

Case Study: The Peruvian Rural Roads Program (RRP)

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Context:

Your team was sent to Peru to advise the USAID/Peru senior management on USAID support for the Rural Roads Program (RRP).

Background

1. Peruvian Rural Roads Program (1995 – 2007)

(1a) Activities and Results: Over the past 12 years, the World Bank (WB), the Inter American Development Bank (IADB), USAID, and JICA supported the Government of Peru (GOPE) to construct / improve approximately 15,000 km of unpaved all weather gravel roads, 3,000 km of pedestrian's pathways and to structure 650 very successful community-based road maintenance micro-enterprises (MEs) to carry out the routine maintenance works.

(1b) Sustainability: It was concluded that the rural roads accessibility services (including pedestrian dirt trails) using MEs is gradually becoming sustainable. Technical sustainability came first, showing that roads with a low resurfacing cost, subject to a strict routine maintenance program, could meet, and in some cases exceed, expected service life; it also showed that with periodic maintenance, this service life can be extended with a minimal investment. MEs have proven to be a useful tool in providing routine maintenance, while also creating jobs and acting as catalysts for other local community development initiatives, giving rise to management sustainability.

(1c) Lessons Learned: Donors and the Peruvian government (GOPE) learned that safe and reliable roads and transport services were needed to secure the peace dividends in the Peruvian rural area, to build confidence among the rival parties, and to facilitate IDP/returnee movements and resettlements. The Program demonstrated that reliable motorized and non-motorized rural roads and dirt pedestrian pathways are critical input to economic growth, regional integration, employment and poverty reduction. Also, recent socioeconomic impact studies have shown that short-term benefits related to all year accessibility and cost effective travel have translated into growing physical accessibility and use of the social infrastructure, such as education and health services, as well as greater use of productive and business services. In addition, a survey following the Peruvian rural road program shows that: (i) cargo and passenger transport costs fell 59% and 29%, respectively; and (ii) 67% of those surveyed have improved access to educational services.

2. Peruvian Rural Road Program (2008-2010)

(2a) GOPE and donors, WB, IADB, USAID, are interested to continue supporting and expanding the RRP for additional two years, and have acknowledged the 12-year significant socio/ economic benefits of this program. GOPE, WB, and IADB agree to continue to finance the routine maintenance works of the 15,000 km, estimated at \$11.3 M per annum, in equal shares for additional 2 years. The estimated total cost of the road maintenance sub-program is \$22.6 M and this is a loan that the WB and IADB would provide. USAID will provide a grant of \$1.0 M for technical assistance services.

(2b) In addition, GOPE, WB, and IADB agree to finance equally the improvements of 2000 km of new roads, not included in the 15,000 km road networks. The new 2,000 km are located in the departments of Tingo-Maria (TM) and San Martin (SM). GOPE estimates that the 2000-km improvement works would cost approximately \$80 M, and the WB and IADB estimate the cost should be only \$50 M or approximately \$25,000 per km.

(2c) In addition, the WB and IADB request to optimize the 15,000-km road network maintenance expenditures in order to finance the maintenance of the additional 2000 km of new roads from the current annual road maintenance budget of \$13.2 M. To achieve this goal the WB and IADB propose to transfer the existing sole source performance-based MEs road maintenance contracts into a cost competitive performance-based procedure, allowing productive MEs to gain more mileage of maintenance works and therefore reduce the total cost. GOPE and most of the rural municipal road authorities are reluctant to accept the new road maintenance cost competition strategy of the WB and the IADB, claiming “why modify a system that works well”. The disagreements among the rural municipalities and GOP on one side and the WB and IADB on the other side would probably delay the project implementation.

(2d) The USAID mission in Peru would like to expedite the project implementation, especially the construction of 700 km of new roads in the departments of TM and SM, where GOPE and USG would like to eradicate illegal Coca production. In addition USAID would like to maximize the leverage of donor support for the project implementation in order to sustain future reliable road accessibility, especially in the areas that produce illegal drugs.

Additional Information

3. Road improvement and maintenance costs

(3a) Representative average rural road improvement costs are approximately \$20,000 to \$30,000 per km and annual road routine maintenance costs are approximately \$750 per km per annum. The MEs have provided reliable and adequate daily road maintenance services for the last 13 years and the maintenance unit cost has dropped from \$1,200 to \$700.

(3b) The construction contracts have been competitively tendered among national and community construction companies using performance-based lump-sum (PBLs) contracts. The contract modality of multi-annual road maintenance contracts is also PBLs, however there is **no** competition among local MEs and each community along the road has selected its own ME, considering productivity and capabilities of each member of the ME to carry out its daily maintenance activities.

4. Engineering Tools

(4a) The actual annual cost for the road maintenance services is determined by independent selected consultants, using the Road Management Maintenance System (RMMS) Program. The RMMS considers the specific road characteristics (climate, topography, traffic, rainfall, soils/ materials, etc). The RMMS defines the benefit of maintenance in terms of improved performance under budget and environmental constraints. The RMMS has supported the provision of safe, reliable and cost effective road maintenance services and has promoted cooperation among all stakeholders.

5. Effectiveness of road investment and maintenance

(5a) GOPE and donors have concluded that effectiveness of road investment and maintenance depends on several factors including the budget, productivity of the maintenance activities, soils and materials, procurement procedures, traffic characteristics, road conditions and the environment.

(5b) The World Bank rural road program (WBRRP) has been used to optimize road investment programs, including construction, rehabilitation, and improvement works. The WBRRP achieves this by analyzing the road condition assessments; social, environmental and road safety characteristics; construction, maintenance and road user's costs needed to predict the performance of several alternatives of rural roads improvement works. The WBRRP has been the most cost effective tool to analyze road investment programs.

Case Study Assignment

Your team was sent to Peru to advise the Senior Management in USAID Lima how resolve the technical issues in order for the WB and the IADB project teams to clear the project for their Managements and Boards approvals. To achieve this goal you have held a series of meetings with senior management of the Ministry of Transport of GOPE and with elected mayors and senior staff of the municipal road authorities that manage the MEs road maintenance programs.

The Mission Director told you that he decided to start the provision of the TA program immediately in order to accelerate the culmination of the WB and IADB project appraisal activities and to start the construction of the 700 km of roads in Tingo-Maria and San-Martin ASAP. Also, the mission director told you that USAID supports the GOPE MEs road maintenance program. Here is what the Mission Director asked you to cover in next week's exit briefing:

1. The municipalities of TM and SM have a significant political influence on GOPE and they are aggressively pushing to give the 700-km construction contracts to their preferred local contractors. USAID, the WB and IADB do not accept this kind of request that would probably postpone the project, which USAID wants to avert. USAID wants the project to start immediately. On the other hand, the municipalities of TM and SM are not so concerned about losing donors support. They could use some drug money to finance the 700-km of road construction.

(1.A) What should be the best USAID strategy to keep the project alive and to start it as soon as possible?

(1.B) What are the technical tools you suggest USAID to use to "convince" the municipalities of TM and SM and GOPE to start the project implementation ASAP?

2. GOPE and the rural municipalities like to continue the community sole source MEs road maintenance contracts. In addition, GOPE is willing to approve an increased unit cost of \$1150 per km per annum to the selected new MEs of TM and SM, instead of the current unit cost of \$750. The municipalities of TM and SM requested a unit price of \$1200 that was used to compensate the MEs when the Peruvian project started, in 1995. The WB and IADB argue that their technical assistance programs have helped GOPE and the MEs to increase their productivity and the road maintenance unit price should be less than \$750 in order to secure future financial sustainability of the road maintenance services when the WB and IAD will exit the program. In addition, the WB and IADB claim that their Managements and Boards have

requested to further improve the productivity of the MEs and to introduce competition among qualified MEs in order to drive the annual maintenance down and to use these savings to further develop other rural ME for **new export businesses**.

(2.A) What should be the best strategy to bring all the parties to common conclusion?

(2.B) Would you recommend supporting the WB and the IADB position of using competitive bidding procedures for road maintenance services? If so, why?

(2.C) Considering the possible political, technical and implementation issues of the proposed Peruvian RRP, how would you recommend the mission to structure the \$1 million Technical Assistance (TA) program? What should be the 1st priority of this TA program?