

# **CASE STUDY: A COMPARISON OF FOUR CONTRACTOR DEVELOPMENT PROGRAMMES**

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## **Objectives of the case study**

This paper discusses case studies, from 4 different countries which vary widely, in terms of social, cultural, contractual and organisational practices. While there are many different aspects to a construction development programme the paper discusses the issues of international assistance, training programmes, equipment provision, contracts and payments, programme objectives and contractor selection.

## **1. INTRODUCTION**

The four case studies have been chosen to represent a cross-section of contractor development projects. While the main goals of each project are the same, to increase private sector contracting capability, their secondary objectives differ. They also represent a wide spread in international assistance offered to the project, from virtually nil to a large financial and technical input.

## **2. GHANA**

The objectives of the Labour Based Programme in Ghana are threefold.

- To improve rural accessibility
- Increase contracting capacity
- Create rural employment

The project commenced in 1986 and to date 93 contractors have been trained under the scheme to work on labour based road rehabilitation and maintenance contracts. It is mainly funded by UNDP and the World Bank and has resulted in the rehabilitation of 1,400km of rural roads at a cost of US\$14 million.

The programme is promoted to contractors by a newspaper advertisement campaign and selection is based on education, previous experience and locality of business. There are three stages to the training process which addresses the needs of both the contractors and Department of Feeder Roads (DFR) staff;

Stage 1.	20 weeks of classroom and fieldwork training
Stage 2.	4 months trial contract of 5 km carried out under supervision
Stage 3.	4 year development with on-site training undertaking a 20 km contract per annum

Following their period of initial training (stage 1.) the contractors are provided with a set of equipment, listed in the box below, worth US\$150,000 financed through a bank loan which is repaid over the following 4 year period (Opoku, 1995).

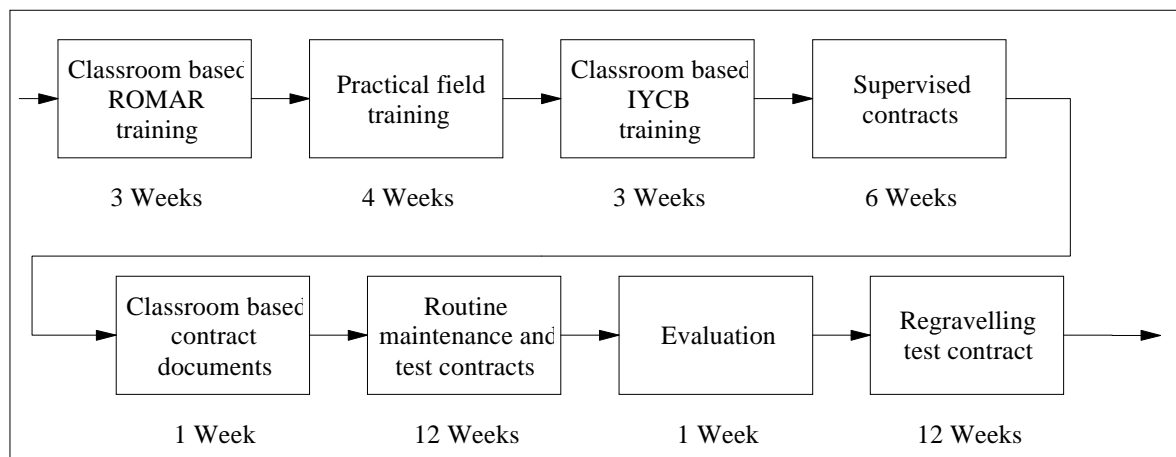
<b>Equipment sets given to Ghanaian Contractors</b>
2 Tractors
4 Trailors
1 Water Bowsers
2 Pedestrial Vibrating Rollers

This loan repayment represents a significant element of the contractors' overhead as the bank interest rate in Ghana is about 35%. In order to ensure that contractors are able to repay their loans the DFR guarantees contracts will be awarded for the first 4 years after training. Each contract lasts approximately one year and has a value of US\$240,000. The project attempted to operate these contracts under a competitive tendering system, however, the formation of cartels forced the DFR to adopt a schedule of rates for the initial 4 year period. Following the repayment of the equipment loan contractors competed for work through competitive tendering in an open market

### **3. LESOTHO**

The Labour Construction Unit (LCU) was set up in 1977 with the aim "to promote and propagate the use of efficient labour intensive methods .... and create as much gainful employment as possible in the country" (Lehobo, 1995) The LCU became increasingly responsible for the development and maintenance of the country's 2,300 km earth and gravel road network. In line with the government's promotion of private sector enterprises the LCU commenced a 30 month programme, in 1992, to train local contractors to maintain the road network. The World Bank sponsored the Enterprise Development for Labour-based Road Maintenance Contractors project which was managed by the LCU, with technical input from the ILO.

The programme focused heavily on the training issues both in terms of the technical and managerial skills of the contractor and also the retraining of the LCU staff for their new contract supervisor role. The contractor training programme, shown below, combined on-the-job training with classroom work to meet the needs of the contractors (Miles, 1996). To address the technical training aspects the programme developed the Road Maintenance and Regravelling (ROMAR) package (Andersson et al 1996). It also utilised the Improve Your Construction Business (IYCB), (Andersson et al 1994) series of 3 handbooks and workbooks which were designed to meet the business training needs of small scale contractors.



During the training period all costs were met by the project. The six month trial contract period consisted of two contracts commencing with a routine maintenance contract awarded at a fixed price. This was followed by a regravelling contract which was tendered by the contractor. If the tender sums were within  $\pm 5\%$  of the Engineer's estimate they were awarded at the tender price, otherwise they were awarded at the Engineer's estimate.

The contractors were given a basic set of handtools worth US\$6,670 at the beginning of their trial contracts, which were paid for during the trial contract period, and offered the opportunity of hire purchase agreements on vibrating pedestrian rollers. They were expected to hire any further equipment, which was readily available, or buy equipment using a lease financing arrangement set up with a national bank.

#### 4. SOUTH AFRICA

Following the abolition of apartheid in April 1993 the South African government introduced the Reconstruction and Development Programme, which aimed to maximise job creation. Small scale contractors existed in South Africa before, but had usually undertaken labour only work as subcontractors to larger contracting firms. A multitude of projects commenced that aimed to develop the employment and business prospects of the indigenous population, these included the Soweto Contractor Development Programme (CDP) and the Winterveld Presidential Project.

The objectives of both projects were employment creation, transfer of marketable skills whilst also improving the infrastructure in the area. The Soweto CDP has adopted three different approaches for improving the skills of small contractors, ex-supervisors and labourers (after Twumasi-Boake 1996):

- Development Team
- The contractor is assigned construction managers, engineers and materials managers who assist with administration of the contract, technical training and the engagement of specialist subcontractors.
- Managing Contractor
- A large contractor administers the contract while training and supplying materials to a labour-only subcontractor.
- Mentorship

- This approach is use for more experienced contractors, who employ consultants (mentors) to assist with tender preparation and business management.

The Winterveld Presidential Project adopts a more formal approach to the training of contractors carried out in two phases. The first phase is project specific, enabling contractors to submit realistic bids for the Winterveld contracts. The second phase, which utilises the IYCB training material, was designed to provide the participating contractors with the skills that would be needed to compete in the open market (Ward 1995).

A common feature of these two programmes was the tiered tendering structure with progressively more testing level of contract. Contractors progress to a higher level as they gain experience until they reach the final level which is synonymous with a national experienced contractor. The Winterveld Presidential Project tiered contract structure is included below.

<b>Level</b>	<b>Assessment of Skills and Experience</b>	<b>Maximum Contract Value in Rand (\$ 1.00 = R 3.65)</b>	<b>Performance Guarantees</b>
A	Some ability to organise. Limited artisan skill.	Cost of labour component, including contractor's mark-up and profit, to a maximum value of R 10,000.	Not required
B	Established artisan. Civil engineering ganger, charge hand, gang boss.	Cost of labour component, including contractor's mark-up and profit, to a maximum value of R 40,000.	Not required
C	Advanced gang or trade managerial ability.	Total contract price, to a maximum value of R 250,000.	Not required
D	Advanced general management ability. Commercial experience.	Total contract price, to a maximum value of R 850,000.	5% of contract price.
E	Advanced construction management ability. Marketing skills. Credibility with financial institutions.	Total contract price, to a maximum value of R 2,500,000.	10% of contract price

This tiered tendering structure prevents contractors bidding for contracts outside their capability and prevents more experienced contractors from dominating the small contract market.

## 5. TANZANIA

The Labour Based Road Contractor Training Project (LBRCTP) commenced in 1992 with the objective of establishing a labour based contracting capacity. The project has trained 24 contractors in two regions of Tanzania who each have an annual turnover of US\$60,000 and employ approximately 70 workers (Osei-Bonsu, 1995). 3

Supervisors from each contractor receive 6 weeks classroom teaching followed by 14 weeks fieldwork training. The contractors then undertake 6 month trial contracts to maintain a 5km section of road. During this period the directors of the contracting firms undertake a course in contract management with the aim of improving their business skills.

All the contract work is undertaken with hired equipment which is available on the open market. In order to ensure that the contractor is able to procure the necessary equipment to carry out the work, they receive a mobilisation payment equal to 30% of the contract sum. While 15% goes directly into the contractor's bank account the other 15% is paid directly to a plant hire company as an advance against the plant hire costs.

## **6. CONCLUSION**

There is no definitive answer to the design of a contractor development programme. Experience in designing programmes is currently fragmented and poorly documented. The Department for International Development (formally the Overseas Development Administration) recognised the need to gather and collate existing experience by its support of the Management of Appropriate Road Technology (MART) initiative. This research project aims to achieve sustainable improvements in road construction and maintenance through the optimum use of local resources and skills, the effective use of the private sector and the application of good management practices.

The MART project has collected a number of papers and case studies on existing experience which it will be publishing this year in an edited book; Labour-Based Road Construction: A state of the art review. It will draw on this information and the results of a workshop attended by practitioners in this field (Miles, 1996) to produce a comprehensive series of guidelines of the development of small scale construction enterprises.

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