaga-lembaga setempat berhasil memanfaatkan tenaga serta kreativitas penduduk dalam menghasilkan perubahan-perubahan yang berguna dan berkelanjutan. Studi-studi ini juga menggambarkan bagaimana kegiatan-kegiatan tersebut menolong membangun suatu rasa bermasyarakat, dimana masyarakat itu lebih mampu menghadapi tantangan-

tantangan dari perubahan dunia yang cepat ini.

Persiapan buku ini merupakan suatu hasil perkembangan kerjasama antara PPLH-ITB dengan Fakultas Studi Lingkungan dari Universitas York, Toronto, Canada; kerjasama yang dilaksanakan dalam suatu bentuk Konsorsium Universitas untuk Lingkungan Hidup yang dibiayai oleh Canadian International Development Agency.

Thema utama dalam kerjasama antar universitas ini ialah pembangunan masyarakat dengan perhatian khusus pada cara-cara dimana proyek-proyek yang bertumpu pada masyarakat ini dirancang dan dilaksanakan. Thema ini merupakan sesuatu yang sangat 'alamiah', sejak kedua perguruan tinggi ini mempunyai kepentingan perjalanan sejarah yang cukup panjang dalam kiprahnya melaksanakan kegiatan-kegiatan perubahan yang bertumpu pada masyarakat, jauh sebelum kedua lembaga ini memulai kerjasamanya pada akhir tahun-80 an. Beberapa kepentingan bersama dari kedua perguruan tinggi ini memusatkan perhatiannya dalam penelitian tindak (1), metodologi partisipatif yang khususnya efektif dalam kegiatan-kegiatan yang bertumpu pada masyarakat. Hal lain, yang berkaitan dengan kepentingan umum adalah pelaksanaan program kegiatan yang menjadi thema dari salah satu kerjasama workshop yang telah dilaksanakan di ITB pada tahun 1991 (2,3).

Gagasan yang timbul untuk menerbitkan volume pertama terjadi pada saat Professor Hasan Poerbo, Direktur pertama PPLH-ITB menjadi Guru besar tamu di FES, Universitas York, dari tahun 1991-92. Beliau bersama dengan professor William Found bekerja sama dalam merencanakan sebuah workshop yang bertitik berat pada pelaksanaan rencana, yang telah diselenggarakan di ITB pada bulan Mei, 12-14, 1993 yang berjudul 'Perencanaan Pembangunan di Indonesia: Menjembatani Jurang Pemisah diantara pelaksanaan Kegiatan-kegiatan Pusat dan Daerah'.

Sejumlah makalah yang diminta telah disajikan selama workshop tersebut, meliputi suatu rangkaian prakarsa-prakarsa perencanaan dalam berbagai konteks yang berbeda. Sementara workshop ini memfokuskan diri pada batas antara perencanaan 'top-down' dan 'bottom-up' yang terjadi di Indonesia, sebagian besar diskusi berpusat pada perencanaan 'bottom-up' atau proyek-proyek yang bertumpu pada masyarakat yang telah berhasil dengan baik. Kemudian, diputuskan untuk mengumpulkan 6 (enam) buah studi kasus yang menarik mengenai kegiatan penelitian yang bertumpu pada masyarakat tersebut untuk diterbitkan dalam buku ini.

Bagian pertama dari buku ini menggambarkan kegiatan studi lapangan yang bersifat umum dari suatu perencanaan di pedesaan, dan tempat dari tiga studi kasus 'desa' dalam kegiatan lapangan. Bagian ke dua sampai ke empat menampilkan kasus-kasus tadi secara terperinci. Serupa juga, pada bagian ke lima berisi pengenalan terhadap studi-studi kasus di perkotaan, dimana perinciannya ada dalam Bab 6 (enam) sampai 8 (delapan). Bab ke-9 (sembilan) menyajikan beberapa pandangan umum dari keseluruhan analisa yang ditampilkan.

Usaha penerbitan buku ini ditunjang oleh beberapa orang baik dari PPLH-ITB maupun FES-York, khususnya dari PPLH-ITB adalah Dr. Benny Chatib sebagai ketua PPLH-ITB, beliau telah sepenuhnya menunjang usaha penerbitan buku ini; Rionita (Nico) A-Indra, MDE, sebagai 'UCE-Project Manager' di lembaga ini yang telah banyak terlibat dalam buku ini sejak dimulainya workshop dan Elly Hermaliah sebagai Koordinator dalam proses penyuntingan dan penerbitan buku ini.

Sedang di Universitas York, Janice Loudon telah berupaya menyiapkan draft akhir dan memastikan bahwa keseluruhan naskah siap untuk diterbitkan. Maggie Gibson dan Sean Squires telah membantu dalam banyak hal, biasanya apabila ada masalah-masalah yang harus segera diselesaikan. Ucapan terima kasih yang setinggi-tingginya disampaikan kepada mereka yang tersebut diatas.

CHAPTER 1

THE FIELD OF RURAL PLANNING, AND ITS RELATION TO THE CIAMIS, JASINGA-LEUWILANG, AND RAWA SRAGI CASE STUDIES

by William Found

Abstract

The case studies presented in chapters 2, 3, and 4 bear an important relation to the general field of rural planning, as they illustrate the importance of involving local villagers in the design and implementation of development projects. While the studies are quite different in context, style, and achievements, together they represent an important contribution to the understanding of how rural planning can be undertaken to benefit local people and to reflect their specific needs and capabilities. The three projects are by no means uniform in their degree of success; but they contain enough successes and experiences to provide a number of lessons for rural development, both in Indonesia and in wider contexts. In particular, they illustrate the importance of participatory action research, personal relations within projects, and the need to build local institutions in order to improve the chances of long-term sustainability.

Abstrak

Studi kasus yang terdapat pada bab 2,3 dan 4 merupakan suatu kaitan penting dalam kegiatan-kegiatan lapangan dari suatu perencanaan desa, seperti digambarkan betapa pentingnya keterlibatan penduduk desa setempat dalam merancang dan melaksanakan proyek-peroyek pembangunan. Walaupun penelitian-penelitian ini agak berbeda dalam konteks, ciri dan pencapaian hasil akhirnya, namun bersama-sama mereka menampilkan suatu sumbangsih yang berarti untuk suatu pemahaman bagaimana perencanaan desa dapat dilakukan demi keuntungan masyarakat setempat dan juga mencerminkan kemampuan serta kebutuhan-kebutuhan mereka secara khusus. Ke-tiga proyek ini tidak menjalani hal yang sama dalam mencapai keberhasilannya, akan tetapi mereka berisikan pengalaman-pengalaman serta keberhasilan-keberhasilan yang cukup guna melengkapi sejumlah pelajaran yang ada untuk membangun pedesaan, baik di Indonesia dan juga dalam kaitannya yang lebih luas lagi. Secara khusus, hal ini menggambarkan betapa pentingnya penelitian tindak partisipatif, kaitan-kaitan yang bersifat pribadi dalam kegiatan proyek pembangunan serta kebutuhan membangun lembaga-lembaga setempat atau daerah dalam usahanya untuk memperbaiki perubahan-perubahan yang berkelanjutan dalam jangka panjang.

A HISTORY OF RURAL PLANNING

"Rural Planning" can be defined as "a conscious effort to attain particular objectives in non-urban areas". As a formal process identified as "rural planning", its beginnings date to the early twentieth century. Since then, rural planning has progressed through a number of important changes. Significant differences exist between the "highly industrialized" and the "developing worlds". In the former, rural planning efforts have tended to concentrate on the protection of agricultural land from urbanization, the

preservation of countryside landscapes, the "orderly" conversion of agricultural land to urbanized forms surrounding cities, the preservation of land for parks and wilderness areas, and the conservation of forests and wetland regions. The underlying purposes of such planning are partly economic, as in the provision of orderly, efficient forms of urban settlement around the edges of cities, or the careful management of forests in order to maximize long-term levels of production. The purposes are also aesthetic, as in the case of efforts to preserve historic countrysides. The objectives of rural planning in developing countries have tended to be rather different, concentrating on the need to improve food production, to redistribute land among the rural population, to prevent excessive soil erosion or flooding within watersheds, and to provide basic services (e.g. all-weather roads, domestic water, or electricity).

BASIC STYLES OF PLANNING

The basic approaches to formalized planning have changed markedly throughout the twentieth century¹. In its earliest forms, rural planning was characterized by its highly mechanical, authoritative, top-down characteristics. Experts working in centralized offices determined the objectives, programmes, and projects to be undertaken, as well as the time periods within which planning would occur. Plans, usually composed of statements of objectives, lists of programmes or projects, maps of zoned land use, and financial allocations, were "cast in stone", appearing as "blueprints" for action. Deviations from the original plans were not permitted, and failures (which were almost inevitable) were attributed to poor plan execution. After numerous failures, planners began to recognize their inability to plan very far ahead with accuracy, partly because of insufficient data and analysis, and partly because the broad context within which they were planning was usually somewhat unpredictable (e.g. the prices for agricultural products could rarely be predicted ahead of time). This led planners to accept the notion of monitoring the progress of planned activities at regular intervals (e.g. every year), as well as the practice of altering plans or targets in order to better reach overall objectives. These "mid-course corrections" gave rural planning a more dynamic characteristic, and much greater chances for success. More recently, the "blue-print" approach has been modified to make planning more "adaptive" or "evolutionary", with sufficient flexibility to adjust quickly to changing circumstances.

An early practice of rural planning was to divide the area to be planned for into different geographical units or regions. Such "regional planning" recognized that areas with different characteristics (e.g. natural resources) might require quite different plans in order to achieve specific objectives. Initially, planning for the subdivided regions was undertaken by central authorities, but gradually the practice of allowing officials within the different regions (e.g. provinces) to create their own plans became more common. While

¹ Benveniste, G., "Six Theories of Planning: Myths and Realities", in Mastering the Politics of Planning, Jossey-Bass, San Francisco, 1989, pp. 56-86.

overall planning still required some direction and co-ordination from the centre (e.g. a national government), it was recognized that better planning decisions might be made if those closest to the region were able to formulate some of their own programmes and projects.

The latest forms of decentralized planning have not only allocated decision-making power to local experts, but have also provided mechanisms through which local beneficiaries (individuals and organizations) can help to formulate, implement, and evaluate local plans. These forms of "participatory planning" will be discussed in greater detail below.

Within developing countries one of the earliest forms of rural planning was land reform (e.g. in Mexico very early in the century). Through land-reform programmes agricultural property was made available to those who traditionally owned very little or had no resources for earning a living. Land reform programmes have much political appeal, as they present a relatively easy way for a government to encourage food production, while at the same time providing a high degree of satisfaction among the landless rural population. Early forms of land reform were often problematic because the redistributed properties were too small to provide the basis for a decent living - a reflection of the fact that governments could maximize their short-term appeal by dividing property among the largest possible number of recipients - another significant problem related to the lack of rural infrastructure. Often, in an effort to maximize political gains, governments concentrated on redistributing land, while not making the investments in rural roads, water supplies, community services, etc., which would be necessary in order to support viable rural settlement and agricultural production.

In an effort to overcome this problem, rural planning in the 1950s began to emphasize agrarian reform, a kind of planning which involved not only land reform, but also the simultaneous provision of the services, education, etc. that were necessary to support viable agricultural communities. Many rural-development programmes today could be called "agrarian reform", although the term is no longer used to much extent.

Beginning in the 1960s a new form of rural planning, "integrated rural development" (IRD), came into fashion². IRD projects, many of which continue today, were partly an outgrowth of agrarian reform, in that they involved an integrated consideration of land redistribution and the provision of rural infrastructure. They were considerably more comprehensive, however, in that they also involved non-agricultural activities (e.g. rural industrialization), reflecting the belief that economic and social problems in rural areas ought not be restricted to just improving the means of traditional forms of rural production.

² Conyers, D., P. Mosley, and D.M. Warren (eds.), "Integrated Rural Development: Lessons of Experience", Special Issue of Manchester Papers on Development, Institute for Development, Policy, and Management, Manchester, January, 1988.

IRD programmes came to include a range of activities, including green-revolution agriculture, conservation projects designed to achieve sustainable development, agro-forestry, eco-tourism, and rural industrialization. At the same time, IRD programmes came to involve a degree of local participation in project planning and implementation.

RECENT DEVELOPMENTS IN RURAL PLANNING

While some recent developments in rural planning are of a technical nature (e.g. the computer use of Geographic Information Systems, and the use of satellite data for analyzing land use and capability), other developments have related to the "human" and "organizational" aspects of development. Developments in the technical aspects of planning have been rapid and impressive, while changes in the human processes associated with rural planning have been somewhat more controversial. Integrated rural development and decentralization have seen their successes, but have also received criticism from those who believe that the human resources and coordinating mechanisms required for success have been in short supply³. Decentralized planning has failed, in some cases, to deliver the expected results for a variety of reasons, including the lack of trained personnel within local planning offices. IRD projects, while impressive in design, have sometimes become so large and comprehensive that they have been difficult to operationalize and put into effective practice.

Much recent attention has been paid to "participatory" forms of development planning, where local beneficiaries have been involved in the identification of local needs, the design of appropriate projects, the implementation of project activities, and the evaluation and modification of programmes. "Action research"⁴, rapid rural appraisal, and participatory rural appraisal⁵ are three of the more important methods used in facilitating the interaction of local beneficiaries and professional planners in the creation of rural "plans". Many see great advantages to these forms of rural planning, in part because they can help to "empower" local communities to take responsibility for themselves. Programmes or changes developed at the grass roots level are seen as "authentic", and capable of sustainability within the care of local community members. Critics, some of whom tend to subscribe to a "top-down", authoritative model of rural planning, feel

³ Rondinelli, D.A., J. S. McCullough, and R.W. Johnson, "Analyzing Decentralization Policies in Developing Countries: A Political-Economy Framework", Development and Change, Vol. 20, 1989, pp. 57-87.

⁴ Morley, D., "Resource Analysis as Action Research", in P. Wilkinson and W. Found (eds.), Resource Analysis Research in Developing Countries: The Experience of Ontario Geographers, Faculty of Environmental Studies, York University, Toronto, 1990, pp. 1-16.

⁵ R. Chambers, "The Origins and Practice of Participatory Rural Appraisal", World Development, Vol. 22, No. 7, 1994, pp. 953-969.

unsatisfied with the time taken to involve local communities in planning, and with the uncertainty of planning results. They tend to see local empowerment as the abdication of planning responsibility to people without proper training or professional motivation.

A related development in rural planning has been a concern for local institution-building. Often a necessary condition for locally-produced plans to thrive is the creation of sustainable local institutions which can carry on planning activities after the initial planning period is over. Examples include local credit unions, farmers' co-operatives, or other forms of community organization. Some have emphasized the need for local "capacity-building", which includes both the creation of institutions and the training of people to carry out tasks related to planning.

RELATION TO THE CIAMIS JASINGA - LEUWILANG, AND RAWA SRAGI CASE STUDIES

The case studies presented in the next three chapters reflect rather well recent developments in rural planning. The Ciamis study concerns a rural community where consultants from a university (PPLH-ITB) worked with local experts and with community members in order to determine local needs, appropriate project activities, and forms of project implementation. Special forms of action research were used to facilitate the participation of local beneficiaries. The study also demonstrates how successes were shared with surrounding communities, and how change occurred both "horizontally" and "vertically" throughout the local community and through various institutions. It is a remarkable study of a remarkable community, empowered to take responsibility for its own future.

The Jasinga-Leuwiliang study concerns an early stage of rural planning in a community where the results are still to be determined. A methodology somewhat similar to the first case study was used, but local circumstances have required much modification of the original plans. The importance of personal relations and behaviours is demonstrated in this micro-study of initial planning, actions, failures, and successes.

In contrast, the Rawa Sragi case study concerns a very large, well organized project, undertaken by the Indonesian Government in association with local officials and an international consulting company. While the project contains "top-down" features, it also involves the development of local institutions, and the active participation by a local population receiving the benefits of a land-reform property redistribution. This case study demonstrates a variety of rural-planning types, from the traditional to the very modern.

CHAPTER 2

THE DEVELOPMENT OF CRITICAL UPLANDS IN CIAMIS: FROM LOCAL DEVELOPMENT TO THE MANAGEMENT OF WATERSHEDS

by Hasan Poerbo and Gatoet Poerwady

Abstract

This chapter explores approaches to environmental management in the uplands of North Ciamis, West Java, where PAR was employed in the village of Sagalaherang and the hamlet of Cigaru from 1980 - 1984. A Human Action Model was developed by the project planners in which local values and norms defined the project's objectives, rather than the goals and objectives being prescribed from outside. Cigaru has become a kind of Mecca for surrounding communities to learn about integrated rural development, watershed management, terracing and integrated farming. The paper describes how the Cigaru experience has been disseminated to nearby locations through a process of social learning. Finally, the paper argues that the government should increasingly limit its role to that of enabling community-based development.

Abstrak

Bab ini menjelaki pendekatan-pendekatan pengelolaan lingkungan di suatu daerah pegunungan di Ciamis Utara, Jawa Barat, dimana PAR dilaksanakan di desa Sagalaherang dan di sebuah desa kecil, bernama Cigaru dari tahun 1980-1984. Sebuah Model Tindak Manusia dikembangkan oleh para perencana proyek dimana nilai-nilai dan norma-norma setempat mendefinisikan tujuan-tujuan proyek, lebih dari pada hanya sekedar hasil akhir serta tujuan-tujuan yang diterangkan dari sisi lain. Cigaru telah menjadi semacam Mekah bagi desa-desa disekelilingnya guna mempelajari masalah pengembangan desa terpadu, pengelolaan daerah aliran sungai, terasering dan pertanian terpadu. Makalah ini menerangkan bagaimana pengalaman di Cigaru menyebar ke lain tempat yang berdekatan dengannya melalui sebuah proses belajar sosial. Makalah ini menyimpulkan bahwa sebaiknya pemerintah mengurangi keterlibatannya dalam proses pembangunan di daerah guna memungkinkan tumbuhnya pembangunan yang bertumpu pada masyarakat itu sendiri.

INTRODUCTION

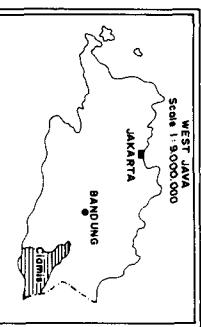
This chapter explores approaches to environmental management in the uplands of North Ciamis, West Java, Indonesia (see *Project Location Map* on page 8). In this area Participatory Action Research (PAR) was employed, involving the contribution of whole communities and with some interesting results. This chapter explores how PAR was carried out, identifies the problems encountered and reflects on the lessons which were learned. It is hoped that this analysis contributes both substantively and methodologically to the field of environmental management.

PROJECT LOCATION MAP

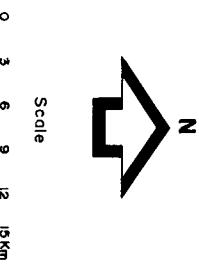
MAJALENGKA REGENCY

KUNINGAN REGENCY

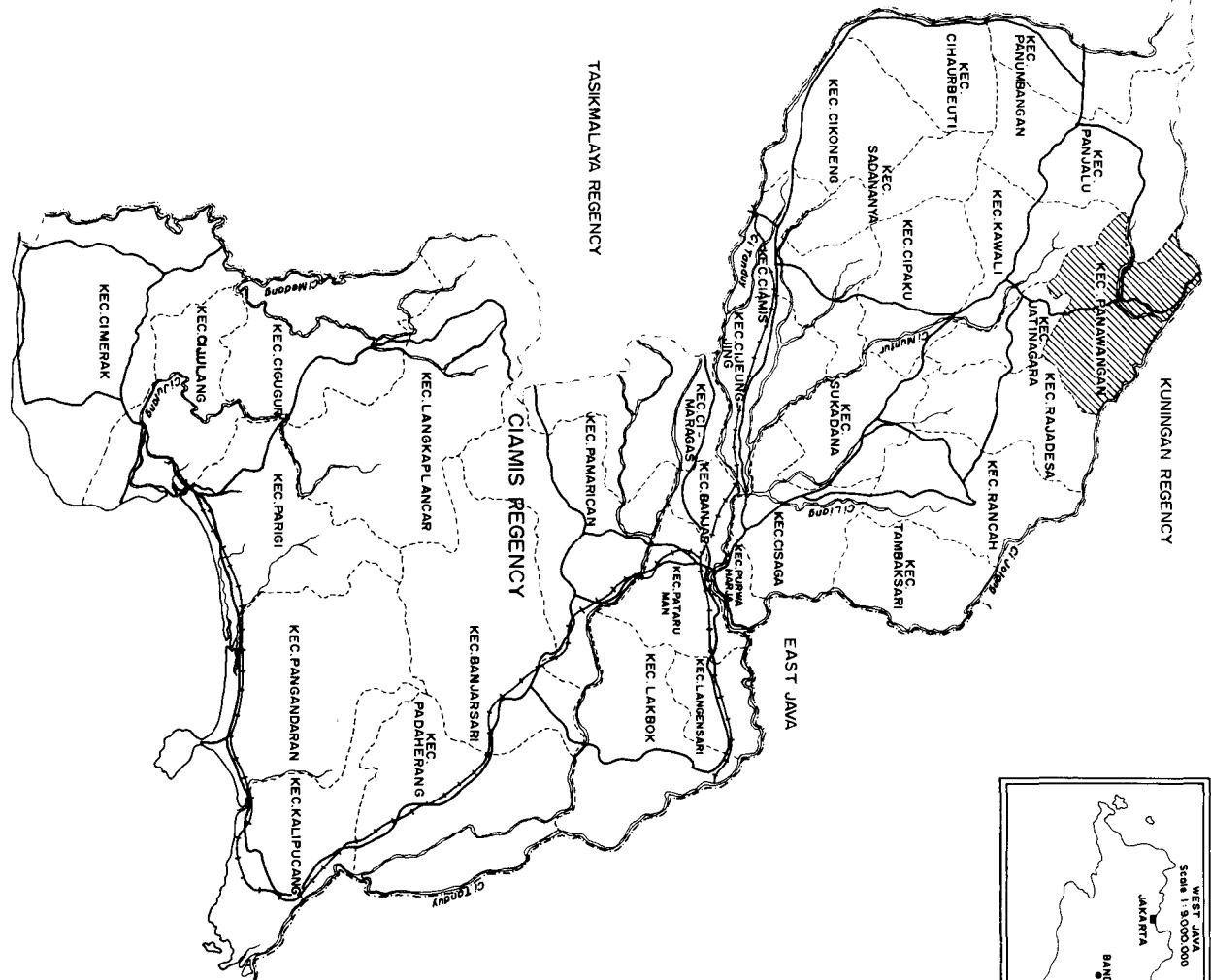
WEST JAVA
Scale 1:1000000



- LEGEND:**
- Roads
 - Rail road
 - - - Provincial boundary
 - - - Kabupaten boundary
 - - - Kecamatan boundary
 - ▨ Project location



INDONESIA OCEAN



To present the Ciamis Project, the chapter is sub-divided into four sections three of which reflect the chronological phases of the project: 1980-1982; 1982-1989; 1990-1994; while Part 4 draws some relevant conclusions.

1. Phase I: (1980-1982) Background and Early Development.

Evolution of the project from conception to its operationalization in Cigaru.

2. Phase II: (1982-1989) "The Cigaru Model" and its Dissemination in the Citanduy Watershed.

This phase was marked by diversification of the project both horizontally and vertically. Funding and the dynamics of concerned organizations and management are described. The establishment of YBLH in this phase and the problems of self-governance were key parts of this period.

3. Phase III: (1990-1994) Ciamis Revisited and Transfer of the Cigaru Model to Other Locations.

Some reflections on the experience of Ciamis are offered and its transfer to other locations is described.

4. Conclusion and Some Reflections.

BACKGROUND OF PPLH - ITB INVOLVEMENT

When the Centre for Environmental Research at the Institute of Technology Bandung (PPLH-ITB) was established at the end of 1979, PPLH-ITB initially focused on four key fields of study:

1. Urban Settlements
2. Rural Settlements
3. Industrial Settlements
4. Transmigration

"Settlements" are understood as any built environments, including rice fields, dry agricultural fields, agro-forests, and any other areas cultivated or changed by the presence of people. This paper looks principally at the management of rural settlements in Ciamis.

Each field of study at PPLH-ITB was assigned its own Task Force, which was

managed by ITB research staff with support from various cooperating organizations including the government, NGOs, and other universities. Each Task Force had a fairly wide latitude and much individual autonomy in conceptualizing its tasks, cooperating with concerned parties, designing its own research methodologies, and in implementing its programmes. In the beginning, PPLH-ITB was fortunate enough to have the financial support of the Ministry of the Environment so that it could, to a certain extent, have the freedom to formulate its own research programmes and choose its own research methodology.

The Task Force on Rural Settlements had a small group studying Watershed Management, also known as the Task Force on Critical Lands. The project required support not only from ITB, but also from the local government, other research institutions and NGOs. The Ciamis project employed a research methodology which was quite new in Indonesia at the time, Participatory Action Research (PAR). In order to implement PAR in this area, a diverse group of people were drawn together who were fascinated with new ideas and methods, and had the courage to carry out what they envisaged. Their chief motivation was clearly not monetary, since PPLH-ITB was notorious for under-paying its employees, it was instead the opportunity to experiment and work creatively with communities.

PHASE I: (1980-1982) BACKGROUND AND EARLY DEVELOPMENT

The Mission Statement of the Ciamis Project, and Looking for a Location

The Rural Settlements Task Force was established in 1980 with the mandate to explore the management of watershed areas. The stated mission of the Task Force formulated in the early 1980s was: "to study the management of watersheds in order to identify problems pertaining to soil and water conservation, as an entry point for more comprehensive approaches."

To initiate the project, Purwo Arbiyanto, a microbiologist by training, conducted a preliminary visit to the Serayu River Valley, going from the city of Wonosobo down to the Segara Anakan estuary. In the subsequent review, it became apparent that the mission had not fully grasped the concept of watershed management or how it was related to environmental management. In light of this fact, a second mission was soon organized.

The second mission took the team to the Ciamis Planning Board (BAPPEDA). Rachlan, the Head of BAPPEDA, who was an English teacher and a self-taught regional and development planner, enthusiastically welcomed the team. He was facing problems with the management of the Citanduy I Project, a USAID-funded demonstration project in which he was implementing an integrated water and soil conservation strategy.

Rachlan challenged PPLH-ITB to develop a more effective and economical method for terracing and integrated farming as an alternative to the Citanduy I Project

demonstration plot at Panawangan. He suggested two possible locations for participatory or action-oriented research: the village of Sagalaherang and a small hamlet called Cigaru. Sagalaherang was a newly formed village with a population of 4,000, which was endowed with rich agricultural land, part of which produced cloves. Some parts of the village consisted of poor hamlets in the uplands which had soil erosion and depletion problems. In contrast, Cigaru in North Ciamis had a population of 700 and was a poor community with a reputation for being "backward."

Thus, PPLH-ITB was faced with the challenge of developing an environmental management plan in an entire watershed area, as well as providing an operational alternative to what had been developed in the Panawangan demonstration plot as a result of the Citanduy I Project. PPLH-ITB thus began an ambitious adventure in search of answers to the environmental management challenges of the area.

Starting without Assets

PPLH-ITB was now faced with a very difficult situation. It had no experience in this area of study, no theoretical background, insufficient funds, and no permanent senior staff to provide guidance and leadership to the project. The odds against the Task Force seemed insurmountable in this early phase of the project.

The first step was to collect information on watershed management, and more specifically, on the issues pertaining to the Citanduy I Project and the Panawangan demonstration plot. The participation of Arbiyanto, with his strong background in rural development, Rachlan, as Head of BAPPEDA and as adviser in the development of the Panawangan demonstration plot, and of Ading, an Indonesian language teacher and a former Chair of the Ciamis district level parliament, all played a central role in giving initial direction and focus to the study. The group was later joined by Herbagiandono, a biologist working with the Centre for Horticultural Research in Lembang, who is also a strong supporter of ecological ideals and a creative innovator in grassroots community-based initiatives.

The highly centralized management system used in the Citanduy I Project soon came under close scrutiny. There had been a tendency to centralize planning and implementation of government programmes and projects, which tended to create a myriad of problems related to effective coordination between levels. This coordination is especially problematic in highly complex multi-sectoral projects, such as watershed management. There had been a propensity to over-simplify project management into a "top-down" deterministic-mechanistic model. The role of communities had rarely been given much attention in either the planning or implementation stages. For example, in the case of Ciamis, it was assumed that the demonstration plots would motivate farmers through demonstration courses and subsidies to transfer the learned expertise and technologies to their own fields. Rachlan cautioned the Task Force that this process had been an expensive one in Panawangan, and that a more feasible alternative was needed.

The second step was to ask permission from the relevant authorities to carry out experiments in terracing and integrated farming as an approach to upland watershed conservation. This started a chain of formal events, ending with a meeting in Ciamis attended by various dignitaries representing organizations involved in the execution of the project. The people involved included: the Ministry of the Environment, which was represented by the Assistant Minister on Human Settlement Affairs; the Rector of ITB; the Governor, who was represented by his Vice Governor; the Bupati, who was present with all of his staff; the Central Government Agencies in Ciamis, who were all present with their staff; and finally, the Director and staff of PPLH-ITB. After listening to various speeches and explanations about the purpose of the project (called the Integrated Upland Development Project), a motorcade was organized to visit one of the project sites, Sagalaherang.

The village of Sagalaherang was eagerly awaiting the start of the project, which promised them progress and improvements in both their surrounding environment and their everyday lives. There were high expectations based on the experience of AID-funded initiatives nearby, and little realization that this project was to be a community inspired venture with little external capital investment. If PPLH-ITB had "assets" to speak of, it was in the form of a moral commitment to implement their promises. Ading, who by nature is a straightforward realist, wanted PPLH to adopt an honest stance with the community. He suggested that they return to visit the local leader and communities after the official ceremonies to explain that PPLH had no funds but wanted to provide them with information about the implementation of a programme for environmental improvement in the adjacent uplands. Unfortunately, the effect of this honest strategy was like pouring cold water on a pot of burning hopes.

After this time, daily debates raged at PPLH about how to best operationalize "development from below" and "participatory approaches to development." These approaches were regarded as promising alternatives to top-down styles of development. Soedjatmoko, an influential author and former Indonesian Ambassador to the U.S., had begun to creatively point out that "social energy [must be regarded] as a development resource." Various theories and cases were studied, reviewed, and discussed as possible courses of action to take in the field. Talks were organized through various community groups, such as, the Koran Reading Group, the Women's Group, the Youth Group, and the Neighbourhood Groups to generate community support for the idea. Regrettably, people remained disenchanted with the notion of community inspired development.

Of all the theories and case studies which were discussed at this time, perhaps the most promising was Erich Jantsch's "Rational Human Action Model." This approach was popularized by Rachlan amongst the Local Government staff as the "Human Action Model." In a very simplified form, the characteristics of the Human Action Model can be compared to the conventional (mechanistic) decision-making process. The two approaches show a number of fundamental differences. In the Human Action Model, local values and norms define the project's objectives, goals and purpose, while in the

Mechanistic Model, goals and objectives are given from the outside. The PPLH position was that "top-down" development, inspired by mechanistic models, tends to create dependency on the project holders or managers. One alternative to this dependency, they argued, is offered by the Human Action Model. The characteristics of each model are represented in Figure 1.

Figure 1: Mechanistic Model vs. Human Action Model

MECHANISTIC MODEL	HUMAN ACTION MODEL
-Goals given from outside	-Select internal/local values, set objectives, define goals
-Designed to solve specific class of problems	-Seek common norms, define collective purpose
-Internal organization	-Higher order organization in which structure is designed independent of purpose
-Controlled by external policy	-Self-regulating and self-adaptive
-Programmed actions are directed toward a given outcome	-Regulation of steady state dynamics through change and governance of metasystem's self-adaptive and self-regulatory tendencies, through policy formation

Ozbekhan, as quoted by Erich Jantsch (1972) in: Technological Change and Social Futures.

What is most significant in the Human Action Model is that the values and norms of the communities involved in the actual development process determine the direction of future actions. The institutions guiding these actions are created according to the objectives which they have to fulfil. Clearly, in this scenario, future actions based solely on the premises and rationale of external planners, may very well be rejected by the communities involved in the development process.

For example, in the case of the Citanduy River Project, terracing and integrated farming were introduced with the objectives of conserving soil and water and lessening siltation and flooding downstream. It was assumed that this strategy for environmental

management would result in higher incomes for farmers. While this approach may be quite sensible in terms of the planner's premises, values, norms, and assumptions, it may however be quite unacceptable and even absurd to the farmers who have other priorities for their survival. Their priorities may include things like choosing affordable, low maintenance, quick yielding plants, since most farmers are absent from their fields for part of the year in search of income earning opportunities to support and feed their families at home. In the context of their lives and requirements, downstream flooding is not a primary concern. And so, terracing and integrated farming techniques are quite unaffordable to them and clearly not a priority.

Thus, in conventional planning, strategies to implement soil and water conservation policies are ordinarily carried out through efforts to "internalize external objectives." This is most often realized through the training of local cadres, the establishment of demonstration plots, creating incentives and disincentives for participation, and providing management and technical services to those who need them. However, there are strong indications that this kind of approach can quickly degenerate and become rather manipulative. This sort of strategy is known amongst PPLH researchers as "social engineering" in which farmers become a "target population" who are the object of development, and are manipulated or "engineered" to achieve set targets.

In most academic debates, existing methods were called "top-down." A more effective approach is one in which farmers come to understand why there is a process of environmental degradation in the uplands, how it can be overcome; and they become motivated to organize their own terracing and integrated farming. Thus, according to Erich Jantsch's model, the problem becomes how to develop values and norms amongst farmers so that they understand that erosion and floods will endanger their individual future. Then they will recognize that it is their responsibility to prevent degradation, and that terracing and integrated farming are answers to the environmental degradation which threatens their individual and collective livelihoods. But the farmers' attitudes were entrenched in the mind-set that they were marginalized and had to fight for their survival. Their concerns were focused on narrow and short-term outlooks. The issue was how to build a broad and long-term interest in terracing and integrated farming, as a strategy which would make sense as a way to improve their community. Six months after the formal launching of the project, both the researchers and the communities involved were still struggling to understand the issues at hand. This created a great deal of frustration after such initially high expectations.

In the meantime, a self-survey was organized with the community in Cigaru. This gave a more detailed picture of the hamlet and its socio-economic structure. Based on this information, a Strategic Development Plan was formulated by Rachlan, a plan which was formulated in a "top-down" fashion. However, the plan was very useful as a framework for discussing the project and as a way for research staff to more closely involve themselves with the community. Nevertheless, in spite of all the ideas, plans and experiences of the demonstration plot in Panawangan, the PPLH project showed little real

progress, except for intermittent visits to groups in Cigaru and Sagalaherang. These groups were becoming increasingly frustrated because "only talk comes, but [with] no money."

Early Breakthroughs

After this period of initial frustration, two events occurred which later proved to be significant breakthroughs. The first one was the discovery of simulation cards, while the second was the visit of Dr. Peter Nas.

1. Simulation Cards

One day a group from PPLH-ITB visited the Centre for Non-Formal Education at Jayagiri, Lembang to discuss the possibility of renting facilities for a course on Environmental Impact Assessment. During the visit, the staff at the Centre talked about a simulation card game they used in non-formal education. The PPLH-ITB staff thought that the game might be applicable to their work in Ciamis.

The simulation cards consisted of problem cards and answer cards, with the answer cards being only partially correct in order to invite debate. The team brought an environmental sanitation card game based on this model to Ading, who then brought the cards to the Cigaru Mosque. One night after prayers, Ading gave a talk on the virtue of environmental sanitation in Islam and introduced the simulation card game to generate discussion. Ading acted as card dealer and moderator. They started the game at about 8:00 at night, and it was so popular that it was still going on six hours later, at 2:00 in the morning.

The next evening the debates continued, but this time without the game cards. Topics were skilfully suggested by Ading, so that discussions centred around problems faced by the village: roads and transportation (not yet a priority), micro-hydro (not a priority), and rehabilitation of irrigation systems (only 30% of the people have rice fields). After a long debate the group agreed on terracing and integrated farming as priorities, because most of the people were dry-land farmers. Thus, soil conservation and improvement of productivity were found to be important for their livelihood. So, as Herbagiandono rightly observed, the problem was not really how to make farmers concerned about erosion and control of water resources; rather it was to make "the eyes of the farmers green" with the ideas of terracing and integrated farming as a way of increasing their incomes.

Thus it came about that the community in the Cigaru mosque was challenged to look at ways to realize its goals. The challenges ahead included: how to establish a Local Terracing Group/LTG, and elect an effective leader for the LTG; how to train cadres who could then teach others the techniques for effective terracing and integrated farming, and; how to organize this work and pay for it.

A new set of challenges emerged from this one agreement, which in turn brought new discussions and new agreements from the Mosque into the field. Within this context, Ading and Herbagiandono became advisers in the field, enthusiastically assisted by two recent graduates from an agricultural high school. These graduates were assigned by Professor Sayogyo from the Agricultural Institute of Bogor (IPB). Sayogyo was very interested in the project and occasionally invited the researchers to have discussions in Bogor.

2. Dr. Peter Nas

The process by which the Mosque discussions developed into a model for terracing and integrated farming is illustrative of "participatory action research" (PAR) in action. Yet before the community knew about PAR, they were in fact engaging in participatory action research. PAR was later explained by Dr. Peter Nas of the Institute of Social Studies (ISS), the Netherlands. Dr. Nas was invited by PPLH to Bandung as a part of cooperation between PPLH and ISS in the Urban Informal Sector Project. At the time, the two Institutes were preparing to carry out "action research."

Dr. Nas' background in applied social sciences very quickly brought him into contact with the Ciamis research group because of his interest in the study and development of theories of praxis. This was exactly what was being done by the Ciamis research group. He generated interest in PPLH in the methodological and epistemological aspects of the Ciamis project, and introduced the concept of participatory action research or PAR. He introduced PAR as: "research with, through and about a group of people or a community involved as objects and subjects at the same time in the research." However, PAR was and still remains quite controversial amongst academics. At PPLH, PAR was viewed favourably as a way of obtaining clearer insights and a deeper understanding of development as a social process. This position was reflected by the experience of the Local Terracing Group (LTG), which eventually established horizontal and vertical expansions and became a small "local community based integrated upland development movement." At one time, the upland development area encompassed a total of 28 villages with 40 hamlets.

Local Terracing Groups (LTGs)

The process of establishing Local Terracing Groups (LTGs) was very instructive. The first step in the process was establishing an agreement between community members in an area to set up an LTG. In order to do so, somebody had to act as a catalyst; and in the Ciamis case this individual was Ading, together with his field staff.

The designated area had to be a natural hydrological area in the uplands, so that the contours could be developed as a continuous system. For Cigaru there were 8 LTGs with their own assigned areas (it was later agreed to reduce the number to increase efficiency). The Groups agreed to the following course of action: a) have Ading appoint

somebody from each Group to act as a leader; b) apply a system of "gotong royong" (working together for mutual benefit) to implement terracing on their land; c) send cadres for training on a 0.5 hectare piece of land borrowed for one season from one of the local villagers, (in payment this land was returned terraced), and; d) ask PPLH "to take the same risks" as a "partner" in the process by buying seeds and providing information. Thus it was decided that the cadres would have their training on the 0.5 hectares of borrowed land, beginning with contouring, terracing and integrated farming, and including planting and harvesting. As compensation, the cadres received a percentage of the seeds harvested while the balance was put in a "seed bank" established in each individual LTG. It was quickly apparent that many of the LTG leaders appointed by Ading were not meeting the expectations of the LTG members. They were subsequently replaced by others through a democratic process which involved all of the members of the group.

The second step in the process was to organize a visit to the Panawangan demonstration plot to learn how to construct productive terraces and drop-structures. Technically, a great deal was learned about how to correct and improve work based on the Panawangan experiences. The visit also showed basic weaknesses in the organization of activities. The "gotong-royong" system practiced by the LTGs in fact created the opportunity for some members to become parasites, letting others work without having to do too much themselves. After much discussion, a decision was reached to do the "contouring" together, so that the drawing of contours for an entire watershed area would be well coordinated amongst the various farm holdings. Meanwhile, terracing and any further activities would remain the responsibility of individual farmers on their own property. This approach invited friendly competition between neighbours. And so, the model for terracing and integrated farming developed in Cigaru quickly spread to neighbouring locations.

The process described above can be categorized as "experimental research" in the field of organization and management, in the sense that in every cycle a change was introduced into one of the variables which would be tested. Through this process, inhibiting factors or constraints are removed and replaced with new elements which can have a more positive effect. In this case, the experiments were done in a very limited time, and took place during a single season. In 4 months the LTGs were able to terrace 22 hectares of land. Within one year, Cigaru was able to terrace nearly all of its upland areas. Thirty percent of the land remained un-terraced, because the land was owned by people from outside the hamlet. While PPLH was in the midst of preparing a plan to help the hamlet to approach these land owners to negotiate a deal whereby their land would be terraced, if the owners agreed to give PPLH compensation in kind, it turned out that the people from Cigaru had managed to make their own agreement with the external owners. By the following season, all dry land in Cigaru had been terraced.

In this phase, activities were not limited to Cigaru and included quite a number of activities similar to those in Sagalaherang. This village has a rather complex and stratified political structure. Sagalaherang is a village made up of hamlets and so direct

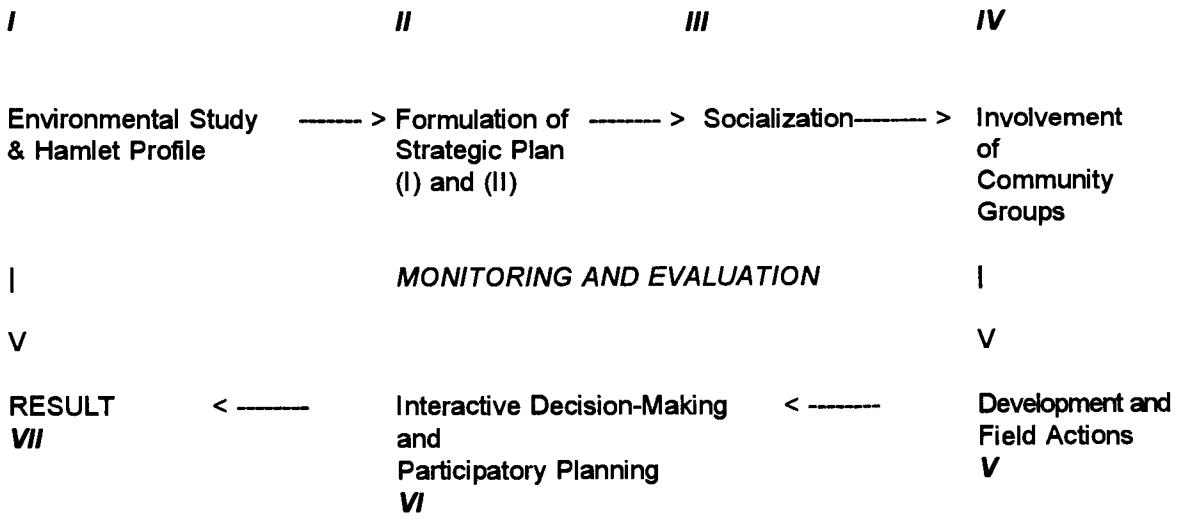
involvement by the various communities was not easy. PPLH had to make its entry through the village Head and develop the program at this level. The process became an exercise dominated by the "village elite," whose land was first selected as the designated plots for terracing and integrated farming, with PPLH subsidizing the cost of the various inputs. Not surprisingly, this created tensions with other groups in the hamlets which were claiming their right to a share in the project. Several months after activities began, Ading stopped his support of Sagalaherang, to avoid being drawn too deeply into local politics.¹

This phase ended with a rethinking of the development process. A review was held in Lembang where research staff were invited to have discussions and exchange views with field managers and resource persons. Two very important conclusions were drawn from the discussions:

1. an interactive process of decision-making should always be practiced between researchers (including field staff) and the communities, and;
2. a participatory planning process should be fostered, both between communities and researchers as well as amongst the communities themselves.

In conclusion, activities in the field can be conceived of as processes going through specific development cycles as outlined in Figure 2:

Figure 2: Phases of the Development Process



¹ It turned out later that people in Sagalaherang were able to sort out their differences, and were developing their own solution of local community-based soil and water conservation activities through political channels. This would make an interesting comparative study.

The above model is a general one which has to be adapted to local and culturally specific conditions and to dynamic situations as they are encountered in the field.

PHASE II: (1982-1989) THE CIGARU MODEL AND ITS DISSEMINATION IN THE CITANDUY WATERSHED

Diversification, Horizontal Dissemination and Vertical Expansion

After the LTGs were consolidated, many problems started to emerge in their management. Since many members resided in different neighbourhoods, it was deemed important to involve the Neighbourhood Associations (Rukun Warga or RTs) in the network for development purposes. Accordingly, Domicile Groups were established from each hamlet, which formed the communication links between the LTGs and PPLH-ITB and created a ready network for development initiatives.

With the establishment of these Domicile Groups, various development activities could be initiated at the community or hamlet level. These initiatives included: home improvements, better utilization of gardens, environmental sanitation, a cleaner water supply, improvement of roads within and between hamlets, cleaning of homes and the use of better stoves. At the height of these activities in Cigaru there were 22 different types of activities which were introduced, all of which were community-based and completely autonomous. The diversification of development activities continued and was further strengthened by community-based competitions held between hamlets to judge which hamlet had the most productive fields. This competitive spirit became ingrained in the culture of the Cigaru community. They became more self-confident and increasingly self-reliant while remaining helpful to each other.

The process of vertical development came about accidentally when one LTG needed to purchase an expensive sprayer, but could not afford to do so. The situation was discussed at the hamlet level. Under the leadership of one particularly effective leader, it was agreed that Cigaru would establish a Kelompok Usaha Bersama Ekonomi (KUBE), an Economic Cooperative Development Group. It was this KUBE which made it possible to mobilize enough savings amongst the LTGs to buy a sprayer which was then leased to each of the various LTGs. Thus it was that Cigaru developed a multi-level management system for development, in which the KUBE, with its need for a continuous discourse on development financing, made it necessary to have a forum at the hamlet level for integrated decision-making. The evolution of the KUBE is dealt with below.

By the end of 1982, Cigaru had received a lot of attention from the mass media. Several newspapers sent journalists to cover what was going on in the area. The Minister of the Environment paid a visit, and through him the President awarded Cigaru and Sagalaherang 350 sheep to be divided between the two villages. Sagalaherang, which received 100 of the sheep, divided the gift amongst individuals who were connected to the village elite. Here, the sheep became individual property. By contrast, in Cigaru the

KUBE organized meetings with the LTGs to discuss how to best utilize the gift from the President, so that it would contribute to environmental improvement while also increasing health and income equitably.

The community in Cigaru decided to establish what it called "Sheep Pen Groups," based on the Domicile Group network. The Sheep Pen Groups put their sheep in pens which the hamlets built for them, so that the sheep did not idly graze in the gardens or eat crops. This meant that the community needed people who were in charge of feeding and maintaining the sheep. This job was given to the women and children. Droppings from the sheep were collected to be mixed with compost from agro-waste for fertilizing the fields. Any lambs from the flock were to be divided equally amongst the group who tended the sheep and the KUBE. This process became part of the community's education in what Rachlan called "critical thinking." This resulted in interdependent and integrated development activities. It was also this attitude and way of thinking which enabled the communities in Cigaru to withstand the volcanic eruptions from Galunggung, which lasted for six months and covered the fields with ash. The Sheep Pen Groups had to seek fodder from villages as far away as Central Java. They brought back fodder by "oplet" (the village cab) and received a 50 per cent discount on their fare out of community solidarity.

At the beginning of 1983, innovative actions became more and more common in Cigaru. In economic terms, this is known as "diversification of activities", and it helps create interdependencies. There was an atmosphere of exhilaration and adventure in the communities. Even the introduction of a "rope pump" became a learning process which involved many people. The rope pump was the response of Yayasan Mandiri (a Bandung-based NGO which specializes in appropriate technology), to a plea from the communities in Cigaru who were having problems getting water from their wells. Water levels had dropped, in some areas reaching as low as 20 metres below the edge of the well. Yayasan Mandiri seemed to have an answer, but after six months of waiting they still had not come to the community. It turned out that they were waiting to get funds from a sponsoring agency to send a team to install the promised rope pump. Eventually they came to the community, where they were eagerly met by a crowd of people, including the Head of the hamlet. He became an avid student, learning how to build a rope pump. The pump was a great success and the Head of the hamlet improved the design, and together with interested people in Cigaru, started to produce rope pumps for sale. He was later able to export his products to other villages as far away as Majalengka some 50 kilometres away.

Horizontal Dissemination Outside of Cigaru

It was stories such as these which made Cigaru a kind of "Mecca" for surrounding communities to learn about integrated rural development, watershed management, terracing, and integrated farming. Newspapers sent journalists to cover the "Cigaru Story." Students and teachers from various universities came to learn about what was

happening. It was a stroke of good luck that the poorest and most backward village had been designated as a pilot project, so that the changes which Cigaru had undergone seemed all the more dramatic. Many villages were quite confident that: "....if Cigaru can do it, we can do it better."

Neighbouring communities usually sent a group to learn "how Cigaru did it." Usually, they were met in the cottage (saung) of the LTG, where guests could get all the information they needed and see the surrounding fields from the open saung, located on the top of a hill. At the end of the visit the guests were then given a fistful of seeds to try the technique for themselves, as a symbol of the transfer of experience from Cigaru.

It is instructive to follow how, for instance, the village of Karangpari, approximately 18 kilometres from Cigaru, transferred the experience of Cigaru to their own circumstances. This village was an isolated one, and was also identified as backward. People in Karangpari were very interested to learn about how Cigaru had developed. They appointed Endong, Head of a hamlet in Karangpari, to do a reconnaissance visit to Cigaru. He returned with some very interesting stories, and invited all the members of his hamlet and their families to organize a trip to Cigaru.

People from Karangpari applied the "Cigaru Model" of development to their own hamlet, with necessary adaptations, and it became a model for the whole village of Karangpari. To honour Endong's leadership, the hamlet named itself after him, Endongsari. The Village Council of Karangpari (LKMD) was quick to support the experience brought from Cigaru. Within one year the experience of Endongsari was already disseminated to all the other hamlets in Karangpari, including the establishment of KUBEs in every hamlet. They even added new elements such as hydrams (hydraulic rammed pumps) and micro-hydro electric power generators. In addition, a "logistical unit" was established which supplied the KUBE shops with a range of everyday products at a reduced cost which helped mitigate the cost of living.

Here, we observe a horizontal transfer of the experience from Cigaru to another village. In Cigaru, as the first generation of this kind of development, the involvement of PPLH was very intensive. Field visits by staff averaged once per week. Services to communities were given by Rachlan as a "strategic planning consultant." Meanwhile, Ading and two or three assistants played the role of facilitators, motivators, intermediaries, and technical advisors. Herbagiandono, along with the staff from PPLH-ITB, and other Centres were involved in supporting the field staff. PPLH-ITB staff were also assigned as monitors and evaluators.

Karangpari, as a second generation village, which had its knowledge transferred from Cigaru, received only a monthly visit from PPLH. Questions were directed to people from Cigaru. If the responses were incomplete or not satisfactory, only then were communities from Karangpari asked to consult Ading's Ciamis office. Third generation villages would consult second generation villages, and Cigaru as the first generation

village. PPLH's role through Ading's office was reduced even further. It was through this system that the "Cigaru model of development" was disseminated. Ading and his assistants estimated that the model had spread to about 29 villages, with 40 hamlets within 4 years after Cigaru's successful implementation in 1981. This was also achieved by the encouragement of the District Head of Ciamis, who in his field visits around his District and in meetings with his sub-district officers, promoted the Cigaru model.

The transfer of the so-called "Cigaru experience" from one village to another has not been well studied. Only one case study has been recorded in detail, and that was the case of Karangpuri. The cases of Sukadana, Margajaya, Mekarsari (the main village of Cigaru), Bojonggedang, and others, have only been observed by the field staff and have not been well recorded or critically analyzed. However, there is a general indication of an internal mechanism in rural areas which has considerable potential. The case of Endongsari is one case where the community brought development to themselves by sending its own representative to learn about how it was done elsewhere.

Alternately, experienced communities sent their own "experts" to assist other villages. For example, Odon from Cigaru at one time volunteered two days a week for this type of work. He received some compensation for his transportation (sometimes 15 kilometres from Cigaru), and was invited to stay with a host family. His host family gave him a small token of their appreciation when he left. But it was not this kind treatment which motivated people like Odon, Endong, and others, to do what they did for these communities. There is pride about what Cigaru has accomplished, but even more importantly, there is a moral imperative to give back to society, an imperative which is deeply grounded in religious ethics and community values.

What is perhaps most instructive is that the Ciamis Project uncovered a hidden potential in village communities (which remains relatively dormant) for development to be disseminated through a process of "social learning." At a seminar on rural development held by the Yayasan Mandiri in Bandung, Odon was invited to give a talk about his experience in Cigaru. It was a surprise to hear him talk professionally about why Cigaru needed soil and water conservation, why terracing and integrated farming was important, how terracing was done, including specifics about how to choose certain grass varieties (with their names in Latin and their characteristics), how to plant the grasses on the edge of the terraces, and what cropping patterns to choose. He spoke as if he was a distinguished professor giving a lecture, yet he was in reality a man of limited formal education whose learning had been carried out at a "university in the field."

Through this process of social learning, the Cigaru Model was disseminated to the hamlets and villages of North Ciamis, with specific adaptations made to local conditions and culture. In terms of terracing and integrated farming areas, it was estimated that the total area included some 3,000-4,000 hectares, starting from a mere 0.5 hectares in both Cigaru and Sagalaherang a mere three years before.

Project Organization

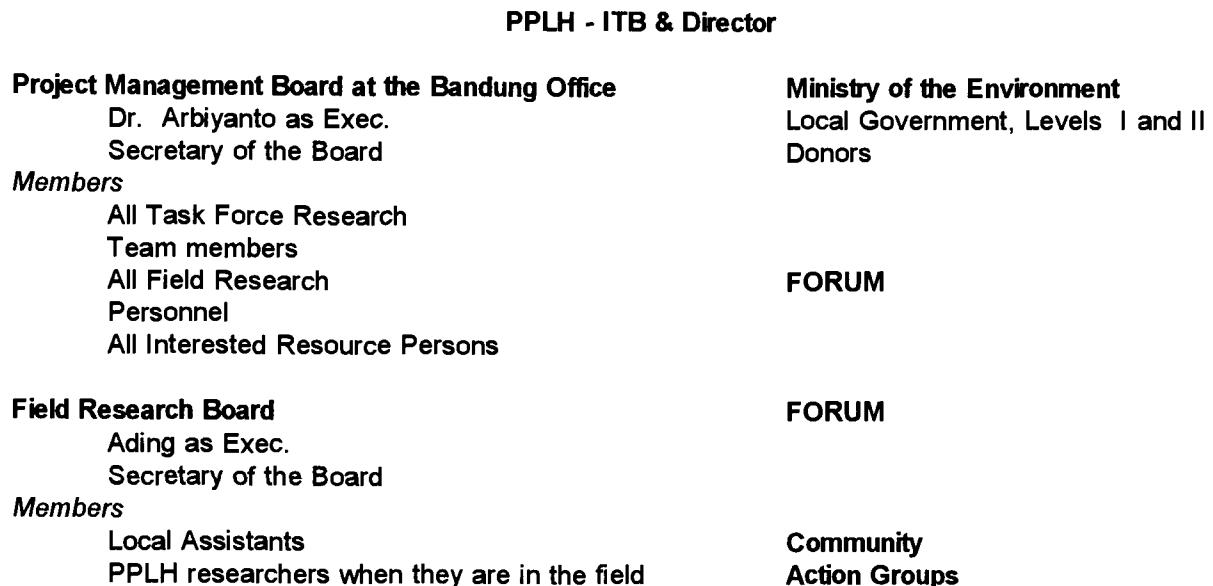
The Project was organized in a very flexible manner and adapted itself to the objectives, constraints, and opportunities which were encountered in implementation. Its structure was never formalized. In the end it evolved into a permanent Consultative Forum with a network for cooperation between the various groups and individuals involved. The project was decentralized in nature and was dependent on initiatives from the groups involved who remained bound together by a common purpose and understanding which deepened further through animated discussions and debates. The Director of PPLH acted as a catalyst and intermediary at the top level. At the lower levels, there was Dr. Arbiyanto as Executive Director, and Ading, as Field Director, both also functioning as catalysts and intermediaries in discussions at those levels.

This Project's form of organization was incompatible with the well-known concept of "management by objectives" which is inherently mechanistic-deterministic and manipulative in nature. Instead, it worked by "management by interest"² through a common understanding of issues and problems and the development of informal agreements amongst the concerned actors. This was the basis for an "action learning" process. At the time, however, the label "management by interest" and its affiliated paradigm were not yet known at PPLH-ITB. Knowledge of the paradigm came later with cooperation from the Faculty of Environmental Studies, York University, Canada in 1988. At this time, writings by Eric Trist, Michel Chevalier, and others, on the concepts of action learning, management by interest, and the concepts of "insider" and "outsider" in the development process enriched PPLH-ITB's knowledge of the process already underway.

In very simple form the organizational structure which evolved in the Ciamis Project is shown in Figure 3:

² Chevalier, Michel. 1968. Interest-Based Planning. Unpublished doctoral dissertation, University of Pennsylvania.

Figure 3: Organizational Structure of the Ciamis Project



Organizational Network in the Management of the Ciamis Project

Financing

Until 1984, the Ciamis Project was subsidized by the Ministry of the Environment. Financing was administered through the so-called DUP and DIP systems (Project Proposal Forms and Project Implementation Forms). In reality, there had to be administrative adjustments in order to be able to support the needs in the field which could not easily be forecasted. This situation demanded a concept of administration which ran contrary to existing practices, namely that the needs in the field determined the budget and not the other way around. The experience of the Ciamis Project clearly suggested that financing community-based projects should be based on a budgetary system with an open system of allocation, and that a post-audit based on a strategic plan drawn up by management was required. This maintains the possibility for the parties involved to have the freedom to determine their needs according to what happens in the field. The case hereunder illustrates the effectiveness and efficiency of using funds in this manner.

The total funds allocated to the Ciamis Project were Rp 81 million over 4 years (CAD 52,000). The largest portion was used for financing PPLH activities including: salaries, travel, surveys, seminars and workshops, reporting and overheads, which in total amounted to approximately Rp 70 million, or some Rp 17.5 million annually. Funds allocated for direct use by the communities in Cigaru, or in support of their activities (seeds, revolving seed capital for KUBEs, subsidies to send cadres for training etc.), amounted to a total of Rp 11 million, or some Rp 2.75 million annually. Thus, given the

total expenditures of Rp 81 million, to achieve 4,000 hectares of terraced land together with the application of integrated farming, the expenditure per hectare came to around Rp 20,000, or less than 10 percent of the subsidy given to farmers in the Panawangan demonstration plot. But, if the total budget allocated to the field is counted as an input, achieving the same results cost only about Rp 2,750 per hectare. However, this calculation does not take into account other benefits achieved within the project.

Yayasan Bina Lingkungan Hidup (YBLH): 1985 - 1989

The establishment of Yayasan Bina Lingkungan Hidup or the Foundation for Environmental Development (YBLH) was discussed as early as 1984, when it was clear that the subsidy from the Ministry of the Environment would be coming to an end, and that the activities in Ciamis could not be dependent on PPLH-ITB forever. Anticipating this, PPLH's policy was to cooperate as early as possible with various NGOs in the management of watersheds. PPLH worked as a counterpart to the government, research institutions and donor agencies to assist local communities in developing their capacities for self-governance in upland development. With at least two different NGOs, cooperation was established. With Lembaga Studi Pembangunan/LSP (Institute for Development Studies) the focus of the linkage was on cooperative development, while with Yayasan Mandiri, the cooperation was in the form of appropriate technology.

YBLH was created with the field staff of PPLH as its core, and Ading as the Chairman. The objective of its establishment was to continue the work already pioneered by PPLH-ITB, and function as an information, management and technical service unit to those groups in the community in the areas serviced by YBLH. This was carried out in cooperation with the local government where YBLH integrated its program with various ongoing activities.

PPLH-ITB assisted with obtaining financial assistance for YBLH, from, for example, the Canadian University Service Organization (CUSO) which was negotiating a grant at that time. This grant was later given to YBLH through LSP as the contract administrator in Jakarta. The grant had three objectives: a) institution building for YBLH; b) consolidating the KUBEs which were then being established (the number had already reached 28 units), and; c) further developing the capacities of the Cooperative High School (SMA Kooperasi), where special courses in cooperative development were offered, and where many students from the North Ciamis area were studying. The idea was to create cadres for the management of the KUBEs. But the grant was small (around US 36,000 for three years), and was hardly sufficient to realize the stated objectives. Fortunately, LSP was able to obtain another small grant from the Swiss Embassy to support the KUBE program. This grant was a great help in organizing management courses and provided small loans for seed capital.

Consistent with the principle of a decentralized system of management for the project, which grants a lot of freedom to the communities to make their own decisions,

the KUBE movement showed great variations in its membership. It can even be said that there were no two KUBEs which were identical. Most were established at the hamlet level, and were at various stages of development. Figure 4 gives a rough overview of the variety of KUBEs in 1988.

Many problems were initially encountered, because KUBEs were "pre-cooperatives", and therefore not yet eligible to become clients of a Bank. The grant from the Swiss Embassy was intended to be used as a revolving fund administered by the Bank Rakyat Indonesia (BRI) for the KUBEs. It was to be used as training on how to get further access to BRI loans. At the end of the grant period, an effort was made to form two KUBE Associations, organized according to location. The notion was to establish secondary level Cooperatives which could be incorporated. It was believed that this would lead to the development of common services, such as technical and management services, which could act as an interface function with the banking system, so that the concept of loans with collective guarantees could be applied. But this initiative experienced a lot of problems with the "monopoly" of the formal KUD system. With this constraint still unresolved, PPLH-ITB ended its activities in Ciamis. However, after 1988 PPLH researchers were still monitoring the development of the Ciamis Project. The last Phase is described below, along with a brief description of the transfer of the experience of Cigaru to Jasinga.

Figure 4: Development of KUBES in North Ciamic under YBLH - LSP in 1988

No.	Name of KUBE Village/Hamlet	Membership (number)	Capital (RP)
01	Tunas Harapan Cigaru I/Mekarsari	119	804,600
02	Sugih Mukti Padasuka	37	901,700
03	Pelita Sukma Sukamanah/Sukadana	76	2,690,425
04	CandraDirana Cariu/Sukadana	53	496,150
05	Pabrik I Pabrik/Sukadana	64	1,952,030
06	Pulosari Margasari I/Margajaya	71	1,263,122
07	Marga Mukti Margadanu/Margajaya	17	597,834
08	Bangunsari Margasari II/Margajaya	50	549,700
09	Kopeng Kopeng/Karangpari	131	2,728,650
10	Pancadaya Jata baru/Karangpari	140	799,560
11	Pasagi Sukamulya/Karangpari	38	827,150
12	Mulyasari Mulyasari/Bojonggedang	74	2,086,200
13	Giri Mulya Sidamulya/Bojonggedang	49	3,256,500

YBLH Report 1989: "Report on Activities of KUBEs in 1988"

PHASE III: (1990-1994) TRANSFER OF EXPERIENCE AND CIGARU REVISITED

In 1993-1994, some research staff from PPLH-ITB (Widanarto, Gatut Purwadi, and Irma) carried out a study of the area where PPLH had interacted with local communities for nearly a decade. This research team had been involved in the project from the start and were very much acquainted with it and with the actors. Another study was carried out by Henri Bastaman, a York University doctoral student, who carried out a field visit to obtain material for his Ph.D dissertation. Both studies were used as inputs into writing this Phase III history of the Ciamis Project.

Cigaru Revisited

Cigaru was split into two hamlets in 1985 by a Local Government Decree, with the objective of making the administration of land taxation more efficient. The event was traumatic for the community, since many people lived in one part of Cigaru while their land was in the other part of Cigaru. This situation led to a lot of internal conflict. They were able to deal with the problem only because the old Head of the Hamlet remained Head of Cigaru I, but was still recognized as an informal leader by the people of Cigaru II. In times of conflict, he helped to resolve problems. Cadres for development, formerly created by the old Cigaru in the hamlets, also helped to smooth over differences, so that after some time Cigaru I and II were able to function again as a community.

At this time nearly all the dry land which was terraced had changed into irrigated rice fields. From being a hamlet which was characterized as "poor and backward", Cigaru transformed itself into a relatively rich hamlet with rice fields and a village electrification program. As with other programs since 1980, electrification was also managed cooperatively but without formal cooperatives. Cooperation has since become a way of life in Cigaru. Those who are having difficulties in paying their dues are helped by the community association, so that they do not hamper the progress of the community.

The creation of rice fields was assisted by the terraces which were previously constructed by the community. What was needed was rehabilitation of the tertiary irrigation system (which was called in former times "VIP irrigation," because it worked only when an important guest was coming to inspect the village), and a reliable and equitable system of water distribution. The creation of rice fields was financed independently by the hamlet, for example by Odon, who sold his Agathis trees to get funds. When he was asked why he created rice fields knowing that he would never get a full return on his investment, Odon said that PPLH-ITB advised him to do it. But, there were also perhaps other reasons, namely that difficulties in the marketing of horticultural products drove people to choose to become rice farmers, and also perhaps more importantly, that rice farmers have a higher social standing.

Whatever the pros and cons of rice farming are in comparison to dry land farming, the hamlet of Cigaru shows a remarkable improvement in all aspects of life and its

environment. Nearly all houses have become permanent. Cleanliness and environmental beautification are now community norms. There are more shops and modern building material suppliers, and one can even find ceramic tiles and tinted glass to buy. Migration is still high among Cigaruans, but what they bring back is not consumed for survival as before, but instead invested in the improvement of homes and the local environment, and for other productive enterprises. Cigaruans are also becoming quite popular with their neighbouring communities, as they are straightforward and vocal in village meetings. Probably for these same reasons, they are not popular with the Camat (Head of Sub-District). They are usually asked to represent the community's interests. The educational standard of Cigaruans has increased markedly since the community joined the Project in 1980. A more in-depth study will be needed to understand the impacts this has had on the development of the hamlet community.

The Other Villages

While an in-depth study of the other villages has not been completed, it is noteworthy that many who were involved with the Ciamis Project have become influential leaders in North Ciamis. Many were young men when the Project was gaining momentum ten years ago, full of idealism and enthusiasm and they became involved in the various activities under the guidance of the elders. The younger generation, now in their late teens, are not able to remember the name of the project or the original activities. Nevertheless, they now participate in all kinds of activities left by the project, such as, maintaining terraces, water conservation, building check dams, and so on.

The KUBE movement has shrunk considerably, although some pre-cooperatives are still operating. This was already apparent even before 1990, when it became clear that the conflict with the KUD system was political, and thus government support would not be forthcoming. The link with the BK3D system (such as was found later in Jasinga) was not yet established, so that no alternative approach to cooperative development was attempted.

Ading has reported that people are now engaged in producing timber from old coconut trunks as a building material, an idea first proposed by PPLH in 1988. He sought PPLH interest in pursuing the idea of developing an industry supplying standard building components for low-cost housing. It was argued that this would lead to new employment and income opportunities, while at the same time introducing a program to rejuvenate coconut palms. As it is now, the activities are carried out haphazardly and without clear direction. Ading was concerned that the opportunity might be wasted, and rather than waiting for direct PPLH involvement, he approached the Association of Housing Cooperatives established in Bandung for more than two years. He thought that the Assistant of the Housing Cooperative might be interested in organizing its membership as an initial market for standard components made from coconut trunks.

People from various places who have received assistance from YBLH continue to

come to Ading to ask for his advice. This indicates that there is still potential to continue the Ciamis Project.

Transfer to Other Locations

Outside of North Ciamis, there is only one case where a transfer of the experience in Cigaru was attempted. This location is in Jasinga, South of Jakarta. The two-year experience of Jasinga is covered in detail in the next chapter. The early attempts at involvement by the local communities in brick and tile manufacturing as an entry point are described. The overall failure of the plan and subsequent use of the savings and loans association to reach the lower income groups is also discussed.

The initial process of involvement by local communities has been an experience which PPLH used extensively and with great success in Ciamis. But the case of Jasinga promises to be more difficult, as Jasinga is a much more conservative and closed community. Nevertheless, the experience of Jasinga provides interesting raw material for students working in rural development, although the work here is still too recent to present firm conclusions. The Jasinga example does give a clear message for the development process: that working with people calls for a decentralized management system which fully recognizes local community participation.

CONCLUSION AND SOME REFLECTIONS

One thing which has not yet clearly emerged from the experience of community participation, especially on an increasingly larger scale than found in Ciamis, and perhaps in Jasinga in the future, is the potential role of the facilitator. The facilitator acts as a catalyst and intermediary in conflict resolution and in the formulation of innovative agreements between the actors in the development process. This role is crucial in achieving equitable and sustainable development. It is also through this type of "development as a social learning process" that continuity becomes embedded. This is achieved through the development of values, norms and institutionalized systems and procedures, even in informal and traditional societies, so that in the end no assistance is needed from the outside. The concept of development management ordinarily places one of the actors in a central coordinating position. For that purpose, s/he is also nominated as the referee in conflicts between the actors, and in determining the use of their resources. The main actor playing this role is the Government.

The experience in Ciamis often placed both PPLH and the NGOs working with the communities in a difficult position. Concepts advocated by David Korten, and other thinkers, have suggested that it is time for the Government to play only an enabling role. This gives communities the main task of being the initiator of the development process. This concept is formally accepted and is politically supported in the GBHN (General Guidelines for National Development) in Indonesia. But its operationalization is still a problem, because the interpretation of the role of NGOs or other actors outside of the

Government is still being debated. The bias is still towards having the Government apparatus playing the most important role.

The experience in Ciamis, and now in Jasinga, clearly indicates that local governments are wary of dealing with NGOs and universities in their own local communities. The question is whether it would be better to give the responsibility to assist local communities to local Governments, or to NGOs, or universities. It seems that the answer is not simple, but is part of an on-going learning process. Giving the opportunity directly to a government agency, an NGO, a development consultant, or a university does not guarantee that an experience similar to that of Ciamis will occur. Time is still needed to let the experience grow into a systematic body of knowledge, transferable to all those who will be actively involved in development work wherever they may be.

What the Ciamis Project has contributed to this discussion is an example in which local communities have developed themselves and their environment, while PPLH-ITB has played merely an enabling role. How this can be achieved by government agencies, NGOs, and development consultants remains open for debate, because their continued existence depends on their successful performance.

A concept which has been proposed by PPLH-ITB is to compare its services to communities as akin to the role of Semar. In the Javanese shadow play, Semar is an incarnation of God who devotes himself to the service of humankind as a lowly servant to his King, whom he advises with his wisdom. Such a concept is very instructive and inspirational to all communities alike regardless of education level. The role of PPLH-ITB was never a dominant one, instead it has taken the role of a catalyst-intermediary in the service of communities. Like the figure of Semar, PPLH-ITB has wisely served local government and society through its associations.

Government is still being debated. The bias is still towards having the Government apparatus playing the most important role.

The experience in Ciamis, and now in Jasinga, clearly indicates that local governments are wary of dealing with NGOs and universities in their own local communities. The question is whether it would be better to give the responsibility to assist local communities to local Governments, or to NGOs, or universities. It seems that the answer is not simple, but is part of an on-going learning process. Giving the opportunity directly to a government agency, an NGO, a development consultant, or a university does not guarantee that an experience similar to that of Ciamis will occur. Time is still needed to let the experience grow into a systematic body of knowledge, transferable to all those who will be actively involved in development work wherever they may be.

What the Ciamis Project has contributed to this discussion is an example in which local communities have developed themselves and their environment, while PPLH-ITB has played merely an enabling role. How this can be achieved by government agencies, NGOs, and development consultants remains open for debate, because their continued existence depends on their successful performance.

A concept which has been proposed by PPLH-ITB is to compare its services to communities as akin to the role of Semar. In the Javanese shadow play, Semar is an incarnation of God who devotes himself to the service of humankind as a lowly servant to his King, whom he advises with his wisdom. Such a concept is very instructive and inspirational to all communities alike regardless of education level. The role of PPLH-ITB was never a dominant one, instead it has taken the role of a catalyst-intermediary in the service of communities. Like the figure of Semar, PPLH-ITB has wisely served local government and society through its associations.

PHOTOGRAPHS OF THE CIAMIS PROJECT

Photo 1:
**Terracing in the Village
of Cigaru, constructed to control
soil erosion and to provide land for
intensive crop production.**

(Photo: William Found)

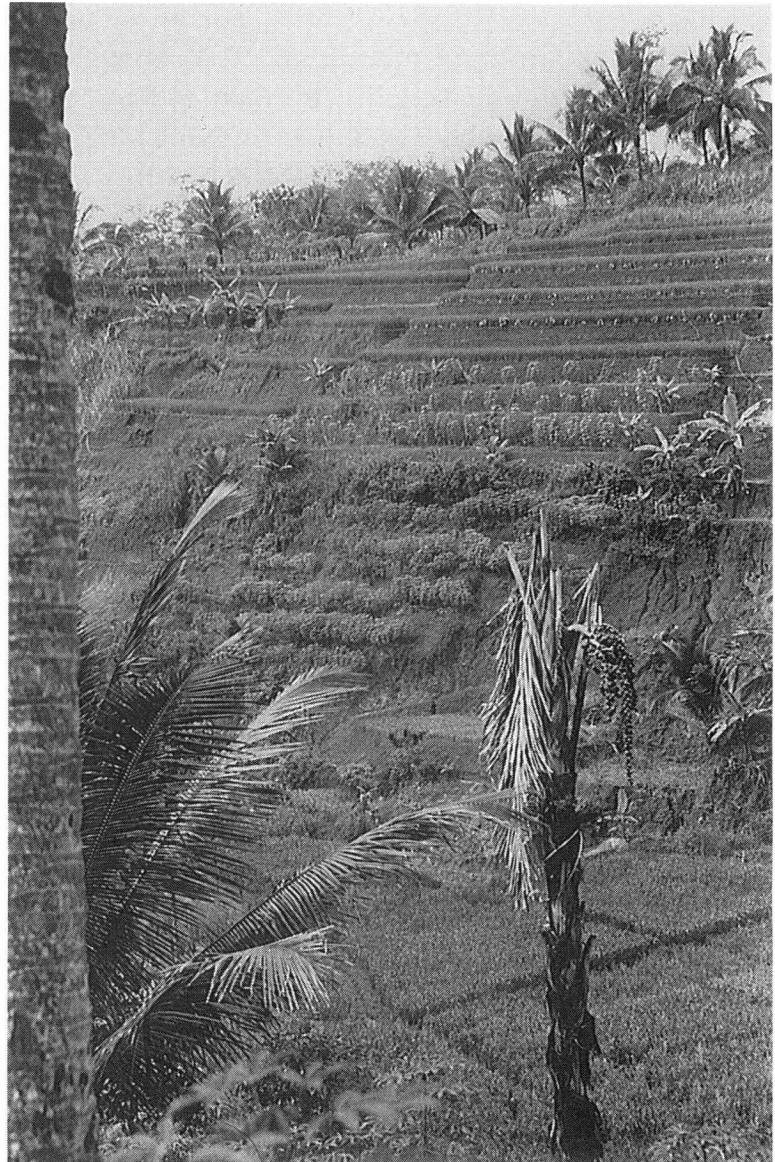




Photo 2: New housing, Village of Cigaru, Ciamis District (Photo: William Found)



Photo 3: Cigaru - chicken pen, constructed in a fish pond - part of a highly intensive, ecologically-based system of agriculture. (Photo: William Found)

REFERENCES

- Jantsch, Erich. Technological Planning and Social Futures. Associated Business Programmes Ltd., London, 1972 xii, p. 255.
- Korten, David C. (Ed.). Community Management: Asian Experiences and Perspectives. Kumarian Press, 1986. xxii, p. 328.
- Poerbo, Hasan and Nordholt, Nico G. Schulte. Memperkenalkan Model Tindak Manusia (Introduction to a Human Action Model). PRISMA # 6, June 1983, pp. 40-53.
- Schwass, Richard. A Study of the Implementation of the Ciamis Action Research Project in the Uplands of Citanduy, West Java, Indonesia. Student Paper No. 1, York University, Canada, 1990. p. 85.
- Trist, Eric. The Evolution of Socio Technical Systems. Ontario, Ministry of Labour, 1981.

CHAPTER 3

REFLECTIONS ON THE IMPLEMENTATION OF THE JASINGA-LEUWILIAH PROJECT: COOPERATIVES FOR SUSTAINABLE DEVELOPMENT

by Taufiq Afiff and Louise Grenier

Abstract

This paper describes the development of a local Credit Union in Jasinga, and the larger story of the plan for sustainable development in the region. Developing cooperative credit organisations in Kecamatan Jasinga was seen as a way of mobilising local capital so that the community could retain control of its resources. The authors find that the community has been successful in developing and managing a rather large and complex credit union, which they argue is testimony to a significant community process and to a notable high learning dynamic in the community. There is still however much to do in regards to establishing marketing and producer group cooperatives. Likewise, environmental concerns still need to be addressed. With the continuation of project funding, the authors argue that the broader sustainable development objectives can be addressed.

Abstrak

Makalah ini menerangkan tentang perkembangan Koperasi Kredit Lokal di Kecamatan Jasinga, Bogor, Jawa Barat, serta suatu cerita yang lebih panjang mengenai rencana pembangunan berkelanjutan di daerah. Perkembangan organisasi kredit koperasi di Kecamatan Jasinga tampak sebagai suatu jalan guna memobilisasi modal setempat, dengan demikian masyarakat setempat dapat melakukan pengawasan terhadap sumber-sumbernya. Penulis menemukan bahwa masyarakat telah berhasil dalam mengembangkan dan mengelola suatu usaha kredit yang sedikit kompleks dan besar, yang mereka perlihatkan sebagai suatu bukti adanya sebuah proses yang berarti tentang adanya gejolak belajar yang tinggi dari sosok tokoh dalam masyarakat. Namun demikian masih banyak hal yang harus dikerjakan yang berkaitan dengan pembentukan kelompok koperasi pemasaran dan produsen. Seperti halnya kaitan-kaitannya dengan lingkungan hidup yang masih harus diarahkan. Dengan adanya kesinambungan dana bantuan proyek, penulis berkeyakinan bahwa tujuan-tujuan pembangunan yang berkelanjutan dan yang lebih luas akan dapat dicapai.

INTRODUCTION

Reality is like an onion; there are layers upon layers of "truths." What is "seen" depends on how closely you get to it. Some parts of this paper are very close, and for that reason, the "details" (the noise) of the implementation process are in focus. This paper is rich with twists and turns, political alliances, personality conflicts, individual perceptions and the personal agendas of real individuals, as they engage in an implementation process. Some readers may be uncomfortable with the level of detail, as the story is close to "reality" - a non-linear process. What is "seen" during implementation depends on who is telling the story. Each actor or observer would tell a slightly different story; and given the number of actors/observers, there are probably many stories that could be told.

A Note on How this Assessment was Prepared

This joint paper was prepared over a six month period (July-December 1994) and entailed countless hours of interviews between Taufiq, the author, and Louise, the writer. At first, Taufiq told pieces of the Credit Union story based on his experience of the process and based on the Field Workers' field journals. Louise recorded the stories, and resubmitted the information to Taufiq. Then, Taufiq corrected and/or added to the information and Louise asked more questions. This process was repeated until the whole story was written down. During that time, we also documented the Project's conceptual base and proposal development stages. Once we had a complete story on paper, we began the assessment. Again, within an interview format, the Project was subjected to a multi-level evaluation. Finally, we began to draw out the lessons learned to date during the implementation process.

Organization of this Paper

In contrast to the other chapters in this book, this paper first documents the translation of a concept into a project, or the implementation of an idea. Like the other chapters, the paper then documents the implementation of a project. However, this project is ongoing, and hence this paper gives insight into the beginnings of a process of change. This chapter is divided in four parts:

- Part A: The Implementation of an Idea**
- Part B: The Implementation of the Funded Project**
- Part C: Evaluation**
- Part D: Conclusion**

Part A of this paper depicts how big "ideas" get translated into small "projects." Part A begins by introducing the Ciamis Model, a sustainable development model designed and implemented by the Environmental Studies Centre at the Bandung Institute of Technology (or Pusat Penelitian Lingkungan Hidup, Institut Teknologi Bandung; PPLH-ITB) under the leadership of Hasan Poerbo.

The sub-heading "A General Plan and Approach" provides an account of how the model came to be focused on a specific geographic area, Jasinga, and a specific group of individuals, the tile and brick producers. A proposal based on the General Plan and Approach was prepared by the Poerbo team and submitted to the Canadian Cooperative Association (CCA) for funding. The objectives and expected outcomes of "The First Proposal" are given. The first proposal focused on improving some technical aspects of the brick and tile industry. The funding agency rejected the first proposal. In the last section of Part A, the objectives and expected outcomes of "The Approved Proposal" are given. The approved proposal focused on the development of credit unions, a focus required by the funding agency.

Part B, "The Implementation of the Funded Project," is presented in two sections. Section 1 gives a detailed account of the first two years of the development of the "Jaya Mulya Credit Union." Some details are given on the neighbouring Eka Karya Credit Union -- a direct spin-off of the Jaya Mulya Credit Union. Progress associated with the establishment of marketing and/or workers' cooperatives (producer groups) is presented in Section 2, "The Producer Groups," with the following sub-headings: Brick and Tile Producers, Vegetable Producers, Fermented Cassava, Mushrooms, the Women's Group, Fisheries, and Small Shops. Originally, it was thought that "producer groups" would be formed first, and would then become the main users of the credit union. This proved difficult to implement in the field. Due to its importance in the implementation process, a summary of the Project's "Political Context" is also given.

In Part C, Evaluation, the project results are evaluated on three levels, since what was implemented could not be separated from: 1. the objectives of the approved project, 2. the objectives of the ideal project, and 3. the conceptual model. Finally, in Part D, Conclusion, the lessons learned to date are highlighted.

Much can be learned from this case study, although it could not all be written down. Given the complexity and unfolding nature of this case, a complete analysis is not possible at this time. Some of the onus of "making sense" of the events rests with the reader. And, ultimately, it is not possible to make complete sense of such complex processes. In terms of a community development process, two years is a very short time frame. The picture may be very different next year, or the year after.

PART A: THE IMPLEMENTATION OF AN IDEA

The Ciamis Model

The Ciamis Model was described in the previous chapter. In brief, it is a model designed and applied by PPLH-ITB to initiate a process of sustainable development at the local level, involving local communities in their own development. A critical assumption of the Ciamis model is that sustainable development requires greater local involvement in resource management. To drive the process, it is considered essential to establish local democratic institutions or to transform existing traditional ones. It is this institutional framework that will allow villagers to continue to address environmental and developmental problems over the long term.

The sustainable development strategy includes the following key points:

1. sustainable development projects are an exercise in "social learning"¹ for all actors in the development process and represent a synthesis of top-down approaches

¹ "Social learning" is defined as a societal process, where groups of people who interact in a process, learn from each other (Poerbo, personal communication, February 1995).

- (used by others) and bottom-up approaches to development (achieved through conflict resolution);
2. information and communication are important tools to increase the rationality in decision-making;
 3. initially, it is more practical to look for the smallest possible unit as an entry-point, and replicate its development to build-up the whole system;
 4. the whole process of system development can be started at the lowest level (hamlet or production group level) and can grow from there;
 5. the theoretical model is based on several principles: decentralized, democratic representation in decision-making at various levels; an enabling role for government and an intermediary role for NGO/university groups, and;
 6. **Participatory Action Research (PAR)** can be used for limited purposes at crucial times (Schwass 1990; Poerbo and Thomas, 1991).

In PPLH's experience, the sustainable development dynamic² begins with village groups identifying and acting on (small) problems of immediate local concern. As the community's experience and management abilities become more sophisticated, the community learns to resolve increasingly complex and diverse problems. Development consultants (NGO/university groups) serve as "catalysts" in the process, and their role is intended to be temporary and flexible. Their role may entail facilitating the development of community-based democratic organizations, helping the community to identify problems, seeking external assistance in the form of credit and technical advice, mediating conflicts, and playing the role of "intermediary" between local people and formal organizational structures. The time-line of the process and the sequence of specific activities is dependent on the readiness of the community to accept and utilize resources.

The General Plan and Approach

In the late 1980's, then Director of PPLH-ITB, Hasan Poerbo, conducted some preliminary surveys south-east of Jakarta, in Kecamatan Cibitung and Cikarang, Kabupaten Bekasi, West Java. He identified several areas located near the new toll road where the brick and tile industry was being displaced by large-scale industries, and where land was being bought and then left idle by land speculators. The brick and tile industry in one area had completely moved out in a one-year period, choosing to relocate to other suitable areas where land prices were still low. Poerbo thought that the brick and tile entrepreneurs who

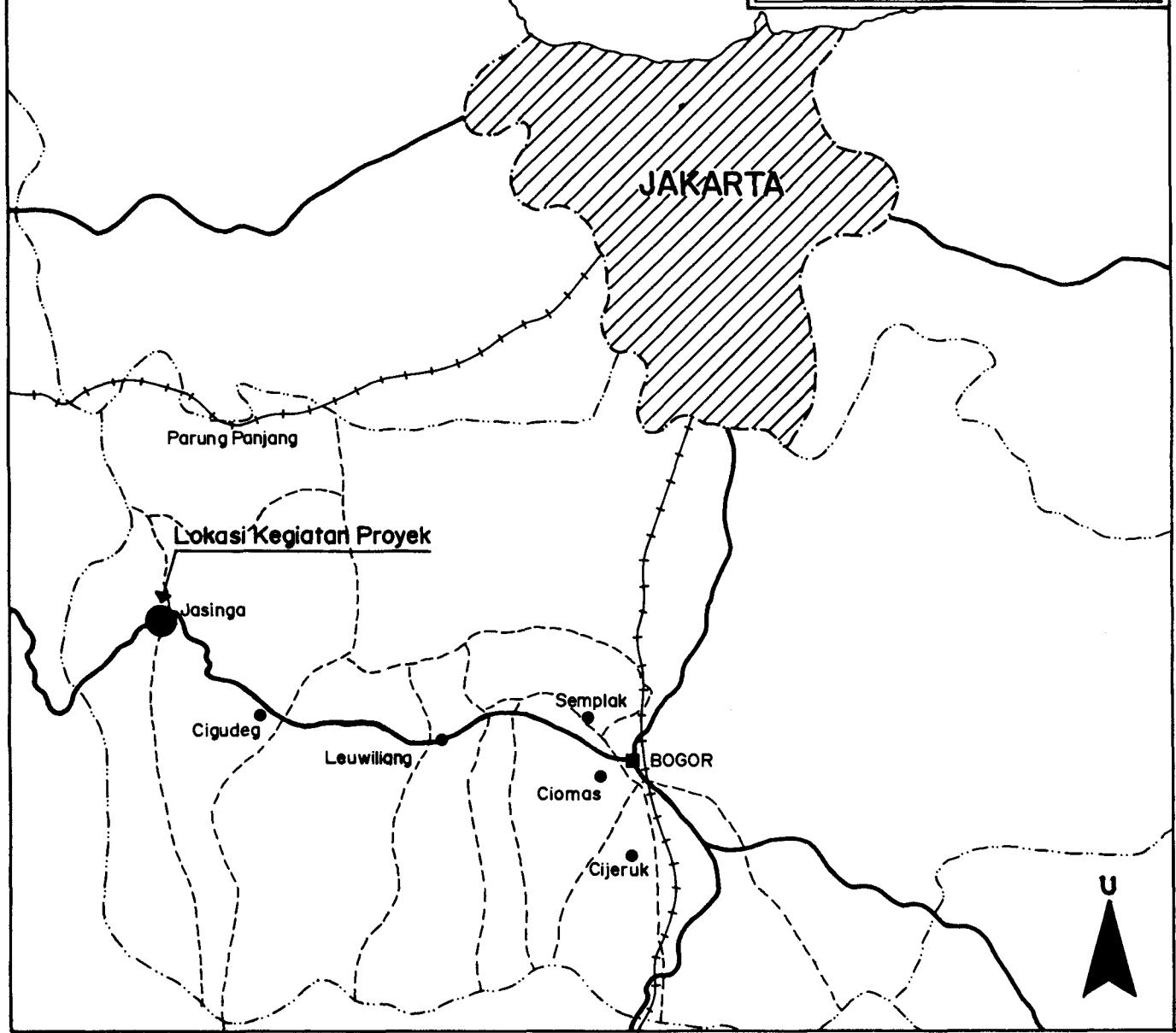
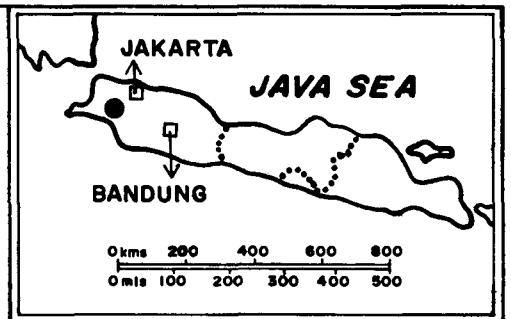
² "Development" can be defined as change which is willingly introduced, and internally driven. A "sustainable development dynamic" refers to an internal capacity (local social energy) for the management of this internally driven change process (Poerbo, personal communication, October 1994).

were relocating could be invited to Kecamatan Jasinga (located south-west of Jakarta - see *Project Location Map* on the facing page) as positive development agents. However, without good management, the receiving population was unlikely to benefit from inviting more brick and tile makers into their community. In some nearby areas, brick and tile entrepreneurs had rented land from farmers, mined the clay, and moved out, leaving behind a "wasteland" with a low market value. Nevertheless, after the top layer of the clay soil is used for making bricks and tiles, land can be converted to other agricultural purposes (eg. growing fruit trees). This positive scenario requires that the clay mining process and the brick and tile industry as a whole, be better organized.

Under the framework of the University Consortium on the Environment Project, York University student William Thomas conducted field research (April - September 1990) in Kecamatan Jasinga on sustainable rural development. Thomas' research provided baseline information on the area, in particular on the region's tile and brick industry. Thomas argued that there were a variety of sustainable development issues in the Jasinga area, and that, the most important concerned improving the returns from available resources. Nearing the end of the field research, Poerbo and Thomas outlined a general plan and approach for a sustainable development project, based on the Ciamis Model. It was proposed that the tile and brick industry be the initial focus of activities, or the "entry point" to initiate the sustainable development dynamic.

The tile and brick industry was seen as having good potential to generate funds (capital) to finance further development. If the environmental damages were managed, and the business profits improved, this could lead to a diversification of village economic activities, leading in turn to poverty alleviation and thereby to sustainable development. Addressing environmental degradation has to begin with redressing the factors that influence the way in which resources and the environment are used, including poverty, lack of ownership and conflict.

Based on Thomas' preliminary information, Jasinga's brick and tile producers faced three main problems: a lack of capital, ineffective marketing and insufficient technology. Activities related to the brick and tile industry could include: i) developing new marketing channels, ii) accessing credit, iii) establishing a cooperative, iv) studying prospects and strategies for gradual modernization of the industry, and, v) encouraging the development of an association of land owners/clay suppliers. Thomas argued that access to capital was the major limiting factor in the development process. PPLH also envisaged that the Project could support agricultural development by accessing credit and information on markets, and introducing new cropping systems and marketing channels for those crops. It was envisaged that the Project would expand in later years to support other production activities (Poerbo and Thomas, 1991; Thomas 1991).



LEGEND :



Study area

Project Location Map

Actions were considered tentative, as actual activities would be shaped by village discussions. The above activities were also considered steps toward the longer-term goal of establishing mechanisms that would allow the community to address a broader range of issues (Thomas, 1991). At some point in the future, local associations would be formed to provide a forum for those interested in exploring development options. To support the process, three functions needed to be provided at the village level: a credit and savings capacity, a Technical Services Organization, and, a Management Services Organization.

The First Proposal to the Canadian Cooperative Association: The Jasinga-Leuwiliang Sustainable Development Project

Even prior to Thomas' return to Canada in December 1990, discussions were initiated with a potential sponsor, the Canadian Cooperative Association (CCA). CCA was very supportive in the initial discussions, and it seemed likely that funding would be approved. Prior to leaving for his sabbatical in July 1991, Poerbo regularly discussed the Project's conceptual framework with Taufiq³.

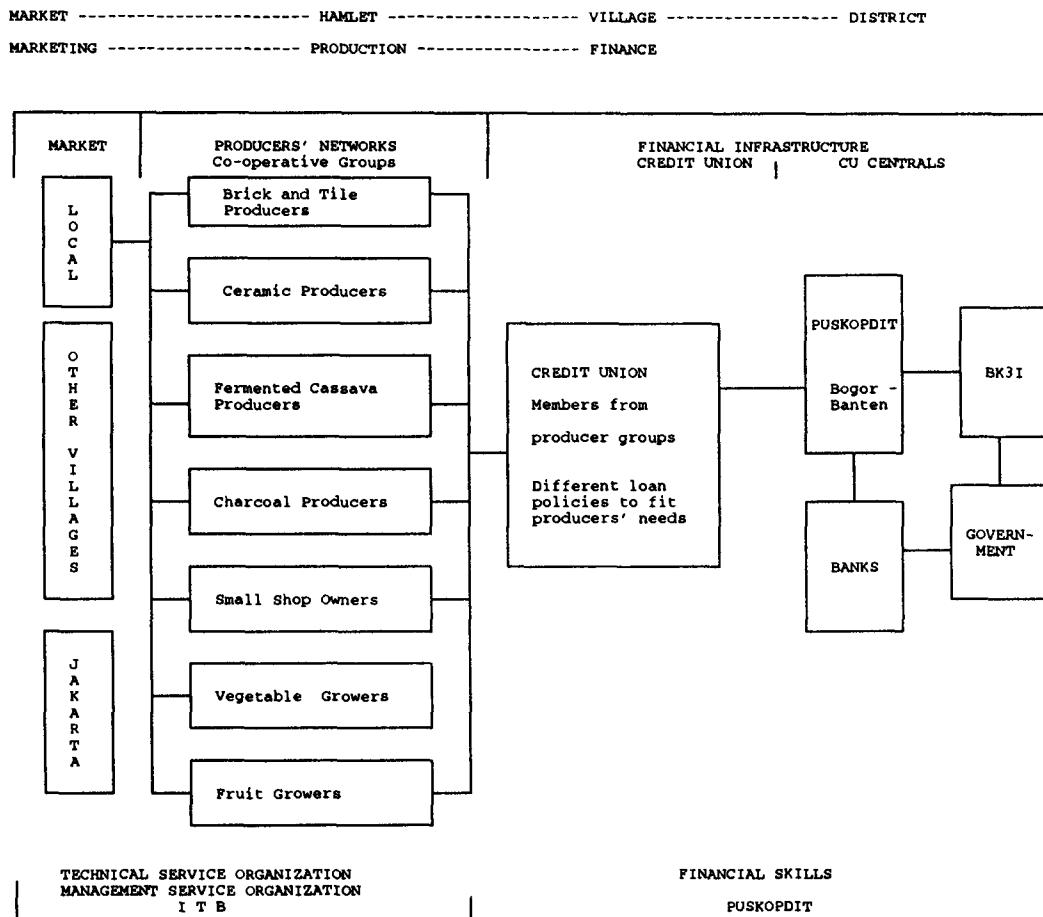
Poerbo and Thomas' general plan and approach for a sustainable development project in the Jasinga area was developed into a funding proposal by Craig, Carden, Poerbo and Taufiq and was submitted to CCA in August 1991. CCA was asked to fund a preliminary phase, with the understanding that a longer term project would be developed. The proposed Jasinga Project was seen as an application of the lessons learnt in PPLH's Ciamis Project, and a test case for the evolving sustainable development model.

The key objectives of the First Proposal were to enable PPLH-ITB to:

1. develop strategic methods and mechanisms to mobilize community participation;
2. identify the appropriate technology that would enable the community to develop a sustainable brick and tile industry;
3. identify the appropriate means to mobilize local capital;
4. identify the feasibility of establishing marketing and/or workers' cooperatives, and;
5. identify the measures necessary to ensure that any present environmental degradation is halted.

³ In the beginning, Taufiq did not really believe in the Project's community-based development approach. As a biologist, he was trained to think in terms of concrete goals. Also, until only recently, he has grappled with the concept of sustainable development. He finds the concept incomplete, especially in terms of its ambiguous time-line (is development sustainable for 10,100, or 1,000 years?).

Figure 1:
Conceptualization of Jasinga Sustainable Development Project



It was expected that the design phase would:

1. assist PPLH-ITB in determining whether the community was prepared to engage in a self-development process around the strengthening of the brick and tile industry;
2. test some initial ideas on technology development and credit union development;
3. document the community development process of participatory action research as it was being implemented, and;
4. create and strengthen networks between all of the relevant actors;
5. enable the development of a three-year proposal.

The Approved Proposal

The Jasinga-Leuwiliang Project: Cooperatives for Sustainable Development

CCA rejected the first proposal as the stated goals and objectives did not closely reflect their own agenda. In September 1991, Jack Craig (York-FES University) and Hasan Poerbo (Visiting Professor at York that year) actively lobbied CCA.

The proposal was revised and resubmitted: the development of credit unions⁴ (not the brick and tile industry) was to be the central activity, and the new entry point into the village. It was argued that developing cooperative credit organizations could play a role in mobilizing local capital so that the community could retain control of its resources. Subsequently, CCA approved funding on the condition that PPLH work with Pusat Koperasi Kredit (PusKopdit) Bogor-Banten⁵, the Regional Federation of Credit Unions.

Several months before signing the contract, Taufiq visited the PusKopdit office to discuss the Project's sustainable development goals and objectives. It was explained that this was a community-based development project, and that the credit union was a "tool" to facilitate "development" in that setting. This Credit Union, therefore, might not follow the standard PusKopdit model, even though PusKopdit Bogor-Banten would provide expertise in group formation and financial management. PPLH planned to provide a development consultant to assist with the formation of cooperative producer groups, who would then become the main users of the Credit Union (See Figure 1 - page 42).

Specifically, the revised objectives were to:

1. lay the groundwork for establishing credit unions;
2. identify the feasibility of establishing marketing and/or workers' cooperatives, and;
3. identify the measures necessary to ensure that any present environmental degradation is halted.

It was expected that:

1. credit unions would be established;

⁴ Credit unions are cooperatives for savings and loans. People join cooperatives to collectively alleviate shared problems, such as poverty. In Indonesia, cooperatives are legal, economic organizations whose profits are member-owned, pooled and reinvested for the benefit of members (Kwik, 1991).

⁵ In Indonesia, credit union cooperatives are under a regional umbrella organization, Badan Koordinasi Koperasi Kredit Daerah (BK3D) or Pusat Koordinasi Kredit (PusKopdit) as of May 1993. In addition to having access to local savings, village credit unions can borrow money from the regional organization; this is called "interlending." The PusKopdit umbrella organizations are under a national umbrella organization, Badan Koordinasi Koperasi Kredit Indonesia (BK3I).

2. the credit union movement in general would be strengthened;
3. the community development process of participatory action research would be documented as it was being implemented, and;
4. contacts and communications would be strengthened within the community, between the community and the ITB/CCA team, and the various government agencies who would consider helping with funding the next phase of the Project.

With the Canadian Government "freeze" on the approval of new projects in the aftermath of the East Timor November 1991 incident, Project signing was delayed until June 1992. In follow-up to Taufiq's initial visit, Poerbo and Craig visited PusKopdit in June 1992. Craig and Poerbo were very pleased about this working relationship as "capital" had been a major problem in previous PPLH-ITB projects. With PusKopdit involved, the Project gained access to capital through the regional inter-lending feature, and indirectly, the Project gained access to banks through PusKopdit.

Conclusion to Part A

Part A of this paper depicts how big "ideas" get translated into small "projects" and how some of this "focusing" is at times imposed internally (by the Project planners), as well as externally (by the funding agency). See Figure 2 - on page 45. The "big idea" was how to initiate a process of sustainable development at the local level. To address sustainable development objectives, environmental degradation had to be halted; for environmental degradation (caused by a specific group) to be halted, poverty had to be alleviated (within a specific group); poverty alleviation required capital; capital could be obtained through a credit union. The Credit Union was the small "project," associated with the "big idea."

PART B: THE IMPLEMENTATION OF THE FUNDED PROJECT

The Jasinga-Leuwiliang Project: Cooperatives for Sustainable Development

"The Implementation of the Funded Project" is presented in two major sections: 1. The Jaya Mulya Credit Union, and; 2. The Producer Groups. Section 1 gives a detailed account of the first two years of the implementation of the Jaya Mulya Credit Union. Some details are also given on the neighbouring Eka Karya Credit Union, a direct spin-off of the Jaya Mulya Credit Union.

The Project also placed some focus on establishing marketing and/or workers' cooperatives (producer groups). This information is presented in Section 2. Initially, it was envisaged that producer groups would be the main users of the Credit Union. However, it proved difficult to establish "producer groups" and the producer groups that were established did not use the Credit Union.

Figure 2:
The Implementation of an Idea

A MODEL FOR SUSTAINABLE DEVELOPMENT

Community-level institutional development, with access to capital and other interventions that alleviate poverty, would reduce environmental degradation and lead to sustainable development.



GENERAL PLAN AND APPROACH

A specific place, Jasinga, and a specific entry point into the village, the brick and tile producer group, were chosen. The question remained how to accumulate capital to alleviate poverty; various options were available.



FIRST PROPOSAL

The returns on the brick and tile industry would be improved through various technical interventions. Capital would be accumulated, possibly through the development of credit unions.



APPROVED PROPOSAL

The funding agency required that credit unions become the new entry point into the village, and the primary Project activity. It was thought that producer groups would be the main users of the credit union. Improving the returns on various productive activities (including the brick and tile industry) through various technological interventions, became a secondary objective.



IMPLEMENTATION OF THE PROJECT

Project personnel mainly focused on the development of the Jaya Mulya Credit Union. (Capital --> poverty alleviation --> halt in environmental degradation --> sustainable development.) Some work was done with various producer groups, including the brick and tile makers. However, most producer groups have not used the credit union.

Although credit union and producer group activities were intended to be simultaneous, in practice the Project developed into two parallel and separate projects, with the Credit Union consuming most of the implementors' time. To complete Part B of this paper, a brief summary of the Project's Political Context is given.

SECTION 1: THE JAYA MULYA CREDIT UNION

Overview of the Development of the Jaya Mulya Credit Union

The first CCA instalment was deposited in July 1992. The Project team decided to locate the base camp in the village of Barengkok, Kecamatan Jasinga. This location was chosen because the village had a viable tile and brick industry, Thomas had previously found housing there, and PPLH already had some connections in the village. Field workers were hired, and the Jaya Mulya Credit Union was established on February 13, 1993. The focus during the first year was on setting up the Credit Union. In the second year, much effort was placed on identifying and resolving the Credit Union's operational problems.

The regional federation of credit unions conducted several training courses for the Credit Union's general membership and executive, in February, May, and July 1993. In June 1993, the formal training was evaluated as ineffective by the Project Leader, and he decided that after completing the July 1993 commitments, the training would be conducted on a door-to-door basis. As it turned out, the door-to-door training only had limited success.

In May 1993, the Board Members drafted the Credit Union regulations, and the first loans were dispersed. From May 1993 up to the present time, Field Workers and Board Members supported the growth and operation of the Credit Union by continuing with the membership drive, conducting the door-to-door training, dispersing loans, and collecting instalments. By November 1993, bookkeeping was identified as a major problem. One Field Worker was asked to conduct one-on-one training in bookkeeping to build a village level capacity. However, this intervention proved fruitless. Concurrently, the Field Workers were asked to design a simpler bookkeeping system.

In December 1993, preparations began for the First Annual Meeting held February 6, 1994. Several operational problems were highlighted after the Annual Meeting, most notably that bookkeeping was still a problem. In addition, other problems identified included: that the organizational structure was inadequate and did not facilitate communication between Members and the executive; that the Credit Union's loan policies were unsuitable for many economic activities, and; that many Credit Union Members were defaulting on their loan instalments. During the period from February-October 1994, the Project staff and the Board Members managed to address the operational issues. For instance, the design of a simpler bookkeeping system was completed in February 1994, and a variation on this simpler system was adopted in June 1994. Area Coordinators

have been added to the organizational structure (July 1994) and five Area Coordinators are now in position (October 1994). In addition, ideas have been generated about the type of instalment schedule and pay-back period that would be more appropriate for the different types of economic activities (July and September, 1994); and a Task Force has been formed to visit each loan defaulter (October 1994).

Appendix 1 summarizes the development of the Jaya Mulya Credit Union to date. Below, details associated with some of the "stories within the stories" of the Jaya Mulya Credit Union, are given. The information is indented and presented in small print since some readers may choose to read only parts of this material. Figure 3 outlines some of the key people in the project.

Figure 3: IMPORTANT ACTORS*

Ali	Field Worker (Taufiq's prime field informant)
The Camat	Head of the sub-district, or kecamatan government
Craig, Jack	Canadian expert on cooperatives from York University
Ismet	An enthusiastic Barengkok farmer/brick and tile maker
General Affairs	General Affairs Board Member
The Head	Credit Union Head, and Board Member
Deden	A brick and tile producer, who is participating in a fisheries project
Kepala Desa	Head of the village
Poerbo, Hasan	Former Director of PPLH-ITB
Adrian	An NGO expert on the brick and tile industry
Husen	A brick and tile producer
Ondi	Field Worker from PusKopdit (June 1993-present)
The Secretary	Credit Union Secretary, and Board Member
The Shop-Owner	A Barengkok shop-owner and Credit Union Member
Iwan	Field Worker from PusKopdit (January-October 1993)
Suyud	PusKopdit Supervisor in Sukabumi
Taufiq	Project Field Leader
Thomas, William	York University student
The Treasurer	Credit Union Treasurer, and Board Member
Isla	Field Worker from PusKopdit (January-December 1993)
The Vice-Head	Credit Union Vice-Head, and Board Member
Budi	Field Worker (September 1992-January 1993)
Tarso	A Credit Union Monitor; and a local government official

* Some names have been changed for reasons of confidentiality.

The Project Staff

A field worker, Budi, was hired in September 1992. Little was accomplished during his posting and he resigned in January 1993. Following his resignation, field workers were immediately requested from Pusat Koperasi Kredit (PusKopdit), the regional federation of credit unions. Two PusKopdit field workers arrived in Barengkok in mid-January 1993: Isla, a retired teacher, (5 days/week) and Iwan, his supervisor, a UGM graduate in geography and demography, (2 days/week). Ali, a UGM graduate in agriculture, joined the Project in February 1993. An additional Puskopdit field worker,

Ondi, a retired school principal with a high school degree in agriculture, was hired in June 1993 to assist with the door-to-door training. While Isla, Iwan and Ondi focused on developing a credit union, Ali concentrated on the other aspects of the sustainable development program (ie. the development of marketing / workers' cooperatives and producer groups). Ali was also PPLH's informant. All Field Workers were salaried by PPLH. Iwan and Isla's contracts ended in December 1993. The Treasurer and the Kepala Desa would have liked to extend Isla's contract. However, Taufiq considered Isla to be more effective in the preliminary stages of credit union development, while Ondi was more effective in the later phase. Due to limited funds, neither was re-hired. The Secretary and some others would have liked Iwan to return to work. Ali and Ondi are still working for the Project.

The Field Workers and the PPLH Project Leader had no previous experience in community-based development. This was a learning process. Taufiq spent some time discussing the community-based development focus of the Project with the Field Workers, but it was unclear how to proceed. In terms of methodology, Taufiq found that most field experts knew what to do in the "middle" of the process. However, no one knew how or where to start. Taufiq instructed the Field Workers to start with what people wanted to do.

In May 1993, Suyud (the PusKopdit Supervisor) informed Taufiq that Isla and Iwan were competing with each other with respect to who was doing a better job, and undermining each other in the process. Isla interacted with a set of Members; Iwan served a different group. This embarrassed Suyud, and he thanked Taufiq for placing Ali in the field in February 1993 to serve as the peace maker. Suyud suggested that one of the Field Workers could be fired. Taufiq preferred to have a number of field workers, and chose to have Ali continue to mediate the disputes between the PusKopdit Field Workers. Once Ondi joined the Project in June 1993, Ondi and Isla were allied against Iwan. When Iwan left at the end of 1993, the relationship between Ondi and Isla became tense. Most Board Members preferred to work with Isla who was more patient, lighthearted and accommodating, and always ready to help or do the difficult tasks. On the other hand, Ondi was too serious and impatient when a task had to be re-taught. As fewer and fewer people asked for Ondi's help, he became more involved with Ali and the producer groups.

The Credit Union Board

Even before any formal meetings were organized in Barengkok, there was interest in establishing a village credit union, probably because of previous discussions with Thomas and Budi. The villagers, most of whom were not brick and tile producers, simply wanted to know how to go about it. When Isla and Iwan arrived at the base camp, three villagers dropped by to initiate discussions. The three villagers invited 30 people to a meeting on January 30, 1993 to discuss how to proceed. Some 42 people attended. Many villagers expected to be given money as was the case in a recent political campaign. It was clarified that this was a self-help project and the development consultants would only facilitate the process. To expedite matters, Iwan and Isla requested that two villagers start identifying candidates for the Credit Union executive. Three people were identified based on their education level; another was suggested based on his status, a retired army official. Isla and Iwan selected the Board on February 5: the Head, the Vice-Head, the Treasurer, the Secretary, and General Affairs. Thirteen individuals attended the second Credit Union meeting on February 6, 1993 - those interested in more than a handout. The structure and function of the Credit Union was discussed. The Jaya Mulya Credit Union with 32 founding members (25 men, 7 women) was officially established February 13, 1993. By April 1993, three Monitors were added to the Board, making an 8-member Executive. Board Members were responsible for the daily administration and had to report to Members at least once a year; in addition, Monitors were responsible for policy and financial auditing.

In the first year of operation, Board Members formed a cohesive group. In time, however, various factions emerged. After the first year, the Treasurer and the Head were not getting along with the Secretary and the Vice-Head. The Secretary and the Vice-Head had a plan to replace the Treasurer. The Head died in September 1994, and the Vice-Head became the Acting Head.

Membership Selection

PPLH had assumed that all villagers who wanted to, could join the Credit Union. In March 1993, Taufiq discovered that the Credit Union had turned down several applicants and that some founding members were handpicked. Iwan (with the help of his friends) had identified and then invited "appropriate" candidates to join the Credit Union. "Appropriate members" were honest and were successful business people. Isla and Ali, on the other hand, had conducted a general campaign for the Credit Union membership. After the selection of the founding Members, the Board and Iwan continued to apply elitist selection criteria. Additional Members had to be: honest individuals, involved in a certain type of economic activity, who had two letters of recommendation from established Members, and could meet final Board approval. The Head of the Credit Union was afraid that some people would take loans and "run away" with the Credit Union's money. And, for Iwan's own personal career plans, it was very important that this Credit Union be successful.

This exclusionary selection process was highly questionable. PPLH-ITB saw "development" as hamlet focused, with an emphasis on sustainable and environmentally sound practices. The goal of this exercise was not "a successful credit union." Taufiq re-discussed the Project goals with the PusKopdit supervisor in Sukabumi, the Board Members and Iwan. He re-emphasized that it was far more important for the Members to get richer (poverty alleviation), than the cooperative, and that the focus should be on the Members' welfare. Poerbo suggested that other villagers form producer groups and any member of a producer group could become a Credit Union Member. The reasoning was that a new power structure (ie. producer groups) had to be created to negate the elitist selection practice. The Board endorsed this suggestion, and this strategy did break the Credit Union's elitism.

Interestingly, upon the death of the Head in September 1994, four important villagers immediately joined the Credit Union. Kyai Embeh, a religious leader in the Vice-Head's neighbourhood and the leader of the deceased Head's neighbourhood association were among the four. Had their entry into the Credit Union been blocked? Were these individuals truly afraid of the previous Head's reputed fierceness? Or was their entry at this time just coincidental?

Training

Isla arranged the cooperative training in February and May, 1993. When PusKopdit offers training, a letter is sent to the Head of the credit union. The Head submitted this letter to the Field Worker Isla. Isla then sent a letter to PPLH requesting funds for the training, with a list of Members to be trained. All 41 Members were invited to take the first basic 3-day training that focused on leadership and entrepreneurial skills, and "how to" cooperate. To ensure better attendance than at the basic training, the Board Member's more advanced 2-day training on the cooperative regulations and guidelines and 3-day training in bookkeeping was held at the PusKopdit office in Sukabumi⁶. The Treasurer received additional training in bookkeeping from Isla, and later from

⁶ The Board Members who went to Sukabumi for training were more impressed by the PusKopdit facilities than by the training; oddly enough, this generated trust. It was reasoned that since PusKopdit had such assets, PusKopdit would not steal the Credit Union's money. Subsequently, the Members agreed to

Ondi.

Taufiq noted that certain individuals had registered for up to four training sessions. He questioned Ali on this and was informed that: 1. Isla had "too much" to do with who got trained; 2. that the training material was perhaps too difficult or not very useful (especially the training given to the general membership), and that the education level of the villagers was perhaps too low to take advantage of the training; 3. that the villagers did not understand the advantages of "cooperative" behaviour, did not take well to the class room setting and protested that they were too old or didn't have time for formal training, and; 4. that the PusKopdit trainers did not have a good grasp of the village conditions. Ali also indicated that most people didn't like the training per se; what was appreciated were the per diems, certificates and the travel associated with the training.

Overall, the training was evaluated as not having effective results. Taufiq decided to stop the formal training (in favour of door-to-door sessions) for the above reasons. Taufiq explained the situation to the PusKopdit supervisor in Sukabumi. However, three training courses were held in July 1993, one for Barengkok and two for the nearby credit union, to fulfil previously made commitments. Much later, Taufiq discovered that Iwan and some Board Members opposed his top-down decision. They argued that the training had been effective for some Members, and the correct decision should have been to more carefully select the trainees.

In June 1993, Taufiq requested that the Field Workers and Board Members conduct the training at the small shops or while visiting people's homes. An additional Puskopdit field worker was hired, Ondi, to help Ali with the door-to-door training. Another objective of this door-to-door training was to build the relationship between Board Members and Members, as most of the interaction was between Members & Field Workers and Board Members & Field Workers. As it turned out, "house" visits were not very successful since villagers are tired when they get home. Also, Isla and Iwan, in particular, and to a certain extent Ondi and Ali, preferred the classroom. In the end, Ondi, Ali, and the General Affairs Board Member visited a small number of homes. Isla and Iwan still thought that the training should be conducted at PusKopdit. The effort did not improve the relationship between Members and the Board.

Another issue that emerged in mid-1993 was that even after receiving training, the Credit Union Members were still dependent on the Field Workers. For instance, the monthly reports were written by Isla. Rather than letting the Members work through their problems, and learn from that process, the PusKopdit organizers exercised their expertise.

Currently (October 1994), the Board has the perception that Members are already trained, although the Credit Union continues to receive new Members. The Board argues that Members know enough or Members don't need to know everything. Ali and Ondi still conduct some door-to-door training but the large number of Members sets limits to this approach. Also, Board Members still do not call Member/Board problem-solving sessions on their own. Board Members still ask the Field Workers for "solutions." Overall, it seems that the Credit Union Members are insufficiently trained. The issue of how to conduct effective training is still unresolved; the Project Leader has contacted an NGO involved in popular education to discuss the matter.

keep their savings with PusKopdit (instead of the bank) to obtain a better interest rate (1.75%).

Making Regulations

In May 1993, a membership meeting was held to make the loan regulations. On account of the PusKopdit training, the Board selected loans at four times the Members' savings and a maximum 10-month pay-back period for the village Credit Union. Nevertheless, the meeting was important in terms of "training" the Members.

With respect to accessing loan money from the PusKopdit regional level, members of the inter-lending association could borrow twice their savings. By May 1993, the Credit Union had accumulated Rp 500,000. In addition, PPLH "gave" PusKopdit a Rp 3 million guarantee in March 1993, to expedite the Credit Union's development process. When it was realized that there was an extra Rp 3 million ($Rp\ 500,00 \times 2 = Rp\ 1\ million + Rp\ 3\ million\ (guarantee) = Rp\ 4\ million$) available for loans), some regulations were disregarded for a few Members to use the Rp 4 million and to avoid paying interest on "idle" money. Taufiq called a meeting to discuss this issue, feeling that the villagers also had to follow their village level regulations. Members agreed to increase their own savings to Rp 1.256 million ($4 * Rp\ 1.256\ million = Rp\ 4.256\ million$) to follow their own internal regulations, and to take advantage of the inter-lending feature. PusKopdit started lending money at the end of May 1993.

It is significant that according to the Treasurer (and the Project Leader tends to agree), this Rp 3 million "guarantee" created problems. For one, it rendered the village level savings meaningless. Secondly, the Board had carefully selected the few first creditors based on the Members' capability to pay instalments. With this Rp 3 million bonanza, most Members could get a loan. In retrospect, the Board's learning process (eg. how to manage credit, select creditors etc.) was by-passed by having this sprint-start. Other Board Members were very happy about the Rp 3 million guarantee.

Bookkeeping

By the end of November 1993, bookkeeping and monitoring were identified as major problems. It was at this time that Taufiq discovered that Field Worker Isla had been on the Jaya Mulya Monitoring Board all along (and a Monitor for the nearby credit union also). Isla was asked to resign from the Monitoring Boards, and it was re-explained that Field Workers were supposed to be "catalysts," helping villagers to do things by themselves. In a rush to try to manage the problems before the scheduled end of the Project in December 1993, Taufiq requested that Ondi select and individually train 10 people from Barengkok and 10 from Tegal Wangi in bookkeeping. Only 3 out of 10 people in Barengkok and 4 out of 10 people in Tegal Wangi completed the bookkeeping lessons, and the trainees were (mainly) Board Members in both cases. The "drop-out" rate suggests that the training was again too difficult, the goals were unclear, and the villagers had very little time for training. This effort did not train Monitors, nor did it yield a village-level bookkeeping capacity. None of the trainees were sent to Sukabumi for further training. Clearly the Monitors, whose job it was to audit the financial books could not do their job simply because they didn't have the skills to do so (February 1994)!

Also in an effort to manage this bookkeeping problem, Ali and Ondi began designing a simpler bookkeeping system in November 1993. The 7-book system in use was cumbersome and complicated. Ali and Ondi completed the design of a new 2-book system in February 1994. The Jaya Mulya Treasurer was reluctant to switch to the new system, as she had invested a lot of personal time to learn the more complex one. At the end of April 1994, when there was still no improvement in the bookkeeping, Taufiq requested that Ondi set up a different set of financial books using the 2-book system. After one month, the Treasurer was able to compare the two

systems for herself and she adopted a 2-book system based on two of the books from the 7-book system. Since then, the bookkeeping has been flawless.

The Annual Meeting

In December 1993, preparations began for the first Annual Meeting. Once the year's interest (Rp 350,000) had been divided among the Members and some money set aside to organize the Annual Meeting, there was little left. Because of the limited funds and because some Board Members wanted to ensure a "successful" meeting (a meeting with few questions) the Board planned to make four copies of the Annual Report: one each for PPLH and PusKopdit, and two for the archives. The Planning Committee also drafted an agenda. Opening speeches by the Camat, Kepala Desa, PusKopdit and Taufiq were to be followed with reports from the Executive, a presentation on the workplan, and a question and answer period. During his next village visit, Taufiq offered some CCA funds to print 50 copies of the report. In terms of the agenda, Taufiq suggested that fewer speeches be made, that the Annual Report be distributed one week before the meeting, and, that the question and answer period be lengthened.

The Annual Meeting was held February 6, 1994. Many long speeches were made; and many reports using financial jargon were given. Most of the participants had left their reports at home. During the meeting, some Members said to Taufiq and Ali that they didn't understand the financial statements. Ali and Taufiq encouraged the Members to ask questions and one Member (only) asked about a bookkeeping term.

The Board suggested that the village loan policy be changed from four times people's savings to two, because the list of Members who wanted to borrow money was getting longer. The suggestion was met with some grumbling and one Member said that if the Board insisted, then it was agreeable to him. Isla, who attended as the representative of PusKopdit, reminded the Members that as Members they could debate issues. Members were more active in the ensuing discussion and argued that this was not enough money. A compromise of three times people's savings was reached. The decision was not announced to the absent Members. For a while, many Members continued to request loans at four times their savings instead of three, which made it awkward for the Treasurer.

The Board also suggested that regulations be drafted for three types of loans: working capital, welfare, and emergency. In practice, the Head was making the decisions on a case by case basis. Without clear regulations, some questionable loans were being made, for example, "emergency" loans for a wedding party. To date no regulations have been drafted (October 1994).

Cooperation, Communication and Organizational Structure

People joined the Credit Union with a simple goal: to get some money. It was apparent from the Annual Meeting that most Members still didn't understand the concept of "cooperation." Members were passive and simply tended to agree with the Board's suggestions. A problem solving meeting was held on March 29, 1994 with Taufiq, the Board, and Members to discuss the issue of "cooperation/communication" and "loan policies." Twenty people attended. "Poor" communication was contributing to "poor" policies. The main objective was to show that meetings could be used to solve problems. However, to date it is still difficult for Members to grasp that "decisions" should be Member-owned and jointly made with the Board. And the Board Members think that the Members are too slow at making decisions.

"Cooperative behaviour" is dependent on regular communications. There was a lot of

interaction between Members and the Treasurer, but almost no communication between Members and the Board. Ondi introduced the Puskopdit organizational model in September 1993. The Board Members just filled all of the positions in the model, regardless of whether a particular position was needed. The organizational chart graphically illustrated that there was no mechanism to reach the dispersed membership (Appendix 2). Taufiq called a meeting with the Board to discuss the organizational structure (July 5, 1994). He recommended that Area Coordinators be added to the organizational structure and the Board made a suggestion that five coordinators were needed for Barengkok. The Board decided that the Area Coordinators' tasks would include: 1. collecting instalments and contributions from the Members; 2. making lists of potential borrowers, and; 3. representing area Members at the monthly meetings. It was also suggested that the Area Coordinators and the Board would form the Credit Committee. Hopefully, this will help solve communication problems, simplify the logistics of managing an increasingly large credit union (the Area Coordinators will keep track of the transactions using simple bookkeeping tables drafted by the Treasurer), decrease the Treasurer's work load (she will interact with only the local Area Coordinators from now on), and provide a training ground for the cooperative. After the current Board Members complete their 3-year term, the new Board Members can be chosen from the Coordinators. To legitimize this new function, the Credit Union's regulations and guidelines were revised and informally approved by the Members in July 1994. (See Appendix 3 - The New Organizational Chart.) As of October 12, five area coordinators have been identified.

Another dimension to this "communication" issue is that the Project does not have a community meeting place. In previous PPLH projects, the local mosques were used. An informal leader had advised the Field Workers that due to the differences in the interpretation of Islam between the conservative and the more moderate Barengkok villagers, each Kyai (religious leader) would have to agree with the Project's concept before they would allow their Majelis Taklim (a religious forum) to discuss Credit Union matters. A long process of interviewing the hamlet Kyai ensued. In September 1994, two Majelis Taklim agreed to discuss Credit Union issues at their meetings. In retrospect, Taufiq feels that the informal leader gave inaccurate information: the Majelis Taklim could have been approached directly.

Theft

A "stranger" attended the Annual Meeting; it was later determined that he was a Member and had given his membership fee to the Secretary. Also, the Treasurer listed a particular Member as a loan-defaulter; this Member argued that he had been paying the Secretary. The Treasurer reported this to Taufiq after the March 30, 1994 meeting. Before the May 28, 1994 meeting, the Head, Treasurer, Vice-Head and Taufiq met to discuss these allegations about the Secretary. The Head and the Treasurer argued that the Secretary had stolen ~Rp 400,000. The Secretary is no longer allowed to receive payments from Members.

Idle Money ... Waiting Lists ... Loan Defaults

Initially, the Credit Union had excess capital, or "idle" money. This was attributed to Barengkok's low economic activity, or structural poverty. Barengkok's only export commodity is from the brick and tile industry. Everything else is imported, meaning that people's incomes are spent outside the village, instead of being reinvested in the village. Furthermore, most villagers live at subsistence level, with no savings, and hence no money for investments. This constrained the amount and type of economic activities that could be undertaken.

As the number of Credit Union Members increased, and as some people began to default on payments, the "idle" money was loaned out or was unavailable. The Treasurer reported the

issue of loan defaults to Taufiq after the March 30, 1994 meeting: 31 people were defaulting on their payments. These loans amounted to Rp 2,492,000, representing a ~Rp 200,000 loss in payments, or, one to two lost loan opportunities per month. The Head was angry with the Treasurer for reporting the problem to Taufiq. For political reasons, he didn't want to draw the Kepala Desa's attention. To avoid a backlash against the Treasurer, Taufiq requested that Ali list the bad debts. On May 28 1994, a specific meeting was called by Taufiq to discuss the issue. It was decided that the Treasurer would report to the Head when a Member defaulted on two or more consecutive payments. She was not to deal with the problem directly anymore, as some Members complained that she was too "harsh" with them. After this meeting, the Head approached the defaulters and encouraged them to pay what they could monthly, instead of not paying anything. After which, the Head claimed that only three people were not paying back their loans.

There were 36 defaulters accounting for a debt of Rp 1.9 million in August 1994; at the end of September 1994, there were 39 defaulters with a Rp 3,572,500 debt. At a Board Member / Area Coordinators' meeting on October 25, the Treasurer distributed a summary sheet of the bad debts. It was agreed that a Task Force would be formed, and that they would visit each loan defaulter to find out what the specific problems were. Once the list of problems is drafted, some Members might be asked to leave the Credit Union. The bad debts are seriously jeopardizing the viability of the Jaya Mulya Credit Union. Currently, with 128 Members, loan requests go on a waiting list.

Loan Policy

During the Annual Meeting, the loan policy was changed from four times people's savings to three, exacerbating some problems. The villagers' savings are very low, so the amount of money that can be borrowed is very small, and perhaps useless. Secondly, a ten-month pay-back schedule, with the first instalment due at the end of the first month, is problematic for economic activities with time lags between the time money is spent and the time profit can be expected (eg. the brick and tile industry). In some of those cases, the pay-back schedule may be causing some loan payment defaults. The small loans and the 10-month pay-back schedule support a very limited type of economic activity, namely activities with a fast cash turnover.

Taufiq met with shop owners (July 4), brick and tile makers (July 5), and with the Eka Karya Credit Union (July 6) to discuss the Credit Union's lending policies. Taufiq suggested a new model: a grace period of 3-6 months; and a 2-year credit period. Although Members are not yet comfortable with "giving" input, the shop-owners and brick and tile makers were left with the task of thinking about the length of the grace period appropriate for their businesses. To date, no action has been taken because of the crisis with loan defaults. In September 1994, the shop-owners did however opt to pay instalments whenever they had money, be it daily, weekly, and/or monthly. Most Credit Union Members now want this type of flexible instalment schedule. All of the above points are significant in light of the fact that they indicate the start of a community-level learning process.

Overview of the Development of the Nearby Eka Karya Credit Union

Appendix 4 summarizes the development of the Eka Karya Credit Union. It is interesting to contrast the development of the Jaya Mulya Credit Union, with the nearby Eka Karya Credit Union. In June 1993, a Member introduced the Jaya Mulya Credit Union to her ex-husband. While in the process of becoming a member, he suggested that instead of paying transport costs to and from his village, that a new credit union be formed in Tegal Wangi, 9 kilometres away. The Barengkok Field Workers (Isla, Ondi and Ali) agreed to hold a meeting at the Tegal Wangi school and the Eka Karya Credit Union was established July 31, 1993. In July 1993, two training sessions were

conducted by PusKopdit for the new credit union.

From a distance, the development of this credit union seemed easier. It has experienced some of the same problems as the Jaya Mulya Credit Union, mainly problems with bookkeeping, inappropriate loan policies and instalment schedules, and "personality" conflicts. For instance, the Head does not get along with the Treasurer; the Credit Union Secretary resigned in October 1994 after he was caught stealing money from the village office, etc. However, Eka Karya members seem more open to change, more aware of bookkeeping issues, and "learn" more easily. For example, this credit union was vocal about how difficult the old bookkeeping system was. They quickly reviewed the 2-book system, considered it simpler, and adopted it. One problem-solving meeting was held with the nearby Eka Karya Credit Union on March 30 with 25 people attending. Now, when problems arise there, the Members ask their Board to set a problem-solving meeting.

Whether the development of the Tegal Wangi Credit Union was in fact easier, is difficult to determine. The Project was much more involved in the implementation process of the Jaya Mulya Credit Union. Nevertheless, there are some notable differences between the villages. The education level of the Eka Karya members is higher; they also tend to have secure employment. Furthermore, the credit unions are used differently. In Barengkok, Members borrow money for working capital, while in Tegal Wangi the credit union is often used for savings. Another important difference is that the Barengkok Credit Union has more members, so it has more transactions, and hence more problems.

SECTION 2: THE PRODUCER GROUPS

Initially, it was thought that Producer Groups would be formed and would then become the main users of the Credit Union. However, it was harder than anticipated to form the producer groups, and there was little NGO assistance to run that aspect of the project (see below). Thus the primary objective of the funded project was to establish credit unions and producer group activities were secondary in importance. Nevertheless, the activities were considered important in terms of the Project's sustainable development objectives. The producer groups of the Project include: Brick and Tile Producers, Vegetable Producers, Fermented Cassava Producers, Mushroom Producers, the Women's Group, Fisheries, and Small Shops.

The Role of NGOs

In July 1991, a couple of meetings were held with three NGOs interested in doing work in the Jasinga area. "GS" was interested in helping the community make ceramic accessories. "BA" brought traders who could market the villager's products. "PK" was interested in the brick and tile industry. Once the Project was running, it was planned that a communication forum would be formed and a group coordinator would be appointed to coordinate activities among the four parties. Unfortunately, Project funding was delayed for one year. PPLH called a third (August 1992) and a fourth meeting (March 1993) to re-initiate discussions with the same NGOs. On account of some staff changes, GS' interests had shifted from ceramics to compost digesters and livestock food. There were no markets for these products at that time. BA did not attend. PK sent a brick and tile expert; Adrian did do some preliminary work in the village (see section on Brick and Tile Producers).

Overall, there was little NGO assistance for the village producers at this time, and, the producers were not that interested in receiving technical help. No joint work and no NGO/PPLH communication forum was established. With respect to working with NGOs, there was also a significant difference in terms of approach. PPLH wanted the community to identify their own

needs while the NGOs preferred to actively seek projects, bring in funds and solutions. In spite of the fact that there were no NGOs available to run this aspect of the Project, producer groups were introduced in March 1993 to "break" the elitism of the Credit Union by enabling any member of a producer group to become a Member of the Credit Union.

Brick and Tile Producers

In line with the Project's concept, the main initial focus of the producer group activities was the brick and tile industry. According to the preliminary information, brick and tile makers were competing with each other for buyers and labourers and defined their production problems in terms of a lack of capital and labour. However, the Field Workers defined the problem in terms of non-standardized products and slow production. The brick and tile producers agreed to form an association, but were sceptical that an association could help solve the different problems. Ali called a brick and tile producers meeting on March 13, 1993. Nine people attended (four were brick and tile producers). Several issues were discussed at the meeting, most importantly the issue of standardizing the brick size to fill large-scale orders, and the issue of purchasing a clay-mixer.

The NGO PK was selling a Rp 5 million clay-mixer to increase the speed of production and help resolve the labour problems. At that time, the villagers were not interested in technology and management; they wanted money. Ali worked with producers on the issue of standardizing the product size. In March 1993, three producers agreed to standardize. But, in terms of buying bricks of standard size from a number of producers and then firing them together in one kiln, one producer blamed another for producing bricks that cracked during the firing process. Also, even if bricks were shaped to the same size, they tended to shrink to a different size through the drying and/or firing process.

Adrian, a brick and tile expert from the NGO PK, came to Jasinga March 20 and 21, 1993. After doing a reconnaissance survey, Adrian called a meeting to discuss five issues: quality, productivity, efficiency of fuel wood use, conservation of fuel wood, and techniques for mixing and digging clay. Fourteen Credit Union Members attended (7 were brick and tile producers). Adrian claimed that the product's quality was good, but that productivity and efficiency were low and that there were some technical problems.

Adrian had identified one tile producer in the village who used fuel efficiently and with good results, but the knowledge had not spread. He suggested that 2,500 tiles instead of 2,000 could be fired at one time and gave Rp 10,000 to producers willing to take his advice, with the understanding that if the advice failed, that they would keep the money. Results from the trial were not good; there were many broken tiles. Adrian also suggested that fewer tiles would break if they were made thicker and arranged in the kiln in a different manner. This advice did decrease the number of rejected tiles, but consumers refused to pay a higher price for the thicker tile. Adrian also suggested that bamboo racks be built to speed up the drying process, but producers claimed that they could not afford to build the racks. Adrian placed an order for 20,000 bricks with one producer, Husen, to be delivered in two months. Husen's production capacity was 8,000 and the intent was to encourage this producer to cooperate with others. Husen kept the order to himself and the order went undelivered.

Notably, the amount of environmental degradation attributable to the industry (one of the Project's initial *raison d'être*) was negligible at this time in Barengkok: 16 out of 800 hectares of land is owned by the entrepreneurs, amounting to three hectares of brick and tile activity on flat land (ie. no erosion problem; no significant damage to the landscape). Given the producer's lack of interest, the unsatisfactory results of the technical advice, the current low level of environmental

impact, and the very limited resources to identify and invite outside brick and tile entrepreneurs to set-up-shop in Jasinga, Taufiq cast his attention away from the brick and tile producers in April 1993.

The brick and tile producers met again in May 1994. They seemed more willing to initiate activities then. In discussion, the brick and tile makers reiterated that they lacked capital and labour and expressed interest in purchasing a clay-mixer. The Rp 5 million model previously offered by PK was no longer available; the current market price of a clay-mixer is Rp 12 million. The brick and tile producers have discussed how to pool their money to purchase the machine. Until now, the producers have distrusted each other and can not agree on how much money each should contribute. To solve their "labour" problems, the brick and tile producers are currently looking for workers from outside the community.

To date, the Jaya Mulya Credit Union has not addressed the capital needs of the brick and tile entrepreneurs, and hence is not addressing the issue of poverty alleviation and sustainable development for this economic activity. Larasati (1994) calculated that with a 10-month pay-back schedule, brick and tile entrepreneurs need loans close to three times their working capital, so ~Rp 1 million. This large amount of money is needed to overcome issues related to the production time. Production time varies with the weather conditions, the availability of workers, and the entrepreneur's ability to pre-pay for workers and firewood. The brick and tile entrepreneurs have little (if any) savings, and consequently, only have access to very small loans. They remain tied to middlemen who lend them money, and then purchase their bricks at a reduced price.

Vegetable Producers (Chili Production)

In March 1993, Ali initiated discussions with some farmers on agricultural techniques to cultivate vegetables. "Talking" was not effective; a demonstration plot was needed. Taufiq agreed finally that the Project could finance the production costs, if the farmers worked their own land (April 1993). After conducting market demand and crop calendar research, Ali proposed that chilies be grown. Four farmers agreed to participate. When it was time to start, three of the farmers requested a salary and one requested that the Project rent his land. Taufiq refused to comply with their demands on the basis that this was a self-help initiative.

Ali subsequently identified Ismet, a farmer/brick and tile producer, who agreed to the conditions. In May 1993, Ali taught Ismet how to compost manure and how to make a nursery bed. The seedlings were transplanted to the field during the last two weeks of June 1993 and Ismet began harvesting in early August. Unfortunately, when Ismet's wife went to market, the chili price had crashed (Rp 1,000/kg) due to a bumper crop from Bogor and Sukabumi. She decided to divide her 3 kg harvest into small packets, securing Rp 3 - 3,500/kg.

Other farmers noted Ismet's success. In July 1993, one farmer participated in a green bean demonstration project. By the end of 1993, some 10 farmers (accounting for 3 hectares of land) had been taught the new techniques. The demonstration plots yielded an increase in production and an increase in produce quality. By early 1994 however, it became clear that the market did not recognize quality improvements, but only production increases. These farmers found that the extra work did not yield a sufficient profit.

Capital output for Ismet's 100 m² demonstration plot was Rp 130,000; and the chilies sold for Rp 150,000. In contrast to the other farmers, Ismet's savings from using the home-made compost and profits from marketing the vegetables were funnelled into the next batch of bricks, whose profits supported the next agricultural experiments. Notably, although at the start of the

Project, his brick and tile industry was idle; there is now continuous production. Viewing Ismet's success, one wonders why other farmers have not followed his example. One explanation is that the other farmers are convinced that he is receiving extra payments from the Project. This is not at all true. Ismet can compost manure efficiently and with economic benefit since his livestock, compost area, and garden are all nearby. Farmers with a different layout perhaps lose the small benefits. For instance, composting probably becomes un-economical if it has to be transported some distance. A small increase in income, when cleverly integrated into a subsistence-level household economy, can make a dramatic difference.

By October 1993, 14 farmers had visited Ismet to find out about the demonstration plot. Based on these visits, the Kepala Desa requested that Tarso (a Credit Union Monitor; and an official of the Desa) form a village-level farmer group. This group met only once; it was felt that the Kepala Desa was exerting too much influence.

To date, the Jaya Mulya Credit Union has not helped the Vegetable Producers. Farmers are considered a credit risk since crops can fail and market prices can crash. Capital is "tied up" until after harvest time. The Credit Union's current loan policies, in particular the instalment schedule, does not accommodate this group.

Fermented Cassava

Good quality fermented cassava is soft, dry and sweet. What the villagers produced instead was soft, wet and sour. Therefore, in early 1993 the Project offered to help the producers make a higher quality product. The producers were not interested, as cost and effort to do so yielded negligible profits. Furthermore, there was a larger market (restaurants) for the lower grade product. The sweet fermented cassava is sold to individual consumers. This producer group defined its problem as a lack of capital (forcing them to use money lenders), not a lack of technology. However, more capital would increase production and the number of people involved in the activity, and marketing and transportation of the product would become more complicated. Perhaps on account of the fact that the group (to date) is still not organized, individual batches remain the optimal scale of production.

Most fermented cassava producers do not need the Credit Union at this time, because the production costs are small (Rp 12,500). The Project, as of September 1993, has only assisted some fermented cassava producers with "entry" into the Credit Union. Initially, the Field Worker Iwan blocked their entry as he considered "fermented cassava" a marginal economic activity.

Mushrooms

In June 1993, the Field Workers discovered that four people, including the Credit Union Secretary, were growing mushrooms using rice stalks. This technique was introduced by a Bogor Agricultural Institute student. They had encountered problems with the availability of spores and problems with the rice stalks rotting. Further experimentation by the Project staff resolved both of these problems. Spores can be obtained from market mushrooms, but the best results are obtained when spores are ordered from the Bogor Agricultural Institute. Rice stalks can last longer if the operation is set up on sloping ground. This activity will remain seasonal when the weather is favourable (just after the rainy season), and when there is a ready supply of rice stalks. This group does not need the Credit Union, because very little capital is involved.

The Women's Group

The village women living near the base camp enjoyed making sweets. In August 1993, Ali and Ondi suggested that they try to sell some. Except for one person, the women were not Credit Union Members. They had two meetings and made cassava chips and other sweets as test cases for marketing. Although sceptical, the women discussed how to go about selling their products. At the third scheduled meeting, nine different women (mostly Credit Union Members) showed up, led by one Shop-owner/Credit Union Member. The plan (which displaced the initial group of women) was to make goods to sell at her shop. This group met for a number of Tuesdays to try out ten different recipes and to discuss how to improve the products. Cassava chips were selected for production and the group pooled their money to purchase supplies and equipment.

From the start, market demand exceeded their production capacity. In time, however, the group's productivity came into question. At home, each woman produced 4-5 bags per day; by working together, only 8 bags were produced (free-rider syndrome). The group decided to disband and to divide the assets. They planned to meet occasionally to try new techniques. The production activities were put on hold during the fasting month of Ramadan (February-March 1994), after which only the Shop-owner resumed production. The price of plastic bags, cooking oil and cassava had increased, while the price of cassava chips remained the same. This group managed well without the Credit Union.

Fisheries

In February 1994, a brick and tile producer, Deden, asked Taufiq about doing fisheries activities as a source of extra income. He had a number of digging pits from his brick and tile business that he proposed to use as fish ponds. Taufiq and Ali gave Deden a formula to calculate the amount of fish food needed and Rp 25,000 in Project funds to purchase rice meal and fingerlings. Deden was advised to grow fingerlings for three months. He purchased the cheaper "fry," and grew them for two weeks to the stage of "fingerlings," minimizing his risks through a quick resell to nearby fish farmers. Deden and others are interested in continuing this activity on a seasonal basis (during the rainy season). The Credit Union was not needed.

Small Shops

Fourteen Credit Union Members are shop-owners, and they have proven to be reliable creditors. Overall, the smallest shops have accrued the greatest benefit from the Credit Union, because small shops can benefit from small loans, while bigger shops cannot.

POLITICAL CONTEXT

The development of the Jaya Mulya Credit Union and the Barengkok Producer Groups occurred within a political context. Of particular bearing on the Project was the sub-district (Camat) and local (Desa) levels of government. The Project's relationship with these two levels of government is outlined below (See Appendix 5, for the Government structure.)

The Camat (Head of the Sub-district, or Kecamatan Government)

In January 1993, when Taufiq started the research permitting process, he found that the new Camat was displeased with the Project. The acting Kepala Desa had complained to the Camat that none of the Credit Union staff had reported to him. Taufiq's first task was to explain to the Camat the Project's goals and why ITB was involved. Taufiq requested the Camat's support (ie. non-

interference) and it was agreed that a monthly report would be submitted. Isla was assigned the task but initially didn't make the reports as he disliked bureaucracy; this angered the Camat. In June 1993, Taufiq requested that Isla submit the report to Ali, who would then submit it to the Camat (also copied to PPLH).

From the time that the Camat began receiving regular reports, he has given the Project his full support. For instance, in August 1993, the Bupati introduced a government agricultural program and requested that the Camat select one farmer per village to do a soya bean demonstration plot. The Camat chose Ismet (chili project) in essence complimenting the Project for its good work. The Camat has also offered Rp 30 million in loan money for small-scale industrial projects; however, the 3% interest rate is however too high. The Kecamatan now invites the Field Workers to attend monthly Kepala Desa meetings. He has also requested PPLH's assistance with the Inpres Desa Tertinggal Program, a government program addressing the needs of the poorest villages. The Camat is using the Credit Union as a model and in October 1994, the Camat asked Ali when he will initiate similar work in other villages.

The Kepala Desa (the Village Head)

The July 1992 - June 1993 period was politically "hot" in Barengkok. The Kepala Desa died in July 1992; the acting Kepala Desa was disliked by the current Kepala Desa and the Head. At the time, the Head and the current Kepala Desa had a good relationship. The campaign to find an official replacement began in January 1993, and by May 1993 three candidates were identified. The most favoured candidate was rejected by the Camat (sub-district Head) and/or the Bupati (district Head). On account of this, it was thought that many villagers would spoil their votes in protest at the June 26, 1993 election, so vote ballots were inspected by the police and army. Against Taufiq's advice, Iwan, one of the Field Workers, got somewhat involved in the election, and gave lectures on democracy out of the Project base camp. The current Kepala Desa was elected and took his seat in October 1993. Sometime during the election process, the relationship between the Kepala Desa and the Credit Union Head soured. The current Kepala Desa invited the Board Members, with the exception of the Head, to set up a new credit union (August 1993). Nothing happened with this suggestion.

Taufiq met with the Kepala Desa November 13, 1993 to discuss the end of the Project (officially, the end of December 1993). In striking contrast to his previous attempt to set up a new credit union, the Kepala Desa requested that the Project be continued beyond the official completion date. The Kepala Desa also offered the Credit Union some office space and offered Ali an executive position in his office. The Credit Union chose to rent separate space. The Kepala Desa suggested that some joint work (eg. animal husbandry) be undertaken. He added that if PPLH "cooperated" with him, he would use his influence to get a lot of members for the Credit Union. Taufiq agreed to some joint work as long as the basic Project approach was maintained, ie. villagers continued to make their own plans.

In his speech at the Annual Meeting, the Kepala Desa mentioned that he was displeased with the Credit Union as he had not been appointed to the Credit Union's Advisory Board. During 1994, the Kepala Desa actively "stole" the cooperative staff, giving them village level responsibilities. For instance, the Secretary was asked to be the Health Inspector. Individuals were afraid to refuse these functions, as they did not want to be transferred to another location. Taufiq felt that the Kepala Desa had two objectives: he was trying to disrupt the Credit Union, and faced a shortage of skilled human resources at the village level.

The Kepala Desa fired the Credit Union Head from the School Board in July 1994, during

a closing speech at the school. The Kepala Desa threatened (although he does not have authority to do this) to have the Head fired from the Credit Union in September 1994 when the Project's research permit had to be renewed. The Credit Union Head died in September 1994, and the Vice-Head became the acting Head of the Credit Union. How will the Kepala Desa relate to the Credit Union now? Ali visited the Kepala Desa recently to discuss the Credit Union's new Area Coordinators. Ali discovered that the Kepala Desa is no longer getting along with the Secretary and the Treasurer, and that he is campaigning to have Tarso (a Monitor) as Head of the Credit Union.

PART C: EVALUATION

This story has brought the reader along a very circuitous road. Much learning is embedded in this account: a wealth of observations, triumphs and failures are highlighted. In this section of the paper, we distance ourselves from all of these stories, and begin the process of "making sense" of some of these events. We chose to evaluate the Project against the Project's proposal development sequence because some of the original objectives were maintained, and ultimately steered what was implemented. The Project results to date are evaluated against: 1. the objectives of the funded proposal; 2. the objectives of the original proposal, and; 3. the model.

Evaluation with Respect to the Approved Proposal

Specifically, the objectives of the approved proposal were to:

1. lay the groundwork for establishing credit unions;
2. identify the feasibility of establishing marketing and/or workers' cooperatives;
3. identify the measures necessary in order to ensure that any present environmental degradation is halted.

It was expected that:

1. credit unions would be established;
2. the credit union movement in general would be strengthened;
3. the community development process of participatory action research would be documented as it was being implemented;
4. contacts and communications would be strengthened within the community, between the community and the ITB/CCA team, and the various government agencies who would consider assisting with funding the next phase.

The Project has surpassed expectations in terms of objective # 1. In spite of all the problems, the Members are currently trying to manage a rather large and complex credit union. This is testimony to a significant community development process and to a significant community level learning dynamic (ie. individuals within the Credit Union community). However, there is still much to do with respect to establishing marketing and producer group cooperatives (objective # 2). There is resistance to "cooperative" group

activity (eg. the women's group). Also, individual producers (eg. brick and tile entrepreneurs) remain distrustful of each other, which is a real barrier to the formation of workers' cooperatives. Likewise, environmental concerns (objective # 3) have yet to be addressed. The Project never had the resources to lure more brick and tile entrepreneurs to the Jasinga area. And, on closer inspection, it was found that the current environmental impact of the brick and tile industry in Barengkok was negligible. In contrast, access to a clean water supply would appear to be an environmental health concern in Jasinga, but the local population doesn't think so. In terms of expectations, the community development process of participatory action research was documented as it was being implemented by way of this paper; and various important contacts have been made (expectations # 3 & 4).

Evaluation with Respect to the First Proposal

The key objectives of the first proposal were to enable PPLH-ITB to:

1. develop strategic methods and mechanisms to mobilize community participation;
2. identify the appropriate technology that will enable the community to develop a sustainable brick and tile industry;
3. identify the appropriate means to mobilize local capital;
4. identify the feasibility of establishing marketing and/or workers' cooperatives, and;
5. identify the measures necessary in order to ensure that any present environmental degradation is halted.

It was expected that the design phase would:

1. assist PPLH-ITB in determining whether or not the community was prepared to engage in a self-development process around the strengthening of the brick and tile industry;
2. test some initial ideas on technology development and credit union development;
3. document the community development process of participatory action research as it was being implemented;
4. create and strengthen networks between all of the relevant actors, and;
5. enable the development of the three-year proposal.

Certainly, much has been done to address the above objectives and expectations. Methods and mechanisms to mobilize community participation are being developed (eg. Area Coordinators, objective # 1). In addition, some ideas on technology development, (objective # 2) were tested. However, most technological interventions for the brick and tile producers have failed (eg. standardizing bricks). Based on the preliminary information, the brick and tile producers faced three main problems: capital, marketing, and technology. When technology (through Adrian), money (through the Credit Union), and management (through Ali) were added, there were still no improvements to the brick and tile makers' situation. The preliminary information was perhaps misleading. It has

become clear that the problems are in fact seasonal. During the wet season, demand is low and marketing is a problem as there is little building activity. Meanwhile, during the dry season, prices are good, demand is high, but production capacity is too low, and water and labour are in short supply. If a clay-mixer is purchased to alleviate the labour shortage, the rate of production might increase significantly, and environmental concerns may emerge. With this clearer understanding of the brick and tile industry, interventions will be more effective in the future. In terms of expectation # 1, the brick and tile community is not yet ready to engage in a self-development process around the strengthening of their industry.

New cropping systems (eg. composting) were introduced and were successful in certain contexts. However, most of the technical advice attempted by farmers in Barengkok failed to significantly increase their incomes. Higher quality products were produced but "quality" was not valued in the market place. With the exception of Ismet (the chili project), individuals did not continue with the technological advice offered. It was envisaged that the Project could support agricultural development by helping with accessing information on markets for local crops, and introducing new cropping systems and marketing channels for those crops. Market information was given to some producers but markets were found to be unpredictable (eg. the market price of chilies crashed).

Some progress has been made on identifying the appropriate means to mobilize local capital (objective # 3) and ideas on credit union development are being tested (eg. different loan policies for different groups). To date, the Credit Union has not resolved the brick and tile makers' and farmers' "capital" problems. For instance, the brick and tile makers have very limited savings, and hence cannot borrow the large amounts needed. A 10-month pay-back period does not accommodate the idiosyncracies of the industry. The Credit Union's current policies seem appropriate for a very small number of economic activities, such as small shops. Most notable, most of the producer groups did not need any credit. What is clear is that the standard PusKopdit credit union model does not suit all types of economic activity. Objectives # 4 and # 5 and expectations # 3 and # 4 were discussed under "Evaluation With Respect to the Funded Proposal." A new funding proposal is currently being drafted (expectation # 5).

Evaluation with Respect to the Model

The Ciamis model is a strategy to initiate a process of sustainable development at the local level, involving local communities in their own development. To drive the process, it is considered essential to establish local democratic institutions or to transform existing traditional ones. It is this institutional framework which will allow villagers to continue to address environmental and developmental problems over the long run. A process of institutional development and democratization has been initiated with the establishment of the Credit Union and attempts are being made to increase membership representation through monthly meetings with the Area Coordinators. It is, however, too soon to

determine whether this institutional framework will develop into something that can address environmental and developmental problems over the long run. For the moment, these are not the community's concerns; they are only concerned with making money.

The Project's implementation to date does corroborate to a large extent the key points of the sustainable development strategy: ie. that sustainable development projects are an exercise in "social learning" for all actors in the development process and represent a synthesis of top-down and bottom-up approaches to development, achieved through conflict resolution. In addition, information and communication are important tools to increase the rationality in decision-making (eg. problem-solving meetings; Area Coordinators). Also, it is more practical to look for the smallest possible unit as an entry-point, and replicate its development to build-up the whole system. The role of the Project staff is that of "catalyst," and the time-line of the process and the sequence of specific activities are dependant on the readiness of the community to accept and utilize resources.

However, it is still unclear how the Credit Union can support economic activity in Barengkok in the context of sustainable development. (Or, how can this Credit Union generate capital, which will alleviate poverty, which will halt environmental degradation, and steer "development" in the direction of "sustainable?") During the first two years of the Project, the Credit Union's development has consumed most of the staff's energy. If funding can be secured to continue the Jasinga Project, the sustainable development objectives will be more seriously addressed.

PART D: CONCLUSION

Lessons Learned to Date: Reflections on the Implementation Process

Lastly, and in line with the purpose of this book, some reflections on the implementation process are given. This final section begins to highlight some of the lessons learned to date. This whole story was "put down on paper" to enable us to write this section. In terms of methodology, this was "participatory action writing" in the sense that the following assessment was produced through the writing process. The following eight points constitute some of the major areas of learning to date with respect to the Project implementation. Major headings include: project design and objectives, project approach, beneficiaries, information, political relationships, top-down and bottom-up implementation, conflict resolution, and implementors.

Project Design and Objectives

It was difficult to convey the Project objectives to the community due to their limited understanding of the overall concept. Above all else, the villagers wanted money. It was also difficult to convey the Project objectives to the PusKopdit Field Workers. Their prime objective and focus of activity was the development of a successful credit union. The

"ideal" was a holistic program leading to sustainable development, an ideal which was maintained by other members of the implementation team. Throughout the implementation process, there was tension between attempting to implement the Project "ideal" and implementing the approved proposal (the development of credit unions). This highlights the issue that implementation is a process involving multi-actors, with multi-objectives which can be in conflict at times.

Although the Project ideal is a worthwhile holistic "vision," in practice it proved to be ambitious and unfocused. Many different activities were initiated and were implemented to varying degrees. Taufiq now reflects that the Project dealt with everything, and that the Project reacted when the community reacted. Everything was "done half way," and the focus shifted as community interest shifted. Taufiq now feels that the path to initiate the sustainable development dynamic is quite wide. Any number of activities can be used as the entry point, a credit union or the brick and tile industry. Had the Project focused on any one activity, there would have been things to work on and problems to solve, and this might have brought more tangible results.

The Approach

The Project was easy on public resources. The one year design phase (CAD 34,000) funded two years of Project activity. The limited financial resources helped to maintain focus on the Project's "self-help," community-based approach.

The Project approach allowed for the community to control the change process. Throughout the process, the Project Leader had to be very flexible and patient (at least when in the field!), to listen carefully, and to do his best to try to decipher what was wanted. Most interventions were framed as "suggestions." Even in terms of technological interventions, it was never said that "this is the best way." Options were merely offered. This created a non-patronizing climate, a "partnership." This approach also shielded the Project Leader from being directly responsible for any negative or positive outcomes. It was truly a community-based change process.

Things didn't go as planned; it was initially thought that it would be difficult to establish the Credit Union and easy to establish the producer groups. In the field, the reverse was true. The Credit Union "took-off;" many delays were encountered with respect to the development of producer groups. From this experience, it would seem that implementing "what people want" is not at all a straight-forward process. The whole journey was peppered with things that didn't work (eg. Producer Groups), followed by attempts to identify (creative) alternative solutions (eg. Area Coordinators). For this particular case, a "fixed" plan could not have been made; ideas were generated during implementation. A lot of what can be seen in this case can be termed "unplanned" development; a type of development which is perhaps common in Indonesia, and elsewhere, and thus requires more serious study.

Field Worker Ali used a "personal" approach to get close to individual villagers. Personal relationships had to be developed prior to gaining the trust of individuals. In reference to another situation, the Field Worker recommends identifying "groups" early in the process. A "group" approach was not feasible in Barengkok, because there were so few "groups."

To date, the Project approach has had some measure of success. Perhaps on account of this experience, this very conservative community has become a little more experimental (eg. trying variations in fertilizer, food processing, mushrooms and having to deal with the ongoing Credit Union problems). This may be the forerunner to the hoped-for learning dynamic.

Beneficiaries: Individuals/Community?

One factor which greatly eased the implementation process was that what was being proposed initially was in line with what individuals wanted. At the individual level, the benefits of the Credit Union (loans, savings) were quite clear; others benefited from receiving technical advice (composting). As time passed, individuals could more seriously consider "what they needed" (eg. regarding lending policies).

However, "capital" in itself was not enough to help most villagers. The rules surrounding the use of capital (the loan amount and instalment schedule) render capital useful or useless. Clearly, a credit union which has the same rules for different types of economic activities does not provide an equal opportunity to everyone. Furthermore, some producer groups do not know how to use capital, as their scale of activities is very small. This impasse is related to Barengkok's structural poverty.

It was assumed that it would be easy to determine what the community wanted. Outside of wanting money, villagers are generally reluctant to discuss their problems. Loans requested for some stated reason were used for completely different purposes. People didn't give the Field Workers complete information, so it was difficult for the Field Workers to give appropriate advice or anticipate consequences. For instance, if a farmer requested information on fertilizer use, the advice would not be followed because the farmer didn't have any money to purchase fertilizer. Often, if some technical advice failed, the villagers did not report the failure (and the project team did not follow-up enough to find out in a timely way), so there was no learning loop created. The Project was implemented within a village culture that views "asking questions" as admitting that you are "stupid;" that problems should be "hidden;" that being active or entrepreneurial is being "greedy;" where entrepreneurs are individualistic in terms of business ventures; and where social jealousy is an issue. Furthermore, Project Staff interact with "individuals," and "individual wants" may conflict with "community desires."

The Project model is premised on initiating action "when the community is ready." "Readiness" was difficult to measure; "community" was difficult to define. If within a

group, 3 out of 8 people are interested in participating in an activity, is the community ready? During implementation, when "one" was ready, (eg. Ismet), activities proceeded. The Field Workers did not wait for the community to be ready. Is that usually the case with community-based development? Perhaps projects like this one are termed "community-based development" from the outside, but from the inside they are closer to "individual-based development."

It was assumed that the process of "community learning" was easy. The Project can document "individual learning." However, how closely related is "individual" learning to "community" learning in this context? Barengkok is a poor, passive, conservative village with a history of getting hand-outs. New ideas had to be proven, carefully presented to each individual, and then re-discussed. Simple language was used at meetings but even simple explanations were not always understood. (Differences in specific context are apparent when the Jaya Mulya experience is compared to its sister credit union, the nearby Eka Karya).

Information

Access to correct and timely information was difficult. The Project staff was at times mis-informed (eg. about the use of the mosques). Also, the Project Leader learned about the field issues through a Field Worker, so the "problems" were filtered. This was sometimes beneficial, as the Project Leader didn't need to react to every issue. There was also a lag between the time problems arose and when problems were reported to PPLH, as well as a time lag between finding out about a problem and the Project Leader's next field visit. Sometimes the delays were beneficial, allowing the community to solve its own problems and in effect minimizing the number of Project interventions. Also, the Project personnel was not invited to all Credit Union meetings, so some information was simply inaccessible.

Political Relationships

The Camat did not intervene in the process as long as he was kept informed. Overall, he created a supportive political climate. At the village level, the Project staff now emphasize how important it is to befriend the formal and informal leaders as quickly as possible; the village leaders cannot be excluded from the project implementation process. One issue however, is that it is difficult to determine which individuals are dominant.

Top-Down and Bottom-Up Implementation

Often, solving a specific issue involved a synthesis of top-down and bottom-up implementation. For instance, the Area Coordinators were introduced in a top-down manner. Now it is up to the Board and the Members to sort out the Area Coordinators' responsibilities.

Overall, there was a high degree of local control over the Project's implementation. A bottom-up approach was important in the overall development of the Credit Union, resulting in at least the Board Members feeling like the owners of the Credit Union. And, working at the village/hamlet level is bottom-up with respect to other levels of political organization. However, it has become more evident through this experience that anything termed "bottom-up" is relative. The concept is implemented in degrees and is a multi-level process. When the Board Members were "top-down," their actions can still be considered "bottom-up" from the political organization standpoint. Poerbo comments that at the hamlet/village level, it is difficult to distinguish between top-down and bottom-up.

One also has to question how well a completely "bottom-up" approach can work in this particular context. The educational level and culture of the villagers imposed limits on what could be accomplished from the bottom. Notwithstanding the latter, Taufiq does at times ask himself why he didn't follow a completely bottom-up approach. Why didn't he trust the community/individuals to find the correct solution for themselves? He asks himself whether his emotional attachment made him lose his objectivity.

The Project attempted to steer the development process, without exerting control. For instance, when individuals got off the Credit Union development track (a subjective evaluation by the Project team), interventions were needed. A top-down intervention was not viewed as inherently good or bad. For instance, to get the Credit Union "off and running," a top-down approach was used to select a skilled executive. However, a top-down approach was viewed as inappropriate when the Board and one of the PusKopdit Field Workers wanted to apply an exclusionary selection criteria to the broad membership. The latter was in conflict with the overall Project goals, and required a top-down countervailing intervention. If the local knowledge was insufficient (eg. bookkeeping) then a top-down approach was used to solve problems. Also, there is the issue of time. A top-down approach can make things happen faster.

Issues often required careful reflection and consideration before deciding how and when to intervene. Often an intervention took the form of bringing critical issues to the surface (eg. the organizational structure issue). On their own, the membership would have probably remained passive. It was important to restrict "intervention" to critical issues.

The difficult aspect of implementing community-based development projects may be in determining where, when and to what degree to use a bottom-up approach and where, when, and, to what degree to use a top-down approach.

Conflict Resolution

Dealing with conflict consumed a lot of the Project staff's energy. An important dimension to managing conflict was the constant necessity to manage the relationships between the various actors. There was conflict between the various parties (Field Workers, Board

Members, Members and Political Leaders) and conflict within the various parties (between the Field Workers, between the Board Members). Overall, conflict needed to be managed on an ongoing basis.

Implementors

Implementation was a messy, uncertain, and unpredictable process. Why? One reason is that implementation involves individuals, individually, and in personal relationships to each other, and in relation to various activities. Personal relationships and the specific actors changed over time, sometimes for the better, sometimes not. What was implemented was associated with many variables, including: opportunity, do-ability, staff capability and decisions made by the implementors. The choice of activity and the extent to which an activity was implemented also depended on the personal and political interests of the various actors. What was implemented in this case had a lot to do with the specific actors, most notably the Field Workers. Careful selection of the Project team is essential. And, even there, a carefully selected Project team must be connected or matched with compatible local actors.

CLOSING NOTE

Part A of this paper depicted how "big ideas" get translated into "small projects" and how some of this "focusing" is at times imposed internally (by the Project planners) and externally (by the funding agency). The "big idea" was how to initiate a process of sustainable development at the local level: to address sustainable development, environmental degradation had to be halted; for environmental degradation to be halted, poverty had to be alleviated; poverty alleviation required capital; capital could be obtained through a credit union. The Credit Union was the small "project," to implement the "big idea." In Part B of the paper, the implementation of the Jasinga-Leuwiliang Project: Cooperatives for Sustainable Development, was described. Events associated with the development of the Jaya Mulya Credit Union and activities initiated with a number of Producer Groups were outlined. In Part C, the Project results were evaluated against the objectives of the funded proposal, the original proposal, and the model. And last, the lessons learnt during implementation were listed. We hope that the story has given you much food for thought and much insight into the mysterious process of implementation.

APPENDIX 1

TABLE 1: THE JAYA MULYA CREDIT UNION IN BARENGKOK

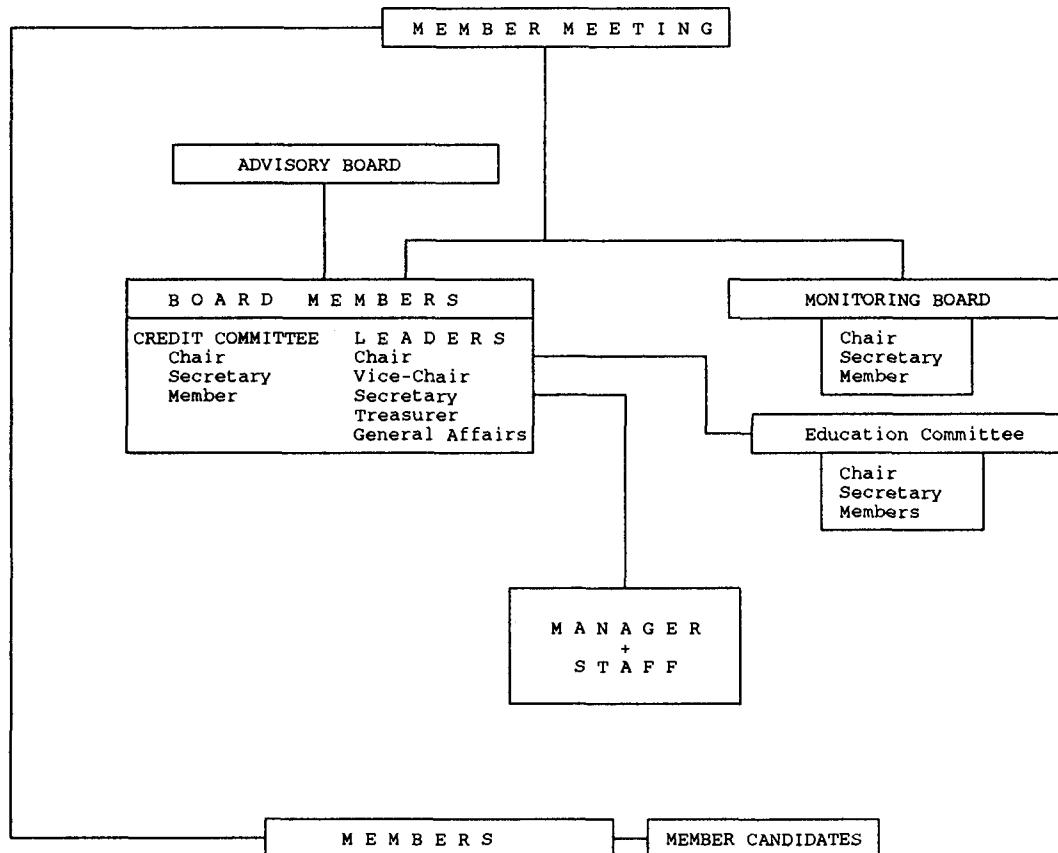
Month	Number of female members	Number of male members	Total number of members	Total savings (Rp)	Number of Creditors	Loans/month (Rp)	Total number of creditors	Total amount in loans (Rp)	Profit (Rp)
Feb 1993	14	26	40	301,000.00	-	-	-	-	5,200.00
Mar 1993	14	27	41	352,500.00	-	-	-	-	5,700.00
Apr 1993	15	27	42	547,000.00	-	-	-	-	-300.00
May 1993	16	29	45	1,256,000.00	28	4,250,000.00	28	4,250,000.00	5,700.00
Jun 1993	17	32	49	1,375,000.00	1	100,000.00	29	4,350,000.00	24,100.00
Jul 1993	19	44	63	1,671,500.00	3	200,000.00	32	4,550,000.00	50,975.00
Aug 1993	21	48	69	2,063,000.00	9	1,110,000.00	41	5,660,000.00	109,525.00
Sep 1993	25	57	82	2,509,800.00	8	625,000.00	49	6,285,000.00	86,175.00
Oct 1993	30	64	94	3,220,500.00	12	1,340,000.00	61	7,625,000.00	155,375.00
Nov 1993	31	65	96	3,660,800.00	5	1,110,000.00	66	8,725,000.00	230,575.00
Des 1993	33	68	101	4,188,600.00	11	1,090,000.00	77	9,815,000.00	343,725.00
Jan 1994	34	69	103	4,338,750.00	6	760,000.00	83	10,575,000.00	60,200.00
Feb 1994	34	71	105	4,516,650.00	8	800,000.00	91	11,385,000.00	92,400.00
Mar 1994	34	70	104	4,740,650.00	23	2,081,000.00	114	13,466,000.00	120,400.00
Apr 1994	35	70	105	4,867,150.00	7	945,000.00	121	14,411,000.00	267,945.00
May 1994	37	71	108	5,082,600.00	5	675,000.00	126	15,086,000.00	333,695.00
Jun 1994	39	76	115	5,342,100.00	4	700,000.00	130	15,786,000.00	420,045.00
Jul 1994	41	83	124	5,616,100.00	8	1,070,000.00	138	16,856,000.00	532,270.00
Aug 1994	41	81	122	5,793,100.00	7	740,000.00	145	17,596,000.00	591,220.00
Sep 1994	43	85	128	5,916,600.00	3	380,000.00	148	17,976,000.00	569,095.00
Oct 1994									

TABLE 2: THE EKA KARYA CREDIT UNION IN TEGAL WANGI

Month	Number of female members	Number of male member	Total number of members	Total savings (Rp)	Number of Creditors	Loans/month (Rp)	Total number of creditors	Total amount in loans (Rp)	Profit (Rp)
Sep 1993	10	39	49	847,000.00	1	300,000.00	1	300,000.00	19,500.00
Oct 1993	11	49	60	1,170,000.00	-	-	1	300,000.00	12,600.00
Nov 1993	11	48	59	1,608,500.00	5	510,000.00	6	540,000.00	-19,500.00
Des 1993	11	49	60	2,151,000.00	7	600,000.00	13	1,140,000.00	-14,950.00
Jan 1994	13	46	59	2,369,000.00	5	395,000.00	18	1,535,000.00	7,400.00
Feb 1994	13	46	59	2,469,000.00	2	450,000.00	20	1,985,000.00	13,200.00
Mar 1994	14	45	59	2,453,000.00	11	850,000.00	31	2,835,000.00	36,300.00
Apr 1994	15	45	60	2,697,100.00	2	350,000.00	33	3,185,000.00	57,900.00
May 1994	16	44	60	2,815,100.00	5	980,000.00	38	4,165,000.00	109,600.00
Jun 1994	18	45	63	3,032,800.00	5	630,000.00	43	4,795,000.00	155,050.00
Jul 1994	18	49	67	3,526,200.00	6	400,000.00	49	5,195,000.00	179,650.00
Aug 1994	18	49	67	3,610,700.00	3	215,000.00	52	5,410,000.00	221,250.00

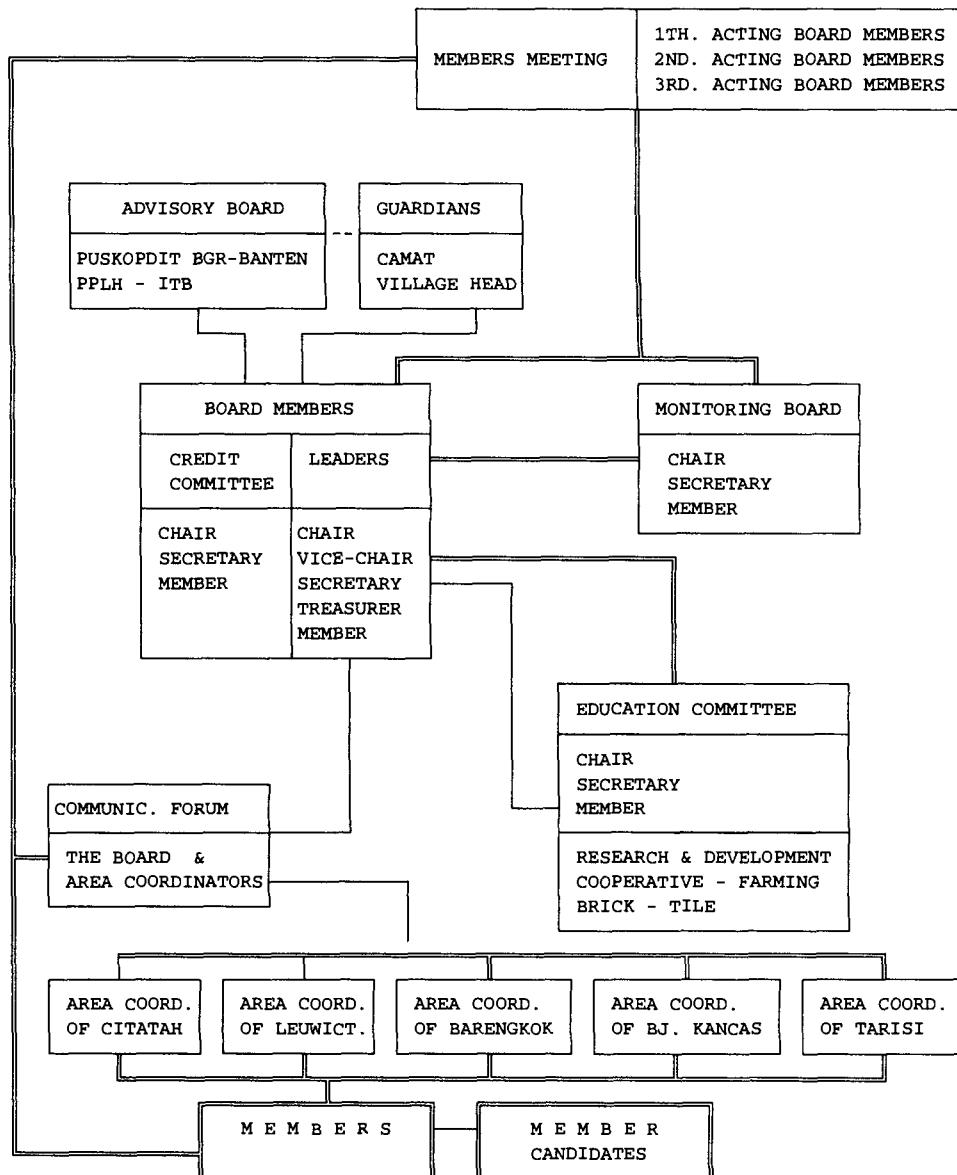
APPENDIX 2

THE OLD ORGANIZATIONAL STRUCTURE OF THE JAYA MULYA CREDIT UNION



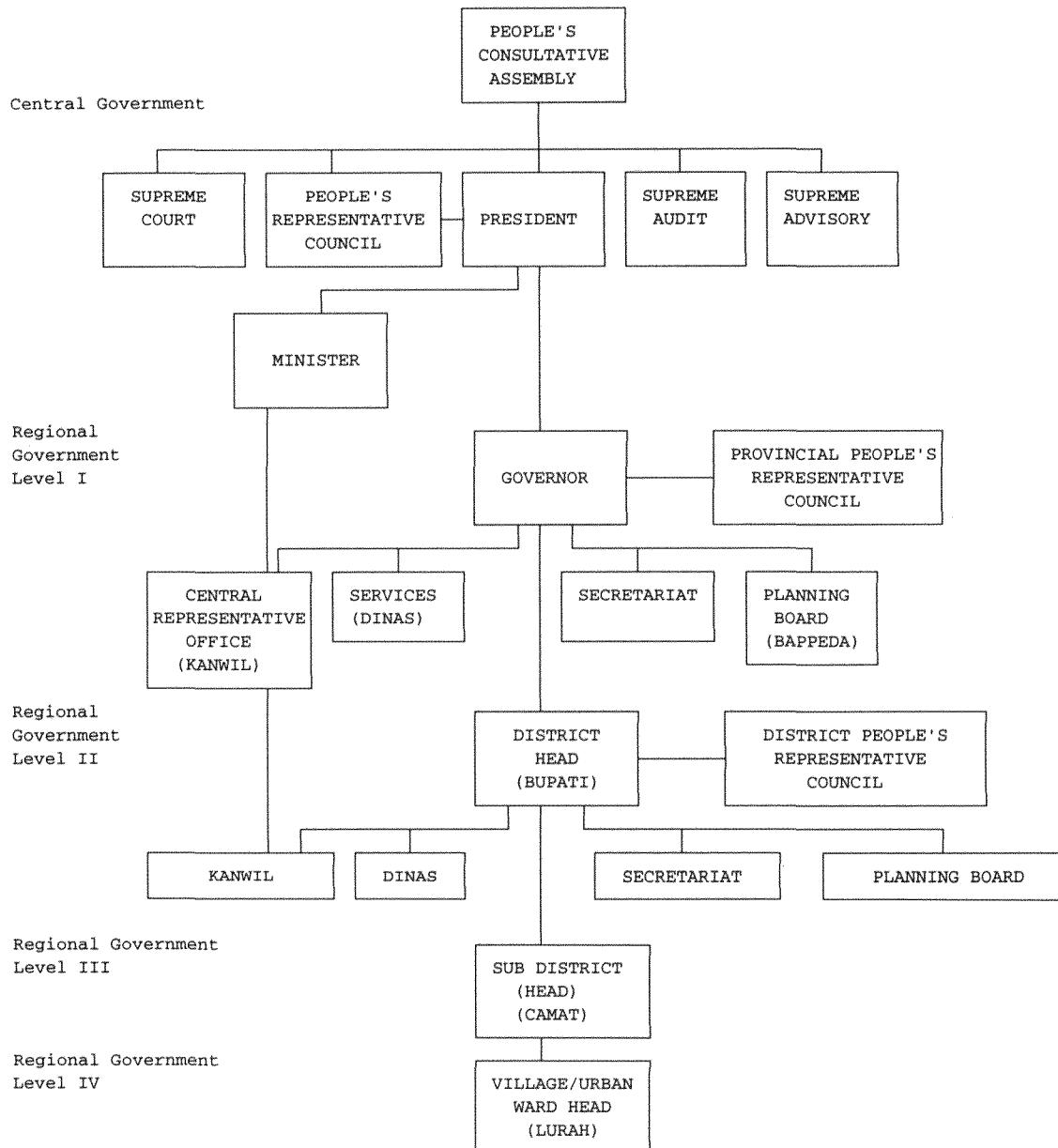
APPENDIX 3

THE NEW ORGANIZATIONAL STRUCTURE OF THE JAYA MULYA CREDIT UNION IN DESA BARENGKOK KECAMATAN JASINGA

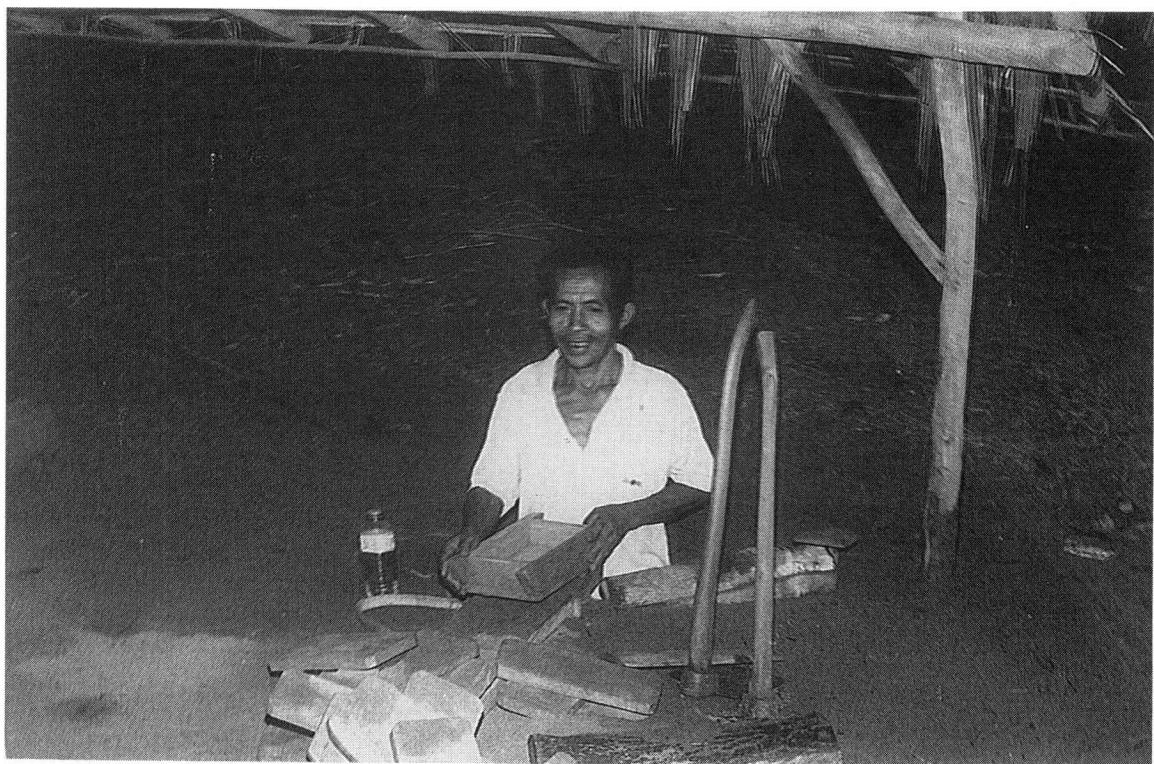


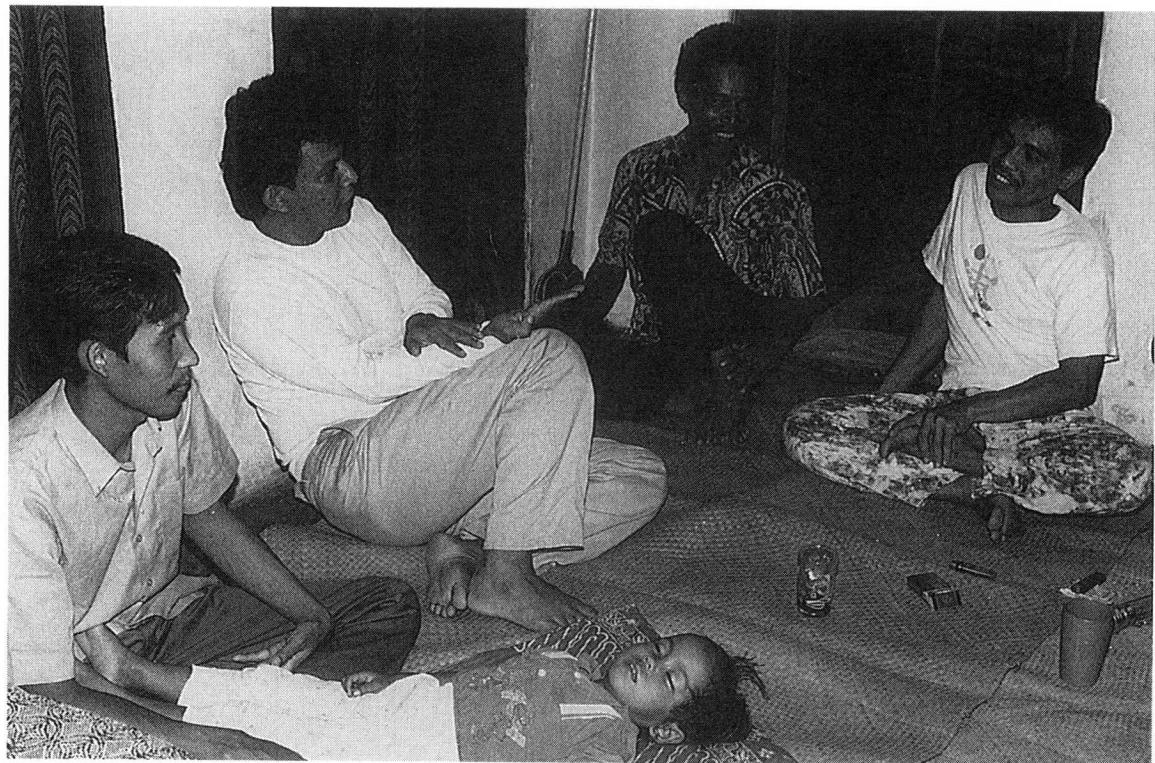
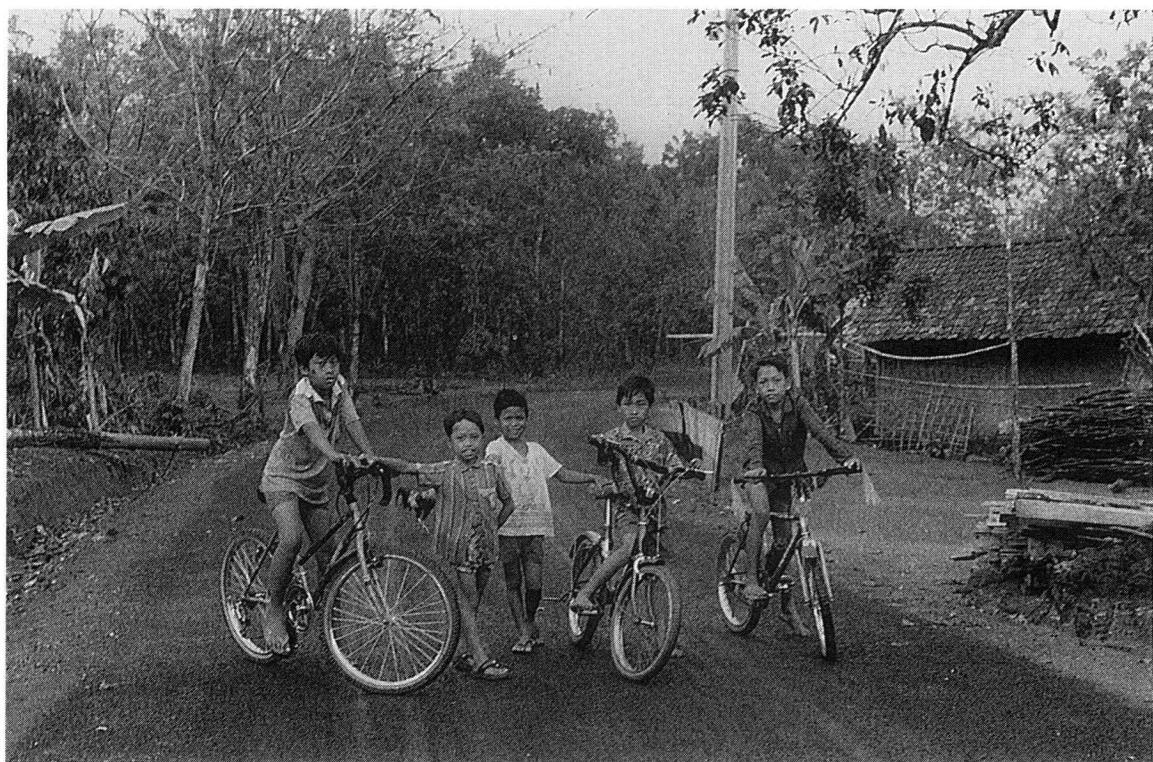
APPENDIX 4

STRUCTURE OF THE GOVERNMENT OF THE REPUBLIC OF INDONESIA



PHOTOGRAPHS: SCENES FROM THE JASINGA PROJECT AREA

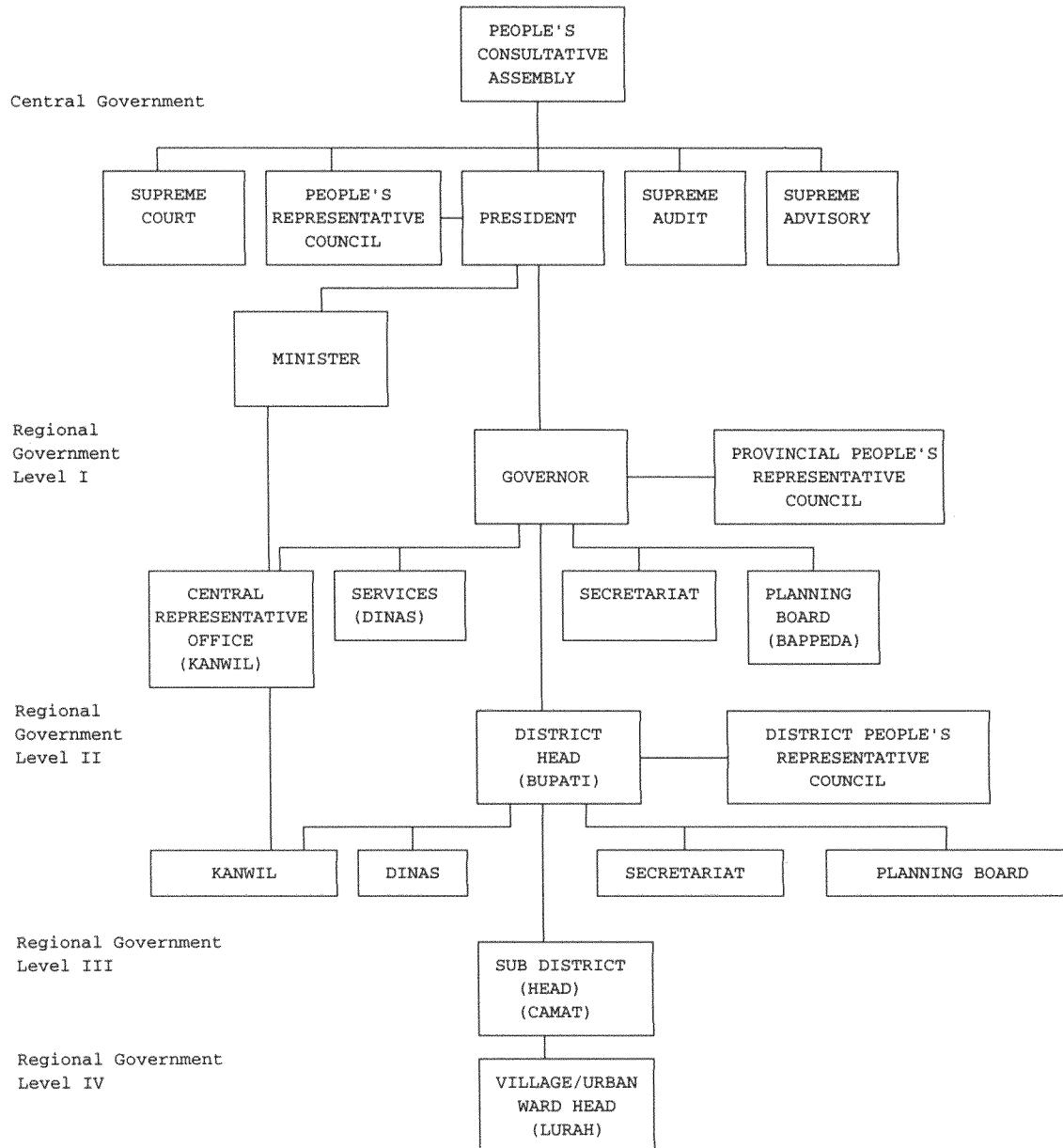






APPENDIX 4

STRUCTURE OF THE GOVERNMENT OF THE REPUBLIC OF INDONESIA



REFERENCES

Kwik, Kian Gie. 1991. Pendekatan Koperasi dan Kapitalistik di Negara Sedang Berkembang. (Cooperative and Capitalist Approaches in Developing Countries) in Discussion Forum on the Graduate Program in Development Studies at the Institut Teknologi Bandung, edited by Fred Carden, UCE Publication Series, Research Series Paper #5 ; pp. 121-131.

Larasati, Sri. 1994. Penyusunan Struktur Organisasi dan Bebijakan Kredit Usaha Bata pada Koperasi Kredit Pedesaan (Case Study: Jasinga Sustainable Development Project). Tugas Sarjana Disusun untuk Memenuhi Persyaratan Ujian Seminar Sarjana Teknik Industri. S1 Thesis prepared to fulfil academic requirements of the Faculty of Technical Engineering, October 1994.

Poerbo, Hasan and William Thomas. 1991. Environmentally Sustainable Development: A Proposal for the Jasinga Area Based on Experience from the Ciamis Project and Studies of Rural Productivity and Non-Farm Employment in West Java. from "Some Aspects of Sustainable Development," edited by Louise Grenier. UCE Publication Series, Research Paper # 24; pp. 159-184.

Scholz, A. and T. Walsh. 1991. The Jasinga-Leuwiliang Sustainable Development Project. The first funding proposal to the Canadian Cooperative Association, (the preliminary draft was submitted by Fred Carden, Jack Craig, Hasan Poerbo, and Taufiq). Unpublished. 14 pages.

Schwass, Richard. 1990. A Study of Implementation of the Ciamis Action Research Project in the Uplands of Citanduy, West Java, Indonesia. UCE Publication Series, Student Paper #1, York University. 85 pages.

Thomas, William. 1991. Implementing Sustainable Rural Development: Prospects for the "Ciamis Model" in Kecamatan Jasinga, Kabupaten Bogor, West Java, Indonesia. UCE Publication Series, Student Paper # 8, York University. 147 pages.

Walsh, Thomas. 1992. The Jasinga-Leuwiliang Project: Co-operatives for Sustainable Development. The approved funding proposal to the Canadian Co-operative Association, (the preliminary draft was submitted by Fred Carden, Jack Craig, Hasan Poerbo, and Taufiq). Unpublished. 11 pages.

CHAPTER 4

SUSTAINABLE INSTITUTIONAL DEVELOPMENT: A FIELD NOTE FROM THE RAWA SRAGI DEVELOPMENT PROJECT

by Zainal Abidin

Abstract

This paper describes the importance of institutional development in the context of the Rawa Sragi Development Project. One of the main thrusts of this project was a land reform programme. Although originally conceived of in a top down planning manner, the project received a positive response because it fulfilled a very basic need for farmers, the need for land. The paper reflects on the successes and weaknesses of the Rawa Sragi Project, which is widely regarded as a showcase of Lampung's political and economic achievements.

Abstrak

Makalah ini menggambarkan pentingnya pengembangan kelembagaan dalam kaitannya dengan pembangunan proyek Rawa Sragi di daerah Lampung, Sumatera Selatan. Salah satu titik tolak yang paling penting dalam proyek ini adalah program perbaikan lahan. Meskipun pada mulanya disusun dalam suatu rencana dengan arah kegiatan yang bentuknya 'top-down', akan tetapi proyek ini memperoleh tanggapan yang positif, karena program ini cukup memuaskan kebutuhan para petani yang paling mendasar, yaitu kebutuhan akan tanah. Makalah ini mencerminkan keberhasilan-keberhasilan maupun kelemahan-kelemahan proyek Rawa Sragi ini, yang secara luas dianggap sebagai suatu pameran keberhasilan politik maupun ekonomi di daerah Lampung.

INTRODUCTION

The Rawa Sragi Project is an excellent example of a successful agricultural and rural development project in Indonesia. Initially, the project was set up in a top-down manner with the farmers' involvement beginning mainly after the construction phase. The transition from a top-down project to a more participatory project involving the farmers was facilitated by relatively well developed institutional arrangements within the project. Also, the interplay between top-down planning and the farmers' needs was accommodated during the land reform programme.

This paper proposes that effective institutional development is necessary to ensure the sustainability of a project. In the implementation process, institutional development plays a major role in achieving the project's overall objectives. In this project, several factors contributed to its success, including effective coordination, availability of resources, high commitment among parties, leadership, the diffusion of information, and the skills of the foreign consultants. However, new problems are emerging which include environmental issues, inadequate funds, land reform problems, and problems with new agricultural extension methods.

To develop the case, this chapter is organized into five sections. The first section discusses some theoretical aspects of institutional development. Section two describes the project setting. The third section discusses the project design, the objectives, the beneficiaries and the implementation process. Section four evaluates the project, lists factors that contributed to its success and also outlines current problems. Several recommendations are given in the last section.

THEORETICAL ASPECTS

The significance of institutional and human factors in socio-economic development has been increasingly acknowledged over the past 15 years. Institutional development as a software package¹ is often ignored by scientists and economists because of its lack of accuracy and predictability. Today, this issue has become a highly focused field of study by donor agencies as well as recipient countries (Lewis, et al., 1988). The need for institutional development is often articulated not by the recipient country but by the donor, as was the case in the Rawa Sragi Project.

An institution develops when a common need, that directs people to behave in a certain way, is perceived. Because it deals with a common need, the institution itself implies sustainability, self-organization, and a grass roots based movement. An institution can also be prescribed from outside the society, called a "formed" or "induced institution." This kind of institution is characteristic of a top-down planning programme or project. The Rawa Sragi Project was this type of institution.

Sustainability is a concept which emerged strongly after the Brundtland Commission released its report, *Our Common Future*, in 1987. Sustainability has become a new paradigm in the development field and many development sectors have attempted to apply it. In terms of foreign assistance, USAID (1983) published an aid-policy paper, *Institutional Development*, which observed that institutional sustainability was emerging as one of the major problem areas for sectoral development, as well as public administration.

Another definition by Brinkerhoff and Goldsmith (1990, p. 13) states that "sustainability is the ability of a system to produce outputs that are sufficiently well valued so that enough inputs are provided to continue production." Institutional sustainability, therefore, refers to the lasting capability of an organization or system to provide sufficient goods and services to society. In the case of foreign assistance projects, institutional development may avoid the "balloon effect" which can occur when external funds are first

¹ In Indonesia, a "software package" refers to the social side of implementing an idea: the policies, procedures (including financial procedures), organizational framework, and laws which enable or indicate how an idea or technology will be implemented. For instance, scientists may produce superior seeds, but the "software" would consider how people will get access to the seeds and how farmers will finance buying the seeds.

provided in relative abundance and then withdrawn. With regard to institutional sustainability, Brinkerhoff and Goldsmith (1990) suggest three criteria. A project is sustainable if it can: 1. recover some of its costs or even become self-financing; 2. supply continuing benefits, and; 3. survive as an identifiable unit.

THE RAWA SRAGI PROJECT SETTING

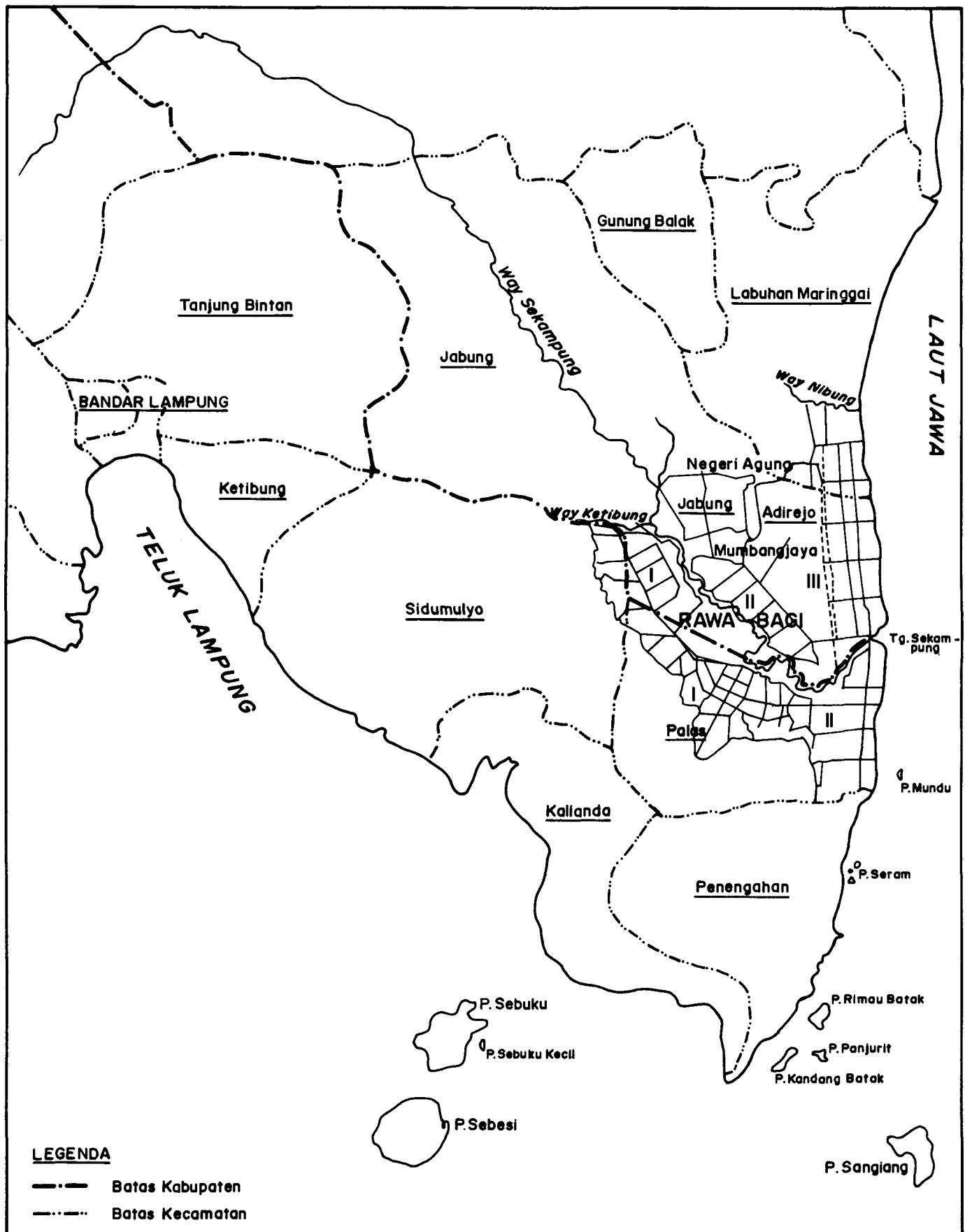
Rawa Sragi is located on the southeast coast of Lampung Province, in the downstream part of Sekampung River (see Map - *Location of Project* - on next page). The Rawa Sragi Project area involved 23,400 hectares and was divided into four phases of development: Rawa Sragi I, 7,700 hectares, which consisted of Way Sekampung and Pisang polders; Rawa Sragi II, 7,700 hectares, which consisted of Rawa Pisang and Rawa Kramat, and; Rawa Sragi III and IV, 8,000 hectares (see Map - *The Lay-out of Rawa Sragi Project* - on page 83). One thousand hectares of this land was clan-owned, while the largest part was owned by the state (Euroconsult, 1991a). Only the state-owned lands were subject to the land reform programme. The project area was situated in two regencies, Central Lampung and South Lampung Regencies, and involved five *kecamatan*s, namely Labuhan Maringgai and Jabung in Central Lampung regency, and Sidomulyo, Palas, and Penengahan in South Lampung.

Previously, the entire area was covered by swamps with the Sekampung River flowing across the middle. During the rainy season, most of the area was inundated, and was not suitable for agricultural cultivation. For the most part, the area drained naturally; only about 1,000 hectares, especially the clan-owned land at Pisang Polder, had an irrigation/drainage system. The objective was to convert this area into useful agricultural land through land reclamation.

The governments of Indonesia and the Netherlands negotiated the project proposal in April 1977; it was approved by late 1977 and construction began in 1979. This was the first project of its kind in Indonesia. The total project budget (1977-1991) was 55 million guilders. The foreign funds were discontinued by mid-1991 when the construction phase was completed. Overall, the project was considered successful and able to sustain itself as the foreign funds withdrew (Euroconsult, 1991a).

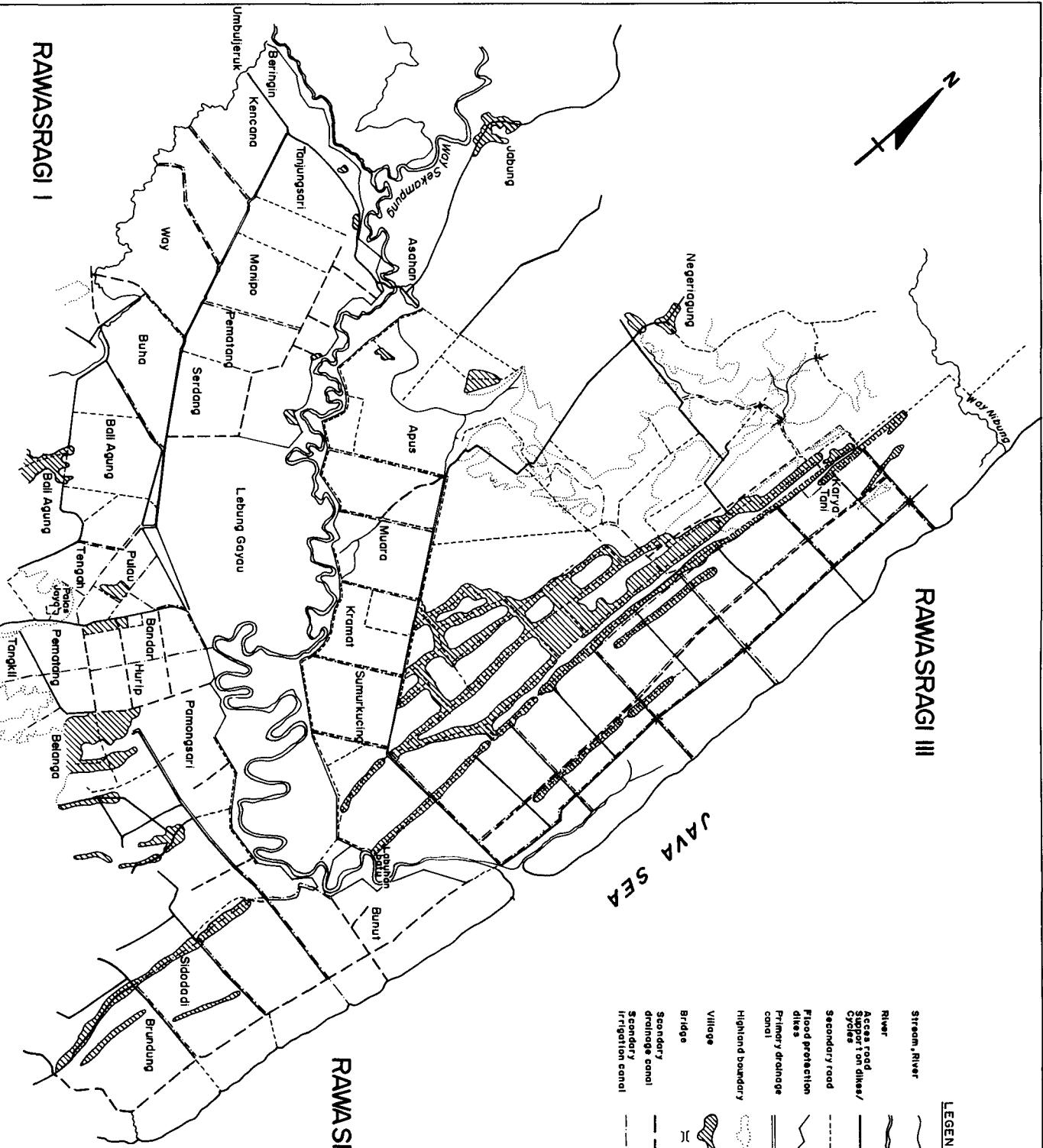
PROJECT DESIGN

This was an integrated rural development project, and involved infrastructure development and social and economic development. Infrastructure development activities included the construction of roads and bridges, rice fields, primary, secondary and tertiary canal outlets, an agricultural research station for food crops, and the development of small settlements. The social and economic development components included a land reform programme, agricultural extension services, the development of existing village cooperatives, and increasing the role of women in the cultivation of food crops. Of the listed activities, the land reform programme was the main component.



: Location of Project

RAWASRAGI I



LEGENDA

Stream, River	Sungai
Access road on dike/canal	Jalan atau diatas tanggul/kanal.
Secondary road	Jalan sekunder.
Flood protection dikes	Tanggul penangkal banjir.
Primary drainage canal	Tanggul primer SPP dengan jalan.
Highland boundary	Batas tanah tinggi.
Village	Kampung
Bridge	Jembatan
Secondary drainage canal	Saluran pembuangan skunder.
Secondary irrigation canal	Saluran irigasi skunder.

0 1 2 3 4 5 Km

The social and economic development activities were outlined in an Action Plan drafted in 1980 by the University of Lampung and the Institute of Social Studies in the Netherlands. Subsequently, the Dutch government allocated additional funds for activities under the Action Plan which was then known as the Special Assistance Program (SAP):

the necessity of a Special Assistance Program can be related to the fact that the project area is newly reclaimed land. The larger part has only been cultivated for a limited number of years, and farming still shows the characteristics of pioneer farming in an area where agricultural conditions are rapidly changing. The knowledge and experience of the farmer with regard to the qualities of the land and the water management system are still limited. Besides, the farmers have little resources, apart from their labour for investments. For the time being, government services like the agricultural services do not yet extend to the whole area. Thus a temporary additional input is warranted to raise the agricultural productivity and standard of living in the area (Euroconsult, 1991b: 19)

THE OBJECTIVES OF SAP

According to Euroconsult (1991b), the objectives of SAP were:

1. to increase farmers' access to agricultural inputs and services;
2. to assist in the creation of a farmers' organization, which through internal coordination of activities and cooperation among the members, could increase the efficiency of farming and managing communal tasks;
3. to increase farmers' knowledge of locally appropriate agricultural practices and incentives through strengthening of the agricultural efforts, and;
4. to assist with the provision of essential facilities (self-help programmes) for villages in and near the project.

In order to reach these objectives, the SAP included Action Plan I - V (see Table 1 on page 85).

Table 1:
Action Programmes in Rawa Sragi

Action programme	Title	Year(s)
I	Distribution of seeds and implements	1980-87
II	Farmers' group and organization	
	- II	1984-85
	- II	1985-88
	- III	1989
III	Agricultural extension	1984-90
IV	Small-scale activities	1990
V	Women in food crop production project	1987-89

Source: Summary from Euroconsult, 1991b: p 120-145

THE BENEFICIARIES

Initially, the intended beneficiaries of the Project (especially for the land reform programme) were local people and migrants from other parts of Lampung Province. However, new migrants came into this area not only from Lampung but also from Java. The project area was subject to an increase in spontaneous settlers even before the onset of project construction.

In the early 1970's, there were 50,000 residents; by 1991, the population had swelled to approximately 150,000. Their languages included Javanese (62%) and Balinese (4%); only 1% spoke the local Lampung language. The remaining 33% spoke Sundanese, Palembangese, Semendonese, and Madurese (Euroconsult, 1991b). The rapid population changes made it difficult to determine the project beneficiaries.

The criteria used to select the beneficiaries of the land reform programme were simple. The "beneficiary" had to belong to a family unit and was eligible if they:

1. had settled in the area and could provide proof of having owned land in the project area prior to 1978;
2. were landless and poor, and able to prove that they had settled there before 1978 through election cards, identity cards, or other civil records;

3. had owned land but had settled in Lampung after 1978 (the priority depended on the size of the land and the length of their stay in the area), and/or;
4. had cultivated land by themselves after 1978.

If necessary, the following criteria were also applied:

1. the candidate could not possess land elsewhere;
2. the size of the household had to be comparatively large;
3. the period of residence had to be comparatively long, and;
4. the period of cultivating the land had to be comparatively long.

The amount of land allocated per household was specified as follows:

- (a) a maximum of two hectares was allotted to farmers who cultivated land themselves as well as to share croppers and tenants;
- (b) to farm labourers and others, a maximum of one hectare was allocated.

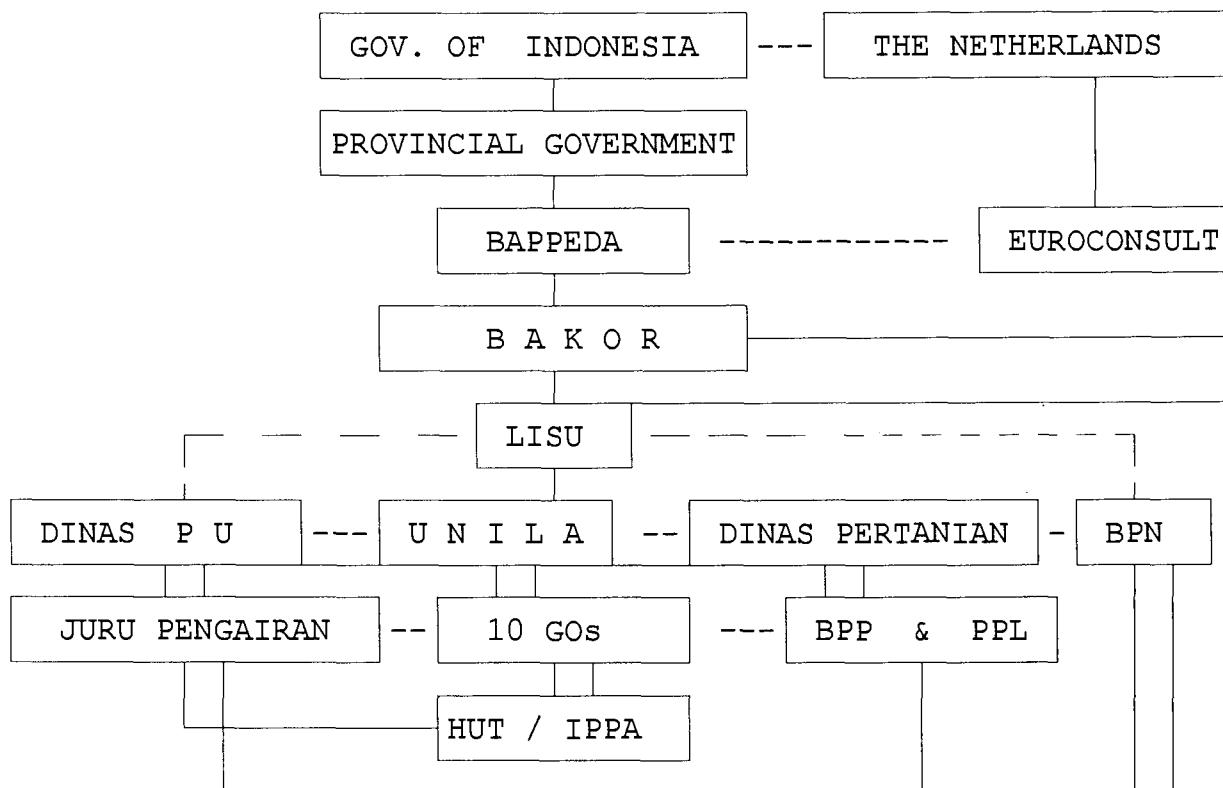
ORGANIZATION

The target group of the extension programme, Program Pembinaan Petani Rawa Sragi (P3RS), were farmers with a green card². The P3RS extension programme was underway after the cards were issued. The rationale was that as the farmers started to cultivate the new land, they needed agricultural technical assistance. The P3RS staff noted some important issues: (1) the soil was fertile, porous and composed of peat, and the soil's ability to retain water was low so the water table dropped quickly in the dry season; (2) proper water management was critical to the drainage system; (3) the irrigation facilities such as tertiary, secondary, and primary canals, and canal gates had to be managed properly to assure their sustained function; (4) food crops could be grown in the area, therefore farmers were encouraged to utilize the land; (5) pests, especially rats, were common, and; (6) crops were subject to plant diseases. It was argued that collective action was the best way to tackle these problems.

The organizational structure of P3RS (Figure 1) was developed after intensive discussion among the parties involved.

²The green card holder has the right to cultivate land in the project area and was supposed to obtain a land certificate. However, since there was a large number of people entering this area and the administration was inadequate, the authorities failed to issue certificates to all of the green card holders. By April 1991, 3,400 land certificates had been issued in Rawa Sragi I, 3,000 in Rawa Sragi II, and 270 in Rawa Sragi III and IV as opposed to the 5,000, 7,000, and 5,000 expected in Rawa Sragi I, II, and III and IV respectively (Euroconsult, 1991a). In addition to the green card, the National Land Agency issued two other kinds of cards, the yellow card and the red card. The holder of a yellow card was on a waiting list and had to wait for a certain period of time until the project found available land for him/her. The red card was given to farmers who were not eligible to receive land in the project area.

Figure 1:
The Organizational Structure of P3RS³



The organization was an *ad hoc* institution and served for only three years, 1984-1987. It was a special project as there was no government structure available in the area at that time. For instance, there was no agricultural extension office, no extension workers, and no village administration. Hence, the P3RS was established to create the 'tentative agent of development' with the University of Lampung (UNILA) as the main actor. UNILA therefore voiced government policy.

The UNILA team assigned ten undergraduate students as Group Organizers (GOs). GOs undertook the extension workers' tasks in a broad sense, performing agricultural extension services, water management education, community development work, and coordinating parties in the field.

Euroconsult employed Dutch consultants who functioned as 'quasi representatives' of the Dutch government. They played a major role in the decision-making process at

³This structure is based on the author's experience with this project (1985 -1989).

almost every level. Euroconsult's overall tasks were assistance in project management, planning, design, construction supervision, operation and maintenance, land allocation, formation of farmers' and women's groups, and agricultural development.

PU (Dinas PU, Pekerjaan Umum, i.e. Provincial Public Works Office) assisted with project policy, planning, design and construction, and operation and maintenance (O & M). Most of PU's tasks were carried out independently because they had their own project manager. The purpose of involving PU was to improve coordination.

BAPPEDA coordinated the project. To this end, BAPPEDA set up BAKOR (*Badan Koordinasi*, Coordination Board), and BAKOR established LISU (Local Implementation and Support Unit) in the field. LISU managed the day-to-day coordination between the village and sub-district administrations, extension workers, public works office, agricultural office, water controllers, and farmers. Some of LISU's tasks, especially with respect to agricultural coordination, overlapped with the GOs' tasks. So, LISU reduced its function in this area.

BPP (*Balai Penyuluhan Pertanian*, Agricultural Extension Station), along with PPL (*Petugas Penyuluhan Lapangan*, Field Extension Worker), worked with the GOs to establish the HUT group (*Hamparan Usaha Tani*, Farmers' Group) or IPP⁵ group (*Ikatan Petani Pemakai Air*, Farmers' Water User Association).

Dipertan (Dinas Pertanian, Agricultural Office) provided facilities and technical assistance with regard to agricultural matters. In the beginning, its role was very limited, providing UNILA with agricultural materials. After 1987, this body became very active as UNILA's role decreased.

BPN (Badan Pertanahan Nasional, National Land Authority) was responsible for organizing the land reform programme. This body was not involved in agricultural extension.

The P3RS was a temporary structure established to compensate for the shortage of government facilities within the project area. By 1987, a new policy was introduced, whereby government agencies were becoming more available and gradually more involved in administrative matters. By then, UNILA's role was reduced and LISU was eliminated. P3RS was replaced by a new organization called TP5DRS *Tim Pembina dan*

⁵The HUT/IPPA name was adopted to reflect the organizational structure of the Agricultural Office and the Public Works Services Office. The Agricultural Office recognizes the *Hamparan Usaha Tani* (HUT) or farming land as the smallest unit for agricultural extension. On the other hand, the Public Works Office used the IPPA (*Ikatan Petani Pemakai Air*) or farmers' water user association as the smallest unit to be developed. To avoid the confusion, the project named the group "HUT/IPPA."

Pelaksana Pembangunan Pertanian Tanaman Pangan Terpadu Daerah Rawa Sragi, Team for the Implementation of Integrated Food-Crops Development of the Rawa Sragi Area, see Figure 2. The agencies involved by that time were more diverse and included:

1. Kanwil Koperasi: (*Kantor Wilayah*, Regional Office of Cooperative Department) this agency promoted cooperative development among the farmers;
2. Bukopin: (*Bank Koperasi Indonesia*, Cooperative Bank of Indonesia) acted as a creditor for the farmers' group. Bukopin was funded by Rabobank of the Netherlands to undertake this credit activity;
3. WFCP (Women in Food-Crop Production) was a new activity. The idea was suggested by a GO and endorsed by Euroconsult. WFCP'S objective was to recognize the role of women in agriculture and to involve them in the decision-making process at the farm level;
4. the civil service became more involved, from the regency down to the village level. Previously, village and sub-district heads had been consulted as needed and had provided information about the beneficiaries. The Regents of South and Central Lampung became more involved in the administration of the project area as their direct intervention was increasingly needed.

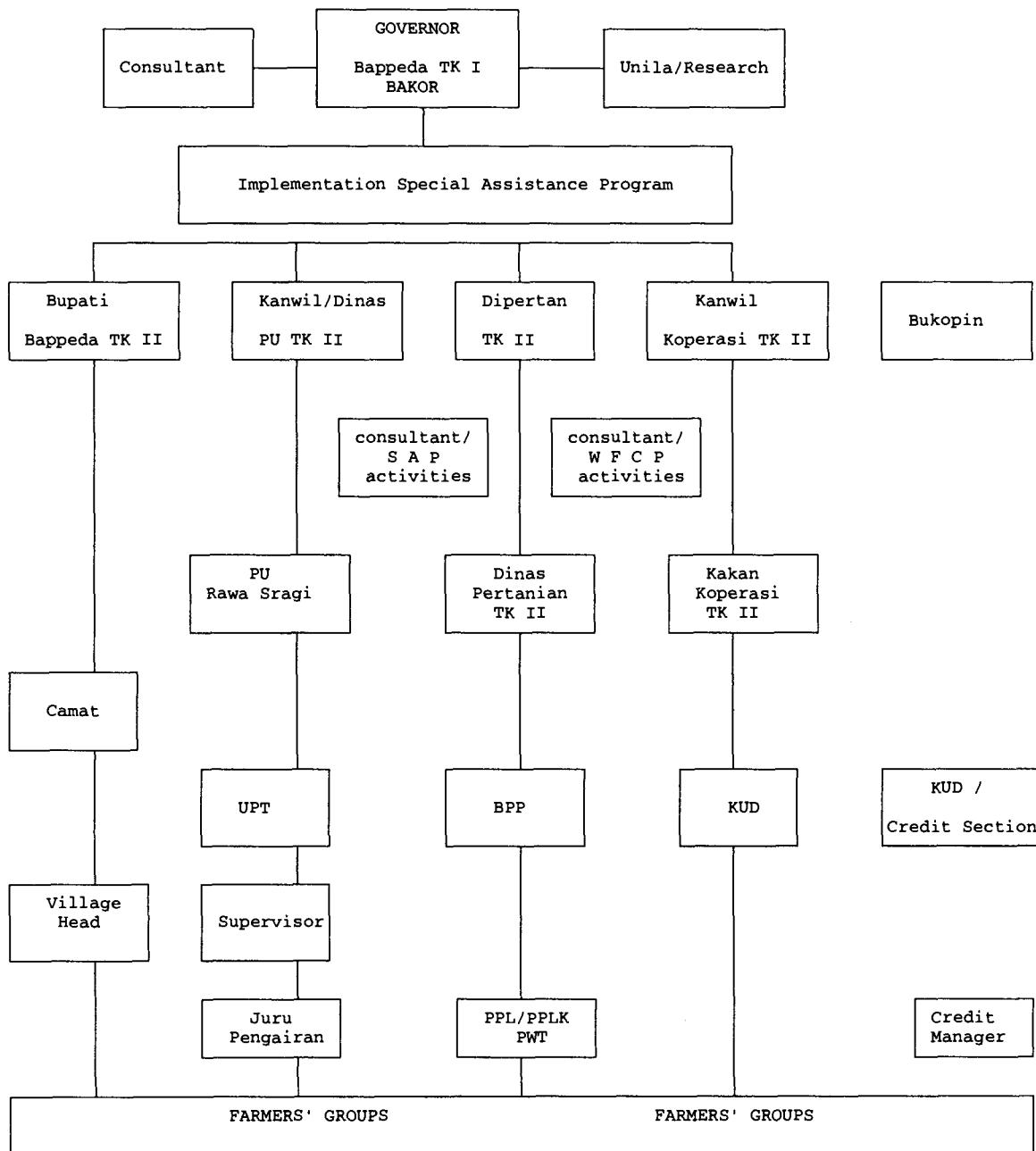
In this project, group action was encouraged. One objective of the extension program, P3RS, was to establish the farmers' group within the project area. Since the area was very large, these groups were established slowly and prudently because the objective was not just a matter of quantity, but of quality as well. To start with, small groups of 25 to 50 farmers were organized, called tertiary groups⁶. Next, other groups occupying adjacent tertiary areas were organized. Three or four tertiary groups formed the HUT/IPPA.

The most important activity in P3RS (TP5DRS) was agricultural extension services. Problems arising in the field were noted and evaluated, especially topics that came up during discussions with the farmers.

Agricultural extension was based on the Training and Visit model. This model, developed by the World Bank and adopted by the Department of Agriculture, intends to link research results to farmers. Cernea (1985: 13) states that:

⁶ The project area was divided into resort, sub-resort, and tertiary areas. A "resort" referred to one secondary channel. Each resort had an area of 800-1500 hectares, while sub-resorts ranged from 100-200 hectares. Each tertiary area covered 20-50 hectares. A HUT/IPPA was a group of farmers in a sub-resort. A group of farmers who cultivated land on the same tertiary canal, generally comprising 20 to 50 farmers, was called a tertiary group.

Figure 2: Structure of TP5DRS



Source : Euroconsult, 1991a : 13

... technological know-how can best be incorporated into the agricultural production process if extension is used to build a continuum between research and its ultimate beneficiaries, farmers ...

An extension worker plays a pivotal role in this model. He/she acts not only as a messenger from the research centre to farmers, but also as a messenger from the farmers to the research centre. This creates dialogue and mutual interaction, or an action learning process.

The extension workers received weekly training from PPM (*Penyuluh Pertanian Madya*, Middle-level Agricultural Extension Workers) and PPS (*Penyuluh Pertanian Spesialis*, Specialist Agricultural Extension Workers) at the research centre (BPP). Issues raised by farmers were also discussed at those meetings. As such, the training sessions were set up to solve day-to-day field problems.

The extension workers also visited the farmer groups weekly. They were responsible for 800 to 1500 hectares of agricultural fields, almost equal in size to one village. Budget constraints necessitated that most extension workers cover more than that. Budget restrictions also prevented the extension workers from meeting each farmer every week. This problem was overcome by visiting representative farmers, *kontak tani*, every week. Problems, issues, and techniques were discussed at that time. It was assumed that those contact persons would disseminate the meeting results throughout the group.

The above communication network did not function as well as intended. In fact, it strengthened the linear model of communication, since the flow of communication mostly proceeded in a top-down manner instead of being an interactive process. There were many reasons for this, such as lack of facilities and funds, the motivation level of the *kontak tani*, and communication skills.

It was realized that the Training and Visit model could be effective if it was modified. The project staff decided to add the following to the model:

1. a census was taken before the agricultural extension programme was underway. This was done through visiting and interviewing the farmers at home or in the field. With this information, the GOs identified the beneficiaries and the problems they encountered. At the same time, GOs introduced themselves to the farmers and a new relationship was forged;
2. field information was analyzed and strategic steps determined. The GOs identified local field issues and determined what actions to take within their agricultural extension programme;
3. face-to-face meetings were held with farmers. The GOs spent 3 to 4 days a week

in the field to build a close relationship. Meetings took place at the farmer's home or plot. In addition to getting to know each other, this activity was intended to develop the GOs' accountability. Building trust between the GOs and the farmers was considered to be very important;

4. weekly group meetings were held. These meetings were very important not only for information exchange among farmers, but also for their group formation process because many did not know each other initially⁷. Farmer leaders played a major role at such meetings. In fact, he or she usually chaired the meetings;
5. weekly meetings were held at UNILA. The purpose of those meetings was to exchange information between GOs, counterparts from Diperta, PU, BAPPEDA, and Euroconsult. All parties were usually represented and field information was put forward and discussed. Through these meetings, policy changes were suggested. Close attention was given to the GOs' response to suggested changes in policy, because of their important role in policy implementation;
6. monthly meetings were held at BPP. All GOs and PPLs as well as representatives of LISU, Euroconsult, Dipertan, and PU attended these meetings. Coordination in the field was discussed to ensure that all parties involved had the same perception about plans, policies, issues and problems. Those meetings also provided a good opportunity for the PPLs not directly involved in the project, to get up-dated on project matters. The PPLs were to be responsible for the day-to-day agricultural extension activities after project completion. By having them attend the meetings, it was thought that they might later sustain the institutional development begun during the project, and;
7. seasonal workshops were held at the University of Lampung every semester, at the beginning of the rainy season and the dry season. The workshops were attended by field officials (Gos, PPLs, BPP Chief, Camat, Bupati) and provincial officials (Euroconsult, Dipertan, PU, BAPPEDA, Cooperative Office, Bukopin, WFCP, and BPN). The aim was to coordinate all parties involved in the project. UNILA presented reports from all parts of the project area, presented field concerns and outlined strategies needed for the next activities. Based on the reports, the meeting agenda was set. Topics were divided into farming, drainage and irrigation, performance of farmers' groups, and coordination problems. For example, with regard to farming, the main field concerns were bad cropping patterns, rats, and seed availability. The problem then became the agenda of the farming system group. This meeting usually closed with the plans for the following semester.

⁷ On account of the land reform programme, there were many farmers who obtained land which was far from their domicile.

The weekly and seasonal meetings enabled all parties to express their concerns. To facilitate the direct interaction between parties, the meetings were conducted in a round-table fashion.

EVALUATION

The Rawa Sragi Project is an institution. It has its own distinct structure, programmes, functions, linkages, directives and doctrines. It is a showcase of Lampung's political and economic achievements.

This project worked well with the foreign assistance. When aid was discontinued, the question was whether the institution was sustainable. More time and experience is needed to fully answer this question. However, there is some data available to assess the project's accomplishments thus far.

1. Production: The average rice yield in the rainy season of 1989/1990 was 5,770 kg/hectares which was considered very high. This figure was almost two and half times higher than the 1980 figure (2,200 kg/hectares). The increase in production was obtained without the heavy use of fertilizers (Euroconsult, 1991a). By 1991, Rawa Sragi I and II had increased Lampung's rice production to 115,000 tonnes. (Figures are not yet available for Rawa Sragi III and IV.) This was far higher than expected in 1980 when production was at 77,000 tonnes (Euroconsult, 1991a). (This figure does not take into account the production of secondary crops and animal husbandry.)
2. Income: The project beneficiaries have substantially increased their incomes from paddy cultivation. Gross income was Rp 1,100,000 in 1991. Annual net income was around Rp 660,000, not Rp 500,000 as predicted in the feasibility study (Euroconsult, 1991).
3. Farmers' Groups: This activity achieved substantial results. The number of field groups grew from 3 in 1985 (450 households) to 350, involving 13,000 households (Euroconsult, 1991a). Especially noteworthy, is the fact that women were included in the farmers' groups and a number of women's groups were established. Furthermore, agricultural extension on chicken and goat husbandry, vaccinations for chickens and home gardening were also initiated.
4. Agricultural extension: This activity involved delivering the P3RS programme and policy, and channelling feedback from farmers. Delivering the project programme and policy meant articulating the policy in the "local" language so that it could be understood. Although it was a very difficult task, it was successful. For example, the farmers' cropping pattern was better organized. Farmers' benefits could then be expressed not only in terms of successful production, but in terms of the sustainability of the harvest as well. The old cropping pattern neglected the dry

season because farmers were afraid of rat plagues. Through intensive agricultural extension, farmers are now able to combat this pest not by the extensive use of chemicals but by group action. *Gropyokan* is a physical activity whereby farmers form a circle, close in and capture the rats in the fields, making it possible to grow pest-free crops in the dry season.

5. Provision of services: The project gradually provided more services. In 1980, only five extension workers were available; at the time of writing, the number was 52. The number of agricultural extension centres (BPP) increased from two to six units. Schools, roads, community health centres, and other communication facilities have materialized. These services have increased the local people's quality of life.

Several factors contributed to the project's successful implementation. Most important are the following:

1. Given the P3RS and TP5DRS structure, coordination at every level was an important activity, and coordination was specifically discussed and addressed at weekly and monthly meetings and workshops.
2. Sufficient resources were available to undertake implementation. The SAP budget enabled the project team to better organize the agricultural extension activity. However, the availability of resources became a concern as the foreign funds were withdrawn. Although BAPPEDA inserted Rawa Sragi into the provincial and national budgets, the amount was too small to cover project expenses.
3. The commitment of all parties involved, and most importantly the farmers', was quite high. Although initially a top-down undertaking, the project obtained a very good response from the beneficiaries. This is understandable in light of the fact that the issue was land distribution and land is the most important factor in a farmer's life.
4. The diffusion of information also played an important role in expanding the establishment of farmers' groups. This happened through the traditional communication network called *getok tular* where information is passed from one individual to another by word of mouth. This mechanism helped disseminate knowledge into the larger community, to farmers who could not be reached by the extension service.
5. The strength of BAPPEDA's leadership was critical. BAPPEDA was able to act as the arbiter not only amongst Indonesian parties, but also between Indonesians and the foreign counterpart. Many disagreements arose during the process of implementation: between PU and Dipertan, between UNILA and Dipertan, between Euroconsult and UNILA. However, BAPPEDA laid the common ground through coordination and direct consultation.

6. Leadership was also important in the field, especially among farmers. To unite farmers who initially did not know each other required effective leadership. Determining who was going to be the group leader was critical. The project team was quite careful in this regard. A social selection approach was used whereby the farmers themselves selected several tentative leaders. After one or two seasons, the farmers elected the leader.
7. The ability of some of the foreign consultants to work with the local government and to speak the local language contributed significantly to the success of the project. This reduced the language gap which often plagues foreign assisted projects.

Issues which might threaten the Rawa Sragi institution are also evident. Firstly, as stated earlier, this project received generous foreign funding for fourteen years. When this funding ended, it was up to the provincial and/or central government to take over financing, especially the operation and maintenance (O & M) of project facilities and the agricultural extension programme. For O & M alone, Rp 1.5 billion is needed annually, but only half of that was received. Current funding may be inadequate, and the quality of O & M may suffer as a result.

Ideally, an institution should be self-financing as suggested by Esman. If the O & M contract procedure is revised so that farmers' groups perform O & M, the project might avoid problems. At the time of writing, PU was contracting out the O & M work. PU believes that the contract approach is efficient and effective. However, according to Bagadishu and Korten (1991), using farmers' groups is a lot more efficient. Also, from my observation, when the project employed farmers in 1987 to do the repair and cleaning of secondary canals, the farmers did very satisfactory work in terms of quality, quantity and speed. The cost of maintenance work was also reduced. I also observed that farmers were eager to do O & M on drainage facilities, if they were trained beforehand.

Secondly, agricultural extension was undertaken in a different way as the funds were reduced. During the project, this activity was carried out in a more interactive way, with serious attention given to the two-way communication process. A good ratio of extension workers and farmers was maintained so that the work load of extension workers was manageable. After the project ended, communication became less interactive and more top-down, because the agricultural office had less funds to finance workers.

Thirdly, the land reform programme was also facing a serious problem. BPN had not delivered enough land certificates to the green card holders. The administrative system of registration was very cumbersome. Dipertan (the Agrarian Office) worked very slowly which created problems for the other programs. For example, because BPN made some errors in delivering the cards (red, yellow, and green) to farmers, the resulting high political tension in the field hampered the agricultural extension programme.

Fourthly, environmental issues have become more important. When the project was designed in the late 1970's, the Environmental Impact Assessment Law was not yet promulgated. As such, the project's environmental impacts on the coastal zone of eastern Lampung were not addressed. The development of Rawa Sragi I-V, the expansion of the shrimp industry and the deforestation of the mangrove forests may indeed threaten the biodiversity, and life support system of the area. Recently UNILA and the provincial government have undertaken a study, but the report is not yet available.

CONCLUSION

In foreign-assisted as well as national projects, institutional development is very important. Many rural development projects fail to sustain themselves after completion partly because of inadequate provisions.

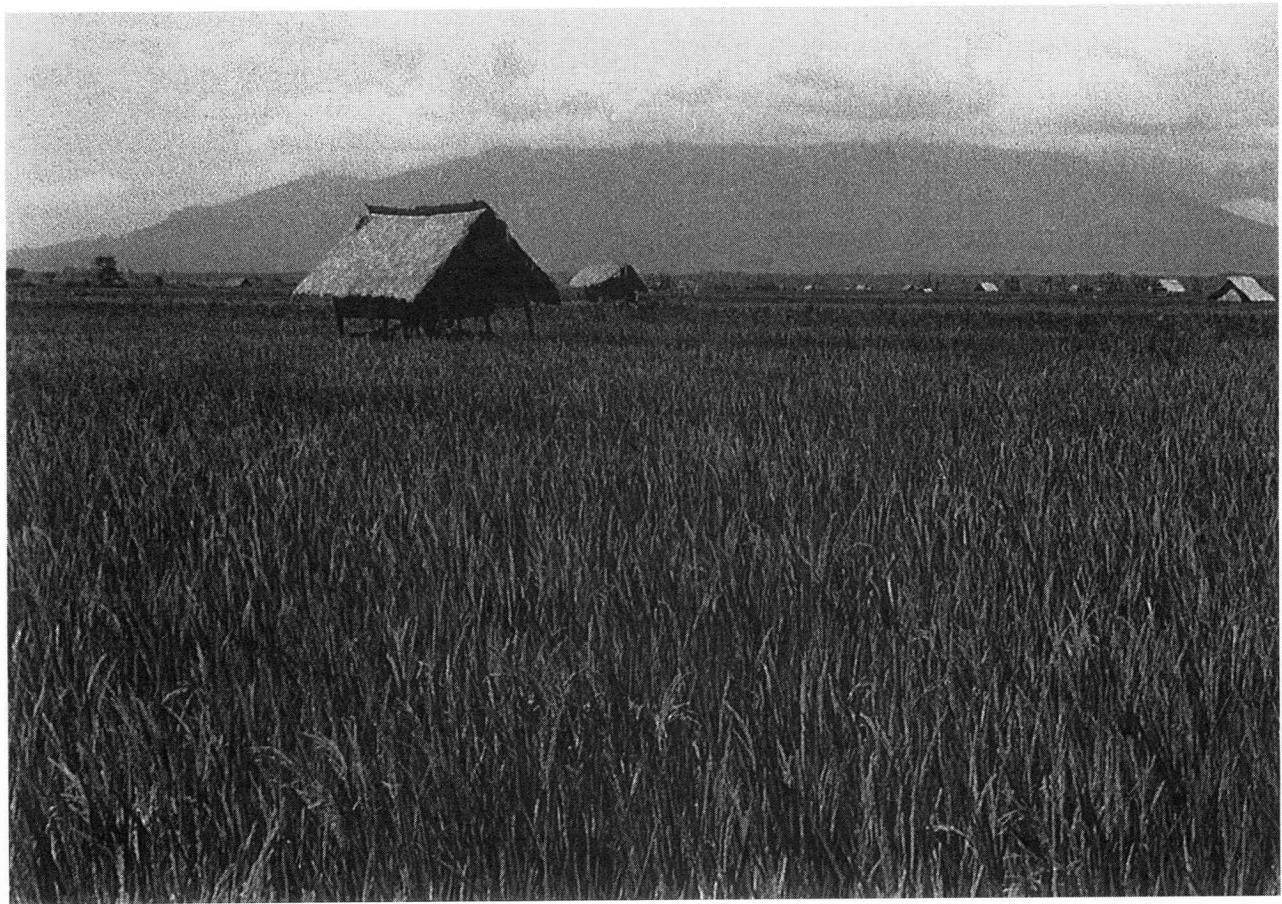
The Rawa Sragi project was designed in a top-down planning manner. However, it received a positive response because it fulfilled a very basic need for farmers, i.e. land. To some extent, this project has been very successful in terms of food production, farmers' income, and facilities improvement. In addition, this project provided Indonesia with new experience in dealing with land reform and organizational/institutional development. This model has been used in similar development efforts in Kalimantan and South Sumatra.

So far, the balloon effect has been avoided as the provincial government has incorporated this project into its annual budget. The question is then whether the funds are adequate. This concern can be lowered if O & M costs are reduced. Current procedures make O & M rather expensive. Employing farmers' groups in O & M could reduce the cost and time spent. Why doesn't the project utilize the farmers' groups for O & M?

It is also important to note the leadership of BAPPEDA. This project was not a specific departmental project, rather a multi-department programme, where each department had its own agenda. Therefore, a coordination body to orchestrate the programme was critical. So far, BAPPEDA has coordinated the TP5DRS with great effectiveness. Finally, it is premature to assess the sustainability of the project, especially its institutional arrangements. The external funds ended just two years ago. More time is needed to determine the project's institutional sustainability.

PHOTOGRAPHS: SCENES FROM THE RAWA SRAGI PROJECT

(Photos: Euroconsult - Arnhem, The Netherlands)





REFERENCES

- Bagadishu, B.U., and F.F. Korten, 1991. Developing Irrigation: A Learning Process Approach, in M. Cernea (ed). Putting People First: Sociological Variables in Rural Development. 2nd edition. A World Bank Publication, Oxford University Press, Washington.
- Blasse, M.G., 1973, Institution Building: A Source Book. Agency for International Development, US Department of State. Washington.
- Brinkerhoff, D.W. & Goldsmith, A. 1990, Institutional Sustainability in Agricultural and Rural Development: Global Perspective, Praeger, New York.
- Cernea, M. 1985. Research-Extension-Farmers: A Two-Way Communication for Agricultural Development. The World Bank, Washington.
- Euroconsult. 1991a. Rawa Sragi Project-Lampung, Sumatra: Final Report, Euroconsult, Arnhem, The Netherlands.
- Euroconsult. 1991b. Rawa Sragi Project-Lampung, Sumatra: Executive Summary of Final Report. Euroconsult, Arnhem, The Final Report. Euroconsult, Arnhem, The Netherlands.
- Lewis, J.P., et al. 1988. Strengthening the Poor: What Have We Learned? U.S. Third World Policy Perspectives, No. 10 New Brunswick.
- USAID. 1983. Institutional Development, AID Policy Paper. Washington.
- The World Commission on Environment and Development, 1987, Our Common Future, Oxford University Press, London.

CHAPTER 5

CREATING THE SPACE FOR ACTION: URBAN EXPERIMENTS IN COMMUNITY DEVELOPMENT

by Fred Carden

Abstract

This chapter explores the common issues which emerge in the three urban case studies. It elaborates the background behind the concept of the 'development consultant' and initiatives exploration of frameworks for building the links between top-down and bottom-up approaches to planning. It explores participation as a process of managing boundaries between the various levels of decision-making and action in the implementation of change.

Abstrak

Kesinambungan kelangsungan hidup dari kebanyakan suatu kelompok masyarakat secara garis besar akan bergantung kepada kemampuan mereka dalam memulai serta melibatkan mereka sendiri dalam suatu proses belajar yang baru. Kita tidak mengetahui bentuk prosesnya seperti apa, juga peralatan teori apa yang dijalankan untuk merancangnya. Akan tetapi kita mempunyai suatu firasat bahwa mungkin kita disini akan terlibat dengan sebuah proses yang mungkin akan membimbing kita ke arah suatu bentuk peningkatan organisasi dan pengelolaan yang mandiri dan bahkan mungkin menuju kearah kemampuan yang mandiri bagi non lembaga-lembaga masyarakat dan anggota masyarakatnya melalui suatu proses evolusi.

The continued viability of many societies will depend in large measure on their capacity to initiate and become involved in new learning processes. We do not know what shape they will take, nor do we have the theoretical tools to design them as yet. But we have a hunch that we may be dealing here with a process that may lead towards the enhancement of self-organization and self-management, and even possibly towards the capacity for self-directed evolution of institutions, communities and societies.

Soedjatmoko, Opening Statement, Science and Praxis of Complexity, UNU 1985:3-4

As Indonesia becomes an increasingly urbanised society, the implementation of effective development planning in the urban context is increasingly important. The rapid growth of the economy in the past two decades increases the rate of urbanisation, compounding the planning complexities in the urban setting.

The three papers presented here focus on the implementation of community planning and control of the urban development process. One of the most significant elements raised here, is the role of the development consultant. NGOs are increasingly

being brought into question as effective agents for the implementation of change. The context within which NGOs operate means that they frequently create parallel structures which neither they nor anyone else has the long-term capacity to sustain; and they are often weakest in their ability to integrate findings and recommendations into government policies. And, perhaps, most critically, they are generally external agents attempting to help a community; in spite of the best of intentions, they remain external agents. While they tend to substitute for local involvement in the design of community development initiatives, they do not live with the consequences of the work they do; and they have not always been successful in creating local ownership of the project or problem. As a result a lot of expectations are created, but the capacity to meet those expectations is not there.

As Richard Maclure notes in a recent paper,

....most foreign-funded NGOs...have been unable or unwilling to go beyond fairly perfunctory consultation with established local leadership. But if they do not substantially alter their methods, then it is difficult to see how the client-patron relationship...can be transformed...they must first come to grips with the inherent conflict that too often exists between their own internal lines of authority, decision-making and accountability...and the development of local initiative¹

Government organisations are also in a dilemma as agents of change. They have a range of existing relationships with any given community; by definition they have a political agenda which is larger than that individual community; and, as a result, they suffer from some of the same problems as NGOs - for very different reasons, but with the same ultimate consequences from the perspective of local community development.

The concept of the development consultant, introduced by Hasan Poerbo in the late 1980s, is an attempt to integrate a specific participative mechanism for local control, into the development planning and implementation process. Because the consultant is hired with terms of reference generated by the community, there is a requirement created in the community to discuss what is needed, and how the objective will be achieved. The sense of ownership which is created in the process of defining the terms of reference (and control of the financial resources to pay the development consultant), enhances the potential for community ownership of the project in a very significant way. At the same time the development consultant - the Semar - is able to work effectively with the government and with private developers.

This approach provides a unique and innovative response to the many calls for participation and local control of the development process which permeate the

¹ "Non-Governmental Organisations and the Contradictions of Animation Rurale: Questioning the Ideal of Community Self-Reliance in Burkina Faso," Richard Maclure, Canadian Journal of Development Studies, Vol XVI, No. 1, 1995: 50 - 51.

development literature, but which so far have seen few mechanisms for implementation in light of the needs, interests, and expectations of funding sources. It responds not only to the need for local control, but sheds light on how to approach the need for some general mechanisms to be put in place which permit specific response to the development problem under review.

In a review of building more effective aid partnerships, Bossuyt and Laporte summarize the key issues succinctly:

Hands-on approaches look tempting, but successful implementation and sustainable results cannot be achieved without recipient participation and ownership. That is not to say that donor agencies have no role to play other than committing funds. On the contrary, the post-Cold War climate provides new opportunities to accommodate legitimate donor (development agent) accountability concerns. There is nothing wrong with donor agencies putting forward their own objectives and spending priorities. This is a pre-condition for genuine partnership. The challenge is to find new management approaches that leave development initiatives in the hands of local actors, while ensuring results oriented donor control.²

While they are referring to internal partnerships, the same issue applies to national development in local community development processes: the local community must have ownership; and the national partner role and interests must also be explicit and integrated in the process.

What role does the development consultant play? The development consultant has an objective, bridging the boundary between aid (or assistance from outside) and on-the-ground local development (community-based and participative). The development consultant brings outside skills and knowledge to bear on the community, but takes direction from the community. The development consultant is paid from within the community and therefore answers to the community, not to an external constituency, be it the individuals or companies or governments which might fund an NGO to be a helping organization, or a government department which must respond to the political imperatives of governance. The development consultant is the 'philanthropic intervenor' described by Eric Dudley:

Aid is predicated on the existence of outsiders with resources - resources mean power...The genuinely philanthropic intervenor is faced with the problem of how to exercise that power in the most equitable, just, and effective manner.

² Jean Bossuyt and Geert Laporte, Policy Management Brief, Number 3, December 1994: 4, Maastricht: European Centre for Development Policy Management.

The language of community participation has tended to obscure the fact that there is always an 'us' and a 'them' - there are those who are trying to address the needs of others and there are those who are the target of the philanthropy. The borderline between the two groups is not fixed... 'us' may include field workers who are drawn from, and live in, the villages which are the target of aid. Similarly, 'them' sometimes refers solely to government ministries, at other times householders.³

The development consultant can make explicit the gap between the 'us' and the 'them' and can help the community to work with that gap and use it to their best advantage. What is critical is the recognition that so long as there are outside funds, whether they come from an outside philanthropic source, or a national government program for local development, there is an additional agenda than merely the development of the community in question. How best to make use of that interest to the benefit of the community is a critical question.

Urban planning, like rural planning, has been moving increasingly away from the early blueprint models and approaches to planning. What studies in implementation have shown, is the ineffectiveness of blueprints, no matter how seemingly logical and sensible. Urban planning has been seeking approaches which are more open, more adaptable to the changing socio-economic environment, and less deterministic. Increasingly, urban planning has been attempting to understand the forces at play which create the urban context and to work with those forces in more creative ways.⁴ The professional planner is increasingly a generalist with skills at process, in bringing together disparate interests, in managing the gaps between the different groups central to the planning and implementation processes.⁵

The development consultancy model elaborated by Poerbo and his colleagues is an approach in this spirit. It is significant as it shows considerable promise. Its use suggests a number of important lessons in how community development actually unfolds in the urban context in Indonesia.

The three papers which follow present a rich experience in the use of the development consulting process and provide a consistent experience in successes and

³ Eric Dudley, The Critical Villager, NY: Routledge 1994: 8 - 9.

⁴ For example, see Jane Jacobs, Cities and Wealth of Nations, 1984 Random House, and Jean-Marc Choukroun and Robert Snow, editors, Planning for Human Systems, 1992, University of Pennsylvania Press, among many others.

⁵ See for example, Michel Chevalier, 'A Strategy of Interest Based Planning', unpublished doctoral dissertation, University of Pennsylvania, 1968, and Eric Trist, Developing an Adaptive Planning Capability in Public Enterprise and Government Agencies, in J.W. Sutherland & A. Legasto Jr. eds., Management Handbook for Public Administrators, NY: Van Nostrand Rienhold, 1978: pp 389 - 422.

failures. The lessons for implementation of successful development consultancy in urban settings, emerging from the experiences recounted in these three papers, are summarised after a brief description of the papers.

The paper in chapter 6, by Professor Poerbo, focused on a unique and challenging participatory action research process which embodies the spirit of engagement⁶ in society by social scientists, which is sought in Participatory Action Research (PAR). It describes an experience with a scavenger community, and the development of the concept of the Garbage Industrial Estate (GIE), an innovation in waste management. This paper is important because it was one of the first experiments with the notion of the development consultant role; and it is also important because it addresses two critical issues which face all urban development (North and South): how to bring marginalised groups to a dignified and productive role in urban development; and how to deal with the management of waste in the urban context. While the experience was not ultimately "successful" in terms of the scavenger community, it presents some valuable lessons and insights into effective work with communities, and the pitfalls which must be considered.

The two experiences presented by Antonio Ismael in urban development in Samarinda, in chapter 7, are stories about the utilization of the concept of development consultancy in another part of Indonesia (East Kalimantan). They too provide a rich source of information on the experience. They are stories well worth telling, and they both confirm some of the lessons of the Garbage Industrial Estate experience and suggest additional lessons from the experience.

The final chapter, in which Johan Silas recounts the unique experience of Surabaya with the Kampung Improvement Programme (KIP), tells the story of the integration of the development consultancy process into the implementation of a national program for urban revitalization. It is exciting because this innovation was attempted in the second largest city in Indonesia, and has become in many respects a model for other KIP programmes around the country, building especially on its successes in promoting commitment and ownership by the communities themselves.

Many different lessons may be drawn from these stories. Some of the key ones are outlined below, but each reading highlights different ideas and impacts in light of one's own experience. Three general issues emerge:

⁶ Engagement is described by Eric Trist in the Preface to the Social Engagement of Social Science, Vol II, as, "the process by which social scientists endeavour to actively relate themselves in relevant and meaningful ways to society". (University of Pennsylvania Press, 1993:xi).

1. Building effective linkages between local communities and structures of governance

This has been the crucial role for the development consultant in all cases. It is no longer seen as a process of bottom-up planning and development; rather it is the critical linkages between bottom-up and top-down which is considered in the development process. That is where the development consultant can play a facilitative role, as one who is not directly tied to any single set of interests and can therefore interpret the levels to each other.

There is a need to, as Johan Silas notes, institutionalise the consultative process, so that there is an explicit understanding that there are different interests and different needs at each level. The successful development consultant must have highly effective skills at balancing the interests of all parties.

2. Political decisions at all levels are critical on an on-going basis: creating the political space for action

What is clear in all cases is that, while there is a crucial need for a "political stronghold" (Silas) political support at all levels of the system which can create the political space, for the project to take place. For example, in the paper by Hasan Poerbo, he outlines the significance of the President declaring the scavengers to be "self-reliant soldiers" - rather than "vagabonds and thieves", their usual characterization.

Approval from the top to proceed does not necessarily mean that other levels will make it easy to proceed. On-going monitoring was essential to all the projects, and all noted a high level of energy expended in ensuring the cooperation and support of the different levels of government and the political system. This is especially true when operating in politically volatile settings, but holds true across the projects. In some cases, this involved working with and through the existing structures (such as the village level planning body - LKMD - in Surabaya and Samarinda; in other cases, it involved maintaining linkages and support with the existing structures, but not necessarily working directly through them.

3. Open planning processes

In all the cases, openness was essential in the planning process. In some cases this has meant a willingness and ability to become better involved in seemingly unrelated events - the mass weddings in the scavenger community are the most striking example presented in these papers. The mobilisation of community resources and the engagement of the community in the development process required in all cases that the community build trust with the development consultant. That included building an understanding of what the community needs by the development consultant, however remote these needs seemed from the objective of the "project".

Open planning does not mean haphazard planning, but rather engagement and local control of the process; it also means being aware of the regulations affecting what is done, knowing the loopholes which can be used when necessary as well as the pitfalls which can cause the failure of the project.

These threads run throughout the papers. Each paper presents some of its own lessons from experience. For example, the periods of limited access to external finances were seen as crucial by Hasan Poerbo to the success of the GIE initiative: the lack of funds forced a community commitment if the project was to survive. And Johan Silas notes in his paper that the fact that the Kampung Improvement Programme in Surabaya dealt with the low income residents of the community as well as the middle income residents, was crucial to its success, to the development of a sense of community ownership over the process. And Antonio Ismael notes that there must be constant vigilance over the project finances to ensure that there is a fair and equitable use of funds.

CONCLUSION

Building a generalisable theory of project and program implementation is a challenge which has faced planners for some time. In a recent study of the implementation literature, Adil Najam (MIT)⁷ explores the implementation literature in search of a theoretical foundation. While he did not find the foundation, he was able to identify the five key factors which emerge consistently throughout the literature: 1) available 'capacity' to implement the recommendations (capacity is not a well defined concept in the literature and refers both to individual and institutional capacity); 2) 'context' in that the implementation process is affected by the culture of the individuals and organisations involved in implementation; 3) 'commitment' is also critical, but in particular at the field level, not only at the top; 4) 'content' is a factor in that the material must be clear, relevant and concise, and; 5) 'clients and coalitions' are key: it must be clear who benefits and who pays; success is more often dependent on who pays (or does not benefit) than on who benefits. In other cases, a framework has been constructed, such as Don Warwick.⁸

The lessons learned from the three case studies which follow this chapter, fit well into this framework:

- building effective linkages between communities and structures of governance reflects both commitment and culture;

⁷ Adil Najam, "Learning from the Literature on Implementation: A Synthesis Perspective", Working Paper, Laxenburg, Austria: IIASA (forthcoming).

⁸ Don Warwick, Bitter Pills: Population Policies and their Implementation in Eight Developing Countries, Cambridge: Cambridge University Press, 1982.

- creating the space for political action, is reflected in context as well as clients and coalitions, and;
- open planning processes are reflected in capacity, content, and commitment.

This suggests the need for an iterative planning process which assumes that implementation will require a constant redefinition of both the problematique and its solutions. The Interest Based Planning Approach referred to above is one such approach. It does not give priority to the community or to the different levels in the governance structure; rather it assigns priority according to the stage in the process and the definition of the problematique. It is a process of boundary management which focusses its attention on the gaps, the differences between elements of the system, as a means to define alternative mechanisms and solutions. Viewed in this light, these three cases studies present a rich tapestry of the boundaries - and linkages - which can be explored in the effective implementation of development projects. The following three chapters contribute to a better understanding of what works in community development in the urban setting in Indonesia.

CHAPTER 6

THE GARBAGE INDUSTRIAL ESTATE AS AN ALTERNATIVE URBAN WASTE MANAGEMENT SYSTEM

by Hasan Poerbo

Abstract

This chapter provides an account of how a cooperative research venture into urban waste management evolved into PAR, and ultimately led to the formulation of the Garbage Industrial Estate (GIE) concept. A joint study was first conducted by PPLH-ITB and the Dutch Institute of Social Studies into the informal urban sector. A scavenger study was conducted in Bandung, with some observations in Cianjur and Sukabumi. It was revealed that scavengers contribute substantially to urban waste management. In order to maximize this impact, a dialogue was established with the scavenger community which led to the establishment of a cooperative in Jatidua. The paper concludes by distinguishing between two forms of the GIE concept which have emerged.

Abstrak

Bab ini merupakan laporan penelitian tentang usaha sebuah koperasi dalam pengelolaan sampah di perkotaan yang kemudian bergerak ke arah penelitian tindak parsipatif dan yang pada akhirnya menuntun ke arah terbentuknya konsep Kawasan Industri Sampah. Pada mulanya, sebuah kerja sama penelitian dalam sektor informal di daerah perkotaan dilaksanakan dengan kerja sama antara PPLH-ITB dengan Lembaga Penelitian Sosial, Belanda. Ini adalah penelitian masalah pemulung sampah yang dilaksanakan di kota Bandung dan pengamatan yang dilakukan di kota Cianjur dan Sukabumi. Terungkap, bahwa para pemulung ini adalah penyumbang besar bagi suatu pengelolaan sampah di daerah perkotaan. Guna meningkatkan pengaruhnya, suatu dialog dengan masyarakat pemulung ini dibentuk yang kemudian mengarah kepada terbentuknya sebuah koperasi di Jati Dua. Makalah ini menyimpulkan dengan membedakan dua bentuk konsep Kawasan Industri Sampah yang muncul.

INTRODUCTION

This is a brief account of how a group of urban scavengers in Bandung developed a successful waste management based on their own experiences. This locally inspired system became a small movement which ultimately gave the scavengers better recognition in their own society, and ultimately paved the way for the development of the Garbage Industrial Estate (GIE), an alternative urban waste management system. This experience has also contributed to understanding the intricacies of implementing development research in a politically volatile setting.

This account describes the fortuitous way in which a cooperative research venture

in urban waste management evolved into participatory action research (PAR), action programmes, and pilot projects. Ultimately, the activity was transferred into the formal system of urban waste management. It took twelve years of research, field experimentation, advocacy and conflict resolution before its acceptance and adoption by the central as well as local governments. The long and arduous process still continues.

This paper is presented in three main sections. First, an account of the research on scavengers in Bandung that led to a Participatory Action Research (PAR) process, and to the formulation of the Garbage Industrial Estate (GIE) concept is given. The second section describes some aspects of the scavenger's community development after the PAR intervention. The last section focuses on the GIE concept.

THE SCAVENGER RESEARCH PROJECT: MARCH 1980 - MARCH 1982

Pusat Penelitian Lingkungan Hidup, PPLH-ITB (the Centre for Environmental Research at the Bandung Institute of Technology) was established in 1979. The Centre was created by the State Minister of Population and the Environment and the Minister of Education and Culture. One of the Centre's earliest assignments was a joint research project with the Dutch Institute of Social Studies (ISS) on the urban informal sector. The project consisted of several topics: a) the *mandor* (foreman) system in the construction industry; b) chicken farming; c) urban transportation, and; d) the scavenging system.

The topics were difficult to specifically relate to the environment as they were framed as economic activities. However, scavenging uses waste as a resource for its productive activities, and thus fits clearly within the realm of environmental research. Only two of the project's topics, the *mandor* study and the study of scavengers, were ever properly completed. The *mandor* study did not get much attention from the Ministry, as it was not directly related to the environment.

The scavenger study was conducted mainly in Bandung, but also included observations in the towns of Cianjur and Sukabumi. The structure and dynamics of the scavenger community were determined through participant observation, life histories, and stratified random sampling.

The research yielded the following observations:

1. Scavengers are found in both large and small cities. This suggests that the presence of scavengers does not depend on the size of an urban community, but rather on the presence of poverty.
2. Motivation to enter the scavenger profession varies, ranging from being "at the end of one's rope", looking for additional family income, to using scavenging as a refuge from criminal prosecution.

3. Scavengers are usually migrants. They come both villages and cities. A person enters scavenging outside her/his community because of the shame of being identified with a "lowly" occupation by his or her own people.
4. The greatest fear among scavengers is eviction and prosecution as *gepeng*, vagabonds and beggars. By Decree of the Minister of Social Affairs, *gepengs* are outlawed.
5. There is an informal structure in the waste trade. The lowest position in this hierarchy is the *pemulung* (waste collector). Then follows the *lapak* or *bandar kecil* (small middlemen who may come from among the waste collectors themselves), and then, lastly, the big *bandars* (big middlemen) who are likely to be from a certain ethnic group (often of Chinese or Batak origin). This last category is adept at dealing with big business, if need be, by making deals with people in power. *Lapaks* may turnover some Rp 5 - 10 million a month (US \$2,500 - 5,000), while the big *bandar* may trade in excess of Rp 100 million per month (US \$50,000).
6. Scavenger income varies, ranging from Rp 1,000 to 3,000 per day (1981). This amount is on par with the average wage in industry and agriculture, although some scavengers earn even higher wages. Many scavengers live frugally to save money, while others squander their earnings on 'leisure', and stop working as soon as they have earned enough to 'live an easy life'.
7. Scavengers can be divided into two groups: *tukang loak* (itinerant scavengers) and *pemulungs* (garbage pickers who select waste from garbage dumps). The *tukang loak* goes door-to-door with a cart and buys old newspapers, recyclable plastics, and other discarded household items. The *tukang loak* must have some capital, and has a higher social standing than the *pemulung*.
8. The scavenging community is a mobile community, both horizontally as well as vertically. People tend to change their picking routes or move to new locations. There are those who move upwards, becoming *lapaks*. Some *lapaks* have put their children through college. Other *lapaks* return to farming after saving enough money to buy land.

Among city administrators and policy makers, scavengers are most commonly regarded as "vagabonds and beggars," with prostitutes, thieves and even murderers among their midst. (Although this assertion was never verified, this generalization was perhaps partly true for the Jatidua group in Bandung at the start of the project activities). Official government policy was to eliminate scavenging. Scavenging was regarded as a public nuisance, and it was considered a national embarrassment to let "people live from garbage." Even though the scavenger project was not well received by the local government of Bandung, the Mayor was informed and was good enough to consent to the study.

By August 1981, the field research was already quite advanced. It was obvious that scavengers were already contributing substantially to waste management. Thanks to them, the total volume of waste was reduced by 5 - 20%. Also, in Bandung alone, scavenging employed an estimated 2,000 people. However, the question was how the scavenging system could contribute more significantly to the urban solid waste management system. To increase the productive use of waste, how could the value of recyclable waste be improved? Would a cooperative system help? Or would it come into conflict with the interests of the middlemen? These issues were debated, but there was no supporting data. It was decided to test some of these ideas through the use of Participatory Action Research (PAR).

What is "PAR?" According to Dr. Peter Nas, one of the ISS consultants, PAR may be defined as; "research with, for, and by the people to be researched, making them the subjects instead of the objects in the process." From the researchers' point of view, the objective of this particular exercise was to develop knowledge, methodology and policies experientially, while at the same time, supporting the scavengers' need for security of income and welfare.

At the beginning, there were some doubts as to whether PPLH-ITB could carry out the research. There was no Faculty of Social Sciences at ITB to support the research and no one at PPLH with experience in these matters. Dr. Melly Tan, a prominent social scientist with the National Research Council (LIPI), jokingly remarked that she envied the fact that PPLH "was free from the methodological traps of the social scientists, and could do PAR with the courage of the ignorant, and retain a clear conscience." As it turned out, the project hired Saraswati as a participant observer. She was an experienced field worker with the Lembaga Studi Pembangunan (LSP), a Jakarta based NGO. She made herself available for three months to live with the Jatidua scavenger group.

The scavengers lived a five minute walk from PPLH-ITB on a wasteland over grown with underbrush and tall weeds, just in front of the Governor's office and Provincial Council building. Nearby was an athletic track, and the site was bordered by army barracks from a transportation unit. The scavengers literally 'buried themselves', making their cardboard shelters as unobtrusive as possible, so that from the outside they could not be seen. This was Jatidua, where some 75 people, belonging to 38 families, were living.

Saraswati introduced herself discreetly, and after a week was able to buy a shack to live in from one of the scavengers. She became a continuous source of information about the group's dynamics and the scavengers' aspirations and frustrations. The findings were discussed at research meetings, and appropriate responses were generated.

It was soon discovered that the scavengers lived under the constant fear of eviction, something which the researchers had little control over. Another interesting discovery was that some of the unwed scavenger couples wanted to be legally married,

but they lacked the proper identification cards. The project facilitated getting the official papers processed and a mass-marriage was arranged for seven couples (see Photo 1 on page 121). When the project was discontinued four years later, a total of 38 couples had been married. The mass-marriage was a turning point: it developed trust between the scavengers and the researchers, and marked the beginning of a continuous dialogue. It also drew support from sympathetic NGOs which became involved in later activities.

A number of activities grew out of the dialogue between the scavenger community, the researchers, NGOs, and local government agencies. The first important step was organizing the mass-marriage, while the second was the establishment of a school in Saraswati's 'house' (see Photo 2 on page 121). There were 20 children in the community at the time, some of whom attended private schools nearby. Most were not of school age, but were eager to join a play-group. The school quickly developed into a communication forum for mothers concerned with child-care and family welfare. In addition, the children were given milk to drink by a local NGO, and the Borromeus Foundation provided health services from a nearby private hospital. These activities were coordinated by the Foundation for the Betterment of Youth.

A third initiative was also undertaken. One of the small hovels that had been used as a small mosque for Friday prayer was improved and enlarged. What it lacked in appearance, it made up for by having an active Governing Board and close cooperation with the Da'wah Foundation of the Bandung Islamic University. The sermons made the mosque very popular, and even attracted people from outside the community.

After three months of PAR, and nearing the end of the project, the subject of establishing a cooperative was broached. It was immediately evident that it would not be an easy job, as there were two 'warring parties'. Half of the group was dependent on one male *lapak* who was the 'founder' of the Jatidua settlement and the de facto 'head of the neighbourhood (RT)'. The others sold their recovered materials to a female *lapak*, the wife of one of the army men quartered next door. The two *lapaks* were in competition and were initially unwilling to form a single cooperative. After some difficult negotiations, the situation was resolved. An NGO field staff member from Jakarta was elected Chair. He acted as an Arbiter in the aptly named Jatidua Recycling Cooperative, the first ever of its kind. The male *lapak* became Vice-Chair and Secretary, and the female *lapak*, its Treasurer.

A community emerged out of a group of scavenger families, loosely bound together for common survival living together illegally on a piece of land. It became a community complete with a rich network of social institutions: a school, which also functioned as a meeting place for women; a mosque, which was used as a place for community deliberations, and; a cooperative, which facilitated economic and productive cooperation. This process later became known as community-based local development. The institutional structure made it possible to involve the community in synergetic improvements in all aspects of life, it had become a community capable of creating and

absorbing innovations and managing change.

The PAR study came to an end in February 1983. This participatory action research exercise, the methodology of which was perhaps questionable, was the start of further activities which led to the concept of the Garbage Industrial Estate (GIE), an alternative urban solid waste management system. At the end of the study, permission was given to continue with the PAR project with the understanding that its objective was to resettle the scavengers outside the city limits. The intent was to contain the scavengers in a specific area, and not leave them in unsightly hovels next door to the offices of the Governor of West Java.

FROM FLEDGLING TO MATURITY AND EVICTION: 1983-1987

For PPLH-ITB and the Jatidua community, 1983-1987 marked a critical period. On the one hand, this was a time to discover the potential of community-based development through action learning, while on the other, it was a time of arduous struggle for survival. During this short time span, something managed to evolve from its onset to its end.

For the researchers, the Jatidua community was the main source of information. The experience made it possible to develop an environmentally sustainable self-improvement programme, which ultimately led to the operationalization of a community-based, self-financed, self-managed and profitable alternative urban solid waste management system.

After the ISS Informal Sector Project was terminated, PPLH-ITB was on its own. Unlike other research projects, PPLH-ITB's continued involvement became a moral obligation, because otherwise the community would have been merely an experiment, and not the subject in a collaborative enterprise, as intended by PAR. In many ways, it was just as well that there was very little money available since community self-reliance was maintained. Innovations were introduced from inside and outside, and results were generated which became the pride of the community. Self-confidence, self-esteem, and social discipline grew as the community became a national focus. The initiative brought sympathy and cooperation from various NGOs and donors so that the Jatidua project was sustained for another four years with small grants and voluntary services. This is a record worth noting considering the political opposition from official circles. The following are some key highlights in the development of the Jatidua community.

Population Growth

During the course of the project the community experienced some population growth. Whereas in the beginning the community consisted of 38 families (about 75 people), by the date of eviction four years later, it had grown to include about 85 families (or 170 people). PPLH-ITB had suggested to the community that it should not be too willing to accept new families, since this would likely invite local government intervention.

The School

The school, organized by the Foundation for the Betterment of Youth, started with informal afternoon sessions, with 20 or so mostly pre-school age children. When the project was discontinued there were 40 youngsters, including some who attended high school outside the community. A primary school class and a pre-school class were organized in the mornings and all the children were invited to attend evening sessions. Those who attended regular school and joined the evening classes, had above average grades in their day classes (see Photo 2 on page 121).

The Mosque

In addition to serving as a place of worship, various activities such as Koranic reading for children, women, and youths were organized at the mosque. Men used the mosque not only to deliberate on the observance of religious teachings, but also to discuss civic affairs, including problems related to cooperative management. By the end of the project, when the community had to move out, the mosque had become a rallying point.

Recycling Cooperative

Innovative ideas were implemented through the cooperative. A Rp 200,000 personal grant from one of the Dutch researchers in 1983 provided the seed capital to begin a savings and loan association. There was little capital accumulation in the first year. In time, membership grew and confidence in the cooperative also strengthened. A consumer programme was initiated with the *kaki-lima* (vendor) cooperative of Bandung to supply basic daily needs. Loan schemes were introduced to increase recycling productivity. The loans assisted with health services, supported investments such as buying carts for itinerant scavengers, and provided capital for buying recyclable materials from households. Prior to eviction, the cooperative had Rp 2,000,000 in capital and was still growing. In addition, new technologies were introduced to increase the utilization of waste. Some examples follow below.

Use of Seed

Initially, an NGO requested mango seeds for re-greening purposes. Within two weeks, the cooperative had collected 250,000 seeds, which were then dried and 100,000 seeds were selected and sold for Rp 850,000. The money was used by the cooperative members to buy merchandise, including sewing machines and other equipment.

This experience induced members of the cooperative to set up a seed-farm using seeds selected from garbage. At one point, this venture was selling 6,000 various three-month old seedlings. Another request came from a pineapple plantation in Eastern Indonesia which was subsequently supplied with 43,000 seedlings at a price of Rp 35 per seedling.

Production of Compost

A simple aerobic composting technique was introduced to some of the scavengers who wanted extra income. They were able to produce compost at Rp 10 per kg. The compost was used at the seed farm, at the scavenger community's market garden, and was also sold to the Municipality. Initially, composting was a limited activity but it inspired larger experiments at later stages.

Market Gardening

Market gardening was undertaken in an adjacent wasteland. Since many of the scavengers had a background in farming, it became a popular cooperative pastime.

Fishing and Animal Husbandry

Originally, there was a drainage pool in the middle of the shanties. This pool was transformed into a clean and well maintained fishing pond (see Photo 3 on page 122). In addition, the community acquired 16 rabbits from PPLH-ITB with the understanding that they would return 28 within one year. Prior to eviction, there was over 200 rabbits and some goats. The animal manure was used as garden fertilizer.

Health Care and Family Planning

This activity was initiated by the Borromeus Foundation and the local Municipal Health Care Unit. It consisted of a Mother and Child Care Unit, a Family Planning Unit, and a unit for the treatment of common illnesses. The whole activity was integrated within the community, and the Cooperative assisted with funds as needed. It was the forerunner of the integrated health post.

The Double Pit Latrine

The double pit latrine pilot project was introduced by UNDP via the Centre for Human Settlement Studies. The objective was to test a system which produced manure. It was built by the community using half of the available budget, and remained well maintained until the eviction date.

Other activities also became part of daily life: cleaning up the reeds, improving the shacks, building the front gate, road maintenance, participating in the August 17 National Proclamation Day celebration and organizing security. This ecological development¹ process was made possible by the establishment of a community with an effective system

¹ "Ecology" refers to the relationship between a living thing and its physical and social environment; "development" is a willful change process. So "ecological development" in this case refers to a process where people are actively involved and interacting in, a development process.

of self-governance. The system was based on hope, self-respect, respect for others, and, a sense of social discipline stemming from an understanding of collective responsibility. At the time of eviction in 1987, the fledgling had developed into a mature community.

Politically, scavengers were (and still are) regarded as a nuisance to the community and a shame to the nation. As a result, they were persecuted and put into 'social rehabilitation centres' to be trained to become productive and normal citizens. At this time an agreement was reached with the Mayor of Bandung which organized scavengers into a more productive community, in preparation for transfer to another site which would be appropriately located and designed. This political leeway for developing programmes with the Jatidua community lasted three years. However, the Mayor was soon after replaced and the new functionary had other ideas. It was deemed inappropriate to give scavengers a place to live in front of the Governor's office, and no alternative place was offered. In 1987 the Jatidua undertaking came to an end; the site was requisitioned, and the community evicted to make room for a parking lot.

Resettlement into a 'social rehabilitation centre' was a traumatic experience. The presumption was that scavengers are "vagabonds and beggars" in need of social rehabilitation. Subsequently, PPLH-ITB was sponsored by the Dutch Women's Association to build an 'Ecoville' for the Jatidua community, then living at the 'social rehabilitation centre'. However, the community's spirit was broken. The development process had to be re-initiated at the new settlement, Rancamanyar, located in the southeastern part of Bandung, a site where scavenging was virtually impossible. Not surprisingly, many scavengers did not make the move.

TOWARDS THE IMPLEMENTATION OF THE GARBAGE INDUSTRIAL ESTATE CONCEPT

Although the Jatidua story belongs to the past, its spirit continues to live on in other related experiments searching for alternative urban solid waste management systems.

The Centre for Policy and Implementation Studies (CPIS), an NGO with high level connections, heard about the conflict between ITB and the local government. They were also interested in an alternative waste management system because of its potential for employment generation in the informal sector and waste reduction. Both were becoming important social and environmental policy issues. CPIS invited PPLH-ITB to discuss the GIE concept.

Subsequently, CPIS undertook a policy study which changed the politics of scavenging and recycling forever in Indonesia. The NGO reported that scavenging contributes to solving the urban waste problem, while simultaneously creating work opportunities in the informal sector. With their superb connections, CPIS was able to get the attention of the President who made a public statement in support of the role of scavengers: "..... Scavengers are to be seen as 'Self-reliant Soldiers', creating work for

themselves without government support, contributing to the reduction of urban waste and creating added value to waste. Therefore they are to be given our support to do their work to increase their contribution." It was this statement which created the political space for further experimentation with decentralized and dispersed waste management systems.

In the late 1980's, PPLH-ITB was given an opportunity to become involved with the Ragunan Zoo in Jakarta and to become involved with the Jakarta City Government (DKI). The intent was to introduce the same local waste processing system or Garbage Industrial Estate (GIE) first developed in Bandung. The GIE concept was well publicized by this time. Perhaps this had more to do with the political appeal of being involved with scavengers, rather than its contribution to environmental management. PPLH's engagement in DKI was short-lived because it became politically sensitive. Nevertheless, the work at Ragunan Zoo was a significant breakthrough.

Two types of Garbage Industrial Estates or GIEs have evolved: 1. the Organization-Based GIE, and, 2. the Community-Based GIE. Both types are described below.

1. The Organization-Based GIE:

- a) Waste processing units are organized as part of an established urban function, (eg. a zoo, a recreational centre, a campus, a market complex) where on-site space is readily available.
- b) Municipal or estate waste processing units, serving relatively large heterogenous areas, set aside land for a GIE.

2. The Community-Based GIE:

Waste processing is organized as part of the neighbourhood system. Local people agree to manage the local GIE with the incentive that they will benefit from the utilization of local waste and the reduction of transportation and dumping costs. The community accepts the consequences of setting aside some land for this purpose. Ideally, the GIE is cooperatively owned and operated by the local community and the GIE workers include (among others) scavengers.

A good example of Model 1a) is the Ragunan Zoo in Jakarta. The Director of the Zoo was Secretary to the former Minister of the Environment, Professor Emil Salim. He had heard that PPLH-ITB had conducted experiments in integrated resource recovery and had been successful in utilizing up to 80 per cent of the organic and inorganic waste before final dumping. He invited PPLH to implement the idea at the Zoo, which produced animal dung, visitor waste (paper, carton, plastics, bottles and cans), and organic waste from the gardens.

The project operated for several years. The GIE employed scavengers and labourers from the surrounding communities and sold its compost. PPLH's simple open-air aerobic composting system was used. The project was eventually taken over by the Centre for Policy and Implementation Studies (CPIS). CPIS added a shelter to the composting operation. Although this increased preliminary investment in the GIE, the efficiency of the composting process was significantly improved. The preliminary costs and organizational skills needed to construct a roof structure, although relatively simple and cheap, are ultimately an obstacle to a community-based approach since a more elaborate organization and management system is needed to implement it effectively. CPIS also introduced a system of composting animal dung at the Zoo.

Model 1b) is a spin-off from the Ragunan Zoo experience. It was implemented by the Bumi Serpong Damai (BSD) New Town Corporation and the Jakarta City Government Waste Processing Unit in West Jakarta, both developed in cooperation with the Centre for Policy and Implementation Studies (CPIS). These models have been operational for several years, and are awaiting evaluation for replication into a city-wide system. This could ultimately represent a large-scale GIE model, organized by municipal governments and estate management units, and managed by institutions with each area having responsibility. Scavengers may or may not be used in the waste processing operation.

Model 2 uses a community-based approach in waste processing and has not yet been fully tested. Although fragmented, discontinued and not supported by the local government, the Jatidua experience was conclusive enough to develop a community-based approach in waste processing. In a basically hostile environment, such as one can still expect to find in Indonesia in which municipal governments deal with scavengers and the informal sector, transferability of the concept remains highly questionable.

One problem is that this kind of model requires a paradigm shift from ordinary project management, in which, actors are conceived of as *objects* in the development process who are dependent on the project manager's perception of realities and decisions, toward a developmental approach in project management in which the actors are conceived of as *subjects and stakeholders* in the project, and are therefore actively involved in decision-making from the project's outset. This is a revolutionary change from a "top-down" approach to a democratic and interactive development management approach. Large-scale implementation of the model will have to wait for a more facilitating political and socio-cultural environment.

CONCLUDING NOTE

After two decades of experimenting with a decentralized urban waste management system (or Garbage Industrial Estate, GIE), two conclusions can be made:

1. the GIE concept is workable and economically viable, and;

2. two types of the GIE concept can be developed: the organization-based GIE and the community-based GIE.

At this time, the organization-based GIE is more easily promoted at all levels, since regular development planning and implementation channels can be used without too much difficulty. Why it has not yet been implemented on a larger scale is an interesting research question. The community-based GIEs require more time to mature. A cultural change is needed, one that is supportive of grass roots initiatives. Communities need to learn to manage their own affairs with the assistance of development consultants as required. This enabling strategy in development has to be operationalized before community-based GIEs can be promoted and sustained without negative interventions.

The stage is set for implementing the GIE concept as an alternative urban solid waste management system, perhaps initially in a very limited way, but at later stages, a large-scale application may be possible. The success of such applications will of course be situational specific.

PHOTOGRAPHS FROM THE JATIDUA SCAVENGER COMMUNITY

Photo 1:
The first mass-marriage
conducted by the
Officer of the
Department of
Religious Affairs
(Photo: PPLH - ITB)



Photo 2:
The pre-school
(Photo: PPLH - ITB)

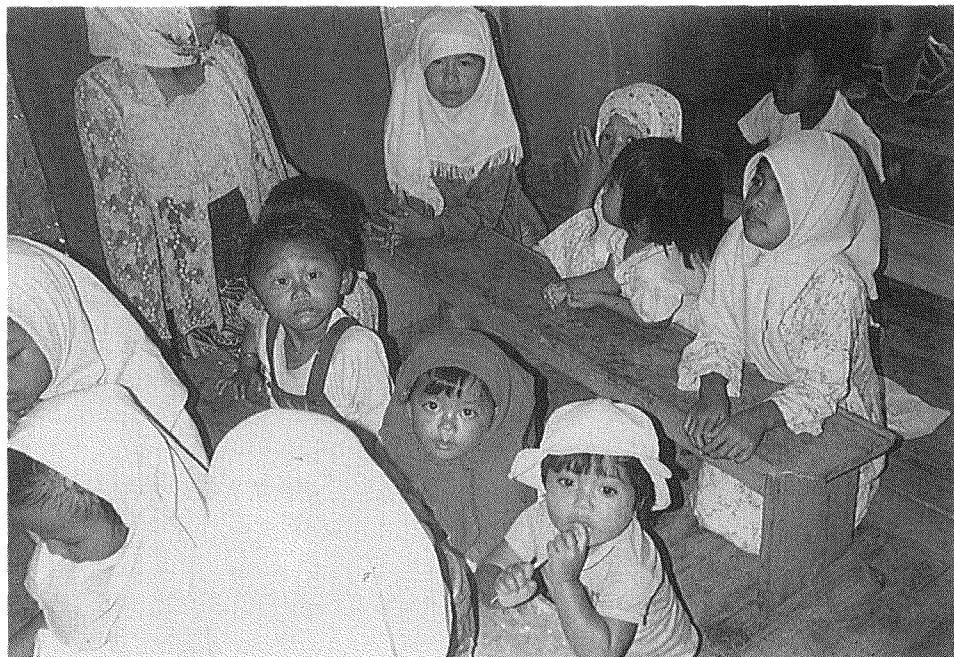




Photo 3: The fishing pond
(Photo: PPLH - ITB)

REFERENCES

- Garna, Judistira; Hans Versnel, and; Ade Emka. Comparative Study of the Scavenging System in 3 Cities in West Java. PSLH-ITB, Bandung and ISS, The Netherlands, 1982.
- Jantsch, Erich. Technological Planning and Social Futures. Associated Business Programmes Ltd., London, 1972. xii, p. 255.
- Poerbo, Hasan; Daniel T. Sicular and Vonny Supardi. An Approach to the Development of the Informal Sector: the Case of the Garbage Collection in Bandung. PRISMA, # 32, June 1984.
- Trist, Eric. The Evolution of Socio-Technical Systems. Ontario, Ministry of Labour, 1981.

CHAPTER 7

PARTICIPATORY DEVELOPMENT IN THE URBAN CENTRE OF SAMARINDA: THE CITRA NIAGA AND GANG MANGGIS EXPERIENCES

by Antonio Ismael

Abstract

This chapter describes two examples of participatory development in the urban centre of Samarinda, the Citra Niaga shopping mall and the adjacent Gang Manggis retail market. The details of each redevelopment are described and analyzed at some length. One of the main characteristics of this project was that the redevelopment did not relocate the poor and was intended to equally benefit all economic levels of the population. Another unique aspect was that the project utilised an integrated approach to project management and planning which encouraged the participation of all sectors. All facilities were planned and managed by the community, with the assistance of a professionally run local board. Citra Niaga has become an important national demonstration project, and has won both the Aga Khan Award for Architecture, and the Indonesian Institute of Architects Award for Outstanding Architecture.

Abstrak

Bagian ini menggambarkan dua contoh pengembangan partisipatif yang terletak di pusat kota Samarinda, Kalimantan Timur, yaitu pusat perbelanjaan 'Citra Niaga' serta pasar eceran 'Manggis' yang berdekatan dengan pusat pertokoan tadi. Perincian setiap proses pembangunannya diuraikan secara panjang lebar. Salah satu citra utama dari proyek ini adalah bahwa pembangunan tidaklah dimaksudkan guna menempatkan kembali golongan ekonomi lemah akan tetapi pembangunan adalah untuk kepentingan bersama bagi semua tingkat ekonomi dan semua lapisan masyarakat. Aspek unik lainnya dari proyek ini adalah bahwa proyek ini memanfaatkan suatu pendekatan terpadu dalam perencanaan dan pengelolaan proyek yang mendorong peran serta seluruh sektor yang ada. Semua prasarana direncanakan dan dikelola oleh masyarakat dengan bantuan suatu badan pengelola setempat secara profesional. Citra Niaga telah menjadi suatu proyek percontohan nasional yang penting dan telah berhasil memenangkan penghargaan Aga Khan dalam bidang arsitektur dan juga penghargaan sebagai suatu bentuk arsitektur terbaik dari Ikatan Arsitek Indonesia.

INTRODUCTION

This chapter describes two examples of participatory development in the urban centre of Samarinda, the capital of East Kalimantan Province, a city of some four hundred thousand inhabitants (1990). This account concerns the Citra Niaga shopping mall¹ and the adjacent Manggis retail market (see Map - Location of Project on page 125).

¹ In 1989 the Citra Niaga project received the Aga Khan Award for Architecture, and in 1991 it was awarded the Indonesian Institute of Architects (IAI) Award for Outstanding Architecture.

Prior to the Citra Niaga Project, the central area of Samarinda was comprised of a dense shopping district with sprawling markets and haphazardly built shop-houses, and urban slums nestled in between (see Photos 1 and 2 page 135). The local infrastructure was poorly maintained, and the area was prone to major fires every 4 years or so. The author, in collaboration with the local government, private investors, and NGOs became involved in an urban redevelopment project with both communities.

This chapter focuses on the design of the Citra Niaga Project and on experiences gathered during the implementation process. Some generalisable criteria for successful implementation are discussed, along with specific lessons learned from the Citra Niaga experience.

THE CITRA NIAGA URBAN REDEVELOPMENT PROJECT

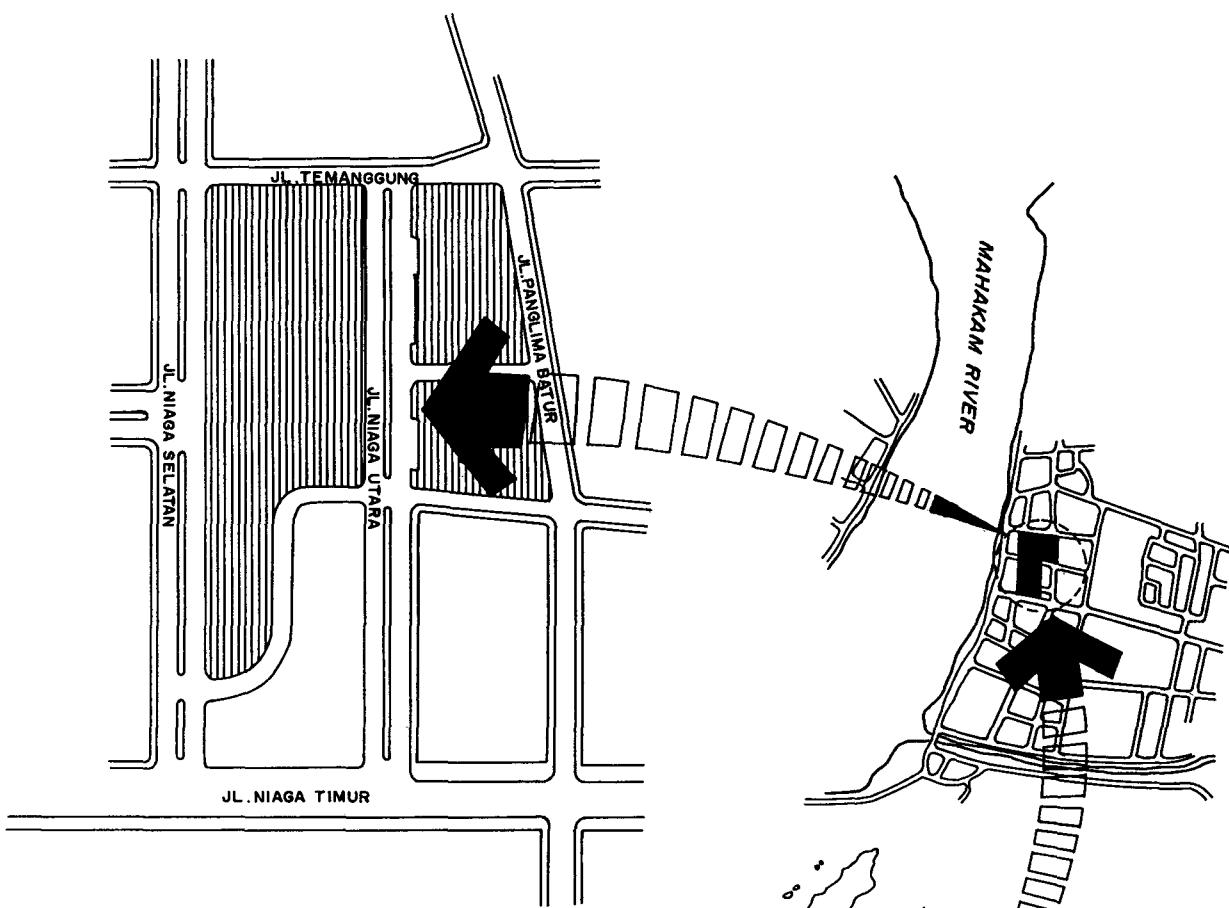
Prior to the Project, some three hectares of the Citra Niaga site were used as a public recreation centre. The facility was poorly maintained and the area quickly turned into a slum as migrants moved into the city. Low-income merchants were located on the periphery of the area, and behind them were squatter's settlements. The central space was densely populated and unhealthy, in short a fire hazard. The government owned the land, but no funds were available for redevelopment. The squatters, mostly living from informal trade and services, did not undertake any improvements, and the area continued to deteriorate.

In 1983, (then) Governor of East Kalimantan H.E.H. Soewandi, suggested that the area be redeveloped. Three basic objectives were put forward: 1. to redevelop the blighted area and to make optimal use of the area's potential economic value; 2. to carry out this redevelopment without overlooking the welfare of the poorer residents, and; 3. to invite the private sector to assist the local government in this endeavour.

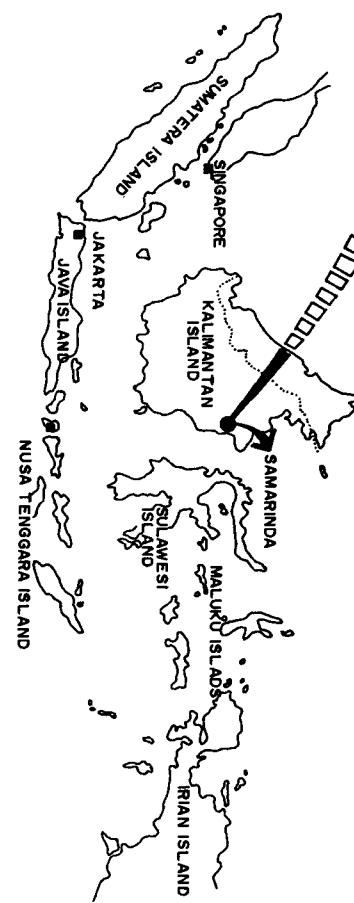
The most notable aspect of the redevelopment was the Government's instruction not to evict the poor residents in the area, as is commonly done in most urban redevelopment projects. One-third of the land was set aside for use by the low income inhabitants. The Citra Niaga Project was designed to accommodate and benefit all economic levels of the population. This was a significant departure from the common practice of segregating² low income settlements from exclusive real estate developments. This integrated approach was entirely new.

Planning with the community and related actors began in 1983; while construction started in 1985, and was completed in 1987. From the outset, an integrated approach was proposed by the three development consultants, who included; the developer, the author, and an NGO representative.

² Segregation may cause social and economic disparities and create political tensions.



LOCATION OF PROJECT
SCALE
1 : 2000



The proposal was unconventional and experimental and called for the participation of all sectors. Most important was the participation of the area residents, including the low income squatter families.

The construction phase was preceded by a two-year dialogue. This phase was characterised by the struggle to promote the concept, to integrate all the participating sectors, and to design not only a self-financed, self-sustaining project, but also a profitable venture as well. The total development cost was six billion rupiah (US 4 million, 1986).

A mixture of cross-subsidy, self-financing, and self-generating funds, together with effective management of available resources, resulted in a complex and innovative financial scheme. Based on a strategy of directly involving the various actors to ensure their commitment, the undertaking reduced costs by lessening uncertainties and as such attracted development, thereby benefitting all parties involved. (The process of getting people involved and informed prior to project implementation is sometimes called "social preparation".) The cost-benefit analysis focused not only on the profitability of the business venture, but also included the social and ecological costs and benefits. A mixed-use integrated development scheme consisting of housing, commercial, recreational and public facilities was suggested. Underlying this scheme was an equitable (although experimental) financial concept: a mix of modern capital-based financing and informal barter-type financing.

From Phase I until Phase III, 141 shop-houses were completed for the higher income group. In addition, 79 small shops were made available to the middle income group, while 224 sidewalk stalls in covered spaces were provided at a reduced cost for the lowest income group, usually street vendors (see Photos 3 and 4 on page 136). Also completed at this stage were community-owned recreational facilities, an open plaza and other utilities, as well as infrastructures such as sidewalks, fire hydrants, parking lots, and public toilets (see Photos 5 and 6 on page 137). All facilities were managed by the community.

Our role as consultants was to bridge the gap between the community, the government and the private developer. A team (which involved at least the three development consultants) designed the participatory planning and implementation process. The team included community field workers to help organize a cooperative for the low-income group. This enabled the more disadvantaged group to engage in the negotiations. As such, the team served as a catalyst for community-based development activities, and as a mediator among the other formal parties in the competition for urban resources.

Such an approach was designed to ensure satisfactory results for all. It was an initiative designed to prevent inequitable urban development. The rules of the game were based on a 'win-win' outcome. The initial step was called participatory planning, or

advocacy design. By engaging in direct dialogue with the community, ideas were generated and evaluated, and community aspirations were translated into a physical scenario.

The long and intricate process required full commitment from the multidisciplinary, non-partisan team. The team, consisting of professionals and technicians, was considered an alternative type of NGO. It assumed the role of a lobbyist and policy concepter, a role recently called 'development consultant' by Poerbo. Development consultants are also called 'Semar' consultants, named after the mythical wayang figure Semar.³

The development consultant role, based on the figure of Semar, was conceived of as a link between the poor and the other parties --the government, the private sector, the banks, or other bodies and individuals. As such, this link served to channel resources and information to the poor. The role of development consultant was an experiment in finding a more effective and realistic role for NGOs involved in community development. Increasingly, this role has become that of an acknowledged player in both urban and rural development.

However, the development of physical buildings alone does not completely solve urban problems. Non-physical development or software should also be included. The latter required an organizational structure to ensure its sustainability, to regulate the co-existence of the various groups, and to ensure that all socio-economic groups benefited from the process. A professionally run Local Board was set up to manage and maintain the area's development. The Board consisted of representatives from the formal local government and the local community. Initially, it also included an NGO as a 'mediator'. As the Board became fully operational, the NGO decreased its involvement.

The 'community-based local government' orientation of the Citra Niaga Project is an example of a more participatory, integrated, and decentralized form of government. It solved local problems more directly and effectively by avoiding the conventional bureaucracies. Indeed, it was a new approach to deal with urban management problems in Indonesia. This has important implications for most Third World cities as well.

The results of the project suggest that poverty alleviation is not solely a government responsibility where people 'wait and receive'. With limited funds and staff, the Samarinda City Government readjusted its role to act not as a provider, but rather as a regulator and a facilitator that supported both community and private sector initiatives. As such, the Citra Niaga Project has been recognized as a breakthrough by the Indonesian Government and is now frequently referred to as a demonstration project for the following reasons:

³ Though humble (being a servant) and rather ugly, it is said that Semar blends with the lowest strata of the community, and yet he is also the King's advisor. Semar is a 'god' in disguise.

1. It did not victimize the lower income population in the competition for resources, but instead regarded them as an integral part of the urban development process.
2. It did not burden government funds or human resources.
3. It placed importance on community-based organizations in the form of professionally run cooperatives as viable and necessary social-economic institutions for the improvement of the lower income groups.
4. It suggested a new role for NGOs and professionals as development consultants motivated by social and ecological concerns. These consultants narrowed the gap between the formal development system and the large low-income section of society which has no access to this formal system.
5. It called for a mixed government-community organization in the form of a professionally run Local Settlements Managing Board which gave more direct control and ownership to the users (the community) within the boundaries of the area development.

The benefits of the Citra Niaga Project had a ripple effect locally. Recently, Pasar Kasban, an assemblage of mobile food-stall owners and peddlers on the south side of the project, was reorganized and the Samarinda Public Servants Cooperative was established. Also, an awareness of the *kaki lima* cooperative movement has spread to other markets around Samarinda. East of the Citra Niaga Project, a land consolidation experiment was implemented by the same team. And the Mayor has also proposed a similar scheme on the west side to establish a fruit centre for hawkers. Once completed, 7.5 hectares will have been redeveloped, thus re-vitalizing Samarinda's central business district.

The same Samarinda team has started a similar, larger scale (120 hectares) project in East Jakarta. Here a mixed self-help housing, land-consolidation project based on the Citra Niaga model has been initiated under the guided land development (GLD) approach. A more complex set of methods and techniques to deal with land issues through land banking, consolidation, pooling, and readjustment is evolving.

Also, the Citra Niaga case is considered a national demonstration project by several ministers, namely the Ministers of Labour, Home Affairs, Cooperatives, and the State Minister of Housing. Various universities and research institutions, including the National Research Institute, have launched several seminars and dialogues with government agencies to promote the idea that urban redevelopment can be done in conjunction with ameliorating the plight of the poor.

A number of private developers have expressed interest in this approach for cities such as Semarang, Surabaya and Balikpapan. The Mayor of Banjarmasin has started a

similar project; and others in Pontianak, Jakarta, and Ujung Pandang are referring to the Citra Niaga model.

THE GANG MANGGIS LAND CONSOLIDATION EXPERIMENT

As stated in the introduction, this chapter deals with two examples of participatory development from Samarinda, East Kalimantan. The first, the Citra Niaga case, illustrates that well planned and effectively managed development and redevelopment can benefit all economic levels of the population. The second case, the Gang Manggis Land Consolidation Experiment, is also concerned with equitable development, but in this case within the context of private ownership.

Context and Background

The Gang Manggis Settlement, which encompasses some four hectares, is located in the downtown area of Samarinda where a dense slum area was surrounded by more formal and larger plots on the periphery. These serviced plots were very small and irregular. In 1984, the whole block and parts of the neighbouring settlement were destroyed by fire.

At the time, it was suggested that the area be redeveloped. Two objectives were set forth. First, the inner slum would be the focus of attention. The main issue was the availability of land for infrastructure; the government had limited funds for obtaining land through conventional land acquisition methods. The second objective concerned the rebuilding of the houses. Attention was again focused on the lower income members of this community.

Approach

Prior to the fire which destroyed the area, land was irregularly subdivided and densely occupied. After the fire, it was decided to divide the land into 12 blocks and to involve the owners as developers, with assistance and coordination by a development consultant. First, the land was pooled. Then, land to be used for community facilities and community infrastructure was subtracted from the total and the remainder was re-plotted.

This was an unconventional approach. For one thing, the government did not acquire land for the infrastructure through compensation. Secondly, individuals who had land within the right-of-way of infrastructure or new community facilities were not victimized. Instead, the costs and benefits from the development were shared.

Another interesting element of this project was the practice of community land banking. Two percent of the total land area was designated as a community asset. This land could be used for various community purposes. The land could be used as an economic venture, the profit from which could be used for the maintenance and management of the whole area. The land could be leased in a long-term fashion (eg. 20

years) to a third party, preferably the private sector, and the resulting income made available to the community. As an asset, the community land bank could be used to obtain a loan for a community business which could then be run as a cooperative, and, a portion of this land could also be used as a business location for lower income members of the community. The community land bank system was designed to serve a number of goals. For instance, an access road to the kampung was maintained but was closed to automobiles; only street vendors and small shops activities were to be permitted. Hence, the lower income members of the community gained access to additional income.

The Roles of the Various Parties

The Gang Manggis experiment can be conceived of as a theatrical play with the community, the government, and the development consultants all performing their respective roles. The government acted as a regulator, facilitator, and to some extent as a provider. Its tasks included regulating the game play, obtaining the consultants' design, and securing the professional services of the project manager and community organizer. The government provided some local funds. Roads, electrical lines, and sewage systems were built. The government also assisted in the surveying process. The government, the development consultants, and the community measured the land and divided it into plots in accordance with the proposed design.

In rebuilding the area, permits were required for the individual plots. These permits were processed at a subsidized rate. Initially, it was proposed that the permits be processed on a sliding scale, with a higher rate being charged to higher income members and permits made available at a nominal rate for the lower income group. This suggestion was ignored. Presumably, the executing official preferred to charge everyone the same rate to obtain the extra income.

Initially, the role of the development consultants was to develop the community approach and the game plan. Both technically and physically, the design had to be sound. Furthermore, all parties had to be coordinated: the various governmental bodies, the consultants, the community, the private sector, and the bank.

The consultants staffed an on-site field station. The field station provided: public information, assistance with the processing of building permits and land ownership certification, and assistance with diverse matters such as obtaining construction loans. Eventually, the consultants managed aspects of the construction process, including coordinating the various activities and managing payments.

The development consultants had to adapt themselves to an ever-changing situation, including the availability of funds to pay their salaries. Initially, they were paid by the government for the site design and for conducting the land consolidation-community planning process. Various design alternatives were formulated in consultation

with the community. Later, during the construction phase, the consultants were paid by the community via a management fee on the construction process.

Design

In designing the settlement, a number of criteria were considered:

1. All plots had to face a road. The size of a plot depended on its location, and whether it was located on a primary or secondary road.
2. The new plot had to be similar to the former one. For example, if previously located at a corner facing the main road, then the new location had to be similar.
3. Plot sizes were proportionally reduced to accommodate the community facilities.
4. Plots that were too small to be reduced received a land subsidy.

The calculations were first analyzed by computer, and then the community deliberated on the design until all parties agreed. In all, there were three formal sessions resulting in a number of readjustments.

Financing

All of the land was privately owned. The complex reconstruction process involved a sequence of activities. The whole area had to be rebuilt in an orderly manner, more or less simultaneously to prevent the growth of slums. The initial stage of the process was financed by the government in the form of administrative work, design, and road construction. The costs were relatively low compared to the phase of rebuilding the plots.

Organizational Structure

In the Manggis project, the government acted as the regulator, issuing building permits through *prona* (mass certification) and *pemutihan* (programme of registration through forgiveness of delinquency).

There were several different agreements:

1. Between the Government and the Community, there was a Mayor's Decree stating that members of the Manggis community had a right to stay on the land, if they followed the instructions set by the Authority Board.
2. Between the Community and the Government, there was a detailed promissory note explaining the rights and the responsibilities of the community. Most notably, payment to the contractors and the penalty for any delay or default were explicitly outlined (e.g. losing the right to use the buildings for a number of years).
3. Between the Contractor and the Government, there was a promissory note

whereby a 5 percent management fee was deducted (four-fifths of which went to pay the Development Consultants, and the remainder was for the Government).

4. A legal contract was signed between the nine Kampung Improvement Project blocks of the Manggis community and the respective Contractors. (Contractors were chosen by the block members.) The contracts outlined the rules set by the Development Consultants under the name of the Authority Board. Members of the blocks were controlled through the contract between the contractor and the block members.
5. A legal contract was signed between the Development Consultants and the Government stating the respective roles and tasks of each party, and ensuring that the consultants' salaries would be paid by the 119 land owners via the contractors.

Lessons from the Gang Manggis Experience

Several of the problems encountered during project implementation are quite common to these types of community-based projects. In many communities, there are a number of individuals who are reluctant to cooperate. Worse still, often these people have influential friends or relatives in high places. For instance, in this case, one local member who had previously supported the overall arrangement and design, later changed his mind during the construction phase. This resulted in having the member replaced. In another situation, one land owner used a political connection to obtain an additional 1.60 metres of land for his building which obstructed a pedestrian path. These are just a few of the sorts of problems which emerge in a community inspired development initiative.

In addition, financial matters also proved critical at times. The first option was to let the group finance its own members. If this failed, the development consultant assisted individuals on a case-by-case basis. The lower income group was unable to keep up financially with the others and some land disputes resulted in financial claims. As a result, the management was forced to cover some payment defaults. Such issues should have been regulated in the main contract.

For many, land consolidation was a wholly new concept. Inconsistencies in land measurement, differences in boundaries recorded and measured by the land titling agency, poor registration, and an unwillingness to settle differences in stated vs. actual plot size made the process even more difficult. Furthermore, land agencies were uncomfortable with having other parties involved in land readjustment issues.

Other problems were bureaucratic in nature: delays concerning permits, legal transfers and changes of land and building rights. Other internal problems concerned the area management's authority. For instance, the communication established amongst the local organizations and the development consultants and the NGOs should have been more intensive. The established management did not always make decisions by

consensus nor did they follow recommendations. For example, prior to any building activity, the financial situation of all landowners should have been confirmed, conditional agreements drawn-up, and a trustee appointed to manage community funds for construction.

There was always the possibility for mismanagement, corruption, and individual misuse of authority. Financial control proved to be especially difficult. A lot of experience was needed before appropriate administrative procedures were established. One example of the misuse of authority involved the writing of memos by high-ranking officials which were at variance with agreed upon rules. This led to instances such as the acceptance of unqualified contractors. This type of malpractice can be avoided by having clearly written procedures and sanctions.

Coordination was a very central problem because numerous parties, governmental as well as private and community organizations, were involved. Constant deliberation among all parties was needed to synchronize the construction process, and to set the financing schedules of the different elements of area redevelopment. Itemization of those elements, (the construction of infrastructure by local government, buildings by developers and community groups, payments and loans by the banks) was a must.

RECOMMENDATIONS IN LIGHT OF THE CITRA NIAGA AND GANG MANGGIS EXPERIENCES

Clearly, there is no one recipe for making participatory development projects more successful or replicable. Conducting projects exactly similar to Samarinda is difficult. However, based on this experience the following factors should be considered.

1. Political Support

Political decisions are not made by single individuals. In the Citra Niaga case, even when the Governor was enthusiastic about the project, many obstacles were encountered. Political support at all levels was needed. For this reason, it is suggested that decision-makers be involved in the process of making plans. This must be set up skilfully. Completed proposals are often imposed on officials, whereas in reality officials prefer to participate in the conceptualization and planning of projects.

2. Balancing Act

The interests of the community, the developer, and the government should all be balanced. Some of these interests are not necessarily logical, ethical, or even fair. But the facilitator (who has no real power) must maintain a balance and try to weed out unfair intentions. Convincing participants about the fairness or unfairness of an idea is often difficult.

3. Political Stronghold

In a political context in which government officials make public statements without a firm grasp of the issues, a political stronghold is needed. This is dangerous and risky, and psychologically draining. Frequently, the consultants were required to do a significant amount of lobbying prior to the actual formal decision-making process. (This lobbying exercise can be called an "approval support game".)

4. Financial Matters

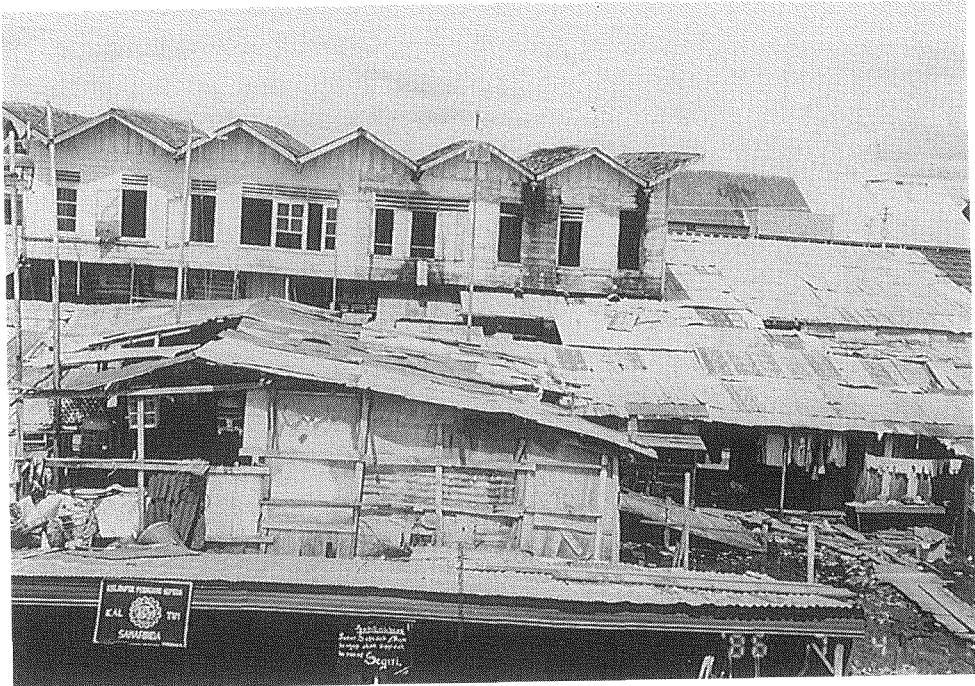
This can be a complex and very tricky part of any project. In order to get initiatives moving, pre-financing and bridging funds must be made available.

5. Loopholes

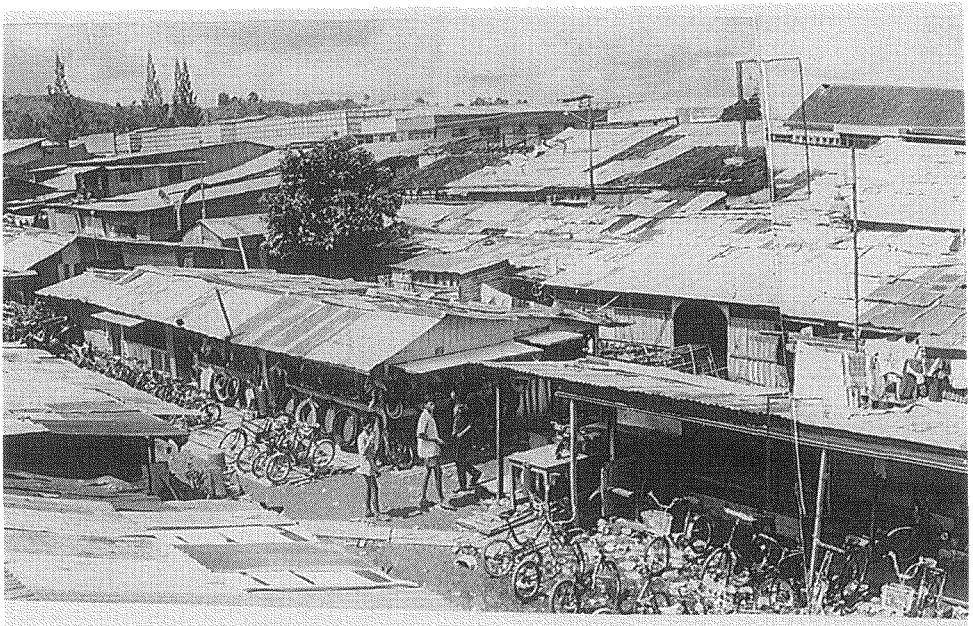
There are often loopholes in existing regulations. Getting through or around these loopholes requires a thorough knowledge of the existing conditions.

Even though the above five factors have been identified as problematic in the implementation of these cases studies, each implementation process will encounter its own unique set of challenges.

PHOTOGRAPHS FROM THE CITRA NIAGA CASE STUDY



Photos 1 & 2:
The Project Site
before redevelopment
(Photo:
TRIACO
Development
Consultants).





*Photo 3: Condition of the shops before the Project
(Photo: TRIACO Development Consultants).*

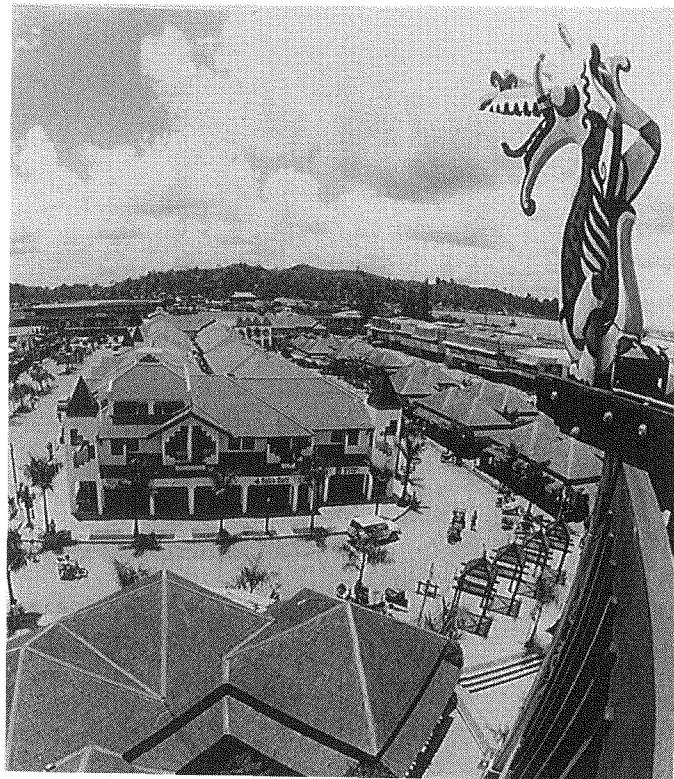


*Photo 4: Condition of the shops after the Project
(Photo: TRIACO Development Consultants).*



*Photo 5: The Shopping Area after Project completion
(Photo: TRIACO Development Consultants).*

*Photo 6: The building viewed from a tower designed to complement the local climate, made from local materials, and with forms and symbols indigenous to the region.
(Photo: TRIACO Development Consultants).*



CHAPTER 8

CITIES IN PARTNERSHIP:

SURABAYA AS A CASE IN POINT

by Johan Silas

Abstract

This chapter summarises the background behind the emergence of the Kampung Improvement Programme (KIP), and describes how a specific partnership developed between the government and the community of Surabaya. KIP is primarily concerned with the improvement of low-income, often unplanned neighbourhoods in Indonesian cities. The approach is premised on the belief that sustainable development can only be achieved by linking the public sector with the community in partnership. The paper describes the three forms of KIP with specific reference to Surabaya, which has received several Adipura Awards from the Central Government, and the UNEP Award for cleanliness and effective management of the urban environment in 1991.

Abstrak

Bab ini meringkas latar belakang munculnya Program Perbaikan Kampung (KIP) dan menguraikan bagaimana suatu kerjasama yang spesifik berkembang diantara pemerintah dan masyarakat di kota Surabaya, Jawa Timur. Program Perbaikan Kampung utamanya menyangkut berbagai masalah perbaikan lingkungan untuk golongan berpenghasilan rendah, yang sering merupakan suatu lingkungan tempat tinggal yang tidak terencana di kota-kota di Indonesia. Pendekatannya adalah suatu dasar pemikiran pada tingkat kepercayan bahwa pembangunan yang berkelanjutan hanya dapat dicapai dengan kerja sama antara sektor umum dan masyarakat. Tulisan ini menggambarkan tiga bentuk KIP dengan rujukannya yang spesifik pada kota Surabaya yang telah menerima beberapa penghargaan 'Adipura' dari Pemerintah Pusat dan penghargaan dari UNEP dalam hal kebersihan dan pengelolaan yang efektif untuk bidang lingkungan perkotaan pada tahun 1991.

INTRODUCTION

The Kampung¹ Improvement Programme (KIP) is concerned with the improvement of low-income, often unplanned neighbourhoods in Indonesian cities. Roads and footpaths, drains, water supply systems, sanitary facilities, and the solid waste management system are targeted for improvement. The programme was first implemented in Jakarta and Surabaya, in 1969. This account summarizes the background to this programme and describes the government and community partnership which developed in the Surabaya case.

¹Originally, the English equivalent of the word *kampung* was village or hamlet and was usually spelled kampong or campong. Today, the word may also denote an urban residential area of low-income groups.

THE DEVELOPMENT OF URBAN KAMPUNGS

After World War II, Indonesian cities experienced a massive influx of rural migrants, of whom only a small portion settled in the planned residential areas introduced late in the last century. Most settled in various types of kampungs.

Urban kampungs developed from the discrete and individual settlements of the earliest towns and harbours of Indonesia. Gradually, they amalgamated into larger entities forming agglomerations. During this process, land which was unsuitable for settlement because it was prone to flooding, other hazards and/or swamps, was reclaimed. Even cemeteries were converted into residential areas. The kampungs were built and developed incrementally by their inhabitants. Urban growth transformed rural villages into urban kampungs with a minimum of facilities and services.

Most kampung settlers are from the lower income groups. They have limited resources to build houses and to organize their neighbourhood. As a result, a large number of dwellings were built with makeshift materials; basic infrastructure was overlooked or was sub-standard.

HISTORY OF THE KAMPUNG IMPROVEMENT PROGRAMME

There have been kampung improvement programmes since the 1920s. The then Netherlands Indies Government initiated this action to prevent disease from spreading from poor kampungs to neighbouring, more affluent residential districts.

In the early stages, government funds were very limited. Gradually, some improvements were made to housing and other facilities and the living standard improved. Due to the unique mix of socio-economic classes in traditional kampungs, the poor lived next door to the urban middle-class, mutual self-help and informal cross-subsidies were common. However, this gradual improvement process was hampered by increasing population densities and the related lack of space for on-plot and neighbourhood facility development. High population densities are a special cause for concern because in combination with poor sanitary conditions, health risks are increased and may lead to further environmental degradation.

THE CASE OF KIP IN THE CITY OF SURABAYA

The aim of a country's development programme is, basically, the achievement of tangible results for all its citizens. If development is to be endorsed by the common people, it should be carried out in partnership with the people. This means that everybody contributes in proportion to his or her capacity. (This is an ideal view of development but the reality does not always reflect this ideal.) Since 1979, the Kampung Improvement Project (KIP) has become a national development strategy, implemented in cities throughout Indonesia. During the Fifth Pelita 1989-1993, 500 Indonesian cities and towns

were targeted, including Surabaya.

Surabaya (population 2,473,272 in 1990) is the second largest city in Indonesia. It dates back to the 13th century when the site served as a gateway to the once glorious inland kingdom of Majapahit. Since the Dutch colonial period, the town has flourished as a centre of trade and industry.

The traditional and informal process of 'housing by the people' (co-funded by middle and higher income groups) has provided 85 per cent of Surabaya's annual housing needs. Public housing programmes have contributed only a small number of new housing units. As land is always scarce and demand is high, population densities in the kampungs have grown rapidly. Sometimes, the population density exceeds 1,000 inhabitants per hectare.

In the beginning, only limited local resources were available for the KIP program, in 1976 outside assistance began to be received, primarily from the World Bank. In the 1990s, once again only local resources were used. Since KIP's implementation in Surabaya, 70 per cent of the kampungs have been involved. The programme stimulated the gradual development of most dwellings from provisional to semi-permanent and permanent structures and increased the number of non-plot facilities (toilets, garbage bins, water supply and electricity).

THREE KINDS OF KAMPUNG IMPROVEMENT PROJECTS IN SURABAYA

In Surabaya there are three kinds of kampung improvement programmes. All three involve cooperation between the city government and the kampung communities, each is described below;

People's Self-Help Project

In this case, the community identifies specific neighbourhood needs or problems and addresses these by bringing together the required funds and labour. The government renders assistance by providing appropriate guidelines and standards for proposed facilities. Despite the restricted scope and limited funds, this kind of project can successfully solve specific problems in a neighbourhood by relying on the people's own resources. The biggest impact has been achieved in more affluent kampungs where adequate funds are more easily raised by the inhabitants.

W.R. Soepratman Project

Named after the composer of Indonesia's national anthem, who is buried in Surabaya, this municipal government-assisted programme encourages kampung communities to formulate self-help projects. In particular, the community is encouraged to construct access roads and other types of infrastructure.

With its limited financial and technical resources, the programme could only be successful with substantial community involvement. The government supplied prefabricated concrete slabs and gutters on request, and the community was responsible for the construction of footpaths with side drains. This approach is attractive in that community contributions are matched by municipal funds, typically up to 50 per cent of the required budget. The programme has proven to be effective; over a period of 15 years, some 1,000 projects have been implemented with a value of US\$ 6.7 million. In most cases, this type of improvement programme has been implemented in the more prosperous kampungs.

Urban Kampung Improvement Programme (KIP)

In 1976, KIP was increased in scale to reach the lower income communities. It is in this area that the Surabaya city government has been most successful in mobilizing communities to improve and manage their own living environment. This programme is more comprehensive than the two preceding approaches. The following are examples of specific improvements at the neighbourhood-level: construction of some access roads with side drains; passageways with side drains; tap water supplies with hydrants for groups of 25-35 families; sanitary facilities, consisting of public washing and bathing areas, and toilets; solid waste management facilities including garbage bins, garbage carts, and transfer stations; elementary schools; and public health centres.

This programme is managed by the city, with World Bank loans channelled through the provincial government. The communities provide the land and are responsible for organizing the relocation of buildings and fences when additional space is required, and for the operation and maintenance of the facilities.

During implementation, the project adhered to previously set standards. However, project components were introduced in a flexible way to accommodate different local conditions. For instance, when providing space in the densely populated kampungs, any loss or inconvenience due to project activities was settled through mutual agreement. The community decided how to compensate families who contributed land to the project or had to demolish parts of their houses. In the latter case, the community would usually help with restoration of the building. As such, a KIP proposal was finalized only when the residents of a particular kampung agreed on how to share the cost of bettering their own living environment.

CONSEQUENCES OF KIP

In Surabaya, KIP has brought far-reaching consequences. Over 1.2 million people have been affected by this World Bank assisted programme. Initially, it covered 3,008 hectares. Under the fifth slice (Urban V 1984 - 1990) and using only local funding, 70 kilometres of access roads and 150 kilometres of drains and culverts were constructed; almost 56,000 metres of water pipes were laid, and 86 public bathing and toilet facilities were

built.

Most important were footpaths or passageways to ease movement within and around the kampung. Roads for motor vehicles were kept to a minimum. On both sides of the paths and roads, drains were constructed. Where needed and where space was available close to the drains, public toilets and bathing facilities were provided for the communities. Fewer main drains were built as they serve larger areas and may serve only certain kampungs. Being larger in dimension, the main drains require more maintenance.

The programme created an unusually strong partnership between low-income communities and the public sector. Chosen activities were community-supported and based on real needs. Consequently inhabitants have assumed ownership of the programme, and this attitude has helped ensure good upkeep for the provided facilities, something that is difficult to achieve in most slum upgrading programmes.

KIP AND OPERATION AND MAINTENANCE

Once a project is completed, the next issue is operation and maintenance (O & M). In Surabaya, special arrangements were made with the community. People took pride in keeping the footpaths and side drains clean, and also in doing minor repairs. Some residents provided cement or other building materials; others volunteered labour.

Water and sanitation related issues were emphasized. Community health promoters regularly made visits to increase the awareness of health hazards. To ensure regular garbage collection, each kampung community has its own neighbourhood-level collection service which links with the government collection process at the city level. Recently, blue garbage bins were introduced (in addition to the yellow ones) to collect reusable waste materials such as paper, cardboard, glass and metal. This initiative should help raise environmental awareness, especially among the young. People were encouraged to plant and care for trees and shrubs along street borders. They were also encouraged to improve their own on-plot facilities, i.e. housing and infrastructure. In all of these follow-up activities, women played a major role.

The KIP initiative in Surabaya has received national and international attention. This is because it addresses the basic infrastructure needs of the low-income urban population in a sustainable way. The Programme was premised on the idea that sustainable local development can only be achieved by linking the public sector with the community. Important elements in this relation are regular consultation, mutual commitment, a shared contribution to development, and care for and development of the living environment. These elements are closely interrelated and reinforce each other. The Program was successful because it mobilized community resources and increased the awareness of the importance of a clean and healthy living environment. Surabaya has received several Adipura Awards from the Central Government and the UNEP Award for cleanliness and effective management of the urban environment in 1991. The Surabaya

Institute of Technology '10 November' (ITS), has played a key role as catalyst in the process of kampung improvement.

LKMD AS A FORUM

One important institution in present-day Indonesia is the LKMD (*Lembaga Ketahanan Masyarakat Desa*), the institution which coordinates and plans development activities at the village level. A similar body is found in urban kampungs, the Neighbourhood Development Institution. Playing a key role in this organization are the local leaders and elders, kampung residents chosen by the community. LKMD's task is to mobilize community development through consultation with the people; it also represents them in other fora.

Regular consultation makes it more likely that people become involved in shaping their own living environment. By starting with a community level survey of problems and needs as experienced by the community, the programme involved the beneficiaries in the planning process. One example of the community's deliberations concerned the width of the kampung footpaths. It was decided that the footpaths should be wide enough to accommodate pedestrians and push bikes, but narrow enough to restrict normal vehicular access. Footpaths are usually closed to motorized traffic. Most kampung dwellers cannot afford a private car and prefer to use the footpaths as an extension of their limited indoor living space. Women dry laundry on the pavement, children play in a safer environment, and the noise and pollution of inner-city traffic is kept away.

During the critical planning phases, the KIP Planning and Development Board regularly consulted with local officials and community representatives. Much effort was made during these meetings to address issues and problems at an early stage, so that swift action could be taken to resolve issues. Using this approach, the community was encouraged to organize itself and to create a forum for the exchange of ideas. Both the public sector and the community contributed to the project's success by committing time, labour, and funds. The planning and implementation stages were monitored by community leaders and local government officials.

Given the limited government resources, the community's own contribution in the realization of kampung improvements was a strong asset to the programme's sustainability. On average every Rp 1 million invested by the government in direct project costs was matched by a Rp 500,000 contribution by the community. If the economic value of planting vegetation along footpaths, providing street lighting, and, building garbage receptacles and entrance gates was included, the community contribution was even higher. In addition, kampung improvement stimulated private investment in home and plot improvements. These private investments far exceeded the initial project costs.

CONCLUSION

In the preceding pages, the concept of the Kampung Improvement Project (KIP) and its implementation in Surabaya was discussed. Although the experience in this city is by no means exceptional, in some ways it may serve as an example of an environmental management project that is based on partnership between government and community.

Surabaya is one of the Metropolitan cities in Indonesia which has consciously attempted to operationalize the concept of public and community participation in development, in which the Local Government and citizenry interact as partners. Over the years it has developed effective methods of cooperation. If recognition by other parties can be a measure of success, the Adipura and UNEP Awards are proof of the effective partnership.

In terms of the question of the successfulness of implementation for this project, four important points can be identified:

1. all three types of KIP in Surabaya involved the community;
2. an open planning approach was used;
3. there was an institutionalized consultative process through the link with LKMD, and;
4. the local city government officials were very flexible.

CHAPTER 9 CONCLUSIONS

by Fred Carden, William Found, Louise Grenier, and Hasan Poerbo

Abstract

The various factors related to success in community-based development in the six case studies are analyzed in this concluding chapter. Considered are the following: degree of community ownership; role of "outsiders"; the integrated, multi-disciplinary nature of the cases; resource bases; forms of participation; political environment; the "entry point"; sustainability; vertical development and horizontal expansion; communication; organizations and structures; local cultures; incentives for participation; and "top-down/bottom-up" balances. Finally, the role of leadership, and development consultants in particular, is considered.

Abstrak

Berbagai faktor yang berkaitan dengan keberhasilan pembangunan yang bertumpu pada masyarakat dalam ke-enam studi kasus ini dianalisa di dalam bab kesimpulan berikut. Hal-hal yang dipertimbangkan di dalam bab kesimpulan tersebut antara lain adalah: tingkat kepemilikan masyarakat; peran pihak-pihak luar; kemultidisiplinan jenis-jenis kasus yang terintegrasi; pangkalan sumber daya; bentuk-bentuk partisipasi; situasi politis; titik masuk; kesinambungan; pembangunan vertikal dan pengembangan horizontal; komunikasi; struktur dan organisasi; budaya setempat; perangsang keikutsertaan dan keseimbangan-keseimbangan 'top-down/bottom-up'. Pada akhirnya, turut dipertimbangkan pula peran kepemimpinan dan terutama sekali pengembangan konsultan.

This volume has presented a set of remarkable Indonesian case studies where planning and development have been largely community-based. The cases, three rural and three urban, include a broad range of locations and problem settings. The sites include four in Java (Ciamis, Jasinga, Bandung, and Surabaya), one in Sumatra (Lampung), and one in Kalimantan (Samarinda). The problem settings include rural development, involving agricultural technology, local industry, marketing, and various factors related to community development; the enhancement of economic livelihoods for poor urban dwellers; and the reshaping of settlement and land use, from the cores of cities to remote rural regions.

Among this diversity of settings, the case studies exhibit a number of common characteristics. The context in all cases has been one in which flexible planning, a multi-disciplinary approach, high levels of participation (at all levels) and good capacities for conflict resolution exist. In addition, a number of key factors have played a role in each case; how these factors have interacted varies from case to case. Factors which have been identified and are reviewed below, are capacity, context, connections, communications and commitment¹.

¹ While these were identified separately, they bear a striking similarity to the factors identified by Ajam in his extensive review of the implementation literature.

All of the case studies involve a significant degree of local initiative and responsibility for planning and development, although the degree of local "ownership" of the development process varies somewhat from site to site. In cases such as Ciamis, the Scavenger community in Bandung, and the Samarinda project, the local community has been largely responsible for identifying local problems (i.e. establishing the research/development agenda), for investigating alternative courses of action, and for implementing selected paths of development. In Lampung a project which was originally "top-down" and directed by outsiders, developed methods and institutions through which local farmers could become more directly involved in planning and in the day-to-day life of the project. In Surabaya, participants in the Kampung Improvement Programme operated in partnership with others, including the Government, the private sector, and NGOs. In Jasinga, members of the local community have clearly expressed their needs (loans for a variety of rural enterprises), and have worked with the development consultant and the regional federation of credit unions in order to create an indigenous credit union and producer organizations. The objective, in all cases, is that the local community will become increasingly self-sufficient, so that the process of planning and development will become a permanent, sustainable feature of community life.

The case studies all involve participation between the local community and outsiders. The outsiders include development consultants (Ciamis, Scavengers, Jasinga, Samarinda), some level or levels of government (Ciamis, Lampung, Samarinda, Surabaya), NGOs (all sites), and donor funding agencies or "philanthropic intervenors" (all sites). The outsiders sometimes play a leading and overt role (e.g. the international consultants and the government employees in Lampung), and sometimes assume a much less obvious role, and act more as facilitators, enablers, or resource people (e.g. Ciamis and the Scavenger community). Given the action of several stakeholders, coordination among participating parties is seen as a most important requirement for the success of all of the cases.

All of the case studies involve an integrated, multi-disciplinary approach to community development. While the primary focus or "entry point" into the projects is usually clearly defined (e.g. increasing local incomes or introducing a new technology), all of the projects ultimately involve a comprehensive approach to community development, which includes concern for general economic viability, secure land tenure, good conditions of health and education, improved self-esteem, and active community life through local institutions. The increasing diversification of interest and action is facilitated by considerable programme flexibility and experimentation. The ability of the programmes to move beyond initial, narrow areas of interest (e.g. introducing terracing, setting up a credit union, redistributing land, or re-building a marketplace) is an indispensable asset in allowing the communities to investigate the full range of their needs. By taking an integrated, comprehensive approach, communities are able to build their capacities for improvement, while avoiding the dangers of truncated or partial development which often arise through over-concentration on a limited component of change.

Important to the success of all of the case studies is a **suitable resource base**. This includes not only the provision of **external funding** or other forms of assistance, but also an **inherent, local capacity for economic and social growth**. This includes a **natural resource base** (e.g. soils and climate in Ciamis, Jasinga, and Lampung) which can provide the basis for improved production, given appropriate inputs and technology. It also includes the **potential to use new technology** (e.g. terracing, composting) in a way which will generate increased or new forms of income. Similarly, the **human resource base** in all cases has the **capacity to change traditional practices in the interests of economic and social development**. This capacity includes the **ability and willingness to work in groups and to cooperate with others**, actions which can lead to the formation of new institutions (e.g. credit unions or cooperatives). In all case studies, "progress" was achieved when some of the obstacles against "working together" were overcome.

The **forms of participation in planning and development by local communities vary among the six case studies**. Collaboration between local residents and a number of other stakeholders (government, private sector, NGOs, development consultants) occurs in all sites. The collaboration involves more than just consultation or information-gathering by project leaders. The local community members or organizations exercise real initiative, by identifying problems, suggesting solutions, or implementing programmes. In three of the cases, Ciamis, the Scavenger project, and Jasinga the reports refer to **participatory action research**, a process which moves beyond collaboration to one where local residents are engaged in experimentation, continuous learning, and action designed to alleviate problems. In these cases, the local community exhibits a particularly large degree of "ownership" of the process. Card games, designed to form a particular type of participatory research, were used to engage the interest of community members in Ciamis. Community or social learning was referred to in several of the studies. Public meetings, often in local mosques, were important for both information sharing and participatory planning in all of the projects. A special form of participatory planning -- **advocacy design** -- was used in the Samarinda case. "**Participatory writing**", a new concept in the field of participatory development, was used to create the documentation and analysis of the Jasinga project. In this case the process of interaction between the development consultant and the writer led not only to a very useful description of the case study, but also to an insightful level of analysis which would have been impossible to achieve by either participant under other circumstances.

The political environment was very important to the success of each case study. Although local activity was a distinguishing characteristic of each case, all of the projects took place within a general political environment which could either encourage or discourage the development process. At some stage the Ciamis, Scavenger, Lampung, Samarinda, and Surabaya cases all involved support from very high levels of government -- support which was very important to the levels of success. In the case of the Scavenger community, for example, success was achieved so long as the Mayor of Bandung offered his support, or at least so long as he did not intervene to disrupt the project. With the change to a non-supportive mayor, however, the scavenger community

was doomed, and the remarkable achievements of the initiative were destroyed. The later pronouncement by the President that scavengers are "self-reliant soldiers" and very positive agents of change, will, no doubt, enhance the success of future community-development projects in scavenger sites. At a more local level, the support of the local Camat had to be obtained (by providing monthly reports) before the Jasinga project could proceed. So while local initiative and responsibility are essential for success in each case study, that success is at least partially dependent on the level of political support from higher levels.

An important feature of each case study was the "entry point" through which external and local participants began to collaborate. In some cases, the entry point which provided a breakthrough was unanticipated (e.g. the card games in Ciamis or the mass mosque marriages in the scavenger community). In Jasinga the entry point became the creation of a local institution to provide small loans, which was determined more by the funding agency than by other participants in the project. In Samarinda the decision by government officials not to evict settlers from the area to be redeveloped provided an important impetus for the involvement of local residents in the participatory planning process. What is significant is that the "entry point" can vary greatly, and it need not coincide with the major thrust of the project. It can provide a very limited or contained beginning to a project which may subsequently broaden to include many more dimensions, and which may ultimately become a completely integrated, comprehensive exercise in community development. Without the special entry point, however, the broader project may never be initiated.

Participatory projects are favoured by some planners because they are believed to lead to sustainable development -- i.e. a process of development which will continue long after external sources of funding and consultants have disappeared. It is believed that a process of change which has been created, at least in part, by local communities will be particularly authentic, well suited to local conditions, and capable of continuation far into the future. Sustainability appears to vary among the six case studies, and some of the projects have remained sustainable in ways not predicted very far in advance. The local institutions, growth in self-esteem, and collective action begun during the Ciamis project have remained, even though significant and unplanned changes have occurred within the site. In particular, the cultivation of paddy rice, with attendant changes in community life, has replaced the earlier emphasis on tree crops, particularly cloves. The Jasinga project is still at a very early and experimental stage, and the prospect for long-term sustainability is still uncertain. Similarly, the Lampung project has entered a stage where sizeable external funding from a donor agency has disappeared, and one is not certain how sustainable will be the process of agricultural development. On the other hand, strong local institutions have been put in place; and effective cooperation among farmers, the government, and a local university has been well tested. It would appear that the conditions for long-term sustainability are in place. The scavenger project did not prove to be sustainable in the face of unfavourable political decisions at a higher level, but the lessons learned in the project have been transferred to other sites (e.g. Jakarta);

and the political environment at the highest possible level has become very supportive. The sacrifices made by the scavenger community in Bandung have led, indirectly, to sustainability for communities in other locations. The processes and lessons learned through the Samarinda case study and through the Kampung Improvement Programme in Surabaya have led to local stability and sustainability, and have also provided good examples for communities facing similar problems in other locations.

Reference is made in several of the case studies to both "vertical" development and "horizontal" expansion. Vertical development occurs when communities spontaneously discover more and more problems to address, and development becomes increasingly complex. For example, the initial concentration on terracing in Ciamis eventually led to the consideration of 22 different development problems, including water supply, crop spraying, education, and health conditions. This increasing vertical integration and complexity occurred, in some form or another, in all six case studies. As described above, it is a very positive outcome of community-based development, as it leads to a comprehensive analysis of community planning problems, and helps to avoid the dangers of over-concentration on isolated issues. Horizontal expansion refers to the spatial diffusion of planning approaches from one community to others. Sometimes, as in the case of Samarinda, the project is initially seen as a pilot study or prototype which can be transported to other sites once it has been properly tested. In other cases, as in Ciamis or the scavenger community, horizontal expansion has occurred, but not in a manner carefully predicted or planned ahead of time. Very great horizontal expansion of community-based development is evident in dozens of villages surrounding the Cigaru site near Ciamis. Scavenger communities in Jakarta, Surabaya, and elsewhere have developed, partly in response to the successes of the scavenger community in Bandung, even though the latter community could not survive in the face of local political constraints. Jasinga represents a site where a specific effort has been made to import and replicate some of the lessons learned at the Cigaru site. Very different conditions within the Jasinga context, however, have meant that the Cigaru model has required considerable adaptation to new local circumstances. Nevertheless, horizontal expansion has occurred in Jasinga at the project level in the form of the establishment of a nearby credit union. Vertical development and horizontal expansion appear to be natural features of community-based development, but their specific forms are difficult to predict, as they are broadly shaped by local circumstances.

Communication is a most important issue within each case study. Good communication channels are essential to ensure that correct information is transferred in all directions and among all stakeholders. The provision of effective communication is enhanced through good communication structures (e.g. regular community meetings, or the division of communities into smaller units such as the domicile groups in Ciamis). In other cases, individuals such as the development consultants must make special efforts to ensure that the information being transferred among community members is correct (e.g. in Jasinga), since false rumours can have a devastating effect on project success, community participation, and governmental support. Good communication is directly

related to horizontal expansion. In the Lampung case study special attention was paid to the spatial diffusion of information, and to its role in disseminating the practices of collaborative agricultural planning to new locations.

Closely related to the issue of communication is organizational structure. The success of all of the case studies is attributed, in part, to the design of suitable learning organizations and structures. Within small communities (e.g. the scavenger community) the organizational structures are very simple, but formalization of community organizations is very important nevertheless (e.g. in the formation of small cooperative organizations, as can currently be seen in the organisational development of the Jasinga credit union). The organizations provide a specific forum and structure within which ordinary community members can be heard, can hear from others, and can help make decisions. Within larger projects (e.g. Lampung, Samarinda, Surabaya) more complex organizational structures are required, to ensure that tasks and information are channelled to appropriate fora and decision-making bodies, and to ensure that coordination among all stakeholders is enhanced. Within the larger projects hierarchies of organizational structure are evident, so that, at one level, government, NGOs, external consultants, and community leaders may be in close contact with each other, while at another level community members may be in effective contact with each other and with the community leaders. It is noteworthy that the development consultants appear to play a particularly effective role through being in close contact with individuals and groups at all levels of the organizational hierarchy.

Local cultural conditions or contexts play an important role in determining the forms and successes of participatory planning. The successes in Ciamis, Lampung, the scavenger community, Samarinda, and Surabaya came about as local trust of the development process and of the people and organizations involved gradually evolved through time. Until trust was developed, progress in community development was not possible. Trust and a sense of mutual responsibility developed most quickly in communities which were already cohesive, and where local leaders used familiar settings and moral structures (e.g. in mosques) to communicate with local residents. In a setting such as Jasinga, however, local lack of trust and experience with community-based development has slowed the process of participatory planning. Effective development has been reduced even further by a local case of theft from project funds.

Community-based projects are successful only if potential participants have appropriate incentives or motivations for taking part. Such incentives are clearly evident for all six case studies. To begin with, all of the projects provide material improvements in the ability to earn an income or in the quality of life for all community participants. These improvements include the provision of small loans, improved technology, housing, sanitation, education, and secure land tenure. For the professionals participating in the projects (e.g. agricultural experts, architects, civil servants), the case studies provide a locus within which their talents can be seen to bear fruit, and where positive community responses provide an important degree of satisfaction. Beyond these incentives, the case

studies refer to many individuals who have a genuine interest in community development which goes well beyond their own material rewards. These include individuals from the local community, NGOs, government, the private sector, or universities. This sense of moral/ethical commitment to individual human welfare and to community development is obviously important to their participation in the projects.

Reference is made throughout the case studies to the contrast between top-down and bottom-up planning and development. The cases are particularly significant, of course, because they represent high degrees of bottom-up, community-based initiative. At the same time, they refer to the importance of top-down planning, and to the need to achieve a suitable balance and relationship between planning and development at all levels (e.g. national, provincial, city-wide, district, or village). This is a very important observation, since so much current planning literature refers to the advantages of local-level action, but to the disadvantages of planning which is over-centralized. The concept of proper harmony among planning initiatives at various levels on the hierarchy, and of mutual respect for actions at those various levels, reflects an important degree of learning and realism by those involved in all of the case studies.

The concluding comments concern leadership in community-based development, and refer to development consultants in particular. Leaders and the skills which they bring to community development are, of course, indispensable in participatory planning and action. Good leadership is usually associated with a good sense of organization, personal charisma, excellent communication skills, and the ability to work with others, to delegate responsibility, and to understand the needs of others. Participatory development of the kind considered in the six case studies is also enhanced by the actions of persons who are able to liaise effectively with different stakeholders (e.g. local community members, community leaders, governments at various levels, the private sector, and NGOs), while also maintaining a commitment to the success of the community's development without having any special allegiance to any of the external stakeholders. Their effectiveness is even greater if they can maintain this unbiased stance, and also work humbly in the pursuit of community goals, without demonstrating any particular need for personal recognition. These types of leaders, characterized by Hasan Poerbo as "development consultants", provide a most important interface among the various stakeholders, while working with all of them as the situation demands. They must be knowledgeable in the technologies involved with community development, must be able to empathize with people's needs, should be tireless in pursuing details so that the process of planning and development can continue with minimum disruption, and must be more interested in facilitating or enabling projects to succeed than in seeking personal credit. They possess the essential characteristics of the traditional Semar figure, and can play the decisive role in helping Indonesian communities to meet their own goals.

AUTHOR BIOGRAPHIES

Zainal Abidin graduated from the Faculty of Agriculture, University of Lampung, Indonesia in 1986. He holds a Master's degree in Environmental Studies from York University (1993). At present he is working as a lecturer at the Faculty of Agriculture, University of Lampung. He has been involved in several development projects in the Lampung area, and has written papers and publications pertaining to agricultural development.

Mohamad Taufiq Afiff was born in Bandung, West Java, Indonesia in 1953. He is presently with the research staff of the Centre for Environmental Studies, Bandung Institute of Technology (ITB). He graduated from Biological Sciences at ITB (1981), Master of Sciences from the International Institute for Aerospace Survey and Earth Science (ITC), and Enschede The Netherlands (1991). His areas of research have involved environmental monitoring and evaluation of transmigration settlements, research on rural non-farm activities in West Java, and a research project on environmental impact assessment in the region.

Fred Carden holds a Master's degree in Environmental Studies from York University, and a Ph.D. from the University of Montreal. He was the Project Field Leader with the University Consortium on the Environment from 1989 - 1993. He is now a Senior Programme Officer with the International Development Research Centre (IDRC), Box 8500, Ottawa, Canada.

William Found is *University Professor* at York University, cross-appointed between the Faculty of Environmental Studies and the Department of Geography. He has been the York Academic Project Director of the ITB-York Project in Environmental Management since 1989. His primary interests include programme implementation, rural development, and university planning (he is former Vice-President (Academic Affairs) of York University). He is a graduate of McMaster University (B.A.) and the University of Florida (M.A., Ph.D.); and holds an honorary Doctorate from Umea University, Sweden (1989).

Louise Grenier is an MES - York University Graduate (1990), who has been involved with the UCE Project in Indonesia since 1990. She is currently the UCE Project Field Leader, and lives in Bandung, Indonesia.

Hasan Poerbo, Professor in Human Settlement and Housing at the Bandung Institute of Technology (ITB) (1985), was born in Salam, Central Java, 1926. He is the Senior Lecturer at the Department of Architecture Engineering at ITB. He graduated from the Architectural Engineering Program at ITB (1958) and attained his Master's degree in Civil Design from the University of Liverpool, (1961) U.K. He has served as a Member for the Natural Research Council, as a Chairman of the Sub-committee on Human Settlement and Housing (1985), and as a Senior Fellow of the E-W Centre, Hawaii, U.S.A. His research and studies have focused on human settlement and housing, and on urban and rural environmental development and management. He was Director of the Centre for Environmental Research of Bandung Institute of Technology from 1979 - 1992. He has written extensively on housing and rural and urban management and development. Some of his publications include: *The Concept of the Garbage Industrial Estate as the Basis for an Integrated Waste Recovery System* (1989); a series of publications under the *Rural Productivity and Non-Farm Employment Study*, ISS-IPB-ITB (1990-1991); *Human Resources Aspects in Industrial Growth for Environmentally Sound and Sustainable Development*; UCE-PPLH/ITB (1991); and *Urban Solid Waste Management in Bandung: Towards an Integrated Resources Recovery System*, 1991. Professor Hasan Poerbo can be contacted through the Centre for Environmental Studies, Institute Technology of Bandung, P.O. Box 1371, Bandung 40135, Indonesia.

Gatoet Poerwady was born in Mojokerto in 1953. He is a lecturer at the Department of Architecture Engineering and a member of the research staff at the Centre for Environmental Studies, Bandung Institute of Technology (ITB). He is a graduate from the Architecture Engineering Program at ITB and holds a Master's degree in Human Settlements Development and Rural Planning from the Asian Institute of Technology, Bangkok, Thailand (1983). He first joined the Centre for Environmental Studies in 1979 and has since been involved in research on environmental management and participatory action research in integrated rural development programmes in West Java.

Antonio Ismael Risianto: an American citizen, Antonio was born in Amsterdam, Holland in 1951. He received his Master's degree in Urban Design and Community Development from the University of California, Berkeley in 1975, and his Post Master's Advanced Studies in Urban Settlement Design for Developing Countries from the Massachusetts Institute of Technology in 1978. He obtained his M.B.A degree in Project Management from the Golden Gate University in 1982. He specializes in Project Management, Community Development, Real Estate Development, Architecture and Planning, Urban Design and Housing and Construction Management. He is fluent in several languages, including English, Indonesian, Spanish, Dutch, Javanese and Sudanese. He has been involved as a Technical Advisor and Project Coordinator in various community-based development and Participatory Action Research Projects. At present, he is the Technical Advisor and Project Coordinator of the PT TRIACO Development Consultants and Advisor Member to the Government of Indonesia.

Johan Silas, born in Samarinda in 1936, is a prominent architect in Indonesia, who graduated from the Bandung Institute of Technology in 1963. He received academic training abroad during 1979 - 1987, at the University College of London, IHS of Rotterdam, Cooperative Housing Tokyo, Japan, Comparative Study on Urban Anthropology, Paris and DSE, Berlin. He is currently Senior Lecturer on Housing and Human Settlements at the Institute of Technology, Surabaya, and Advisor to the City Government of Surabaya on Planning, Housing and Environment. He has been involved in research on urban and regional development and planning, low income housing, and other environmental issues. His work has been published in many journals and books. He was honoured in 1986 with the Aga Khan Award for architecture.