



Module 2: Planning, Design, Appraisal and Implementation

Small Scale Contractor Development

**Session: 2.5
Part 1**

Presentation: 2.5a

The Training Modules

Module 1. Policies and Strategies

This Module

Module 2. Planning, Design, Appraisal and Implementation

Module 3. Management and Financing

Module 4. Rural Mobility

Module 5. Social and Environmental Issues

Module 2. Planning, Design, Appraisal and Implementation

Session 2.1 Participatory rural planning process

Session 2.2 Design of rural transport infrastructure

Session 2.3 Rural road economic appraisal methodology

Session 2.4 Labour-based works methodology

This session

Session 2.5 Small scale contractor development

Session 2.6 Community Participation in Rural Transport Infrastructure

Session 2.7 Participatory Survey Techniques for Rural Transport

1. Introduction

Learning Objectives

By the end of the session participants will be able to:

- Explain the rationale behind the privatisation of the road construction industry
- Describe the problems facing small scale contractors
- Analyse the nature of the issues related to the 'institutional framework for privatisation'
- Identify various options for the development of the support frameworks for privatisation

Session Overview

- ⦿ Background issues
- ⦿ The need for a framework to govern private contracting
- ⦿ Problems facing small contractors
- ⦿ Institutional framework in developing countries
- ⦿ Construction industry in developing countries
- ⦿ Institutional development of the support framework

2. Background issues

- ◎ Following independence many countries saw an effective road network as a high priority for economic development
 - networks developed with international funding
 - limited domestic funds for continued investment and maintenance
 - result: deteriorating road network
- ◎ Traditionally relied on state-owned organisations
 - but these proved inefficient, due to:
 - loss of high calibre staff to better paid jobs
 - funding shortages
 - political pressures
 - bureaucratic mismanagement
- ◎ Interest grew in stimulating private sector involvement

But, it has become increasingly difficult to implement a strategy of privatisation ...

© Problems associated with

- contracting procedures
- industry support framework

3. The need for a framework to govern private contracting

Five types of contracting organisation capable of undertaking construction work:

Small builders and 'jobbers':
generally one-man businesses

Communal and self-help groups

State-owned organisations

Private contracting companies

Foreign contractors

The issue of the ‘missing middle’ ...

© A handful of *large* contractors work along side a plethora of *small* construction businesses

- but few medium sized contractors

© **Small businesses:**

- appear unable to develop and expand their market share to become medium sized contractors
- are restricted to undertaking small building work and occasional minor civil engineering work
 - due to their size and resources
- ‘invisible’ to national construction statistics

For road works to be efficiently carried out in a competitive market requires

- ③ Contracting firms of all sizes to undertake various sized projects
- ③ Workload of adequate size
- ③ Sufficient numbers of construction companies to create a demand for work and realistic competition
- ③ The development of institutional capacity to execute work through a private contracting industry
- ③ Formal agreements between the purchaser (the government) and the provider (the contractor)

The problem is:

© Countries which relied on state-owned organisations

- had no need for a contract
 - as the client, designer and contractor were the same organisation
- ... so now there are **no suitable national contract procedures** and documents which may be adapted for use with the private sector

4. Problems facing small scale contractors

- ⊙ Lack of access to and difficulty in obtaining credit
- ⊙ High financial turnover
- ⊙ Need long-term capital to cover costs of expanding the business, and financing the purchase and depreciation of equipment
- ⊙ State-owned construction enterprises received financial support from other government departments
 - not affected by late payments, as finances are obtained from a central account
 - private contractors are dependant on regular payments to retain staff, pay wages, obtain supplies and maintain a good relationship with their creditors

further problems ...

- ⊙ Poor contract documentation
- ⊙ Poor work continuity
 - gap of many months between contracts
 - nature of the road authority - accustomed to undertaking work when financial resources are available
- ⊙ Difficulty in recruiting suitably trained labour and supervisors
- ⊙ Poor availability and/or high costs of construction materials
- ⊙ High capital cost of equipment and high loan interest rates
- ⊙ Lack of construction equipment for hire and difficulty in obtaining equipment spares
- ⊙ Poor on-site supervision and availability of road authority staff to address queries

5. Institutional Framework

- ③ Tripartite arrangement between **client**, **contractor** and **consulting engineer**
 - forms the core of the institutional framework within developed countries
 - need to understand contractual procedures
- ③ Other support organisations are essential
 - to enable the industry to function and develop new techniques and materials and improve productivity
- ③ Relationships between the stakeholders in the construction industry are complex

A range of organisations and roles

☉ Trade organisations

- material suppliers and manufacturers
- work to promote their products and services to contractors and consultants

☉ Contractors/ consultants' associations

- assist in development of contract procedure and national standards

☉ Learned societies

- provide knowledge and dissemination to the whole industry, examine and certify engineers and technical staff

☉ Education, training and research organisations

- universities and technical colleges to provide courses and training that lead to professional accreditation of learned societies

☉ Government

- set up and fund agencies to provide information and advice to policy makers
- in UK e.g. Hydraulics Research (HR), the Transport Research Laboratory (TRL)

6. Construction industry in developing countries

Two fundamental institutional problems:

Lack of a consulting engineering profession

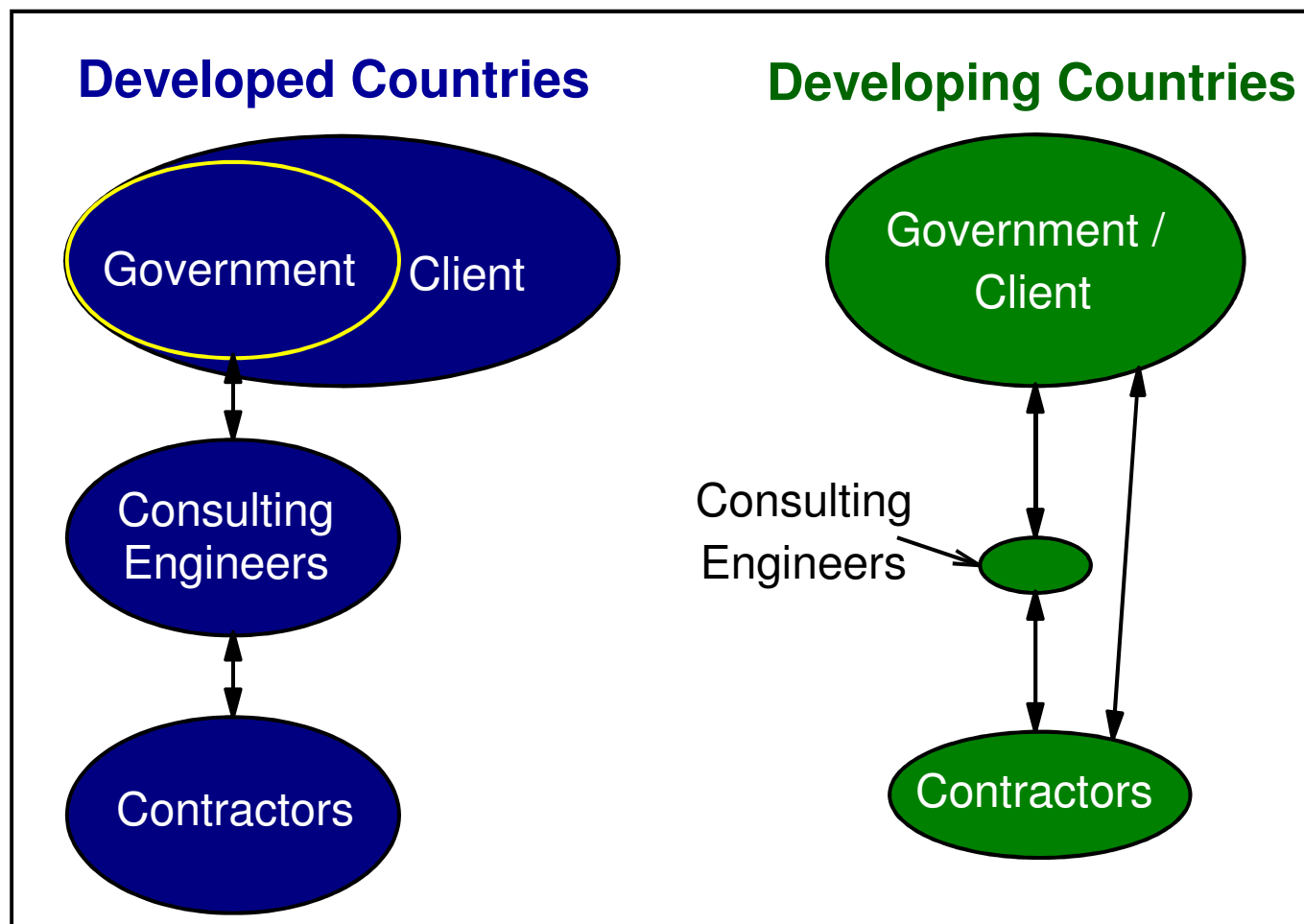
Poor capacity within the support framework to assist the contracting sector

The lack of a consulting engineering profession

‘balance of power’

- ③ Developing countries - client is predominately the government
 - developed countries - client often the private sector
- ③ Contractors in developing countries:
 - lack resources and experience - places them in a much weaker position than the government and client
 - forced to accept a proportionally greater contractual risk
 - have no support for contract administration
 - consulting engineering profession is almost non-existent

Relative strengths of stakeholders in the road construction and maintenance sector



The poor capacity within the support framework to assist the contracting sector

1. Limited resources

- © In developed countries, many of the organisations in the support framework are financed by the three stakeholders (client, contractor, consulting engineer)
- © In developing countries this financial resource is not available because:
 - the engineering profession is virtually non existent
 - contractors have very limited financial resources
 - the government budgets are unable to meet the requirements of the road maintenance budget

2. Insufficient training

- ⊙ Lack of funding
- ⊙ Lack of resource management and planning within the education system
- ⊙ Reputation of management topics within the education system is low
 - results in a lack of qualified staff and specialists
- ⊙ **Knock-on effects**
 - people receive education on the '*hard engineering*' skills
 - ... but little in the '*soft engineering*' skills of construction and business management
 - lack of physical infrastructure and centralisation of education facilities - usually in the capital city
 - results in poor training in the provinces
 - lack of information resources in the *education* sector
 - contributes to lack of information resources within the *construction* sector

A changing role for government ...?

- ③ In developing countries the **tripartite** system does not work
 - due to lack of a consulting engineering profession
- ③ A different mode of operation is required:
 - the client takes on the main roles of the engineer
 - government departments must undertake the design work and then prepare, tender and supervise the contracts for work
- ③ In the existing state-owned enterprise system there is capacity within the road authority to undertake the design work
 - but there are problems ...

Problems with government managing road contracts

© Few suitable forms of contract for road projects

© Road authority staff are:

- accustomed to organising labour groups and not accustomed to managing contracts
- not aware of the procedures and roles, which they are required to undertake when managing contracts

© There is a need to:

- restructure the road authority
- redirect and retrain staff at all levels

Addressing the two fundamental problems

1. The lack of a **consulting** engineering profession
 - **long term objective** - develop the engineering profession
 - but likely to take years before the sector has sufficient capacity to undertake the required roles
 - **short to medium term** - develop the government agencies capacity to prepare, award and administer contracts
2. Poor **capacity** within the support framework to assist the contracting sector
 - short to medium term – not feasible to develop an extensive support structure
 - ... though a lower level of support, which addresses the core needs, **must be provided**

7. Institutional development of the support framework

- ◎ There is a need to initiate and develop organisations which can provide the support framework
 - process takes a long time and is particularly difficult with limited resources
- ◎ 4 case studies
 - aim to offer a broad spectrum of the different types of organisations or projects

Examples of support initiatives

Organisation / Project	Support provided by	Support Framework
<ul style="list-style-type: none"> Khupuka 	Non-Governmental Organisation (NGO)	<ol style="list-style-type: none"> Contractors Association Education and Training
<ul style="list-style-type: none"> Tanzania Civil Engineering Contractors Association (TACECA) 	Tanzanian Contractors	<ol style="list-style-type: none"> Contractor Association Education and Training Equipment and Material Suppliers Commercial Banks
<ul style="list-style-type: none"> ASIST (Advisory Support Information Services and Training) 	International Labour Office (ILO)	<ol style="list-style-type: none"> International Organisations Government Departments Government Agencies
<ul style="list-style-type: none"> MART (Management of Appropriate Road Technology) 	DFID (Department for International Development)	<ol style="list-style-type: none"> Government Departments Government Agencies Universities Learned Societies

Institutional frameworks for privatisation



Case study exercise

- A. Describe the essence of each initiative.*
- B. What are the potential advantages and limitations?*

Khuphuka

© Established 1991

© KwaZulu-Natal, South Africa

© Objective

- set up an organisation to provide people with an entry point to the economy - through *training linked to production*
- strengthen community structures
- promote development

The priority target groups

Community
groups
engaged in
development

Unemployed
young adults -
Women = at least
30%

Entrepreneurs e.g.
micro manufacturers
building contractors

The concept

- interests of the three groups are complementary
- community groups could provide a market for the contractors
- contractors could provide local employment opportunities

- ◎ Create *employers* who will in turn create employment
 - rather than short term (and probably unsustainable) employment opportunities
- ◎ Prospective employers are members of local communities
 - participate in development process as partners
 - learn the skills of identifying and implementing project opportunities



Tanzania Civil Engineering Contractors Association

© Founded circa 1998

© Aim

- raise the capacity and capability of local contractors to a level where they can handle any construction project within the country

© Membership

- Tanzanian contractors: large companies to small one-man enterprises
- annual subscription: according to the type of work contractor undertakes, which provides the finance for the Association's activities

© Objective

- protect the interests and foster co-operation between its members enabling an enhanced participation in all construction programmes

Joint ventures between large and small contractors

1. Large contractor obtains large contracts
 - pass some smaller parts of the work to the small contractors
 - small contractors paid by the large contractor for their work
 - minus a percentage for overheads (approx. 7%) and costs of any materials or equipment provided

2. Provides a support framework for small contractors

- banking system
- equipment and material supplies
- education and training by the large contractors staff

3. Large contractors support the scheme:

- have sufficient financial resources to manage large projects
- are able to bid for larger contracts if they join forces with small contractors
- cover their overhead costs from the management fee levied from the small contractor

Construction industry development fund

TACECA

Partnership with the National Construction Council of Tanzania

© Aim

- To provide consultants and contractors with access to funds for working capital and procurement of tools and equipment

© Fund will be established by a combination of

- grants from the government and donor agencies
- shares bought by contractors and other stakeholders

© Loans offered to construction enterprises at preferential rates

- to maintain the fund and cover its operating costs but not result in a large profit

© Fund will operate as a commercial bank

- solely works in the construction industry



Advisory Support, Information Services and Training

- ③ Operated under International Labour Organisation's (ILO) regional structure for Africa
 - technical support from the Development Policies Branch (POL/DEV) in Geneva
 - cooperation with the ILO's Multi-Disciplinary Advisory Team in Harare, Zimbabwe
 - along side national authorities, road agencies and project staff in its region
- ③ Overall objective
 - wide-scale adoption of employment-intensive approaches in national transport and infrastructure investment policies and programmes
 - alleviate poverty

🌀 Immediate objective

- increase use and efficiency of labour-based methods to carry out infrastructure
 - particularly road, construction and maintenance activities in sub-Saharan Africa

🌀 Project was divided into 3 components:

Advisory Support
technical & policy advice,
project backstopping

Information Services
networking, technical
enquiry service,
publications, research

Training
international
courses for
engineers,
senior
technicians
and trainers

MART

Management of Appropriate Road Technology

© Aim

- reduce the costs of constructing, rehabilitating and maintaining road infrastructure, and vehicle operations in developing countries

© Based on a research project

- funded principally by the UK Department for International Development (DFID) under its Technology Development and Research (TDR) provision

© Led by the Construction Enterprise Unit of Loughborough University's Institute of Development Engineering

- in association with two UK-based specialist consultants

🌀 Current phase: draw together existing expertise in

- labour
- intermediate equipment-based technology
- development of private construction enterprises
 - to produce a series of guidelines on 4 priority topics of:

hand tools

intermediate
equipment

institution
building

private sector
development

© Strongly research-based

© Main impact

- analysis and codification to support practical project initiatives
- and the institutional framework

© Outputs

- journal papers and other formal publications

Comparing the 4 case studies

Khuphuka

TACECA

Similarities

- each provides assistance to contractors at the **field level**
- work directly with groups affected by the lack of support framework

Differences

- TACECA is an organisation in its own right that aims to fulfil the role of a number of different services in the support framework
- Khupuka exists to promote the development of other organisations and increase capacity within the industry
 - ultimate aim of Khupuka = to work itself out of a job

Comparing the 4 case studies



ASIST



MART

Similarities

- complement and assist the fragile support framework that already exists
- do not attempt to create new organisations
- providing the missing institutional requirements
- facilitate the links between these requirements and the appropriate support organisations
- Main link are with government departments and agencies

Conclusions

1. Change the role of the government road authority

- from an executing agency to a contract supervisory agency
- ... as the use of the private sector to undertake road maintenance and construction expands

2. Attitude change

- from a state owned to a private sector approach

3. Institution building

- undertaken in parallel to the implementation of the privatisation programme

Differences in the state and private sector approaches

State owned enterprise characteristics	Private sector characteristics
Ensures jobs are allocated to the right person at the right time	The available human resources (skills and potentials) are matched with corporate mission and goals
Policies aim at trade-offs between economic and social objectives	Policies aim to develop a coherent culture and balance current and future needs
Vertical management structure	Horizontal management structure
Planning is a reactive exercise	Planning is fully integrated
Group unity is emphasised for motivation	Individualism is emphasised for motivation
Protocol, rank and status are important	Informality and competence are important
Education is an investment in prestige	Education is an investment in personal development / success