

The Labour-Based Technology Source Book

A CATALOGUE OF KEY PUBLICATIONS

Sixth (revised) edition

International Labour Organisation
Advisory Support, Information Services and Training
Harare, Zimbabwe

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Abbreviations

ASIST	Advisory Support Information Services and Training
ARE	Access and Rural Employment
	Available in digital format
CBO	Community Based Organisation
CTP	Construction Technology Paper
DANIDA	Danish International Development Agency
DFID	Department for International Development
DIGL	Department of Interior and Local Government (Philippines)
ECA	Economic Commission for Africa
EIIP	Employment-Intensive Investment Programme
EIP	Employment-Intensive Programme
FRP	Feeder Roads Programme
gm	grammes
GTZ	German Agency for Technical Cooperation
Habitat	United Nations Centre for Human Settlements
IFRTD	International Forum for Rural Transport and Development
IHE	International Institute for Infrastructural Hydraulic and Environmental Engineering (The Netherlands)
	Published by the ILO
ILO	International Labour Organisation
IMT	Intermediate Means of Transport
IRAP	Integrated Rural Accessibility Planning
ISBN	International Standard Book Number
ITDG	Intermediate Technology Development Group
IYCB	Improve Your Construction Business
LBT	Labour-based Technology
LFA	Logical Framework Approach
MART	Management of Appropriate Road Technology
MIRTP	Makete Integrated Rural Transport Planning (Tanzania)
MPBS	Maintenance Performance Budget System (Ghana)
MRP	Minor Roads Programme (Kenya)
M & E	Monitoring and Evaluation
	New to this edition of the Source Book
NGO	Non-Governmental Organisation
PIRTP	Pilot Integrated Rural Transport Project (Malawi)

POA	Price On Application
pp	Pages
RAPI	Rapid Assessment of Poverty Impacts
RARP	Rural Access Roads Programme (Kenya)
RATP	Rural Accessibility Technical Paper
ROMAR	Road Maintenance and Regravelling
SAMAT	Southern Africa Multi-disciplinary Advisory Team
SDC	Swiss Agency for Development and Cooperation
SETP	Socio-economic Technical Paper
Sida	Swedish International Development Cooperation Agency
SKAT	Swiss Centre for Appropriate Technology
SPWP	Special Public Works Programme
SSATP	Sub-Saharan Africa Transport Programme
TES	Technical Enquiry Service
TOOL	Technology Transfer for Development
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNIFEM	United Nations Development Fund for Women
UWEP	Urban Waste Expertise Programme (The Netherlands)
VIP	Ventilated Improved Pit Latrine
WEDC	Water, Engineering & Development Centre, Loughborough, (UK)

They cover all aspects of labour-based technology for infrastructure development and access and rural employment from first steps to detailed implementation.

All these publications are available from our ASIST Information Service at cost. The publications listed may also be ordered directly from the publishers (a list of publishers' addresses is provided at the end of the catalogue). To order publications from ASIST, complete the order form in the centrefold of this catalogue and return it to the ASIST Information Service at the address below.

The Source Book does not intend to provide an exhaustive list of all that is available on labour-based technology and access and rural employment but focuses primarily on those sectors that the ASIST programme has actively been involved in.

Please let us know if we have missed any key document and we will endeavour to include it in future editions.

For more information on the ASIST programme write to or call on us at the following addresses.

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Introduction

Labour-based technology (LBT) is now well established as a viable option for building infrastructure in countries with low wages and high unemployment. The quality of output produced in rural roadworks, sanitation and water supply is usually indistinguishable from that produced by conventional techniques, and the costs are competitive. However, like any relatively new approach, the information on how to do it is not always readily available. This Source Book seeks to put together a selective list of the key publications we have found useful over the years. The publications are categorised into the following subject areas:

- construction and contractor development
- environment
- irrigation
- labour and employment
- project planning, monitoring and evaluation
- rural roads
- rural access and employment
- soil and water conservation
- tools and equipment
- training
- urban infrastructure development

The Employment-Intensive Investment Programme of the ILO

The Employment-Intensive Investment Programme (EIIP) of the ILO is among the best known of all of the ILO's worldwide technical cooperation activities. For the past two decades this programme, with strong donor support, has had a profound effect on influencing investment policies, and employment and income generation and poverty reduction, in over 35 developing countries, where often as much as 70% of public investment expenditure is in the infrastructure sector.

The ILO's Employment-Intensive Investment Programme promotes employment-intensive investment policies through practical research, the provision of advisory services at policy and practitioner levels, the dissemination of labour-based technology curricula materials to institutions of higher education, information in seminars and workshops, and assistance in the establishment of pilot projects and large-scale infrastructure rehabilitation and maintenance programmes.

The ILO, through its head office staff in the Employment-Intensive Investment Branch in Geneva and its regional experts within the ILO Multi-Disciplinary Advisory Teams in Africa and Asia, delivers the necessary outputs to ensure that key policies are considered and guidelines are available. They also help to network between the Governments, social partners, and donors involved in the sector.

Under the ILO's Employment-Intensive Investment Programme the Advisory Support Information Services and Training (ASIST) programme was established in 1991 to promote the increased use of labour-based methods in Sub-Saharan Africa. This ASIST programme receives funding from the Department for International Development (DFID), the Swedish International Development Cooperation Agency (Sida), the Government of Norway, and the Danish International Development Agency (DANIDA).

In 1998 an ASIST programme was established to cover the Asia-Pacific region. ASIST Asia-Pacific (ASIST-AP), based at the ILO's Regional Office for Asia and the Pacific in Bangkok, Thailand, provides technical advisory support, information and training to countries within the region.

ASIST

ADVISORY SUPPORT, INFORMATION SERVICES AND TRAINING

The ASIST programme provides Advisory Support, Information Services and Training to governments, development and funding agencies, communities and the private sector, training institutions and other partners involved in poverty reduction through the provision of sustainable infrastructure.

ASIST's objectives are to:

- create employment with fair working conditions for men and women;
- develop local capacity and build knowledge and skills in government, the private sector and communities; and
- create and maintain appropriate and sustainable public infrastructure in a cost effective and efficient manner.

The programme focuses on rural and urban infrastructure development using local resource based methods and local level investment planning methodologies, with emphasis on the rural road sector, urban infrastructure in low-income settlements, small-scale irrigation and water supply and sanitation.

Advisory Support

ASIST provides comprehensive policy, planning and technical advice. ASIST advises on project and programme design, coordination, monitoring, and review of both urban and rural labour-based infrastructure programmes, and access and rural employment programmes.

Information Services

ASIST actively gathers, synthesises and disseminates relevant published and unpublished information on and related to labour-based technology for rural and urban infrastructure and access and rural employment. ASIST provides a Technical Enquiry Service to respond to specific requests for information. ASIST maintains a network database of contact persons and institutions involved in the promotion and development of labour-based technology and access and rural employment.

Training

ASIST provides support to national training institutions and universities in the development and provision of training in labour-based technology and rural travel and transport. This involves support in the development of curricula, training programmes, training material, as well as training techniques and methodology. ASIST also supports annual international training courses for engineers, senior technicians and trainers in collaboration with the Ministry of Roads and Public Works, Kisii Training Centre, in Kenya.

ASIST Technical Enquiry Service

ASIST offers a Technical Enquiry Service (TES) which provides technical information upon request on labour-based technology for infrastructure development and access and rural employment to projects, consultants, policy makers, donors, training institutions and others interested in labour-based methods and management.

To support the technical enquiry service, ASIST actively collects both published and unpublished documents on employment-intensive technology, access and rural employment and related topics. The collection includes text books, research reports, project reports, technical manuals, training material, periodical articles, *etc.*, most of which are in English, with a small number in French and Portuguese. A computerised bibliographic database is maintained to facilitate quick and easy access to the collection of over 10 000 documents.

ASIST also has links to other information resources around the world, and maintains contact with experts in the field that can be called upon to provide technical advice or information.

If you require technical advice or information on labour-based technology for infrastructure development and/or access and rural employment, contact the TES by mail, fax, telephone or e-mail at any of the ASIST addresses on page 4.

You are also welcome to pay us a visit!

ASISTDOC

Bibliographic Database on Labour-Based Technology

The ASIST bibliographic database of over 10 000 employment and technology related publications is available for distribution on computer diskette or CD-ROM. You can order a read-only version of

the database for quick and easy access to bibliographic details of publications available from ASIST's Document Centre. The database software runs under Windows 3.0, Windows for Workgroups 3.11, Windows 95, Windows 98, Windows 2000, and Windows NT.

Price: US\$25.00 for a one year subscription with quarterly updates sent by airmail (this includes a set of diskettes and a user manual)

We can send you a copy of the database and user manual via email free of charge. You may also freely download the database from our website: <http://www.ilo.org/asist>.

CONTACTS

Database of Labour-Based Technology Practitioners

ASIST maintains a network database of people and organisations concerned with alleviating poverty through employment-intensive infrastructural works and through access and rural employment programmes.

If you would like to be registered on this database, please complete the registration form in the centrefold of this catalogue and return it to the ASIST Information Service. If you are interested in consultancy work, please also send an up-to-date version of your CV.

The ASIST Bulletin

ASIST publishes a Bulletin featuring thematic articles on labour-based technology, access and rural employment and regional project news. Each Bulletin contains a centrefold section dealing with a specific issue which can be pulled out and used independently. Back issues are available on request. The Bulletin is sent free to registered subscribers. To register, complete and return the registration form in the centrefold of this catalogue.

Issue No 1: Road maintenance, May 1993

This first issue of the Bulletin focuses on maintenance and reviews systems currently in use. The centrefold is a reproduction of the handbook developed by Minor Roads Programme of Kenya for headmen involved in road maintenance activities.

Issue No 2: Contracting, December 1993

This issue focuses on contracting and contractor development. The centrefold is a short comic-like story depicting the trials of small contractors involved with large government bureaucracies.

Issue No 3: Equipment, July 1994

This issue focuses on equipment support to labour-based roadworks activities. It contains articles on equipment requirements, compaction equipment, and equipment maintenance. The centrefold section contains drawings and specifications of a tipping and non-tipping trailer.

Issue No. 4: Training & urban infrastructure development, November 1995

This issue is based on the proceedings of the Regional Seminar held in Johannesburg, South Africa in January 1995. The articles cover issues on technology transfer, capacity building, training, and the potential for employment creation in upgrading urban infrastructure. The centrefold deals with how to set up and organise visual presentations for training, workshops or seminars.

Issue No. 5: Contracting maintenance, September 1996

The focus of this issue is on contracting out labour-based road maintenance activities, and is based on the proceedings of the Regional Seminar held in Accra, Ghana in 1996. It contains articles on labour-based contracting, and community contracting. The centrefold pullout section deals with how to prioritise your routine maintenance requirements.

Issue No 6: Tools & equipment, August 1997

This issue focuses on recent trends in the development and use of appropriate tools and equipment for labour-based works. The centrefold shows you how to cost equipment.

Issue No 7: Community participation, July 1998

This issue features articles on community participation in labour-based infrastructural works in both urban and rural settings, and in rural transport planning. The centrefold provides a step-by-step guide on community contracting and a checklist of what should be included in a community contract document.

Issue No 8: Labour standards, environmental issues and gender issues, December 1998

This issue features articles on labour standards, environmental issues and gender issues related to employment-intensive works and rural travel and transport, as well as project news from Africa and Asia. The centrefold provides an outline of key labour

policies and practices in employment-intensive infrastructure programmes.

Issue No 9: Contracting in employment intensive works, July 1999

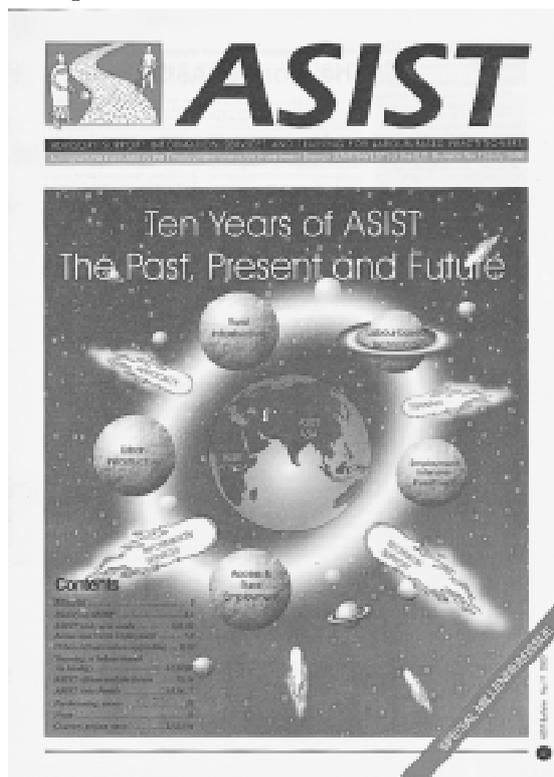
The focus of this issue is on contracting in employment-intensive works in both urban and rural settings. It features articles on the creation of an enabling environment, community contracting and contractor training. The centrefold focuses on productivity norms for various operations in rural road construction and various systems of apportioning work on a labour-based site.

Issue No 10: Socio-economic impacts of labour-based technology, January 2000

Bulletin No 10 deals with various social, economic, as well as environmental impacts of labour-based technology. The centrefold provides an insight into the main steps Integrated Rural Accessibility Planning (IRAP) methodology, and its main features.

Issue No 11: Ten years of the ASIST: The past, present and future, July 2000

This special issue of the bulletin looks back at the past ten years of ASIST, how ASIST came into being, its achievements, and what lies ahead for ASIST. It also includes contributions from our partners and clients on what impact ASIST has had on them. The centrefold provides a snapshot of ASIST's activities in sub-Saharan Africa and the Asia-Pacific region, as well as a full list of ASIST publications.



Issue No 12: Technical issues of labour-based technology, September 2001

The articles in this edition have a more technical content than usual, covering topics such as footbridge construction, the development of appropriate engineering standards, planning tools and surfacing options for roads. The centrefold is on issues related to the contracting of roadworks.

Issue No 13: Appropriate engineering practices and an enabling environment, March 2002

This issue focuses on appropriate engineering practices and the creation of an enabling environment of employment-intensive programmes. The centrefold looks at the use of labour-based technology in crisis response and reconstruction.

PUBLICATIONS

ASIST Publications

As information on labour-based technology and access and rural employment is relatively difficult to find and often lacking, ASIST synthesises and publishes technical publications in these subject areas. The following is a list of technical publications published by ASIST. The full details and abstracts of these titles are included under their respective subject headings.

Technical Briefs and Working Papers

Designs and specifications for a standard trailer and hitch for labour-based works. Technical Brief No. 1. Jim Hamper and David Mason et al. Third (revised) edition. 1997

Productivity norms for labour-based construction. Technical Brief No. 2. David Stiedl, Ulf Brudefors, Mike Shone. 1998

Contract documents for small scale contracts in the Road Sector. Technical Brief No. 5. David Stiedl. 2000

Heavy duty wheelbarrow for labour-based infrastructure works. An illustrated step-by-step guide to its construction. Technical Brief No. 7. 1997

Heavy duty wheelbarrow jigs and fixtures for batch production. An illustrated guide. Technical Brief No. 7. 1997

Material selection and quality assurance for labour-based unsealed road projects. Technical Brief No. 9. Philip Paige-Green. 1998

The urban material sourcebook: A guide for community-managed and labour-based upgrading of urban low-income settlements. George Simba and Jan Fransen. 2000

Training Materials

Training material source book: A guide for trainers in labour-based roadworks. Andreas Beusch. 1997

Trainer's toolbox of training techniques. Second edition. David J. Mason. 1995

Access and Rural Employment

A guide to Integrated Rural Accessibility Planning in Malawi. Rob Dingen. 2000

A guide to Integrated Rural Accessibility Planning in Tanzania: Gender — Integrated version. Compiled by Edward H. Mhina. 1997

Guidelines for the design and construction of suspension footbridges. Emmanuel Chipuru. 2000

Manufacturer's guide: Low-cost transport devices. IT Zimbabwe and ILO/ASIST. 1997

User's guide: Low-cost transport devices. IT Zimbabwe and ILO/ASIST. 1997

Regional Seminars Proceedings and Papers

Labour-based technology: A review of current practice. Report of proceedings of the Mbeya Seminar, Tanzania. 26th – 28th February 1990. Volume I: Papers presented; Volume II: Report of proceedings. CTP 121 and 122. Jane M. Ritchie (Ed.). 1990

Labour-based technology: A review of current practice. Report of proceedings, 2nd – 6th March 1992, Mhales Hoek, Lesotho. CTP 129. Gerrit Bosma and Bjørn Johannessen (Eds.). 1992

Labour-based technology: A review of current practice. Report of proceedings, 27th September – 1st October 1993, Harare, Zimbabwe. CTP 133. Bjørn Johannessen (Ed.). 1993

Labour-based technology: A review of current practice. Regional seminar for labour-based practitioners in the road sector in Sub-Saharan Africa, Johannesburg, South Africa, 16th – 20th January 1995. Volume One: Report of proceedings; Volume Two: Seminar papers. CTP 139 and 140. Kati Autere, Marit Due Langaas and David Mason (Eds.). 1995

Labour-based technology: A review of current practice. Proceedings and papers of the fifth regional seminar for labour-based practitioners in the road sector in Sub-Saharan Africa, Accra, Ghana, 22nd – 26th

April 1996. CTP 144 and 145. Jan Fransen, Angela Kabiru and David Mason (Eds.). 1996

Labour-based technology: A review of current practice. Proceedings of the sixth regional seminar for labour-based practitioners. Jinja, Uganda, 29th September – 3rd October 1997. CTP 157. Compiled by Sam Emorut-Erongot, Edited by Angela Kabiru-Kang'ethe, David Mason, and Gamelihle Sibanda. 1998

Papers of the sixth regional seminar for labour-based practitioners. Jinja, Uganda, 29th September – 3rd October 1997. CTP 158. Compiled by Angela Kabiru-Kang'ethe and David Mason. 1998

Labour-based technology: A review of current practice. Proceedings of the seventh regional seminar for labour-based practitioners. Lusaka, Zambia, 3rd – 7th May 1999. CTP 159. Compiled by Les Sampson and Pat Loots, Edited by ILO/ASIST. 1999

Papers of the seventh regional seminar for labour-based practitioners. Lusaka, Zambia, 3rd – 7th May 1999. CTP 160. Compiled by Angela Kabiru-Kange'the. 2000

Labour-based technology: A review of current practice. Proceedings of the eighth regional seminar for labour-based practitioners. Cairo Egypt, 15th - 19 October 2000. CTP 161. Compiled by Catherine Allen, Edited by ILO/ASIST. 2001

Papers of the eighth regional seminar for labour-based practitioners. Cairo, Egypt, 15th -19th October 2000. CTP 162. Compiled by Egyptian Social Fund for Development. 2000

Labour-based technology: A review of current practice. Proceedings of the ninth regional seminar for labour-based practitioners. Maputo, Mozambique, 20-24 May 2002. CTP 163. Compiled by David Mason, Edited by ILO/ASIST. 2002

Papers of the ninth regional seminar for labour-based practitioners. Maputo, Mozambique, 20-24 May 2002. CTP164. Compiled and edited by David Mason. 2002.

Promotional Material

ASIST Information kit and brochures. 2002 (Available free of charge)

Engineering for development poster series. (Set of six posters). 1999 (Available free of charge)

Integrated Rural Accessibility Planning and access interventions information kit. Fatemeh Ali-Nejadfard and Joan Bijl. 1996 (Available free of charge)

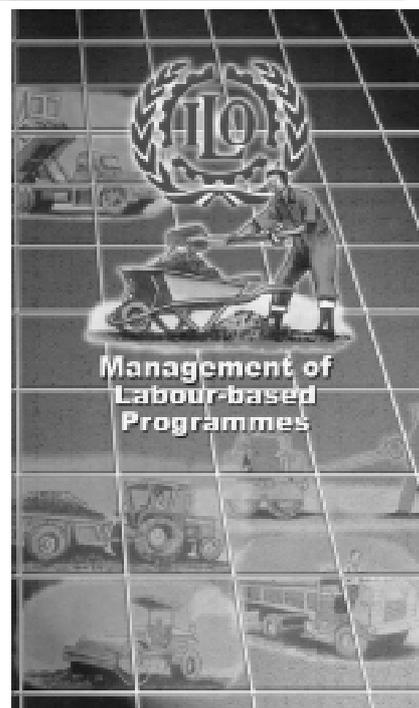
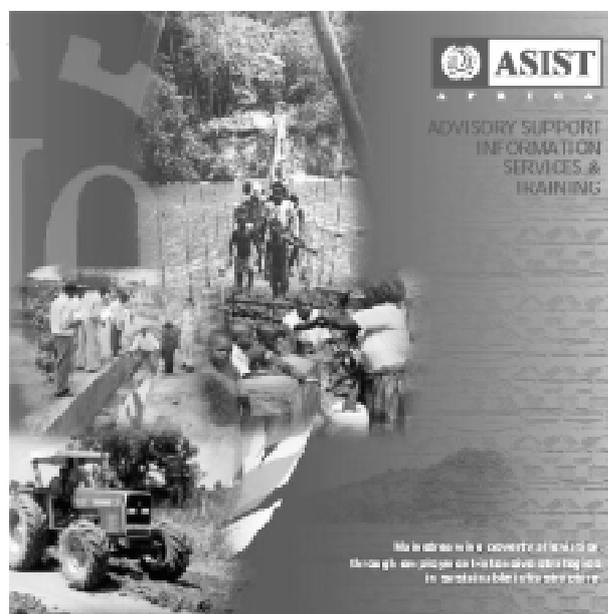
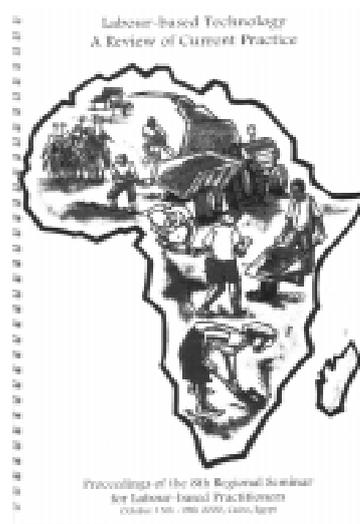
Videos

Appropriate technology and fair working conditions. ILO/ASIST. 1999

Earth report V: The long walk. DFID. World Bank. ILO/ASIST. 2001

Labour-based technology video series - a compilation. ILO/ASIST 1996

Management of labour-based programmes. ILO/ASIST. 1999



Access and Rural Employment

There is growing recognition of the scale of the rural transport burden born by rural communities to meet their basic needs, and of the degree to which it inhibits their social and economic development. Studies have shown that conventional approaches to rural problems which focus on roads and motorised transport may not provide effective solutions. The novel approach to rural travel and transport is defined in terms of provision of "access" that deals with mobility, i.e. the ease or difficulty with which people move themselves and their goods, and the location of social and economic services and facilities. The following titles provide an introduction to the concepts, guidelines on policy and planning issues, access interventions and case studies.

Access and Rural Employment: concepts and theory

The following titles provide an introduction to the concepts and theories pertinent to rural travel and transport.

NEW **A gender responsive monitoring and evaluation system for rural travel and transport**

Petronella Maramba and Michael Bamberger
World Bank. 2001. 55pp. 165gm

Provides practical guidance for planners, managers, and evaluators on the design and use of monitoring and evaluation (M &E) systems for rural travel and transport (RTT), that are gender sensitive. It is divided into four chapters which cover the following issues: gender issues (including cultural, social and economic issues) in RTT; the essential elements and information requirements of an M & E system, appropriate data collection and analysis methods and different kinds of studies required for RTT; and a gender responsive monitoring and evaluation system

Ref. No. 1AF-042574

POA

Download full text digital documents and the ASIST bibliographic database, ASISTDOC, from our Website at:
<http://www.ilo.org/istat>

An annotated bibliography on rural transport

Niklas Sieber (Eds.)

IFRTD. 1997. 128pp. ISBN 1-85339-418-1. 215gm

An annotated bibliography with over 100 titles of books and documents covering a wide range of rural travel and transport concerns from infrastructure and intermediate means of transport, to planning, financial and institutional aspects, and gender issues. The bibliography provides a comprehensive reference list that will be of interest to researchers, transport and rural development policy makers, planners and implementors.

Ref. No. 020-009172

POA

Roads are not enough. New perspectives on rural transport planning in developing countries

Jonathan Dawson and Ian Barwell

Intermediate Technology Publications. 1993. 88pp. ISBN 1-85339-191-3. 155gm

This publication has three objectives. The first is to trace the evolution of transport theory and policy and to chart the emergence of the new 'needs-led' approach. The second is to describe the methodology and findings of a number of studies which follow this approach. The third is to examine the implications of these findings for policy makers and to suggest areas of intervention, which could usefully be explored to complement the development of rural road networks, with a view to reducing the scale of the transport burden which currently imposes heavily on the time and energy of the rural poor.

Ref. No. 020-009143

\$17.50

Rural roads and poverty alleviation

John Howe and Peter Richards

Intermediate Technology Publications. 1984. 198pp. ISBN 0-946688-05-2. 390gm

A study prepared for the ILO to analyse the pattern and the use of local road networks, and the causes and effects of road programmes on income distribution and poverty alleviation in general. The impact of the selection criteria used in specific road programmes in four countries, Egypt, India, Botswana and Thailand is presented and suggestions made for appropriate selection criteria for the future.

Ref. No. 043-001217

\$16.00

Rural transport in developing countries

Ian Barwell, G. A. Edmonds, J. D. F. Howe and Jan de Veer

Intermediate Technology Publications. 1985. 208pp. ISBN 0-946688-96-6. 210gm

A study of rural transport patterns and policies in developing countries, illustrated by nine case

studies. Illustrates the wide range of low-cost forms of transport that exists in rural areas and suggests the need to broaden the scope of rural transport planning to encompass the actual needs of rural communities in developing countries.

Ref. No. 043-000703

\$19.00

Transport and the village: Findings from African village-level travel and transport surveys and related studies

Ian Barwell

World Bank Discussion Paper No. 344. Africa Region Series. The World Bank. 1996. 66pp. 200gm

The paper focuses on local level transport in rural Africa, examining the multi-sectoral implication of rural transport and the related issues in policy formulation, institutional structures and planning. It defines a range of policy measures which would facilitate an effective response to rural transport needs. It also advocates a more integrated approach to rural transport planning at the local level and recommends that accessibility be considered in the design of many types of development projects and programmes. This report presents a synthesis of the key findings from research, and an agenda for governments, donor agencies and NGOs aiming to improve rural mobility and access in Sub-Saharan Africa. Household surveys and case studies on intermediate means of transport and the role of transport in women's lives were carried out to enhance the understanding of the circumstances under which local level transport imposes a constraint.

Ref. No. 020-009090

POA

Transport for the poor or poor transport?

John D. G. F. Howe

ILO. 1996. 80pp. ISBN 92-2-110473. 230gm

Research has shown that in the poorest areas household travel is dominated by subsistence tasks of getting access to water, fuelwood, grinding mills, schools and clinics. The prime transport requirement is for the movement of frequent, small loads over short distances. Social and welfare needs are the main motivation for longer-distance travel for which road transport might be appropriate. Few households possess any form of motorised transport. Instead walking, cycling and movement by animal dominate. Recognition of these transport patterns has led to the formulation of rural transport policies and planning methodologies based on the twin requirements of improving household access to services, and the mobility of all its members, especially the women who in many societies shoulder the majority of the transport tasks.

The author argues that the implementation of such policies implies a much wider and more heterogeneous range of investments on the part of governments and development agencies than has traditionally been the case. A new economic *numaire* will be required to replace cost-benefit analyses which, as currently practised, emphasise only a narrow range of road-user benefits. Least Cost Planning, which has been developed to overcome similar access investment heterogeneity problems in developed countries, appears to merit closer inspection.

Ref. No. 020-009163

POA

Women and rural transport: Assessment of their role in Sub-Saharan Africa

Irene Urasa

CTP 126. ILO. 1990. 79pp. 275gm

Considers rural women's activities in relation to transport needs. Examines the impact on women of improving accessibility and introducing intermediate means of transport, and the role of women in improving rural accessibility.

Ref. No. 043-001730

\$9.50

Access and Rural Employment: Integrated Rural Accessibility Planning (IRAP)

The following titles deal with rural accessibility planning at the local level. IRAP is a needs-based planning tool that, with community participation and in collaboration with local authorities, identifies the access problems and prioritises interventions addressing those problems.

A guide to Integrated Rural Accessibility Planning in Malawi

Rob Dingen

ILO/ASIST. June 2000. 140pp.

ISBN 92 -2-112098-8. 250gm

This guide describes the IRAP approach in Malawi and is based experience from the Pilot Integrated Rural Transport Project in Malawi. IRAP is a multi-sectoral integrated planning tool that addresses the major aspects of access needs of rural households for subsistence and economic purposes. This is a useful practical guide of the steps involved in the process.

Ref. No. MWI-030511

POA

 **A guide to Integrated Rural Accessibility Planning in Tanzania: Gender — Integrated version**

Compiled by Edward H. Mhina

ILO; Swiss Agency for Development and Cooperation (SDC). March 1997. 74pp. 210gm

Based on the new approach in rural transport planning, *i.e.* integrated rural accessibility planning, this guide focuses on how gender issues may be incorporated into rural transport and accessibility policy and planning. The guidelines are drawn from the experience of the Makete Integrated Rural Transport Planning (MIRTP) project carried out by ILO and funded by the SDC. The gender guidelines have been prepared to assist district planners in Tanzania, planning and implementing programmes or projects designed to improve rural accessibility.

Ref. No. TZA-037595

POA

 **Accessibility planning and local development**

K. Dixon-Fyle

RATP No. 2. ILO. 1998. 27pp. ISBN 92-2-111138-5. 105gm

The IRAP (Integrated Rural Accessibility Planning) methodology is concerned with improvement of the living and working conditions of the rural population, through investments directed towards the most urgent needs for their access to basic goods, social and economic services and employment opportunities. This paper presents the accessibility planning approach and the IRAP methodology, and explores their present and potential usefulness to local level development within today's development context, characterised by trends such as democratisation and decentralisation. The paper concludes by reviewing the different areas in which more research and development can extend the methodological range of IRAP whilst keeping its edge as a simple, user-friendly and yet powerful planning tool in the service of local level planners and communities.

Ref. No. 020-009186

POA

Balancing the load: Proceedings of the Asia and Africa regional seminars on gender and rural transport

International Forum for Rural Transport and Development (IFRTD). 1999. 69pp. 250gm

The Balancing the Load research programme began in 1996 to fill the gaps in our knowledge about how gender relations affected women and men's access to goods and services and influenced the provision of transport infrastructure and services. These proceedings provide an account of the two regional seminars held in Asia and Africa which brought together researchers and other

actors with an interest in gender, rural development and rural transport to share experiences and develop recommendations for better integration of gender into rural transport interventions.

Ref. No. 020-009339

POA

 **Guidelines on Integrated Rural Accessibility Planning: Planning for peoples' needs**

Geoff Edmonds, Chris Dongess and Nori Palarca

ILO/DIGL. Manila, Philippines. 1994. 225pp. 285gm

These guidelines are intended to provide an introduction to the Integrated Rural Accessibility Planning (IRAP) methodology. IRAP is a local level planning process which is based on the concept that the lack of access of rural people to goods and services is one of the fundamental constraints to their development. It describes the basic philosophy behind this local level planning procedure and explains how it is applied and finally illustrates what can be expected from it. This document includes three issues papers, which describe accessibility indicators, the accessibility database and access mapping, as well as two sets of training materials; T1 - Training reading material and T2 - Training program: access to basic goods and services.

Ref. No. 020-009084

\$24.00

 **Integrated Rural Accessibility Planning project series**

Chris Donnges

Access and income generating activities. Issue paper 1

UNDP; IRAP/ ILO. 1998. 42pp. 120gm

Guidelines on Integrated Rural Accessibility Planning. Issue paper 2

UNDP; IRAP/ ILO. 1998. 49pp. 150gm

Rural road planning: Recommendations for improving the rural road network in Lao P.D.R. Issue paper 3

UNDP; Sida; ILO. 1998. 45pp. 130gm

These issue papers are meant to stimulate and guide discussions to improve the IRAP planning procedures in Laos and other Asian countries where activities are starting such as Indonesia, Cambodia, Mongolia and Thailand. They provide valuable information and guidelines that can usefully be adapted to different countries.

Ref. No. 1AS-043533 (Paper 1)

\$5.00

Ref. No. 1AS-043555 (Paper 2)

\$6.50

Ref. No. 1AS-043556 (Paper 3)

\$6.00

Local level planning and investment prioritisation. Final report

IT Transport. 1999. 57pp. 200gm

This report is based on the development of the accessibility planning technique and the role of access in planning for sustainable rural livelihoods. It's major emphasis is directed at ensuring that local level funds set for access improvements are effectively allocated by developing a simple procedure which can be used by local level planners to make rationale decisions when using scarce resources.

Ref. No. 020-009328

\$7.50

Rural transport and accessibility

Ron Dennis

RATP No. 1, ILO. 1998. 83pp. ISBN 92-2-111141-5. 235gm

This paper brings together the results of four studies undertaken in the framework of an interregional project on rural transport and accessibility financed by the Swedish International Development Cooperation Agency (Sida) and managed by the Development Policies Department (POLDEV) of the ILO. The considerations emerging from these studies lead to a more general discussion on the issue of how to provide effective solutions to the access needs of rural populations. The main theme of the document is that there needs to be a more systematic approach to the issue; that rural transport planning cannot be divorced from the planning of physical infrastructure such as water supply, schools and health centres. The paper reinforces support to the current trend towards a systems approach to the issue and describes the important aspects of the development of such an approach.

Ref. No. 020-009158

POA



Wasted Time: The price of poor access

G. A. Edmonds

RATP No. 3, ILO. 1998. 110pp. ISBN 92-2-111001-X. 365gm

The focus of this paper is on how infrastructure development and accessibility planning can effectively contribute to the improvement of the access situation in rural areas of developing countries. The thesis of the book is that time consumed in merely obtaining access to services and facilities is a considerable constraint to development. It provides detailed descriptions of the accessibility planning process, which has been developed in the framework of the ILO-assisted projects and of its potential, as well as indications on possible improvements to such a process.

Ref. No. 020-009159

POA

Access and Rural Employment: rural access intervention

The titles listed below describe various access interventions that address accessibility problems. These include development of rural infrastructure such as footpaths, tracks and foot bridges; intermediate means of transport (IMT); provision of transport services; creation of an environment within which the need for and time spent on transport and travel are reduced.



Footpaths and tracks: A field manual for their construction and improvement

IT Transport

RATP No. 6, ILO. 2002. 105pp. ISBN 92-2-113122-X 330gm

The manual presents practical measures that can be taken to improve or upgrade paths and tracks in developing countries. These improvements are not only directed to making travel by foot easier, but also cover the need to provide access for intermediate means of transport (IMT) such as pack animals, bicycles, wheelbarrows and carts. The manual includes guidelines on organisational issues; the appropriate standards for paths and tracks for different uses; as well as specific technical solutions to problems which are commonly encountered on sections of paths and tracks.

Ref. No. 020-009351

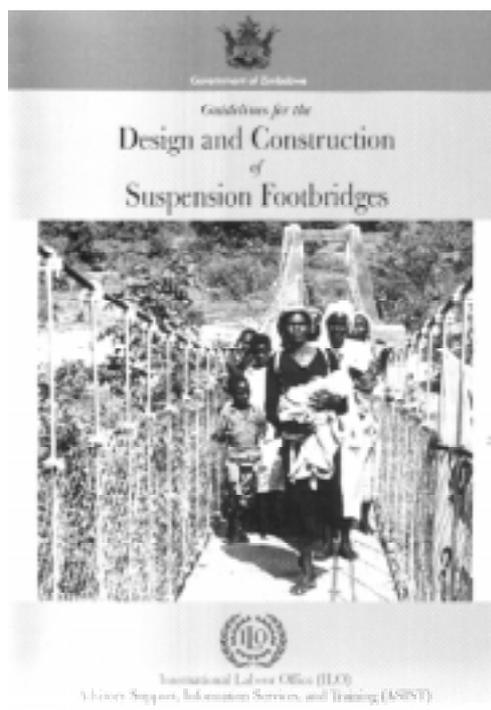
POA

NEW**Guidelines for the design and construction of suspension footbridges**

Emmanuel Chipuru

ILO/ASIST. 2000. 130pp. ISBN. 92-2112443-6. 280gm

These guidelines draw on the experiences gained during the construction of suspension footbridges in both Zimbabwe and Nepal. They cover the following aspects: site investigation; estimation of quantities; tendering of contractor; construction procedures; resource management; and maintenance of the structure once built. It is intended as a complement to the standard procedures and drawings for bridge development by the Department of Roads in Zimbabwe.

Ref. No. 043-110000**\$6.00****Intermediate means of transport in Sub-Saharan Africa: Its potential for improving rural travel and transport**

John D. N. Riverson and Steve Carapetis

World Bank Technical Paper Number 161. Africa Technical Department Series. The World Bank. 1991. 36pp. ISBN 0253-7494. 110gm

Examines rural transport services in Africa and the gaps that exist. Discusses the potential for intermediate means of transport as a means of improving rural access and the personal mobility of rural people, particularly women, to help increase their productivity. Calls for a new approach to planning for rural transport based on a better understanding of the needs of rural people.

Ref. No. 043-000539**POA****Low-cost vehicles: Options for moving people and goods**

Gordon Hathway

Intermediate Technology Publications. 1985. 112pp. ISBN 0-946688-40-0. 240gm

An illustrated guide to low-cost forms of transport aimed at planners and decision makers. Focuses on the real transport needs of developing communities. Catalogues the range of low-cost options available, summarising the characteristics, uses, advantages and disadvantages.

Ref. No. 043-001684**\$16.00****Makete Integrated Rural Transport Project—The transport demand of rural households: Findings from a village-level travel survey. Volume I: Main report; Volume II: Annexes to main report**

Ian Barwell and Christina Malmberg Calvo

ILO. 1989. Volume I: CTP 102. 90pp. 270gm; Volume II: CTP 103. 83pp. 250gm

This report presents the findings of the village-level transport survey carried out in Makete district of Tanzania as part of the Makete Integrated Rural Transport Project (MIRTP). The object of the project was to assist the district identify and implement sustainable improvements in the rural transport system in the area to improve access of rural households to essential goods and services using local resources. The purpose of the survey was to define the transport characteristics and existing travel patterns of rural households, and their level of access to basic economic and social facilities. The findings from the survey provide a basis of defining a programme of interventions aimed at improving access of rural households. They also have important implications for the development of rural transport facilities in other parts of Tanzania and Sub-Saharan Africa.

Ref. No. TZA-037414 (Volume I)**\$11.50****Ref. No. TZA-037415 (Volume II)****\$85.00****Manual on improvements/maintenance of paths. Makete Integrated Rural Transport Project**

K. Selvarasa

ILO. 1992. 20pp. 145gm

This is a simple guide for technicians for the improvement and maintenance of rural infrastructure such as footbridges, paths, tracks and culverts using locally available resources.

Ref. No. TZA-037124**\$3.50**

 **Manufacturer's guide: Low-cost transport devices**

IT Zimbabwe and ILO/ASIST. 1997. 32pp. 145gm

This booklet is intended to provide artisans with basic designs of different non-motorised rural transport devices that they can make in rural workshops using basic equipment. The devices illustrated are designed with small rural farms in mind and include various hand and animal drawn carrying devices, wheelbarrows and push carts. It also includes designs for the manufacture of wheels and hubs. A list of training centres in Zimbabwe is also provided.

Ref. No. 020-009188

POA

Meeting transport needs with intermediate modes of transport. Volume I and Volume II

IFRTD. 1999. Volume I: 47pp.

ISBN 955-8233-00-5; 80gm; Volume II: 221pp.

ISBN 955-8233-01-3. 310gm

Proceedings of the regional seminar on Intermediate Modes of Transport (IMT) organised by the Lanka Forum on Rural Transport Development (LFRTD) and held in Galle, Sri Lanka on March 1998. The aim of the seminar was to create awareness of the issues related to the production, dissemination and use of IMTs. Volume I presents the overview of the seminar, while volume II contains the papers presented.

Ref. No. 020-009324 (Volume I)

POA

Ref. No. 020-009325 (Volume II)

POA

Promoting intermediate means of transport: Approach paper

I.T. Transport Ltd.

Sub-Saharan Africa Transport Policy Program (SSATP), Working Paper No. 20. The World Bank. October 1996. 50pp. 130gm

This paper puts forward a five-stage decision making model for the designer or planner of projects or programmes. It begins with a contextual analysis that gives attention to environmental, economic, industrial, and social factors; and non project issues such as institutional, policy and regulatory. The results are filtered through a consideration of access issues, including national norms and targets as well as the possibility of non transport solutions to what may appear to be transport problems. This leads to a diagnosis of the problem to be tackled and the objectives to be set in improving the rural transport system. A supply and demand analysis then provides a bridge between the definition of needs and the last stage, the planning of detailed action.

Ref. No. 020-009091

POA

 **Report of the final evaluation mission regarding the Pilot Integrated Rural Transport Project - Phase (II): MLW/93/003**

John Sadalaki, Geoff Edmonds, and Michael Dalton

ILO; UNDP; Government of Malawi. 1996. 109pp. 320gm

This is a report of an evaluation mission of the Pilot Integrated Rural Transport Project (PIRTP). Overall, the project was regarded as a success. Recommendations include the need to promote Intermediate Means of Transport (IMT), and more effective credit.

Ref. No. MWI-030020

\$12.50

Rural transport

Jo Doran

Energy and Environment Technology Source Books. Intermediate Technology Publications; United Nations Development Fund for Women (UNIFEM). 1996. 80pp. ISBN 1-85339-345-2. 220gm

This source book seeks to raise awareness and to provide information on how rural transport problems might be identified and addressed. Since much of rural transporting work is done by women, efforts to address transport needs must pay attention to those who carry the main burden: women. The book highlights rural transport activities and needs, ways of addressing these needs with different means of transport, *i.e.* improving local transport infrastructure, transport activities and needs, ways of addressing these needs with different means of transport, *i.e.* improving local transport infrastructure, establishing transport services, as well as non-transport interventions. The constraints are discussed and a checklist of questions for consideration before identifying or acquiring a means of transport is provided. Case studies and reference lists are also included.

Ref. No. 020-009173

\$13.00

 **Rural transport study in three districts of Zimbabwe**

Volume 1: Main report presenting the findings from the survey in Zaka, Rushinga and Chipinge districts

Mannock Management Consultants; Government of Zimbabwe, Ministry of Transport and Energy; Sida; ILO. April 1997. 37pp. 140gm

Volume one presents the results of the surveys on local travel and transport conducted in Chipinge, Rushinga and Zaka Districts in Zimbabwe. The objectives of this study were: to improve understanding at national, provincial and district levels of the actual transport needs and patterns of the rural population; produce an action plan for each of the three survey districts;

and facilitate development of a National Policy on local rural transport in Zimbabwe. The data presented suggests that households spend considerable time and money on their daily subsistence and on other social and economic needs. This study provides a list of recommendations to address poor access in rural areas.

Ref. No. ZWE-041126 **POA**

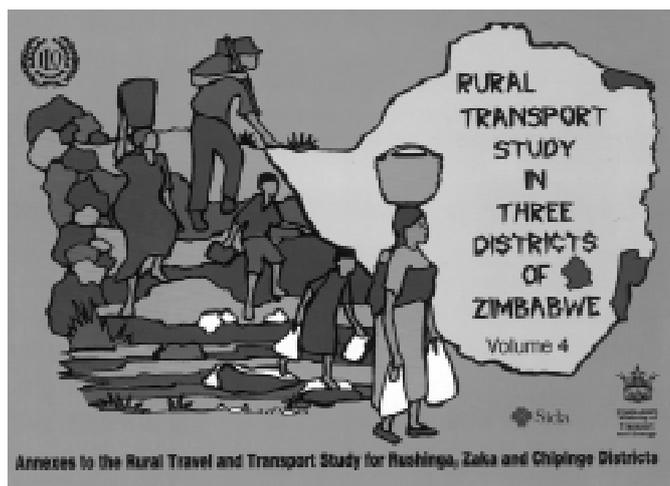
Volume 2: The transport burden on women and girls in Zimbabwe's rural areas

Emily Mudzamba

Government of Zimbabwe, Ministry of Transport and Energy; Sida; ILO. April 1998. 35pp. 120gm

Volume two presents the findings of a further study seeking to define the transport needs of women and girls and to provide recommendations. Among the key findings of the surveys were that women and girls are overburdened with responsibilities of transporting basic household necessities like fuelwood, water, agricultural produce, etc. Very often services are located in inaccessible areas.

Ref. No. ZWE-041539 **POA**



Volume 3: The transport need generated by agricultural activities

Tatenda C. Mbara

Government of Zimbabwe, Ministry of Transport and Energy; Sida; ILO. May 1998. 36pp. 160gm

This report contains the findings of agricultural generated travel and transport in Chipinge and Zaka provinces. The rural travel and transport burden for agricultural generated trips is generally high but vary between districts as well as wards within the same districts. Members of the household spend a considerable amount of time on activities related to crop production, marketing and transportation of farm inputs. An important finding in this study is the high level of intermediate modes of transport (IMT) use in crop production.

Ref. No. ZWE-041562 **POA**

Volume 4: Annexes to the rural travel and transport study in Zaka, Rushinga and Chipinge

Mannock Management Consultants; Government of Zimbabwe, Ministry of Transport and Energy; Sida; ILO. April 1998. 50pp. 155gm

Volume four contains the annexes for the studies and includes the terms of reference, methodology, survey questionnaires, results, findings and recommendations.

Ref. No. ZWE-041548 **POA**

 **The design and manufacture of animal-drawn carts**

Ian Barwell and Gordon Hathway

Intermediate Technology Publications. 1996. 80pp. ISBN 0-946688-52-4. 350gm

A technical manual prepared for the ILO and Habitat on the principles of good design and manufacture of efficient animal drawn carts. It provides detailed information on animal cart design and manufacturing technologies that can be employed under different circumstances and at different scales of production. The manual is useful for producers and potential producers who have difficulty in choosing and applying technologies best suited to their own circumstances. However, it is also of interest to planners, evaluators from development agencies, training institutions and funding agencies.

Ref. No. 043-000842 **\$20.00**

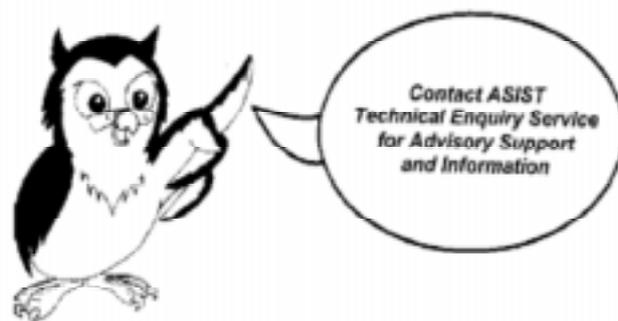
 **The design and manufacture of low-cost motorised vehicles**

Ian Barwell and Alan Smith

ILO; Habitat; Intermediate Technology Publications. 1988. 190pp. ISBN: 1-85339-070-4. 545gm

Aimed at planners and decision-makers seeking to identify or select low-cost motorised vehicles to meet local transport needs. Gives an assessment of low-cost vehicle options available to the developing world. Provides technical specifications for the design of different vehicles suitable for manufacture in developing countries. Technical and economic considerations in the manufacture of low-cost motorised vehicles are discussed.

Ref. No. 020-009144 **\$25.00**



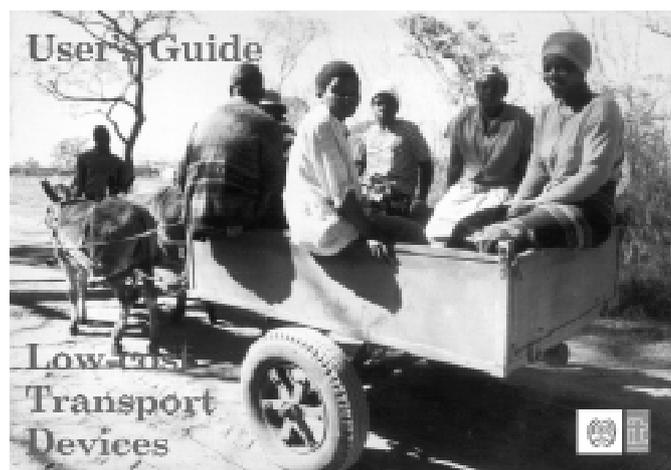
 **User's guide: Low-cost transport devices**

IT Zimbabwe; ILO/ASIST. 1997. 16pp. 95gm

This booklet is intended for organisations dealing with issues of rural transport. It provides information on transport devices for rural households and small farms that can be made in rural workshops using basic equipment. The basic designs described can be modified to suit local conditions, material supply and most importantly to suit the customer's needs, and can be made by any good rural workshop.

Ref. No. 020-009189

POA



Construction management and contracting

For many years the responsibility for delivering infrastructure in the developing world has remained with government agencies. This is now changing, and the private sector is becoming much more important. However the private sector, particularly the small-scale and emerging businesses that would be appropriate for labour-based work, needs a lot of help to grow, and government procedures need to be adapted to give a supportive environment. These documents provide the necessary information to help this process.

Accounting and book-keeping for the small building contractor

Derek Miles

Intermediate Technology Publications. 1986. 192pp. ISBN 0-903031-54-X. 270gm

A practical and comprehensive guide for managers and owners of small contracting businesses. Topics covered include keeping records, assets and liabilities, basic book-keeping, fixed assets, depreciation, balance sheets, profit and loss accounts, reading and comparison of accounts. Also includes practical exercises.

(A publication in the *Small Building Contractor series*).

Ref. No. 043-000312

\$16.00

Contracting out road maintenance activities

Volume I: Developing domestic contractors for road maintenance in Africa

Jean Marie Lantran

The World Bank, ECA, SSATP. 1990. 39pp. 110gm

Volume II: Contracts for road maintenance works, agreements for works by direct labour

Jean Marie Lantran

The World Bank, ECA, SSATP. 1991. 55pp. 145gm

Volume III: Setting up a plant pool

Jean Marie Lantran and Roger Lebussey

The World Bank, ECA, SSATP. 1991. 62pp. 175gm

Volume IV: Managing small contracts: Practical guidance on how to streamline and manage small contracts for public works and services

Jean Marie Lantran

The World Bank, ECA, SSATP. 1993. 113pp. 145gm

Volume V: Road maintenance and the environment: Guidance for taking care of the environment when preparing and carrying out road maintenance activities

Jean Marie Lantran, Jacques Baillon, Jean-Marc Pagès

The World Bank, ECA, SSATP. 1994. 162pp. 415gm

This series of reports was produced for the World Bank as part of their Sub-Saharan Africa Transport Program initiative.

Volume I reviews the experience of past and current projects aimed at developing the capacity of the domestic construction industry in road maintenance works.

Volume II draws lessons for preparing, awarding, and managing contracts for road maintenance works in developing countries.

Volume III presents information and advice on how to set up a commercial plant pool to deal with the redeployment of government departmental equipment fleets and to facilitate access to equipment for small contractors and force-account brigades.

Volume IV reviews the experience of past and current projects and draws lessons for preparing, awarding, and managing contracts for road maintenance works. It offers practical guidance to highway and other authorities to help them streamline their procedures and reform their structure so as to manage efficiently small contracts for road maintenance works.

The final volume V aims at providing all the actors in road maintenance programmes with

practical guidance and tools for integrating environmental considerations into road maintenance operations. The report covers the identification of the impact of road maintenance on the environment, the technical options, economic considerations, and institutional and contractual aspects of integrated environmental management in road maintenance.

Ref. No. 043-000300 (Volume I) POA
Ref. No. 043-000531 (Volume II) POA
Ref. No. 043-001437 (Volume III) POA
Ref. No. 043-001586 (Volume IV) POA
Ref. No. 043-001002 (Volume V) POA

 **Employment-intensive infrastructure programmes: Capacity building for contracting in the construction sector**

Peter Bentall, Andreas Beusch and Jan de Veen

ILO. 1999. 238pp. ISBN 92-2-111-581-X. 780gm (Also available in French and Spanish)

These guidelines present the current experience of contractor development programmes which aim to introduce cost-effective employment intensive approaches to infrastructure works while respecting labour standards and correct working conditions. It discusses different options for private sector development — contractors and consultants — the selection and training of contractors, their access to and management of financial and material resources, and contract documentation and procedures. It also deals with labour relations and issues related to working conditions and labour standards.

Ref. No. 003-014133 \$25.00

Financial planning for the small building contractor

Derek Miles

Intermediate Technology Publications. 1992. 188pp. ISBN 0-903031-55-8. 250gm

A practical easy-to-read guide for small building contractors on planning, job programming, cash flow, funds management, investment decisions, billing procedures, and monitoring and evaluating work processes. (*A publication in the Small Building Contractor series*).

Ref. No. 043-000315 \$16.00

 **Ghana feeder roads project GHA/84/008: Labour-based rehabilitation and maintenance. Final report**

P. H. Bentall

CTP 116. World Employment Programme; ILO. 1990. 116pp. 315gm

Reports on the experience of the Ghana feeder roads improvement project which involved the use of local small-scale contractors employing labour-based methods. Outlines the project

objectives, planning and implementation procedures (including contract procedures), equipment arrangements, costs, and the spot improvement and maintenance programme employed. The report concludes with the problems faced, achievements and lessons learned.

Ref. No. GHA-026023 \$13.00

 **Guidelines for the development of small-scale construction enterprises**

Colin T. Relf and Angus D. Austen

ILO. 1987. 143pp. ISBN 92-2-105695-3. 215gm

Provides comprehensive and specific guidelines for the development of small-scale construction enterprises. Discusses the rationale for the development of small-scale construction enterprises, policy issues, constraints, programmes and strategies for small contractor development. Specifically targeted towards policy makers, governments and others working to improve the performance of small-scale construction enterprises.

Ref. No. 043-000307 \$17.00

 **Improving site productivity in the construction industry**

Alan Heap

ILO. 1987. 128pp. ISBN 92-2-105694-5. 205gm

Addressed to managers of construction projects, this book describes how improvements in productivity can be achieved. Outlines the use of work study, a series of techniques used to systematically examine every aspect of human work and the factors that affect efficiency and economy to improve productivity levels in construction work.

Ref. No. 043-000305 \$25.00

  **Labour-based contracting on the road to the 21st century**

Jan de Veen and Terje Tessem

ILO/SAMAT. 1996. 36pp. 105gm

The ILO has been involved in the development of local contractors in the road sector through its Employment-intensive Programme. The paper reviews the ILO's holistic approach which involves both the business community and the government agency in joint implementation of labour-based roadworks. It underscores the crucial role of the government agency in fostering the growth of the local contracting industry. This is to be done through the development of a supportive policy environment and the introduction of simple and effective administrative systems. At the same time the business community should be involved in training and subsequent support programmes such as mentorship programmes for the emerging contractors. In addition to facilitating

institutional development to support emerging contractors, the government agency will need to arrange for business management and technical training.

Ref. No. 043-000839

\$5.00

 **Labour-based contracting: A study to develop guidelines for project formulation and implementation. Phase 1: Collection and collation of data**

Peter Bentall, Alex Twumasi-Boakye and Ron Watermeyer

Volume 1: Overview; Assessment of key issues; General analysis of projects; Brief project descriptions

Volume 2: Country reports; Applicability of projects; Alternative approaches

Volume 3: Overview (South Africa); Soweto CDP; Contract documentation

ILO. 1995. Volume 1: 129pp, 365gm; Volume 2: 168pp, 465gm; Volume 3: 178pp, 485gm

Report of the first phase in an ILO project to develop guidelines for project formulation and implementation of labour-based contracting projects. Reports on a study tour of labour-based contractor training projects in Ghana, Kenya, Uganda, Lesotho, Zimbabwe and South Africa. Volume One identifies the key issues from various project experiences, i.e. project preparation, training, contract documentation and detailed implementation. Volume Two contains detailed descriptions and analyses of the various country projects, the applicability of the projects and alternative approaches. Volume Three concentrates on the South African situation and the Soweto contractor development programme (CDP).

Ref. No. 1AF-042034 (Volume 1)

POA

Ref. No. 1AF-042035 (Volume 2)

POA

Ref. No. 1AF-042036 (Volume 3)

POA

 **Managing construction projects: A guide to processes and procedures**

Angus D. Austen and R. H. Neale (Eds.)

ILO. 1990. 159pp. ISBN 92-2-106476-X. 290gm

This guide describes the general principles of construction project management, with emphasis on their use in developing countries. Particular emphasis is placed on the need for careful planning and the requirements for successful execution at all stages. This fully illustrated practical guide is valuable for all involved in managing construction projects and construction management training.

Ref. No. 043-000306

\$18.50

Road contractor promotion and employment generation in Africa

Eugène Rausch

Transport and Construction Division, GTZ, Eschborn, Germany. 1994. 159pp. 215gm

A study of the organisational and financial condition for promoting road contractors in developing countries in Africa, the creation of employment agencies as well as the use of veterans in feeder road maintenance. Discusses past experiences in developing a local road contracting industry, by looking at experiences in specific countries including Cameroon, Rwanda, Tanzania, Uganda, and Zanzibar. Analyses the problems of the road contracting industry and defines possible solutions. Looks at the administrative environment of the traditional contracting authority and advocates for private contracting agencies as a new approach to contractor promotion.

Ref. No. 1AF-042044

POA

 **The administration of labour-intensive works done by contract. Practical guide**

P. Garnier and M. van Imschoot

ILO. 1993. 137pp. ISBN 92-2-108514-7. 405gm

Provides practical guidelines to those responsible for rural and urban labour-intensive infrastructure projects. Aims to facilitate government departments or local consulting firms in the preparation of tender and contract documents, and the administration of such contracts, for implementation of labour-intensive infrastructural works by small and medium scale construction enterprises.

Ref. No. 043-001747

\$14.00

 **The Rainmaker**

ILO. 1992. 28pp. ISBN: 92-2-103271-X. 165gm

A light hearted account of the trials that beset a small contractor. An illustrated comic-like story where the contractor is portrayed as a rainmaker.

Ref. No. 043-000251

\$3.00

The small building contractor and the client

Derek Miles

Intermediate Technology Publications. 1986. 270pp.

ISBN 0-903031-67-1. 340gm

A practical guide for small building contractors on how to establish and run a business effectively. Topics covered include marketing, estimating, pricing, purchasing, bidding policy, risks, legal issues, contractor-client relationship. (*A publication in the Small Building Contractor series*).

Ref. No. 043-000313

\$16.00

Towards guidelines for labour-based contracting: A framework document. MART Working Paper No. 1

MART/ILO. 1996. 36pp. ISBN 1-900930-005. 135gm

This framework document on labour-based contracting for the roads sector in low-income countries is intended to provide a useful set of checklists for practitioners. It forms a preparatory stage for the production of a comprehensive manual. The framework was produced as a result of a workshop of 30 international experts on the topic. Both strategic and operational issues of labour-based contracting are covered.

Ref. No. RES-017003

POA

Contract documents

A simple and reliable set of contract documents is a prerequisite for successful contracts. However most existing documents tend to be over complex for the level of work we are involved in. There has been a temptation to produce ad hoc contracts assembled from various sources. These have often proved to be poorly drafted and of doubtful value when claims or disputes occur. The following set of contract documents developed in Lesotho could be used or adapted for use in different countries.



Contract documents for small contracts in the road sector

David Stiedl

Technical Brief No 5. ILO/ASIST. 2000. 18pp. 55gm

Private sector involvement in road construction and maintenance is now a priority in many developing countries, but there is often limited exposure and experience with modern contracting procedures and practices. This technical brief looks at some of the currently available contract documentation for works of civil engineering construction and comments on their suitability for use by road agencies with respect to local small or "emerging" contractors.

Ref. No. 043-002420

\$3.00

Labour Construction Unit: Bidding document for road rehabilitation/ regravelling works

Labour Construction Unit, Ministry of Works, Maseru, Lesotho. May 1996. 84pp. 315gm

Bidding documents developed and used by the Labour Construction Unit, Ministry of Works, Lesotho for road rehabilitation and regravelling works using labour-based construction methods.

Ref. No. LSO-028139

POA

Labour Construction Unit: Contract documents for routine road maintenance

Labour Construction Unit, Ministry of Works, Maseru, Lesotho, June 1996. 40pp. 130gm

Contract documents developed and used by the Labour Construction Unit, Ministry of Works, Lesotho for contracting out labour-based routine maintenance roadworks to small scale contractors.

Ref. No. LSO-028138

POA

Standard procedures for the procurement of works

IT Transport

Labour Construction Unit, Ministry of Works, Maseru, Lesotho. June 1997. 18pp. 130gm

Standard procedures for competitive and direct bidding and contract procurement used by the Labour Construction Unit, Ministry of Works, Lesotho for contracting out road rehabilitation and regravelling works to small scale contractors using labour-based construction methods.

Ref. No. LSO-028133

POA

Contractor training

The construction industry in developing countries typically employs 5-10 percent of the workforce, and is responsible for creating at least 50 percent of these countries fixed assets. In recognition of the importance of this industry the ILO has been involved in technical cooperation programmes concerned with contractor development. The ILO and its partners have produced a series of publications as a result of these activities, designed to increase the competence of small-scale contractors.

Entrepreneurship development for labour-based road construction contractors

Labour Construction Unit (LCU), Ministry of Works, Lesotho. May 1999

ROCAU training programme: Training guidelines

264pp. 700gm

ROCAU course: Overhead slides

110pp. 300gm

ROCAU course: Training manual

285pp. 750gm

ROCAU is the roads construction and upgrading programme in Lesotho. These guidelines are useful for planning, organising and implementing training programmes for small-scale contractors of labour-based road works. The guidelines

contain practical advice, checklists and reference material based on the experience gained during courses conducted by the LCU and ILO in Lesotho. The training manual covers the basic information required for the classroom training courses for contract supervisors, contractors, and contractors' site agents. Chapters in the manual include: appropriate technology for road construction and maintenance; soil mechanics; equipment and tools; site planning and quality control; managing people; and contract documentation and pricing principles. The training guidelines are complemented by a set of overhead slides to be used in the training.

Ref. No. LSO-028514 (Training guidelines) POA
Ref. No. LSO-028515 (Overhead slides) POA
Ref. No. LSO-028516 (Training manual) POA

Improve your construction business series

Claes-Axel Andersson, Derek Miles, Richard Neale, John Ward

Pricing and bidding. IYCB 1. Handbook and Workbook

ILO. 1994. Handbook: 112pp. ISBN 92-2-108738-7. 170gm; Workbook: 112pp. ISBN 92-2-108748-4. 170gm

Ref. No. 062-003669 (Handbook) \$11.00
Ref. No. 062-003670 (Workbook) \$11.00

Site management. IYCB 2: Handbook and Workbook

ILO. 1996. Handbook: 112pp. ISBN 92-2-108754-9. 195gm; Workbook: 160pp. ISBN 92-2-108753-0. 265gm

Ref. No. 062-003773 (Handbook) \$11.00
Ref. No. 062-003774 (Workbook) \$11.00

Business management. IYCB 3: Handbook and Workbook

ILO. 1996. Handbook: 128pp. ISBN 92-2-108755-7. 215gm; Workbook: 144pp. ISBN 92-2-108756-5. 245gm

Ref. No. 062-003805 (Handbook) \$11.00
Ref. No. 062-003806 (Workbook) \$11.00

The Improve Your Construction Business (IYCB) series has been developed to suit the needs of small building and public works contractors. The series is designed for self-study. There is also an IYCB trainer's guide to assist trainers in preparing for and running seminars and workshops. Volume 1 presents a step-by-step guide through the preparation of a bid for a small building contract, and also contains a contract glossary. The Workbook contains exercises to test the contractor's estimating skills and to help identify strengths and weaknesses of their businesses.

Volume 2 covers the technical aspects of planning and site management. The Handbook,

together with its companion Workbook, explores the management of construction projects, including both the initial planning aspects and practical issues such as site layout, work methods and quality control. Volume 3 focuses on the financial control and office administration areas which are frequently neglected by contractors, who are generally more interested in the technical aspects of construction work. The Handbook covers both financial and business management and includes guidelines on the costing of plant and equipment, as well as an introduction to accounting, marketing and advice on efficient office organisation. The Workbook contains exercises in management practice and skill tests.



Interactive contractor training

T. Hernes and Derek Miles

Module 1: Estimating and tendering

ILO. 1987. 276pp. ISBN 92-2-109156-2. 1015gm

Module 2: Project planning

ILO. 1987. 231pp. ISBN 92-2-109157-0. 850gm

Module 3: Site productivity

ILO. 1987. 138pp. ISBN 92-2-109158-9. 550gm

Training modules written to meet the needs of small to medium scale construction enterprises in developing countries. The methodology is designed to encourage contractors to participate fully in the learning process through an integrated programme of study, worked examples, exercises and simulations. The modules are designed as a model or a basis for preparing training material based on the exact needs of the target group. Each module contains a guide providing specific advice for the trainer on how the modules should be used in the context of a comprehensive contractor training course.

Module 1 provides the basis for a simple but comprehensive introduction to estimating and tendering. Module 2 describes how a project is planned by drawing a bar chart, preparing schedules for labour and materials, drawing weekly and monthly programmes and forecasting the cash needs throughout the project. Module 3 shows how productivity affects the financial performance of the contracting firms. Specific ways to improve productivity are described, *i.e.* better site layout, more effective supervision, measuring the site activity level and reviewing work methods.

Ref. No. 062-003783 (Module 1)

Ref. No. 062-003784 (Module 2)

Ref. No. 062-003785 (Module 3)

\$63.00 (for set of three modules)



Labour-based road contracting development in Zambia: Training curriculum, trial contract arrangements and training assessment

Andreas Beusch

CTP 146. ILO/ASIST. 1996. 65pp. 195gm

Provides a detailed outline of a contractor training programme in Zambia. Outlines the main principles involved in the planning process of contractor training programmes, from the definition of training objectives, training needs analysis, training inputs and requirements, to the preparation of training programmes and resources, training implementation and assessment. Though developed for Zambia it can be used as a guideline for planning contractor training in other countries.

Ref. No. ZMB-039154

POA



Management training for labour-based road contractors

Claes-Axel Andersson

Book 1: Pricing and bidding

ILO. 1997. 70pp. ISBN 92-2-110909-7. 230gm

Book 2: Management and planning

ILO. 1997. 94pp. ISBN 92-2-110908-9. 265gm

This training material has been prepared as an output of a contractor training project executed by the Department of Feeder Roads, Ministry of Roads and Highways, Ghana, with technical support from ILO and funded by DANIDA. The project concerns training development of Ghana's labour-based roadworks contractors. The booklets constitute a course for managers of small-scale road contracting firms and deal with business planning and control. Book One covers the pricing and bidding process step by step to enable contractors to accurately cost and bid for new projects. Book Two provides a realistic plan to carry out the work and deals with the principles and practice of site supervision. The booklets contain examples and exercises relating to typical situations commonly encountered in labour-based roadworks executed with locally available human and material resources, and provide practical knowledge directly applicable to everyday situations of a typical contractor. The material is designed both for classroom use and self study.

Ref. No. 062-013785 (Book 1)

\$8.00

Ref. No. 062-013786 (Book 2)

\$11.00

Road maintenance and regravelling (ROMAR) using labour-based methods: Handbook and Workbook

Claes-Axel Andersson, Andreas Beusch, Derek Miles

Intermediate Technology Publications. 1996.

Handbook: 311pp. ISBN 1-85339-348-7. 265gm

Workbook: 137pp. ISBN 1-85339-349-5. 545gm

The ROMAR handbook and workbook are written for managers of small construction businesses and designed to complement the Improve Your Construction Business (IYCB) series (also listed in this catalogue). The ROMAR books were produced as part of a contractor development programme in Lesotho, in association with the Labour Construction Unit of the Ministry of Works, assisted by the ILO. They cover both the technical and managerial aspects necessary for a construction business to expand into road and regravelling activities using labour-based methods. The handbook which covers the theory is complemented by the workbook, which includes practical exercises and worked example solutions. The first part of the books provide an introduction to roads and appropriate roadworks technology, the tools and equipment used, and the organisation of labour-based roadworks. The second part deals with road maintenance, covering the different maintenance systems and management techniques, followed by details of routine maintenance and regravelling activities. The final chapters deal with pricing, bidding and management methods.

Ref. No. 062-13726 (Handbook)

\$22.00

Ref. No. 062-13727 (Workbook)

\$17.00



Road maintenance and regravelling (ROMAR) using labour-based methods: Training guidelines

Claes-Axel Andersson and Andreas Beusch

ILO/ASIST. 1997. 266pp. 700gm

These guidelines for training of small-scale contractors are designed to assist trainers in the planning, organising and implementing of routine road maintenance and regravelling using labour-based methods (ROMAR) training courses. The manual provides guidelines on how to link ROMAR, which deals with the technical and managerial aspects, to the Improve Your Construction Business (IYCB) training course which deals with the business management aspects of small-scale road contracting. The guidelines provide practical advice, checklists, sample exercises, overhead projector transparencies and reference material.

Ref. No. 062-013761

\$28.00

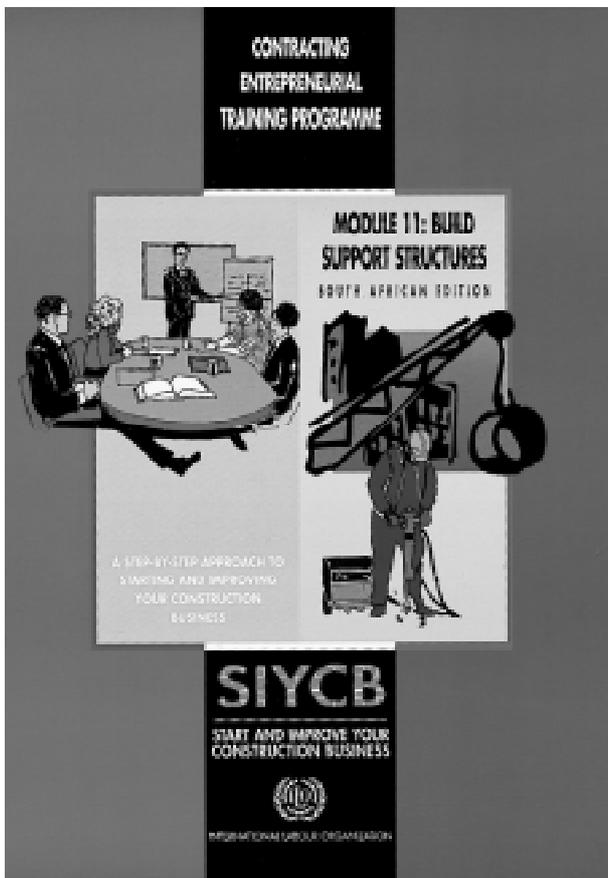
NEW  **Start and improve your construction Business (SIYCB): Contracting entrepreneurial training programme**

ILO. 1999. 12 Modules. ISBN 92-2-111498-8 (set) 3900gm

This set of modules forms a series of a step-by-step approach to starting and improving your construction business. It consists of twelve seamless, progressive step-by-step modules that introduce basic principles of good contracting business management in a simple and practical way. It also includes one generic management business game and two contracting business management games. This set aims to make the emerging contracting businesses more viable. It was developed in South Africa.

Ref. No. ZAF-034598-034609

POA



Crisis Recovery and Reconstruction

The following titles deal with issues related to the timely and effective response to the decent work and other socio-economic challenges of the different crises such as armed conflicts, natural disasters, financial and economic downturns, and political and social transitions.

NEW  **Crises and decent work: A collection of essays**

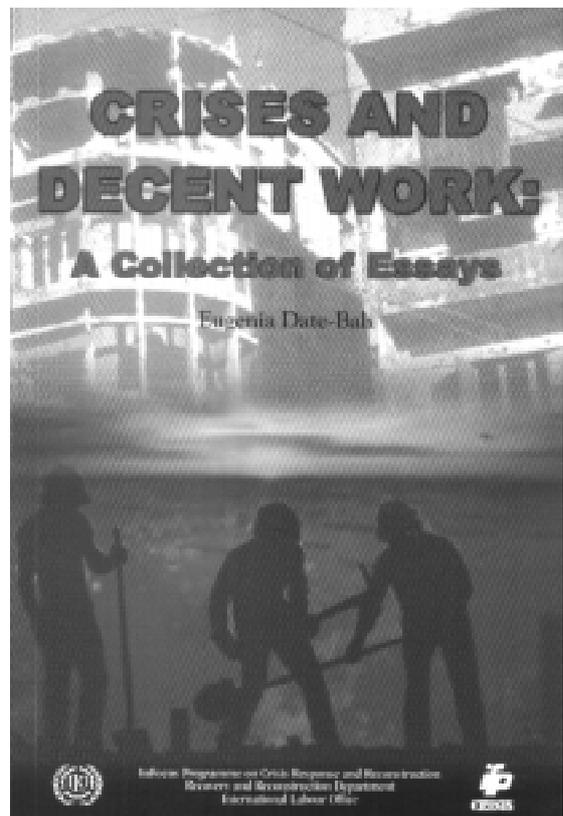
Eugenia Date-Bah

ILO. 2001. 97pp. ISBN 92-2-112638-2. 230gm

This volume brings together a sample of technical papers presented at various conferences and seminars. The issues addressed include; the employment and other socio-economic aspects of post-conflict reconstruction; recovery and reconstruction in crisis caused by natural disasters; crisis prevention; as well as the importance of tackling decent work concerns as an intergral component of the strategies for promoting a culture of peace. The publication also covers specific and critical concerns like gender and crisis, demobilisation, disarmament and re-intergration of ex-combatants, and the importance of capacity building and research for crisis response and reconstruction work. The book also sheds lights on ILO,s role in this sector.

Ref. No. 042-098005

POA



 **Training contractors for results.**

A guide for trainers and training managers

T. Hernes and Derek Miles (Ed.)

ILO.1988.121pp. ISBN 92-2-106253-8. 185g

Gives practical advice on preparing and running a successful training programme for building contractors. It focuses on the results of learning, measurable in terms of improved performance in quality, time and cost on the construction site. Addressed to trainers and managers of training institutions, and to policy makers.

Ref. No. 062-003672

\$15.00

  **Crisis-affected peoples and countries: ILO, operational activities, mid 1997 - March 2001**

ILO. 2001. 100pp. ISBN 92-2-112276-X. 420gm

This report provides a synopsis of ILO's technical assistance programmes and projects in a sample of countries in different parts of the world. It covers the following four main areas: armed conflicts in 19 countries; natural disasters in 9 countries and the Central America region; economic and financial downturns in 6 countries; and difficult social movements or political transition in 5 countries and in the central and eastern Europe region. The publication concludes with a chapter on lessons learned.

Ref. No. 042-098006

POA

  **Employment-intensive reconstruction works in countries emerging from armed conflicts**

ILO. 2001. 116pp. ISBN 92-2-112402-9. 280gm

The main objective of these guidelines is to provide a planning and programming tool and advice for the timely and effective action as regards the following: rehabilitation and development of the physical, economic, social and institutional infrastructure damaged during armed conflicts; and re-integration of conflict-affected groups in this process through employment creation applying employment-intensive techniques. The guidelines further aims to share the experiences gathered from EIIP in post-conflict situations and to give an overview of this process, the stages involved and a basic idea of the methodologies required.

Ref. No. 042-098004

POA

  **From destruction to reconstruction: The Cambodia experience (1992-1997) using employment intensive methods**

Mike Shone

ILO. Recovery and Reconstruction Department. 2001. 47pp. ISBN 92-2-112901-2. 170gm

This study reviews and assesses the employment-intensive programmes (EIP) experience in Cambodia and compares it with the World Food Programme's food for work programme in Cambodia; and the UNDP Office of Project Services Cambodia Resettlement and Reintegration Programme (CARERE). Both programmes also aimed at the reintegration and employment of war-affected persons in Cambodia. The study then goes on to establish a set of guidelines and checklists for the preparation of EIPs in countries emerging from armed conflict, based on the Cambodia experience

Ref. No. 1AS-043596

POA

  **From destruction to reconstruction: The Mozambique experience (1981-1997) using employment intensive methods**

Fione de Vletter

ILO. Recovery and Reconstruction Department. 2001. 48pp. ISBN 92-2-1129029. 160gm

This study was undertaken to look at whether employment-intensive programmes (EIPs) have served or could serve as suitable employment/income generating instruments for vulnerable groups, particularly demobilised soldiers. The study gives a brief overview of the economy of the country. This is followed by a breakdown of the employment and livelihood patterns prevailing in Mozambique. It also takes a look at EIPs, examining the positive contributions and obstacles of the approach. The study briefly reviews various aspects of the reintegration programme designed for vulnerable groups. The study also looks at feeder roads rehabilitation, making a comparison of three different approaches found in Mozambique. Lastly, it examines the issue of institutional capacity and its implications before presenting the conclusions and recommendations

Ref. No. MOZ-031562

POA

  **From destruction to reconstruction: The Uganda experience (1981-1997) using employment intensive methods**

Erik Lyby

ILO. Recovery and Reconstruction Department. 2001. 33pp. ISBN 92-2-112903-9. 120gm

This is a case study of Luwero Triangle in Uganda, as an area emerging from armed conflict. It gives some background information on the history of the country and the effect of the conflict on the infrastructure. The study also traces the history of labour-based technology in Uganda, particularly its application in the Semuto and Masulita projects. The study concludes with some recommendations for future planning of labour-intensive works interventions in post conflict situations.

Ref. No. UGA-038514

POA

  **Guidelines for employment and skills training in conflict-affected countries**

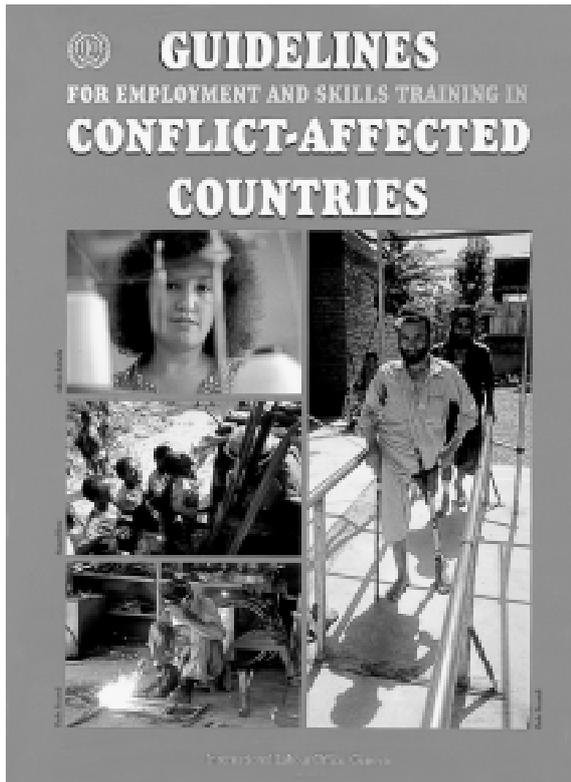
ILO. 1998. 58pp. ISBN 92-2-111035-4. 250gm

This document discusses the requirements for employment and skills promotion in conflict-affected countries, focusing on how training and employment programmes should be adapted to this context. It looks at issues such as the general framework and other prerequisites for the design and implementation of reintegration programmes; possible constraints; small and micro businesses and entrepreneurs; and issues related to social security and protection.

The guidelines concluded by highlighting the role of ILO in thi sector.

Ref. No. 042-110002

POA



Environment

Natural resource degradation in developing countries is often directly linked to poverty and is a major constraint to socio-economic development. Poverty, under- and unemployment, and environmental degradation are interrelated problems calling for an integrated approach. It is vital that all infrastructure created and maintained using labour-based technology is environmentally sound. The titles listed here provide guidelines on the issues to consider to ensure that infrastructure works are carried out in an environmentally sound manner and that no unforeseen negative environmental impacts emerge.



EIP environmental guidelines series

Per Mogstad, Terje Tessem, *et al.*

ILO. 1999.

Guide I: Environment, poverty and the use of local resources for sustainable development

23pp. 100gm

Guide II: Project cycle and environmental assessment

24pp. 100gm

Guide III: Environmental impacts and rural access

25pp. 165gm

Guide IV: Low volume roads and the environment: A guide to proper design, construction and maintenance. Volume 1 and 2

Volume 1: 108pp; 320gm; Volume 2: 59pp. 195gm

The main objective of these guidelines is to enhance the optimal use of local resources in sustainable and environmentally sound infrastructure development strategies and community-based access programmes. They promote a project cycle integrating environmental concerns into the identification, design, planning, execution, operation and maintenance of infrastructure development projects.

Guide I provides a general introduction to the subject, discussing the relationship between environment, poverty, employment and development. Guide II focuses on the project cycle in relation to environmental assessment. Guide III concentrates on the environmental aspects of rural access and transport programme and Guide IV gives practical environmental guidelines for rural road construction and maintenance. In addition there are two case studies from Kenya and Nepal. These guidelines may be applied at all levels, from project identification, design and planning to execution, and should be integrated into the training of policy makers, planners, technicians and people at local level.

Ref. No. MIS-009733 – 009737

POA

Roadside bio-engineering: Site handbook

John Howell

Department of Roads, His Majesty's Government of Nepal; DFID. 1999. 160pp. ISBN 1-86192-170 5. 485gm

This handbook provides information needed to design, plan, implement and maintain bio-engineering works on steep slopes, with specific reference to roadside areas. It also covers the establishment and operation of bio-engineering nurseries. Bio-engineering is the use of living plants for engineering purposes.

Ref. No. 043-002532

POA



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and Information

Irrigation

The ILO has promoted and applied the use of local resources for irrigation works for several years. Community participation and labour-based technology have been applied in the construction and maintenance of irrigation canals and of environmental protection measures. The following titles cover the technical, organisational and operational aspects involved in the utilisation of local resources in irrigation works.

Community works and farmers' participation in minor irrigation in Tamil Nadu

K.S. Sharma and Leila Narayanan

ILO. 1995. 50pp. ISBN 92-2-109798-6. 210gm

Reports on a study which focuses on community works involving people's participation, especially farmers, in the minor irrigation sector in Tamil Nadu, India. The study examines the present level of, and future potential for, participation of farmers in minor irrigation schemes, in the operation and maintenance of works, based on field studies of tanks, an important source of minor irrigation. Tanks represent a public form of irrigation with considerable community interest and responsibility in their maintenance and use.

Ref. No. 1AS-43137

POA

Economic development that lasts: Labour-intensive irrigation projects in Nepal and the United Republic of Tanzania

Bertin Martens

World Employment Programme, ILO. 1989. 192pp. ISBN 92-2-106400-X. 345gm

This book takes the reader to three labour-based irrigation projects, one in Nepal and two in the United Republic of Tanzania. It shows how grass-roots popular participation increases the chances for success, and how the use of local resources improves the long-term viability of the infrastructure. But it also points out how mistakes in design and implementation can greatly limit the length of time the infrastructure can be successfully maintained.

Ref. No. 040-004092

\$18.50

Irrigation: training manuals

Introductory training course in labour-based technology for irrigation supervisors

ILO, Phnom Pehn, Cambodia. 1993. 101pp. 165gm

Provides training material on the technical, environmental, social and economic aspects of

irrigation development with special emphasis on the use of local materials and labour. The material may need to be modified to suit the specific requirements of the irrigation schemes selected for implementation. However, it provides basic guidelines for irrigation supervisors for most situations likely to be encountered.

Ref. No. 062-003924

\$11.50

Nepal SPWP manual series for poverty alleviation through employment generation in irrigation works programmes for the People of the Hills of Nepal

A participatory approach to environmental protection measures for hill irrigation schemes in Nepal

Nepal SPWP Manual No. 1. ILO. 1992. 170pp. 330gm

This manual provides appropriate measures using local resources for slope protection, landslide stabilisation and river-bank protection works required for Nepal's irrigation projects. It provides simple and logical guidelines for design and construction techniques in environmental projects. The manual is suitable for irrigation engineers and overseers but emphasis is given to techniques that can be continued by the beneficiaries during the subsequent operational phase of the canals.

Ref. No. 040-004091

POA

Training modules in appropriate design of small-scale hill irrigation structures: An orientation course for training engineers, irrigation engineers and field overseers

Nepal SPWP Manual No. 2. ILO. 1996. 290pp. 1580gm

A set of nine training modules designed for irrigation engineers and field overseers who have a broad knowledge of civil engineering practices, but lack the appropriate technical expertise needed for the fragile mountain environments of Nepal. The training modules present criteria, standards and guidelines for the selection, design and construction of simple irrigation structures for small-scale farmer-managed hill irrigation schemes in remote hilly areas of the Himalayas. The training modules emphasise the need for a participatory approach to making design and construction choices so that the farmers' knowledge of their environment and building and farming skills are not neglected.

Ref. No. 043-001720

POA

A manual for the formation and management of farmers' irrigation associations in small-scale hill irrigation schemes in Nepal

Nepal SPWP Manual No. 3. ILO. 1992. 159pp. 335gm

Provides a step-by-step participatory process. It has been designed to provide the user with the

Labour and employment

For labour-based methods to be effective and sustainable it is essential that the workforce is productive and reliable. However, for the methods to benefit the country as a whole it is also necessary that the workforce is fairly treated and adequately paid. In all ILO's experience to date with labour-based programmes it has been clearly demonstrated that good labour management procedures and fair conditions have ensured success. The following titles focus on issues and policy concerning labour and employment, particularly as it relates to projects and programmes specifically developed to create employment and alleviate poverty.



A guide on food for assets (FASE)

Draft Working Document. World Food Programme (WFP); ILO. June 1999. Guide: 47pp. 275gm; Leaflets: 46pp. 110gm

This draft working document produced by the WFP together with ILO, though still under development, provides useful guidelines on how food maybe used in exchange for work in food insecure areas. The guide comes with six complementary leaflets that provide basic guidance on a number of subjects related to the planning and implementation of FASE activities. They are meant to assist those in the field responsible for organising and supervising these activities.

Ref. No. 003-014141 (Guide)

\$6.50

Ref. No. 003-014148 (Leaflets)

\$6.50



An opportunity for employment creation, labour-based technology in road-works: The macro-economic dimension

Gary Taylor and Moses Bekabye.

SEPT No. 5. ILO/DANIDA. June 1999.

ISBN 92-2-111827-4. 69pp. 225gm

This report is based on a study carried out in Uganda to evaluate the potential of using employment-intensive technology in the rehabilitation of feeder roads as a means of building infrastructure while at the same time generating employment and combating poverty. The study concentrates on the economic aspects rather than technical ones. The study confirms the hypothesis that labour-based approaches are viable and offer high employment potential, as well as greater indirect benefits to the national economy than conventional equipment-based technology. The main conclusions indicate that a switch towards more labour-based methods could generate very significant benefits for the poor in the form of employment opportunities, and for the country in terms of Gross Domestic Product (GDP) and foreign exchange savings. This comparative study between labour-based and

practical skills in community-based participatory management in hill irrigation and basic procedures required for planning and supervising support activities for rural development endeavours following a genuine participatory approach. It is aimed at rural sociologists and association organisers working on behalf of both government agencies and NGOs responsible for the social organisation and beneficiary training of user groups linked to hill irrigation schemes. It will also be beneficial to district level engineers and overseers responsible for supervising the implementation of irrigation investment programmes through Farmers' Irrigation Associations at the field level.

Ref. No. 040-004142

POA

A video and booklet on improving community-based construction skills for training local community works organisers and village-level artisans

Nepal SPWP Manual No. 4. ILO. 1992. 81pp. 170gm

The video and booklet is aimed at improving the technical, managerial and financial skills of village-level and semi-skilled artisans and entrepreneurs who, as local community-based works organisers could be awarded construction contracts of unskilled and semi-skilled work under a "piecework system". The booklet describes the different types of contracts, contract conditions, construction planning, estimating, manpower and cashflow requirements, pre-bid activities and the prudent use of expensive imported construction material. The training material is elementary and reflects the level of understanding that could be expected of a common villager from the more remote hilly areas of Nepal. The video illustrates the correct construction techniques and construction quality appropriate for difficult and remote construction sites typical of small-scale farmer-managed hill irrigation projects.

Ref. No. 062-013639

POA

A manual for the monitoring and evaluation of community-based irrigation in the hills of Nepal

Nepal SPWP Manual No. 5. ILO. 1995. 112pp. 210gm

Presents a set of guidelines for monitoring and evaluation (M & E) of rural development works with special focus on irrigation development. The guidelines cover several disciplines and provide an introduction to the basics of M & E, including concepts, terminology and objects, methodological considerations, the role of bias, and the identification of target groups. The manual also deals with a practical prerequisite for M & E, viz. the logical framework approach to planning, and links this with the concept of the project cycle. It finally deals with M & E outputs, effects and impacts.

Ref. No. 040-004143

POA

equipment-based methods for rural feeder road improvement would be useful to those involved in the policy formulation process regarding employment generation through infrastructure development.

Ref. No. UGA-038229

POA

 **Decent working conditions in labour-based programmes: A hands-on development strategy**

ILO. 2000. 15pp. 90gm

A short booklet outlining the benefits of employment-intensive infrastructure approach in the construction sector and stresses the importance of ensuring good working conditions which ensures high quality outputs and a motivated, productive workforce.

Ref. No. 003-014175

POA

Employment for poverty reduction and food security

Joachim von Braun (ed.)

International Food Policy Research Institute.
Washington, DC. USA. 1995. 322pp.
ISBN 0-89629-332-7. 470gm

A compilation of articles analysing employment policies and programmes in terms of their potential for addressing the problems of poverty and economic growth, drawing on experiences from different regions and countries. Issues covered range from policy and programme design, operational aspects and effectiveness issues to political-economy considerations, participation, and sustainability issues, as well as intra-household effects. Case studies of labour-based infrastructure programmes and policies and food-for-work programmes from Africa, Asia and Latin America are analysed. Concludes with a synthesis of the findings and the lessons they offer for the formulation of future policy. A valuable text for policy makers and programme designers, planners and implementors.

Ref. No. 003-014020

POA

 **Employment generation for poverty reduction in Sub-Saharan Africa**

Terje Tessem and Marc van Imschoot

ILO/SAMAT. October 1996. 23pp. 135gm

Employment-intensive works in infrastructure investment policies are an important means of employment generation and poverty alleviation in Sub-Saharan Africa. The paper describes different types of employment-intensive programmes being implemented in Sub-Saharan Africa, the benefits, issues to be considered in the design and implementation of these programmes, and the problems faced. Proposes a strategy for the future development of infrastructure investment programmes to enhance employment generation and poverty reduction, while at the

same time responding to the demand for cost effective creation of productive, economic and social infrastructure.

Ref. No. 1AF-042163

\$4.00

 **Employment-intensive infrastructure programmes: Labour policies and practices**

David Tajzman and Jan de Veen

ILO. 1998. 250pp. ISBN 92-2-111034-6. Guide: 810gm; Leaflets: 320gm (Also available in French and Spanish)

This guide discusses how employment-intensive or labour-based approaches for infrastructure works have become an important way of creating productive income generating jobs in many developing countries. It presents the current experience on how labour issues are being dealt with in the context of employment-intensive infrastructure programmes and gives guidance on how progress on standards and working conditions can be made with the involvement of the social partners. Separate sections contain advice for the government ministries responsible for civil works, labour and employment, workers' organisations and employers' organisations.

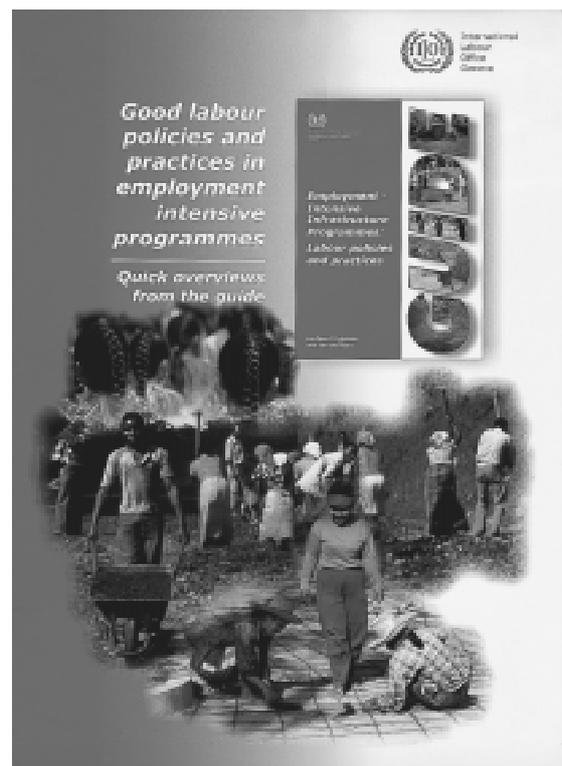
Also available are a set of 13 leaflets entitled "Good labour policies and practices in employment-intensive programmes: Quick overviews from the guide". Each leaflet highlights one of the key issues for consideration on the various labour management aspects covered in the guide. (The leaflets are only available in English).

Ref. No. 003-014111 (Guide)

\$25.00

Ref. No. 003-014174 (Leaflets)

POA



 **Employment-intensive investment in infrastructure: Jobs to build society**

ILO/EIIP. 2000. ISBN 92-2-11831-2. 84pp. 365gm
(Also available in French)

This is an information paper presenting the ILO's Employment-Intensive Investment Programme (EIIP) which has been promoting employment-intensive policies and practices for infrastructure through both public and private sectors in developing countries. The paper presents the strategy which aims at intensifying the fight against poverty and contributing to the rehabilitation and reconstruction efforts which are called for in unfortunately too widespread and growing crises situations due to conflict, natural disaster or acute economic disruptions.

Ref. No. 003-014169 **POA**

Engineering in emergencies: A practical guide for relief workers

Jan Davis and Robert

Lambert IT Publications on behalf of RedR. 1999. ISBN 1-85339-222-7. 735pp. 920gm

This practical book draws on the experience of a wide range of relief workers. It covers both "hard" topics, including the provision of water, sanitation, and shelter, and "softer" issues, such as the needs of refugees, managerial skills, and personal effectiveness. It has a particularly useful section on the labour management issues in emergency conditions.

Ref. No. MIS-009726 **\$30.00**

 **Guide to the assessment of rural labour supply for labour-based construction projects**

K. G. Vaidya

CTP 21. World Employment Programme. ILO. 1993. 102pp. 310gm

A guide for the use of planners and engineers involved in the setting up and running of labour-based civil construction programmes or projects. It describes how to estimate labour supply, and related issues such as the economics of rural labour markets, wages rates, shadow pricing and the influence of project employment on the local economy in the rural areas concerned.

Ref. No. 043-000026 **\$11.50**

 **Introduction to special public works programmes**

P. Garnier

ILO. 1982. 184pp. ISBN 92-2-102885-2. 295gm

Provides an introduction to the main stages of the planning, design, organisation, implementation, administration and financing of special labour-intensive public works programmes. Also has sections containing

the socio-economic evaluation of such programmes.

Ref. No. 043-001209

\$18.00

 **Of nets and assets: Effects and impacts of employment-intensive programmes: A review of ILO experience**

Willem Keddeman

SETP No. 1. ILO. 1998. 51pp. ISBN 92-2-111139-3. 160gm

Since the mid 1970's, the ILO has been promoting employment-intensive public and community works programmes as a major means of job creation and poverty alleviation in developing countries. Over the years and within the framework of such programmes, various studies have been conducted to investigate the socio-economic impact of different types of interventions. This paper presents the findings of a systematic review to appraise the impact assessment methodologies applied in conducting these socio-economic impact studies and to draw some general conclusion about immediate, long-term and durable effects of project activities. The review concludes with recommendations with respect to the methodology for impact assessments, and that assets and benefits produced with labour-based methods may be more easily sustainable than those produced with more traditional methods but the long-term impact on poverty alleviation needs to be more fully documented.

Ref. No. 003-014114

POA

 **Policy advice and information dissemination to member states on the employment-intensive works programme. Seminar report and papers presented, Harare, 19 – 21 September 1995**

ILO/SAMAT. October 1995. Report: 64pp. 200gm; Papers: 194pp. 320gm

A set of two volumes; Volume One containing a summary of the proceedings and discussion, and Volume Two the full text of the papers presented at a seminar organised by the ILO's Southern Africa Multi-Disciplinary Advisory Team (SAMAT) in Harare on employment-intensive works programmes. The three subjects of the seminar were: (i) technology choice - man or machine, including case studies and cost comparisons of road projects in Lesotho and Zimbabwe, (ii) community-based works and popular participation - highlighting issues in employment generation, remuneration and community contracts with case studies from Botswana and Zimbabwe and, (iii) labour standards in relation to employment intensive works and creation of sustainable productive employment.

Ref. No. 003-014025 (Report)

\$8.00

Ref. No. 003-014026 (Papers)

\$21.00

 **Productive employment for the poor**

Jacques Gaude and Steven Miller (Eds.)

International Labour Review. Special issue. Volume 131. Number 1. ILO. 1992. 142pp.

ISSN 0020-7780. 215gm (Also available in French)

A special issue of the International Labour Review focusing on one of the major themes of ILO technical cooperation during the past decade: employment creation through infrastructural investments. The articles cover developments as regards labour-based infrastructure programmes, local resource utilisation, institutional issues, technical and socio-economic aspects. Article titles include: Employment creation and poverty alleviation through labour-intensive public works in least developed countries; Labour-intensive public works for food security in Africa: Past experience and future potential; Social investment funds and economic restructuring in Latin America; Rural organisations and infrastructure projects: Social investment comes before material investments; Fighting poverty by promoting employment and socio-economic rights at the grass-roots level; Remuneration systems for labour-intensive investments: Lessons for equity and growth; A labour-based approach to roads and rural transport in developing countries; Employment and environmental rehabilitation in the Sahel; Water as a source of employment.

Ref. No. 043-000635

POA

  **Productivity norms for labour-based construction**

David Stiedl, Ulf Brudefors, Mike Shone

Technical Brief No. 2. ILO/ASIST. 1998. 41pp. 160gm

This guideline is targeted at professional staff, either engineers or technicians, who have experience of road construction and maintenance activities and some exposure to the concepts and application of labour-based technology.

The first section deals with definitions, in which the various activities relating to construction are clearly defined. The second section summarises the productivity norms that have been reported from many projects in Africa and Asia. The third section gives guidance on the factors that can affect productivity and how productivity can be improved. It also gives advice on procedures for the setting, measuring and monitoring of activities so that project specific norms can be refined.

Ref. No. MIS-009634

\$5.50

 **Rapid assessment of poverty impacts (RAPI): Elaboration of a rapid survey method of assessing the poverty reduction impacts of pilot employment intensive projects**

Luara Murpy

SEPT No. 2. ILO. 1998. 100pp. ISBN 92-2-111140-7. 330gm

This document describes the proposed "rapid assessment of poverty impact" (RAPI) method, and discusses issues that arise in using the method for assessing rural road projects. It notes special issues that arise in adapting the method to an Ethiopian road project. The document indicates how to adapt the method to other projects. This paper is not a manual but rather a description of a general method which will have to be adapted in accordance with the type of project and local circumstances.

Ref. No. 003-014115

POA

Self-help for road construction: When it applies — How it can be encouraged and supported: Experience in Flores, East Indonesia and other countries

Peter Winkelman

Technical Report 2. INTERCOOPERATION Swiss Organisation for Development and Cooperation. 1999. 109pp. ISBN 3-906494-13-6. 465gm

Based on field experience in Flores, Eastern Indonesia and a number of other countries, this study looks into various aspects of self-help initiatives in road construction: preconditions, supporting measures, sustainability, costs and potential. It describes and discusses the results obtained through the provision of minimum training and technical support to communities' traditional self-help efforts in building village roads and motorable tracks. Country level examples from Nepal, Ghana, Tanzania and Lesotho present interesting experience, confirming and complementing observations made in Indonesia, putting the Flores case in a wider perspective. It concludes with some of the factors necessary if self-help initiatives are to be successful, as well as other important factors to ensure the sustainability of self-help schemes.

Ref. No. MIS-009697

POA

 **Supplement to the labour supply guide: Wage rates on labour-based construction project in the presence of high rates of inflation and overvalued exchange rates**

K. G. Vaidya

CTP 93. ILO. 1988. 67pp. 230gm

This supplement to the labour supply guide (CTP 21) listed earlier examines the problems of high rates of inflation, overvalued local currencies and

the decline in the real value of public sector wages, which make recruitment of a productive labour force and economic evaluation of labour-based projects difficult. Provides a checklist of tasks to be carried out in exploring the possible solutions.

Ref. No. 043-000075

\$8.50

 **The window of opportunity: Strategies for enhancing women's participation in technical co-operation projects**

ILO. 1991. 34pp. ISBN 92-2-108053-6. 90gm

Targeted towards those involved in development project planning and implementation. Examines factors to consider when planning, monitoring and evaluating different types of projects to ensure that women are fully integrated into development initiatives.

Ref. No. 002-014510

\$5.00

Project planning and evaluation

Good planning and project preparation are essential prerequisites to successful project implementation. The following titles are useful planning, monitoring, and evaluation guidelines and manuals.

 **Design, monitoring and evaluation of technical cooperation programmes and projects: A training manual**

Bureau of Programming and Management, Evaluation Unit

ILO. 1995. 207pp. 555gm

A manual developed as a training and reference guide on the procedures developed by the ILO for the design, monitoring and evaluation procedures for technical cooperation programmes and projects. The procedures are largely based on the main components of the Logical Framework Approach (LFA) which is described in the publication listed below, but incorporates some relevant elements on participatory approaches particularly as they relate to the involvement of beneficiaries in the various stages of the programming cycle.

Ref. No. 062-013627

\$16.50

Evaluation of development assistance. Handbook for evaluators and managers

Norwegian Royal Ministry of Foreign Affairs, Oslo, Norway. 1993. 123pp. 250gm

Provides an introduction to the methodology of monitoring and evaluation in development assistance. It is structured around three dimensions: the goal hierarchy which builds on the Logical Framework Approach (LFA), a

general evaluation, and a set of development or crosscutting issues. Provides instruction in how to carry out evaluation, project appraisal and reporting, as well as indicating how the results of such work can contribute to the administration of aid.

Ref. No. 080-016065

POA

Managing for a change: How to run community development projects

Anthony Davies

Intermediate Technology Publications; Voluntary Service Overseas. 1997. 175pp. ISBN 1-85339-399-1. 360gm

This book provides development workers and community groups with an insight into development project planning and management. It gives step-by-step guidance through the stages from project identification to post-project activities. The topics covered include problem identification and cost estimating, project funding, basic book-keeping and records, project supervision, execution and post-project management.

Ref. No. MIS-009550

\$16.00

 **Standardised procedures for the presentation of work plans**

Special Public Works Programmes (SPWP), ILO. 1990. 109pp. ISBN 92-2-106462-X. 375gm

A manual to simplify and standardise the preparation of work plans for rural and urban labour-intensive special public works programmes (SPWP). Particularly aimed at government projects receiving technical assistance from ILO. The manual will also be helpful to ILO field projects and donors financing ILO-sponsored labour intensive special public works programmes, who need to fulfil certain conditions laid down by the ILO.

Ref. No. 062-003658

\$13.00

 **Taking risks: Background papers**

UNCDF; UNDP. 1993. 203pp. 400gm

This collection of working papers provide a companion volume to the 1999 UNCDF Policy Paper "Taking Risks". They are prepared by staff intimately involved in UNCDF's eco-development and local governance projects in 'a variety of countries and circumstances, drawing exclusively on the field experiences that have shaped UNCDF's current policies and operations. Issues addressed include supporting rural local governments in practice, decentralised development planning, decentralised financing, participatory eco-development, policy and institutional analysis and programming strategies. Guidelines are provided on assessing the potential benefits of decentralisation from the perspective of efficiency and governance. The

papers provide a diverse and in depth commentary on the daily challenges and contradictions faced in trying to turn new project models into viable field programmes.

Ref. No. 083-046181

POA

The community planning handbook: How people can shape their cities, towns and villages in any part of the world

Nick Wates and Jeremy Brook

Earthscan Publications Ltd, London. 2000. 230pp. ISBN 1-85383-654-0. 445gm

Growing numbers of residents are getting involved with professionals in shaping their local environment. This handbook is a valuable starting point for all those involved – planners and local authorities, architects and other practitioners, community workers, students and local residents. It features an accessible how-to-do style, best practice information on effective methods, and international scope and relevance. Tips, checklists and sample documents help readers to get started quickly, learn from others' experience and to select the approach best suited to their situation. The glossary and bibliography and contact details provide quick access to further information and support.

Ref. No. MIS-049028

\$21.00

The logical framework approach (LFA). Handbook for objectives-oriented project planning

Norwegian Agency for Development Co-operation (NORAD). 3rd edition. July 1996. 107pp. ISBN 82-7548-160-0. 195gm

Describes the use of the logical framework approach, an analytical tool for objectives-oriented project planning and management. The "logical framework" approach emphasises the links between the main components of a coherent programme or project design, such as identifying a problem, defining a strategy, stating objects, describing key outputs and activities, assessing external factors and establishing preconditions. The handbook includes guidelines on how to apply it.

Ref. No. 080-016064

POA

ZOPP: An introduction to the method

ZOPP flip charts: Training materials for ZOPP moderators

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmBH. March 1987. Booklet: 36pp. 180gm; Flipcharts: 26pp. 150gm

These two booklets provide an introduction to the ZOPP methodology, *i.e.* objectives-oriented project planning, developed by GTZ. Can be used as a handbook to study the method, though

participation in a ZOPP basic training course is recommended. The flip charts provide a series of charts for trainers.

Ref. No. 062-003674 (Introduction)

\$4.50

Ref. No. 062-003675 (Charts)

\$3.00

Road construction and maintenance: general

Labour-based technologies for road construction and maintenance have been developed and successfully applied for many years. The following publications cover the organisation, technical and operation issues involved in the use of this technology for roadwork activities, drawing on the experiences of many different projects and programmes. Some of the publications are not specifically labour-based but address the basic engineering issues which must not be overlooked whatever technology is adopted.



Foundations for change: Aspects of the construction industry in developing countries

G.A. Edmonds; D. W. J. Miles

IT Publications; ILO. 1984. 143pp.

ISBN 0-946688-00-1. 325gm

A study of the problems facing the construction industry in developing countries. It is based on case studies from Ghana and Sri Lanka. The book demonstrates that the industry has very different needs and characteristics from those that apply in industrialised countries.

Constraints upon progress can be traced to the imposition of a framework that effectively limits the growth of the indigenous sector. The economic and institutional framework are analysed in detail and a set of recommendations are put forward to enable the development of an indigenous construction industry. Criteria are presented for the creation of a Contractor Development Agency (CDA) that conditions, improved payment procedures and ensuring fair, consistent and effective quality control. The CDA would also be involved in supporting contractor training, financial assistance, work promotion, physical support (plant hire arrangements etc) and promoting a corporate approach to problem solving.

Ref. No. 043-000524

\$13.00



Highway and traffic engineering in developing countries

Bent Thagesen (ed)

E&FN Spon. 1996. 485pp. ISBN 0-419-20530-6. 830gm

This textbook provides a comprehensive account of the wide range of both technical and non-

technical problems that may confront road engineers working in the developing world. Designed primarily for civil engineering students, it also offers a broader view of the subject for practising engineers. The sections on economic evaluation, development assistance and institutional issues are particularly useful. The text follows a logical progression of planning, design, construction, maintenance and management of roads and traffic, illustrated with detailed engineering methods, but in the context of an appropriate engineering response to the needs and resources of low income countries.

Ref. No. 043-000193 \$68.00

Labour-based road construction. A state of the art review

Paul Larcher (Ed)

Intermediate Technology Publications. 1998. 144 pp. ISBN 1-855339-416-5. 255gm

A compilation of twelve papers by labour-based roadworks and contractor development experts selected from a competition organised by the Management of Appropriate Roads Technology (MART) initiative to generate information on recent developments in labour-based roadworks handtools, intermediate equipment, private sector development and institution building.

Ref. No. 043-002380 \$19.00

Manual on planning of labour-intensive road construction

M. Allal, G. A. Edmonds and A. S. Bhalla

ILO. 1977. 261pp. ISBN 92-2-101543-2. 400gm (Also available in French and Spanish)

This manual is aimed at people who are engaged in the planning, implementation, evaluation and design of road construction projects. Provides a basis for the incorporation of the assessment of alternative technologies and a means of evaluating them. Has chapters on road planning, design, productivity, labour-intensive techniques, cost-benefit analysis, and organisation and management of labour-intensive techniques.

Ref. No. 043-000322 \$34.00

Material selection and quality assurance for labour-based unsealed road projects

Dr. Philip Paige-Green

Technical Brief No. 9. ILO/ASIST. March 1998. 53pp. 155gm

The application of labour-based construction techniques to unsealed roads is beneficial in that it creates employment opportunities and assists with the development of small contractors whilst upgrading the transportation network in developing countries. Improvement in the techniques utilised during this type of

construction will result in greater cost-effectiveness and better performance of the completed product.

The main part of this brief discusses the issues to be considered in making decisions about the recommended type of borrow material and how to test it. It also covers construction quality assurance testing. A set of practical guidelines is appended as a stand-alone annex. This describes a step-by-step method of evaluating borrow materials for use as the wearing course in labour-based unsealed roads, and for ensuring that the quality of the construction is appropriate.

Ref. No. 043-002402 \$7.00

Overseas road note 6: A guide to geometric design

Overseas Unit, Transport and Road Research Laboratory. 1988. 29pp. ISBN 0951-8787. 150gm

This note gives guidance on geometric design and the setting of geometric design standards for single carriageway rural roads in developing countries. It is aimed at government officials who are responsible for formulating policy on geometric design and at engineers who are responsible for preparing road designs. It will also be of interest to personnel in aid agencies and consultancies who are responsible for the preparation and design of road projects. Many countries will have existing standards different from those described in this guide, but this should provide the opportunity for a review where there are severe investment restraints, particularly for low traffic roads, where the guide provides opportunities for real cost savings.

Ref. No 043-002086 \$15.00

Rating unsurfaced roads: A field manual for measuring maintenance problems **Special Report 87**

R.A. Eaton, S. Gerard and D.W. Cate

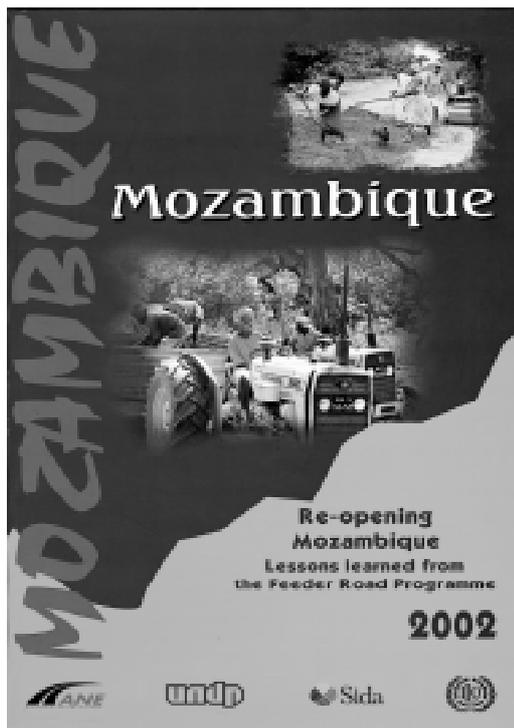
US Army Corps of Engineers. 1987. 35pp. 140gm.

This manual describes a method that can help local highway agencies manage their unsurfaced and gravel roads. The system is designed to work with a computerized pavement management system but can be used without a computer. The manual presents a simple inspection system which identifies and measures seven kinds of carriageway problems (or amount of *distress*), improper cross section, inadequate roadside drainage, corrugations, dust, potholes, ruts, and loose aggregate. These measurements are then combined to calculate an unsurfaced road condition index to compare road conditions and prioritise maintenance interventions. The method does not evaluate the cost of interventions, and the index would need to be calibrated for particular terrains and climates.

However the inspection stem is simple and well described.

Ref. No. 043-001775

POA



NEW **Re-opening Mozambique: Lessons learned from the feeder roads programme.**

Feeder Roads Programme (FRP), Mozambique. 2001. 303gm.

This booklet contains the experiences and lessons learned from the Feeder Roads Programme in Mozambique, 20 years after its inception. It covers institutional, technical, social and economic aspects of the programme, highlighting the breakthroughs made by the FRP, as well as some of the mistakes. The booklet explains the different systems of road maintenance experimented with by the FRP, i.e., lengthmen, gangs and contractor systems, showing the advantages and disadvantages of each option in particular situations. It also discusses labour and employment issues. It is in English and Portuguese.

Ref. No. MOZ-110008

POA

NEW **Roads and resources: Appropriate technology in road construction in developing countries**

G.A. Edmonds and J.D. Howe (eds)

IT Publications; ILO. 1980. 200pp. ISBN 0-903031-69-8. 275gm

This book is concerned with appropriate construction technology in the building and maintenance of roads. By drawing upon the detailed studies that have been carried out by the ILO and experience from recently executed labour-based programmes, the book shows that

the use of more labour-intensive techniques can be technically and economically efficient. It also shows that the level of planning and organisation required for efficient labour-based programmes is no less demanding than that for equipment-based programme. The book is in two parts. The first deals with the institutional framework within which the appropriate technology is proposed and with the various aspects of the implementation of appropriate technology. Having discussed the institutional framework it continues with a discussion of the major aspects of labour-based road construction, using as a basis the various ILO studies and programmes in Iran, Thailand, Nepal, the Philippines, India and Kenya.

Ref. No. 043-001225

POA

NEW **Road building in the Tropics: State of the art review 9**

R.S. Millard

TRL. 1993. 312pp. ISBN 011-551062-1. 1104gm

This book was written to provide a comprehensive source of information for highway engineers practising in hot, tropical climates. The first part deals with tropical soils and road building materials, describing their formation, characteristics and methods of testing. The second part describes the methods used to design and build roads in tropical climates, and includes chapters on most common types of pavement including concrete, bituminous, gravel and earth. The book also looks at construction options with a strong emphasis on materials properties and behaviour in tropical conditions. The book intends to impart an understanding of why road pavements behave as they do, so that highway engineers can make the many judgements that are necessary in providing the most effective road system for the local conditions. The short section on earth and gravel surfaces is particularly useful as this aspect is often omitted from standard texts.

Ref. No. 043-001716

POA

NEW **Road maintenance management: Concepts and systems**

Richard Robinson, Uno Danielson and Martin Snaith

Macmillan Press. 1998. 291pp. ISBN 0-33372155-1. 140gm

This book provides an up-to-date description of road maintenance management which is discussed from a business management perspective. With the focus of attention in many countries now moving away from building new roads to maintaining existing ones, the authors demonstrate that road maintenance is a fundamentally different and in many ways more complex process. A new set of skills are required where institutional reform, human resource development, and changes to management

practices having greater prominence than technical issues. The text offers a framework for considering policy formulation, network management, organisational responsibilities, information requirements, cost estimating and many other aspects of road maintenance. The book is not targeted at a particular country or region, but is intended to provide an international perspective on best practice. The book is aimed at engineers and managers working in road administrations, consultants staff and contracting organisations engaged in road maintenance management, and university students pursuing courses in road engineering and transport planning. It is also of particular interest to staff in international and bilateral aid agencies who have responsibility for designing and implementing road sector projects.

Ref. No. 043-002518 **\$57.00**

 **Rural Access Roads Programme, Kenya: An analysis of costs and productivities**

Steinar Hagen

CTP 84. ILO. 1985. 27pp. 100gm

Gives an insight into the costs and productivity encountered during the Rural Access Roads Programme in Kenya, where labour-based methods were employed for the construction of 8000 km of farm to market roads between 1974 and 1985.

Ref. No. KEN-027375 \$4.50

Stone: An introduction

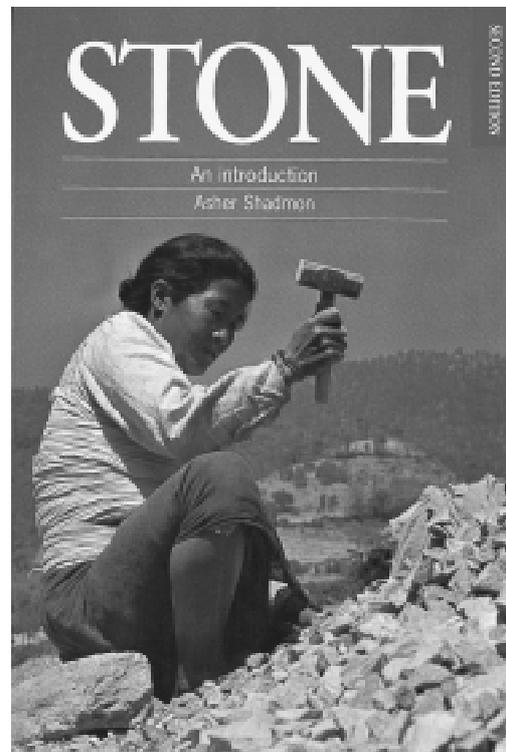
Asher Shadmon

Intermediate Technology Publications. 2nd edition. 1996. 168pp. ISBN 1-853393-13-4. 370gm

This useful general survey describes the varieties and uses of stone, whether cut or field stone, as a building material; how to extract, work and use it. It has a chapter on stone and the environment which emphasises the importance of planning, waste recycling, and quarry rehabilitation as part of the extraction process.

The appendix outlines procedures for testing stone's flexural and compressive strength and discussing the importance of slip resistance.

Ref. No. 043-000076 **\$24.00**



 **The District Road Improvement and Maintenance Programme. Better roads and job creation in Malawi**

S. Hagen and Colin Relf

ILO. 1988. 96pp. ISBN 92-9-106393-3. 150gm

Describes the Malawian experience of the District Road Improvement and Maintenance Programme (DRIMP). Illustrates the programme's significant contribution towards rural road improvement and maintenance in an efficient manner, both economically and technically, by utilising locally available resources to the maximum extent possible.

Ref. No. MWI-030015 **\$15.00**

 **The Rural Access Roads Programme: Appropriate technology in Kenya**

J. J. de Veen

ILO. Fourth impression. 1993. 186pp. ISBN 92-2-10220408. 280gm (Also available in French)

The RARP was the first comprehensive development of a labour-based programme in Africa. This book is divided into two parts: text and appendices. The text discusses the development of the administrative, organisational and training systems of the programme in general terms. It also describes the technical and financial involvement of the various aid agencies and the research carried out in the initial stages of the programme. The appendices describe the procedures and systems used in the RARP in detail.

Ref. No. 043-001245 **\$21.00**

Road construction and maintenance: technical manuals

A pocket guide to feasibility studies for low-volume roads

Richard Robnsson, Charlie Eriksson and Ulf Bruderfors

Department of Roads, Ministry of Transport and Energy Zimbabwe. 1998. 136pp.

ISBN 0-7974-1904-7. 165gm

This guide explains how to carry out feasibility studies for projects on low volume roads in Zimbabwe. The guidelines are designed for use on roads with traffic levels up to about 100 vehicles per day. The main purpose of these guidelines is to enable the comparison and priority ranking of projects involving low-volume gravel roads.

Ref. No. ZWE-041576

POA

A pocket guide to road design for low-volume roads

Richard Robnsson; Charlie Eriksson; Ulf Bruderfors

Department of Roads, Ministry of Transport and Energy Zimbabwe. 1998. 136pp.

ISBN 0-7974-1931-4. 280gm

This guide provides step-by-step guidance for the design of low-volume secondary and feeder roads in Zimbabwe. It outlines steps in the process of designing these roads, provides technical and other information necessary in the collection and evaluation of data for design, and explains how design decisions should be presented in final report form. It aims to provide guidance on the overall approach to design and is not intended as a specification.

Ref. No. ZWE-041575

POA

Building roads by hand: An introduction to labour-based road construction

J. Antoniou, P. Guthrie, and Jan de Veen

ILO. Second impression. 1997. 50pp.

ISBN 0-582-06060-5. 120gm (Also available in Portuguese)

Presents the broad technical, organisational and managerial principles of labour-based roadworks construction. Aimed at supervisory staff but is also valuable to civil engineers embarking on labour-based works for the first time and to students who need a general introduction to the subject.

Ref. No. 043-000260

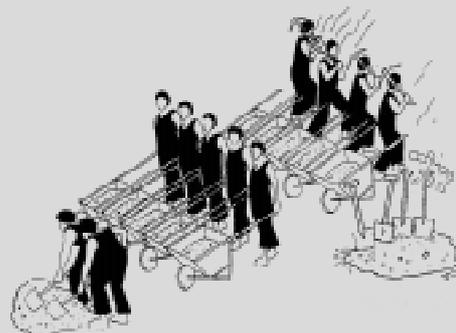
\$11.50

BUILDING ROADS by HAND

An introduction to labour-based road construction

Prepared for the International Labour Office
by

J. ANTONIOU • P. GUTHRIE • J. DE VEEN



 LONGMAN

Design guidelines for low volume roads suitable for labour-based construction methods in Lesotho

I.T. Transport

Ministry of Works, Maseru, Lesotho. Revised 4th edition. 1996. 68pp. 210gm

Guidelines for the standard design of earth and gravel roads suitable for the conditions prevailing in Lesotho. These guidelines have been developed based on experience, both local and international, in design of earth and gravel roads. Covers all aspects including geometric design standards, drainage standards, erosion protection works and environmental protection. Though written specifically for Lesotho, the methods and techniques described could well be adapted to local conditions in other countries.

Ref. No. LSO-028140

POA

Earth roads: A practical guide to earth road construction and maintenance

J. Hindson. Edited and revised by John Howe and Gordon Hathway

Intermediate Technology Publications. 1996. 135pp.
ISBN 0-903031-84-1. 210gm

A technical manual providing a simple description of road planning and construction for non-engineers. Deals with drainage, road planning, the actual construction and subsequent

maintenance operations. Puts considerable emphasis on the importance of drainage and illustrates how this can compensate for the absence of gravels and other road surfacing materials.

Ref. No. 043-001593

\$16.00

Field engineering: An introduction to development work and construction in rural areas

Peter Stern (Compiled and edited from an original work by F. Longland)

Intermediate Technology Publications. 1983. 288pp. ISBN 0-903031-68-X. 365gm

A standard guide for those involved in simple engineering work in rural areas. Deals with site surveying, engineering materials, water supplies, sanitation in general, planning and construction of roads, simple river crossings, bridges and small dams.

Ref. No. 043-001297

\$17.50

Field handbook: Labour-based road construction methods

Bjorn Johannessen

ILO. 1997. 51pp. 155gm

The purpose of this handbook is to provide site supervisory staff with a handy field reference containing the most essential information in regards to specific geometrical standards, work methods and procedures used on labour-based road construction works in Lao PDR. This document does not provide a full description of labour-based technology. It is expected that this has already been explained in specially designed training courses. A very concise and well illustrated handbook, following the standard ILO approach.

Ref. No. 043-002346

POA

International road maintenance handbook

PIARC; ODA; TRL. 1994. ISBN 0-9521860-12 (set)

Volume I: Maintenance of roadside areas and drainage

329pp. ISBN 0-9521860-20. 430gm

Volume II: Maintenance of unpaved roads

337pp. ISBN 0-9521860-39. 440gm

Volume III: Maintenance of paved roads

279pp. ISBN 0-9521860-47. 375gm

Volume IV: Maintenance structures and traffic control devices

171pp. ISBN 0-9521860-55. 240gm

This series of four handbooks provides guidelines for maintenance foremen and supervisors assigned to bitumen or unpaved roads in tropical

and moderate climates. The handbooks aim to assist maintenance foremen and supervisors in all aspects of their work whether carried out by direct labour or by contract. Each handbook is divided under the headings: the task, defects, resources and maintenance method. Where appropriate, options are shown for carrying out work by heavy equipment, tractor based methods, or labour-based methods. The handbooks are also useful reading for engineers and senior supervisors. Their pocket format enables the volumes to be easily carried and consulted on site. The handbooks can also be used for training purposes, supported by country specific supplementary information.

Ref. No. 043-000912 - 000915

\$64.00 (for set of four volumes)

Kitabu cha utunzaji ya barabara kwa wanyapara / Headman's handbook for the maintenance of minor and rural access roads

I&D Consult

Ministry of Public Works, Roads Department, Minor Roads Programme, Nairobi, Kenya. 1991. 11pp. 40gm (Kiswahili/English)

A simple well illustrated booklet in both Kiswahili and English providing instructions for headmen performing annual routine road maintenance works.

Ref. No. KEN-027297

\$5.00

Labour-based roadworks: Technical manual

Intech Associates

Ministry of Works, Tanzania, ILO. May 1997

This manual is aimed primarily at road engineers, planners and managers involved with the development of labour-based road maintenance and improvement methods. However, its format has been designed so that modules or pages may be incorporated in training material.

Volume I: Road rehabilitation works

326pp. 885gm

Volume I covers the technical and management aspects of road rehabilitation works. The manual sets out the design standards for labour-based roadworks. It describes the techniques, planning and organisation of the various components of the works including earthworks, drainage, erosion protection, structures, and surfacing for paved and unpaved roads.

Ref. No. TZA-037485

\$21.00

Volume II: Road maintenance

248pp. 485gm

Volume II covers the technical and management aspects of road maintenance. It describes the various emergency, routine and periodic maintenance operations and the options for organising the works. It also provides practical guidelines on selected maintenance management issues.

Ref. No. TZA-037486 \$21.00

Volume III: Design and specifications

102pp. 715gm

Volume III covers designs and technical specifications for the important items commonly used for labour-based roadworks. These include accommodation and site facilities, handtools, control and setting out tools, and a range of intermediate items. Standard designs for culverts and road signs are also included. It is intended that the designs and specifications will encourage local fabrication or manufacture to the standards necessary to ensure cost-effective ownership by contractors, road authorities or other organisations engaged in roadworks.

Ref. No. TZA-037558 \$21.00

Labour enhanced construction for bituminous surfacings

Manual 11. SABITA. March 1993. 55pp. ISBN 0-620-17499-4. 140gm

The manual provides recommendations and advice on bituminous surfacings suitable for labour enhanced construction, to guide the practitioner who may be getting involved in this for the first time. The first part of the manual covers the choice of bituminous surfacings for labour enhanced construction, with information on the limitation of the construction techniques to be used. It covers criteria which would be useful in choosing the surfacing to suit objectives of job creation, maximisation of the labour component of the budget, and skills transfer. Organisation of labour is also discussed.

Ref. No. 043-001591 POA

Labour enhanced construction for bituminous surfacings: Methods and procedures

Manual 12. SABITA. August 1994. 54pp. ISBN 1-874968-08-X. 115gm

This is a companion publication of the above Manual 11. The methods and procedures for labour enhanced construction of bituminous surfacings are presented to give guidelines for the appropriate techniques. It is intended for use by contractors' staff in planning labour enhanced construction of surfacings and in the training of

workers. It could also be included in contract document as a method specification.

Ref. No. 043-001592

POA

Low cost road construction in Indonesia. Labour-based road projects in Manggarai District

A. Beusch, P. Hartmann, R. C. Petts, P. Winkelmann

INTERCOOPERATION, Swiss Organisation for Development Cooperation. 1997.

ISBN 3-906494-00-4 (set of two volumes)

Volume I: Documentation

50pp. ISBN 3-906494-01-2. 220gm

Volume II: Workbook

110pp. ISBN 3-906494-02-0. 440gm

This pair of documents describes a rural road construction programme in the Manggarai District of West Flores, situated in the Province of Nusa Tenggara Timur, East Indonesia, and supported by the Swiss Agency for Development and Cooperation. Volume I covers the background, objectives and results, institutional framework, planning and monitoring, design standards, work methods and organisation, implementation, training and road maintenance. Volume II provides detailed examples, guidelines and standards. These volumes provide useful reference material particularly for stone paved rural roads constructed in steep terrain. Both these volumes are stocked by Intermediate Technology Publications (see back of catalogue for address).

Ref. No. 1AS-43114 (Volume I) \$17.00

Ref. No. 1AS-043115 (Volume II) \$15.00

Minor Roads Programme structures manual: Volume 1 and Volume 2

Ministry of Public Works, Roads Department, Minor Roads Programme, Nairobi, Kenya. January 1993. Volume 1: 142pp. 725gm. Volume 2: 119pp. 650gm

A manual developed under the Kenya Minor Roads Programme which involved labour-based techniques for the improvement and maintenance of minor roads. Gives guidelines on the design and construction of small structures commonly encountered on minor roads of a span up to 10m. Covers the planning and design process, site investigation and soil testing, river hydraulics and climatological data, as well as modules on materials and types of structures. Volume 2 contains construction drawings. The manual is complemented by the MRP Technical Manual, Drawings and Specifications Manual, Road Maintenance Manual and Forms Manual.

Ref. No. KEN-027293 \$14.50

Minor Roads Programme technical manual. Volume I

Intech Associates

Ministry of Public Works, Roads Department, Minor Roads Programme, Nairobi, Kenya. January 1992. 290pp. 510gm

A manual developed under the Kenya Minor Roads Programme which involved labour-based techniques for the improvement and maintenance of minor roads. This technical manual describes in detail the organisation and techniques used for the improvement of roads under the MRP. It sets out the MRP policy and standards on technical issues, describes technical procedures, and gives guidance on planning, organising and control of the MRP road improvement work. The manual is set out in modules, each covering one of the aspects of the programme. The manual is complemented by the MRP Road Maintenance Manual, Drawings and Specifications Manual, and Structures Manual listed above and below.

Ref. No. KEN-027298 \$15.00

Minor Roads Programme technical manual. Volume II: Drawings and specifications

Ministry of Public Works, Roads Department, Minor Roads Programme, Nairobi, Kenya, January 1995. 90pp. 680gm

Contains the drawings and specifications used under the MRP for the following: base camp facilities; site accommodation; tipping trailer; non-tipping trailer; fuel bowser; water bowser; heavy-duty towing hitch; hand or animal drawn roller; 600mm culvert mould; 900mm culvert mould; ditch and slope templates; hand tools; and road signs.

Ref. No. KEN-027425 \$15.00

Minor Roads Programme technical manual. Volume III: Road maintenance manual

Intech Associates

Ministry of Public Works, Roads Department, Minor Roads Programme, Nairobi, Kenya. November 1992. 195pp. 385gm

A manual developed under the Kenya Minor Roads Programme which involved labour-based techniques for the improvement and maintenance of minor roads. Describes the lengthman system for routine maintenance of rural access and minor roads, and periodic maintenance activities. The manual describes in detail the organisation and techniques used for the maintenance of roads under the MRP. It sets out the MRP policy and standards on technical issues, describes management procedures, and gives guidance on planning, organising and control of the MRP road maintenance work. The manual is set out in modules each covering one of the aspects of the programme. The manual is

complemented by the MRP Technical Manual, Drawings and Specifications Manual, Forms Manual and Structures Manual also listed here.
Ref. No. KEN-027295 \$19.50

Overseas road note 1: Maintenance management for district engineers

TRL, Overseas Unit. 1981. 34pp. 250gm

A practical guide to the management of maintenance operations. Outlines a rational approach that will help maintenance engineers organise and control the activities for which they are responsible, for improved efficiency and productive use of maintenance resources.

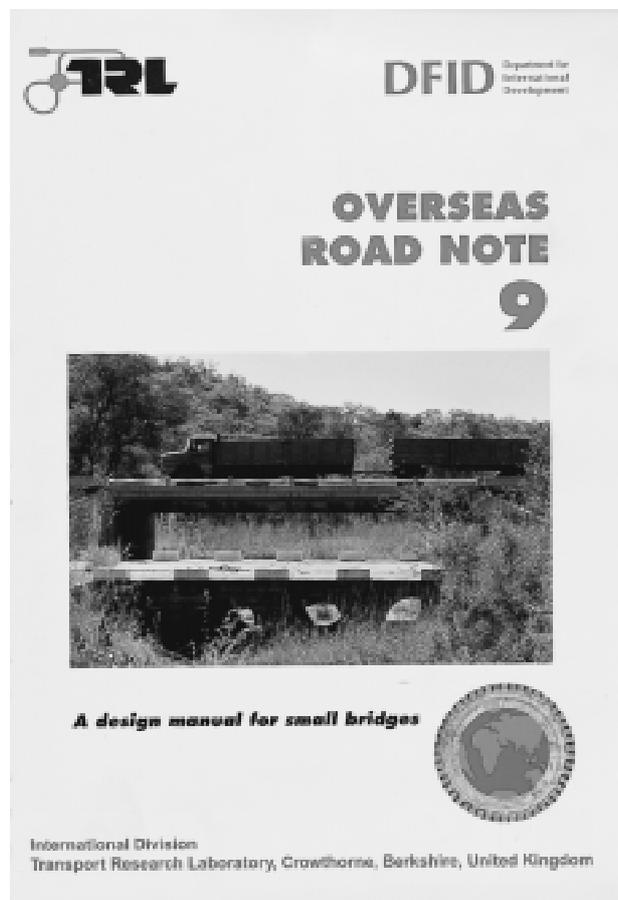
Ref. No. 043-001022 \$16.00

Overseas road note 2: Maintenance techniques for district engineers

TRL, Overseas Unit. 2nd edition. 1985. 46pp. 185gm

Describes the principal techniques used to maintain roads within a district in a developing country, with particular emphasis on the planning and design aspects of the work. Discusses the merits of using labour or equipment-based operations and examines the scope for using local contractors for maintenance work.

Ref. No. 043-001020 \$16.00



Overseas road note 9: A design manual for small bridges

J.D. Parry *et al.*

TRL, Overseas Unit. 1992. 223pp. 760gm

This manual offers highway engineers a comprehensive set of guidelines to assist and simplify the process of designing small bridges and culverts which are an essential part of every road network. The manual defines "small bridges" as single or multi-span structures with individual spans no more than 12m long. The guidelines cover the entire design process, from the planning stage through site investigations and materials analysis, hydraulic design and structural design, to the final preparation of drawings and detailed specifications. The manual is designed for general engineers who may not be bridge specialists.

Ref. No. 043-000592 \$24.00

Rehabilitation of feeder roads using labour-based methods: Technical manual

Zoran Veselinovic

UNDP, Office for Project Services, Afghanistan Projects Office. Peshawar, Afghanistan. March 1993. 144pp. 634gm

This manual provides practical guidance to various levels of site supervisors engaged in rehabilitation of Afghan feeder roads using labour-intensive, equipment-supported methods. The manual is in modular form so that individual sections can be easily revised and adapted to different situations. Basic setting out techniques, detailed for each type of road work, will enable site supervisors – from foreman to site engineer level – to reconstruct roads to specified levels, shapes and dimensions, as well as to measure the work, calculate and allocate daily tasks, and plan and control all necessary inputs throughout the construction period.

Ref. No. 062-003644 \$16.00

Roads 2000 works manual

Intech Associates

Ministry of Public Works and Housing, Nairobi, Kenya. 1996. 301pp. 1530gm

A manual prepared for the Kenya Roads 2000 programme, which builds upon the successful experience of the RARP and the MRP. The manual sets out the techniques and procedures developed from a pilot project for the Roads 2000 programme. The Roads 2000 approach applies primarily to unpaved roads of all classification in all districts of Kenya. However, the techniques can also be applied to certain activities on paved roads. The manual describes in detail the organisation and techniques used for the preparation, maintenance and spot improvement of roads. It sets out Road Department policy and standards on technical matters, describes

procedures used, and gives guidance on planning, organising and controlling the road maintenance and spot improvement work. It is set out in modules, each covering one of the aspects of the programme.

Ref. No. KEN-027448 \$29.00

Technical manual for low volume roads upgraded and constructed using labour-based methods in Lesotho

I.T. Transport

Ministry of Works, Maseru, Lesotho. Revised 2nd edition. 1996. 225pp. 625gm

This manual is written for use as a practical guide by supervisory staff responsible for the construction, upgrading and maintenance of low-volume roads using labour-based methods in Lesotho. The manual takes into account the geometric design standards of low-volume roads and all associated drainage structures. It describes all road construction, upgrading and maintenance activities. Its also details how to set tasks for each activity, check the quality of work done, check the quantity of work undertaken and report on the work actually undertaken over a period of time. Though written specifically for Lesotho, the methods and techniques described could well be adapted to local conditions in other countries.

Ref. No. LSO-028141 POA

Road construction and maintenance: training manuals



Course materials on labour-based road engineering

John Howe and Hans Muller

ILO. 1998. ISBN 92-2-111419-8 (set)

Undergraduate course on labour-based road engineering

ILO. 1998. 437pp. ISBN 92-111421-X. 2920gm

Postgraduate course on labour-based road engineering

ILO. 1998. 435pp. ISBN 92-111422-X. 2800gm

Orientation course on labour-based road engineering

ILO. 1998. 510pp. ISBN 92-111420-1. 3340gm

Audio-visual material for courses on labour-based road engineering

ILO. 1998. 195 35mm colour slides. ISBN 92-2-111423-6. 1440gm

This course material was developed jointly with the International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE), Delft, The Netherlands as part of ILO's effort to expand the use of employment-intensive techniques. This material which was previously published as a provisional edition has now been revised. The core material comprises two courses in labour-based road engineering at undergraduate and postgraduate levels. The undergraduate course concentrates on basic principles, and summarises practical experience that has been accumulated. The postgraduate course concentrates on more advanced subjects and current innovations and issues. The orientation course is for practising engineers and managers and is meant to provide rapid and intensive instruction in the subject for those unable to devote time to programmed study. A complementary pack of 200 35 mm colour slides is also provided.

Ref. No. 062-13836 (Undergraduate course) POA
Ref. No. 062-13838 (Postgraduate course) POA
Ref. No. 062-13837 (Orientation course) POA
Ref. No. 062-13839 (Audio-visual material) POA

 **Guide to the training of supervisors for labour-based road construction and maintenance**

L. Karlsson and J. J. de Veen
ILO. 1981.

Instructor's Manual/1. The setting up of training courses

CTP 97. 28pp. ISBN 92-2-102887-9. 125gm

Instructor's Manual/2. How to develop a country/project-specific training course

CTP 98. 37pp. ISBN 92-2-102887-9. 135gm

Instructor's Manual/3. Notes for instructors

264pp. ISBN 92-2-102887-9. 750gm

Trainee's Manual/Part 1

276pp. ISBN 92-2-102827-5. 800gm

Trainee's Manual/Part 2

258pp. ISBN 92-2-102828-3. 750gm

Guide to the general and technical training of supervisors for road construction and maintenance programmes. Comes in two parts, instructor's manual and trainee's manuals. The instructor's manual is divided into three parts and contains information and advice for instructors on how to plan, design and implement a training course. The trainee's manuals contain detailed training material for the trainees. However, the trainee manuals are incomplete in that they are not country specific; thus aspects such as project organisation and administration,

programme objects and design standards will vary from country to country. The material is presented in the form of self-contained modules, subdivided into learning elements. The modular format allows the trainer to develop country/project specific courses by simply selecting the relevant modules or modifying others to reflect the local situation. The manuals are complemented by a series of videos: *Training videos for labour-based road construction and maintenance*, and video scripts. See the section on videos for details.

Ref. No. 062-003746 (Instructor's manual 1) \$4.00
Ref. No. 062-003747 (Instructor's manual 2) \$5.00
Ref. No. 062-003748 (Instructor's manual 3) \$25.00
Ref. No. 062-003744 (Trainee's manual 1) \$27.00
Ref. No. 062-003745 (Trainee's manual 2) \$25.00
\$86.00 (full set)

 **International course for engineers and managers of labour-based road construction and maintenance**

Andreas Beusch and J. J. de Veen

Course notes. Volume 1

ILO. 1991. 444pp. ISBN 92-2-107915-5. 1150gm

Course notes. Volume 2

ILO. 1991. 460pp. ISBN 92-2-107916-3. 1200gm

Lecturer's notes. Volume 3

ILO. 1991. 464pp. ISBN 92-2-107917-1. 1490gm

Course curriculum. Volume 4

ILO. 1991. 44pp. ISBN 92-2-107918-X. 110gm

Set of four volumes comprising a training course for engineers and managers covering practical and managerial aspects of running labour-based road improvement and maintenance projects and programmes. The first two volumes provide background and reference material to the students and practitioners. Volume three provides practical guidance to trainers and the fourth volume presents an overview of the course content and learning objectives. These are the materials developed by the ILO for the International Courses run at the Kisii Training Centre in Kenya since 1988.

Ref. No. 062-003649 (Volume 1) \$56.00
Ref. No. 062-003650 (Volume 2) \$56.00
Ref. No. 062-003651 (Volume 3) \$56.00
Ref. No. 062-003652 (Volume 4) \$4.00
\$172.00 (set of four volumes)

 **Labour-based contract maintenance programme. Orientation course for district engineers: Course notes**

Intech Beusch & Co.

CTP 130. ILO. 1993. 204pp. 545gm

Course notes aimed at district engineers on the principles of labour-based maintenance operations to enable them to effectively manage small-scale maintenance contracts for the off pavement routine maintenance of paved and gravel roads. It includes simple contract documentation and was developed with the Government of Uganda, who now use this approach for all their national road network.
Ref. No. 062-003654 **\$22.00**

Labour-based road construction training manual for senior technical officers, technical officers, technical assistants. Training Manual, Parts 1 and 2

Labour Construction Unit (LCU), Ministry of Works, Lesotho. December 1994. Part 1: 334pp. 905gm; Part 2: 285pp. 770gm

Based on the ILO Guide to the Training of Supervisors above, this manual contains a complete training course for technical supervisors of labour-based road construction works. The volumes are in modular format, each dealing with a particular aspect of road construction, such as administration, planning, organisation, management and control, as well as the most important technical topics such as survey, drainage, concrete technology, soil mechanics and structures. Each module is further divided into specific learning elements required for different supervisory levels.

Ref. No. LSO-028098 (Part 1) **\$35.00**
Ref. No. LSO-028099 (Part 2) **\$30.00**

 **Management and supervision of labour-based road construction and maintenance: Maintenance training course notes for technical staff of the District Council road units**

Intech Beusch & Co. and Rolf Johansen
CTP 137. ILO. August 1992. 173pp. 500gm

Course material developed in Botswana for road maintenance activities for technical officers, technical assistants, and gangleaders to enable them to effectively organise, manage and supervise routine, periodic and emergency maintenance of earth and gravel roads.

Ref. No. 062-003657 **\$19.00**

 **Management and supervision of labour-based road construction and maintenance: Maintenance course for technical officers, technical assistants and gangleaders:**

Intech Beusch & Co. and Rolf Johansen
CTP 138. ILO. August 1992. 86pp. 250gm

Outlines course syllabuses developed in Botswana for road maintenance activities for technical officers, technical assistants, and

gangleaders to enable them to effectively organise, manage and supervise routine, periodic and emergency maintenance of earth and gravel roads.

Ref. No. 062-003655 **\$10.00**

Road projects Manggarai: Handbook for instruction course on labour-based road construction

P. Hartmann

Swiss Centre for Appropriate Technology (SKAT). 1991. 54pp. ISBN 3-908001-35-8. 190gm

A compilation of teaching modules developed for training courses in the construction of rural access roads in Indonesia. The modules cover the construction of earth and stone paved roads from the preparatory stage to maintenance. The teaching modules contain an introduction to the project background and concept, and detailed technical comments and references to the different work activities.

Ref. No. 1AS-043124 **\$34.00**



Training material source book: A guide for trainers in labour-based road-works

Andreas Beusch

ASIST Working Paper No 1. ILO/ASIST. 1997. 19pp. 150gm

This guide is for trainers who are charged with providing training for labour-based roadworks, or for the development of small-scale contractors. Its purpose is to assist them in selecting and developing appropriate training material.

Ref. No. 062-13768 **\$3.50**

Seminar proceedings

The ASIST programme supports annual regional seminars which bring together labour-based practitioners from the region and other parts of the world to discuss experiences, research and development in the field. The following reports of proceedings and papers presented provide a valuable reference source on a wide spectrum of labour-based technology practices and experiences from Sub-Saharan Africa and beyond.



Alternative approaches to infrastructure development and transport planning: Prospects for their integration into educational and research programmes.

Sub-regional workshop for Asian Educational Institutions, Bangkok, 11th – 12th October 1995

Aniruth Thongchai and Marit Due Langaas
CTP 143. ILO. 1995. 107pp. 315gm

Proceedings of a seminar held as part of an initiative by the ILO to create a partnership with universities and polytechnics in South East Asian countries. The universities and polytechnics involved were those offering engineering and rural development programmes, and which expressed an interest in including the concepts and practice of local resource utilisation for infrastructure development in their curricula. The report presents a summary of proceedings and presentations, as well as outputs from group discussions and action plans.

Ref. No. 1AS-043064 **\$12.50**

 **Labour-based technology: A review of current practice. Report of proceedings of the Mbeya Seminar, Tanzania. 26th – 28th February 1990. Volume I: Papers presented; Volume II: Report of proceedings**

Jane M. Ritchie (Ed.)

ILO. 1990. Volume 1: CTP 121. 190pp. 560gm; Volume 2: CTP 122. 66pp. 230gm

Volume One presents a compilation of papers of the first regional seminar. The topics covered during the seminar included; low cost structures; haulage; training materials; road construction techniques; road maintenance; labour administration; monitoring and control. Volume Two summarises the discussions arising from the topics covered during the seminar and reports on the site visit, during which a grading demonstration using a double axle towed grader was carried out.

Ref. No. 043-000097 (Volume I) \$20.15
Ref. No. 043-001708 (Volume II) \$7.10

 **Labour-based technology: A review of current practice. Report of proceedings. 2nd – 6th March 1992, Mhales Hoek, Lesotho**

Gerrit Bosma and Bjørn Johannessen (Eds.)

CTP 129. ILO 1992. 154pp. 410gm

Report of the second regional seminar on labour-based technology which took place in Mhales Hoek, Lesotho in March 1992. This report presents summaries of the papers presented and of the discussions which took place. It also reports on the site visit to a labour-based road project and contains circulation papers which were not presented. The main topics covered during this seminar include labour-based maintenance; contracting; compaction equipment; and labour standards.

Ref. No. 043-000653 \$16.50

 **Labour-based technology: A review of current practice. Report of proceedings. Zimbabwe Institute of Engineers, 27th September – 1st October 1993, Harare, Zimbabwe**

Bjørn Johannessen (Ed.)

CTP 133. ILO. 1993. 178pp. 425gm

Report of the third regional seminar on labour-based technology which took place in Harare, Zimbabwe in September 1993. This report presents summaries of the papers presented and of the discussions which took place. It also reports on the site visit to a labour-based road project. The main topics covered during this seminar include tools and equipment; small-scale contractors; and gender issues in labour-based roadworks.

Ref. No.043-001725 \$19.50

  **Labour-based technology: A review of current practice. Regional seminar for labour-based practitioners in the road sector in Sub-Saharan Africa.**

Johannesburg, South Africa, 16th – 20th January 1995. Volume One: Report of

proceedings; Volume Two: Seminar papers
 Kati Autere, Marit Due Langaas and David Mason (Eds.)

ILO/ASIST. 1995. Volume One: CTP 139. 63pp. 195gm. Volume Two: CTP 140. 305pp. 800gm

Proceedings and papers of the fourth labour-based technology regional seminar held in Johannesburg, South Africa in January 1996. The theme of the seminar was urban infrastructure development, and education and training. This report presents a summary of the seminar proceedings, group discussions and the plenary papers presented. The group discussions covered the following topics; urban infrastructure; contracting environment; contractor support and training; and training policy and planning. The report also includes the field visit to a contractor development programme in Soweto. Volume Two contains a compilation of all the plenary and circulation papers prepared for the seminar. The papers are grouped under the following topics; labour-based work in South Africa; urban development; education and training.

Ref. No. 043-001769 (Proceedings) \$10.00
Ref. No. 043-001770 (Papers) \$15.00

  **Labour-based technology: A review of current practice. Proceedings and papers of the fifth regional seminar for labour-based practitioners in the road sector in Sub-Saharan Africa. Accra, Ghana, 22nd – 26th April 1996**

Jan Fransen, Angela Kabiru and David Mason (Eds.)
ILO/ASIST. 1996. Proceedings: CTP 144. 75pp. ISSN 1020-4962. 235gm; Papers: CTP 145. 286pp. ISSN 1020-4962. 775gm

Presents a summary of the seminar proceedings, group discussions and the plenary papers presented. The group discussions covered the following topics; employment policy and labour issues; contract documentation; cost and quality comparisons; contractor-client relationships; sustainability, growth and diversification of labour-based roads contracting; equipping contractors, and training. Also reports on a field visit to roads being maintained by small-scale contractors under the labour-based Maintenance Performance Budgeting Systems (MPBS) employed in Ghana. A compilation of all the plenary and circulation papers prepared for the seminar is presented in a separate volume, under the following headings; policy, research and development; labour-based contracting in Ghana; appropriate technology, and urban development. A valuable collection of papers on labour-based contracting of road maintenance covering a wide range of issues.
Ref. No. 043-001772 (Proceedings) \$10.00
Ref. No. 043-001773 (Papers) \$15.00

  **Labour-based technology: A review of current practice. Proceedings and papers of the sixth regional seminar for labour-based practitioners. Jinja, Uganda, 29th September – 3rd October 1997**

Proceedings

Compiled by Sam Emorut-Erongot, Edited by Angela Kabiru-Kangethe, David Mason, Gamelihle Sibanda
CTP 157. ILO/ASIST, June 1998. 108pp. 295gm

Papers

Compiled by Angela Kabiru-Kangethe and David Mason
CTP 158. ILO/ASIST, June 1998. 291pp. 655gm

The theme of the seminar was tools and equipment. The proceedings contain a summary of the plenary papers presented and the discussions that followed. The report covers the seminar objectives; methodology and evaluation of the seminar; a summary of the papers presented during the scene setting; summaries of all papers presented followed by the discussion highlights; full text of discussions arising from

each presentation; reports on the field visit, and a presentation of the statements of the seminar. The papers provide the full text of all the papers presented, as well as those circulated. The following topics are included: employment and infrastructure; tools and equipment: design development and specifications; equipping contractors and projects; tools and equipment procurement; and road construction and maintenance.

Ref. No. 043-002400 (Proceedings) \$10.00
Ref. No. 043-002401 (Papers) \$15.00

  **Labour-based technology: A review of current practice. Proceedings and papers of the seventh regional seminar for labour-based practitioners. Lusaka, Zambia, 3rd – 7th May 1999**

Proceedings

Compiled by Les Sampson and Pat Loots, Edited by ILO/ASIST

CTP 159. ILO/ASIST. 1999. 118pp.
ISBN 92-2-111869-X. 325gm

Papers

Compiled by Angela Kabiru-Kangethe
CTP 160. ILO/ASIST. 2000. 221pp.
ISBN 92-2-111870-3-X. 600gm

This was the seventh in a series of regional seminars for labour-based practitioners held since 1990. The theme of this seminar was contracting in employment-intensive works in both the urban and rural sector. A broad range of issues were presented and discussed during the seminar ranging from, stakeholder participation in the design, planning and implementation of works, contract documentation, credit facilities, contract management, community contracting, rural access among others. The proceedings report on the plenary and discussion sessions, and include summaries of the papers presented. The papers provide the full text of all the papers presented.

Ref. No. 043-002433 (Proceedings) \$10.00
Ref. No. 043-009724 (Papers) \$15.00

   **Labour-based technology: A review of the current practice. Proceedings and papers of the eighth regional seminar for labour-based practitioners. Cairo, Egypt, 15-19 October 2000**

Proceedings

Compiled by Catherine Allen, Edited by ILO/ASIST

CTP 161. ILO/ASIST. 2001. 162pp.
ISBN 92-2-112538-6. 440gm.

Papers

Compiled by Social Fund for Development (SFD), Egypt.

CTP 162. SFD. 2000. 325pp. 1157gm

The proceedings and papers from the eighth regional seminar for labour-based technology practitioners held in Cairo, Egypt in October 2000. The theme of the seminar was "The new millennium – challenges for employment intensive investments". The sub-themes covered in the seminar included the following: urban communities and socio-economic issues; rural infrastructure development; policy and implementation issues; capacity building; rural travel and transport. The seminar also included site visits to witness labour-based technology in practice in and around Cairo.

Ref. No. 022-110 00 (Proceedings) \$10.00

Ref. No. 043-002452 (Papers) \$15.00



Labour-based technology: A review of the current practice. Proceedings and papers of the ninth regional seminar for labour-based practitioners. Maputo, Mozambique, 20-24 May 2002

Proceedings

Compiled by David Mason, Edited by ILO/ASIST

CTP 163. ILO/ASIST. 280pp ISBN 92-2-113105-X. 500gm

Papers

Compiled and edited by David Mason

CTP 164. National Road Administration (ANE); ILO/ASIST. 165pp. ISBN 92-2-113105-X. 782gm

These are the papers and proceedings from the ninth regional seminar whose theme was, towards appropriate engineering practices and an enabling environment. The proceedings cover the summaries of the issues that were discussed during the group discussions and in plenary, as well as issues emanating from the site visits. Various papers were presented and these have been grouped into four main themes which are: social, contracting, institutional and technical. Both the proceedings and papers are also available in digital format.

Ref. No. 043-002400 (Proceedings) \$10.00

Ref. No. 022-110037 (Papers) \$15.00

 **Workshop on technology choice in civil engineering, University of Nairobi, Nairobi, 12th – 16th March 1989**

CTP 134. ILO. 1989. 94pp. 255gm

Proceedings of a workshop held as part of an initiative by the ILO to create a partnership with universities to review and discuss technology

choice and local resource utilisation in civil engineering, and their introduction into civil engineering curricula at undergraduate level.

Ref. No. 043-001534

\$11.00

Soil and water conservation

This section lists publications that provide useful guidelines on the use of labour-based techniques for the construction and maintenance of various soil and water conservation control measures.

 **Soil conservation project design and implementation using labour intensive techniques**

Bernard Leblond and Laurent Guerin

ILO. Second impression 1988. 216pp.

ISBN 92-2-103395-3. 480gm (Also available in French)

Reviews the basics of different types of erosion and focuses on control measures making intensive use of unskilled labour and community participation, standard methods for the design and planning of projects and finally guidelines for site organisation, operation and supervision. This manual, with its emphasis on a practical approach to the subject, has been written mainly for national planners, senior engineers and technicians who must establish and execute soil conservation programmes.

Ref. No. MIS-009622

POA

Vetiver grass: The hedge against erosion

The World Bank. Third Edition, 1990. 88pp. 70gm

Vetiver grass is the ideal plant for a vegetative system of soil and moisture conservation. It can be used to form contour hedges in both rainfed and irrigated farming situations. Indian farmers have been using it effectively for over two hundred years. Since 1987, it has been tested widely in Africa and in Asia. This booklet explains in detail the principles and practices of establishing vetiver hedges.

Ref. No. 043-000693

POA

Technology choice

When considering the adoption of any new technology, the first question is: will it work in your particular case? Every country has its own particular economic circumstances and technical requirements that have to be taken into account. These titles set out procedures for looking at the broader issues and making decisions on whether and how to proceed with introducing labour-based methods.

Expanding labor-based methods in road works in Africa

Elisabeth A. Stock and Jan de Veen

World Bank Technical Paper No. 347. The World Bank. 1996. 80pp. 215gm

Although labour-based methods have proved to be a cost-effective alternative to equipment-based methods in many low-wage Sub-Saharan African countries, these methods have not always been applied on a large scale. The World Bank Rural Travel and Transport study revealed two key reforms that are necessary to mainstream labour-based programs which have not received the attention they require. These are improved financial management procedures and strengthening stakeholders' support. This paper presents and assesses a number of models that may be applied to establish suitable delivery mechanisms to facilitate the expansion and sustainability of labour-based methods, while addressing these reforms.

Ref. No. 1AF-042107

POA

Labor-based construction programmes: A practical guide for planning and management

B. Coukis

The World Bank. 1983. 374pp. ISBN 19-561512-3. 980gm

A guide to the planning, designing and implementation of labour-based construction programmes. A practical, detailed and well illustrated manual covering all aspects of the technology, from the inception and planning; the site engineering, management and administration, to the practical detail of the construction activities, handtools, and productivity data. This guide is a synthesis of ten years of research and field work in nine countries by World Bank staff and associates, and is a seminal work.

Ref. No. 043-000249

\$39.00*

**This publication is out of print. ASIST has permission to photocopy the document. The price quoted is for a photocopy.*

Road maintenance: Options for improvement

G. A. Edmonds and J. J. de Veen

CTP 13. World Employment Programme. ILO. 1982. 66pp. 200gm

Describes a methodology for assessing the costs, effectiveness and viability of various road maintenance systems in African countries. Alternative approaches to road maintenance are described. The cost effectiveness of existing maintenance systems is analysed. A case study comparing the equipment-based maintenance system for the minor roads in Kenya with the

labour-based methodology adopted by the Kenya Rural Access Roads Programme is given. The final chapter discusses the issue of maintenance financing and organisation in relation to the economics of different countries.

Ref. No. 043-000019

\$8.00

Rural roads in Sub-Saharan Africa: Lessons from World Bank experience

J. Riverson, J. Gaviria and S. Thircutt

World Bank Technical Paper No. 141. The World Bank. 1991. 58pp. ISSN 0253-7494. 155gm

Reviews the World Bank's experience and lessons learned from 127 rural road projects carried out since 1964 in Sub-Sahara Africa, under the main headings of, planning, design and institutional performance. Stresses the need to develop a coherent rural road strategy and technology, resource mobilisation and sectoral organisation and support for institutional capacity in each country.

Ref. No. 043-000533

POA

Technology choice for the construction and maintenance of roads in developing countries: Developments and guidelines

G. Edmonds and J. de Veen

CTP 128. ILO. 1991. 24pp. 105gm

A succinct introduction to the choices involved in introducing labour-based methods for the construction and maintenance of rural roads. Looks at private sector involvement, contractor development, the development of intermediate equipment for labour-based roadworks, the factors affecting technology choice and the issues in the establishment of labour-based programmes. It also includes a well tested decision making matrix to help with programme design from preliminary studies through to full scale implementation.

Ref. No. 043-000164

\$4.00

Technology choice in civil engineering practice: Experience in the road sector

John D. G. F. Howe and Han Bantje

CTP 141. ILO. 1995. 98pp. ISBN 92-2-109966-0. 325gm

Provides an in-depth discussion on the topic of "choice of technology" within the road engineering sector. Explores low-cost methods for road construction and maintenance that are both technically and economically viable and efficient, and which also generate important social benefits. The document comprises two parts. The first explores the concept of choice of technology from a theoretical perspective, drawing together different interpretations of the concepts of technology and decision-making, and their interactions. The second part considers the development of choice of technology within a key

civil engineering sector, road engineering, to which considerable effort has been applied to influence the process.

Ref. No. 043-001774

\$11.50

The problems facing labor-based road programs and what to do about them:

Evidence from Ghana

Elisabeth A. Stock

SSATP Working paper No. 24. The World Bank; ECA. 1996. 44pp. 160gm

The use of labour-based methods for roadworks has been an important aspect of the strategy to improve rural transport infrastructure in Africa for the past 25 years. Although the benefits are widely recognised, contractors have been reluctant to use them. This document reports on a study of the Ghanaian experience with labour-based methods and shows that the success of labour-based programmes hinges on the existence of a conducive market structure, targeting small contractors for training and paying them on time. The findings of the study indicate that without these requirements being addressed, the use of labour-based methods is likely to be unsustainable.

Ref. No. GHA-026037

POA

Tools and equipment

Appropriate and properly designed tools and equipment greatly affect the productivity of labour-based works. The following documents cover design specifications, and productivity and durability of various tools and equipment used in labour-based activities.

Better tools for the job. Specifications for hand tools and equipment

W. Armstrong

Intermediate Technology Publications. 1980. 43pp. ISBN 0-903031-71-X. 90gm

Provides specifications and drawings for hand tools and equipment developed in connection with the Kenya Rural Access Roads Programme. Presents practical and manageable information and drawings which can be used commercially for buying, inspecting, and testing hand tools for labour-based roadworks.

Ref. No. 043-000598

\$7.00

Designs and specifications for a standard trailer and hitch for labour-based works

Jim Hamper and David Mason et al

Technical Brief No. 1. Third (revised) edition. ILO/ASIST Nairobi, Kenya. 1997. 37pp. 135gm

Gives full technical specifications and drawings for a standard design for a three cubic metre trailer and hitch developed under the Kenya Minor Roads Programme. Describes key features of the trailer and provides a sample of details that should be included in a contract document for manufacturing trailers to ensure a good quality product is obtained.

Recommendations of the type of tractor that should be used with the trailer are also included.

Ref. No. 043-002334

\$5.50

Données types sur les besoins de main-d'oeuvre dans les programmes spéciaux de travaux publics

ILO. 1984. 268pp. ISBN 92-2-203711-1. 625gm (In French only)

A catalogue of tools and equipment for labour-based public works, with specifications and drawings.

Ref. No. 043-001229

\$13.50

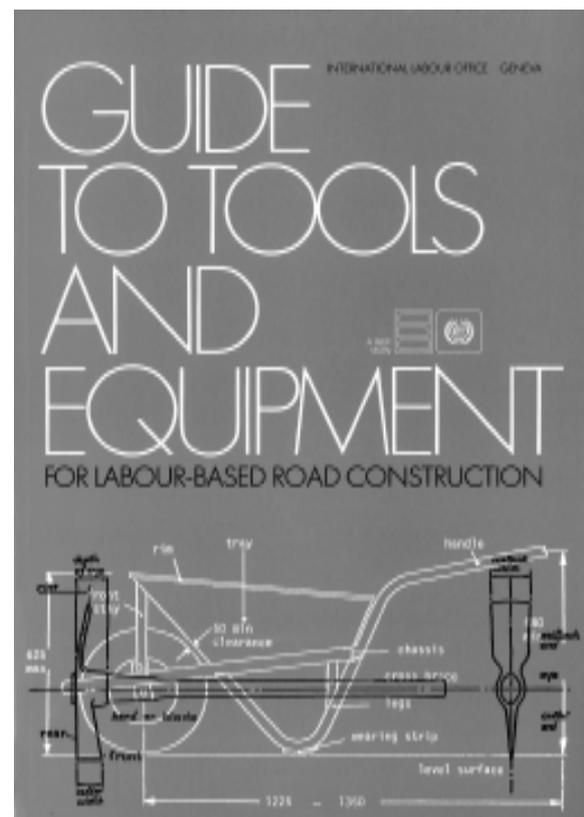
Guide to tools and equipment for labour-based road construction

ILO. 1981. 542pp. ISBN 92-2-102539-X. 1215gm

A practical guide providing specifications for hand tools, methods for testing various tools, design and manufacturing instructions and information on correct tool handling and maintenance. Useful for those responsible for planning and managing labour-based road projects.

Ref. No. 043-000162

\$50.00



 **Heavy duty wheelbarrow for labour-based infrastructure works. An illustrated step-by-step guide to its construction**

Technical Brief No. 7. ILO/ASIST. 1997. 18pp. 45gm

Wheelbarrows are one of the most important tools used in labour-based infrastructure construction and maintenance. This booklet presents a step-by-step guide for the construction of each component. This improved wheelbarrow is designed to be durable, easy to handle and, most importantly, it can be made using locally available materials in a simple workshop. Its considerably extended life span can help reduce overall construction costs.

Ref. No. MIS-009557 \$2.00

 **Heavy duty wheelbarrow jigs and fixtures for batch production. An illustrated guide**

Technical Brief No. 7. ILO/ASIST. 1997. 8pp. 15gm

This booklet accompanies the wheelbarrow construction booklet and is intended for use by those who wish to produce the wheelbarrow in quantity. It provides suggested designs for a range of jigs, which can be used to produce components for the wheelbarrow quickly and accurately.

Ref. No. MIS-009570 \$1.00

 **Intermediate equipment for labour-based roadworks. Accra, Ghana. 19th – 20th April 1996. Workshop report. MART Working Paper No. 5**

MART; ILO/ASIST; Department of Feeder Roads, Ghana. 1996. 30pp. ISBN 1-900930-05-6. 115gm

A report of a workshop held to review the current situation and further development needs for intermediate technology equipment for labour-based roadworks. Lists the main outcomes of the workshop, *i.e.* the key issues identified as influencing the availability, cost and performance of intermediate equipment; and the status of available information on selected categories of high priority equipment (for haulage, compaction, structures and other); the areas that require further research and actions required for further development.

Ref. No. RES-017013 POA

 **Pilot project on labour-based road construction and maintenance in Thailand: Tools and equipment for labour-based road construction**

Lars Karlsson

CTP 63. ILO. 1988. 93pp. 455gm

This project was able to draw on the

manufacturing expertise of small-scale workshops and factories to produce many innovative designs and prototypes to facilitate labour-based methods of construction. All tools and equipment were tested by the University of Chulalongkorn. This document summarises the experience with diagrams and specifications.

Ref. No. 1AS-043038 \$11.00

 **Pilot project on labour-based road construction and maintenance in Thailand: Compaction by labour compatible equipment**

Lars Karlsson

CTP 64. ILO. 1987. 52pp. 175gm

Suitable compaction equipment for labour-based equipment is a continuing problem. This companion volume to CTP 63 concentrates on a number of trials on alternative types of lightweight equipment and gives recommendations for items suitable for animal or power-tiller haulage.

Ref. No. 1AS-043048 \$6.50

 **Productivity and durability of traditional and improved hand tools for civil construction**

J. de Veen, J. Boardman, J. Capt

CTP 9. ILO. 1981. 122pp. 345gm

Reports on research carried out to test the performance of four traditional and improved hand tools, the hoe, forked hoe, pick-axe and shovel. The research results show that investment in good quality, well designed hand tools is justified in terms of increased productivity and durability. The laboratory and field tests carried out to monitor the performance of the tools are described.

Ref. No. 043-000150 \$13.50

 **Tools and equipment for labour-based works. Bibliography of reports and studies**

Marit Due Langaas

ILO. 1994. 19pp. 140gm

An annotated bibliography of some reports and studies on tools and equipment in labour-based works. The list comprises reports held by the Employment-Intensive Investment Branch of the ILO in Geneva, and does not represent a complete list of documentation in the area of tools and equipment.

Ref. No. 081-007014 \$3.50

Training

The successful introduction and implementation of labour-based projects and programmes requires personnel with the right knowledge, skill and attitude towards the technology. Training at all levels of the programme is an essential prerequisite. Numerous training manuals, guides and material have been developed for different target groups through different projects. The following list presents a selection of some of the available relevant training materials for a variety of infrastructure and their works.

Community water supply: A community participation training element for SPWP user beneficiaries

Special Public Works Programme (SPWP) ILO; UNDP. 1987. 93pp. ISBN 92-2-105943-X. 275gm (Also available in French)

This simple and brief manual is intended for community-based training in the use and maintenance of water supply projects. Covers the basics from the benefits of improved water supply, health and sanitation aspects to the types of water supply schemes commonly found. The manual presents a starting point for local discussions and action, and should be tailored to the specific community where the manual is being used. Each section starts with notes to guide the discussion leader followed by course notes.

Ref. No. 062-003743 POA

Illustrated training elements and technical elements for personnel in labour-intensive works programmes

Anti-erosion ditches. Booklet No. 1 and trainer's copy

Special Public Works Programme (SPWP) ILO; UNDP. 1984. Booklet: 80pp; 230gm. Trainer's copy: 78pp. 255gm (Also available in French)
Ref. No. 062-003730 (Booklet) POA
Ref. No. 062-003731 (Trainer's copy) POA

Stone masonry. Booklet No. 2

Special Public Works Programme (SPWP) ILO; UNDP. 1991. 83pp. ISBN 92-2-106465-4. 245gm (Also available in French)
Ref. No. 062-003732 POA

Gabions. Booklet No. 3 and trainer's copy

Special Public Works Programme (SPWP) ILO; UNDP. 1986. Booklet: 58pp. ISBN 92-2-105362-8. 160gm; Trainer's copy: 55pp. ISBN 92-2-105362-8. 175gm (Also available in French)

Ref. No. 062-003734 (Booklet) POA
Ref. No. 062-003735 (Trainer's copy) POA

Gully correction. Booklet No. 4 and trainer's copy

Special Public Works Programme (SPWP) ILO; UNDP. 1985. Booklet: 58pp. ISBN 92-2-105146-3. 160gm; Trainer's copy: 64pp. ISBN 92-2105145-5. 170gm (Also available in French)
Ref. No. 062-003736 POA
Ref. No. 062-003737 POA

Small earth dams. Booklet No. 5

Special Public Works Programme (SPWP) ILO; UNDP. 1988. 100pp. ISBN 92-2105145-5. 255gm (Also available in French)
Ref. No. 062-003738 POA

Tree nurseries. Booklet No. 6

Special Public Works Programme (SPWP) ILO; UNDP. 1989. 134pp. ISBN 92-2-106439-5. 375gm (Also available in French)
Ref. No. 062-003740 POA

Planting techniques. Booklet No. 7 and trainer's copy

Special Public Works Programme (SPWP) ILO; UNDP. 1989. Booklet: 38pp. ISBN 92-2-105364-4. 50gm; Trainer's copy: 44pp. ISBN 92-2-105365-2. 45gm (Also available in French)
Ref. No. 062-003714 (Booklet) POA
Ref. No. 062-003712 (Trainer's copy) POA

Stone-paving blocks: Quarrying, cutting and dressing. Booklet No. 8

Special Public Works Programme (SPWP) ILO; UNDP. 1989. Booklet: 54pp. ISBN 92-2-106421-2. 155gm (Also available in French)
Ref. No. 062-003760 POA

Paves de roche: Mise en oeuvre, entretien et organisation des chantiers. Booklet No. 9

Special Public Works Programme (SPWP) ILO; UNDP. 1992. 106pp. ISBN 92-2-206469-0. 190gm (Available only in French)
Ref. No. 062-000352 POA

A series of illustrated training booklets and technical guides developed to train and assist field personnel to make maximum use of non-skilled labour, locally available construction materials and simple, easily-assimilated technology in programmes of infrastructure construction. The texts are easy to follow and highlighted with numerous illustrations. Some booklets include specific guidelines to trainers and practical exercises. The series is well suited to a variety of training situations, including classroom training, workshops, on-the-job training exercises and for use as a reference by field technicians and workers.

 **Trainer's toolbox of training techniques**

David J. Mason

ILO/ASIST. Second edition. 1995. 72pp. 185gm

A compendium of training techniques. Describes the techniques and how to apply them. Developed for the Kisii Training Centre's International Training of Trainers Course for labour-based programmes.

Ref. No. 062-003863

\$8.50

Urban infrastructure development

As we enter the new millennium it is apparent that Africa is no longer a rural environment. Some countries now have up to half their populations living in urban or peri-urban environments, often in appalling conditions. Asia and South America have been tackling these problems for many years, and the solution of assisting the communities themselves to improve their lot is now a proven approach. The following titles focus on the use of local resources and labour-based technologies for urban infrastructure development and maintenance, and the creation of employment for urban low-income communities.

Community-based contracting: A review of stakeholder experience

Samantha de Silva

The International Bank for Reconstruction and Development, The World Bank. 2000. 32pp 123gm

This paper reviews the findings of a series of consultation with World Bank task teams, project and social fund staff, community representatives, local government officials, service providers (suppliers, NGOs, etc.) and contractors who work on community-managed projects. It presents a synthesis of lessons learned, good practice procedures, constraints and possible solution. The paper is the result of very preliminary investigations of community contracting as it is conducted in the Bank.

Ref. No. MIS-049029

POA

Community-based solid waste management and water supply projects. Problems and solutions compared: A survey of the literature

Justine Anschutz

Working Document 2. Urban Waste Expertise Programme (UWEP). Gouda, The Netherlands. May 1996. 103pp. 295gm

This literature review analyses the experience from community-based water supply and solid waste management projects. The focus of the review is on social and management problems of both kinds of projects and ways to solve them. The main hypothesis of the study has been that community participation and community management experiences from the water sector are relevant for the solid waste sector. The study compares and seeks to draw on solutions to problems from water supply projects that may be applicable to community based solid waste management projects.

Ref. No. 047-008099

POA



  **Community contracts in urban infrastructure works - Practical lessons from experience**

Jane Tournee and Wilma van Esch

**ILO/ASIST. 2001. 113pp.
ISBN 92-2-112408-8. 434 gm**

This reprinted working paper addresses the development and use of community contracts for infrastructure provision and up-grading in unplanned urban settlements. Many of the concepts presented in this paper may be applicable to rural programmes, however the object is to address the special conditions related to the use of community contracts for urban infrastructure works. The paper is based



primarily on experience gained and lessons learned from two pilot projects in Hanna Nassif in Dar es Salaam, Tanzania and Kalerwe in Kampala, Uganda. The paper provides interested parties, in particular field workers, project managers, technicians and community animators with information on the practical application of community contracts for the execution of infrastructure works in urban low-income and/or unplanned settlements. Issues addressed include institutional set-up in community contracting, the community as contracting authority and contractor, type of contracts, payment, profit, role of the municipality and of technical assistance. It presents step-by-step guidelines on the setting up of a community contracting system.

Ref. No. 047-008398

POA

Community initiatives in urban infrastructure

A.P. Cotton, M. Sohail and W. K. Taylor

WEDC, Loughborough University. 1998. 105pp.

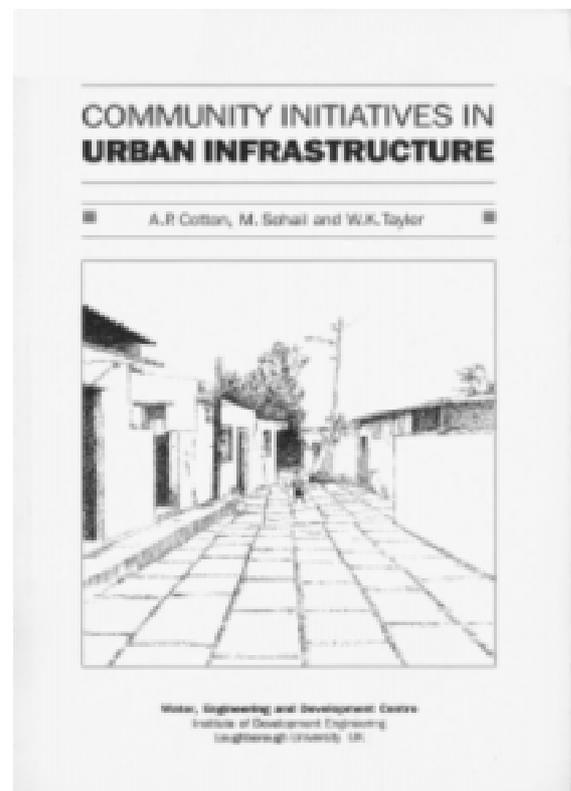
ISBN 0-906055-56-3. 180gm

The book explores the possible roles of communities in the procurement of infrastructure; i) as a 'promoter' if the community pays (part of) the costs; ii) as 'engineer' if it is involved in supervision, monitoring and quality control; and iii) as 'contractor' if it undertakes the provision and management of the construction itself. The various roles the government can play in the procurement process are also described. Normally, governments tender out construction to registered contractors. However, contracts can also be awarded to NGOs, CBOs, cooperatives and others. This is often made difficult by rigid government procedures. However, the experiences of 390 projects in Asia have shown that this approach can be cost-effective and produce results to the specified standards. Communities can also upgrade infrastructure without government involvement, though with technical guidance. For the role of the community and the role of government, the book provides guidelines for agreements, procedures, and contracts to procure infrastructure. These guidelines give a very useful overview of the required steps and choices. The book ends by giving 30 examples from Asia of community participation in procuring infrastructure.

Ref. No. 047-008359

\$30.00

Available online at: <http://www.lboro.ac.uk/wedc/pmmc/contents.htm>



Community-based urban upgrading:

What are the issues?

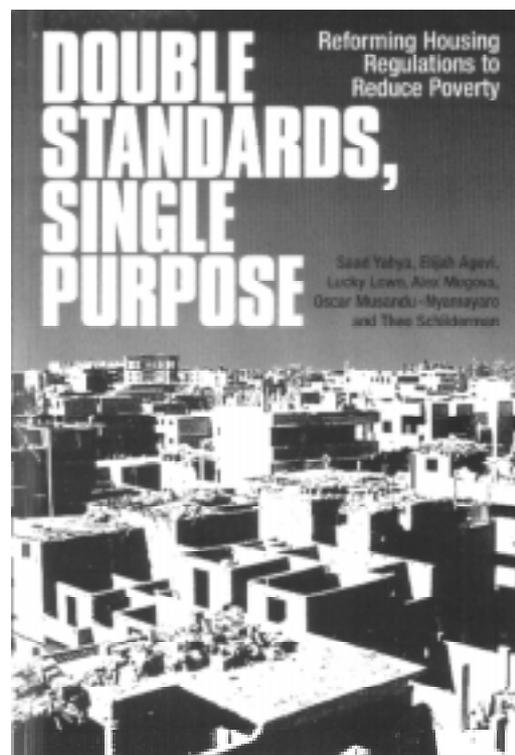
Eric Lyby

ILO. 1995. 10pp. 70gm

A paper dealing with community based urban upgrading and the issues affecting urban works.

Ref. No. 047-008011

\$1.50





**Double standards, single purpose:
Reforming housing regulations to reduce
poverty**

Saad Yahya, Elijah Agevi, Lucky Lowe, *et al*

ITDG Publishing. 2001. 178pp. ISBN 1-8533-9-525-0. 325gm

This book provides development workers, planners and decision makers with information and advice on the revision of housing standards at national, local and project levels. Based on the experience of ITDG and supported by an international literature survey and a wide range of case studies, the authors described the shelter context, the particular place of standards, regulations and procedures, as well as current thinking and approaches to their revision. They go on to explore recent revisions of housing standards in Kenya and Zimbabwe, their impact and lessons learned for future reviews.

Ref. No. 047-008414

POA

Environmental limits to motorization: Non-motorised transport in developed and developing countries

Urs Heierli

SKAT/DEH-SDC/Development Alternatives. 1993. 212pp. ISBN 3-908001-41-2. 385gm

Examines the use of non-motorised transport as a major component in a new strategy for urban transport in both developed and developing countries. Documents case studies from both developed and developing countries. Aims at showing the urgent need to look at sustainable transport policies adapted to each country.

Ref. No. 020-009035

\$35.00



From want to work: Job creation for the urban poor

Eric Lyby

ILO. 1993. 65pp. ISBN 92-2-109086-8. 250gm

A practical guide dealing with issues involved in creating employment opportunities for the urban poor via labour-based infrastructure construction programmes. Addresses employment and urban poverty, local resource utilisation, institutional frameworks for creating an enabling environment, and pilot project design. Draws on the experiences and lessons learnt from projects in Africa and Asia.

Ref. No. 047-008062

\$9.00

**Improving income and housing:
Employment generation in low-income
settlements**

Habitat. 1989. 75pp. ISBN 92-1-131110-0. 155gm

Examines the relationship between income generation and human settlements by focusing

on areas where intervention might benefit the development of both improved shelter and income-generating activities. Has chapters on the potential for income generation and employment generation in the construction and building-materials sector, the possibilities for promoting income-generating activities in human settlement, and opportunities for employment generation in the provision and maintenance of basic urban services. It concludes with a chapter examining the institutional support mechanisms required to implement the proposed strategic responses.

Ref. No. 047-008019

\$15.00



**International training course for
engineers and town planners: Sustainable
community-managed and labour based
upgrading of low income settlements.**

Jan Fransen and Hamish Goldie Scot

Handbook for town planners and engineers

ILO/ASIST. 2000. 175pp. 245gm

Workbook

ILO/ASIST. 2000. 25pp. 80gm

Trainer's notes

ILO/ASIST. 2000. 82pp. 485gm

This three-week course is developed for engineers and planners responsible for infrastructure provision and services in urban low-income settlements. Participants learn to appreciate the relevance and value of community management of urban infrastructure projects. They also acquire, through practical assignments in working groups, some of the skills needed to follow this approach, in particular to:

- .plan and design appropriate engineering solutions to upgrade urban low-income settlements
- .work in partnership with local communities
- .manage community contracts and award contracts to small-scale local contractors
- .design appropriate maintenance strategies with the community
- .plan and design labour-based construction and maintenance works.

The trainers notes are intended for course guides and lecturers and consist of the following: description of classroom session, notes on project assignment, course management and administration, powerpoint presentations.

The workbook guides participants through a project a project formulation exercise. The handbook provides a concise overview of key principles of community-managed and labour

based upgrading of low income settlements and *can be used as a reference source separately from the course.*

Ref. No. 047-047043 (Handbook) POA
Ref. No. 047- 047042 (Workbook) POA
Ref. No. 047-047044 (Trainer's notes) POA

Jobs from housing: Employment, building materials, and enabling strategies for urban development

Robin Spence, Jill Well and Eric Dudley

Intermediate Technology Publications. 1993. 160pp. ISBN 1-85339-2-2-X. 385gm

Examines the processes and the problems of income generation through housing. Looks at the present state of housing, the expected future demands and the processes by which housing is created. Considers the roles of the building industry, the building material manufacturers and the informal sector in creating wealth and income through housing activity. Recommends specific actions for governments and aid agencies to assist in stimulating economic activity, to create employment and to improve the supply of building materials. The book focuses on urban housing.

Ref. No. 048-008078 \$23.00

Low-cost sanitation. A survey of practical experience

John Pickford

Intermediate Technology Publications. 1995. 167pp. ISBN 1-85339-233-2. 295gm

Provides a guide to what has been learned about providing sanitation coverage for both rural and urban low-income communities, and outlines what is appropriate, practical and acceptable. Examines health, social and cultural aspects and preferences in diverse regions of the world. Provides sanitation alternatives in terms of technical efficiency and also in light of cultural acceptability. The final part of the book deals with the practical, financial and organisational considerations of obtaining or upgrading sanitation provision, the emphasis being firmly on the community and its needs and preferences.

Ref. No. 047-008245 \$16.00

Low-cost sewerage

Duncan Mara (ed)

John Wiley. 1966. 255pp. ISBN 0-47-96691-6.

455gm

This book provides practical solutions to the sanitation needs of low-income areas. It also describes low-cost sewerage technologies and their applications in both developed and developing countries. The book contains 15 chapters, 14 of which are papers presented at the International Conference on Low-Cost Sewerage

held in 1995. The last chapter contains the conference conclusion, which is mainly to spread the word on 'low-cost sewer system an important technology which is cost-effective in many situations'.

Ref. 047-008338 \$ 32.00

Low-cost urban sanitation

Duncan Mara

John Wiley & Sons. 1996. 240pp. ISBN 0-471-96163-9. 360gm

This book covers the public health, technical, socio-economic, socio-cultural and institutional aspects of sanitation in towns and cities of developing countries. The text features excreta-related diseases and the use of sanitation to reduce their transmission.

The sanitation technologies covered in detail are VIP latrines, pour-flush toilets, septic tanks, settled sewerage and simplified sewerage, with additional chapters on sullage disposal, pit emptying and sewerage treatment and reuse.

Socio-cultural constraints on sanitation systems and their socio-economic costing are described, together with hygiene education, which is essential in order to achieve maximum benefits to health. The text also explains how to choose the most appropriate sanitation option for a given low-income community.

Finally, institutional aspects are reviewed, including effective sanitation programme planning, monitoring and evaluation.

Ref. No. 047-008385 \$42.50

Municipal solid waste management involving micro-and small enterprises: Guidelines for municipal managers

Hans Christiaan Haan, Adrian Coad and Inge Lardinois

Waste, GTZ, ILO, SKAT. 1998. 164pp. ISBN 92-9049-365-8. 335gm

This book is for managers, engineers and administrators who have some responsibility for municipal solid waste management, and who are looking for ways to improve the service or economise. It covers the "Why?" and "How?" of involving new entrepreneurs and small community-based groups in the collection of solid wastes (garbage) from streets, homes and businesses. The book is primarily concerned with situations found in middle- and lower- income countries, and draws extensively on experiences in Latin America, South East Asia and Africa.

Ref. No. 047-008386 \$20.00

Organised small-scale self-help housing

Mario Rodríguez and Jonny Åstrand

Building Issues, Volume 8, No. 4, 1996. Lund University, Lund Centre for Habitat Studies, Lund, Sweden. 27pp. ISSN 1100-9446. 105gm

There is a shortage of adequate, affordable shelter all over the world. There is an increasing interest in finding solutions in the grey zone between formal housing, *i.e.* built by professionals according to regulated standards for the mortgage market, and informal housing, *i.e.* self-help, illegal, of low standard, and using informal credit. Through organised self-help housing, it can be possible to create affordable homes for those who cannot afford housing produced by the formal sector. This Building Issue Highlights the concept of organised self-help housing in general and provides practical guidelines for implementing organised small scale self-help housing projects. The role of the facilitating organisation is carefully described to show how they can be successful and sustainable. The report describes experiences of organised small-scale self-help housing projects in Bolivia, Costa Rica and Tunisia. (*Building Issues is a series of study results produced through the institutional cooperation between the Lund Centre for Habitat Studies and the Swedish International Development Cooperation Agency.*)

Ref. No. 084-005911

POA

Organisation, negotiation and contracting in development programmes and projects: A study of current practice at the community level

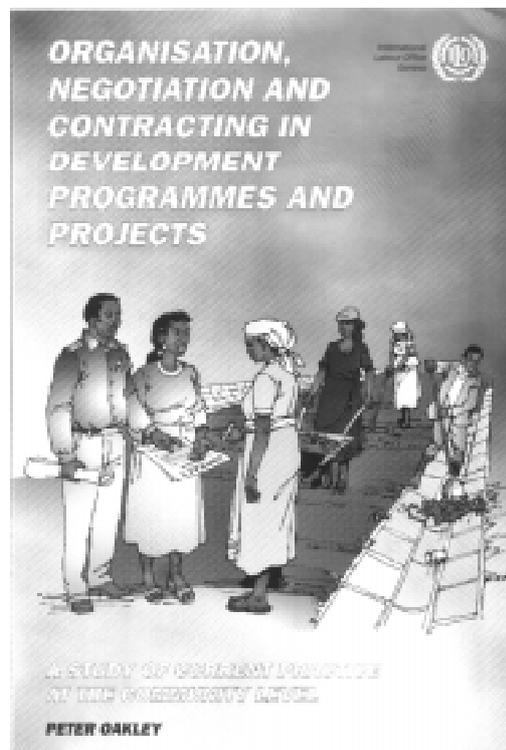
Peter Oakley

ILO Employment-Intensive Investment Branch. 2001. ISBN 92-2-112404-5. 420gm

In recognising the need to extend fundamental principles of organisation and negotiation outside the formal wage sector, to the informal and weakly organised rural and urban sectors the ILO's Employment-Intensive Investment Programme (EIIP) commissioned this study to provide insights to contracting, organisation and innovative forms of collective bargaining at community level in a number of developing countries in Africa, Asia and Latin America. The overall evidence from the case studies is positive in terms of some of the immediate benefits that membership of a community contract group can bring to the poor. The study details the effects that involvement in contract work can have on broader community involvement, despite the many local factors which can influence or even deter this involvement.

Ref. No. 003-14377

POA



On-plot sanitation in low-income urban communities: Guidelines for selection

Andrew Cotton and Darren Saywell

Water, Engineering and Development Centre (WEDC). 1998. 139pp. 250gm

This book presents the findings from a DFID project concerning the performance of on-plot sanitation systems in urban India, Ghana and Mozambique. It investigates how satisfactory on-plot sanitation is in the urban context, and presents guidance on its use for policy-makers, urban governments employees, development agencies and non-governmental organisations. Guidance is presented on situations in which particular sanitation technologies are appropriate. Five key areas of interest are examined: the absence of sanitation; user satisfaction; impact of plot size; operational problems and latrine emptying. Important cross-cutting issues reviewed include: socio-cultural factors; costs and cost recovery; institutional considerations; and the promotion of sanitation.

Ref. No. 047-008369

POA

Performance monitoring of micro-contracts: For the procurement of urban infrastructure

M. Sohail and Andrew Cotton

WEDC, Loughborough University. 2000. 82pp. ISBN 0906055-70-9. 135gm

This document presents the findings from Project R6857 Performance Monitoring of Infrastructure Procurement for Urban Low Income Communities carried out by the authors. The purpose of the

project is to develop a framework and tools for the appraisal, monitoring and evaluation of micro-contracts for the procurement of local infrastructure in urban low-income communities. In addition to the standard measures of time, cost and quality, the work also attempts to capture some of the crucial wider socio-economic impacts of community-based works. The findings presented will be of use to donor agencies, government officials and non-government organisation (NGOs) involved in improving services for the urban poor.

Ref. No. 047-047038 **\$30.00**

Available online at: <http://www.lboro.ac.uk/wedc/pmmc/contents.htm>

Services for shelter: Infrastructure for urban low-income housing

Andrew Cotton and Richard Franceys

Liverpool University Press; WEDC, Loughborough University UK. 1991. 155pp. ISBN 0-85323-287-3. 540gm

This book presents and analyses a strategy for planning, implementation, operation and maintenance of services within the context of the people whom they are serving and their shelter. The emphasis is on a support-approach to service provision. Whilst the book is about provision of physical infrastructure or services for housing, it is not intended to be an engineering design manual. It is written for engineers, planners and architects who are involved with the provision of new or upgraded housing for urban poor.

Ref. No. 047-008251 **\$26.50**

Services for the urban poor: A people-centred approach

George McRobie

Building Issues, Volume 8, No. 1, 1996. Lund University, Lund Centre for Habitat Studies, Lund, Sweden. 23pp. ISSN 1100-9446. 90gm

It is now internationally recognised that the only way most of the service needs of low-income urban dwellers can be met is if they engage themselves in the planning, construction, operation and maintenance of basic services such as roads, water and sanitation, drainage and solid waste management. The role government must increasingly become that of enabling low-income urban communities to choose services appropriate to their needs and resources, and to manage the services efficiently. This report highlights the problem of services for the urban poor and suggests alternative solutions. (*Building Issues is a series of study results produced through the institutional cooperation between the Lund Centre for Habitat Studies and the Swedish International Development Cooperation Agency.*)

Ref. No. 084-005908 **POA**

Services for the urban poor: Guidelines for policymakers, planners and engineers

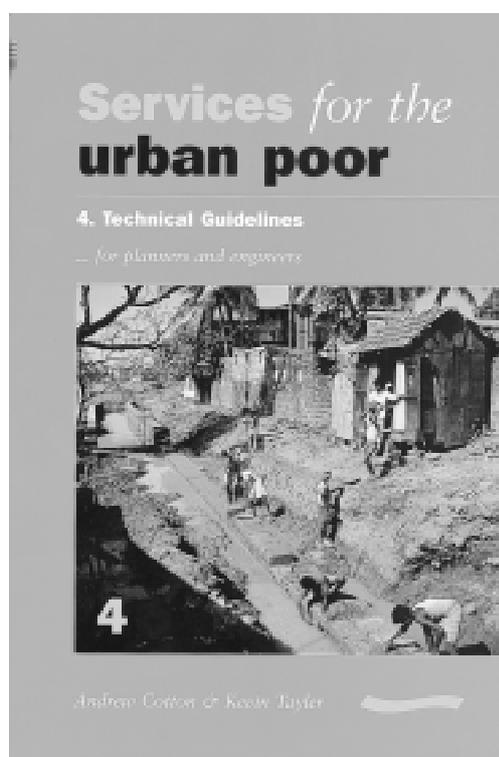
Andrew Cotton and Kevin Tayler

Water, Engineering and Development Centre(WEDC); GHK Research and Training Ltd. ISBN. 0-906055-77- 6. (set). 1495gm

This set of manuals offers detailed guidance on the planning, design, implementation, operation and maintenance of basic services for the urban poor based largely on experience from South Asia. It emphasises the need to integrate participatory approaches at the local level with strategic improvements to city level infrastructure. The readership includes policymakers, urban planners, and urban engineers.

Ref. No. 047-110 002

POA



Shanty upgrading: Technical handbook for upgrading squatter and shanty settlements

John Parry and Andrew Gordon

Intermediate Technology Publications. 1987. 90pp. ISBN 0-9512952-0-9. 375gm

Focuses on the issues involved in urban upgrading projects, particularly on the administrative and legal aspects. Deals extensively with building techniques, the production of building materials and infrastructure appropriate to low-cost, self-help building and shanty upgrading. The techniques described are based on field experiences in developing countries.

Ref. No. 047-008077 **\$16.00**

 **Shelter provision and employment generation**

Habitat; ILO. 1995. 271pp. ISBN 92-2-108523-6. 430gm

Considers shelter provision as a means of meeting housing needs, generating employment and reducing poverty. Examines the scope for self-employment and small-scale enterprises in construction. The book argues that priority should be given to development strategies based on labour-intensive provision of housing, services and infrastructure, with community involvement.
Ref. No. 047-008012 \$17.00

  **Site supervisor course for labour-based and community-managed upgrading of low-income settlements:**

Andreas Beusch and George Simba

Basic Course Manual

Kisii Training Centre (KTC); Kenya Water Institute (KEWI); ILO/ASIST. 2000. 170pp. 480gm

Skills Course Manual

Kisii Training Centre (KTC); Kenya Water Institute (KEWI); ILO/ASIST. 2000. 229pp. 1190gm

Supervisors Site Reference Handbook

Kisii Training Centre (KTC); Kenya Water Institute (KEWI); ILO/ASIST. 2000. 136pp. 215gm

The course was developed to equip trainees with the skills, knoweldge and improved attitudes needed to carry out day-today site supervision of labour based and community managed urban upgrading works.

The course is dived into two sections-basic and skills. The basic course covers the following topics: the urban environment; mensuration, community managed and labour based approaches; tools and equipment; work implementation; work management; labour issues; solid waste management; urban sanitation; quantities costing; and contracting. The course mauals are reference material for the training course. The supervisors Site Reference Handbook contains key data and guidance and comes in a handy format for reference on site.

The Handbook is designed to be used for reference seperately from the course.

- Ref. No. 062-013961 (Basic manual) POA**
- Ref. No. 062-110080 (Skill manual) POA**
- Ref. No. 062-011001 (Site handbook) POA**

  **Start your waste collection service**

Andreas Klemmer

Technical handouts

Ministry of Local Government and Housing, Zambia; ILO. 2001. 121pp. 390gm

Trainer’s guide

Ministry of Local Government and Housing, Zambia; ILO. 2001. 32pp. 145gm

Manual

Ministry of Local Government and Housing, Zambia; ILO. 2001. 71pp. 250gm

Business plan

Ministry of Local Government and Housing, Zambia; ILO. 2001. 71pp. 110gm

These four books are part of a series providing a technical step-by-step guide of how to start a community-based waste collection service. The guide provides specific tasks for the trainer in the following themes on solid waste management: legal issues; types of solid waste generation rates; the waste cycle; recycling issues; gender roles; routing issues; occupational safety and health; community participation; monitoring system; and community contracting issues. The technical handout covers: legal issues; types of solid waste and generation rates; the waste cycle; recycling issues; gender roles; routing issues; occupational safety and health; community participation; monitoring system;and community contracting issues.

The manual presents all the aspects to be considered before starting your bussiness. These include the following: how to make a marketing plan; calculate how much start-up capital you need; assess the sources of starting up capital; and how to make financial plans. The business plan covers these issues: development of a business idea and marketing plan; defining the form of business; assigning business tasks; costing and calucation of the required start-up capital; planning and managing of finances; and finally, an action plan to help one get started. These were developed in Zambia through the Lusaka City Council, with funding from UNDP and Ireland Aid.

- Ref. No. ZMB-039595 (Trainer’s guide) POA**
- Ref. No. ZMB-039596 (Technical handout) POA**
- Ref. No. ZMB-O39597 (Manual) POA**
- Ref. No. ZMB-039598 (Business plan) POA**



 **Storm drainage: An engineering guide to the low-cost evaluation of system performance**

Peter Kolsky

Intermediate Technology Publications. 1999. 152pp. ISBN 1-85339 4327. 260gm

This book is mainly concerned with surface water drainage in low-income urban areas in developing countries. It deals with both open and closed drains. The purpose of this practical guide is to help engineers (in particular municipal engineers) and development workers understand surface water drainage problems so that they can work on more realistic solutions. It starts from the recognition that millions of slum residents across the world suffer the hazards and misery of frequent flooding, and draws upon the results of two and a half years of fieldwork in the city of Indore in India. The book focuses on three questions; what is drainage performance and what happens when it floods?; what are the effects of solids in drains upon performance?; how can we evaluate a drainage system, to assess how best to improve its performance? It includes a comprehensive checklist for drainage evaluation, tables and graphs of data and hydrological equations with worked examples.

Ref. No. MIS-009727 \$9.00

Surface water drainage for low-income communities

World Health Organisation. 1991. 93pp. ISBN 92-4-154416-3. 225gm

Gives practical guidance on the design and construction of simple, effective, low-cost drainage systems and on the rehabilitation of existing systems that have fallen into disrepair. Emphasis is placed on the importance of community participation at all stages of projects, from planning through to implementation, and particularly in maintaining the system once built. It is written in non-technical language and is well illustrated. It is suitable for local authorities and community groups, as well as planners and public works officials in developing countries.

Ref. No. 047-008069 \$8.00

Sustainable sewerage: Guidelines for community schemes

R. A. Reed

Intermediate Technology Publications; WEDC. 1995. 111pp. ISBN 1-85339-305-3. 195gm

Sanitation is one of the most basic infrastructure services and one which many poor communities find themselves unable to afford. In most countries, the demand for sewerage greatly exceeds the resources available to provide it. There are, however, ways in which conventional schemes can be modified, or new schemes

planned, so that the cost both of construction and of maintenance can be brought within reach of more people. This handbook describes these and suggests objective methods of prioritising communities' needs for sewerage. It surveys the planning, selection, design, management and maintenance of community schemes, and provides technical and financial suggestions on cost-effective practice and procedures. Non-conventional options are discussed as well as the conventional approach to sewerage design and implementation. The book will be of great interest and practical use to all those involved in planning small community infrastructure projects, particularly in peri-urban situations.

Ref. No. 049-008076 \$15.50

 **The future of urban employment**

ILO. 1998. 64pp. ISBN 92-2-110337-4. 275gm (Also available in French and Spanish)

This paper presents the immense problems and enormity of tasks confronting the world's large cities, whether in developing, transitional or industrial worlds. The paper discusses global urbanisation and its implication for urban employment. Urban unemployment and poverty; the determinants of urban employment, such as the continuous flow of rural migrants to urban centres; the growth of the informal sector; the effect of technological change and the globalisation process on urban employment; these topics are all examined. Finally, the paper examines key areas for policy intervention, the different strategies and tools required, and the potential for new partnerships involving municipal authorities, national governments, workers, employers and civil society. The paper concludes by highlighting the new challenges for urban employment policy in the 21st century.

Ref. No. 003-014112 \$14.00

 **The urban informal sector in Africa in retrospect and prospect: An annotated bibliography**

Bibliography No. 10. ILO. 1991. 96pp. ISBN 92-2-107747-096. 265gm

A comprehensive bibliography covering 200 titles (in English and French) on the urban informal sector and its potential for employment and growth. Themes covered include regional variations, training, credit, women, policies and institutional environment, linkages with the formal and informal sector and interventions by aid organisations. Each chapter starts with an introduction, followed by a list of general references useful for further reading, followed by abstracts on Africa. The concluding chapter synthesises emerging trends and provides some general guidelines for future research on the urban informal sector in Africa.

Ref. No. 081-007062 \$15.00

 **The urban material source book: A guide for community-managed and labour-based upgrading of urban low-income settlements**

George Simba and Jan Fransen. Edited by Annabel Chite

ILO/ASIST. July 2000. 32pp. 195gm

This source book is a select guide of material available from the ASIST Information Services for projects and programmes involved in community-managed and labour-based upgrading of urban low-income settlements. Community-management refers to a strong involvement of communities in the planning, design, implementation and/or maintenance of the works. The labour-based approach refers to the cost-effective construction and maintenance of infrastructure using (local) labour supported by light equipment. The material listed are grouped according to sector and indicate the main target group for which the material might be relevant.

Ref. No. 047-047040

POA

 **Urban employment guidelines: Employment-intensive participatory approaches for infrastructure investment**

Lin Jinchang

ILO. 1998. 77pp. ISBN 92-2-110944-5. 315gm

learned from the ILO's country-level technical cooperation activities. The guidelines represent a determination to build on the strengths of the ILO's decades-long experience in the fields of the urban informal sector and employment-intensive investment programmes, but taking these experiences a step further, both intergrating adapting them to the context of an urbanising world.

Ref. No. 003-014123

POA

Urban upgrading: Options and procedures for Pakistan

Kevin Tayler and Andrew Cotton

WEDC, Loughborough University; GHK/MRM. 1994. 173pp. ISBN 0-906055-31-8 570gm

This manual is intended primarily for use by engineers responsible for the planning and construction of upgrading schemes, though it is also useful to other professionals working in the field of upgrading. It provides an introduction to the subjects of informal development and upgrading, examines the scope for community involvement, covers planning and design aspects, technical aspects on site appraisal, survey, water supply, sanitation and sewerage, street and lane paving, drainage, solid waste management and street lighting. It also covers

contract documentation, costing and affordability. Though based on experience from Pakistan, it can be usefully applied in other developing countries.

Ref. No. 1AS-043138

\$26.50

Videos

The following videos and slide series have been developed from employment-intensive projects. They are a useful promotional and training resource.

 **Appropriate technology and fair working conditions**

ILO/ASIST, EIIP. 1999. 14 min. VHS/PAL format. 260gm

This video looks at the issues involved in labour-based construction, *i.e.* how to manage a large work force and to provide workers with decent working conditions in order to achieve satisfactory levels of productivity. Well-managed labour-based programmes have in developing countries proven to be a viable and cost effective alternative to equipment-based construction. Labour-based programmes can make an important contribution to the development of a sound domestic construction industry, enable effective participation by local communities, and with increased opportunities for men and women to obtain work clearly contribute to local economic development. Consequently, this apparently age-old approach has grabbed the interest of governments in over 40 countries.

Ref. No. 060-018048

POA

 **Earth report V: The long walk**

Robert Lamb (ed)

DFID; World Bank; ILO/ASIST. 2001. 27mins. 240gm

This video on rural travel and transport in Sub-Saharan Africa is a joint effort of ASIST-Africa and the Rural Travel and Transport Programme (RTTP) component of the World Bank, Sub-Saharan Africa Transport Programme (SSATP). The video, with case studies from Guinea, Senegal, Tanzania and Malawi is aimed at raising awareness of the problems of rural access in sub-Saharan Africa, and showing how these problems can be addressed through community participation, appropriate planning and various access interventions. The video was produced by the Television Trust for the Bank and ILO/ASIST. This video also is available from TVE, UK. Email: tve-dist@tve.org.uk

Ref. No. 060-110004

POA



Improving labour standards in construction: The Ghana experience

DFID; December 2000. 22mins. 235gm

This video is a snapshot of an experiment to improve the livelihoods of construction workers by implementing labour standards on a bridges programme in rural Ghana. The film is about the experiences of workers, employers and trade unions in the labour standards programme. It reflects the different interests and how they are dealing with the practical difficulties encountered during implementation.

Ref. No. 060-110005

POA



Labour-based technology video series

Compiled by ASIST. 1996. VHS/PAL format. 145gm

A compilation of eight short videos listed below.

Ref. No. 060-018011

\$15.00

1 Labour-based feeder roads construction: An experience in Ghana with small-scale local contractors

UNDP/Ghana Department of Feeder Roads Production. Videomart, Accra, Ghana. 19 min.

Describes a labour-based feeder road rehabilitation pilot project established in the Sefwi Wiawso District under the World Bank's 4th Highway project, with technical assistance from the ILO funded by the UNDP. The project involved the use of small-contractors to undertake labour-based rehabilitation of feeder roads. The contractor training processes, the labour-based roadworks techniques and equipment used are described. The video illustrates the successful use of small-scale contractors for feeder road rehabilitation in Ghana, and the resulting socio-economic benefits, such as employment and income generation, which stimulate the rural economy.

2 Roads for the people: Road building with labour intensive methods

A presentation by Gunvor W. Skancke and Kristin Ese. 1993. 16 min.

Describes the Kenya Minor Roads Programme (MRP) during which 5000km of rural access roads constructed under the Rural Access Roads Programme (RARP) between 1974 and 1986 using labour-based techniques were maintained under a labour-based force account system. The MRP, which started in 1986 and ended in 1992, developed the RARP methods to improve and maintain selected roads in 26 districts in high potential agricultural areas. The organisation, recruitment, task rate system, and maintenance techniques employed under the MRP are described. The video indicates the primary benefits of labour-based rural access road maintenance as improved access between

agricultural production areas and markets, the opening up of isolated settlements to social services and the generation of employment.

3 The Lesotho experience: Construction by labour-based methods of the Dilli-Dilli to Sinxondo Road

Hamish Goldie Scot

Tape/slide sequence. Scott Wilson Kirkpatrick. 1986. 7 min.

A narration of a personal experience by a labourer involved in the labour-based construction of the Dilli-Dilli - Sinxondo Road, a 32 km stretch over rocky mountainous terrain in Lesotho.

4 ILO new technologies in Nepal Special Public Works Programme: Rehabilitation and repair of rural infrastructure

Sindhuli Rehabilitation Programme/ILO.

The aim of the video is to demonstrate to technical staff the correct engineering procedures in specific applications of ferro-cement and bamboo technology, and the use of calmmite as an alternative to dynamite. The techniques for the construction of ferro-cement canal linings, bamboo cement cover slabs and water tanks are shown, as well as the use of calmmite for hard rock excavation.

5 Rural travel and transport: Integrated rural travel and transport approach: Makete Tanzania — A case study

ILO. 1994. 14 min.

Describes a new approach to rural accessibility and transport, which identifies the problems at the grass-roots level and includes a wider range of interventions, *i.e.* the improvement of paths and tracks, the introduction of intermediate means of transport. The aim of the video is to show policy makers and project implementors concerned with rural development a different approach to address the actual transport needs of the rural household through local level accessibility planning and access interventions.

6 Labour-based road construction in Thailand ILO/UNDP Bangkok, Thailand. 25 min.

Describes a project undertaken by the Public Works Department, funded by UNDP with technical assistance from the ILO, to build roads by labour-based methods. The advantages and benefits of the use of labour-based technology are described. The techniques and light equipment used for labour-based construction are illustrated. The video demonstrates the successful use of local resources and stresses the need for training at universities and technical colleges to ensure the sustainability of the technology.

7 Labour-based road project, Mutoko - Nyamuzwe, Zimbabwe

SweRoad. 1993. 30 min.

A detailed description of the organisation and techniques used in the labour-based construction of the Mutoko - Nyamuzwe road, from the recruitment procedures, the setting out procedures, and the construction techniques employed. Describes the equipment used, labour productivity and payment procedures.

8 Feeder road maintenance: The Ghanaian experience

Department of Feeder Roads, Ghana. Videomart. 19 min.

Describes the use of the Maintenance Performance Budget System (MPBS) which was introduced as a result of the failing Spot Improvement and Maintenance System (SIAM), a communal labour-based maintenance system which was not sustainable due to competition with the other sources of employment, in particular agriculture. The video illustrates the successful introduction of the MPBS system in the Eastern Region of Ghana where small-scale labour-based contractors are awarded contracts to carry out periodic maintenance activities for a period of one year.

Labour-based surfacing trial

Labour-based Advisory Unit, Ministry of Transport and Communications, Zimbabwe. 25 min. 245gm

This video CD shows road surfacing trials which were conducted in Zimbabwe using different material combinations.

Ref. No. 060-110006

POA

Management of labour-based programmes

ILO/ASIST; ILO/EIIP. 1999. 35 mins. VHS PAL format 255gm

Describes and explains important management aspects of a labour-based project. This training video is divided into five sections:

Section 1 Hiring and recruiting labourers

Section 2 Productivity based play

Section 3 Wages

Section 4 Safety and health

Section 5 Record keeping

Ref. No. 060-018047

POA

Routes on rural transport needs and some options in Sri Lanka

Intermediate Technology Development Group, Sri Lanka, 1995. 18 mins. VHS/PAL format. 145gm

This video depicts transport and accessibility problems faced by rural communities in rural agricultural goods and other goods to markets and accessing social services, such as schools and hospitals, due to poor rural infrastructure and transport services are illustrated. Two local innovations, the extended bicycle and detachable bicycle cart, developed by the Intermediate Technology Development Group in conjunction with local manufacturers to improve the utility of the most common means of transport in Sri Lanka, are described and illustrated. These two innovations help increase the load carrying capacity of the bicycle, allowing for the transportation of more goods to markets and people to social services which in turn enhances the rural communities' income generating capacity.

Ref. No. 060-018 007

POA

The bridge

Licinio Azevedo

Ebano Multimedia. 52 mins. 245gm

In the rainy season, the rivers rise and Chimanimani, one of the regions in Mozambique gets cut-off from the rest of the country. This film is the telling of the collective effort to build a bridge to benefit the local community and promote its development. It demonstrates that the success of this undertaking does not depend solely on the efforts of individuals, but also on the collusion of the region's spirits and on the whims of Mother Nature

Ref. No. 060-110003

POA

The road to rural pride

Kisii Training Centre, Kenya. 1998. 14 mins. VHS PAL format

This video gives the story of the labour-based methods of road building in Kenya and the development of the Kisii Training Centre (KTC) as an internationally renowned centre for labour based roadworks technology. It is the story of the rural pride fostered by a method that has been so successful in allowing for easier access to remote rural areas. This is a useful promotional video not only for KTC but for the technology and would be suitable for providing an initial orientation to those new to labour-based roadworks technology.

Ref. No. 060-018032

POA

Training videos for labour-based road construction and maintenance and video scripts

ILO. 1991. ISBN 92-2-108057-9 (Set of 16 Training Modules on 12 videos, complete with scripts). VHS/PAL format. Scripts: 100pp. ISBN 92-2-108086-2. 545gm. Also available on video compact disk (VCD)

A series of 16 training modules which together form a coherent training package for the building and maintenance of rural roads using labour and light equipment. Designed to be used as supplementary training material for supervisors who will be involved in managing labour-based road construction and maintenance projects.

Modules: 1: Introduction; 2: The role of the supervisor; 3: General planning; 4: Site planning; 5: Reporting and control; 6: Work organisation; 7: Tools and equipment; 8: Survey and setting out; 9: Clearing; 10: Drainage; 11: Earthworks; 12: Compaction; 13: Gravelling; 14: Maintenance; 15: Structures; 16: Maintenance of structures

Ref. Nos.060-018016-018027 (Videos) \$420.00(set)
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