Africa Transport
Technical Note
Road Management Initiative
RMI

Note no. 26 December 1999

Commercialization of Road Management in Sub-Saharan African Countries

Appraisal of the RMI Concepts Implementation

This note is based on "Appraisal of the RMI Concepts Implementation in Sub-Saharan African Countries" (April 1999) conducted by Ole Kr. Sylte, a Norwegian consultant, with assistance from local consultants in the study area. The study was carried out using forms and procedures prepared by the RMI, and builds to some extent on regional reviews of the road sector in SSA countries that were made in connection with the series of RMI dissemination seminars in the period 1995-97.

For information on these notes, contact the SSATP in the Africa Region of the World Bank, Washington, DC. Internet address: ssatp@worldbank.org.

Most Sub-Sahara African (SSA) countries have recognized the need for policy and institutional reforms within the road sector and have, partly with donor assistance, initiated a process of reforms following the RMI message on commercialization. To facilitate a systematic monitoring of progress in implementation of these reforms, the RMI has developed a "RMI Concepts Implementation Monitoring System," which, through quick interviews with key road agency staff in each country, would facilitate tracking of progress over time in the individual countries—by sub-regions and for the whole of SSA.

The RMI Concept

Since 1991 the RMI has been working with a number of pilot countries to identify the underlying causes of poor road maintenance policies, and to develop an agenda of reforms that would facilitate effective and sustainable management and maintenance of the public road networks. The pilot countries that joined the RMI process and, in particular, contributed to development of the RMI concept are *Cameroon, Ethiopia, Ghana, Guinea, Kenya, Madagascar, Malawi, Mali, Tanzania, Uganda, Zambia, and Zimbabwe*

The key concept to emerge from the RMI program was *commercialization*—that is, bring roads into the market place, charge for their use on a fee-for-service basis, and manage them like any other business enterprise. Since roads are a public monopoly and will remain mostly in government hands, implementing the concept requires reforms in four complementary areas, referred to as the four "building blocks":

BB1: Ownership: To empower the public to take an active role in the management of roads.

BB2: Financing: Develop financing models that promote economic efficiency and ensure sufficient revenues to operate and maintain the road network.

BB3: Responsibility: Clearly establishing who is responsible for what in the road sector.

BB4: Management: Ensure effective management systems, procedures, and accountability.

The RMI findings were disseminated through a series of regional seminars in 1995-97; in Pretoria, RSA, for members of SADC; in Nairobi, Kenya, for other members of COMESA; and in Abidjan, Côte d'Ivoire, for members of ECOWAS. The fourth and last seminar scheduled for the Central African States (UDEAC), was replaced by specific events in individual countries due to unrest in parts of the area.

Methodology

In each country, the appraisal of the RMI concepts implementation was based on structured interviews with key road managers, such as directors of roads or chief engineers. The questionnaire was simple and could easily be filled in by any road specialist knowledgeable about the country situation. For each of the four building blocks, the degree of implementation was traced through the response to a set of statements where each has its own coefficient. Positive confirmation on all items would give a total score of 100 points. The exercise was carried out for three different situations: the situation in 1995, the situation at the time of interview (1998), and the expected situation a year later in 1999. The forms were eventually completed for 42 out of the 47 SSA countries included in the survey.

Findings

BB1: Ownership

Fifteen countries responded positively to the initial statement that "there is some kind of a Road Management Council, competent with road maintenance and involving road user representatives." These were Lesotho, Malawi, Mozambique, Namibia, South Africa, Tanzania, and Zambia in SADC, Ethiopia in COMESA, Benin, Ghana, Mauritania, Sierra Leone, and Togo in ECOWAS, and Central African Republic and Gabon in the UDEAC area. Five countries had boards to manage the main road network through road authorities (Benin, Ghana, Namibia, South Africa and Sierra Leone), whereas the others (and Ghana) had boards that generally were set up to manage a road fund.

RMI Concepts Implementation Monitoring System
BB1: Ownership: Average Scores by Regions

Region	1995	1998 (actual)	1999 (expected)
SADC (10 countries)	24	41	50
COMESA (12 countries)	-	7	10
ECOWAS (13 countries)	10	22	50
UDEAC (7 countries)	7	16	17

A confirmation to the initial statement is a precondition to have any score under BB1-Ownership. The next 12 questions trace how the board or council is functioning and to what extent road users are directly involved in road management. The main findings may be summarized as follows:

• Road user representatives were entitled to vote in 12 boards, but were in majority in only two. (Zambia and Namibia).

• Road user representatives were elected or chosen by their respective organizations in 11 of the boards. The chairperson was elected by board members in 3 countries (Benin, Namibia, and Zambia), while appointed by the government in others.

• The Gambia, Guinea, Nigeria, Madagascar, and Senegal expected to establish a representative board involving road users in 1999.

BB2: Financing.

Fifteen countries responded positively to the initial statement that "Road maintenance financing is mostly based on direct pricing of road use, through specific revenue□ for instance, vehicle registration fees, tolls, or fuel fees." These were Kenya, Malawi, Mozambique, South Africa, Tanzania, and Zambia in SADC; Comoros and Ethiopia in COMESA; Benin, Ghana, Guinea, Sierra Leone, and Togo in ECOWAS; and Central African Republic and Chad in the UDEAC area.

A confirmation to the initial statement is a precondition to a further score under BB2-Financing. The next 20 questions trace how the established road fund is managed and how effective it is in providing an adequate and stable flow of funding for maintenance. The main findings may be summarized as follows:

• In 9 countries (CAR, Chad, Ghana, Ethiopia, Kenya, Mozambique, Sierra Leone, Sudan, and Zambia), the revenue collected by direct road user fees was assigned to an autonomous road or road maintenance fund, and was not just a budget line in the public budget.

• The revenue collected was transferred directly to the road fund account in seven countries (CAR, Ethiopia, Ghana, Mozambique, Sierra Leone, Sudan and Togo), and did not pass through the treasury.

RMI Concepts Implementation Monitoring System
BB2: Financing: Average Scores by Regions

Region	1995	1998 (actual)	1999 (expected)
SADC (10 countries)	14	25	33
COMESA (12 countries)	6	21	25
ECOWAS (13 countries)	7	17	43
UDEAC (7 countries)	21	21	28

• Only 7 countries, or half the countries with an established road fund, responded positively to the statement that "at present this fund is able to finance the whole of routine maintenance on the main or prioritized (preferred) network".
• Road funds were generally submitted to an independent financial audit at least once a year. However, only five countries had so far established regular auditing of the agencies technical performance.
• The establishment of a road fund was proposed or considered in 17 countries. The following five expected it to happen in 1999: Cameroon, the Gambia, Guinea, Kenya and Nigeria.

RMI Concepts Implementation Monitoring System
BB3: Responsibility: Average Scores by Region

Region	1995	1998 (actual)	1999 (expected)
SADC (10 countries)	38	58	75
COMESA (12 countries)	29	46	51
ECOWAS (13 countries)	20	52	72
UDEAC (7 countries)	33	35	45

BB3: Responsibility.

The third building block concerns the need to clarify who is responsible for what in the road sector. Included is clarification of government policy and regulatory functions and assignment of responsibility among road management agencies. Related issues are a more commercially oriented approach to road management, targets and performance agreements, autonomy, and accountability.

The interview form includes 11 questions related to responsibility. A score of 100 points indicate that the country has established an institutional/organizational structure that can facilitate effective and high quality management of the road network. The main findings may be summarized as follows:

• Fully 26 of the responding countries confirmed the initial statement that "there is a road inventory (or road data bank), complete and reliable, involving traffic data and actual road condition." However, it is doubtful that all these countries have records with up-to-date traffic and road condition data. Answers seem to be subject to interpretation of what is reliable. South Africa, which probably has the best inventory in SSA, only expected to have an updated inventory ready by next year.
• As many as 24 respondents confirmed that " national responsibilities of government agencies are clearly defined, etc." This may be due to subjective assessments since the reality appears different—i.e., with respect to maintenance standards, axle load control, and traffic safety.
• As many as 27 respondents confirmed that "government fixes national standards for road service and maintenance levels." Following the RMI concept, that would mean that performance levels should be defined through overall road conditions, frequency of maintenance interventions, and level of access for all classified roads. This is believed to have been the case for only a few of these countries.

Appraisal of progress on building block BB3 is, to a large degree, based more on qualitative statements than is the case for BB1 and BB2. Some questions or issues may be difficult both to phrase and understand and, to some extent, leave respondents to their own understanding and judgement of the issues in their replies. Thus for this aspect, it is suggested that a number of questions be rephrased in future appraisals, with more emphasis on the actual implementation or enforcement of the responsibilities. The ambiguous nature of current questions is probably also a reason that the scores for BB3 are higher than for any of the other building blocks in all three scenarios.

BB4: Management

The fourth building block focuses on sound business practices for better implementation of functions for which road management agencies are responsible. These include clear statements of objectives and goals, goal oriented human resource policies, including adequate and competitive service conditions, commercial costing systems, effective management information systems, and competitive contracting of required works and services. The main findings under *BB4: Management*, following the response to the 17 questions or statements, may be sum-

RMI Concepts Implementation Monitoring System
BB4: Management: Average Score by Regions

Region	1995	1998 (actual)	1999 (expected)
SADC (10 countries)	7	22	34
COMESA (12 countries)	9	17	23
ECOWAS (13 countries)	14	33	52
UDEAC (7 countries)	20	34	41

marized as follows:

• As many as 26 of the respondents confirmed the initial statement that "the role and objectives of the government and road agencies are clearly defined." This is surprising since the impression is that most SSA countries still have a long way to go before the mission of road agencies is defined with clear objectives, quantified goals, and defined performance standards.

• Only 7 respondents confirmed that road agency staff are well paid— i.e., have a salary of at least half the amount paid for comparative jobs in the private sector.

• The review confirmed the current trend towards less use of force account brigades for maintenance operations. Two thirds of the respondents would have reduced force account maintenance to a minimum in 1999.

• Own plant and equipment for force account operations are increasingly sold or rented out to private contractors. Seven countries had put up plant for sale; eight more would do the same in 1999.

However, as also some of the questions or statements on this aspect are ambiguous, the scores for individual countries may not reflect good or poor road management on an absolute scale. While Namibia had a score of zero points for all scenarios, its roads appeared well managed and in better condition than in most other SSA countries.

Overall Institutional Progress

Below are the average scores of the RMI Concepts Implementation Monitoring System for each of the four SSA sub-regions, as well as the average for the 11 countries participating directly in the RMI, and for the 31 other SSA countries. There seems to be have been some encouraging progress during the 3 years up to 1998, and road managers were fairly optimistic about further progress in the coming year. But it must be emphasized that reforms, as advocated by the RMI, are not an end in themselves. The most direct indicators of the quality of road management are the improvements in the road network and in road safety. These improvements would have to be monitored through different instruments.

Sub-region	1995	1998 (actual)	1999 (expected)	Number of Countries
SADC	18	33	47	10
COMESA	13	25	35	12
ECOWAS	12	28	50	13
UDEAC	19	26	33	7
Non-RMI Countries	15	26	38	31
RMI Countries	14	33	53	11

Road Management Initiative

The RMI was launched in 1988 by the United Nations Economic Commission for Africa (UNECA) and the World Bank, under the auspices of the Sub-Saharan Africa Transport Policy Program (SSATP). The countries taking part in the RMI are Cameroon, Kenya, Madagascar, Rwanda, Tanzania, Uganda, Zambia, and Zimbabwe. Others receiving assistance from the program include Benin, Ethiopia, Ghana, Lesotho, Malawi, Mozambique, and Togo. RMI is administered by the World Bank's Africa Region, and is co-financed with the governments of Denmark, France, Germany, Japan, the Netherlands, Sweden, Switzerland, and the European Union. France, Japan and Norway provide senior staff members to work on the Program.