

A.I.D. Research & Development Abstracts



UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID)
Volume 18, No. 3 • TN-AAA-062

A.I.D. Research and Development Abstracts

ARDA is published quarterly for the
Center for Development Information and Evaluation,
Bureau for Policy and Program Coordination,
U.S. Agency for International Development, Washington D.C.,
under Contract No. PDC-0232-C-00-0094-00
by the LTS Corporation.

ISSN 0096-1507

Subscriptions to ARDA:

Single year subscription rates:

U.S. domestic, \$10.00 book rate, \$15.00 first class

Foreign, \$25.00 surface, \$30.00 first class

Send payment in U.S. dollars to:

ARDA Subscriptions
A.I.D. DISC
1500 Wilson Blvd. Suite 1010
Arlington, VA 22209-2404
USA

Notice to Agency Staff and Contractors:

ARDA disseminates Agency funded research on a wide variety of topics to A.I.D. staff and development professionals around the world. Help ensure your Agency-funded technical documents are considered for inclusion in **ARDA** by promptly sending a **fully legible copy** to:

U.S. Agency for International Development
PPC/CDIE
Document Acquisitions
SA18 Room 303
Washington D.C. 20523-1803 USA
ATTN: ARDA Submissions

Cover photo: Agency for International Development

TABLE OF CONTENTS

Questions and Answers about ARDA	iii
User's Guide to ARDA Citations	iv
General Development	1
Women in Development	7
Economics	9
Private Enterprise	18
Agriculture	21
Nutrition and Health	28
Population and Human Settlements	38
Environment and Natural Resources	46
Education	54
Social Science and Psychology	55
Tourism	60
Subject and Geographic Index	61
Author and Institution Index	65
Document Number Index	69
Ordering Instructions	71
Order Form	72

QUESTIONS AND ANSWERS ABOUT ARDA

- What is ARDA?** ARDA, "A.I.D. Research and Development Abstracts", is a quarterly abstract journal issued by the Division of Development Information, Center for Development Information and Evaluation, Bureau for Program and Policy Coordination.
- What is the goal of ARDA?** The goal of ARDA is to transfer development and technical information to active practitioners in development assistance.
- For whom is ARDA published?** ARDA's target audience is A.I.D. staff world wide and selected key institutions in developing countries. Such institutions are government agencies, universities, libraries, research organizations, and other public and private sector organizations.
- What material is abstracted in ARDA?** ARDA presents abstracts of AID-funded current and less recent research studies, state-of-the-art reports, sector analyses, special evaluations, and other documents which, taken together, describe a broad spectrum of international development experience.
- To whom do I address additional questions regarding ARDA?** Please direct all correspondence and requests for further information to:
Editor of ARDA
PPC/CDIE/DI
Agency for International Development
Washington, D.C. 20523
U.S.A.

QUESTIONS ET REPONSES RELATIVES ARDA

- Qu'est-ce qu'ARDA?** ARDA, "A.I.D. Research and Development Abstracts", (Résumés sur la recherche et le développement de l'Agence pour le Développement International), est une revue trimestrielle composée de résumés publiée par la Division de l'Information sur le Développement, Centre d'Information et Dévaluation du Développement, Bureau de Coordination de Programmes et Politiques.
- Quel est l'objectif d'ARDA?** Le but d'ARDA est de transmettre des informations techniques sur le développement à ceux qui prêtent assistance au développement.
- A qui s'adresse ARDA?** ARDA s'adresse au personnel d'A.I.D. dans le monde entier et à certaines institutions clés situées dans les pays en voie de développement. Ces institutions comprennent des agences de gouvernement, des universités, des bibliothèques, des organisations de recherche, et d'autres organisations dans les secteurs publics et privés.
- Que contiennent les résumés d'ARDA?** ARDA présente des résumés des recherches actuelles et moins récentes financées par A.I.D., des rapports sur l'état actuel du développement, des analyses dans les différents domaines, des évaluations spéciales, et d'autres documents. L'ensemble décrit une vaste étendue d'expériences dans le domaine du développement international.
- A qui est-ce qu'il faut poser des questions supplémentaires au sujet d'ARDA?** Veuillez envoyer toute correspondance et toute demande de plus amples renseignements à:
Editor of ARDA
PPC/CDIE/DI
Agency for International Development
Washington, D.C. 20523
U.S.A.

PREGUNTAS Y RESPUESTAS SOBRE ARDA

- ¿Que es ARDA?** ARDA, "A.I.D. Research and Development Abstracts" (Resúmenes de Investigación y Desarrollo de A.I.D.) es una revista que se publica cuatro veces al año por la División de Información sobre el Desarrollo del Centro de Información y de Evaluación del Desarrollo, Negociado de Coordinación de Programas y Políticas.
- ¿Cuál es el objetivo de ARDA?** El objetivo de ARDA es suministrar información técnica y sobre el desarrollo a los practicantes en actividades propias del desarrollo.
- ¿Para quién se publica ARDA?** ARDA está dirigida al personal de A.I.D. en el mundo entero y a escogidas instituciones claves en los países en desarrollo, tales como agencias de gobierno; universidades; bibliotecas; organizaciones dedicadas a la investigación; y otras organizaciones del sector público o privado.
- ¿Que contienen los informes de ARDA?** ARDA presenta resúmenes de estudios actuales o recientes, financiados por A.I.D., relativos a la investigación; informes de excelente calidad que incluyen los conceptos y metodologías más avanzados; análisis sectoriales; evaluaciones especiales; y otros documentos que vistos en conjunto describen un amplio panorama de experiencias dentro del campo del desarrollo internacional.
- ¿A quién se le dirigen preguntas adicionales sobre ARDA?** Remita toda correspondencia o pedidos para mayor información a:
Editor de ARDA
PPC/CDIE/DI
Agency for International Development
Washington D. C. 20523
U.S.A.

USER'S GUIDE TO ARDA CITATIONS

Item number	055	*PN-ABC-681	Document number
		MF \$2.16/PC \$14.95	Microfiche/paper copy prices
Title	Tilapia genetic resources for aquaculture : proceedings of the workshop on tilapia genetic resources for aquaculture, 23-24 March 1987, Bangkok, Thailand		
Author (s)	Pullin, R.S.V., ed.		
Institutions	International Center for Living Aquatic Resources Management U.S. Agency for International Development. Bureau for Science and Technology. Office of Agriculture (Sponsor)		
Meeting	(Workshop on Tilapia Genetic Resources for Aquaculture, Bangkok, TH, 23-24 Mar 1987)		
Supplementary notes	1988, v, 108p. : ill., maps, statistical tables, En ICLARM contribution no.457 ICLARM conference proceedings, no.16	Serial title (if any), date, pagination, language	
Project number	9311050		
Availability note	<i>*Also available from: International Center for Living Aquatic Resources Management, MC P.O. Box 1501, Makati, Metro Manila, Philippines</i>		

Tilapia are African fish that are used in warmwater aquaculture throughout the world. Some species, such as the Nile tilapia (*Oreochromis niloticus*), are highly versatile, herbivorous-microphagous feeders well suited to low technology farming systems. However, tilapia culture outside of Africa is based on a narrow genetic base taken from a few founder populations, while Africa itself, which possesses a wealth of tilapia genetic resources, is hard pressed in developing these resources for aquaculture and in conserving wild tilapia populations, many of which are threatened by irreversible change or loss. A variety of issues cognate to this situation were discussed at an international symposium held in March, 1987. These proceedings contain formal presentations on: (1) tilapia resources in Africa in general (two papers); (2) wild and cultured tilapia genetic resources in Africa (Cameroon, Ivory Coast, Ghana, Madagascar, Malawi, Zimbabwe) and elsewhere (Philippines, Thailand, Singapore and Malaysia, Israel, the United States); (3) methods used in tilapia identification and genetic research (six papers); and (4) gene banks and culture collections (two papers).

Abstract

001

PN-AAX-271
MF \$1.08/PC \$7.28

A.I.D. assistance to Panama: evaluation of the post-1989 program

Polak, Jacques; Krueger, Anne; Newton, John
Robert R. Nathan Associates, Inc.

U.S. Agency for International Development. Directorate
for Policy. Center for Development Information and
Evaluation. Ofc. of Evaluation (Sponsor)

U.S. Agency for International Development. Bur. for
Latin America and the Caribbean. Panama (Sponsor)

Sep 1993, xiv, 30 p. + 2 appendices: statistical tables,
En

A.I.D. evaluation special study, no. 71
5259999

USAID's program to help Panama recover from years of economic mismanagement prior to 1989 and from the effects of the U.S. military action that year is evaluated. Findings concerning the program's three components are as follows. (1) The private sector reactivation program was initially conceived as a \$108 million "safety net" for lending by Panama's banks, which were in a very poor position due to capital flight. However, when depositor confidence and deposits returned much more quickly than expected, the funds were reprogrammed to support a new program, FREN (Fund for National Economic Recovery), to boost the availability of funds for lending to the private sector. FREN has had significant positive effects on GDP and employment, although the overall unemployment rate declined only slightly. Reflows from FREN are expected to be considerable — \$100 million over the next 4 years — and USAID will likely treat these reflows as additional assistance, attaching policy conditionality to their disbursement. (2) The public sector investment program provided \$113.9 million for priority investments in agriculture, health, education, justice, other social sectors, natural resources, and infrastructure; \$20 million of this was channeled through an emergency fund to support small, labor-intensive social development programs. While the initial disbursement was conditioned on Panama's planning specific structural adjustment actions, the second and third disbursements were linked to Panama's negotia-

tions with international financial institutions (IFIs) — the World Bank and the InterAmerican Development Bank, USAID essentially adopting IFI conditionalities, which coincided substantially with USAID objectives. (3) The U.S. provided \$130 million to help Panama settle arrears incurred with the IFIs during the crisis years; conditionality was again appropriately linked to that of the IFIs. Overall, however, the Panama program demonstrates the drawbacks of hurriedly designing a rigid program before circumstances are fully understood. While these rigidities were built in at high policy levels in the U.S. Government, the responsibility rests with USAID to use its influence at the design phase to guard against excessive rigidity. Lessons about program strategies are detailed.

002

PN-AAX-280
MF \$1.08/PC \$9.10

Weighing in on the scales of justice: strategic approaches for donor- supported rule of law programs

Blair, Harry; Hansen, Gary

U.S. Agency for International Development. Bur. for
Policy and Program Coordination. Center for Devel-
opment Information and Evaluation

Feb 1994, xi, 53 p. + appendix: charts, En

USAID program and operations assessment report, no. 7
Evaluation highlights: PN-ABG-033

Summary: PN-ABG-030

The development of legal systems in support of Rule of Law has emerged as a major goal of USAID's democracy portfolio. This study, based on field work in six countries (Argentina, Colombia, Honduras, the Philippines, Sri Lanka, and Uruguay), assesses the recent Rule of Law experience of USAID, the Asia Foundation, and the Ford Foundation, all longtime donors in the justice sector. The study identifies four alternative, although often complementary, strategies for legal development. In sequential order, these are: building political support for reform; establishing adequate legal system structures; making these structures accessible and equitable; and strengthening ex-

isting legal structures. Lessons pertaining to these strategies are summarized. (1) Building of political support is critical, but donor efforts in coalition- and constituency-building have often failed. The commercial sector can offer valuable support, as can bar associations, while a free press is essential. (2) Structural reform is a formidable challenge, but sometimes it is more rewarding to create new institutions than to reform entrenched ones. Efforts to introduce merit-based career systems and oral trial procedures have succeeded in several of the countries. Any reform process that does not include mechanisms to ensure enforcement will likely prove ineffective. (3) Legal advocacy NGOs represent the most promising strategy for improving legal access for the poor, while alternative dispute mechanisms are also attractive, although they need close supervision. More conventional means (e.g., legal aid, legal literacy campaigns, paralegal training) are effective when integrated around specific issues. (4) Strategies for legal system strengthening, pursued in all six countries, include traditional institution-building efforts such as improving court administration and training judicial personnel. Successful components of strengthening vary widely among countries; understanding the reasons for court delays is an essential, but almost always difficult task. In conclusion, the study discusses several cross-cutting lessons.

003

PN-ABP-867
MF \$3.24/PC \$36.92

Disaster management handbook for Bangladesh

Rahman, Saidur
Bangladesh Disaster Preparedness Centre
Private Agencies Collaborating Together
U.S. Agency for International Development. Bur. for
Asia. Bangladesh (Sponsor)
Feb 1993, 4 v.: ill., maps, statistical tables, En
3880000

Bangladesh is prone to a wide range of disasters, including cyclones, floods, tornadoes, droughts, river erosions, and epidemics. Distilling the experience of hundreds of disaster managers and residents of disaster-prone areas, this handbook presents a 4-part guide to disaster management, the first of its kind to be produced in Bangladesh. Part 1, The Pre-Disaster Stage, provides an overview of disasters in Bangladesh and of the country's physical and health status, and discusses disaster management planning, disaster preparedness training, operational kits for first-in workers, stockpiling supplies, staffing and logistics, and information management. Part 2, Planning a Disaster Response, discusses collecting data on the affected area, reaching the area and assessing its needs, communications, planning an initial response, procuring relief materials, preparing relief workers, and transportation. Part 3, Operational Response for Up to the First 3 Weeks, covers entering the affected area and contacting the local people, security issues, rescue operations, first aid, disposal of corpses and carcasses, food distribution, ensuring safe drinking water, establishing medical posts, providing shelter and clothing, distributing rations, setting up camps, and environmental sanitation. A brief Part 4 treats issues related to communication between relief workers and concerned organizations, recordkeeping, and planning for the next stage of assistance. Throughout its four sections, the manual explicitly addresses the key questions of what should be done, who should do it, and who should be kept informed. Annexes contain reference materials, such as the addresses of pertinent organizations, weight for height standards for children, etc.

004

PN-ABQ-211
MF \$3.24/PC \$35.49

Final report: establishing priorities for legal reform — Guinea-Bissau

Filho, Ivon D'Almeida Pires; Carl, Beverly; Silvers, Arthur

Checchi and Co. Consulting, Inc.

U.S. Agency for International Development. Bur. for Africa. Ofc. of Development Planning (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Guinea-Bissau (Sponsor)

Aug 1993, xiv, 105 p. + 24 annexes, En
6570021; 6570015

Recent studies by Hernando de Soto, the "public choice" theorists, and others have explored the ways in which laws and regulations structure the market through incentives and disincentives. The present report applies this insight to Guinea-Bissau by analyzing relevant laws, assessing the market structure, examining the effects of laws and regulations across multiple arenas of economic activity, and identifying those legal/regulatory changes that promise the most dramatic and positive incentive effects. Part I provides an overview of Guinea-Bissau's complex legal and economic system. Part II analyzes existing laws that have a direct effect on the economic sector, including commercial, tax, labor, maritime, and environmental laws, and makes recommendations for legal reform. Part III presents an overview of the market structure in Guinea-Bissau, and analyzes the expected economic impacts, both direct and indirect, of legal and regulatory reform. It also considers the implications of this analysis for the critical growth subsectors of A.I.D.'s Trade and Investment Promotion Support project (rice, cashews, fruits, vegetables, and forest and fisheries products, and supporting commerce and services). Part IV contains 23 prioritized recommendations for legal and regulatory reform in 12 areas. (Author abstract, modified)

005

PN-ABQ-636
MF \$1.08/PC \$5.59

Strategies for sustainable development

Atwood, J. Brian

U.S. Agency for International Development

Mar 1994, 47 p., En

The U.S. Agency for International Development was created in 1961, at the height of the Cold War, to respond to the threat of communism and to help poorer nations develop and progress. Having done much towards achieving these objectives, and with the Cold War ended, USAID now faces the challenges posed by sea and air pollution, overburdened cities, rural poverty, economic migration, the oppression of minorities and women, and ethnic and religious hostilities. The Agency's overarching response to these challenges is contained in this strategy for sustainable development, i.e., development that builds on and enlarges the host country's own capacities. The strategy is based on forging partnerships with assisted nations, with a focus on countries where help is most needed and most likely to make a difference, and on the use of integrated approaches that consider the totality of the assisted country's problems and conditions. To make the most of limited financial resources, USAID will distinguish three types of assisted countries: (1) sustainable development countries, which will receive an integrated assistance package; (2) transitional countries, i.e., those which have recently experienced a political crisis or environmental disaster, and which will receive short-term assistance to restore order; and (3) countries where USAID's presence is limited, but where assistance to non-governmental sectors — frequently through U.S. or indigenous PVOs — may facilitate the emergence of a civic society, alleviate human need, or influence a larger political problem. Within these countries, USAID will support programs in four areas fundamental to sustainable development: (1) population and health; (2) broad-based economic growth; (3) environmental protection; and (4) building democracy. Strategic goals, areas of concentration, operational approaches and methods, and impact indicators for these four areas are detailed.

GENERAL DEVELOPMENT

006

* PN-ABQ-701
MF \$2.16/PC \$23.40

Coordinating observers to the 1993 elections in Niger = Coordination des observateurs aux elections Nigeriennes de 1993

National Democratic Institute for International Affairs
U.S. Agency for International Development. Bur. for
Africa (Sponsor)
1993, [173] p., En, Fr
6980486

**Also available from: National Democratic Institute for International Affairs, 1717 Massachusetts Ave. NW, Suite 503, Washington, DC 20036 USA*

As part of a continuing effort to assist Niger's transition to democracy, the National Democratic Institute for International Affairs (NDI) supported domestic and international observers of the 1993 legislative and presidential elections. This document reflects NDI's experiences in this matter, and discusses Niger's background, electoral framework, pre-election environment, the elections, the counting process, and the observer mission. NDI was impressed with many aspects of the election process. For example: (1) the electoral system and administrative framework provided adequate opportunity for political parties to participate in managing the elections; (2) the system encouraged and facilitated access for monitors from political parties, domestic organizations, and international delegations; and (3) political parties, government officials, military personnel, and citizens alike were relatively well-informed, understood the objectives and rules of the process, and demonstrated faith in their role. NDI did, however, notice some isolated problems, including minor administrative irregularities and isolated attempts to manipulate the process. Further, it noticed a low level of participation among eligible voters stemming from factors including cultural barriers to voting by women, long distances to polling stations, and an ambitious election schedule. NDI determined that these concerns did not materially alter the outcome of the elections, and observers concluded that the elections demonstrate a resounding affirmation of Niger's commitment to pluralistic democracy.

007

* PN-ABQ-749
MF \$1.08/PC \$7.28

Estimating tax incidence in Ghana: an exercise using household data

Younger, Stephen D.

Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program

U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Ghana (Sponsor)

Oct 1993, vi, [49] p.: charts, statistical tables, En
CFNPP [Cornell Food and Nutrition Policy Program]
working paper, no. 48

6980519

**Also available from: CFNPP Publications Dept., 315 Savage Hall, Cornell University, Ithaca, NY 14853 USA*

While the effects on the poor of reduced government expenditures as part of structural adjustment programs have received considerable analytical attention, the effects of increasing tax revenues to address fiscal deficits, an approach taken by Ghana, Uganda, and Tanzania, have received little. This study analyses household income and expenditure data from the Ghana Living Standards Survey to examine the question "Who pays the taxes in Ghana?". The study considers the effects of the three main types of taxes — trade, indirect domestic, and direct domestic taxes. In regard to trade taxes, while the emphasis has shifted away from duties on cocoa exports, traditionally a major source of tax revenue, and toward import duties, cocoa duties continue to be a significant source of revenue, and the study faults these as being distortionary, regressive, and the most clearly harmful to the poor. The study recommends abolition of this tax in favor of other, more equitable levies, favoring in particular the Ghanaian government's project to establish a value-added tax. Among domestic indirect taxes, which include excise duties, sales tax, and a petroleum tax, the petroleum tax, which has

grown into a dominant source of revenue — projected to be one-third of all revenue in 1993 — has drawn considerable fire from those concerned with equity. However, the study finds that overall, this tax appears to be proportional or even slightly progressive. Finally, increased domestic direct taxes have come almost entirely through the corporate income tax, and are thus presumed to fall mainly on the wealthy. Overall, the study disputes the contention that Ghana's fiscal stabilization program has disproportionately harmed the poor, while recognizing that all groups are probably paying more taxes than they used to. Only if the benefits of government expenditures had become more regressive under stabilization, a contention disputed by other studies on Africa and Ghana, would this argument have merit.

008

PN-ABR-072
MF \$2.16/PC \$17.16

Decentralization, democratization, public service provision and governance and management of renewable natural resources initiatives and dilemmas in Cape Verde [an abridgment of the original report]

Hobgood, Harlan H.
Associates in Rural Development, Inc.
U.S. Agency for International Development. Bur. for
Global Programs, Field Support and Research. Ofc. of
Economic and Institutional Development (Sponsor)
U.S. Agency for International Development. Bur. for
Africa. Cape Verde (Sponsor)
Jan 1994, xvi, 111 p., En
French ed.: PN-ABR-912
9365446

In 1990, Cape Verdians elected a new government, led by the Movimento para Democracia (MPD) party, which has committed itself to decentralizing governmental authority. This study measures Cape Verde's progress in implementing the new policy. Section I reviews Cape Verde's policy framework and political climate at the

national level. Section II presents case studies of public service provision in two municipalities — Ribeira Grande and Santa Catarina. Section III then examines case studies of natural resource management in five rural communities: Lagoa, a desperately poor farm community, and Ponta do Sol, a fisher community, both on the island of Santo Antao; Mato Baixo and its associated irrigated production site at Tabugal, and Pico Leao, a village of farmers and herders, both on the island of Santiago; and Calheta, another farming/herding community, on the island of Maio. The study reaches two major conclusions. First, although the Government of Cape Verde has clearly and repeatedly stated that it favors substantive decentralization of government functions, it does not have a plan of action. Authorities at the national and local levels as well as citizens are confused as to what decentralization means. Without the leadership to shape a coherent action program, decentralization will remain a pious goal with neither form nor substance. Second, citizens' capacity for local governance is limited by tenure rules that prevent them from capturing gains from investments they finance on borrowed land. To ensure democratic governance in rural areas, there has to be a legislated limit on the extent to which landlords can raise rents. Includes bibliography.

009

PN-ABR-215
MF \$1.08/PC \$8.71

Assessment of municipal management in Eritrea

Miller, John; Robbins, Edward H.; Sumka, Howard J.
Abt Associates, Inc.
U.S. Agency for International Development. Bur. for
Global Programs, Field Support and Research. Ofc. of
Housing and Urban Programs (Sponsor)
U.S. Agency for International Development. Bur. for
Africa. Eritrea (Sponsor)
Mar 1994, xi, 45 p. + 3 annexes: charts, En
9401008

In late 1992, the Eritrean government issued a proclamation granting its cities and towns considerable autonomy. But although local authority structures are gradually being

GENERAL DEVELOPMENT

put in place, most lack the resources and trained personnel needed to fulfill their functions. This report provides an overview of local governance in Eritrea and outlines strategies to improve it. Section 1 presents a socioeconomic profile of Eritrea's urban system, including population distribution among its provinces. Section 2 discusses the organizational and legislative structures and finances of Eritrea's primary urban center, Asmara, as well as of its secondary cities and important towns. Section 3 contains a more in-depth analysis of nine major cities: Asmara, Keren, Mendefera, Tessenei, Hagaz, Massawa, Agordat,

Dekemhare, and Naq'fa. Section 4 proposes a program of policy development seminars, technical training, TA, and supporting studies to strengthen local government capacities. Specific goals of the program would be to: improve the skills and knowledge base of senior government officials; support local institutional development through improved management and planning, a stronger fiscal base, and improved information systems; and promote policies that support decentralization, rational intergovernmental relationships, and private sector growth.



A worker in a clothing factory receives training in the use of a sewing machine.

010

PN-ABQ-322
MF \$1.08/PC \$6.63

Tools of gender analysis: a guide to field methods for bringing gender into sustainable resource management

Thomas-Slayter, Barbara; Esser, Andrea Lee; Shields, M. Dale
Clark University. International Development Program
Institute for Development Anthropology, Inc.
Virginia Polytechnic Institute and State University
U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Economic and
Institutional Development (Sponsor)
U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Women in Development (Sponsor)
Jul 1993, iii, 44 p.: ill., charts, En
9365452

This document provides a brief overview of the importance of gender analysis in development activities and discusses a number of field-based analytical tools that can improve problem identification and project design and management. The guide is based on research conducted between 1990 and 1993 in Kenya, Honduras, the Philippines, the Dominican Republic, and Nepal by ECOGEN (Ecology, Community Organization, and Gender), a joint research project of Clark University and Virginia Polytechnic Institute and State University. The following tools are discussed: (1) traditional tools to improve problem identification (wealth ranking, in-depth household interviews, focus group discussions/group interviews, participant observation); (2) gender-specific tools to improve project design and implementation (gender resource mapping, confirmation surveys, gender-disaggregated seasonal activities calendar, and activities, resource, and benefits analysis); and (3) tools to integrate gender concerns into project management, e.g., gender-sensitive monitoring of project progress. Each of these tools is given a brief (1-2 page) description covering definition, purpose, materials needed, suggested approach, value, and an example from the ECOGEN project. Also briefly described are two new methods recently introduced in Kenya: Gender Analysis

Activity Profile, and Gender Analysis Matrix. The guide concludes by noting that the next step for ECOGEN is to integrate gender analysis with participatory methodologies for data collection and community participation.

011

PN-ABQ-323
MF \$1.08/PC \$7.80

Gender, class, ecological decline, and livelihood strategies: a case study of Siquijor Island, The Philippines

Shields, M. Dale; Thomas-Slayter, Barbara P.; et al.
Clark University. International Development Program
Institute for Development Anthropology, Inc.
Virginia Polytechnic Institute and State University
U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Economic and
Institutional Development (Sponsor)
U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Women in Development (Sponsor)
U.S. Agency for International Development. Bur. for
Asia. Philippines (Sponsor)
Mar 1993, iii, 52 p.: charts, En
ECOGEN [ecology, community organization, and gender] case study series
9365452

This case study examines the complex relationship between economic activity, gender roles, and environmental degradation in the villages of Tubed and Napo on Siquijor Island, a remote island province in the Philippines. Specific issues discussed include: (1) resource decline and issues of sustainability in the two communities; (2) household livelihood systems and stratification; (3) gender and class patterns of resource management; (4) community responses to challenging resource conditions; (5) links between household and community in assuring livelihoods; and (6) policy and research implications. Findings point to a critical linkage between gender and class formation and suggest that gender and class must be joined conceptually in analyzing rural communities in the Philip-

WOMEN IN DEVELOPMENT

pires. The study revealed: (1) a negative impact on gender roles and relations within poorer households, as their members enter the modern cash economy; (2) a reliance on social exchange networks which may be detrimental to the long-term preservation of the natural resource base; (3) the resilience and usefulness of indigenous groups, which are normally structured around gender and class interests; and (4) the integral role of migration for both men and women in the livelihood systems of the rural communities. Appendices contain a discussion of methods for gender-focused research in the Philippines and a sample of the survey used in this study.

012

*** PN-ABQ-623**
MF \$1.08/PC \$5.20

Impact of gender discrimination on the job search strategies of redeployed public sector workers

Mills, Bradford

Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program

Guinea. Ministry of Health and Social Affairs (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Guinea (Sponsor)

Mar 1994, v, 29 p.: charts, statistical tables, En
Cornell food and nutrition policy program (CFNPP)
working paper, no. 51

6980519

**Also available from: CFNPP Publications Dept., 315
Savage Hall, Cornell University, Ithaca, NY 14853
USA*

Women who are forced to leave the public workforce due to retrenchment programs have more difficulty than men in finding wage paying private sector jobs, according to this study of 1,728 households in Conakry, Guinea. The

study finds that women do reenter the workforce more quickly than their male counterparts. but this is because women, recognizing their poor prospects in a gender discriminating labor market, are more quick than men to accept less preferred but more available non-wage employment. Within a 3-year period after leaving the public workforce, only 25% of females vs. 58% of males found wage paying positions. The study also found that individuals who receive severance pay after leaving the public sector are less likely to accept non-wage paying positions than those who are not severanced. Based on these results, several recommendations are made for mitigating the effects of private sector gender bias on redeployed women. Retrenchment programs should provide women with severance pay calibrated to cover the losses they are likely to face due to private sector gender discrimination, along with additional employment services and training, e.g., entrepreneurial training. In addition, public retrenchment programs should establish quotas to limit the inclusion of women.

013

PN-AAX-279
MF \$1.08/PC \$12.22

Export and investment promotion services: do they work?

McKean, Cressida S.; Fox, James W.

U.S. Agency for International Development. Bur. for Policy and Program Coordination. Center for Development Information and Evaluation

Mar 1994, ix, 62 p. + 2 appendices: charts, statistical tables, En

USAID program and operations assessment report, no. 6

Evaluation highlights: PN-ABG-022

Summary: PN-ABG-042

Fostering outward-oriented growth in developing countries by providing services to exporters and export-oriented investors has become an important part of USAID's portfolio. This assessment of USAID's experiences in 10 countries—Costa Rica, Dominican Republic, Guatemala, Chile, India, Indonesia, South Korea, Thailand, Egypt, and Morocco—addresses three key questions: (1) what is the rationale for donor support of export promotion? (2) is USAID assistance in this area paying off? and (3) what service strategies and providers are most effective? The study, which was based on interviews with 90 service providers, a survey of 300 exporters, and a review of overall export performance and policy environments in the 10 countries, reached five main conclusions. (1) Sound macroeconomic policies and partial trade reform are pre-conditions for export success and effective use of subsidized export promotion services. Export services have negligible impacts in hostile policy environments. (2) Subsidized services to exporters can have high payoffs: a few USAID projects had rates of return of 12%-26%. Furthermore, a "bandwagon effect," wherein early, visible export success encourages regulatory improvements, the entry of additional firms, and the development of specialized private providers of export services, has been observed. (3) The most highly rated export promotion programs encouraged active involvement of private exporter associations through advisory councils or cost sharing, and focused on providing results-oriented services. (4) The services most valued by incipient exporters are those that

lead to enduring relationships with business partners, particularly buyers, investors, and suppliers able to help them meet international standards for price, product, and quality. Assistance to export support services contributed little to export growth if a dynamic service provider market already existed. (5) Government-provided services are usually ineffective; government providers typically focus on the wrong services, lack trained staff able to provide a quality product, become consumed by bureaucratic procedures, and are particularly susceptible to assuming a regulatory rather than a promotional function.

014

PN-AAX-281
MF \$2.16/PC \$16.51

Capital projects: Egypt case study

Lieberson, Joseph; Stallard, Janice; et al.

U.S. Agency for International Development. Bur. for Policy and Program Coordination. Center for Development Information and Evaluation

Mar 1994, vi, 47 p. + 7 appendices, En

A.I.D. evaluation technical report, no. 20

Based on evaluation of nine capital projects carried out between 1977 and 1992, this report assesses A.I.D.'s capital assistance program in Egypt in terms of both its commercial benefits for the United States and its developmental benefits for Egypt. In regard to the first aspect, the study found that few A.I.D.-funded projects or studies generated either participation by other donors or follow-on sales for U.S. companies; none generated participation by a private investor. The report places much of the blame for this on U.S. firms' failure to take advantage of a clear opportunity to develop the Egyptian commercial market; in short, U.S. firms were "out-marketed" by their European and Japanese competitors. Findings regarding the developmental benefits of the projects are mixed. (1) The projects helped support strong private sector growth in Egypt through the 1980's. They increased electric power, introduced a modern telephone system in Cairo and Alexandria, and rehabilitated water and sewage systems, significantly improving the quality of life of many poor Egyptians. Nonetheless, their economic and financial rates

ECONOMICS

of return were generally disappointing. (2) The projects were built to a high technical standard, but their sustainability is in doubt due to insufficient financial resources, uneven operations and maintenance practices, and inadequate employee training and compensation. (3) The pursuit of commercial advantage for U.S. firms did not distort the developmental goals of the projects. Overall, the report attributes the disappointing economic results of A.I.D.'s capital assistance program to a poor policy environment, which the reforms pursued in connection with the program did little to change. In Egypt, A.I.D.'s leverage in promoting reforms has historically been hampered by the precedence given to U.S. political concerns. However, the USAID Mission in Egypt believes that a changing political climate, especially since 1989, has increased the effectiveness of economic incentives and improved the climate for policy change. Companion reports provide (1) a detailed look at the nine projects' economic and financial rates of return (PN-AAX-282); and (2) a macro-level analysis of the relationship between U.S. aid and exports to Egypt.

015

PN-AAX-282

MF \$1.08/PC \$12.48

Capital projects: economic and financial analyses of nine capital projects in Egypt

Hanrahan, Michael; Walker, James; et al.

U.S. Agency for International Development. Bur. for Policy and Program Coordination. Center for Development Information and Evaluation

Mar 1994, xviii, 56 p. + 2 appendices: statistical tables, En
A.I.D. evaluation technical report, no. 19

Over the period 1977-92, A.I.D. funded nine capital projects in Egypt, which collectively increased electric power generation, introduced a modern telephone system in Cairo and Alexandria, and rehabilitated a water and sewer system that served 23 million people. This study presents detailed ex post facto analyses of the projects' economic and financial internal rates of return. The methodology, assumptions, and data are examined and described. Results indicate a mixed performance, with generally low to medium financial and economic rates of

return. These low rates are not due to technical problems—the project were well designed, used appropriate technology, and were operated in a sound manner. In large measure, the poor performance was due to the Egyptian Government's poor economic policies, such as government price controls, regulations, subsidies, and employment and management structures that resulted in inefficient production and inefficient use of project outputs. A clear lesson is that in a bad policy environment, even technically sound projects cannot generate a good rate of return. In the last few years, Egypt has initiated several policy reforms that have corrected a number of inappropriate prices and subsidies. These actions, it is hoped, will improve the economic rates of return on future capital projects. (Author abstract, modified)

016

PN-AAX-283

MF \$1.08/PC \$5.59

Export and investment promotion in Thailand

McKean, Cressida; Toh, Kiert; Fisher, William
U.S. Agency for International Development. Bur. for Policy and Program Coordination. Center for Development Information and Evaluation

Apr 1994, vii, 31 p. + attachment: charts, statistical tables, En

USAID technical report, no. 17

Summary highlights: PN-ABG-020
4930329

USAID's Private Sector in Development Project (1983-1987), aimed at stimulating increased investment in Thailand's export sector, is assessed. The project focused on helping the Thai Board of Investment to mount a campaign to attract U.S. investors to Thai industries; it also established a mechanism for the private sector to undertake policy studies and dialogue, and promoted technical cooperation between U.S. and Thai agroindustry. This report describes the economic context of the project and the services it provided, and assesses the effectiveness of these services. The report reaches three main conclusions. (1) A stable macroeconomic policy regime, a realistic exchange

rate, and an efficient manufacturing sector were critical to Thailand's outstanding export growth. This export growth led to the emergence of a dynamic and diverse market for export and investment services. (2) Links between buyers and export firms are critical to stimulating export growth. An export promotion agency that facilitates ties between buyers and exporters in a favorable policy environment can help overcome entry barriers facing firms new to exporting. The Thai Department of Export complemented the private market for export promotion services because of its service oriented mission, outstanding staff, well-run overseas trade centers, and high quality services. (3) Government institutions are not effective providers of investment promotion if delivery of promotion services is not a primary institutional objective. The Thai Board of Investment's technical and bureaucratic limitations, uncertain commitment to investment promotion, and focus on tax-based investment incentives have undermined its capacity to attract and generate investment. Contracting out promotion services to others did not lead to investment deals; promotion institutions must instead develop a clear vision of their promotional mandate and sufficient staff motivation to follow through.

performance of export and investment promotion projects is closely linked to a country's policy regime. Egypt's poor policy environment was one of the main reasons USAID interventions failed to promote foreign investment, whereas Morocco's significant reforms liberalizing trade created an enabling environment for USAID's efforts to increase firm-level exports. USAID should not pursue export or investment promotion in countries where the policy environment is unfavorable. (2) Before intervening in the services-provider market, USAID should first determine if there is sufficient market failure to justify action. (3) Private sector intermediaries are more responsive than public sector institutions. USAID should work through private sector intermediaries as much as possible. (4) Investment promotion activities in Egypt were not cost effective, but export promotion activities in Morocco were. Cost effectiveness analysis is an important component of project monitoring and evaluation. (5) Accurate evaluations require adequate data collection, including baseline and life-of-project data. Data collection was inadequate in Egypt. Includes bibliography.

017

PN-AAX-289

MF \$1.08/PC \$6.11

Export and investment promotion in Egypt and Morocco: a review of USAID experience

Wichterman, Dana

Academy for Educational Development, Inc.

U.S. Agency for International Development. Bur. for Policy and Program Coordination. Center for Development Information and Evaluation (Sponsor)

Jun 1994, viii, 29 p. + 3 appendices, En

USAID technical report, no. 22

2630101; 2630102; 2630112; 6080189

This report, based on a desk review of project documentation, synthesizes USAID's export promotion (mostly in Morocco) and investment promotion (in Egypt) experience in the 1980's. Findings include the following. (1) The

ECONOMICS

018

* PN-ABP-794
MF \$2.16/PC \$19.50

After the Cold War: Russian-American defense conversion for economic renewal

Claudon, Michael P., ed.; Wittneben, Kathryn, ed.
Geonomics Institute for International Economic Advancement
U.S. Agency for International Development. New Independent States Task Force (Sponsor)
(Geonomics Fall 1992 Gateway Seminar, Middlebury, VT, US, 15-18 Oct 1992)
1993, xvii, 133 p., En
Geonomics Institute for International Economic Advancement series
Published by: New York University Press
Related documents: PN-ABP-765 and PD-ABG-666 1100005
**Also available from: Geonomics Institute for International Economic Advancement, 14 Hillcrest Ave., Middlebury, VT 05753 USA*

Conversion of Russia's defense industry to productive civilian uses is lagging, despite its critical importance to the political and economic security of both Russia and the United States. This monograph summarizes an October 1992 seminar which was convened to discuss the legal, political, and social infrastructure needed for Russian defense conversion. Included is the seminar's main output, the "Bread Loaf Charter," which identifies obstacles to be addressed and suggests the creation of two task forces, one to define principles of mutual security and specify actions for their implementation, and a second, a business working group, to develop strategies for generating trade and investment through the defense conversion process. The report includes papers by senior U.S. and Russian officials, defense conversion experts, and business people. Section I, an overview, discusses the prospects for U.S.-Russian cooperation in defense conversion, economic reform, and defense conversion strategies. Section II offers high-level views of defense conversion by representatives of five Russian ministries (defense, economics and finance, foreign affairs, foreign economic relations, and science).

Section III narrows the focus and examines defense conversion from the perspective of individual Russian defense enterprises and organizations involved in preparing decommissioned military officers for work in the civilian sector. Section IV assesses the role U.S. business can play in Russian defense conversion, including a frank analysis by a U.S. businessperson of opportunities in defense conversion in Russia.

019

PN-ABQ-353
MF \$1.08/PC \$4.68

Malawi: the economic impact of malaria on low-income households

Ettling, Mary B.; Chitsulo, Lester; McFarland, Deborah A.
Medical Service Corp. International
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Health (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Malawi (Sponsor)
Aug 1993, 31 p., En
VBC report no. 82239
9365948

One of the most significant and least examined effects of malaria, one of Malawi's worst health problems, is its economic impact on the poor. This report examines that impact by looking at sources of income for poor households, occupations and educational levels of their heads, and time loss and monetary expenditures for prevention and treatment. Data for the report were gathered from a 1992 USAID-supported nationwide survey of knowledge, attitudes, and practices regarding malaria, and from interviews with over 1,000 malaria patients at 21 health facilities. The greatest economic impact on low-income households was the treatment of suspected malaria, which represented 9.6% of the average annual income and 19.8% of disposable income. In addition to these expenditures, low-income households experienced a drop in productivity and subsequent loss of income. Adults, either ill or caring for an ill child, forfeited wages amounting to 2.4% of annual income. Overall, the costs of malaria accounted for 13% of the average annual income of these poor households.

020

* PN-ABQ-622
MF \$1.08/PC \$8.06

Labor force participation, sectoral choice, and earnings in Conakry, Guinea

Glick, Peter; Sahn, David

Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program

World Bank (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Guinea

Jun 1993, v, 52 p.: statistical tables, En

CFNPP [Cornell food and nutrition policy program] working paper, no. 43

Also issued as ENCOMEC [enquete de consommation aupres des menages a Conakry] findings bulletin no. 13, January 1993

6980519

*Also available from: CFNPP Publications Dept., 315 Savage Hall, Cornell Univ., Ithaca, NY 14853 USA

This study presents one of the few efforts to date to analyze the determinants of labor force participation, sector of employment, and earnings in a sub-Saharan African economy; it analyzes the labor market in Conakry, Guinea, a rapidly expanding city of 1 million people. Based on data derived from a survey of 1,725 households, Conakry's labor market is found to be segmented into four sectors: self-employment (primarily in very small enterprises); wage and salaried employment in the private sector; wage employment in the public sector; and non-participation. Using a multinomial logit model, the study analyzes and cross-correlates the effects of age, gender, educational level, technical/vocational training, ethnicity, residency, marital status, capital stock (in the case of private enterprises), and migrant status upon labor force participation rates and earnings levels in each sector. Identifying constraints to women's income-earning opportunities as an

important policy concern, the study emphasizes the differences in male and female labor force participation, sector of employment, and earnings. One of the important contributions of the study is its finding that investments in education increase earnings in small self-employment enterprises as well as in the formal or wage sector. Another significant finding is that civil service wage structure provides poor motivation for higher-level employees. The policy implications of these and other findings are outlined.

021

PN-ABQ-676
MF \$1.08/PC \$4.29

Strategies of industrialization: lessons for The Gambia

Roemer, Michael

Harvard University. Harvard Institute for International Development

U.S. Agency for International Development. Bur. for Global Programs, Field Support and Research. Ofc. of Small, Micro and Informal Enterprise (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Gambia (Sponsor)

Oct 1993, 29 p., En

CAER [consulting assistance on economic reform project] discussion paper, no. 16

French ed.: PN-ABS-017

9400405; 9300095

With the success of its structural adjustment program, the Government of The Gambia has been inspired to consider additional measures to promote industrialization. This paper explores the lessons of industrial development from other countries, primarily the successful industrializers in East and Southeast Asia, and applies those lessons to the special circumstances of The Gambia. Three broad industrialization strategies are examined: resource-based industrialization; import substitution; and outward-looking industrialization. Given its small size, The Gambia's only alternative is to remain a completely open economy, producing for export and re-exporting goods to neighboring countries. Specifically, the paper recommends that The

ECONOMICS

Gambia pursue its goal of becoming an export enterprise by: (1) focusing principally on the products of its natural resource base, especially groundnuts, horticulturals, fish, and tourism; (2) moving cautiously into manufacturing goods that could be substitutes for the existing re-exports of imported goods such as candy, footwear, and clothing; and (3) attracting foreign investors, especially from East Asia, to utilize The Gambia as an export platform for selling textiles, clothing, and other light manufactures to Europ. The Government of the Gambia has already taken important steps on the road to export-led development; however, several additional steps should be taken. These include: (1) maintaining macroeconomic stability, (2) reducing profit taxes, (3) lowering the premium on domestic bank loans, (4) imposing only modest export surcharges if infant industry protection is to be granted, and (5) attracting investors from East and Southeast Asia. (Author abstract)

022

PN-ABQ-731

MF \$1.08/PC \$3.77

Trade: the future engine of growth for Indonesia

Soesastro, Hadi; Pangestu, Mari; et al.
East-West Center. East-West Resource Systems Institute
U.S. Agency for International Development. Bur. for
Asia (Sponsor)

Oct 1993, 27 p.: statistical tables, En
PITO (private investment and trade opportunities):
business environment in ASEAN [Association of
Southeast Asian Nations] , no. 10
3990358

Since the mid-1960s, Indonesia has exhibited impressive economic growth, with real GDP increasing at 6.5% annually and per capita annual income rising from \$75 to \$620. This study examines the role Indonesian trade policies have played — and, more importantly, can continue to play — in this growth. The study begins with an overview of the structural transformation of Indonesian trade since 1970, the most striking feature of which was a shift in exports from raw materials and oil to manufactured goods. Subsequent sections discuss: (1) Indonesia's trade policy

regime (detailing trade liberalization policies adopted in part in reaction to the oil shock of the early 1980s); (2) the current trade scenario (with emphasis on tariff and non-tariff barriers to imports, and measures that affect export competitiveness); and (3) trade-related investment (particularly foreign investment). The study concludes that while Indonesia has come a long way towards eliminating protectionism, more must be done, especially in the area of licensing arrangements and import/export restraints.

023

PN-ABQ-732

MF \$1.08/PC \$2.86

Trade policies of the Philippines

Licuanan, Victoria; Carlos, Cecilia C.
East-West Center. East-West Resource Systems Institute
U.S. Agency for International Development. Bur. for
Asia (Sponsor)
Nov 1993, 22 p.: charts, statistical tables, En
PITO (private investment and trade opportunities):
business environment in ASEAN [Association of
Southeast Asian Nations] , no. 11
3990358

Despite strong economic performance in the 1970's and the late 1980's, the Philippines now lags behind other countries in the Pacific Rim. While this poor performance can be traced in part to political upheaval, years of protectionist trade policies have also played a major role. This study discusses the trade regime in place in the Philippines, concentrating on efforts at tariff restructuring in the late 1980's and early 1990's, qualitative import restrictions and licensing controls, and indirect taxes (such as the home consumption value scheme for imports), and related export promotion, foreign exchange, and investment policies. A final section outlines trade-related measures pending in the Philippine legislature, and proposes recommendations for improvements in infrastructure, technology, and labor skills and for further policy reform in the areas of financial markets, barriers to factor movement, privatization, and export promotion. The study concludes that in order for the Philippines to become on a par with its Asian neighbors, it must cultivate a mind-set of competitiveness and ease the

short-term burden of structural adjustment on the poor. Includes bibliography, charts, tables.

024

PN-ABQ-743

MF \$1.08/PC \$2.86

North American Free Trade Agreement (NAFTA): Its implications for the United States and Central America

Horkan, Kathleen M.

Academy for Educational Development, Inc.

U.S. Agency for International Development. Bur. for Latin America and the Caribbean. Regional Ofc. for Central American Programs (Sponsor)

U.S. Agency for International Development. Bur. for Policy and Program Coordination. Center for Development Information and Evaluation (Sponsor)

Jan 1994, i, 20 p., En

Spanish ed.: PN-ABQ-744

5960162; 9300232

While the North American Free Trade Agreement (NAFTA) includes only Canada, Mexico, and the United States, the pact will also affect economies throughout Central America and the Caribbean. This paper presents and analyzes pro- and anti-NAFTA arguments from the perspectives of the United States as well as the Caribbean Basin countries. The paper begins with an overview of the provisions of the treaty regarding elimination or reduction of tariff and non-tariff barriers to trade in the textile, automotive, energy and petrochemicals, agricultural, and services sectors; reduction of barriers to investment; protection of intellectual property rights; and side agreements regarding environmental standards, workers' rights, environmental infrastructure, import surges, and dispute resolution. The paper then reviews the various arguments for and against NAFTA that emerged during the ratification debate in the United States; a key issue was whether NAFTA would have a positive or negative effect on U.S. jobs. Finally, the implications for Central America/Caribbean are addressed, where concerns stem from a fear that trade and investment will be diverted away from the region. Options for the Caribbean Basin countries are to:

(1) pursue parity with Mexico in regard to NAFTA treatment, a path which has been proposed in the U.S. Congress, but appears to be stalled; (2) change national policies (e.g., regarding labor laws, infrastructure, property rights, the environment) in order to facilitate the region's accession to NAFTA; and/or (3) negotiate as a region for NAFTA accession. Includes bibliography.

025

PN-ABR-133

MF \$2.16/PC \$17.55

Experience of decentralization in Cote d'Ivoire, 1980-1993: an evaluation

Stren, Richard; Motabar, Nezam; Attahi, Koffi
Abt Associates, Inc.

U.S. Agency for International Development. Bur. for Africa. Regional Economic Development Services Ofc. West and Central Africa (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Ivory Coast (Sponsor)

U.S. Agency for International Development. Bur. for Global Programs, Field Support and Research. Ofc. of Housing and Urban Programs (Sponsor)

Oct 1993, xx, [114] p.: charts, statistical tables, En

Executive summary: PN-ABQ-746

9401008

Although the Ivory Coast's program to decentralize governance to the level of municipalities or communes is the broadest and most sustained in Francophone Africa, it faces a number of problems which need to be addressed both within the country and by supportive donors such as USAID. This report presents a detailed review of Ivorian decentralization, concluding with recommendations for USAID. After an opening review of the program's history, four case studies of the structure and functions of governance at the commune level are presented, along with a description of the role of central government agencies. An ensuing analysis of the financial situation in Ivorian communes (a particularly important issue in light of the 1992 Finance Law which reduced tax allocations to communes, along with the central government's lack of liquidity) discusses ways to make the use of existing resources more

ECONOMICS

efficient and to generate new resources. It is recommended that USAID support government efforts to sustain and strengthen the communes as institutions of local democracy. In regard to resource mobilization, this will mean considering support for a wide range of projects in both the short term (e.g., a simplified property tax, substitution of unskilled labor for capital intensive equipment in garbage collection and other areas) and the medium and long terms (e.g., decentralization of tax authority, improved administration of real estate and business taxes, encouragement of professional and artisanal associations). Collaboration with other donors and local NGOs in these efforts is urged, and stress is laid on the continuing importance of training commune officials and elected councilors in basic administrative functions.

026

*** PN-ABR-614**
MF \$1.08/PC \$6.37

Terms of trade and the real exchange rate in the CFA zone: implications for income distribution in Niger

Dorosh, Paul; Nssah, B. Essama; Samba-Mamadou, Ousmane
Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program
U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Niger (Sponsor)
Mar 1994, v, 38 p.: charts, statistical tables, En CFNPP [Cornell Food and Nutrition Policy Program] working paper, no. 57
6980519
**Also available from: CFNPP Publications Dept., 315 Savage Hall, Cornell University, Ithaca, NY 14853 USA*

Economic crisis in Niger during the 1980s is attributed, primarily, to a fall in uranium export revenues, reduced foreign capital inflows, drought, and economic fluctua-

tions in neighboring Nigeria. This study examines the impacts of external conditions and government policies on real incomes of various household groups using a computable general equilibrium (CGE) model. Following an introduction, Section 2 briefly reviews the major developments in Niger's economy in the 1970s and 1980s. Section 3 describes the CGE model and the body of data on which the study is based. The heart of the document, Section 4, presents six simulations analyzing the impact of structural adjustments and of external conditions on real incomes of rural north poor and nonpoor, rural south poor and nonpoor, urban poor and nonpoor, and semiurban groups. The first three simulations focus on the size and consequences of a real exchange rate depreciation to restore external equilibrium, while the remaining three show the impacts of alternative fiscal policies (budget cuts, tax increases, and increased government spending). Section 5 draws conclusions and makes recommendations, especially in the light of the debate about possible devaluation of the CFA franc.

027

*** PN-ABR-615**
MF \$1.08/PC \$5.46

Growth linkages in Madagascar: implications for sectoral investment priorities

Dorosh, Paul A.; Haggblade, Steven
Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program
U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Madagascar (Sponsor)
Mar 1994, vii, 29 p.: charts, statistical tables, En CFNPP [Cornell Food and Nutrition Policy Program] working paper, no. 60
6980519
**Also available from: CFNPP Publications Dept., 315 Savage Hall, Cornell University, Ithaca, NY 14853 USA*

Although the ambitious "investment to the limit" program initiated by Madagascar in the late 1970s to spur economic growth eventually led to a balance of payments crisis and a structural adjustment program, public investment remains an important part of national development efforts. However, since resources are scarce, criteria are needed to establish investment priorities. This study simu

Results strongly suggest that an agriculturally based investment strategy, particularly one focused on rehabilitating small irrigated paddy perimeters, will generate the most rapid income growth, the most jobs, the most equitable income distribution, and rapid urban economic growth.

lates the effects of investments in three key sectors — paddy rice (the major food crop), coffee (the major export crop), and manufacturing (the priority sector under the "investment to the limit" strategy). A semi-input-output model for projecting the income and employment consequences of investments in these sectors is presented. The model employs a Social Accounting Matrix as a framework for tracing interrelationships among productive sectors, households, and other institutions in the economy. Results strongly suggest that an agriculturally based investment strategy, particularly one focused on rehabilitating small irrigated paddy perimeters, will generate the most rapid income growth, the most jobs, the most equitable income distribution, and rapid urban economic growth. Recommendations for policy interventions are offered in conclusion.

028

* PN-ABR-616
MF \$1.08/PC \$5.72

Macroeconomic adjustment and the poor in Madagascar: a CGE [computable general equilibrium] analysis

Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program

U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Madagascar (Sponsor)

Mar 1994, iv, 33 p.: statistical tables, En

CFNPP [Cornell Food and Nutrition Policy Program] working paper, no. 61

6560218; 6980519

**Also available from: CFNPP Publications Dept., 315 Savage Hall, Cornell University, Ithaca, NY 14853 USA*

In the early 1980s, as Madagascar undertook structural adjustment measures to restore macro-economic balance and liberalize markets, a contentious debate emerged as to whether or not the measures would adversely affect the country's poor. Using a computable general equilibrium (CGE) model, this study attempts to conclude the debate, which has remained unresolved due to a lack of representative survey data on Malagasy incomes and expenditures during the 1980s. The study finds that most of the country's rural poor did not suffer adversely from the 1980s' policies. Rather, it was the urban high-income households who saw major changes in their incomes; these households, who had benefitted significantly from the investment boom of 1978-81, were hurt by the subsequent stabilization period. Section Two presents an overview of Madagascar's economy and summarizes the country's economic policy during the 1980s. The CGE model and the data from which the study is drawn are described in Section Three. Section Four presents the results of simulations of macroeconomic policy changes regarding investment and stabilization, rice imports, and trade liberalization. Conclusions are in Section Five.

029

PN-AAX-278
MF \$1.08/PC \$7.80

Export and investment promotion services: service use and its impact on export performance — results of the Asia surveys

Bremer, Jennifer; Bell, Charles; McKean, Cressida
U.S. Agency for International Development. Bur. for
Policy and Program Coordination. Center for Development Information and Evaluation
Feb 1994, 22 p. + 4 appendices: statistical tables, En
A.I.D. technical report, no. 18

A.I.D. has devoted considerable resources over the past several years to services that directly support exports or export-related foreign investment. This study summarizes results of a survey of 131 exporting firms in India, Indonesia, and Thailand on their use of 33 export services, ranging from foreign market information to production TA; 100 of the firms were randomly selected and 31 had been assisted under A.I.D. projects. The survey findings demonstrate that direct services play a vital role in encouraging new entrants into exporting and in assisting foreign investors. Key services are provided predominantly by business partners (including trade associations, informal contacts, distributors, suppliers, buyers, and licensors, as well as formal joint venture partners). Important services are not provided nearly to the same degree by government or nonprofit agencies, nor are services usually obtained from for-profit professional service firms (e.g., lawyers and consultants). Government services are most useful to foreign investors for basic information early in the decision process, and, for local firms, were helpful in making initial contact with buyers. The characteristics of firms receiving export services made no important difference in service use or impact, except when preparing local exporters with foreign-owned firms. A final section of the report discusses the match between the mix of services provided and those sought by firms, focusing on evidence of potential roles for governments in filling the gaps left by private service providers. Three overall conclusions are reached. (1) Firms rely on networks of associates as their primary source of assistance. (2) Business relationships evolve

over time, and the distinction between export promotion and investment promotion will blur due to close business ties. (3) International ventures are fragile in their early stages, particularly if long geographic and/or cultural distances are involved. This is probably the reason that for-profit professional service firms stay out of the investment process until it is well advanced.

030

* PN-ABQ-656
MF \$3.24/PC \$26.52

Latin America's turnaround: privatization, foreign investment, and growth

Boeker, Paul H., ed.
Institute for Contemporary Studies. International Center for Economic Growth
Institute of the Americas
U.S. Agency for International Development. Directorate for Policy. Ofc. of Policy Analysis and Resources (Sponsor)
1993, xvii, 190 p.: charts, statistical tables, En
Published by: ICS Press
Executive summary: PN-ABS-397
9300092
**Also available from: International Center for Economic Growth, 720 Market St., San Francisco, CA 94102 USA*

This collection of papers presented at the Second International Conference on Privatization in Latin America reviews progress made throughout the region since the early 1980s towards privatizing state-owned enterprises and attracting foreign investment. Includes country overviews (for Argentina, Brazil, Chile, Jamaica, Mexico, and Venezuela), extensive discussion of the role of foreign investment in privatization, and separate papers focusing on the privatization of telecommunications, electric power, oil and natural gas, and tourism and air transportation. The current trend towards a smaller state role in the economy augurs well for greater prosperity and improved government services throughout Latin America.

031

PN-ABQ-957
MF \$1.08/PC \$4.42

Methodology for microenterprise strategy design in the Sahel

Grant, William; Gamsler, Matthew
Development Alternatives, Inc.
U.S. Agency for International Development. Bur. for
Global Programs, Field Support and Research. Ofc. of
Small, Micro and Informal Enterprise (Sponsor)
U.S. Agency for International Development. Bur. for
Africa (Sponsor)
Feb. 1994, iii, 20 p. + annex, En
GEMINI working paper, no. 46
9365448

Lessons learned from field work in Niger, Lesotho, Burkina Faso, and Mali are synthesized in this methodological exercise for helping donors or local NGOs develop a strategy for small and microenterprise (SME) projects in the Sahel. Three phases of the exercise are distinguished. (1) Initial planning and organization should focus on three questions: What does the client want? What information is already available? What level of resources is the client willing to devote to strategy development? (2) A preliminary strategy review stage should include an assessment of existing SME financial services, training programs, and institutions, the role of NGOs, initiatives in technology development, existing capacity for implementing policy reform, planned donor programs, and the regulatory environment. A critical part of this phase is a subsector analysis to identify the best targets of opportunities for SMEs. (3) The final phase of the exercise consists of deeper institutional reviews or subsector analyses to pinpoint the particular interventions to undertake. These studies should be conducted in conjunction with the client or its collaborating institutions. (Author abstract, modified)

032

PN-ABR-165
MF \$1.08/PC \$8.97

Small enterprise development in Poland: does gender matter?

Weidemann, C. Jean; Finnegan, Carol
Development Alternatives, Inc.
U.S. Agency for International Development. Bur. for
Global Programs, Field Support and Research. Ofc. of
Small, Micro and Informal Enterprise (Sponsor)
U.S. Agency for International Development. Bur. for
Europe and the New Independent States. Poland
(Sponsor)
Mar 1994, iv, 37 p. + 4 annexes, En
GEMINI technical report, no. 73
9365448

Opportunities and constraints facing women in Poland's small and medium enterprise (SME) sector are analyzed in this report, based on interviews with 50 entrepreneurs and government, donor, and NGO personnel in eight geographical areas. Part 1 compares male- and female-owned SME's and briefly examines similarities in the constraints faced by both — chiefly, lack of access to formal credit.

Women face a number of constraints in the formal labor market: Jobs are scarce, particularly in some geographic regions, and child care can be very costly. The sum of these circumstances make entrepreneurship attractive as an alternative to employment.

Part 2 is devoted to the additional restrictions, both overt and indirect, that women confront in the formal labor market. Jobs are scarce, particularly in some geographic regions, and child care can be very costly. The sum of these circumstances make entrepreneurship attractive as an alternative to employment. Rural and urban differences in economic and entrepreneurial opportunities for women are also addressed in this section. Part 3 assesses gender-relevant retraining, employment, and entrepreneurship

PRIVATE ENTERPRISE

initiatives being undertaken by women's organizations, as well as by government and donors. According to the report, these emerging programs can serve as prototypes for maximizing Polish women's productive capacity and alleviating poverty; provision of child care is an important aspect of these initiatives. Part 4 proposes gender-related research and actions in the areas of policy and legislation, and financial sector reform and financial services. Included among the annexes are profiles of women entrepreneurs, a list of legal issues related to women workers and entrepreneurs, and data on formal sector financing of SMEs. (Author abstract, modified)

government's privatization program. Direct constraints include lack of access to credit and finance, business taxes, and lack of comprehensive business legislation and regulations. The third section discusses the principal institutions and actors in the SME sector, including government, the banking sector, donor-assisted programs, and membership-based organizations. The final section proposes a threefold strategy for USAID, consisting of policy assistance, organizational strengthening of business associations and voluntary bodies, and information support through data collection and analysis.

033

PN-ABR-166
MF \$1.08/PC \$8.71

Slovakia small business assessment

Barclay, Tony; Heatly, Bruce

Development Alternatives, Inc.

U.S. Agency for International Development. Bur. for
Global Programs, Field Support and Research. Ofc. of
Small, Micro and Informal Enterprise (Sponsor)

U.S. Agency for International Development. Bur. for
Europe and the New Independent States (Sponsor)

Mar 1994, ix, 28 p. + 5 annexes: charts, En

GEMINI technical report, no. 74

9365448

Given the competitive disadvantages now facing larger parastatals within Slovakia's newly privatized business community, growth in Slovakia's GDP and employment must be spurred by small and medium-sized enterprises (SMEs). This assessment of Slovakia's SME sector is divided into three sections. Section one describes the structure and characteristics of the sector. From the small amount of meaningful data available, it appears that only a small portion of Slovakia's SMEs are commercially registered enterprises. Data on female labor and on Slovakia's Romany population, though essential to understanding the informal sector, are not available. The second section summarizes opportunities for and constraints to SME development. Indirect constraints include the budget deficit, inflation, lack of liquidity, and the slow pace of the

034

PN-AAX-291
MF \$1.08/PC \$8.45

Assessment of USAID's agribusiness program: Cameroon case study

Poulin, Roger; Olson, Craig
 Development Alternatives, Inc.
 U.S. Agency for International Development. Bur. for Policy and Program Coordination. Center for Development Information and Evaluation (Sponsor)
 U.S. Agency for International Development. Bur. for Africa. Cameroon (Sponsor)
 Apr 1994, 65 p.: charts, statistical tables, En
 USAID working paper, no. 158
 6310063; 631K601; 9365447; 9300085

This evaluation of Cameroon's Fertilizer Sub-Sector Reform Program (FSSRP) is one of seven case studies being carried out as part of a worldwide assessment of USAID-financed agribusiness programs. The evaluation finds, with some qualifications, that the FSSRP achieved its main policy reform objective — the liberalization and privatization of fertilizer distribution in Cameroon — as well as its intermediate objective of making fertilizer available to farmers on a more timely basis and at a lower cost. However, this applies only to the seven coffee-producing provinces; fertilizer distribution in the three northern cotton-producing provinces is still controlled by the government. The FSSRP has had little impact on increasing agricultural production or farmers' income, which, while not stated goals of the FSSRP, are basic objectives of USAID's agribusiness programs; the evaluation attributes the stagnation in production to factors outside the project's control, mainly a sharp decline in world coffee prices, and maintains that if the project's policy reforms are sustained and expanded (which is by no means certain), they will ultimately lead to improvements for small farmers and agribusiness distributors. Two principal, and contrasting, lessons learned are identified. (1) Policy reform can be effective in bringing about positive change in the agribusiness sector, and success in one area can pave the way for reform in other sectors; for example, arabica coffee marketing in Cameroon has been privatized, based largely on the FSSRP experience. (2) Successful

policy reform does not guarantee an increase in production, employment, and/or agricultural value added; such achievements require both favorable macroeconomic conditions and an integrated approach encompassing marketing policy reforms, improved marketing infrastructure and services, and more effective public and private sector agricultural research and extension.

035

PN-ABQ-649
MF \$1.08/PC \$11.18

Debt overhang and other barriers to the growth of agriculture in El Salvador

Benito, Carlos
 Abt Associates, Inc.
 U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Agriculture (Sponsor)
 U.S. Agency for International Development. Bur. for Latin America and the Caribbean. El Salvador (Sponsor)
 Sep 1993, xii, 57 p. + 4 appendices: charts, statistical tables, En
 APAP [agricultural policy analysis project phase] II technical report, no. 134
 Spanish ed.: PN-ABQ-129
 9364084

In 1993, 23% of El Salvador's farmland was uncultivated, and at the same time the formal bank debt of medium-sized farmers stood at 873 million colones. This study examines the link between this underutilization of land and debt delinquency, and recommends policy and institutional changes. Section 1 describes the relationship between delinquency, credit, and agricultural activity, and presents relative measurements of unoccupied agricultural land and the sum total of delinquent debt accumulated by private, medium-sized farmers. Section 2 explains the causes and origins of credit delinquency, focusing on the civil war, the risks inherent in agriculture, and the rent-seeking behavior induced by government policies. The next two sections are analytical in nature. Section 3 presents a model with three major relationships: the first

AGRICULTURE

relationship explains the underutilization of land, including the non-use of credit as one of the explanatory factors; the second explains the non-use of credit, including the debt overhang and the use of informal credit as explanatory factors; and the third explains the use of informal credit. Section 4 discusses the reasons for the low profitability of farms and estimates the rate of return for fixed and variable agricultural assets. Section 5 examines the policy instruments used to reduce debt delinquency, principally Decree 292, and discusses the suitability of a supplementary instrument such as an agricultural financing corporation. Conclusions and recommendations are presented in Section 6. Appendices include case studies and a profile of the delinquent farmer. (Author abstract, modified)

036

PN-ABQ-654

MF \$1.08/PC \$4.42

Economic analysis of environmental and natural resource problems in agriculture

Pagiola, Stefano
Abt Associates, Inc.

U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Agriculture
(Sponsor)

Sep 1993, iii, 29 p. + attachment: charts, En
APAP [agricultural policy analysis project phase] II
methods and guidelines, no. 409
9364084

Along with increasing concern about environmental degradation resulting from agricultural activities has come a search for its causes and possible solutions. Typically, environmental degradation has been blamed on the failure of markets to accurately reflect the value of the natural resources (e.g., when farmers use rivers as a waste dump for chemical residues, since such use has no cost to them). Recent years, however, have also seen a growing awareness that many environmental problems are caused by inappropriate government policies (e.g., subsidies that promote the use of harmful chemicals). Despite the simultaneous presence of both types of problems, most analyses

have focused on one or the other exclusively. This paper proposes an approach for combining cost-benefit analysis and the Policy Analysis Matrix into a single framework that allows a more integrated analysis of environmental and natural resource problems.

037

PN-ABQ-750

MF \$1.08/PC \$6.63

Agribusiness firms in Zambia's maize subsector: a review of their characteristics, constraints, and innovations

Guyton, Bill; Temba, Joseph
Abt Associates, Inc.

U.S. Agency for International Development. Bur. for
Africa. Ofc. of Analysis, Research and Technical
Support (Sponsor)

U.S. Agency for International Development. Bur. for
Africa. Zambia (Sponsor)

U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Economic and
Institutional Development (Sponsor)

Sep 1993, 32 p. + 4 appendices: ill., charts, En
9365447

How have agribusiness firms serving Zambia's maize subsector fared under the country's new market liberalization policies? To answer this question, this study reviews marketing arrangements for the 1993-94 season and examines the principal characteristics of agribusiness firms in the sector, the constraints under which they operate, and their responses to changed market conditions. The study uses both subsector and case study approaches, examining individual firms and the relationships among the various participants in the maize marketing system. Agribusinesses covered include input distributors; large, small, and emerging farmers; grain dealers and marketing agents; transporters; millers; wholesalers and retailers of maize meal; feed processors; and breweries. The field research was conducted in July 1993 in the provinces of Lusaka, Central, Copperbelt, and Southern, which collectively produce about 60% of Zambia's maize crop. The study concludes

that the future of private agribusinesses in Zambia's maize marketing system is promising provided there is continued policy dialogue and reform. Specifically suggested are efforts to improve public-private sector communication, strengthen laws that protect contract farming arrangements, increase access by small and emerging farmers to marketing information, upgrade farm storage facilities for small farmers, and permit large farmers to export maize. The study also recommends market extension programs, distribution of dehullers to small millers, speedy privatization of parastatal millers, and clarification of the government's policy on marketing.

038

PN-ABQ-954

MF \$2.16/PC \$18.59

Final report: in vitro propagation and improvement of fruit species with economic potential for semi-arid zones

Jordan, Miguel; Montenegro, Gloria
Catholic University of Chile (Sponsor)
U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Research (Sponsor)
Jun 1993, 32 p. + attachments: ill., statistical tables, En
AID/SCI no. 8.007
9365542

Recently, there has been an upsurge in interest regarding the commercial potential of little known crops of the Andes, including several fruit crops cultivated in semi-arid zones. However, large-scale cultivation requires efficient methods of mass reproduction. This report presents the results of research on three Andean fruit species, *Carica pubescens* (highland papaya), *Annona cherimola*, and *Pouteria lucuma*, to determine their suitability for propagation and to develop species-specific propagation procedures. Specifically, the research aimed at: (1) developing morphogenic responses in vitro in different explants (microspores, leaves, petioles, nodal sections, internodes, pericarp, zygotic embryos, cell suspensions, and cuttings) leading to plant regeneration; (2) reducing in vitro browning problems due to phenolic compounds oxidation; and

(3) developing selection and characterization systems to be applied to elite clones. Contained in the report are: a description of the overall research project, its objectives, and outputs; research papers on the three target species and on selected other species (e.g., kiwi fruit, *Solanum Muricatum*) with similar histories and/or hybridization potential; presentations from scientific meetings; color photos of cell cloning, plant regeneration, etc.; numerous bibliographies; and Spanish versions of selected papers and presentations.

039

*** PN-ABR-611**

MF \$2.16/PC \$13.00

Agricultural policy and technology options in Malawi: modeling responses and outcomes in the smallholder subsector

Simler, Kenneth
Cornell University. New York State Colleges of Human
Ecology & Agriculture & Life Sciences. Div. of Nutri-
tional Sciences. Cornell Food & Nutrition Policy
Program
World Bank (Sponsor)
U.S. Agency for International Development. Bur. for
Africa. Ofc. of Analysis, Research and Technical
Support (Sponsor)
U.S. Agency for International Development. Bur. for
Africa. Malawi (Sponsor)
Feb 1994, viii, 80 p.: statistical tables, En
CFNPP [Cornell Food and Nutrition Policy Program]
working paper, no. 49
6980519
*Also available from: CFNPP Publications Dept., 315
Savage Hall, Cornell University, Ithaca, NY 14853
USA

Despite stagnant performance in recent years, agriculture still provides Malawi the most viable basis for an economic development strategy. This paper uses linear programming models to explore the farm and national-level effects of a smallholder-based growth strategy with four major components: flint hybrid maize, burley to-

bacco, agroforestry, and self-inoculating soybeans. The models are used to simulate the effects in the year 2002/2003 of three policy scenarios: (1) continuation of present policies; (2) policy reform, in which smallholder burley production is allowed to increase to 25 million kg, the supply of flint hybrid seeds is sufficient to meet demand, and agroforestry practices and maize-soybean rotations are allowed on up to a tenth of all cultivated areas; and (3) more rapid reform, with burley production, spurred by additional credit, rising to 50 million kg. Results show that the four-component strategy can revitalize Malawi's smallholder subsector by raising incomes while increasing food production and consumption. The analysis identifies several areas critical to the success of such a strategy: expanding smallholder burley tobacco licensing; ensuring a sufficient supply of flint hybrid seed; expanding credit availability, especially for the smallest farmers; and encouraging the inclusion of agroforestry and soybean-maize rotations in the farming systems of the very poorest households, who cannot afford the risks of credit or tobacco farming.

040

* PN-ABR-612
MF \$1.08/PC \$4.55

Emergence of parallel markets in a transition economy : the case of Mozambique

Sahn, David E.; Desai, Jaikishan

Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program

U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Mozambique (Sponsor)

Mar 1994, v, 24 p. : charts, statistical tables, En CFNPP [Cornell Food and Nutrition Policy Program] working paper, no. 53

6560218; 6980519

*Also available from: CFNPP Publications Dept., 315 Savage Hall, Cornell University, Ithaca, NY 14853 USA

The *Novo Sistema de Abastecimento* (NSA), an official system for rationing food aid (rice, sugar, yellow maize flour, and yellow maize grain) in Maputo, Mozambique, has led to the emergence of *dumbanengues*, a parallel market for the sale of the subsidized foods. This study, which surveyed 1,816 Maputo households from 10/91 to 4/92, finds that the NSA, designed to provide a minimum food ration to the poor, appears to be breaking down; although the price for yellow maize grain and flour, and usually rice, was substantially lower in the NSA's ration shops than in the *dumbanengues* (the hundreds of street corner stores and open area markets located within the city), consumers were compelled to purchase from the *dumbanengues* because either the NSA ration shops were poorly stocked and the rations were simply not available, or because the NSA ration shops sold commodities in larger quantities for which consumers lacked sufficient cash on hand. In short, *dumbanengues* have become the main source of illegally diverted food aid products, originally destined for the NSA. The study recommends that

the ration scheme be dissolved, but maintains that food aid is essential to Mozambique's food security given the supply shortfalls resulting from internal conflict and the shortage of foreign exchange earnings for commercial imports. Recommendations are made for establishing a system of food aid distribution that is privatized, efficient, and fair.

041

PN-ABR-169
MF \$1.08/PC \$5.46

Final report: generation of transgenic cassava having reduced cyanide toxicity — August 29, 1990–October 30, 1993

Sayre, Richard T.; Roca, William
International Center for Tropical Agriculture
Ohio State University
U.S. Agency for International Development, Bur. for
Research and Development, Ofc. of Research (Sponsor)
1993, [7] p. + 3 attachments: charts, En
AID/SCI no. 10.222
Document includes 3 articles: 1. Regulation of cyanogenesis in cassava — 2. Proceedings of the first international scientific meeting: cassava biotechnology network — 3. Tissue specific inhibition of transient gene expression in cassava (*Manihot esculenta* Crantz)
9365600

Cassava plants possess a cyanide toxicity that is harmful to humans. In fact, a correlation has now been demonstrated between the cyanide content of poorly processed cassava and the occurrence of the neurological disorder called Konzo. This paper describes genetic research designed to develop cassava plants with reduced cyanide toxicity. The strategy was to isolate and overexpress the gene encoding linamarase, the enzyme that converts linamarin into acetone cyanohydrin. Most research objectives were achieved, and some were even expanded upon.

The most significant accomplishments have been to: (1) isolate, characterize, and localize cassava hydroxynitrile lyase (HNL), which converts acetone cyanohydrin into cyanide; (2) isolate cassava cDNA clones for linamarase; (3) characterize the stability of acetone cyanohydrin in low pH media and its relevance to cassava processing procedures; (4) demonstrate that roots can synthesize linamarin; and (5) develop cassava regeneration systems suitable for transformation, and identify suitable Ti plasmid transformation vectors. Project researchers are now close to developing recombinant plants that overexpress the cyanogenic enzymes, linamarase and HNL. Moreover, due in part to project efforts, the international Working Group on Cassava Safety has recommended that most effective way to detoxify cassava using a recombinant DNA approach is a strategy based on (1) tissue-specific inhibition of linamarin synthesis, combined with (2) tissue-specific overexpression of the cyanogenic enzymes.

042

PN-ABQ-665
MF \$2.16/PC \$14.04

Fertilizers in Albania: situation, analysis, and recommendations

International Fertilizer Development Center
U.S. Agency for International Development, Bur. for
Europe and the New Independent States (Sponsor)
Feb 1992, v. 95 p. + appendix: charts, statistical tables, En
1800024

Although the dissolution of the command economy and the wholesale privatization of the agricultural sector have opened up new marketing opportunities, agricultural inputs, and particularly fertilizers, remain in short supply. This study discusses the impact of the fertilizer shortage (fertilizer use in 1991 was just 33% of what it was in 1985-90, resulting in a 66% decrease in the wheat harvest) and outlines problems in the fertilizer marketing and production systems. For example, there is a rudimentary retail system developing for fertilizer, but it consists primarily of former collective farmers buying fertilizer from old parastatal distributors at the government-mandated ceiling and selling it with a mark-up (at an illegal price) to private

AGRICULTURE

farmers. The price problem is compounded by a shortage of agricultural credit and the resulting weak purchasing power of private farmers. A potentially more serious problem is the dramatic decline of nitrogen and phosphate fertilizer production since 1991, caused by a lack of raw materials, including natural gas and sulfuric acid. The study makes a number of recommendations, including (1) a 20,000 mt emergency supply of urea should be imported immediately; (2) government price controls on fertilizer should be eliminated; (3) the transportation system should be privatized; (4) urea production should be given priority in the distribution of natural gas supplies; and (5) certain agricultural exports (e.g., fruits and vegetables) should be stimulated to avoid local market gluts and generate foreign exchange.

043

*** PN-ABQ-791**

MF \$2.16/PC \$18.59

Index to livestock literature microfiched in Malawi

Assefa, Mekonnen, comp.

International Livestock Centre for Africa. Library and Documentation Services

U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Agriculture (Sponsor)

Aug 1993, vi, 139, En

936411109

**Also available from: International Livestock Centre for Africa, P.O. Box 5689, Addis Ababa, Ethiopia*

Since 1979, the International Livestock Center for Africa (ILCA) has been building a microfiche collection of nonconventional literature on livestock in tropical Africa, including 1,182 documents collected in Malawi, which are cited in this catalogue. Subjects covered by the citations include, inter alia: agricultural research; agricultural economics and policies; farm management; rural sociology; marketing; consumer and home economics; seed production; crop husbandry; plant sciences; plant pests and diseases; forestry production; animal husbandry; animal feeding, genetics, and physiology; veterinary science; animal

diseases and pests; agricultural machinery; soil science; food and feed processing; and mathematical and statistical methods. Sources for the documents include: Chitedze Agricultural Research Station; Bunda College of Agriculture; Department of Animal Health and Industry; Central Veterinary Laboratory; Lunyangwa Agricultural Research station; Malawi German Livestock Development Program; and the UNDP/FAO Animal Power Utilization Project. The catalogue is also available as a CDS/ISIS bibliographic database, available free of charge to national agricultural research systems in sub-Saharan Africa. Includes author and subject indexes, and ordering instructions.

044

PN-ABQ-793

MF \$2.16/PC \$13.78

Rural context of giant clam mariculture in Solomon Islands: an anthropological study

Hviding, Edvard

University of Bergen. Centre for Development Studies International Center for Living Aquatic Resources Management

U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Agriculture (Sponsor)

U.S. Agency for International Development. Bur. for Asia. South Pacific Regional Development Ofc. (Sponsor)

1993, xiv, 93 p., En

ICLARM [International Center for Living Aquatic Resources Management] technical report, no. 39
9365518

Throughout the South Pacific, giant clams are a highly valued food, and in some cultures, they also have great cultural significance. This report examines, from an anthropological viewpoint, an ICLARM-sponsored research effort to promote village-based giant clam mariculture in Solomon Islands, where giant clams have long been cultivated in "clam gardens" at village shores; an understanding of the anthropological context of giant clam mariculture, as well as an appreciation of traditional husbandry

and harvesting practices, is key to developing a model transferrable to other Pacific cultures. Chapter 1 summarizes key issues relating to the past, present, and future importance of giant clams for Pacific Islanders, and gives an overview of ICLARM's project in Solomon Islands, while Chapter 2 provides an ethnographic sketch of culture, society, and economy in the Solomon Islands, emphasizing rural systems of production and their implications for mariculture. Chapters 3 and 4 examine traditional knowledge, beliefs, and uses of giant clams, including their cultural significance, harvesting patterns, postharvest preparation, taboos, and vernacular terminology. Chapter 5 is a study of ICLARM's village-level ocean nurseries,

emphasizing the importance of communication between participating villagers and mariculture researchers. Chapter 6 examines customary law as it applies to potential mariculture sites in Solomon Islands. Finally, Chapter 7 summarizes some important organizational and economic circumstances for rural mariculture in Solomon Islands. A particularly significant finding, from Chapter 3, is that rural people usually prefer to eat the smaller species rather than the *Tridacna gigas* favored by mariculture researchers. Appendices provide more detailed information on the traditional postharvest utilization of giant clams and on the overall importance of marine molluscs as sources of food and cash in rural Solomon Islands.

045

* PN-ABR-373
MF \$2.16/PC \$15.47

Poverty, household food security, and nutrition in rural Pakistan

Alderman, Harold; Garcia, Marito
International Food Policy Research Institute
U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Agriculture
(Sponsor)

1993, viii, 108 p.: charts, statistical tables, En
International Food Policy Research Institute (IFPRI):
research report, no. 96
936411114

**Also available from: International Food Policy
Research Institute, 1200 17th St. NW, Washington, DC
20036-3009 USA*

Data from a 3-year (1986-89) survey of 800 households in five districts in rural Pakistan were analyzed in an effort to trace the pathways from economic and social policies to food security and, ultimately, to nutrition. Key findings of the report, which covered fluctuations in income, consumption, savings, nutrition, and health seeking behavior, included the following. (1) Despite the fact that all sample households were rural, their sources of livelihood were not strictly agricultural. Hence, rural development strategies should go beyond agricultural development to credit for non-farm enterprises, infrastructure development, and education. (2) Even though most income is derived from agriculture, income from livestock development and non-farm investments was found to decrease the high level of income inequality found in rural areas. (3) Fluctuations in income were considerable, but did not translate into fluctuations in calorie intake; nor was any evidence of seasonality in consumption detected. (4) Calorie-intake elasticities in the sample households imply that it would require a 30% increase in income to achieve a 10% rise in calorie consumption. Underconsumption of calories in the poorest households is unlikely to change in the normal course of economic development. The report recommends increased investment in the education of women as key to achieving better nutrition and increasing household incomes. The study also notes that increases in calories will improve

health and nutrition only if existing high rates of infection are also addressed by high-quality community health, sanitation, water supply, and public drainage services.

046

PN-AAX-272
MF \$1.08/PC \$9.10

A.I.D.'s child survival program: a synthesis of findings from six country case studies

Martin, Richard

U.S. Agency for International Development. Bur. for
Policy and Program Coordination. Center for Development Information and Evaluation

Oct 1993, x, 56 p. + appendix: charts, statistical tables, En
A.I.D. program and operations assessment report, no. 5
Evaluation highlights: PN-ABG-017

Summary: PN-ABG-038

Findings from evaluations of A.I.D. child survival (CS) programs in six countries — Bolivia, Egypt, Haiti, Indonesia, Malawi, and Morocco — are synthesized. According to the report, institution building may be the unsung success of the program: in three of the six countries examined, A.I.D. has been instrumental in developing innovative institutional arrangements for providing low-cost services. Sustainability is a problem, however, in mature programs, such as Egypt and Morocco, where A.I.D. is having problems phasing out support. Other key conclusions are as follows. (1) A.I.D.'s CS program has been cost-effective and has played a notable, though not easily quantifiable, part in lowering child mortality and morbidity. (2) A.I.D. has cooperated with other donors in expanding immunization coverage and has taken the lead in reducing high-risk births. A.I.D. has tried to take the lead in oral rehydration therapy as well, but efforts have been disappointing due to underestimation of support requirements. Breastfeeding and vitamin A supplementation appear to have been cost-effective interventions, but impacts in the areas of nutrition, water and sanitation, and acute respiratory infection are unclear. (3) The program is managed by an eclectic group of direct hires, contractors, university fellows, and professionals from other U.S. agen-

cies; staffing needs to be rationalized. A.I.D.'s complex administrative requirements have led to long delays, wasted resources, and strained relationships. On the other hand, A.I.D. was wise to concentrate CS resources on selected emphasis countries and has successfully involved the commercial private sector and PVOs. Policy dialogue has been moderately successful, though not in persuading host governments to increase their CS budgets. Donor coordination in CS has been better than in many other social sectors. All in all, the report concludes that the program is successful and should be continued. However, both operational problems and strategic issues are identified and it is recommended that A.I.D.'s CS strategy be updated, based on lessons learned during the past 8 years. Other general and specific recommendations are made.

047

PN-ABQ-734

MF \$1.08/PC \$3.51

Working paper: diagnosis and management of acute respiratory infections by Swazi child caretakers, healers, and health providers, 1990-1991

Wilson, Ruth P.; Nxumalo, Mavis; et al.
 U.S. Public Health Service. Centers for Disease Control and Prevention. International Health Program Ofc.
 U.S. Agency for International Development. Bur. for Africa. Operations and New Initiatives Ofc. (Sponsor)
 U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)
 [1992], iii, 23 p., En
 6980421

In this study, anthropologic methods were used to assess how acute respiratory infections (ARIs) in children under age 5 are diagnosed and treated in Swaziland. A total of 96 interviews were completed with 33 mothers, 33 focus groups of adult men and women, 17 health care providers, and 13 traditional healers. In general, respondents chose the health facility as the first-line treatment site of choice for both mild and severe ARI, although some mothers and

focus groups would first use traditional medicines or try a home remedy, even for acute ARI. Practices found to compromise a child's recovery included: use of detergent or disinfectant enemas; inhalation of smoke from burning herbs; and misdiagnosis by health care providers. A key finding of the study was the broad range of ARI-related terms in the siSwati language. Of these, *yimbo*, *unkhuhlane*, and *lishashati* refer to a mild upper respiratory infection, while *emahlaba* and *lucabangu* denote acute lower respiratory infection (i.e., pneumonia and severe pneumonia). The study concludes with recommendations for training health care providers, healers, and mothers or other caretakers, and for using specific siSwati illness terms when discussing ARI with mothers.

048

PN-ABQ-752

MF \$2.16/PC \$14.17

Sustainability assessment of the Africa child survival initiative (ACSI) combatting childhood communicable diseases (CCCD) project, Rwanda, 1993

Atlantic Resources Corp.
 U.S. Agency for International Development. Bur. for Africa. Operations and New Initiatives Ofc. (Sponsor)
 U.S. Agency for International Development. Bur. for Africa. Rwanda (Sponsor)
 7 May 1993, v.p., En
 6980421

Four years after the completion of A.I.D.'s Combatting Childhood Communicable Diseases project in Rwanda, a team of health professionals evaluated the project's sustainability, assessing over 50 indicators on the basis of six criteria: (1) perceived effectiveness; (2) integration and institutional strengthening; (3) local financing, community participation, and private sector provision of services; (4) training; (5) constituency building; and (6) local ownership. It was found that there is a strong national commitment to continue project activities, and that the activities are well integrated into public and private health structures. It was unanimous among Ministry of Health (MOH) staff and participating donors that the project was

NUTRITION & HEALTH

needed and effective and that it achieved most of its objectives. On a scale of 0 to 3, Expanded Program on Immunization (EPI) and Training/Supervision were judged to be the most sustained of the project's seven support strategies and interventions, with a score of 3 (permanent activity with improved quality), while diarrheal disease control and health education rated a 2 (permanent activity with maintenance of quality), and malaria and health information systems a 1 (permanent activity with a decline in quality). Only operations research rated a 0 (it was not sustained). Lessons learned included the following. (1) Many public sector health professionals are leaving for the more rewarding private sector, thus jeopardizing sustainability. (2) Priority programs like EPI—which has the highest status in the MOH and is the most organized—perform better at all levels. (3) Health personnel motivation, e.g., financial incentives, is essential to program success and sustainability. Unfortunately, these incentives, currently being paid by UNICEF and the World Bank, will end with the phase-out of their projects.

049

PN-ABR-094

MF \$1.08/PC \$12.74

USAID governance initiative in Nigeria: a strategic assessment of primary health care and local government

Ikhide, Sylvanus; Olowu, Dele; et al.

Associates in Rural Development, Inc.

U.S. Agency for International Development. Bur. for Global Programs, Field Support, and Research. Ofc. of Health, Population, and Nutrition (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Nigeria (Sponsor)

Feb 1994, vii, 81 p. + 2 appendices, En

Related document: PN-ABN-643

9365446

Findings are presented of a November 1993 study to refine and expand an earlier study (PN-ABN-643) of primary health care (PHC) management by Nigeria's Local Government Authorities (LGAs). Following an introduction, Chapter 2 examines government initiatives in

decentralization to local government and in the health sector. It also identifies USAID health initiatives and explores how governance issues can be applied to strengthen decentralization and health care delivery in Nigeria. Chapter 3 reviews current health conditions and the implementation of PHC policy. Chapters 4-6 examine management and organizational issues related to PHC planning and programming; budgeting and financial sustainability; and monitoring, evaluation, and supervision. Chapters 7 and 8 treat grassroots participation and intergovernmental relations issues as they affect PHC delivery. Chapter 9 identifies the systemic problems facing local governance of PHC, while Chapter 10 presents detailed discussion of the study's main recommendation: that USAID establish, over 3 years, centers at four regionally diverse Nigerian universities with the goal of training PHC, LGA, and community leaders in PHC policy, planning management, applied problemsolving, financing, and community mobilization. It is noted that the change of the government back to the military on November 18, 1993, while affecting this strategy, does not fundamentally alter it.

050

PN-ABR-153

MF \$1.08/PC \$2.34

Use of oxytocin and other injections during labor in rural municipalities of Guatemala: results of a randomized survey

Bartlett, Alfred V.; Bocaletti, Marco Antonio; Paz de Bocaletti, Maria Elizabeth; Bocaletti, Maria Elizabeth Paz de

John Snow, Inc.

U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Health (Sponsor) Aug 1993, 17 p.: charts, statistical tables, En

MotherCare working paper, no. 22

9365966

Oxytocin, a natural hormone, induces forceful contractions of the uterus at or near the time of the delivery. In the hands of obstetricians, a synthetic analogue of oxytocin may be administered to induce labor, increase the rate of labor, or control postpartum hemorrhage. However, in the

hands of traditional birth attendants, pharmacists, injectionists, or even peripheral health workers, use of oxytocin can prove deadly. Administered in the wrong amounts, through the wrong means, often unmonitored, it has resulted in the death of women through rupture of the uterus, or in the death of children through asphyxia. In the rural Guatemalan Mayan community surveyed in this study, oxytocin injection administered by traditional birth

In the rural Guatemalan Mayan community surveyed in this study, oxytocin injection administered by traditional birth attendants was significantly associated with increased risk of intrapartum and early neonatal death.

attendants was significantly associated with increased risk of intrapartum and early neonatal death. After presenting these observations, the study summarizes a systematic investigation of the frequency of oxytocin injection by untrained birth attendants during labor and delivery in rural municipalities throughout Guatemala. Findings show that intramuscular injection of oxytocin occurs in other municipalities besides that originally studied. Use of oxytocin seems to vary substantially by region, but to be highest among the indigenous Maya population of the Highlands region. Perinatal and neonatal death likewise appear to be substantially greater in this population than in the other regions studied. (Author abstract, modified)

051

PN-ABR-181

MF \$1.08/PC \$9.62

Assigning technical officers to ministries of health: a management study

Dawkins, J. K. Laslene; Amonoo-Lartson, Reginald
 U.S. Public Health Service. Centers for Disease Control and Prevention. International Health Program Ofc.
 U.S. Agency for International Development. Bur. for Africa. Operations and New Initiatives Ofc. (Sponsor)
 U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)

Aug 1993, xii, 69 p.: statistical tables, En
 6980421

The technical achievements of the African Child Survival Initiative-Combating Childhood Communicable Diseases (ACSI-CCCD) project have been well documented, but less attention has been given to the project's management aspects. This case study explored the project's primary strategy for in-country management: the assignment of long-term Technical Officers to Ministries of Health (MOHs). Interviews and surveys of U.S. and MOH personnel affiliated with the project found that respondents predominantly supported the strategy. However, U.S. and MOH respondents differed in their perception of whether the Technical Officers succeeded in transferring knowledge and skills to national counterparts, with U.S. respondents being more likely to say this had indeed occurred; in any case, it was not apparent that the counterparts had sufficient occasion to use what they had learned. The effectiveness of the Technical Officers was compromised by their spending more than 50% of their time on project administration. Respondents stressed that more attention should have been given to identifying mid-level and senior MOH managers and that more training should have been provided at all levels, especially management training for senior managers. Planning was considered the most important management skill for the Technical Officers to have; information management, communication, and evaluation were also mentioned often by respondents as key skills, as were knowledge of host government and

NUTRITION & HEALTH

A.I.D. regulations and procedures, knowledge of training and interpersonal and French language skills. It was recommended that future projects be multi-sectoral, include nationals in project design and management, and be more flexible in implementation.

052

PN-ABR-618
MF \$2.16/PC \$21.97

Health education planning and management for child survival program: a training program guide

U.S. Public Health Service. Centers for Disease Control and Prevention. International Health Program Ofc.
U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Operations and New Initiatives Ofc. (Sponsor) [1990], 187 p.: charts, statistical tables, En 6980421

The training manual presented here was used during workshops of the African Child Survival Initiative-Combating Childhood Communicable Diseases (ACSI-CCCD) project in Niger to provide practical, participatory training in the development of child survival health education programs. The first section explains the manual's philosophy and 4-phase training process, consisting of needs assessment, workshop planning, training, and follow-up evaluation and consultation; the four phases are designed to be conducted over a minimum period of 8-12 months. The manual is intended to be used with trainee pairs (a health educator and a child survival program manager, who work at the national, state, or district level), and to foster teamwork which the two trainees will then carry back to the work setting. Section Two contains 14 modules, each consisting of a set of objectives, an outline of training content, a brief description of training methods, and handouts. Appendices contain materials needed for

workshop needs assessments and follow-up, materials for program and participant evaluation, and a sample workshop schedule.

053

PN-ABR-619
MF \$1.08/PC \$1.56

Working paper: adult education perspectives in primary health care training

Voigt, Ann; Berney, Karen Tompkins; Kanne, Judi
U.S. Public Health Service. Centers for Disease Control and Prevention. International Health Program Ofc.
U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Operations and New Initiatives Ofc. (Sponsor) [1994], 9 p.: charts, En 6980421

Using adult education perspectives in health worker training is one method of effectively teaching clinical and communication skills. The adult education model encourages learners to take responsibility for their own learning, to share experiences, and apply them to their environment. Citing examples from the training component of the Africa Child Survival Initiative-Combating Childhood Communicable Diseases (ACSI-CCCD) project, this paper supports the use of participatory adult education perspectives over traditional didactic training methods and stresses that exposure to participatory training practices will encourage health workers to apply similar approaches in their own work with communities. The paper describes how adult education methods can be incorporated into training planning, implementation, and follow-up, and explains how the ACSI-CCCD project developed new training guides, which utilized a participatory approach wherein skills are explained, demonstrated, and then practiced. Field visits were another valuable component of the ACSI-CCCD training approach, as was small group practice with peer

observation and feedback. Some brief examples from Nigeria, Lesotho, the Central African Republic, Burundi, and Rwanda are included.

054

PN-ABR-620
MF \$1.08/PC \$1.82

Working paper: continuing education- the rationale for a systems approach

Voigt, Ann; Adegoroye, Anu; Kanne, Judi
U.S. Public Health Service. Centers for Disease Control
and Prevention. International Health Program Ofc.
U.S. Agency for International Development. Bur. for
Africa. Ofc. of Analysis, Research and Technical
Support (Sponsor)
U.S. Agency for International Development. Bur. for
Africa. Operations and New Initiatives Ofc. (Sponsor)
[1994], 11 p.: charts, En
6980421

Citing lessons from the Combatting Childhood Communicable Diseases (CCCD) Project, this paper suggests that a systems approach to continuing education is vital for the effectiveness and sustainability of health worker training programs. In the early 1980s, training courses were often implemented without identifying needs or assessing health worker performance, and the training was conducted without coordination and communication. In response to these shortcomings, the CCCD project offered assistance in planning training strategies that would respond to each country's respective needs. Technical officers, equipped with specific guidelines, worked with their host country counterparts to identify the country's existing health worker training status and the direction to be taken. The guidelines included the following suggestions: (1) assess existing training; (2) conduct needs assessments; (3) plan for needed training; (4) plan a link for supervisory follow-up; (5) evaluate the effectiveness of the training; and (6) institutionalize training. Assessment of the training programs focused on measuring progress in several areas, particularly concerning evaluation of the training system, evaluation of health worker performance, and training of trainers. The report includes brief summaries of CCCD achieve-

ments in these areas in Lesotho, Nigeria, and the Central African Republic, and concludes by summarizing recommendations for continuing education.

055

PN-ABQ-725
MF \$1.08/PC \$2.34

Working paper: evaluation of national malaria control programs in Africa

Bryce, J.; ROUNGOU, J. B.; et al.
U.S. Public Health Service. Centers for Disease Control
and Prevention. International Health Program Ofc.
U.S. Agency for International Development. Bur. for
Africa. Operations and New Initiatives Ofc. (Sponsor)
U.S. Agency for International Development. Bur. for
Africa. Ofc. of Analysis, Research and Technical
Support (Sponsor)
[1993], 15 p., En
French ed.: PN-ABR-563
6980421

International agencies and malaria control program managers have identified improved evaluation as critical to increasing the effectiveness of malaria control programs in Africa. This report discusses key issues involved in integrating evaluation into the program process. According to the report, managers can develop an evaluation strategy only after they have defined program objectives and planned specific activities. Indicators should be directly related to program objectives and should be selected on the basis of their: validity; reliability; ability to chart change stemming from program implementation within a reasonable amount of time; ability to be interpreted; usefulness in guiding program change; and measurability. Specifically, indicators need to be developed for: program policies and plans; the implementation process; the outcomes of malaria control interventions in disease management and prevention; and program impact on malaria-related morbidity and mortality. Managers also need to identify data sources and determine how often each indicator will be measured. Key issues in managing an evaluation activity include the need to: begin with available resources and build incrementally; explore options for administering

NUTRITION & HEALTH

evaluation activities; select, train, and supervise evaluation staff; develop quality control strategies; and ensure that data are managed and communicated in ways that support effective program decisionmaking. (Author abstract, modified)

056

*** PN-ABQ-751**
MF \$1.08/PC \$10.14

Measles outbreak in a highly vaccinated population: health sector Muyinga, Burundi, 1988–1989: a case study and training exercise for EPI managers

U.S. Public Health Service. Centers for Disease Control and Prevention. International Health Program Ofc.
U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Operations and New Initiatives Ofc. (Sponsor)
Revised ed.
Apr 1993, 90 p.: charts, statistical tables, En 6980421

**Also available from: ACSI-CCCD Technical Coordinator, International Health Program Ofc., Centers for Disease Control and Prevention, Atlanta, Georgia 30333 USA*

Even in highly vaccinated areas, measles outbreaks remain possible as long as there is less than 100% vaccine coverage and the vaccine used is less than 100% efficacious. A case study of such an outbreak in Burundi's highly vaccinated Muyinga Health Sector is used to supply sample data for this training exercise for immunization program managers. The exercise, which is written in a question and answer format, includes sections on assessing vaccination coverage, interpreting surveillance data, estimating vaccine efficacy, and analyzing measles control strategies, especially the selection of appropriate target age-groups. There is also an optional module on using surveillance data to calculate and interpret incidence and mortality rates. Includes an instructor's guide and references.

057

PN-ABR-182
MF \$1.08/PC \$8.06

Addressing the challenges of malaria control in Africa

U.S. Public Health Service. Centers for Disease Control and Prevention. International Health Program Ofc.
U.S. Agency for International Development. Bur. for Africa. Operations and New Initiatives Ofc. (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)
[1993], vi, 59 p.: charts, statistical tables, En 6980421

Malaria exacts an enormous toll on sub-Saharan Africa, killing more than 1.5 million children each year. This document makes technical and programmatic recommendations for a public malaria management and prevention program by drawing on the successes of the 12-year malaria component of the Africa Child Survival Initiative-Combating Childhood Communicable Diseases (ACSI-CCCD), which was implemented from 1982-93. Section I discusses the impact of malarial disease on the human body, including the biology and epidemiology of the malaria parasite. In Section II the study discusses the management and prevention of the three classifications of malarial disease (acute febrile illness, chronic infection, and perinatal infection); discusses the control of malaria in pregnant women; makes a case for the use of insecticide-impregnated bed nets as the least costly method to reduce malaria transmission; and reviews the use of chemoprophylaxis (the regular administration of antimalarial drugs) to prevent malaria among children, travelers and immigrants, and pregnant women. Section III discusses the incorporation and/or merging of strategies for malaria prevention with existing, comprehensive health programs such as disease prevention and control programs, prenatal programs, and community-based initiatives; and discusses the requirements for a malaria control program, including written policies and program plans, a technical group and implementation staff, and systems for program monitoring, program evaluation, and operational

research. An annex discusses progress in and constraints to the development of a malaria vaccine. Includes numerous references, tables, and figures.

058

PN-ABR-183
MF \$2.16/PC \$15.99

Controlling malaria in Africa: progress and priorities

U.S. Public Health Service. Centers for Disease Control and Prevention. International Health Program Ofc.
U.S. Agency for International Development. Bur. for Africa. Operations and New Initiatives Ofc. (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)
[1993], v, 118 p.: ill., charts, statistical tables, En 6980421

The malaria component of the Africa Child Survival Initiative-Combating Childhood Communicable Diseases (ACSI-CCCD) project, which was implemented from 1981-93, has produced a valuable knowledge base for the formation of malaria control programs in sub-Saharan Africa. Part One of this report reviews the component's accomplishments in the areas of leadership and policy development; disease, health, and drug research; disease surveillance; health information systems; health training and supervision; education for health program planning and management; and drug logistics and supply. A lessons learned section notes particular success in improving malaria management and prevention through the use of health education, including posters, especially for women with no formal education; preservice and inservice training programs for health facilities workers; and intermittent, clinic-based chemoprophylaxis for pregnant women for malaria management and prevention. Despite its overall success, some of the component's goals were unmet, primarily due to poor parasite response to the most widely available antimalarial drug; ineffective disease management in health facilities and homes due to limited drug availability, improper dosage regimens, and unclear instructions for treatment follow-up; and the inability of the

public health sector to keep pace with the disease's rapid spread through burgeoning cities. Priorities for malaria control for the next decade are reviewed. Part Two outlines activities undertaken in the 12 participating, malaria-endemic countries of Burundi, Central African Republic, Congo, Cote d'Ivoire, Guinea, Liberia, Malawi, Nigeria, Rwanda, Swaziland, Togo, and Zaire. Includes numerous references, 23 figures, and 4 tables.

059

PN-ABR-617
MF \$2.16/PC \$18.98

Health education for malaria control in the context of a primary health care approach: a training program guide

University of Ibadan. African Regional Health Education Center
University of North Carolina at Chapel Hill. School of Public Health
U.S. Public Health Service. Centers for Disease Control and Prevention. International Health Program Ofc.
U.S. Agency for International Development. Bur. for Africa. Operations and New Initiatives Ofc. (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)
Aug 1990, vi, 157 p., En 6980421

Guidelines are presented for short-term training in the health education component of malaria control programs at the primary health care level in Africa. This guide was developed for district and community-level training teams who are experienced in health education management and in using adult education methods. An introductory section describes the four phases of the training: (1) needs assessment; (2) course design and team building; (3) a training workshop; and (4) follow-up evaluation and consultation. Section two presents six modules on malaria as a health problem and on malaria control methods; subjects covered include national malaria policies, malaria epidemiology, parasitology and entomology, clinical features of malaria, field case management, and field malaria control. Section

NUTRITION & HEALTH

three is comprised of nine modules focusing on health education, including behavioral issues, community participation, information gathering, formulation of objectives, strategies, planning, monitoring and evaluation, and resource management. A case study of post-training implementation and follow-up conducted in 1990 in the Ife Central Local Government Area of Osun State, Nigeria, is presented in the fourth section. Appendices contain needs assessment forms and sample weekly schedules. The manual is generally in outline form, and trainers using the materials are advised to adapt and update them their particular settings.

060

PN-ABQ-522

MF \$2.16/PC \$19.63

Lessons learned in water, sanitation and health: thirteen years of experience in developing countries

Bendahmane, Diane B., ed.

Camp Dresser and McKee, Inc.

U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Health (Sponsor) 1993, xv, 138 p., En

Spanish ed.: PN-ABQ-787

Earlier ed.: PD-ABD-028

9365973

Twenty lessons learned from the 13 years (1980-1993) of field work in the Water and Sanitation for Health (WASH) project are distilled in this report. In regard to TA, WASH teaches that: effective TA focuses on building local institutions by transferring sustainable skills; an active information service can expand the reach of TA; and, TA in water supply and sanitation (WS&S) requires an approach that is interdisciplinary and participatory, and the collaboration of donor agencies. Lessons concerning shared responsibility are that: government's role is to assume responsibility for overall sector management, that of donors to support the government's national plans; NGOs can operate effectively in local situations inaccessible to donors; user participation in WS&S management is critical to sustainability; expansion of the private sector's

role depends on a supportive legal and policy environment. Lessons regarding program strategies are: the success of individual projects depends on strong sectoral policies and institutional practices; sanitation should be accorded the same priority as water supply; improvements in hygiene are an indispensable measure of success for WS&S activities; national governments must take specific policy steps to empower communities to manage WS&S efforts; a participatory approach to planning helps forge linkages beyond the sector; and, the traditional command and control model for WS&S regulation is generally inappropriate. Lessons for sustainability are that: successful institutional and human resource development projects are comprehensive, systematic, participatory, and based on long-term planning; sustainability of WS&S systems requires full consideration of appropriate engineering design and application, planning of operations and maintenance functions prior to construction to ensure that the technologies selected are sustainable, and an appropriate mix of donor, government, and community resources.

061

PN-ABQ-637

MF \$1.08/PC \$9.49

Water resources policy and planning: towards environmental sustainability

Thomas, Robert; Colby, Michael; et al.

Camp Dresser and McKee, Inc.

U.S. Agency for International Development. Bur. for Asia (Sponsor)

Nov 1993, xv, 65 p.: charts, maps, statistical tables, En 3980289

Four case studies illustrate some common environmental problems affecting water resource development projects. The studies, which focused on maintenance of the water resource rather than on the sustainability of the water delivery system, targeted four medium-sized, agriculturally significant cities in Asia and the Near East with a history of donor assistance—Fayoum, Egypt; Beni Mellal, Morocco; Faisalabad, Pakistan; and Khon Kaen, Thailand. The studies show that water projects, while beneficial, have left behind, and in some cases aggravated, environ-

mental problems such as water shortages, water pollution, water logging, and salinization. Deficiencies in planning water projects were also noted, including failure to include drainage facilities in irrigation systems, ineffective treatment of industrial waste, lack of systems to dispose of sewage and control water-borne diseases, failure to incorporate water conservation and reuse into project design, etc. Further, none of the case study cities possesses an agency or process to devise sector-wide policies or provide

independent reviews and environmental assessments of proposed water projects; there is also a general reluctance to impose user fees. A key policy implication is that donors should supplement the traditional project-by-project approach, which relies heavily on loan covenants, by helping host countries develop the right water policies and capabilities, as well as by coordinating among themselves in order to prevent one donor's efforts from undercutting the sustainability of another's.



Workers install a sewer line in Egypt.

POPULATION & HUMAN SETTLEMENTS

062

* PN-ABQ-205
MF \$3.24/PC \$34.58

Factors affecting contraceptive use in sub-Saharan Africa

National Research Council

U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Population (Sponsor)

U.S. Agency for International Development. Bur. for Africa (Sponsor)

1993, xv, 252 p.: charts, statistical tables, En
Population dynamics of sub-Saharan Africa

Published by: National Academy Press
9363023

**Also available from: National Academy of Sciences, 2101 Constitution Ave. NW, Washington, DC 20418 USA*

Recent surveys indicate that contraceptive use has increased in some countries in sub-Saharan Africa, but not in others. This report inquires into the economic, social, and programmatic causes of this disparity. Chapters examine: (1) current levels and trends in contraceptive use; (2) economic and social (community, kinship, household) factors affecting (sustaining or reducing) the demand for large families and so for contraceptive use; (3) the effects of population policy and family planning programs on fertility decisionmaking; (4) the relative importance, as determined by a multivariate analysis, of sociodemographic and economic factors in contraceptive use at the regional level; and (5) the relative importance of contraceptive use and traditional birth spacing methods. The report finds that Botswana, Kenya, and Zimbabwe have joined other regions of the developing world in a contraceptive revolution; major contributing factors have included political commitment, a supportive policy environment, excellent family planning programs, and high levels of female education. On the other hand, longstanding forms of social organization clearly inhibit contraceptive adoption and fertility decline. These include: the high value attached to perpetuation of the lineage; the importance of children as a means of gaining access to land and other resources; the use of kinship networks to share the costs and benefits of

children; and the weak nature of conjugal bonds. Nonetheless, continued improvements in female education, reductions in infant and child mortality, and strengthening of family planning programs should provide impetus for increased contraceptive use in Africa. (Author abstract, modified)

063

* PN-ABQ-206
MF \$3.24/PC \$28.99

Social dynamics of adolescent fertility in sub-Saharan Africa

Bledsoe, Caroline H., ed.; Cohen, Barney, ed.
National Research Council

U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Population (Sponsor)

U.S. Agency for International Development. Bur. for Africa (Sponsor)

1993, xv, 208 p.: charts, statistical tables, En
Population dynamics of sub-Saharan Africa
Published by: National Academy Press
9363023

**Also available from: National Academy of Sciences, 2101 Constitution Ave. NW, Washington, DC 20418 USA*

While childbearing among married adolescents is seen as normal and highly desirable in much of sub-Saharan Africa, childbearing among unmarried adolescents often meets with social disapproval. This study documents fertility patterns among adolescents and assesses the impact thereon of the region's varying social and economic regimes. Individual chapters: (1) present data from recent Demographic and Health Surveys on trends in adolescent fertility, comparing current patterns to those from a generation ago; (2) examine the dramatic economic, legal, religious, and educational changes that are making definition of the married state, always highly fluid in Africa, even more ambiguous; (3) describe the socioeconomic and cultural context of fertility in Africa; (4) document the educational opportunities, both formal and informal, which lead women to delay childbearing, and (5) assess the health

and other risks associated with adolescent fertility. Conclusions focus on two extremes of the adolescent fertility spectrum: childbearing among married adolescents, which occurs mostly in rural areas; and childbearing among unmarried adolescents, which is increasingly frequent. Many young women are still in school when they become pregnant, and because of social censure, either drop out of school or attempt dangerous abortions. Many in both groups lack access to adequate medical care, the married in rural areas because facilities are non-existent, the unmarried in urban areas because many facilities serve only married women. A more general conclusion is that for both married and unmarried adolescents, the social context of childbearing is extremely important, suggesting that adolescents exercise less control over their own reproduction than fertility surveys typically assume. Appendices detail methodological difficulties in analyzing adolescent fertility.

064

* PN-ABQ-207
MF \$3.24/PC \$26.52

Demographic effects of economic reversals in sub-Saharan Africa

National Research Council

U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Population (Sponsor)

U.S. Agency for International Development. Bur. for Africa (Sponsor)

1993, xiv, 193 p.: charts, statistical tables, En Population dynamics of sub-Saharan Africa

Published by: National Academy Press

9363023

**Also available from: National Academy of Sciences, 2101 Constitution Ave. NW, Washington, DC 20418 USA*

This study explores whether demographic phenomena in contemporary sub-Saharan Africa have been linked to economic changes. The effects of recent economic downturns in seven countries — Botswana, Ghana, Kenya, Nigeria, Senegal, Togo, and Uganda — are examined in

terms of their effects on child mortality and on timing of first marriages and of first and second births. Special attention is paid to differences between urban and rural areas. The effects of poor economic conditions on child mortality are clearest in Ghana (especially in rural areas) and Nigeria (especially in urban areas). The positive association between economic conditions and the odds of

The overall conclusion is that economic downturns have had marked demographic effects in sub-Saharan Africa, as many Africans suffered the deaths of their children and made decisions to delay or forego marriage and parenthood.

marrying for the first time is quite clear in Botswana, Senegal, and Togo (especially in urban areas). The results for first births are the strongest of the results for the four demographic outcomes: in all the countries but Kenya there is a consistently positive relation to economic variation. On the other hand, results for second births are the weakest: only for Botswana, Ghana, and Uganda are there positive relations between second births and economic conditions. Nigeria stands out as the country that experienced the strongest effects of economic reversals, probably due to the dominance of one commodity, oil, in its economy. Conversely, in Kenya, which is not so dependent upon one commodity, few effects appeared. The overall conclusion is that economic downturns have had marked demographic effects in sub-Saharan Africa, as many Africans suffered the deaths of their children and made decisions to delay or forego marriage and parenthood. (Author abstract, modified)

POPULATION & HUMAN SETTLEMENTS

065

* PN-ABQ-209
MF \$4.32/PC \$50.96

Demographic change in sub-Saharan Africa

Foote, Karen A., ed.; Hill, Kenneth H. ed.; Martin, Linda G., ed.
Consortium for International Development
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Population (Sponsor)
U.S. Agency for International Development. Bur. for Africa (Sponsor) GCitation>1993, xv, 379 p.: charts, statistical tables, En
Population dynamics of sub-Saharan Africa
Published by:National Academy Press
9363023
**Also available from: National Academy of Sciences, 2101 Constitution Ave. NW, Washington, DC 20418 USA*

Sub-Saharan Africa is experiencing dynamic demographic changes, which are documented in the eight papers comprising this volume. The papers discuss: (1) fertility levels, differentials, and trends; (2) proximate determinants of fertility; (3) marriage ages; (4) child mortality; (5) adult mortality; (6) internal migration, urbanization, and population distribution; (7) international migration; and (8) models for estimating the demographic consequences of the AIDS epidemic. In each case, the focus is on describing demographic trends, not explaining them. The data show there is no doubt that a second stage of demographic transition is beginning in some African countries, where fertility is starting to fall, though the future remains uncertain, especially because of AIDS. In this volatile situation, continuing emphasis on data collection, and especially on regular censuses and sample surveys on specific topics, is essential. Continued support of data analysis and of demographic research centers in the region should also be given priority.

066

PN-ABQ-245
MF \$3.24/PC \$33.93

Regulating reproduction in India's population: efforts, results, and recommendations

Srinivasan, K.
University of North Carolina at Chapel Hill. Carolina Population Center
Tulane University
Futures Group
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Population (Sponsor)
U.S. Agency for International Development. Bur. for Asia. India (Sponsor)
Jul 1993, xiii, 250 p.: charts, statistical tables, En
9363060

Although India, the world's second most populous country, began its national family planning (FP) program more than 40 years ago, fertility reduction has been very slow. This book examines India's FP efforts to date, the results achieved at state and national levels, and the implications of various successful experiences that may help make the FP program more effective. The chapters discuss: (1) population concerns before India's independence; (2) population policies and programs since independence; (3) historical patterns in natural fertility and nuptiality; (4) demographic and developmental trends; (5) acceptance and use of contraception; (6) modernization, contraception, and fertility decline; (7) case studies of successful fertility transition in three states (Goa, Kerala, and Tamil Nadu); and (8) critical issues and recommendations relating to FP supply and demand. The case studies indicate that, on the supply side, four major tes of action have contributed to success in FP: political will for promoting small family norms and reducing fertility; strategic planning for shifting program emphasis from sterilization to spacing methods; bureaucratic efficiency, and improved quality of services. On the demand side, rising female literacy levels and rapid reductions in infant mortality levels are two factors contributing to decline in fertility. Includes 11-page bibliography.

067

PN-ABQ-364
MF \$1.08/PC \$3.64

Sexual initiation and premarital childbearing in sub-Saharan Africa

Meekers, Dominique
Macro International. Institute for Resource Development
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Population (Sponsor)
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Health (Sponsor)
Aug 1993, iii, 26 p.: statistical tables, En
9363023

Two hypotheses have been advanced to explain the recent surge in pregnancies among unmarried adolescents in sub-Saharan Africa: (1) a breakdown in traditional social controls over adolescent sexual behavior; (2) adolescents' use of sexual relations and pregnancy to accomplish consciously set economic or social benefits. This paper uses data from Demographic and Health Surveys conducted between 1986 and 1989 in Burundi, Ghana, Kenya, Liberia, Mali, Togo, and Zimbabwe to test the validity of these hypotheses. Issues covered include the timing of first sexual intercourse, social norms regarding premarital sexual experience, the extent of premarital childbearing, and the reasons for childbearing provided by the adolescent mothers themselves. The study found only scattered support for the initial hypotheses and traces the increasing prevalence of childbearing before marriage not to earlier sexual initiation but to later marriage. The study also found that children born to unwed adolescents are severely disadvantaged, since their mothers tend to be poor, illiterate, and in poor health; the declining influence of the extended family is another strike against them. Nonetheless, for many young women premarital childbearing may be a rational decision aimed at achieving the social status of motherhood. A further finding is that adolescent contraceptive use remains low, indicating the importance of education on the subject among sexually active adolescents.

068

PN-ABQ-679
MF \$1.08/PC \$6.11

Impact of the Togolese refugee crisis on the Beninese economy

Kambou, Gerard; Lenaghan, Tom
Development Alternatives, Inc.
Harvard University. Harvard Institute for International Development
U.S. Agency for International Development. Bur. for Global Programs, Field Support and Research. Ofc. of Small, Micro and Informal Enterprise (Sponsor)
U.S. Agency for International Development. Bur. for Africa. Benin (Sponsor)
May 1993, 37 p., En
9400405; 9300095

The influx of some 86,000 refugees from Togo into Benin during the first few months of 1993 is examined in terms of its economic effects at both the macro and household levels. The macroeconomic analysis examines the short-term effects of the refugee crisis on the inflation rate, fiscal deficit, and national output, as well as on key sectors (food market, labor market and service sector, housing market, financial and capital goods markets, and the public finance and services sector). The household analysis, which is based largely on anecdotal information, addresses the short-term material situation of the refugees and their Beninese hosts (most refugees have been taken in by Beninese families rather than living in camps) in terms of lodging, sanitation, and access to food, along with the longer-term dynamics of the refugee presence, particularly the capacity of the Beninese economy to integrate the Togolese into the labor force. The main concern identified in the macroeconomic analysis is the medium- to long-term ability of the Beninese economy to absorb the increase in the labor supply represented by the refugees. The most pressing issues found in the household level analysis are fulfilling refugees' basic physical needs, the most critical being housing and sanitation. In designing relief efforts, donors should give priority to short-term relief, not encourage the refugees to remain in Benin permanently, and make sure that refugee assistance programs also address the burdens on the Beninese, who have shown

POPULATION & HUMAN SETTLEMENTS

themselves extremely generous to the refugees. Specific recommendations for USAID are presented in conclusion. (Author abstract, modified)

069

PN-ABQ-992

MF \$1.08/PC \$11.44

Survey of slums in Dhaka metropolitan area — 1991

El Arifeen, Shams, ed.; Mahbub, AQM, ed.
International Centre for Diarrhoeal Disease Research,
Bangladesh

U.S. Agency for International Development. Bur. for
Asia and Near East. Bangladesh (Sponsor)

Oct 1993, x, 70 p.: statistical tables, En

Urban FP/MCH [family planning/mother child health]
working paper, no. 11

Also known as: ICDDR,B [International Centre for
Diarrhoeal Disease Research, Bangladesh] working
paper no. 39

3880073

Results are presented of a 1991 survey of slums (defined as areas with substandard housing, extreme population densities, and poor sewerage and water supply) in the Dhaka metropolitan area. The report includes: (1) a general profile of slums and slum dwellers in terms (inter alia) of land ownership patterns, household size, population density, and the topography of slum sites; (2) patterns and growth of slum settlements, covering the spatial distribution of slums, sources of slum populations, and the stability of slum and squatter settlements; and (3) slum infrastructure, with emphasis on quality of housing, access to water, sewers, electricity, and gas, and access to primary schools. The survey identified 2,156 slums, 81% of which had been established since 1971, the year Bangladesh became independent. Of the total, 75% were on private land, although slums on public lands were larger and had a more stable population. While acknowledging the difficulties of documenting slum conditions, the report finds environmental conditions in slums to be extremely poor, characterized by very high population density (225,000/sq km), poor housing (93% of houses were constructed of tin,

wood, bamboo, or jhupri), and proneness to flooding. On the other hand, access to electricity and safe drinking water was high, especially in the private slums, although the same areas generally lacked primary schools. Includes 40 statistical tables.

070

PN-ABR-090

MF \$1.08/PC \$3.51

Ideal family size: a comparative study of numerical and non-numerical fertility desires of women in two sub-Saharan African countries

Olaleye, David O.

Macro International Inc.

U.S. Agency for International Development. Bur. for
Global Programs, Field Support, and Research. Ofc.
of Health, Population, and Nutrition (Sponsor)

Dec 1993, 25 p.: charts, statistical tables, En

DHS [demographic and health surveys] working papers,
no. 7

9363023

Recent survey findings from Asia and sub-Saharan Africa indicate that a substantial proportion of women are unable to quantify their desired family size. This study answers two significant questions that arose from these

Women who responded that family size was "up to God" are more likely to want a larger number of children and less likely to approve of family planning or adopt behavior that produces small families.

findings. The first is whether women who report non-specific responses are different from those who give specific numerical responses in ways that are likely to affect their fertility and family planning behaviors, and further, whether omitting them from analyses biases the results. The second is whether the survey techniques tend to elicit these non-numeric responses. The first question is ana-

lyzed by using data from Ghana and from Ondo State, Nigeria. The second is examined using quantitative survey data and qualitative data from a focus group study among Yoruba women in Nigeria. Evidence shows that women who responded that family size was "up to God" differ from those who gave specific numeric responses in both fertility and family planning behaviors. The first group of women are more likely to want a larger number of children and less likely to approve of family planning or adopt behavior that produces small families. Qualitative data show that women who gave "up to God" responses are likely to express their fertility goals numerically if the demand for children were to be accessed in terms of costs of childbearing. The study concludes that the "up to God" response cannot be excluded from analysis of family size desires. (Author abstract, modified)

071

PN-ABR-377

MF \$1.08/PC \$6.37

Marriage and entry into parenthood

Westoff, Charles F.; Blanc, Ann K.; Nyblade, Laura
Macro International Inc.
U.S. Agency for International Development. Bur. for
Global Programs, Field Support, and Research. Ofc.
of Health, Population, and Nutrition (Sponsor)
Mar 1994, vi, 41 p.: charts, statistical tables, En
Demographic and health surveys comparative studies,
no. 10
9363023

Most fertility in the developing world occurs within marital unions, so the age at which women enter marriage and the length of marriages directly influences fertility rates. This report compares statistics on age of marriage and first birth for women in 37 countries participating in the Demographic and Health Survey (DHS) program. The document is divided into seven sections, including sections that compare DHS countries on several measures of current marital status and marital stability, exposure to childbearing among never-married women, age at marriage, and age at first birth. The study notes wide statistical variation both within and between world regions, but

draws several conclusions. (1) In most of the countries studied, the average woman is married by her early 20s and has a first birth shortly thereafter. The majority of women remain in the same marriage throughout their lives. (2) Rural women and women with less education tend marry and give birth earlier than their urban, better educated counterparts. (3) In sub-Saharan Africa, particularly West Africa, substantial portions of women are in polygynous marriages. (4) In many places, marriage is not a prerequisite for childbearing; in 7 of the 37 study countries, 20% or more of never-married women have given birth. (5) There is a tendency in many countries for younger women to marry later and have their first birth later than older women; this is true in Northern Africa, Indonesia, Sri Lanka, and Thailand, and in several Latin American countries. (6) Study results, especially from Botswana and Namibia, show that standardized questions about marriage, such as those used in DHS survey, are not always adequate for capturing the range of sexual unions in a population. Includes references.

072

PN-AAX-273

MF \$2.16/PC \$18.07

Evaluation of A.I.D. family planning programs: Tunisia case study

Rea, Sam; Martin, Ray; et al.
U.S. Agency for International Development. Bur. for
Policy and Program Coordination. Center for
Development Information and Evaluation
Oct 1993, xv, 71 p. + 10 appendices: charts, statistical
tables, En
A.I.D. technical report, no. 15
Summary highlights: PN-ABG-018

A.I.D.'s contribution to Tunisia's family planning program over the past 25 years — about \$50 million — has been significant for a country of only 8 million people. This report analyzes the effects of that contribution. Section II reviews Tunisia's social and economic climates and their relationship to family planning from the 1950s to the present. Section III provides a component-specific review of the national program, while its overall effectiveness, efficiency, sustainability and long-term impact are dis-

POPULATION & HUMAN SETTLEMENTS

cussed in Sections IV and V. Among the successes of the program, detailed in Section VI, are that it: dramatically reduced fertility and abortion rates, as well as government expenditures on health and education; effectively expanded use of modern contraceptive methods (especially IUDs and female sterilization), the access of poor women to modern methods, and overall program coverage; and was cost-effective. A.I.D.'s contribution to this effort focused on: (1) diversifying the modes of service delivery through mobile units and a social marketing campaign, thereby increasing program access; (2) supporting training and TA in highly effective clinical methods, thereby enhancing contraceptive prevalence; (3) improving health outreach via extensive training of professionals and field workers in clinical methods, management, and service delivery, including IUD provision; and (4) enhancing institutional capacities by supporting the establishment of training centers. Less positively, as of 1990, when A.I.D. funding terminated, the Agency had not contributed to the program's financial sustainability. A price increase was needed for the contraceptive social marketing program to increase profits and reflect real costs, and the program had not been privatized; nor had A.I.D. supported analyses or pilot programs to test cost-recovery schemes. However, A.I.D. assistance may have reduced the budget necessary for the public program in the future.

(IUIDP), and plans to provide an additional \$125 million under a new HG project, Municipal Finance for Environmental Infrastructure. This study addresses the question of how to ensure that the new project meets the legal requirement that HG funds benefit households below the national median income. The study suggests, first of all, that while the IUIDP has made major contributions to improved living conditions for lower-income families in urban centers, it can and should do more in this regard. Recommendations are to: (1) require an explicit focus on poverty alleviation, and the participation of the poor in preparing infrastructure plans; (2) eliminate constraints on infrastructural investments by reducing procedural bottlenecks, promoting private sector participation in infrastructure provision, and upgrading local governments' capacities to generate and spend revenues; and (3) promote new land development on the urban fringe. Secondly, the study finds that planned HG expenditures will benefit the poor, but suggests some adjustments. USAID should (1) support further data analyses to better understand how infrastructure serves different income groups and how the benefits of new infrastructure are distributed, and (2) consider using HG funds to support environmental infrastructure for low-income beneficiaries of urban renewal and area development projects.

073

PN-ABQ-219

MF \$1.08/PC \$6.37

Urban infrastructure and poverty alleviation in Indonesia

Kingsley, G. Thomas

Urban Institute

U.S. Agency for International Development, Bur. for
Private Enterprise, Ofc. of Housing and Urban Pro-
grams (Sponsor)

Oct 1993, vii, 41 p.: statistical tables, En
9401008

Mixed media — accompanying diskette not available.

USAID provided \$120 million in Housing Guaranty (HG) loans between 1988 and 1993 to support Indonesia's Integrated Urban Infrastructure Development Program

POPULATION & HUMAN SETTLEMENTS

074

PN-ABQ-472

MF \$1.08/PC \$7.41

Mortgage pricing in Russia: a methodological introduction

Lea, Michael J.; Ravicz, R. Marisol
Urban Institute

U.S. Agency for International Development. Bur. for
Private Enterprise. Ofc. of Housing (Sponsor)

U.S. Agency for International Development. Bur. for
Europe and the New Independent States. Russia
(Sponsor)

Jul 1993, 53 p.: charts, statistical tables, En
From planning to markets: housing in Eastern Europe
1100008

Mortgage pricing in Russia is complicated by a lack of experience and legal basis for this type of lending, as well as an unstable economic environment. A methodology for pricing residential mortgages in the Russian context is presented. The discussion and examples are tailored to the Deferred Adjustable Instrument for Russia (DAIR), but could be applied to a variety of instruments. The manual begins with a discussion of the general theory of mortgage instrument pricing and then provides detailed explanations and examples of how to determine the key components of a mortgage price — credit risk, interest-rate risk, options risk, spread risk, liquidity risk, operating costs, and the profit spread. For each component of the mortgage price, the manual discusses how the pricing is handled in Western countries and how it might be handled in Russia. Also, a methodology is presented for estimating component values when historical information is unavailable. Appended are summaries of the DAIR default risk pricing model and interest rate risk pricing model. Includes references.

075

PN-ABQ-790

MF \$1.08/PC \$3.25

Indonesia: housing sector assessment

Diamond, Douglas

Research Triangle Institute

U.S. Agency for International Development. Bur. for
Asia. Regional Housing and Urban Development Ofc.
(Sponsor)

Oct 1993, 23 p., En

Building on the findings of the 1988 Urban Institute assessment, this document provides an updated view of Indonesia's housing sector. In the years since that study, real incomes have risen, and housing consumption has grown. As in 1988, the informal sector meets much of this demand and has proven very adept at providing housing commensurate with the purchasing power of the populace. It has not been able to provide the necessary infrastructure, however: water, sanitation, drainage, and sewer facilities lag far behind development. Additionally, reliance on the informal sector has kept credit from playing a significant role in housing acquisition. In the formal housing sector, the private sector has become increasingly important, but the legal and institutional framework needed to support large-scale, low-cost formal housing construction by the private sector is not yet in place. The most important issue facing the Indonesian government is to facilitate the process whereby the private sector replaces the public sector in formal housing development, and formal development replaces informal development. To do this, the government needs two kinds of policy advice: detailed advice on issues such as land policy, infrastructure standards, secondary mortgage markets, and alternative mortgage instruments; and macro-level advice on the efficient role of the public sector in housing development.

ENVIRONMENT AND NATURAL RESOURCES

076

PN-ABQ-119
MF \$1.08/PC \$6.50

Profile of the environmental business sector in Tunisia

Baouendi, Abdelkader
Chemonics International Consulting Div.
U.S. Agency for International Development. Bur. for
Near East. Ofc. of Development Resources (Sponsor)
U.S. Agency for International Development. Bur. for
Near East. Tunisia (Sponsor)
Sep 1993, 46 p.: statistical tables, En
3980365

One of a series of environmental market profiles of Near East countries, this report describes investment opportunities in seven areas of Tunisia's environmental business sector: sanitation, energy control, solid wastes, anti-desertification efforts, drinking water, industrial pollution control, and water resources. According to the report, the best opportunities are in areas that the Government of Tunisia, still the chief contractor, considers priorities. Water resources are of particular importance, as is evident from two national programs — a 10-year program to develop new water resources and a perhaps even longer program to protect existing water resources. Prospects in the energy sector, where plans focus on renewable energy development, are not encouraging. Tourism, however, will require efforts to improve tourist locations through treatment of household and industrial wastewater discharged into the ocean through wadis. Municipal priorities find expression in a national program to improve the quality of life through cleaner cities, proper household waste collection, rational removal of solid wastes, sanitation for cities lacking wastewater treatment systems, and improvements in neighborhood infrastructure. Also planned is a program to combat industrial pollution. All of these programs will require services related to studies, guidance, and follow-up. The value of these services is estimated at 10-15% of the total value of the projected programs.

077

PN-ABQ-120
MF \$1.08/PC \$11.05

Profile of the environmental business sector in Morocco

Westfield, James D.; Gorden, Morton; Mueller-Vollmer, Jan
Chemonics International Consulting Div.
U.S. Agency for International Development. Bur. for
Near East. Ofc. of Development Resources (Sponsor)
U.S. Agency for International Development. Bur. for
Near East. Morocco (Sponsor)
Sep 1993, ii, 32 p. + 7 appendices: charts, En
3980365

Due to increased environmental awareness, the environmental market in Morocco will reach a cumulative \$5.2 billion by the year 2011, most of which will be spent on wastewater treatment and collection. In addition, Morocco is diversifying its product sources away from its traditional French suppliers, and liberalizing important aspects of its economy, allowing more foreign ownership and expatriation of profits. Against this background of change, this document discusses environmental market developments of interest to American exporters and investors. To assess the potential of the current environmental sector, Project in Development and the Environment (PRIDE) interviewed 43 environmental companies. The survey summary shows that all of those interviewed agree that the regulations and standards needed to drive the market will be forthcoming, and forecast much expansion and diversification. They do not, however, agree on what is the most serious environmental problem in Morocco, but when combining their responses (air pollution, surface water, ground water, and coastal pollution), it is clear that air and water are the primary concerns. Wastewater treatment and collection will lead the way in dollar volume, but several other markets will grow as well. The report includes market projections for environmental business in the following subsectors: (1) municipal wastewater; (2) industrial wastewater; (3) waste recycling; (4) water purification; (5) municipal solid and hazardous

ENVIRONMENT AND NATURAL RESOURCES

waste collection and disposal; (6) renewable energy; (7) air and water monitoring and testing; (8) air pollution control; and (9) environmental consulting.

078

PN-ABQ-121
MF \$1.08/PC \$12.61

Profile of the environmental business sector in Jordan

Westfield, James D.; Mueller-Vollmer, Jan
Chemonics International Consulting Div.
U.S. Agency for International Development. Bur. for
Near East. Ofc. of Development Resources (Sponsor)
U.S. Agency for International Development. Bur. for
Near East. Jordan (Sponsor)
Sep 1993, 52 p. + 10 appendices: charts, statistical
tables, En
3980365

One of a series of environmental market profiles developed for the Project in Development and the Environment (PRIDE), this report describes Jordan's environmental business sector, with a focus on eight types of goods and services: (1) municipal water supply and wastewater treatment equipment and design, construction, and operation; (2) industrial wastewater treatment and prevention, and process materials reuse; (3) water purification and conservation equipment and services for industrial, commercial, and domestic use; (4) environmental monitoring and testing; (5) municipal solid and hazardous waste collection and disposal; (6) waste recycling services and equipment; (7) agricultural waste recycling; and (8) mobile and stationary source air pollution control equipment and services. The paper describes each environmental market segment, including information on products and services, potential clients, market demand, supply, competition, ownership, and market entry barriers and strategies. Also discussed are the conditions necessary for success in the sector: market awareness and information, increased environmental regulation, participation by foreign companies, financial support for start-up costs, removal of barriers to market entry, privatization, training, and access to new technologies. The study concludes that the overall

market for environmental goods and services in Jordan over the next 5 years will be small and thus best suited to local firms, in some cases with U.S. or other foreign partners. Appendices provide further details on Jordan's environmental problems, environmental regulatory framework, and donor programs, and a brief bibliography.

079

PN-ABQ-123
MF \$1.08/PC \$4.81

Bolivia: environmental assessment of insecticides as residual sprays for malaria control

Hobbs, Jesse
Medical Service Corp. International
U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Health (Sponsor)
Oct 1993, 33 p., En
VBC report no. 82211
9365948

DDT, once widely used for anti-malarial home spraying in Bolivia, is no longer considered environmentally acceptable, and the search for alternatives is underway. This assessment analyzes Bolivia's trial use of the pyrethroids lambda cyhalothrin and deltamethrin as residual house sprays, and identifies health, safety, and environmental issues relating to the proposed use. According to the report, the anticipated short- and long-term effects of the insecticides on humans, domestic animals, birds, fish, honeybees, wildlife, and the abiotic environment would be minimal compared with the potential benefits of malaria control. This conclusion is based on the relatively small quantities to be used and the contained nature of the use (intra-domiciliary spraying), and assumes that recommended staff training, safety precautions, mitigating measures, and monitoring are fully implemented. A detailed mitigation plan is presented to further minimize acute poisoning of spray crews, inhabitants, and domestic animals; contamination of surface and ground water; and poisoning of fish, birds, and other wildlife. The plan includes recommenda-

ENVIRONMENT AND NATURAL RESOURCES

tions for training, use of protective clothing, education, and proper disposal of rinsate, waste, and empty containers. (Author abstract, modified)

080

PN-ABQ-490
MF \$3.24/PC \$26.65

Final report: Eritrea coastal and marine resources assessment and project identification

Rowntree, John T.; Moussalli, Elie I.; et al.
Resources Development Associates International, Inc.
International Resources Group, Ltd.
U.S. Agency for International Development. Bur. for Africa. Eritrea (Sponsor)
Oct 1993, v.p.: ill., maps, statistical tables, En 2980249

Eritrea's coastal and marine resources have significant development potential, according to this assessment. Artisanal fishing in the Red Sea, particularly in the Dahlak Islands Archipelago, could provide employment to several thousand fishers, add to the domestic food supply, and bring in substantial foreign exchange through exports to regional markets; the Eritrean coast also has strong tourism potential, again, particularly in the Dahlak Island region. The main constraint to the sustainable development of Eritrea's fisheries and tourism industries is the lack of a well-staffed coastal and marine resources management system. The assessment presents a detailed, comprehensive plan for a much-needed, 3-year, donor-supported project to help Eritrea's Ministry of Marine Resources (MMR) establish and maintain a fisheries assessment and management system for its Red Sea fishery, an integrated coastal resources management system, beginning with the Dahlak Islands Archipelago, and a regional multiple use marine resources management plan for the Archipelago. The project design is modular, so that each of the major components could be addressed separately or sequentially. In addition to this large, multi-year program, the assessment describes several small, targeted, high-payoff activities which could help the MMR begin establishing its capabilities to monitor, regulate, and manage its coastal

and marine resources, as well as identify potential private or international donor investment prospects. Includes references and a list of contacts. (Author abstract, modified)

081

PN-ABQ-597
MF \$2.16/PC \$19.63

Profile of Ecuador's coastal region

Epler, Bruce; Olsen, Stephen
University of Rhode Island. Coastal Resources Center
Ecuador. Ministry of Energy and Mines. Directorate General of the Environment (Sponsor)
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Environment and Natural Resources (Sponsor)
U.S. Agency for International Development. Bur. for Latin America and the Caribbean. Ecuador (Sponsor)
1993, xi, 139 p.: charts, maps, statistical tables, En
Technical report series / international coastal resources management project [CRMP], no. TR2047
9365518

The rich natural resources that have made Ecuador's coastal region a center of progress for the past 35 years are being threatened by unsustainable exploitation practices. This profile, an updated, English-language synthesis of two earlier reports (PN-AAZ-061 and PN-ABJ-936), provides a historical, demographic, and economic overview of the region; reviews its natural resource base and development activities (agriculture, forestry, fisheries, shrimp cultivation, manufacturing, tourism, ports, mining, and petroleum and gas), and describes the major components, strategies, and implementation mechanisms of the country's coastal resource management program. The following major problems are identified. (1) Dumping of urban and industrial wastes and increased use of agrochemicals are degrading the region's water resources. (2) Shrimp mariculture has destroyed nearly all the mangrove habitat in some estuaries, threatening wild shrimp populations, increasing flooding and erosion, and reducing the estuaries' ability to absorb pollutants. (3) Lax regulations, increasing demand, and intensive fishing techniques are significantly reducing nearshore and offshore fish stocks. (4) Neither

ENVIRONMENT AND NATURAL RESOURCES

food production nor public services (potable water, waste treatment, schools, and basic health services) are keeping pace with population increases. (5) Construction of upstream dams threatens both estuarine habitats and water quality. (6) Conflicts among incompatible activities, such as fish processing and tourism, are all too apparent. (7) Poor siting of coastal structures has increased beach erosion and led to property loss. (8) Coastal development often fails to take into account the periodic but unpredictable "El Nino" phenomenon, which triggers intense rainfall and flooding. (9) Ecuador lacks the research tradition and expertise required to tackle coastal zone issues.

082

PN-ABQ-758

MF \$1.08/PC \$4.94

Implementation of The Gambia environmental action plan

Gustafson, Daniel J.; Clifford, Veronica
Management Systems International, Inc.
Abt Associates, Inc.
Development Alternatives, Inc.
U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Economic and
Institutional Development
U.S. Agency for International Development. Bur. for Africa.
Ofc. of Analysis, Research and Technical Support
U.S. Agency for International Development. Bur. for
Africa. Gambia (Sponsor)
Feb 1994, 32 p. + annex, En
9365451

National Environmental Action Plans (NEAPs) have become a major mechanism for promoting environmentally responsible and sustainable development in Africa. This study examines management and institutional issues affecting implementation of The Gambia's NEAP, and draws lessons that may be applicable in other countries. After a description of The Gambia's NEAP, the context for its implementation is assessed, using an analytic framework that identifies six variables representing the optimal conditions for policy implementation: (1) clear and consistent policy objectives; (2) accurate identification of

principal factors and linkages influencing policy outcomes, including specification of target groups and incentives; (3) an implementation structure that maximizes the compliance of implementing agencies and target groups; (4) management capacity and commitment; (5) stakeholder support and a neutral or supportive legal system; and (6) socioeconomic and political stability. Potential implementation problems revealed in this assessment center around the issues of coordination and cooperation, according to the report. Recommendations are made for emphasizing coordination, clearly specifying targets, periodically reviewing the implementation process, disseminating rules and procedures to all involved, incorporating NGOs into existing coordination mechanisms, and enhancing the role of the private sector. General lessons that may be drawn from the Gambian experience are offered in conclusion.

083

PN-ABQ-960

MF \$1.08/PC \$7.93

African NGO participation in natural resource policy reform

Swartzendruber, J. F.; Njovens, Bernard Berka
World Resources Institute. Center for International
Development and Environment
U.S. Dept. of Agriculture. Forest Service
U.S. Dept. of Agriculture. Ofc. of International Cooperation and Development
U.S. Agency for International Development. Bur. for
Global Programs, Field Support and Research. Ofc. of
Environment and Natural Resources (Sponsor)
U.S. Agency for International Development. Bur. for
Africa. Ofc. of Analysis, Research and Technical
Support (Sponsor)
Nov 1993, 59 p., En
9365519

Despite their rapid growth in recent years, indigenous African NGOs have generally not participated in policy reform activities supported by donors such as USAID. This report examines issues pertinent to increasing the ability of indigenous NGOs to contribute to policy reform

ENVIRONMENT AND NATURAL RESOURCES

in the natural resource sector. Typically, the role of NGOs is seen as limited to implementing grassroots activities, and there is considerable skepticism among governments and donors concerning the ability of NGOs to participate in environmental policy analysis. Donors are reluctant to

Democracy and governance programs should seek to strengthen local capacity to assess and modify environmental policies. USAID, which is a key player in both the natural resource management and governance fields, has a unique opportunity to link the two in Africa.

fund analytic research projects by NGOs, while governments resist opening the policy-making process to a broader base of participation. However, this limited view stands in contrast to contemporary efforts to make development a more participatory exercise and expand the role of civil society in Africa. Donors should steadily press African governments to continue the process of strengthening civil society, including NGOs. Further, they should expand their funding of NGO activities beyond grassroots service delivery to include policy research and public awareness campaigns. Democracy and governance programs should seek to strengthen local capacity to assess and modify environmental policies. With adequate support, NGOs could play a useful role in analytic and advocacy functions, and thus be active in strengthening civil society. USAID, which is a key player in both the natural resource management and governance fields, has a unique opportunity to link the two in Africa by stressing the cross-cutting role of NGOs; something the Agency should consider in designing NGO umbrella projects and other projects with an NGO component.

084

PN-ABR-189
MF \$2.16/PC \$13.13

Pollution prevention implementation in developing countries

Hirschhorn, Joel S.
Duke University. Center for Tropical Conservation
U.S. Agency for International Development. Bur. for
Program and Policy Coordination. Ofc. of Policy
Development and Program Review (Sponsor)
May 1993, 83 p. + appendix, En
9300091

Program managers are offered a practical 2-step approach to pollution prevention programming in this report. Step One includes classification of the target country into one of three levels of economic development: basic industrialized, denoting a country whose economy is limited in size, scope, and complexity; urban industrialized, in which a country produces several primary materials and substantial energy, and is less engaged in agricultural activity; and competitive industrialized, denoting a country whose economy is based on the substantial production and export of goods through modern technologies. After the target country's economic development level has been identified, program managers can proceed with Step Two, the decision to pursue one of three goals: pollution awareness and the commitment of industry to pollution prevention, perhaps best suited to the capacities of basic and urban industrialized countries; and a waste-free, pollution-free industrial sector, best suited to competitively industrialized countries. The first two goals may be reached in less than 5 years, while the third should be considered an indefinite or permanent effort. The report provides examples of pollution prevention activities in four areas appropriate to USAID assistance programs: technical assistance; policy assistance, government information systems, and training and education. Case studies applying the 2-step approach to Egypt, Poland, Mexico, and Thailand are also offered; each of the countries is indexed to one of the three development levels to illustrate

ENVIRONMENT AND NATURAL RESOURCES

how an appropriate pollution prevention program can be conceptualized for a country's level of development. Includes references.

085

PN-ABQ-448
MF \$1.08/PC \$11.96

Directory of international training and educational opportunities in agroforestry

Muniz-Miret, Nuria; Bournes, Julie
U.S. Dept. of Agriculture. Forestry Support Program
U.S. Dept. of Agriculture. Forest Service
U.S. Dept. of Agriculture. Ofc. of International Cooperation and Development
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Environment and Natural Resources (Sponsor)
Jan 1993, viii, 80 p., En
9365519

In the last decade or so, leading institutions around the world have been responding to the need for agroforestry education and training at all levels. This directory lists educational opportunities in agroforestry ranging from long-term certificate or diploma programs to short professional courses, including programs in Africa, Asia, Australia, Latin America, Europe, the United States, and Canada. Two of the institutions listed offer graduate degrees in agroforestry, while 13 allow graduate level specialization in the subject. Training courses take a variety of approaches to agroforestry, some being more specialized than others and some requiring field work as well as classroom studies. In all, 45 institutions are listed, including 15 in the United States. All entries include a contact name, program/course descriptions, and information on the institutional setting and facilities, costs, and any special requirements for foreign students.

086

PN-ABQ-484
MF \$3.24/PC \$37.05

Acacia mangium: growing and utilization

Awang, Kamis, ed; Taylor, David, ed.
Winrock International. Institute for Agricultural Development
U.N. Food and Agriculture Organization
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Environment and Natural Resources (Sponsor)
1993, xiii, 280 p.: ill., charts, statistical tables, En
MPTS [multipurpose tree species] monograph series, no. 3
9365547

With deforestation in the Asia-Pacific region progressing at the rate of 4.4 million ha per year, many countries have adopted plantation forestry using fast-growing species as a way to sustain the commercial supply of tree products and reduce pressure on natural forests. *Acacia mangium* is playing a large role in this development, especially in Indonesia and Malaysia, due to its versatility and its ability to recapture grasslands dominated by the noxious weed, *Imperata cylindrica*. This monograph consolidates information on *A. mangium* from published literature, unpublished reports and studies, and observations from those familiar with the species. It also points out gaps in our knowledge of *A. mangium*, e.g., regarding silviculture schedules and management of subsequent rotations. Chapters discuss *A. mangium's* taxonomy, distribution, biology, and use as an exotic; its reproductive biology; genetics and tree improvement; vegetative propagation; nursery practices; symbiotic associations; silvicultural practices; growth and yield; insect pests; diseases; properties and utilization; and economics and market prospects. Priorities for future research are included in each chapter and in the final summary. Appendices list seed supply sources and researchers engaged in the study of *A. mangium*. (Author abstract, modified)

ENVIRONMENT AND NATURAL RESOURCES

087

PN-ABQ-485
MF \$3.24/PC \$27.30

Genetic Improvement of neem: strategies for the future — proceedings of the international consultation on neem improvement held at Kasetsart University, Bangkok, Thailand, 18-22 January 1993

Read, Michael D., ed.; French, James H., ed
Winrock International. Institute for Agricultural Development
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Environment and Natural Resources (Sponsor)
1993, x, 194 p.: ill., charts, En
9365547

Lack of progress in improving neem, an increasingly important multipurpose tree species, has led to the establishment of an International Neem Improvement Network. Proceedings of the first meeting of the new network are presented in this report. Section 1 consists of four papers on neem research in its native India, while Section 2 comprises research reports from eight Asian countries — Thailand, Myanmar, Nepal, Sri Lanka, Bangladesh, Indonesia, Malaysia, Pakistan — and from Africa. Section 3 contains overview papers discussing the importance of neem to small farmers, pests and diseases of neem, the influence of genotype and environment on chemical compounds in neem, vegetative propagation, and the role that networks can play in supporting national research. Section 4, arguably the "meat" of the conference, begins with an invited paper on seed collection and handling by specialists from DANIDA and FAO and follows with a summary of working group deliberations on that paper. Section 5 opens with a discussion of technical constraints to exchanging neem seed and to establishing international provenance trials, and ends with a list of research priorities for supplemental studies. (Author abstract, modified)

088

PN-ABQ-486
MF \$3.24/PC \$34.32

Acacias for rural, industrial, and environmental development: proceedings of the second meeting of the Consultative Group for Research and Development of Acacias (COGREDA) held in Udorn Thani, Thailand, February 15-18, 1993

Awang, Kamis, ed.; Taylor, David A., ed.
Winrock International. Institute for Agricultural Development
U.N. Food and Agriculture Organization
U.S. Agency for International Development. Bur. for Research and Development. Ofc. of Environment and Natural Resources (Sponsor)
1993, v, 258 p.: ill., charts, maps, statistical tables, En
9365547

Researchers gathered at a conference in Thailand in February 1993 to examine the contributions of acacias to rural, industrial, and environmental development in the Asia-Pacific region and to identify research needs. These conference proceedings contain brief papers from 12 Asian countries — China, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Papua New Guinea, Sri Lanka, Thailand, and Vietnam — followed by theme papers discussing: (1) genetic resources of 15 tropical acacias; (2) *Acacia mangium* in Australia; (3) acacias and rural development; (4) the role of acacias in agroforestry, (5) use of acacias for fuelwood and charcoal; (6) use of *A. catechu* in a Thai cottage industry; (7) acacias in industrial development in Sumatra, (8) acacia improvement at the Sabah Softwood Company in Malaysia; (9) non-wood acacia products and uses; (10) industrial innovations in utilizing small diameter trees like acacia; (11) acacias and environmental conservation, (12) diseases of acacia, and (13) choosing the right type of acacia for different types of development. Includes references and a list of recommendations and research priorities.

089

PN-ABR-191
MF \$1.08/PC \$4.29

Considerations of the ecological foundation of natural forest management in the American tropics

Putz, Francis E.
Duke University. Center for Tropical Conservation
U.S. Agency for International Development. Bur. for
Program and Policy Coordination. Ofc. of Policy
Development and Program Review (Sponsor)
Jan 1993, 28 p., En
9300091

Natural forest management (NFM) is a land use in which commercially valuable forest products are extracted from forested areas in ways that allow retention of substantial canopy cover. This study identifies research needed to support NFM in the American tropics, with emphasis on silvicultural systems that encourage natural regeneration. The study first discusses the concept of natural resource sustainability and suggests ways in which it might be measured. Section two identifies several ecological areas critical to effective NFM in which, however, research has been slim: flower production and pollination; phenology; seed production; seed dispersal, predation, and germination; light and nutrient requirements, and responses to competition; harvesting schedules and yield estimates; seedling pathogens; susceptibility to mechanical damage; and cataclysmic disturbances. After a brief note in section three of how NFM can reduce greenhouse emissions, section four examines the reasons for the weaknesses in the knowledge base for NFM. These include, inter alia: the low esteem in which the forestry profession is held among the Latin American academic and economic elite; the tendency of the U.S. research grant system to reward basic research rather than applied or long-term studies; the excessive amount of research devoted to species of no commercial importance; the parochial nature of forestry institutions; and the failure of development agencies to adequately fund forestry research. Section five provides brief overviews of NFM projects in Mexico, Suriname, and Peru, in which very different silvicultural approaches were employed.

090

* PN-ABR-192
MF \$1.08/PC \$3.77

Can extractive reserves save the rain forest?: an ecological and socioeconomic comparison of non-timber forest product extraction systems in Peten, Guatemala, and West Kalimantan, Indonesia

Salafsky, Nick; Dugelby, Barbara L.; Terborgh, John W.
Duke University. Center for Tropical Conservation
U.S. Agency for International Development. Bur. for
Program and Policy Coordination. Ofc. of Policy
Development and Program Review (Sponsor)
1994, 24 p., En
Reprint from *Conservation biology*, v. 7, no. 1, March
1993 (p. 39-52)
9300091

**Also available from: Blackwell Scientific Publications, Inc., 3 Cambridge Center, Suite 208, Cambridge, MA 02147 USA*

Extractive reserves in tropical rain forests, in which only non-timber products are harvested, have been heralded by some conservationists as a means of maintaining biodiversity while providing income for local people. This study of extraction systems in Peten, Guatemala, and in West Kalimantan, Indonesia, leads to a more tempered conclusion, for while the Peten program was quite successful, the Kalimantan program was not. The study finds the success of an extractive reserve to be contingent on: (1) ecological conditions, including product density and temporal availability (e.g., seasonal fruits) and the sustainability both of the product and the overall ecosystem; and (2) socioeconomic and political factors, including the presence or absence of conservation incentives, product demand, etc. Nonetheless, the study concludes that extractive reserves can be highly effective as part of a broader multi-faceted land use strategy. Although the study focuses on market-oriented extractive reserves, many of the issues discussed apply as well to other land uses such as the collection of non-timber forest products for household consumption or small-scale timber extraction. Includes 5-page bibliography.

091

PN-ABR-068
MF \$2.16/PC \$18.72

Primary education for all : learning from the BRAC (Bangladesh Rural Advancement Committee) experience : a case study

Ahmed, Manzoor; Chabbott, Colette; et al.
Academy for Educational Development, Inc.
U.N. International Children's Emergency Fund
Rockefeller Foundation
U.S. Agency for International Development. Bur. for
Research and Development. Ofc. of Education (Sponsor)
1993, xxiii, 128 p. : charts, statistical tables, En
Executive summary: PN-ABQ-880
9365832

A case study is presented of the Bangladesh Rural Advancement Committee's (BRAC) highly successful Nonformal Primary Education (NFPE) program, which provides basic education to thousands of rural Bangladeshi children — especially girls — not being reached by the

formal primary education system. The NFPE program, which began in 1985 in 22 villages, has already expanded to more than 8,000 schools, serving children aged 8-16. After an introductory overview, the study examines the strengths and weaknesses of the NFPE program, covering the program's history, detailed descriptions of its individual elements, BRAC's approach to NFPE management, and the cost-effectiveness of BRAC schools. Key sources of NFPE's success are identified as the use of a low-cost, rapidly replicable model capable of reaching the most disadvantaged children, BRAC's use of surveys to target programs towards the most disadvantaged rural families, and its encouragement of family and community involvement. The next section discusses the potential for rapidly expanding the NFPE program to 15,000 schools, and in particular the possible relationship between a large-scale NFPE program and the national system of primary education. According to the report, while expansion of the program is likely to increase program costs, only extremely large increases could make the program cost-ineffective. A final section analyzes the elements of the NFPE program that might be relevant to efforts at expanding educational systems in other countries, though stopping short of offering definite conclusions in this regard.



A teacher in San Salvador supervises a TV class which teaches English.

092

PN-AAX-287
MF \$1.08/PC \$8.45

Compensatory social programs and structural adjustment: a review of experience

Kingsbury, David

U.S. Agency for International Development. Bur. for Policy and Program Coordination. Center for Development Information and Evaluation

May 1994, xii, 50 p. + attachment, En

USAID evaluation special study report, no. 72

Earlier ed.: PN-ABL-327

To alleviate the negative impacts of structural adjustment on the poor, donors and host countries have undertaken a variety of compensatory programs, including public works, social services, credit programs, and subsidies for the most vulnerable. This study examines the recent experience of the World Bank and other donors with both sectoral and multisectoral compensatory programs, and identifies lessons learned for USAID. Section 2 summarizes some of the potential effects on various socioeconomic groups of adjustment programs, and examines the economic and political justifications commonly offered for these programs. Section 3 identifies countries (mainly in Latin America and Africa) in which such programs are being implemented or planned, detailing the types of interventions, the institutions involved, and funding levels. Section 4 presents case studies from Bolivia, Ghana, Chile, Senegal, and Mexico of the major types of programs that have been implemented (USAID was one of several donors that financed the Bolivia and Ghana programs), and assesses the extent to which they benefited their intended targets. A final section presents tentative lessons learned. (1) Despite claims to the contrary, the primary objective of most of these programs was not to redress the social costs of adjustment. (2) Except in the case of redeployment and severance pay schemes for public employees, program designers have usually not thought through the implications of adjustment measures for income distribution and incorporated them into compensatory program design; nor is much attention given to the opportunity costs implications of adjustment. (3) Though multisector programs can

lend political legitimacy to the adjustment process, it is very doubtful that multidonor, multisector programs can provide short-term poverty relief; in most cases donor coordination has been lacking and performance has been very uneven. (4) Compensatory programs can be successful only if governments are committed to them, independently of donor agendas. (5) It is necessary to examine carefully the ability of existing institutions to implement short-run programs cost-effectively and rapidly and to make sure that such programs do not stigmatize the poor. (6) The long-term efficacy of emergency public works programs is probably overestimated.

093

*** PN-ABQ-620**
MF \$1.08/PC \$9.62

Welfare and poverty in Conakry: assessments and determinants

del Ninno, Carlo

Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program

Guinea. Ministry of Health and Social Affairs (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Guinea (Sponsor)

Mar 1994, vii, 60 p.: charts, statistical tables, En

Cornell food and nutrition policy program (CFNPP) working paper, no. 66

Also known as: ENCOMEC [enquete de consommation aupres des menages a Conakry] findings: bulletin no. 11

6980519

**Also available from: CFNPP Publications Dept., 315 Savage Hall, Cornell University, Ithaca, NY 14853 USA*

A clear assessment of poverty and welfare levels can be very useful as a reference point from which to monitor the effectiveness of economic reform programs. This study

uses a variety of methodologies to derive a comprehensive determination and description of the poor in Conakry, Guinea. The three most important variables used in the analysis are: (1) per capita expenditure levels; (2) per

Poverty is large and widespread in Conakry. The poor tend to have large households, live in inadequate sanitary conditions, have a large number of children with a high probability of being malnourished, and have a calorie-deficient diet made mostly of imported rice, fish, oil, and vegetables.

capita daily calorie consumption; and (3) expenditure shares. Following an introduction, the paper discusses population characteristics by expenditure classes, beginning with a general graphical description of the distribution of these variables and concluding with a description and analysis of dispersion measures. The next section discusses the derivation of poverty indicators, and gives an econometric analysis of the determination of poverty. Conclusions and appendices follow. The main conclusion is that poverty is large and widespread in Conakry. The poor tend to have large households, live in inadequate sanitary conditions, have a large number of children with a high probability of being malnourished, and have a calorie-deficient diet made mostly of imported rice, fish, oil, and vegetables.

094

PN-ABQ-709
MF \$1.08/PC \$2.34

Bio-social roles in peasant small ruminant production: the importance of children and women in secondary economic activities

Handayani, Sri Wening; Brown, Ralph B.; Valdivia, Corinne

University of Missouri at Columbia. Dept. of Rural Sociology

University of California, Davis

U.S. Agency for International Development. Bur. for Global Programs, Field Support and Research. Ofc. of Agriculture (Sponsor)

U.S. Agency for International Development. Bur. for Asia. Indonesia (Sponsor)

Oct 1993, ii, 14 p.: statistical tables, En

Small ruminant collaborative research support program.

Technical report series, no. 109

9311328

Contrary to the findings of most previous research, women are not the primary caretakers of small ruminants in Indonesia. According to this study, previous research suffered from the lack of an appropriate methodology and theoretical base. For this study, researchers used participant observation, as opposed to surveys, in order to see firsthand the specific activities and time allocations of each household member. Observations from 24 peasant households in two different areas of Indonesia reveal that women in general, and adult women in particular, actually play a minor role in small ruminant production, which is seen as a secondary economic activity and is usually entrusted to children, especially the young males. By contrast, adults, both women and men, spend the greatest proportion of their time in primary economic activities.

095

PN-ABR-075
MF \$1.08/PC \$5.59

Interplay among land law and policy, the environment, the war on drugs, narcoterrorism, and democratization: perspectives on Peru's Upper Huallaga Valley

Hendrix, Steven E.

University of Wisconsin at Madison. Land Tenure Center

U.S. Agency for International Development. Bur. for Latin America and the Caribbean. Regional Development Ofc. (Sponsor)

U.S. Agency for International Development. Bur. for Latin America and the Caribbean. Peru (Sponsor)

Jun 1993, v, 41 p., En

LTC paper, no. 150

9365453

Peru's Upper Huallaga Valley, a leading source of coca leaf, has been a focus of Peruvian and U.S. anti-narcotics efforts, which have utilized a multifaceted economic approach — a mix of repression, eradication, economic incentives (e.g., to raise other crops and/or forego coca production), infrastructural development, land titling, and efforts to curb demand. This paper provides an overview of the complex issues involved. Chapters cover: (1) background on Peru and the Valley; (2) coca production; (3) cash flow and other economic effects of coca production; (4) environmental effects of coca production; (5) the land tenure situation in the Valley before and after passage of the agrarian reform law of 1991; and (6) policy options, including legalization of production, repression, purchase of all production (followed by eradication), the land titling strategy advocated by the Institute for Liberty and Democracy (ILD), and the multifaceted economic approach. The author favors continuation of the multifaceted economic approach, stressing that success will require continued, comprehensive, and expensive efforts. Specifically rejected is the ILD land titling proposal, which, while ingenious, neglects the dominance of economic interest among

coca producers and the inhibiting presence in coca producing areas of the Sendero Luminoso (or Shining Path, a Peruvian guerilla group). Includes references.

096

PN-ABR-383
MF \$1.08/PC \$4.55

Primary school repetition and dropout in Nepal: a search for solutions

Williams, C. Howard; Karmacharya, Dibya Man; Aryal, Chuda Nath

Florida State University. Learning Systems Institute. Center for International Studies

Nepal. Ministry of Education, Culture and Social Welfare

U.S. Agency for International Development. Bur. for Global Programs, Field Support, and Research. Ofc. of Education (Sponsor)

U.S. Agency for International Development. Bur. for Asia and Near East. Nepal (Sponsor)

Oct 1993, : charts, statistical tables, En

9365823

Drop outs and repetition are among the most serious problems facing the education system in Nepal — fewer than half the children beginning Grade 1 finish primary school, with most dropping out after the first or second grade, usually before attaining basic literacy skills. This study, based on interviews with students, parents, educators, and community members in 20 communities, looks at family, school and community factors that contribute to grade repetition and student dropout and presents 21 possible strategies to minimize these problems. The strategies are grouped by category: low cost/politically easy; low cost/politically more difficult; high cost/politically easy; and high cost/politically more difficult. The following strategies (inter alia) were identified in consultation with Nepalese officials for implementation or further consideration: implementing standardized student performance checklists; conducting a national information campaign; supporting multi-grade schools in remote communities; restricting enrollment in Grade 1 to appropriately aged

SOCIAL SCIENCE AND PSYCHOLOGY

children; supporting instruction in local languages; and providing more scholarships for girls. Includes bibliography.

097

*** PN-ABR-420**
MF \$1.08/PC \$10.92

Poverty and food consumption in urban Zaire

Tabatabai, Hamid

Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program

U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Zaire (Sponsor)

Oct 1993, xi, 67 p.: charts, statistical tables, En Cornell food and nutrition policy program (CFNPP) working paper, no. 47

6980519

**Also available from: CFNPP Publications Dept., 315 Savage Hall, Cornell University, Ithaca, NY 14853 USA*

Zaire's economy has been deteriorating for at least a decade, and the problem is now compounded by the paralysis of the political process and the virtual cessation of international aid. This study explores the problem of poverty in urban Zaire, including Kinshasa and Bandundu Town. The analysis is based mainly on data from two household surveys carried out by the Institut National de la Statistique (INS) in 1985/86. In Kinshasa, poverty is found to have affected about a third of the population in the mid-1980's and is likely to have increased substantially since then. Poverty in Bandundu Town is estimated to have been much higher, affecting as much as 75% of the population. Household size was the characteristic most significantly associated with poverty, with larger households (10 or more members) tending to be much poorer than smaller ones (with 3 or fewer members). Households with older,

poorly educated heads, and those in outlying areas were also likely to be poorer. Gender of the household head was associated with poverty in both cities, but in a rather surprising direction: female-headed households had on average higher incomes and lower poverty incidence than male-headed households. The argument that, for a given level of resources, female-headed households tend to spend relatively more on essentials, such as food, than male-headed household was not supported. (Author abstract, modified)

098

*** PN-ABR-613**
MF \$1.08/PC \$11.44

Living standards and the determinants of poverty and income distribution in Maputo, Mozambique

Sahn, David E.; del Ninno, Carlo;

Cornell University. New York State Colleges of Human Ecology & Agriculture & Life Sciences. Div. of Nutritional Sciences. Cornell Food & Nutrition Policy Program

U.S. Agency for International Development. Bur. for Africa. Ofc. of Analysis, Research and Technical Support (Sponsor)

U.S. Agency for International Development. Bur. for Africa. Mozambique (Sponsor)

Mar 1994, 76 p.: charts, statistical tables, En CFNPP [Cornell Food and Nutrition Policy Program] working paper, no. 56

6560218; 6980519

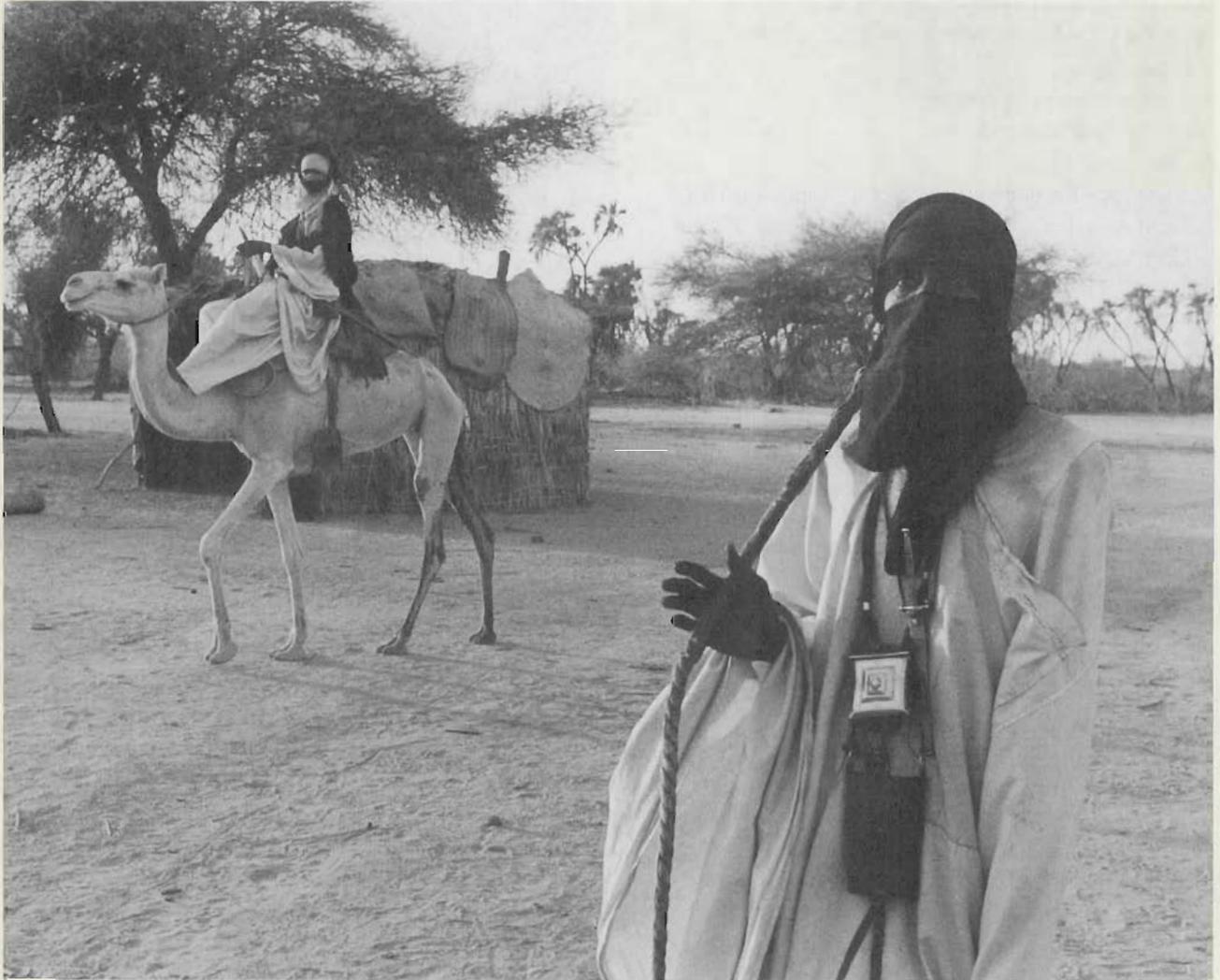
**Also available from: CFNPP Publications Dept., 315 Savage Hall, Cornell University, Ithaca, NY 14853 USA*

Despite the methodological problems of identifying the poor — households whose income is below a threshold required to meet basic needs — such identification can provide vital information to policymakers. This study uses data from a random, multipurpose survey of 1,816 households to describe living standards in Maputo, Mozambique, and attempts to define a model of poverty determination. Findings suggest that about one-third of Maputo's house-

SOCIAL SCIENCE AND PSYCHOLOGY

holds are poor, but only 10% are ultra-poor. It is clear that a combination of government policy and extraordinary donor support have maintained comprehensive health and educational services in the city. However, with half the population under age 15 and half of these younger than 7, the implications for future social and employment needs are staggering. In defining who the poor are, the study finds

that household size, composition, and education of the members are the most important determinants of poverty. Other characteristics, such as gender and occupation of the household head, and the health and nutritional status of the children, were not useful for distinguishing between poor and non-poor. The study's implications for social policy are discussed briefly. Contains 8 figures and 35 tables.



Touareg refugees in Niger.

099

PN-ABQ-202
MF \$2.16/PC \$15.47

Introduction to sustainable tourism (ecotourism) in Central America

Ashton, Ray E., Jr.; Ashton, Patricia S.
New York Zoological Society. Wildlife Conservation International
Caribbean Conservation Corp.
Water and Air Research, Inc.
University of Florida
U.S. Agency for International Development. Bur. for Latin America and the Caribbean. Regional Ofc. for Central American Programs (Sponsor)
Feb 1993, vii, 67 p. + 5 appendices : charts, En
5960150

In the early 1990's, *Paseo Panteo* ("Path of the Panther"), a regional wildlands consortium stemming from A.I.D.'s RENARM (Regional Environmental and Natural Resources Management) project, began a program to develop a strategy of sustainable ecotourism for Central America, i.e., tourism that would support the conservation of the protected areas on which tourism depends while remaining economically profitable. This book provides an overview of the multiple issues involved in sustainable ecotourism for all concerned stakeholders — government officials, protected area managers, local tourism operators, organized labor committees, and community representatives. The subjects discussed include: the status of both conservation and ecotourism in Central America; the goals of ecotourism and its impacts on natural resources; the use of tourism to subsidize natural resource conservation; the cultural and socioeconomic impacts of tourism; and planning for tourism development and developing systems for evaluating its impacts. A key element of *Paseo Pantera's* overall strategy involves the establishment of National Environmental Councils composed of the aforementioned stakeholders; this process is discussed both in the body of the book and in the appendices.

100

PN-ABR-155
MF \$1.08/PC \$9.23

Nature tourism in Asia : opportunities and constraints for conservation and economic development

Nenon, Julia; Durst, Patrick B.
U.S. Dept. of Agriculture. Forest Service
U.S. Dept. of Agriculture. Ofc. of International Cooperation and Development
U.S. Agency for International Development. Directorate for Finance and Administration. Ofc. of Information Resources Management (Sponsor)
Apr 1993, iv, 67 p. : maps, statistical tables, En
9365519

This document presents case studies of nature tourism in four Asian countries — Nepal, Thailand, Indonesia, and Sri Lanka. An introductory study provides a general review of the opportunities and constraints associated with nature tourism development. On the positive side, nature tourism, when pursued intelligently and with foresight, has the potential to generate economic benefits while contributing to environmental conservation. On the negative side, nature tourism poses numerous risks in regard to environmental degradation, economic leakages, low earnings capacity, and uncertain social impacts. Weighing these pro's and con's requires an objective assessment in a given concrete setting. To be successful, nature tourism must reconcile the interests of the various stakeholders involved — the tourists themselves, local landowners and users, government agencies, tour operators, investors and concessionaires, and NGOs. A public-private coordinating council dialogue devoted to this purpose has been found helpful in some cases. Donors like USAID can support the development of nature tourism in several ways: by carefully weighing the benefits and costs of various development scenarios; by formulating an overall nature tourism strategy; and by assisting specific projects in the areas of infrastructure, training, marketing and promotion, and fiscal, reserves, and general tourism management.

SUBJECT AND GEOGRAPHIC INDEX

- Acacia albida trees, 086, 088
Administration of law, 002
Adolescent mothers, 063, 067
Adult education, 053
Adverse health practices, 050
Africa, 053, 055, 056, 070, 082, 083
Africa south of Sahara, 020, 051, 057, 058, 062, 063, 064, 065, 067
Agribusiness, 037
Agricultural credit, 035
Agricultural economics, 035, 036, 039
Agricultural education, 085
Agricultural enterprises, 037
Agricultural policy, 034, 035, 036, 037, 039
Agricultural populations, 045
Agricultural prices, 042
Agricultural product marketing, 037
Agricultural production, 036
Agricultural productivity, 035
Agricultural research, 038, 041, 043, 086, 087, 088, 089
Agricultural training, 085
Agriculture, 027
Agroforestry, 039, 085, 086, 087, 088
Albania, 042
America, 089
Andean region, 038
Animal husbandry, 043, 094
Aquaculture, 044
Aquatic resource management, 080
Artisanal fisheries, 080
Asia, 029, 086, 087, 088, 100
Bangladesh, 003, 069, 091
Barriers to family planning, 062
Benin, 068
Black markets, 040
Bolivia, 079
Botswana, 064
Breeding methods, 038
Burundi, 056, 067
Business enterprises, 029, 076, 077, 078
Business support services, 013, 031
Cameroon, 034
Cape Verde, 008
Capital assistance, 014, 015
Caribbean, 024
Case studies, 066
Cash transfers, 001
Cassava, 041
Central America, 024, 099
Child delivery, 050
Child health care, 046, 047, 048, 056
Child mortality, 065
Child survival activities, 046, 048, 052, 057, 058
Cities and towns, 009, 025, 097
Civil servants, 012
Coastal fisheries, 080
Coastal waters, 080, 081
Coasts, 080, 081
Coca, 095
Cocaine, 095
Colombia, 002
Communes, 025
Community health care, 053
Continuing education, 054
Contraceptive prevalence, 062, 066, 072
Coordinating, 082
Cost benefit analysis, 015, 036
Crop diversification, 095
Crop eradication programs, 095
Crop production, 037, 095
Cultural anthropology, 044
Data analysis, 010
Data collection, 010
Debt repayment, 035
Decentralization, 008, 009, 025
Defense facilities, 018
Defense operations, 018
Demand, 078
Democracy, 006
Democratization, 006
Demographic analysis, 064
Demographic data collection, 065
Demographic research, 071
Demographic surveys, 067, 071
Determinants of fertility, 063, 065, 067
Devaluation, 026
Development assistance, 005
Development policy, 005
Development program evaluation, 055
Development program management, 055
Development program planning, 055
Development project design, 010, 031
Development project implementation, 051
Development project management, 010
Development project planning, 051
Development projects, 061
Development strategies, 002, 005, 031, 100
Disadvantaged groups, 091
Disaster management, 003
Disaster planning, 003
Disaster preparedness, 003
Disaster relief, 003
Discrimination, 012
Disease prevention and control, 019, 047, 048, 056, 057, 058
Disease treatment, 058
Domestic government programs, 072
Ecology, 089
Economic analysis, 004, 015, 036, 093
Economic aspects, 011
Economic assistance, 001
Economic demographic interaction, 064
Economic growth, 014, 022, 027
Economic impact, 007, 014, 019, 024, 028, 068, 092
Economic infrastructure, 014, 015
Economic legislation, 004
Economic models, 026, 027, 028, 098
Economic policy, 004, 017, 027, 028, 030
Economic recovery, 001
Economic reform, 021, 028, 030
Economic research, 098
Economic sectors, 004, 020
Economic stabilization, 007
Ecotourism, 099, 100
Ecuador, 081

SUBJECT AND GEOGRAPHIC INDEX

- Educational delivery, 091
Educational innovations, 091
Educational policy, 096
Egypt, 014, 015, 017, 061
El Salvador, 035
Elections, 006
Electoral systems, 006
Employment, 011, 012, 092
Entrepreneurs, 032
Environmental degradation, 011, 036, 081
Environmental legislation, 078
Environmental management, 077, 078, 084, 088
Environmental planning, 082
Environmental policy, 082, 083
Environmental protection, 061, 079
Environmental technologies, 076
Epidemics, 056
Epidemiology, 057
Equity, 007
Eritrea, 009, 080
Expenditures, 093
Export promotion, 013, 016, 017, 021, 022, 029
Exports, 016, 021, 026, 029
Family planning, 070
Family planning behavior, 062, 070
Family planning policy, 066
Family planning promotion programs, 062, 072
Family planning services, 066, 072
Family planning surveys, 070
Family size, 070
Farmers, 035
Farming systems, 094
Female labor, 012
Fertility, 063, 065, 066, 071
Fertility decline, 065, 066
Fertilizer distribution, 034, 042
Fertilizer production, 042
Fertilizers, 034, 042
Field work, 010
Financial incentives, 004
Financial institutions, 001
Financial management, 025
Fiscal policy, 026
Food aid programs, 040
Food consumption, 045
Food marketing, 040
Food prices, 040
Food rationing, 040
Food security, 045
Foreign assistance, 005
Foreign exchange rates, 026
Foreign investment, 018, 029, 030
Forestry, 085, 089
Fruit trees, 038
Gambia, 021, 082
Gender analysis, 010, 011, 020, 032
Genetic engineering, 041
Genetic resources, 087
Ghana, 007, 064, 067, 070
Government, 009
Government policy, 008
Groundnuts, 021
Guatemala, 050, 090
Guinea, 012, 020, 093
Guinea-Bissau, 004
Health care administration, 049, 051, 055, 056
Health economics, 019
Health education, 052, 053, 059
Health professional education, 054, 059
Health research, 047
Health workers, 047, 053
Hormones, 050
Household surveys, 011, 045, 097, 098
Households, 093
Housing administration, 075
Housing conditions, 069
Housing credit, 074
Housing finance, 073
Housing investment guaranty, 073
Housing policy, 075
Housing surveys, 069
Human nutrition, 045
Human sexual behavior, 067
Immunizations, 056
Impact assessment, 073
Implementation, 082
Import substitution, 021
Imports, 021
Income distribution, 026, 028, 045, 092, 098
India, 029, 066, 087
Indigenization, 051
Indigenous private voluntary organization, 083
Indonesia, 022, 029, 073, 075, 090, 094, 100
Industrial capacity, 018
Industrial crops, 088
Industrial development, 021
Industrial wastes, 084
Informal sector, 020, 075
Insecticides, 079
Institution building, 051
Institutional aspects, 082
Institutional linkages, 004
Interest rates, 074
International trade, 022
International trade agreements, 024
Investment, 018, 027, 029, 076
Investment environment, 077, 078
Investment promotion, 013, 016, 017, 029
Ivory Coast, 025
Jordan, 078
Judicial reform, 002
Judiciary, 002
Kenya, 064, 067
Labor economics, 020
Labor market, 012, 020
Land titling, 095
Land use, 035
Large, 044
Latin America, 030
Layoffs, 012
Legal reform, 002, 004
Legal systems, 002
Livestock, 043
Living conditions, 069
Local level, 009, 049
Low cost housing, 073
Madagascar, 027, 028
Maize, 037, 039
Malaria, 019, 055, 057, 058, 059, 079
Malawi, 019, 039, 043
Management development, 051
Marine resources, 080
Market structure, 004
Markets, 078
Marriage age, 065, 071
Marriage and the family, 066, 071
Marriage customs, 063, 071

SUBJECT AND GEOGRAPHIC INDEX

- Measles, 056
Medical education, 053, 054, 056
Medium scale enterprises, 032, 033
Men, 011
Methodology development, 031
Microenterprises, 031, 032
Morocco, 017, 061, 077
Mortality, 065
Mortgages, 074
Mothers, 047
Mozambique, 040, 098
Municipal level, 025
Narcotics, 095
Natural resource accounting, 036
Natural resource conservation, 088, 090, 099
Natural resource management, 008, 011, 080, 081, 082, 085, 089
Natural resource utilization, 081, 086, 090
Nepal, 096, 100
Niger, 006, 026
Nigeria, 049, 064, 070
Nonformal education, 091
Nonproject assistance, 001
North America, 024
Nutritional status, 045
Obstetrics, 050
Occupational opportunities, 012
Pacific Islands, 086
Pakistan, 045, 061
Panama, 001
Papaya, 038
Personnel, 051
Peru, 095
Pest control, 079
Pesticide spraying, 079
Pharmaceuticals, 050
Philippines, 002, 011, 023
Planning, 052, 060
Plant breeding, 038
Plant genetics, 038, 041, 087
Plant growth, 086
Plant physiology, 041
Plant propagation, 038, 087
Plant reproduction, 038
Plant resources, 087
Poland, 032
Policy analysis, 036
Policy reform, 034
Pollution, 084
Poor, 007, 028, 073, 092, 098
Population characteristics, 065, 066
Population dynamics, 065
Population programs, 066
Poverty, 045, 093, 097, 098
Pregnancy, 067
Pricing, 074
Primary education, 091, 096
Primary health care, 049, 059
Private enterprises, 029, 037
Private sector, 001, 013, 020
Private voluntary organizations, 083
Privatization, 018, 030, 033, 034, 037
Problem identification, 010
Project sustainability, 005, 046, 048, 051, 060, 061, 072
Protected environmental areas, 090, 099
Public administration, 008, 009, 025
Public health care, 049
Public sector, 001, 020
Public services, 008, 014, 073
Public works, 073, 092
Red Sea, 080
Refugee relief, 068
Refugees, 068
Regional economic integration, 024
Regulatory reform, 004
Research priorities, 089
Resource allocation, 073
Respiratory diseases, 047
Return on investments, 015
Revenues, 025
Rural areas, 011, 028, 044, 091
Rural development, 088
Rural populations, 045
Russia, 018, 074
Rwanda, 048
Sahel, 031
School dropouts, 096
Semiarid zone, 038
Senegal, 064
Sex roles, 094
Shellfish, 044
Silviculture, 088, 089
Simulations, 028, 039
Slovakia, 033
Slum areas, 069
Small farms, 039
Small ruminants, 094
Small scale enterprises, 031, 032, 033
Social impact, 092
Social services, 092
Social values, 063
Solomon Islands, 044
Soybeans, 039
Squatters, 069
Sri Lanka, 002, 100
Standard of living, 098
Stimulants, 050
Structural adjustment, 007, 021, 026, 028, 092
Student behavior, 096
Swaziland, 047
Systems approach, 054
Tax rates, 007
Taxation, 007
Teacher training, 053, 059
Technical assistance, 060
Terms of trade, 026
Thailand, 016, 061, 100
Tobacco, 039
Togo, 064, 068
Tourist industry, 021, 080, 099, 100
Toxic substances, 041, 079
Trade liberalization, 024
Trade regulation, 023
Traditional birth attendants, 050
Traditional health workers, 047
Traditional societies, 044
Trees, 086, 087, 088
Tropical rain forests, 089, 090
Tropical zone, 089
Tunisia, 072, 076
Uganda, 064
Unemployment, 012
Universities and colleges, 085
Urban areas, 009, 069, 093, 097, 098
Urban development, 073
Urea, 042
Uruguay, 002
USA, 014, 024

SUBJECT AND GEOGRAPHIC INDEX

USAID, 005
Vaccinations, 056
Varietal research, 087
Voting, 006
Water management, 061
Water resources, 061
Water sanitation, 060

Water supply, 060
Water supply engineering, 060
Water supply structures, 060
Women, 011, 012, 094
Women in development, 010, 020,
032

Women of child bearing age, 071
Workshops, 052, 059
Youth, 063, 067
Zaire, 097
Zambia, 037

AUTHOR AND INSTITUTION INDEX

- Abt Associates, Inc., 009, 025, 035, 036, 037, 082
Academy for Educational Development, Inc., 017, 024, 091
Adegoroye, Anu, 054
Ahmed, Manzoor, 091
Alderman, Harold, 045
Amonoo-Lartson, Reginald, 051
Ashton, Patricia S., 099
Ashton, Ray E., Jr., 099
Assefa, Mekonnen, comp., 043
Associates in Rural Development, Inc., 008, 049
Atlantic Resources Corp., 048
Atwood, J. Brian, 005
Awang, Kamis, ed, 086, 088
Bangladesh Disaster Preparedness Centre, 003
Baouendi, Abdelkader, 076
Barclay, Tony, 033
Bartlett, Alfred V., 050
Bell, Charles, 029
Bendahmane, Diane B., ed., 060
Benito, Carlos, 035
Berney, Karen Tompkins, 053
Blair, Harry, 002
Blanc, Ann K., 071
Bledsoe, Caroline H., ed., 063
Bocchetti, Marco Antonio, 050
Boeker, Paul H., ed., 030
Bournes, Julie, 085
Bremer, Jennifer, 029
Brown, Ralph B., 094
Bryce, J., 055
Camp Dresser and McKee, Inc., 060, 061
Caribbean Conservation Corp., 099
Carl, Beverly, 004
Carlos, Cecilia C., 023
Catholic University of Chile, 038
Chabbott, Colette, 091
Cecchi and Co. Consulting, Inc., 004
Chemonics International Consulting Div., 076, 077, 078
Chitsulo, Lester, 019
Clark University. International Development Program, 010, 011
Claudon, Michael P., ed., 018
Clifford, Veronica, 082
Cohen, Barney, ed., 063
Colby, Michael, 061
Consortium for International Development, 065
Cornell University. Div. of Nutritional Sciences. Cornell Food and Nutrition Policy Program, 007, 012, 020, 026, 027, 028, 039, 040, 093, 097, 098
Dawkins, J. K. Laslene, 051
del Ninno, Carlo, 093, 098
Desai, Jaikishan, 040
Development Alternatives, Inc., 031, 032, 033, 034, 068, 082
Diamond, Douglas, 075
Dorosh, Paul, 026, 028
Dorosh, Paul A., 027
Dugelby, Barbara L., 090
Duke University. Center for Tropical Conservation, 084, 089, 090
Durst, Patrick B., 100
East - West Center. East - West Resource Systems Institute, 022, 023
Ecuador. Ministry of Energy and Mines. Directorate General of the Environment, 081
El Arifeen, Shams, ed., 069
Epler, Bruce, 081
Esser, Andrea Lee, 010
Etting, Mary B., 019
Filho, Ivon D'Almeida Pires, 004
Finnegan, Carol, 032
Florida State University. Learning Systems Institute. Center for International Studies, 096
Foote, Karen A., ed., 065
Fox, James W., 013
French, James H., ed., 087
Futures Group, 066
Gamsler, Matthew, 031
Garcia, Marito, 045
Geonomics Institute for International Economic Advancement, 018
Glick, Peter, 020
Gorden, Morton, 077
Grant, William, 031
Guinea. Ministry of Health and Social Affairs, 012, 093
Gustafson, Daniel J., 082
Guyton, Bill, 037
Haggblade, Steven, 027
Handayani, Sri Wening, 094
Hanrahan, Michael, 015
Hansen, Gary, 002
Harvard University. Harvard Institute for International Development, 021, 068
Heatly, Bruce, 033
Hendrix, Steven E., 095
Hill, Kenneth H. ed., 065
Hirschhorn, Joel S., 084
Hobbs, Jesse, 079
Hobgood, Harlan H., 008
Horkan, Kathleen M., 024
Hviding, Edvard, 044
Ikhide, Sylvanus, 049
Institute for Contemporary Studies. International Center for Economic Growth, 030
Institute for Development Anthropology, Inc., 010, 011
Institute of the Americas, 030
International Center for Living Aquatic Resources Management, 044
International Center for Tropical Agriculture, 041
International Centre for Diarrhoeal Disease Research, Bangladesh, 069
International Fertilizer Development Center, 042
International Food Policy Research Institute, 045
International Livestock Centre for Africa. Library and Documentation Services, 043
International Resources Group, Ltd., 080
John Snow, Inc., 050
Jordan, Miguel, 038
Kambou, Gerard, 068
Karmacharya, Dibya Man, 096
Kingsbury, David, 092
Kingsley, G. Thomas, 073

AUTHOR AND INSTITUTION INDEX

- Krueger, Anne, 001
Lea, Michael J., 074
Lenaghan, Tom, 068
Licuanan, Victoria, 023
Lieberson, Joseph, 014
Macro International Inc., 070, 071
 Institute for Resource Development, 067
Mahbub, AQM, ed., 069
Management Systems International, Inc., 082
Martin, Ray, 072
Martin, Richard, 046
McKean, Cressida, 013, 016
Medical Service Corp. International, 019, 079
Meekers, Dominique, 067
Miller, John, 009
Mills, Bradford, 012
Montenegro, Gloria, 038
Motabar, Nezam, 025
Moussalli, Elie I., 080
Mueller-Vollmer, Jan, 078
Muniz-Miret, Nuria, 085
National Democratic Institute for International Affairs, 006
National Research Council, 062, 063, 064
Nenon, Julia, 100
Nepal. Ministry of Education, Culture and Social Welfare, 096
New York Zoological Society. Wildlife Conservation International, 099
Njovens, Bernard Berka, 083
Nssah, B. Essama, 026
Nxumalo, Mavis, 047
Ohio State University, 041
Olaleye, David O., 070
Olowu, Dele, 049
Olsen, Stephen, 081
Olson, Craig, 034
Pagiola, Stefano, 036
Pangestu, Mari, 022
Polak, Jacques, 001
Poulin, Roger, 034
Private Agencies Collaborating Together, 003
Putz, Francis E., 089
Rahman, Saidur, 003
Ravicz, R. Marisol, 074
Rea, Sam, 072
Read, Michael D., ed., 087
Research Triangle Institute, 075
Resources Development Associates International, Inc., 080
Robbins, Edward H., 009
Robert R. Nathan Associates, Inc., 001
Roca, William, 041
Rockefeller Foundation, 091
Roemer, Michael, 021
Roungou, J. B., 055
Rowntree, John T., 080
Sahn, David, 020
Sahn, David E., 040, 098
Salafsky, Nick, 090
Sayre, Richard T., 041
Shields, M. Dale, 011
Simler, Kenneth, 039
Soesastro, Hadi, 022
Srinivasan, K., 066
Stallard, Janice, 014
Stren, Richard, 025
Swartzendruber, J. F., 083
Tabatabai, Hamid, 097
Taylor, David, ed., 086, 088
Temba, Joseph, 037
Thomas, Robert, 061
Thomas-Slayter, Barbara, 010, 011
Toh, Kiart, 016
Tulane University, 066
U.N. Food and Agriculture Organization, 086, 088
U.N. International Children's Emergency Fund, 091
U.S. Agency for International Development, 005
 Bur. for Africa, 006, 031, 062, 063, 064, 065
 Benin, 068
 Cameroon, 034
 Cape Verde, 008
 Eritrea, 009, 080
 Gambia, 021, 082
 Ghana, 007
 Guinea, 012, 020, 093
 Guinea-Bissau, 004
 Ivory Coast, 025
 Madagascar, 027, 028
 Malawi, 019, 039
 Mozambique, 040, 098
 Niger, 026
 Nigeria, 049
 Ofc. of Analysis, Research and Technical Support, 007, 012, 020, 026, 027, 028, 037, 039, 040, 047, 051, 052, 053, 054, 055, 056, 057, 058, 059, 082, 083, 093, 097, 098
 Ofc. of Development Planning, 004
 Operations and New Initiatives Ofc., 047, 048, 051, 052, 053, 054, 055, 056, 057, 058, 059
 Regional Economic Development Services Ofc. West and Central Africa, 025
 Rwanda, 048
 Zaire, 097
 Zambia, 037
 Bur. for Asia, 022, 023, 061
 Bangladesh, 003
 India, 066
 Indonesia, 094
 Philippines, 011
 Regional Housing and Urban Development Ofc., 075
 South Pacific Regional Development Ofc., 044
 Bur. for Asia and Near East. Bangladesh, 069
 Nepal, 096
 Bur. for Europe and the New Independent States, 033, 042
 Poland, 032
 Russia, 074
 Bur. for Global Programs, Field Support and Research. Ofc. of Agriculture, 094
 Ofc. of Economic and Institutional Development, 008
 Ofc. of Environment and Natural Resources, 083
 Ofc. of Housing and Urban Programs, 009, 025
 Ofc. of Small, Micro and Informal Enterprise, 021, 031, 032, 033, 068
 Ofc. of Education, 096

AUTHOR AND INSTITUTION INDEX

- Ofc. of Health, Population, and Nutrition, 049, 070, 071
Bur. for Latin America and the Caribbean. Ecuador, 081
El Salvador, 035
Panama, 001
Peru, 095
Regional Development Ofc., 095
Regional Ofc. for Central American Programs, 024, 099
Bur. for Near East. Jordan, 078
Morocco, 077
Ofc. of Development Resources, 076, 077, 078
Tunisia, 076
Bur. for Policy and Program Coordination. Center for Development Information and Evaluation, 002, 013, 014, 015, 016, 017, 024, 029, 034, 046, 072, 092
Bur. for Private Enterprise. Ofc. of Housing, 074
Ofc. of Housing and Urban Programs, 073
Ofc. of Policy Development and Program Review, 084, 089, 090
Ofc. of Agriculture, 035, 036, 043, 044, 045
Bur. for Research and Development. Ofc. of Economic and Institutional Development, 010, 011, 037, 082
Ofc. of Education, 091
Ofc. of Environment and Natural Resources, 081, 085, 086, 087, 088
Ofc. of Health, 019, 050, 060, 067, 079
Ofc. of Population, 062, 063, 064, 065, 066, 067
Ofc. of Research, 038, 041
Ofc. of Women in Development, 010, 011
Ofc. of Information Resources Management, 100
Directorate for Policy. Center for Development Information and Evaluation. Ofc. of Evaluation, 001
Ofc. of Policy Analysis and Resources, 030
New Independent States Task Force, 018
U.S. Dept. of Agriculture. Forest Service, 083, 085, 100
Forestry Support Program, 085
Ofc. of International Cooperation and Development, 083, 085, 100
U.S. Public Health Service. Centers for Disease Control and Prevention. International Health Program Ofc., 047, 051, 052, 053, 054, 055, 056, 057, 058, 059
University of Bergen. Centre for Development Studies, 044
University of California, Davis, 094
University of Florida, 099
University of Ibadan. African Regional Health Education Center, 059
University of Missouri at Columbia. Dept. of Rural Sociology, 094
University of North Carolina at Chapel Hill. Carolina Population Center, 066
School of Public Health, 059
University of Rhode Island. Coastal Resources Center, 081
University of Wisconsin at Madison. Land Tenure Center, 095
Urban Institute, 073, 074
Virginia Polytechnic Institute and State University, 010, 011
Voigt, Ann, 053, 054
Walker, James, 015
Water and Air Research, Inc., 099
Weidemann, C. Jean, 032
Westfield, James D., 077, 078
Westoff, Charles F., 071
Wichterman, Dana, 017
Williams, C. Howard, 096
Wilson, Ruth P., 047
Winrock International. Institute for Agricultural Development, 086, 087, 088
Wittneben, Kathryn, ed., 018
World Bank, 020, 039

DOCUMENT NUMBER INDEX

<u>PN-AAX-271</u>	<u>001</u>	<u>PN-ABQ-219</u>	<u>073</u>	<u>PN-ABQ-679</u>	<u>068</u>
<u>PN-AAX-272</u>	<u>046</u>	<u>PN-ABQ-245</u>	<u>066</u>	<u>PN-ABQ-701</u>	<u>006</u>
<u>PN-AAX-273</u>	<u>072</u>	<u>PN-ABQ-322</u>	<u>010</u>	<u>PN-ABQ-709</u>	<u>094</u>
<u>PN-AAX-278</u>	<u>029</u>	<u>PN-ABQ-323</u>	<u>011</u>	<u>PN-ABQ-725</u>	<u>055</u>
<u>PN-AAX-279</u>	<u>013</u>	<u>PN-ABQ-353</u>	<u>019</u>	<u>PN-ABQ-731</u>	<u>022</u>
<u>PN-AAX-280</u>	<u>002</u>	<u>PN-ABQ-364</u>	<u>067</u>	<u>PN-ABQ-732</u>	<u>023</u>
<u>PN-AAX-281</u>	<u>014</u>	<u>PN-ABQ-448</u>	<u>085</u>	<u>PN-ABQ-734</u>	<u>047</u>
<u>PN-AAX-282</u>	<u>015</u>	<u>PN-ABQ-472</u>	<u>074</u>	<u>PN-ABQ-743</u>	<u>024</u>
<u>PN-AAX-283</u>	<u>016</u>	<u>PN-ABQ-484</u>	<u>086</u>	<u>PN-ABQ-749</u>	<u>007</u>
<u>PN-AAX-287</u>	<u>092</u>	<u>PN-ABQ-485</u>	<u>087</u>	<u>PN-ABQ-750</u>	<u>037</u>
<u>PN-AAX-289</u>	<u>017</u>	<u>PN-ABQ-486</u>	<u>088</u>	<u>PN-ABQ-751</u>	<u>056</u>
<u>PN-AAX-291</u>	<u>034</u>	<u>PN-ABQ-490</u>	<u>080</u>	<u>PN-ABQ-752</u>	<u>048</u>
<u>PN-ABP-794</u>	<u>018</u>	<u>PN-ABQ-522</u>	<u>060</u>	<u>PN-ABQ-758</u>	<u>082</u>
<u>PN-ABP-867</u>	<u>003</u>	<u>PN-ABQ-597</u>	<u>081</u>	<u>PN-ABQ-790</u>	<u>075</u>
<u>PN-ABQ-119</u>	<u>076</u>	<u>PN-ABQ-620</u>	<u>093</u>	<u>PN-ABQ-791</u>	<u>043</u>
<u>PN-ABQ-120</u>	<u>077</u>	<u>PN-ABQ-622</u>	<u>020</u>	<u>PN-ABQ-793</u>	<u>044</u>
<u>PN-ABQ-121</u>	<u>078</u>	<u>PN-ABQ-623</u>	<u>012</u>	<u>PN-ABQ-954</u>	<u>038</u>
<u>PN-ABQ-123</u>	<u>079</u>	<u>PN-ABQ-636</u>	<u>005</u>	<u>PN-ABQ-957</u>	<u>031</u>
<u>PN-ABQ-202</u>	<u>099</u>	<u>PN-ABQ-637</u>	<u>061</u>	<u>PN-ABQ-960</u>	<u>083</u>
<u>PN-ABQ-205</u>	<u>062</u>	<u>PN-ABQ-649</u>	<u>035</u>	<u>PN-ABQ-992</u>	<u>069</u>
<u>PN-ABQ-206</u>	<u>063</u>	<u>PN-ABQ-654</u>	<u>036</u>	<u>PN-ABR-068</u>	<u>091</u>
<u>PN-ABQ-207</u>	<u>064</u>	<u>PN-ABQ-656</u>	<u>030</u>	<u>PN-ABR-072</u>	<u>008</u>
<u>PN-ABQ-209</u>	<u>065</u>	<u>PN-ABQ-665</u>	<u>042</u>	<u>PN-ABR-075</u>	<u>095</u>
<u>PN-ABQ-211</u>	<u>004</u>	<u>PN-ABQ-676</u>	<u>021</u>	<u>PN-ABR-090</u>	<u>070</u>

DOCUMENT NUMBER INDEX

<u>PN-ABR-094</u>	<u>049</u>	<u>PN-ABR-189</u>	<u>084</u>	<u>PN-ABR-612</u>	<u>040</u>
<u>PN-ABR-133</u>	<u>025</u>	<u>PN-ABR-191</u>	<u>089</u>	<u>PN-ABR-613</u>	<u>098</u>
<u>PN-ABR-153</u>	<u>050</u>	<u>PN-ABR-192</u>	<u>090</u>	<u>PN-ABR-614</u>	<u>026</u>
<u>PN-ABR-155</u>	<u>100</u>	<u>PN-ABR-215</u>	<u>009</u>	<u>PN-ABR-615</u>	<u>027</u>
<u>PN-ABR-165</u>	<u>032</u>	<u>PN-ABR-373</u>	<u>045</u>	<u>PN-ABR-616</u>	<u>028</u>
<u>PN-ABR-166</u>	<u>033</u>	<u>PN-ABR-377</u>	<u>071</u>	<u>PN-ABR-617</u>	<u>059</u>
<u>PN-ABR-169</u>	<u>041</u>	<u>PN-ABR-383</u>	<u>096</u>	<u>PN-ABR-618</u>	<u>052</u>
<u>PN-ABR-181</u>	<u>051</u>	<u>PN-ABR-420</u>	<u>097</u>	<u>PN-ABR-619</u>	<u>053</u>
<u>PN-ABR-182</u>	<u>057</u>	<u>PN-ABR-611</u>	<u>039</u>	<u>PN-ABR-620</u>	<u>054</u>
<u>PN-ABR-183</u>	<u>058</u>				

ORDERING INSTRUCTIONS

TO ORDER:

- A. Send all orders to AID/DISC/ARDA, 1500 Wilson Blvd. Suite 1010, Arlington VA, 22209-2404, USA
B. Please note the following definitions when placing your order:

1. DOCUMENT NUMBER Found at the top of each abstract; begins with "PN" or "PD." Example: PN-AAJ-875
2. PRICE: Prices for single paper (PC) and microfiche (MF) copies of documents are found directly below the document number. Microfiche are 105 x 148 mm, 98 frame, @24x reduction. Example: MF \$1.08/PC \$7.67

Microfiche use is encouraged. Save paper and mailing costs!

- C. Please note the following categories of customers:

1. A.I.D. employees, A.I.D. contractors overseas, and A.I.D. sponsored organizations overseas may receive microfiche and /or paper copies of ARDA documents free.
2. Universities, research centers, government offices, and other institutions located in developing countries may receive free microfiche copies of up to five titles per ARDA issue. Paper copies of ARDA documents may be purchased at the stated price.
3. All other institutions and individuals may purchase microfiche and/or paper copies of ARDA documents at the stated prices. When ordering, include document number.

PLEASE INDICATE YOUR PREFERENCE FOR PAPER OR MICROFICHE COPIES OF ARDA DOCUMENTS. SEND NO PAYMENT! WHERE APPLICABLE, YOU WILL BE BILLED FOR THE APPROPRIATE DOCUMENT COST AND POSTAL CHARGES.

POUR COMMANDER:

- A. Envoyer les commandes à: AID/DISC/ARDA, 1500 Wilson Blvd. Suite 1010, Arlington VA, 22209-2404, USA
B. Veuillez tenir compte des définitions suivantes en commandant:

1. NUMÉRO DE DOCUMENT: Ce numéro paraît au-dessus de chaque résumé; commencez avec "PN," "PD." Exemple: PN-AAJ-875
2. PRIX: Les prix pour des copies en papier (PC) et/ou en microfiche (MF) paraissent au-dessus de chaque résumé. Les dimensions de la microfiche sont 105 x 148 mm. 98 feuilles par fiche, réduction 24x. Exemple: MF \$1.08/PC \$7.67

Prices for single paper (PC) and microfiche (MF) copies of documents are found directly below the document number.

- C. Vérifier bien les catégories suivantes de clients:

1. Des employés d'A.I.D., des entrepreneurs qui travaillent pour A.I.D. à l'étranger, et des employés d'agences volontaires à l'étranger peuvent recevoir gratuitement les documents d'ARDA en papier et/ou en microfiche.
2. Des universités, des centres de recherches, des bureaux de gouvernement, et d'autres institutions aux pays en voie de développement peuvent recevoir gratuitement jusqu'à cinq documents d'ARDA en microfiche. On peut acheter les documents en papier au prix donné.
3. D'autres institutions et individus peuvent acheter les documents d'ARDA en papier ou en microfiche au prix donné. En commandant veuillez inclure le numéro de document.

VEUILLEZ INDIQUER VOTRE PREFERENCE DE FORMAT (PAPIER OU MICROFICHE) DES DOCUMENTS D'ARDA. PRIERE DE NE PAS ENVOYER DE PAIEMENT! ON ENVERRA UNE FACTURE DETAILLANT LES PRIX DES DOCUMENTS ET LES FRAIS DE POSTE.

PARA PEDIR COPIAS:

- A. Envíe los formularios a: AID/DISC/ARDA, 1500 Wilson Blvd. Suite 1010, Arlington VA, 22209-2404, USA
B. Por favor, verifique las siguientes definiciones al pedir las copias:

1. NUMERO DEL DOCUMENTO: Se encuentra arriba de cada resumen; se comienza con "PN," "PD." Ejemplo: PN-AAJ-875
2. PRECIO: Los precios de las copias individuales en papel (PC) y en microficha (MF) se encuentran abajo del número del documento. Las medidas de las microfichas son 105 x 148 mm, 98 cuadro, @ 24x reducción. Ejemplo: MF \$1.08/PC \$7.67

Se recomienda el uso de las microfichas! Conserve los costos de papel y de correo!

- C. Por favor, verifique las siguientes categorías de los solicitantes:

1. Los empleados de A.I.D., los contratistas extranjeros de A.I.D., y las organizaciones extranjeras apolladas por A.I.D. pueden recibir gratis las copias en microficha y/o en papel de los documentos de ARDA.
2. Las universidades, los centros de Investigaciones, las oficinas de gobierno, y las otras instituciones en los países en desarrollo pueden recibir gratis hasta cinco copias en microficha de los documentos presentados en ARDA. Las copias en papel se pueden comprar al precio estipulado.
3. Todas las demás instituciones y particulares pueden comprar las copias en microficha y/o papel de los documentos de ARDA a los precios estipulados. Al solicitar, se debe incluir el número del documento y el título del documento.

POR FAVOR, INDIQUE QUAL ES SU PREFERENCIA, QUE SEA OBTENER LAS COPIAS EN PAPEL O EN MICROFICHA DE LOS DOCUMENTOS DE ARDA. ¡NO HAY QUE REMITIR EL PAGO! CUANDRO LE CORRESPONDA, USTED SERÁ FACTURADO POR EL COSTRO APROPRIADO DE LOS DOCUMENTOS SOLICITADOS MAS EL COSTO DEL CORREO.

ORDER FORM

Date of Order _____

Name _____

Title/Office _____

Institution _____

Room Number _____

Building _____

Street _____

City _____

Country _____

Postal Code _____

Reason for order _____

DOCUMENT NUMBER	PAPER COPY (PC) MICROFICHE (MF)	QUANTITY
<input type="checkbox"/> <input type="checkbox"/> TITLE _____	PC MF	_____ _____
<input type="checkbox"/> <input type="checkbox"/> TITLE _____	PC MF	_____ _____
<input type="checkbox"/> <input type="checkbox"/> TITLE _____	PC MF	_____ _____
<input type="checkbox"/> <input type="checkbox"/> TITLE _____	PC MF	_____ _____
<input type="checkbox"/> <input type="checkbox"/> TITLE _____	PC MF	_____ _____
<input type="checkbox"/> <input type="checkbox"/> TITLE _____	PC MF	_____ _____
<input type="checkbox"/> <input type="checkbox"/> TITLE _____	PC MF	_____ _____

Send orders to:

A.I.D./DISC/ARDA
 1500 Wilson Blvd Suite 1010,
 Arlington VA, 22209-2404, USA

ENCLOSE NO PAYMENT.
 You will be billed later.

Photo credits:
Pages 6, 37, 54, 59: U.S. Agency for International Development

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

DISC/ARDA

1500 WILSON BLVD. STE. 1010

ARLINGTON, VIRGINIA 22209-2404

UNITED STATES OF AMERICA

┌

┐

└

┘