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Training of Small Scale Contractors for Rural Road Maintenance in Lesotho

Some lessons from Experience

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The Contractor Training Program in Lesotho is a good example of the promotion of small-scale construction industry in the region, and contractors from other countries are already participating in this program. This note summarizes the methodology, challenges and lessons learned in the planning, management and organization of the CTP in Lesotho.

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Until 1994, maintenance of rural roads in Lesotho was carried out using force account procedures. The culture of contracting out road maintenance did not then exist. With the objective of promoting labor based work methods, the Department of Rural Roads (DRR) has so far trained 65 small-scale contractors with internal and external support. The Contractor Training Program (CTP) is now continuing under local financing. Currently 100% routine and periodic maintenance, 100% rehabilitation (excluding emergency works), and 30% upgrading works are carried out through awarding contracts to contractors trained through CTP. This has made road maintenance not only efficient and cost effective, but has had a positive impact on poverty reduction by generating temporary employment for more than 4,000 workers. DRR is in the process of expanding this program to road construction and upgrading.

OBJECTIVES OF THE TRAINING PROGRAM

Lesotho is a small, landlocked and mountainous country surrounded by the Republic of South Africa. Its population is 2 million and its area is 30,000 square km. The size of its road network is 6,860 km (paved 1,220 km, gravel 3,760 km, and earth 1,880 km). In 1993, the Government decided to involve the private sector in creating employment opportunities for migrant workers returning from the mines in South Africa. The local construction industry at that time had capacity only to carry out building works, and no local contractors were available to execute road maintenance. The Contractor Training Program (CTP) started in 1994 with the main objective to phase out force account procedures for carrying out rural road maintenance, which were neither efficient nor cost effective. The immediate objectives were to:

- establish a cadre of new entrepreneurs trained in labor-based works methods;
- create a sustainable road maintenance system for the Department of Rural Roads (DRR) 2,100 km of gravel roads that will establish an enabling environment for newly trained entrepreneurs;
- strengthen the institutional capacity of the DRR to manage the CTP effectively and efficiently including evaluation of contractors' performance;
- strengthen the capacity of contractors through training of their staff;
- review procurement and financial procedures to allow new contractors to compete for and execute road maintenance works; and
- refurbish and develop training facilities.



MANAGEMENT OF THE TRAINING PROGRAM

The DRR under the Ministry of Public Works and Transport is responsible for the overall management of the CTP. The DRR is divided into three sections: Technical, Finance, and Administration. The Technical Section has four units: Operations, Planning, Training, and Contracts. The Contracts Unit, headed by the Senior Contracts Engineer, is responsible for the planning, programming and implementation of contracts. The Training Unit, headed by the Senior Training Engineer, is responsible for the management of the training school. The DRR training school is being used for training DRR staff, new entrepreneurs and staff from other agencies. DRR has decentralized its operations to four regions: North, South, Central, and East. The Head of each region, a Senior Regional Engineer (SRE) is responsible for monitoring the performance of trained contractors.

IDA-financed and ILO-executed technical assistance (TA) comprised of international and national specialists, provided advisory services in the initial period 1994-97. The key objective was to set up the curriculum, prepare training material, and carry out training of the national staff to take over the responsibility from the foreign specialists. The program is currently managed by a team of national staff. The TA was responsible for providing technical support and specialized training with emphasis on the following: (a) selection of potential new entrepreneurs; (b) preparation of simplified bidding documents; (c) planning, designing and execution of trial contracts; (d) monitoring of trainees' performance; (e) training of DRR staff for managing CTP; and (f) advice in the preparation of training materials, technical handbooks, and a trainer's manual.

ORGANIZATION OF THE TRAINING PROGRAM

1. There are two types of training programs: (a) a nine-month program for road maintenance and rehabilitation (ROMAR); and (b) a one-year program for road construction and upgrading (ROCAU). ROCAU, an advanced stage of ROMAR, is only offered when one is successful in ROMAR. The DRR capacity to train new contractors has now increased from 12 to 24 contractors every year. Candidates are selected using the following procedures: (a) an advertisement is placed in local newspapers and candidates are ini-

tially screened based upon educational qualifications and previous experience in labor-based works methods; and (b) a written proficiency test is administered to evaluate knowledge of English and mathematics. The accepted candidates are invited to attend a one-day orientation workshop. Given the high rate of unemployment in Lesotho, more than 100 candidates apply every year for about 15-20 positions.

2. After successful completion of the ROMAR training, and given the limited starting capacity of new contractors, newly trained contractors are allowed to execute one "no-bid" routine maintenance (RM) contract valued at less than US\$10,000. Based on capacity and performance, contractors can be gradually upgraded to be eligible for carrying out more than one contract for routine maintenance works, subsequently for periodic maintenance (PM) works, and finally for rehabilitation works valued at less than US\$100,000. Contractors who have been found successful in the implementation of rehabilitation contracts are considered for training in ROCAU.

3. The ROMAR training consists of five steps with a total duration of nine months:

- (a) classroom training in technical subjects, three week duration;
- (b) site demonstration, six weeks (2 weeks for routine maintenance works and 4 weeks for periodic maintenance works)
- (c) classroom training in "business management", three weeks;
- (d) trial contracts for RM works, three months; and
- (e) trial contracts for PM works, three months.

4. The classroom training covers technical and business management topics. The technical topics are: road materials; technical specifications; cost estimates, bid preparation and work supervision. The business management topics are: contract administration; site management; book-keeping; preparation of invoices and certification of payments. Trial contracts for routine maintenance covered the following: understanding of contract documents; source of materials; setting out road alignments; estimating needs for labor and equipment; work organization, and preparation of works accounts.

5. Works selected for trial contracting are already included in the annual roadwork program, and their costs are charged as part of the road's budget. The contracts are awarded through a lottery system (no competitive bidding) on the basis of negotiated rates based on engineers' estimates and a 10% contractor's profit. During negotiation, each trainee is accompanied by his/her "site supervisor" who also went through the classroom training on "technical topics".

KEY CONTRIBUTIONS

To ensure the success of CTP, DRR has taken the following initiatives:

1. Simplified procedures for inviting bids, issuing contracts, and making payments.
2. Provided financial support by creating a revolving fund to allow contractors easy access to equipment based on hire/purchase leasing arrangement.
3. Recommended to commercial banks that contractors should be provided access to credit facilities and performance guarantees.
4. Prepared quarterly and half-yearly progress reports to monitor performance of individual trainees and analyzed critically the program's success.
5. Preferred DRR former staff in the selection of trainees.
6. Checked during site inspections that contractors have followed the instructions in regard to social aspects that include the following: (a) recruitment of laborers particularly in respect of employment of women; (b) payment of wages to laborers not delayed; and (c) HIV/AIDS awareness campaign conducted.
4. Reliance on construction equipment reduced, and foreign exchange saved.
5. Implementation capacity of small scale contractors strengthened in bid preparation, site management, and carrying out road works in quality and quantity.
6. DRR's managerial and technical capacity strengthened (20 DRR supervisors trained in site supervision and contract management).
7. During the year 2002/03, the following works were carried out using newly trained contractors: 2,100 km RM; 56 km PM; 45 km rehabilitation; and 20 km upgrading in an amount estimated at US\$ 7.5 million. As a result, more than 4,000 new temporary jobs were created in the private sector. The budget spent on works carried out through new contractors was about 44% of the total DRR 2002/03 budget of US\$ 17.5 million, which included government's contribution and donor support.

KEY OUTPUTS TO DATE

1. 65 new contractors trained, 43 in ROMAR and 12 in ROCAU. In addition, 24 contractors from the Limpopo Northern Province of the Republic of South Africa (RSA) have been trained. DRR has also received a request to train more contractors from the Kwazulu Natal Province of RSA. Delegates from other countries including Tanzania, Botswana, Swaziland, Zaire, Zimbabwe, Mozambique, Republic of South Africa (four provinces, and research standards institutes), Ethiopia, Uganda, and army officers from Netherlands, have visited this program.
2. Temporary employment opportunities created so far for more than 4,000 workers -stimulating the rural economy, lowering transportation costs and reducing poverty in the rural areas.
3. DRR's institutional efficiency improved through reducing staff by 260.

PROGRAM SUSTAINABILITY

The program is financially sustainable and the salaries of local staff as well as all operational expenses including maintenance of facilities and laboratory equipment are financed from the government budget. DRR being a public department does not have a separate account for the operation of CTP. A nominal fee (US\$5,000) charged for foreign candidates, and a subsidized fee (US\$2,500) for local candidates, are sufficient to cover the operational expenses including tuition, accommodation and meals. However, they do not cover the capital cost invested through donor support, and the "foreign fees" are not designed for full cost recovery. The fees collected are deposited in the Government Treasury as revenues. To achieve financial sustainability, the government is considering a proposal to run the training center on a break-even basis. In accordance with a South African Development Community (SADC) protocol agreed among several states, Lesotho Government policy supports participation of foreign candidates to share the knowledge that DRR has gained in labor-based work methods, and is not using the initiative for revenue generation purposes.

CONSTRAINTS AND HOW THEY WERE RESOLVED

1. Contractors' capacity was inadequate to handle site management. So the program was extended to cover supervisory staff as well.
2. Private banks were reluctant to provide contractors access to credit facilities for the purchase of equipment. This was resolved by setting up of a revolving fund in an amount of

US\$300,000 to provide equipment to contractors based on lease hire arrangements.

3. Contractors were not able to obtain guarantees from commercial banks, creating difficulties in meeting conditions for receiving advance payments from DRR. DRR provided reference letters to the commercial banks, which agreed to allow guarantees, enabling advance payments to be made.
4. Bidding documents were judged to be too complex, particularly for the new contractors - thus DRR simplified bidding documents in consultation with the trained contractors.
5. Complex payment procedures which delayed the payment to contractors for more than three months. DRR simplified the payment procedures by delegating some authority to the SRE, and by promoting the concept of decentralization in DRR. This provided more authority to the SRE, who was able to make decisions on site, and as a result average payment time was reduced to four weeks.
2. Traditional obstacles to this type of program such as financing of construction equipment can be overcome with imaginative and proactive management from the road agencies as well as a supportive private sector environment.
3. A program can make a significant impact on generating employment, but to ensure work quality, it is important to use appropriate technology such as soundly specified labor-based work methods.
4. It is possible to launch and implement CTP for carrying out maintenance of paved and unpaved roads, and to phase out force account procedures completely in a short span of time.
5. Packaging work appropriately helps both the road agencies in the management of contracts and the contractors to develop their implementation capacity.
6. Special attention is needed to address social issues such as gender equity, and incorporation of HIV/AIDS mitigation measures through sound policies and appropriate implementation.
7. To create market incentives, greater cooperation between the private and public sector is needed through providing a regular flow of works, and simplified competitive bidding procedures.

LESSONS LEARNED

1. CTPs do need long term expensive TA. But once the program is set up, adequate attention is needed for the selection and mentoring of local staff.

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