

Best Practice in Labor-Based Contracting in the Road Sector

Objectives: This program trained contractors in labor-based methods in the local road contracting industry in Ghana in order to produce gravel roads of equal quality to equipment-based methods, and generate rural employment in a cost-effective manner. The program was initiated as a component of the World Bank's Fourth Highway Project and funded by IDA. Later, the program continued under the World Bank's National Feeder Roads Rehabilitation and -maintenance Project (NFRMP) and was funded by the Government of Ghana, USAID and DANIDA.

Impact on the Ground: Between 1986 and 1994, the program created about 2.6 million person-days of employment, paid US\$1.4 Million in wages and rehabilitated 1,190 km of gravel roads. In addition, labor-based methods cost approximately US\$12,035/km with an average rate of completions of 1.4 km/month while equipment-based methods cost approximately US\$19,463/km with an average completion of 2.1 km/month.

Lessons Learned: Although labor-based methods offer the benefits of employment generation, without sacrificing on cost and capital, programs must be designed carefully, so that contractors find these methods attractive to use. When appraising a program, program designers should:

- **Assess the Second-Hand Equipment Stock and the Competitiveness of Sector:** A large quantity of second-hand equipment can enable firms using equipment-based methods to underbid those using labor-based methods because it provides suitable equipment at lower cost. If the sector is very competitive, equipment-based contractors, with their lower variable costs, may be able to underbid labor-based contractors (at least in the short term). In either of these cases, the road agency can decide to protect labor-based contractors from competition with equipment-based firms, as was done in Ghana. In this case, protection was achieved without sacrificing on cost or quality.
- **Target small-scale contractors-** Small-scale contractors find labor-based methods more attractive than medium- and large-scale contractors. They prefer labor-based methods since the costs of renting equipment are minimized. Larger firms, in contrast, tend to own their own equipment and therefore would rather keep it employed than switch to labor-based methods and leave their equipment idle.
- **Ensure Timely Payments to Contractors:** When government payments are prompt, labor-based methods can be cheaper per km and more profitable for small firms than equipment-based methods. Late Government payments, however, increase the cost of using labor-based methods; casual laborers will not accept late payments and small firms often do not have access to affordable bridging finance. Late government payments have less impact on small equipment-based firms

because their wages and bills are lower and suppliers will often accept late payments (for a price). Thus, when payment delays occur, equipment-based sites can continue to operate, while labor-based sites often come to a complete standstill.

- **Equip Contractors with Care:** If light equipment is unavailable in the market, labor-based programs will have to include measures to equip contractors. How this is done is of great importance. The provision of substantial equipment loans can make it difficult to set up a competitive environment for tendering. For example, in Ghana, the bank administering the hire-purchase arrangement required an assurance from the government that labor-based contractors would be provided with four years of continuous work to permit them to repay their loans. To provide continuous work, the road agency needed to tender the same number of contracts as there were contractors in each region. This led to collusion among the participating firms when contracts were tendered in one region. After this experience, the road agency returned to its system of awarding contracts based on fixed rates instead of tendered bids. The road agency negotiated these fixed rates with the contractors' association and awarded contracts on a rolling basis. Only after the equipment loans are paid off can real competitive bidding be introduced. Therefore, in countries where light equipment cannot be rented in the market, program designers should keep loans as small as possible while still enabling contractors to produce quality results.

Source: World Bank. 1996. "Best Practice in Labor-Based Contracting in the Road Sector." *Findings: Best Practice Infobrief No. 10*, Africa Regional Office, Washington, DC.

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