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Assessment of Road Funds in South Asia Region

Jean-Noel Guillossou and Natalya Stankevich

SUMMARY

Sustaining an adequate level of resources for road maintenance has been a continuous issue worldwide, including in South Asia. Since the late 1990s South Asia has developed different models of Road Funds (RFs) – at the national level, or in the case of India at the state and local level – to improve sources of financing for road maintenance and development.

The World Bank South Asia Transport team has carried out a review of RFs in the region to draw lessons learned from the past experience. The review provides the analytical underpinning for advising governments on how to improve the performance of existing RFs or how to establish new RFs for road maintenance, and for providing guidance to the World Bank for revising its transport sector strategy in relation to road policy reforms in the South Asia region.

The review concluded that only two out of nine RFs studied give priority to maintenance, while the rest finance development of roads. These are, Roads Board (RBN) in Nepal and Road Maintenance Account (RMA) in Pakistan.

The main lessons learned include:

- Improved governance at the country (or state) level is one of the key success factors for effective performance of a RF;
- Fuel levies are never deposited directly to the RF account;
- RFs cannot be the only institutions held accountable for the management of roads.

The study suggests the following recommendations:

- The establishment of a RF is an appropriate answer to financing of road maintenance when there is a budget system failure;
- Assessment of governance should be conducted at the country level before promoting the establishment of a RF;
- Priority should be given to achieving good governance of the RF and its Board;
- Where the road agency has good capacity for road management, the RF can concentrate on management of resources and focus more on its role of financial institution;
- The creation of a RF should be considered in parallel with development or strengthening of the road management capacity of an executing road agency;
- An accountability mechanism should be developed to ensure that all revenues collected from fuel charges and designated as RF resources in accordance with the relevant legal framework are transferred in full from the central treasury to the RF account;
- Monitoring road maintenance programs and use of resources needs to improve and the designation of the road institution in charge of monitoring the quality of the road network needs to be clarified;
- Governments should continue providing budgetary support to road maintenance;
- User fees should not be used as revenues of a development RF;
- Allocation rules by type of road/network should be defined in the Legal Act creating the RF;
- Decisions on the allocation of resources by type of work for local road networks should be decentralized and not made by the RF.

BACKGROUND AND OBJECTIVE OF THE STUDY

Sustaining an adequate level of resources for road maintenance has been a continuous issue worldwide, including in South Asia. In the 1990s most countries, especially developing countries, accumulated a maintenance backlog caused by insufficient resources allocated to maintenance. A study on road deterioration in developing countries (Harral and Faiz, 1988) found that South Asia had the largest backlog of maintenance work among all world regions which was estimated at 3.5% of GNP.[1] This has resulted in the loss of road assets and the need for costly rehabilitation in an environment where resources are constrained and where maintenance and rehabilitation have to compete with development of the road network in response to economic growth and poverty reduction imperatives.

To address this issue, several countries have established Road Funds (RFs) with two objectives; creating additional resources, and securing resources for road maintenance. The Bank has encouraged the establishment of second generation RFs (2G RF) as a possible solution to secure stable and adequate flows of funds independent of the government budgets.

The objective of a 2G RF is to improve governance and efficiency in the provision and use of road maintenance resources. This is to be achieved through the following three principles:

- Securing adequate and sustainable maintenance funding by increasing the share in the maintenance budget of revenues collected from road users through road user charges by applying the fee-for-service principle;
- Empowering road users in decision-making regarding the priorities of funding due to their vested interest in good condition of roads;
- Setting up commercialized type management of RF.

When established in the late 90s,[2] the principles of 2GRF were biased by the situation in Africa where the road management capacity was weak. For that reason, it was proposed at that time to also assign a role in road management to the RF in addition to securing maintenance funding.

Since the late 1990s South Asia has developed different models of RFs: at the national level, or in the case of India at the state and local level. Unlike in African countries, RFs in South Asia were not given a role in road management because of a stronger capacity of Public Works Departments/Departments of Roads in the region.

There are indications that countries in the South Asia region are still seeking to improve sources of financing for road maintenance and development in an environment where financing requirements for roads are increasing rapidly to sustain fast economic growth.

- In its current Eleventh Five-Year Plan (2007-2012) Government of India underscores the importance of "generation of additional resources through modern road fund at state level" since budgetary resources to cover maintenance and upgrading of state roads is substantially limited. However, it stresses the need to analyze the effectiveness of the existing RFs in Indian states, in particular whether they provide additional resources to the normal budgetary allocations.
- Roads Board Nepal (RBN) was under detailed assessment three years after its establishment and an amendment to the RBN Legal Act to improve RBN's performance is currently under consideration by the central government.
- Government of Pakistan which created a Road Maintenance Account (RMA) not long ago has recently started considering establishing a Federal Road Fund to increase the level of financing of maintenance of national highways.
- Governments of Bangladesh, Bhutan and Sri Lanka, and Governments of several Indian States want to learn lessons from their neighbors.

The time is thus right to undertake a review of RFs in the region and draw the lessons learned from the past experience. The present review provides the analytical underpinning for advising governments on how to improve the performance of existing RFs or how to establish new RFs for road maintenance, and for providing guidance to the World Bank for revising its transport sector strategy in relation to road policy reforms in the South Asia region.

The initial objective of this study was to assess the effectiveness and impact of the RFs in SAR (i) on the level of funding for maintenance and (ii) condition of road networks which are maintained with RF resources. However, in the course of research and data analysis, the review revealed that only two – RBN and Pakistan RMA - out of 9 RFs studied give priority to maintenance, while the rest finance development of roads, making it difficult to conclude on the level of funding for maintenance. Also, though the data on allocations and actual expenditures on road maintenance was available for India's Ministry of Roads, Transport and Shipping, and States' Public Works Departments they had no relevance to the performance of India RFs, which in reality support essentially development and major improvements of roads. With respect to the condition of road networks, even those two RFs dedicated to maintenance do not collect data which would be appropriate to determine the impact they make on the condition of roads maintained or developed with their resources. These findings completely changed the course of the study and shifted its focus towards the assessment of the institutional and funding arrangements of the existing RFs in the region.

[1] Eastern and Southern Africa's backlog of maintenance work was estimated at 3.3% of GNP, Western Africa's at 3.2%, Europe, the Middle East and North Africa at 2.6%, Latin America and the Caribbean at 2%, and East Asia and the Pacific at 1.6% (Harral and Faiz, 1988).

[2] Heggie and Vickers. World Bank. 1998

The assessment is based on the key characteristics of 2G RFs which are described in the World Bank (Heggie and Vickers, 1998) and IMF (Potter, 1997) papers. The chapters of the note are structured around these characteristics:

- Mission and reason of creation of RFs,
- Sound legal basis,
- Purchaser and provider split,
- Good governance,
- Measurable outputs and performance indicators,
- Fund flow mechanism outside the government's budgetary framework, and
- Funding allocation rules.

The last chapters of the report focus on lessons learned from this assessment and elements for consideration and discussion during the formulation of new transport policies in the region. The recommendations provided have been developed to improve performance of existing RFs financing maintenance and help establish new Road Maintenance Funds when such policy decision is found appropriate. Some recommendations can also apply to RFs financing development and rehabilitation of roads. However, the paper is not aimed at developing recommendations on restructuring RFs financing development and rehabilitation of roads.

ASSESSMENT OF ROAD FUNDS IN SOUTH ASIA

Road Funds covered by the study

The study covers nine Road Funds created since 1990:

(i) three RFs at the national level:
- India Central Road Fund (CRF) established in 2000,
- Roads Board Nepal (RBN) in 2002,
- Pakistan Road Maintenance Account (RMA) in 2003, and

(ii) six RFs at the state level in India:
- Uttar Pradesh (UP) State Road Fund[3] in 1998,
- Madhya Pradesh (MP) Farmer's Road Fund[4] in 2000,
- Kerala State Road Fund in 2002,
- Assam State Road Fund in 2003,
- Karnataka Chief Minister's Rural Road Development Fund in 2004, and
- Rajasthan State Road Development Fund in 2004.

The World Bank was involved in supporting to some extent the establishment of three RFs: Assam State RF, RBN and Pakistan RMA.

The World Bank also provided assistance and advice during the preparation of establishment of Mizoram RF. The RF Bill has recently been approved by the State Assembly and is to be submitted for consideration by the State Cabinet before being officially enacted. The legislation for Bangladesh RF has been drafted and is about to go for consideration by the Cabinet. Sri Lanka Road Maintenance Trust Fund (RMTF) was legally operationalized in 2006 and has not completely adopted operational procedures. These three RFs were not included in the study because Mizoram and Bangladesh RF were not in operation yet and SL RMTF did not have a lot of experience and lessons to share in 2007 when the study was launched.

The term RF is used as a generic term in the study despite the fact that it does not comply with the general definition of a Second Generation (2G) RF in some cases.

Mission and reasons for creation of a RF

To ensure adequate and stable sources of maintenance funding was the main reason for establishing a RF in Nepal, Pakistan, Assam, Karnataka, and UP, which is consistent with the concept of a 2G RF. In reality, however, out of these five RFs, only two, in Nepal and Pakistan, are dedicated to financing maintenance and give priority to routine maintenance. The three others finance either development of roads or major improvement works or consultancies, not routine maintenance.[5] The four remaining RFs (all in India) were established to fund development of roads.

While good reasons can explain why RFs in India either give priority to development or to major rehabilitation works or were specifically created to fund development of roads, the risk is lack of sustainability due to lack of maintenance of assets invested and ultimately loss of these assets. This was the lesson learned from the Road Deterioration in Developing Countries Study carried out by the World Bank in 1988. India had until recently a road network in poor condition with limited capacity which was becoming a bottleneck to sustained high economic growth. The Government decided to increase resources to development of the road network to eliminate this bottleneck. While this strategic decision has shown positive results in the short term, the RFs as used presently do not provide a long-term answer to sustainability of the road network.

Sound legal basis[6]

Theoretically, a sound legal basis can make a RF more sustainable if it is established through a Law or Act rather than through a Decree or Rules and Regulations, as the latter may be easily amended or cancelled with the arrival of a new government. Only four out of 9 RFs studied were established through a Legal Act: RB Nepal, India CRF, Kerala SRF and Rajasthan SRF. The other five RFs have more fragile legal status as they were created through secondary-level legislation: government order (Karnataka RF), notifications (Pakistan RMA, MP RF and UP RF), and decision taken by the State Cabinet (Assam RF).

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[3] The original name is Uttar Pradesh Rajya Sarak Nidhi.

[4] The original name is Madhya Pradesh Kishan Sarak Nidhi.

[5] Assam SRF, which was originally created to support routine maintenance of rural roads, finances major maintenance works (rehabilitation and upgrading). Karnataka Chief Minister's Rural Road Development Fund, which was created to support "maintenance and upkeep of rural roads", allocates 70% of its revenues to major maintenance and upgrading of Major and Other District Roads and 30% for rural roads. UP RF also gives a priority in financing of periodic renewal works, and road widening and strengthening.

[6] UP RF is not included in this analysis due to incomplete information on its legal framework.

Weak legal basis is aggravated by unclear or lack of implementing regulations. Only the Legal Act establishing RB Nepal and India CRF, and Notification establishing Pakistan RMA are supplemented by additional Rules to clarify administrative mechanisms. Additional rules and regulations cover aspects for which more flexibility is needed to allow their revision without requiring new legislation. The other RFs do not really have clear and sound legal frameworks as no additional Rules were developed and enacted. This is also the case for Kerala and Rajasthan RFs, which though created through Legal Acts, do not have supplemental legislation and thus have several important aspects (e.g., allocation rules) that remain to be regulated. It is understandable to some extent why Assam SRF which is mainly a repository of several schemes (e.g., PMGSY) does not need supplemental rules, as regulations of these schemes are already defined in their respective legal frameworks. However, the regulation for one of its revenue sources - fuel levy – is not stipulated in any legislative document related to the RF.

Beyond the soundness of the legal framework, however, it needs to be further assessed if the respective legislations are being properly implemented. While this is discussed in detail in the next sections, it is worth noting here that the Roads Board Nepal Act and Rules are not fully implemented demonstrating that a sound legal basis is not enough to make a RF successful. The review also found that a RF can be successful without the expected level of soundness of its legal basis (e.g., Pakistan RMA). However, this may be a short-term success and the risk of failure in the long term is more important than when the legal framework is sound.

Purchaser and provider split

The separation between the purchaser (which is defined as a "financier") and the service provider (defined as a "provider of road maintenance services") is aimed at preventing a conflict of interests that may weaken financial discipline and compromise efforts to control costs and maintain quality. This is a key principle of a 2G RF. Essentially, RF Board and Department of Roads (DOR)/Public Works Department (PWD) should have a clear delineation of responsibilities which should not overlap. A RF should not accumulate conflicting responsibilities, including funding, planning, procuring and managing road works. In summary, a 2G RF Board should be responsible for managing resources and financing maintenance programs and DOR/PWD for planning, procuring and managing road maintenance works.

The analysis of the available legal documents for RFs in South Asia reveals that there is a clear separation between the two institutions in most of the cases, except Pakistan. RFs purchase road maintenance/development services and DOR/PWDs provide these services. The responsibilities of RFs do not overlap with those of the road agencies. The power of the RF Boards[7] is limited to management of RF resources and they are not engaged in planning and management of road works which rest with DOR/PWD.

While this is also the case for Nepal, RBN has, in addition, a special responsibility which is normally assigned to a government organization at the national level. According to its legal framework, RBN is in charge of integrating annual road maintenance programs submitted by road agencies such as Department of Roads, District Development Committees and Municipalities. That essentially means that RBN has to determine the priorities for the integrated annual maintenance program, a responsibility which should be vested to a road agency or Ministry that would cover both national and local road networks and would have the technical capacity to prepare a strategic plan.

There is no single agency or Ministry with this kind of role in Nepal because the strategic (national and feeder roads) and the local (rural and farmer roads) road networks lie within the jurisdiction of different road agencies reporting to different Ministries. As a result, the function of formulating an integrated annual maintenance program at the national level has been given to RBN probably because of its strategic planning capacity and since its Board includes stakeholders representatives of the various road networks maintained with resources from RBN (i.e. Ministry of Public Works, which is together with DOR responsible for the strategic road network and Ministry of Local Development,[8] Federation of Village Development Committees and Association of Municipalities, which all three are together responsible for the local road network).

Pakistan is the only case where there is no clear separation of the purchaser and provider functions. Funds for road maintenance are deposited in the Road Maintenance Account managed by NHA, the National Highway Agency. Having both responsibilities for financial management of road maintenance resources and management of road maintenance programs, NHA is both purchaser and provider of road maintenance services. While procedures are being put in place in NHA to increase transparency in the planning system by setting up a road asset management system (RAMS) and financial management is improved with the carrying out of financial audits, this framework does not have the strength that would be offered by separating the purchaser and provider functions.

Measurable outputs and performance indicators

RFs, like any funding institution, are expected to have a results framework to monitor and evaluate the funded road programs. While there is general agreement that the objective of 2G RFs is to ensure stable and adequate funding of road maintenance, the choice of the right performance (outcome-oriented) indicators to measure the achievement of this objective remains open to debate. Traditionally, the recommended performance indicator has been the share of the road network in good,

[7] Three RFs do not have management boards at all: India CRF, Karnataka RF and MP RF. Management of RF resources is entrusted with India's Ministry of Finance and State Departments of Finance, respectively, who transfer the resources from the Consolidated Funds to the ministries (in case of India CRF) and agencies responsible for executing road programs.

[8] The Ministry of Local Development consists of one department, i.e. Department of Local Infrastructure Development and Agriculture Road (DOLIDAR).

fair and poor condition.[9] The adequacy of the indicator is discussed later in the report. This section focuses on the existence, quality and reliability of performance indicators in the RFs in the South Asia region.

The research conducted for this study found that none of the RFs, except RBN, has a results framework in place with relevant key performance indicators for monitoring and evaluation (M&E) purpose. No RF compares the program actually executed to the program planned for execution. Comparison is limited to disbursements versus funds allocated. There may be several reasons for this: (i) the legislation gives limited power to RFs and the M&E function is not stipulated, (ii) the RF does not have the authority to request the institution in charge of managing and executing road maintenance programs to provide data on road network condition; (iii) if the RF has this authority, data may not be collected by the institution in charge of road maintenance; and (iv) the RF does not have the capacity to collect data to measure performance.

While the annual reports of RBN state that monitoring and evaluation was conducted in relation to the two road agencies funded by RBN, it is not clear what indicators are used. RBN seems to limit M&E to the use of financial data as monitoring indicators because the annual reports and website provide only information on allocations and actual disbursements by RBN by network, by executing agency and by districts for routine maintenance and recurrent maintenance. In addition, while the scope of monitoring is limited, evaluation is weak. The collected data are not analyzed to explain discrepancies between actual and targeted indicators, for example in the case of low disbursements.

In the current context of South Asia, indicators are usually collected by the DORs or road agencies but RFs do not use the data. While the purpose of this study is not to review the performance of DORs or road agencies, a brief assessment is that not all countries or states/provinces have Road Asset Management Systems (RAMS) to store and maintain the data on condition of roads. However, they recognize that RAMS are a key tool for road management and RAMS are being developed in several countries and should become operational soon.

A brief review of indicators used by DORs and road agencies found that often proxies are used for M&E purpose, e.g. (a) the percentage of funding allocated to the road sector compared to the needs or (b) lengths of roads to receive different types of maintenance. This is symptomatic of the way performance of road institutions is measured: by outputs rather than outcomes. Outcomes are often considered as a by-product of a road maintenance program rather than a key strategic element to define road maintenance programs. The review did not find an example of a country with a long term vision of where they would like the road network to be measured by an outcome indicator.

[9] The indicator applied to measure impact of funds allocated to road maintenance should exclude roads that received major treatments such rehabilitation, upgrading, and roads that were newly constructed.

Governance and Accountability

One key underpinning of the concept of a 2G RF is good governance. Governance is enhanced through such aspects as autonomy and accountability of the Board, consumer/road user participation, transparency of decision-making process and disclosure of relevant information.

India CRF, Karnataka Rural Development Fund and MP RF turn out to be financing instruments without any specific governance mechanisms built in the legal framework other than the usual procedures for managing Government resources: they have no management board, no involvement of road users, no transparency in decision making and no disclosure of information (very limited disclosure of information only in the case of India CRF). The remaining six RFs have limited additional governance mechanisms beyond those typically used in government institutions.

Board autonomy: Boards of South Asia RFs are not autonomous from their governments, which increases the risk of being affected by political interference. They are (i) dominated by public sector representatives (all Board members are from the public sector in the Pakistan case[10]) and (ii) chaired by top level public officials: either the Chief Minister of the State (e.g., Assam and Kerala), the Minister or Secretary of the Ministry in charge of roads (e.g., Nepal, Rajasthan and UP) or the Chairman of a road agency/department (e.g., Pakistan). Since Chairmen are top level public officials they are first accountable to their governments and second to the RF Boards. As a result, there is a risk that decisions taken by Boards have political influence and reflect the interests of the high ranking politicians or line ministries.

Although RBN has more features of 2G RF than the other RFs, it lacks autonomy and independence from political interference. Some of the key powers given to the Executive Committee of RBN by the Legal Act are overridden by the government rules which regulate business procedures of government organizations. Despite the Act providing RBN authority to allocate RF resources, RBN has to receive authorization from Ministry of Planning and Public Works (MPPW) before allocating resources to road agencies. According to the government rules,[11] only a sector ministry (MPPW in this case) has the authority to spend what is specified in Government of Nepal's (GON) Budget Book. Decisions of the Executive Committee are also affected by the views of the political representatives at the Board who are in a majority. The local government representatives who dominate in the Board have managed to influence the Board decisions

[10] NHA has two decision-making bodies: (i) National Highway Council whose basic function is to lay down national policies and guidelines to be followed by NHA in the performance of its functions and who has the power to direct and regulate the affairs of NHA, and (ii) NHA Executive Board who is vested with the general direction and administration of NHA and its affairs to exercise all powers, perform all functions and do all acts and things which may be exercised, performed or done by the Authority. This study covers the Executive Board only because it is responsible for approval of RMA budget and maintenance program.

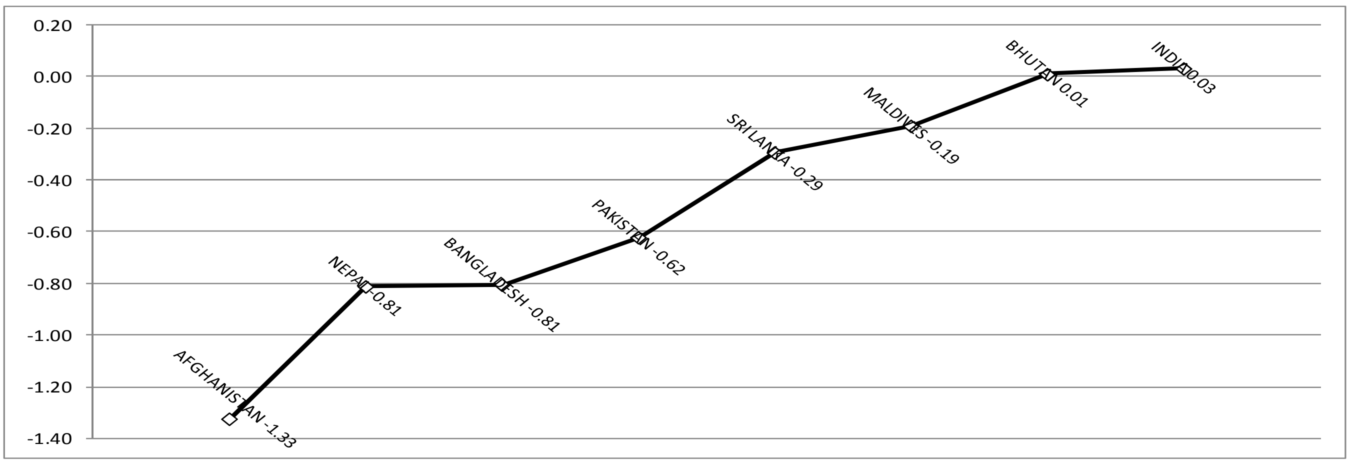
[11] Management of public expenditure is regulated by the Financial Administration Rule.

and allocate more RBN resources for upgrading and reconstruction of local roads despite RBN's priority to financing maintenance.

The assessment of RBN conducted by the World Bank in 2005 pointed to lack of autonomy in RBN as the key impediment hindering the effective performance of RBN. The RBN Legal Act clearly states the composition of the Executive Committee (Board) assigning the seat of the Chairperson to the Secretary of MPPW and a majority of seats to representatives of local governments. That assessment recommended an amendment to the Act that among other things would appoint non-GON Chairman and adjust the size and composition of the Board to improve balance of interests. While a draft Amendment was developed almost immediately after that assessment in 2006 it was still under review by the Ministry of Law, Justice and Parliament at the time of this note. Whether this will be enough to give real autonomy to RBN remains questionable as few examples exist in the world of Boards with real autonomy even with the appropriate legal framework.

Lack of autonomy in RBN is not a governance issue at RBN level. It is a governance issue at the country level because of the government's reluctance of giving up the control of power and frequent political interference in decision-making process. This finding is supported by the Worldwide Governance Effectiveness Indicator (Figure 1). This indicator shows that Nepal is second after Afghanistan in the region in terms of lower degree of government effectiveness as measured by the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Thus, improvement in autonomy of RBN is expected to be closely linked to improvement in overall governance at the country level.

Figure 1: Government Effectiveness in South Asian Countries, 2007



Note: The lower the degree of government effectiveness, the lower the country is on the graph,
Source: Based on the Worldwide Governance Indicators, 1996-2007. http://info.worldbank.org/governance/wgi/index.asp

Auditing: Auditing is promoted to a limited extent in the legal frameworks of almost all RFs under study. Financial audit as one formal accountability mechanism is required for all RFs except Karnataka RF,[12] but a technical audit is required by the legal frameworks of only Pakistan RMA and Assam RF. Financial audits are either completed externally or by government agencies. Financial audits of Pakistan RMA,[13] Assam, Kerala, MP[14] are conducted by chartered accountants, those of RBN, CRF, Rajasthan RF, UPRF by the Auditor General.

No requirements for internal controls are specified in the legal frameworks of RFs. It is implicitly assumed that they are similar to the usual Government requirements for managing public funds. This review found that technical audits are often carried out by the road agencies as required in their legal framework but these audits are often limited to quality assessment and carried out internally and not by independent auditors.

The information available on the audit subject is limited and does not allow to determine if these mechanisms are employed and how effective they are in improving the performance of RFs. Financial and technical audits of Pakistan RMA, while conducted, are always delayed limiting their usefulness in helping improve performance of both RMA and NHA. Financial audits of RBN are carried out on an annual basis and their findings are discussed and taken into consideration.

Transparency: Transparency, defined as allowing stakeholders to access information on the use of resources allocated to RFs, seems to be lacking in most of RFs. The first step, which is expected to be made towards transparency by the RFs (or the governments), is to make the relevant legal documents freely available to the general public/road users so that they can evaluate the performance of RFs against their legal

[12] Insufficient information was provided on the legal framework of UP RF.
[13] These chartered accountants to perform a financial audit of Pakistan RMA are still appointed by the NHA Executive Board which is the main decision-making body of the RMA and NHA.
[14] Financial audits of MPRF are conducted as part of Road Development Authority by chartered accountants.

frameworks. This review found that only RBN published its relevant Act, rules and regulations on its website. Acts creating other RFs in the region are expected to be made available by the department of the central government with the responsibility for such disclosure. Legal documents at a lower level such as rules and regulations are generally not made available to the public.

As for disclosure to the public of information other than legal documents, only the Legal Act of RBN[15] and Pakistan RMA Rules[16] require it, including publishing annual reports on their websites. RBN makes a wide range of information (including allocations and actual disbursements, maintenance plans and expenditures of road agencies) available to the public in its annual reports and on its website. Limited information related to the Pakistan RMA (only revenues and expenditures) has been found on the NHA website. In Nepal, not only RBN but also road agencies spending RBN's resources are required to disclose the financial information, including publishing their maintenance plans and expenditures which are subject to reviews by road users.

Disclosure of information on Indian RFs is not stipulated in their legal documents. And indeed, very limited information is available on the RFs on internet and no annual reports have ever been made widely available to the public. However, this situation may change as the country's Right To Information Act passed in 2005 mandates universal access to and the disclosure of information by all public entities (which include RFs) wherever it is in the public interest.

Involvement of road users: One of the key objectives of setting a 2G RF is to have the voices of consumers/road users heard and their opinions taken into consideration in decision-making process on road planning. While some of the Boards under study have one-two representatives from a truck or other transportation-related association, these representatives are not as active and influential as public sector officials who, as mentioned earlier, dominate and keep the control of the Boards' decisions. Often, representatives from road users have limited understanding of their role and limited capacity to provide meaningful inputs in a rather technical domain even if they have the willingness to fulfill their responsibilities. Training is not provided to strengthen this capacity as this would upset the balance of power between the public sector and road users.

Consultations with stakeholders, including road users, or road user surveys to discuss the operation of RFs do not seem to be taking place in most of RFs. Only RBN and Pakistan RMA have recently started conducting a road user survey and stakeholder consultations, and plan to continue conducting these on a regular basis. In India, NHA[17] and several states[18] have been carrying out road user surveys with the support of World Bank projects and it is expected that this practice will extend progressively to the entire country. However, this has not been linked with RFs yet.

Fund Flow Mechanism

One key characteristic of a dedicated 2G RF is to be a separate fund, outside the central government's general budgetary framework, that is financed from road user charges. Its resources are made available beyond the fiscal year (non-lapsable funds), which is different from the lapsable character of the government budget. The benefit of such mechanism is to improve timely availability of resources, such as before or after the rainy season, which is critical for efficient road maintenance. It also ensures the continuity in funding long-term contracts which are very frequent in the road sector, even for maintenance, therefore reducing the uncertainty on the availability of funds that translates in a risk premium and a higher cost of contracts.

The budgetary procedure can become an obstacle for timely availability of funds as in many cases procurement of contracts cannot start before the annual government budget is approved. This causes bunching of procurement resulting in delays in agencies with weak capacity and in inadequacy between the contractual period of execution and the technically adequate period of execution. Timely availability of funds also ensures that contracts are executed during the contractual period of execution. Very often, governments overcommit funds in their budget which results in unavailability of funds, longer period of execution of contracts and ultimately much higher cost of works.

Most of the RFs under study are non-lapsable RFs (Table 1), which means that funds can be carried over to the next fiscal year if not spent in the current fiscal year. The exceptions are Karnataka and UP RFs which cannot transfer unspent resources to the next fiscal year. RBN is a unique case because it has both lapsable and non-lapsable resources.

Table 1: Lapsable and non-lapsable Road Funds

Lapsable	Non-Lapsable
RBN: revenues from fuel levies which are transferred through MOF	RBN: other revenues which are deposited to RBN account directly
Karnataka RF	Pakistan RMA
Uttar Pradesh RF	India CRF
	Assam RF
	Kerala RF
	Rajasthan RF
	Madhya Pradesh RF

15 The RBN Legal Act states that "if any person desires to obtain the statement of income and expenditure, balance sheet and annual report of the Board, he may obtain copies thereof …".

16 The RMA Rules require the Road Asset Management Directorate to post the annual report and audited accounts along with the auditor's report relating to the RMA on the NHA website and make copies available to the public."

17 The Hindu Business Line. "Rash driving, high-beam lights irk road users: NHAI survey". May 17, 2006. http://www.thehindubusinessline.com/2006/05/18/stories/2006051804010700.htm

18 Including Gujarat, Himachal Pradesh, Karnataka, Orissa and others. Reports are available in the World Bank project files.

Revenues collected from fuel levies and transferred through the national treasury are lapsable and can be used within the first four months of the next fiscal year at the latest. Revenues collected from road tolls and other sources and deposited directly to RBN account can be transferred to the next fiscal year if not spent in the previous year.

Adequacy of level of resources for maintenance

One key objective of a 2G RF dedicated to maintenance is to secure an increase in financial allocation to maintenance. With development of roads often being a top priority on the political agenda, maintenance while being recognized important has not only been underfunded but also has frequently witnessed decline in funding. Thus, increase in maintenance resources has often been the main rationale for establishing a 2G RF.

The data from Pakistan RMA show that there has been a substantial increase in revenues from two major sources of funds for maintenance - tolls and government – (Figure 2). Overall maintenance funding has increased since the establishment of RMA in 2003. However, there was a decrease in government grant in the last year. Apparently, after noticing an increasing trend in maintenance revenues channeled to RMA the government has decided to reduce its support to road maintenance and let RMA rely on its own sources of revenues.

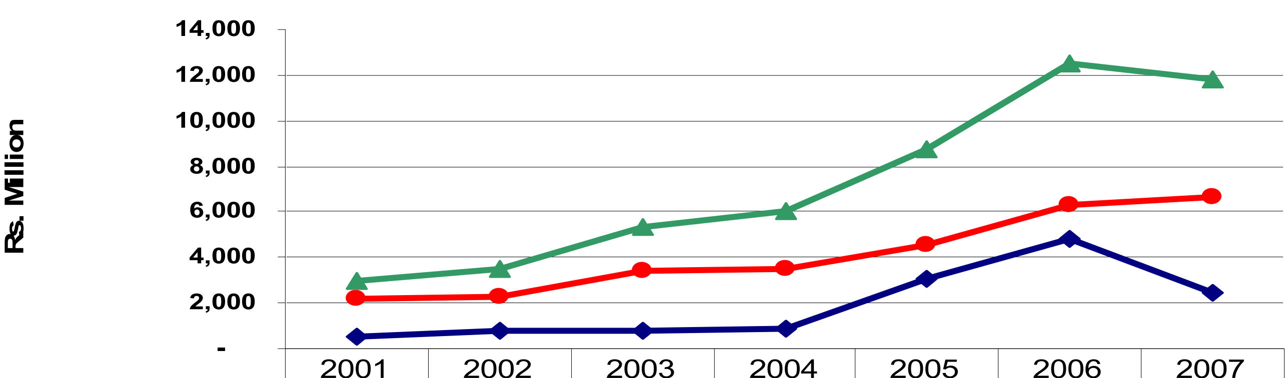
Sources of revenues

The RFs under study have various sources of revenue, including road user charges and government budgets. The most common off-budget sources of revenue are fuel levy and road tolls. Fuel levy (or cess) represents 50% of total RF revenues in the case of RB Nepal and 100% in India CRF and Rajasthan RDF; road tolls – nearly 10% in Nepal but 66% in Pakistan (Figure 3 and Figure 4). The other sources include vehicle registration charges (40% of all revenues in Nepal), police fines (10% in Pakistan), sales tax on agricultural produce (Karnataka and MP), fees for conversion of agricultural into non-agricultural land (Karnataka), motor vehicle tax (Kerala), and others.

However, often most of the sources of revenue which are specified in the RF legal framework are not used. For example, Assam RF, which is to be funded from 11 sources, is in fact funded exclusively by grants from the State Government's budgetary allocation for maintenance. All of the concerned RFs have the possibility of being funded from their governments' budget, but RBN is the only one that does not receive budgetary support from the central government. While Government of Nepal does provide grant support for road maintenance, allocated funds are transferred directly from the Ministry of Finance (MOF) to road agencies not to RBN. RBN has no control over these funds. As a result, this undermines the oversight role of RBN and impedes efficient management of all resources available for maintenance of roads in the country.

All RFs, except the Pakistan RMA, receive their resources transferred through national or state treasuries. This channeling mechanism is typical not only for RFs, which are financed from central government schemes or State Government grants (e.g., Assam), but also for those which are mainly financed from user charges (e.g., fuel levy vehicle registration, cess on agricultural produce). There was no mechanism found in the RFs to consolidate the amounts collected at each step of the process (amount collected by MOF versus estimated revenues in the budget, amount transferred to the RF versus the amount collected by MOF).

Figure 2: Level of Maintenance Funding Before the Establishment of Pakistan RMA in 2003 and During its Operation 2003-2007



	2001	2002	2003	2004	2005	2006	2007
Gov grant	520	787	825	863	3,074	4,816	2,424
Tolls	2,168	2,290	3,435	3,492	4,534	6,295	6,619
Total	2,953	3,459	5,372	6,055	8,724	12,486	11,807

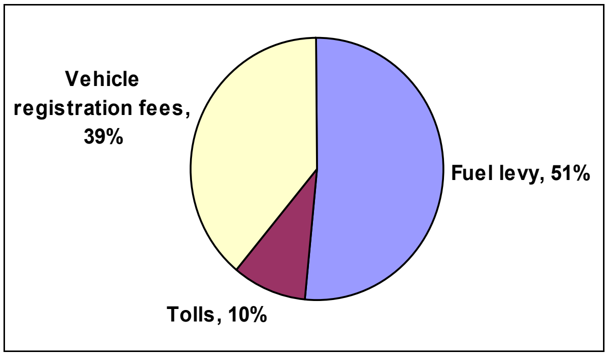
Source: Based on the data from NHA Business Plan 2008-2012.
Note: The data was adjusted to 2000-2001 prices using the inflation rate in Pakistan.

The revenues collected from road tolls have been found to be the only kind of revenues which are always deposited directly to RF's accounts. While they constitute a minor (10%) share of RBN's resources, they represent a lion share (over 60%) of RMA's resources (Figure 3 and Figure 4). Other resources of RMA including fines collected by police and proceeds from bid sales, weigh stations, right-of-way commercialization collected by NHA, all go directly to RMA. The cost of collection is deducted from collection revenues but there is no assessment of the collection efficiency (reasonableness of cost, leakages).

Several reasons may explain why road tolls (and other minor off-budget resources) are deposited directly to RFs' accounts while fuel levies are always directed to RFs through MOF. It is a current practice everywhere in the world for concessionaires of tolled roads to collect tolls. Also, amounts of road tolls revenues are significantly less than those from fuel levies. Since fuel levies generate substantial amount of revenues compared to tolls the governments are reluctant to release the control of fuel levies revenues. In some countries, fuel taxes represent a significant source of revenues for governments and Ministries of Finance (MOF) want to keep record of revenues from fuel levies in the national accounts, especially if a fuel tax is partly transformed into a fuel levy. MOFs do not want this transformation to impact negatively on the national accounts as this could be interpreted as an unjustified change in the country's economy.

Funds allocated to RFs are usually channeled through RF accounts before being transferred to road departments/agencies. Only in the case of RBN, despite the Legal Act provisioning for funds to be channeled through RBN, they are allocated directly from MOF to road agencies. Rarely do RFs use commercial bank accounts. Most bank accounts are in state banks, which often is a limitation in terms of efficiency and quality of services. For example, some state banks in India do not provide consolidated statements as required by financial auditors.

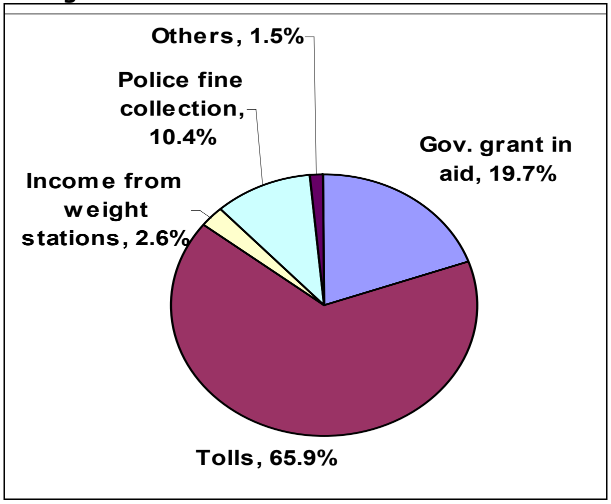
Figure 3: Sources of Revenue of RBN,[19] Average for 2003-2005



Source: Based on the data provided in World Bank's report on Assessment of RBN, 2006

[19] Despite the RBN Legal Act stipulating that the government grants to be channeled through the RF account, the government grants do never go to the RF account and always allocated directly from MOF to road agencies. This weakens the oversight responsibilities of RBN, as it does not oversee the large amount of money directly allocated by MOF. Road agencies are not required to submit plans and publish their expenditure program for funds received directly from MOF.

Figure 4: Sources of Revenue of Pakistan RMA, Average for 2003-2005



Source: Based on the data from NHA RMA Financials during 2003-2006

Allocation of the Proceeds of the Road Fund

While the principles of 2G RFs do not provide specific guidance on allocation of Road Fund resources among networks, it is a practice found in several RFs across the world to have allocation rules per type of network. The rationale, especially in the case of the fuel levy, is that because road users on all road networks contribute to the levy, thus, for equity reasons, all road networks should receive in return a portion of the RF resources. Theoretically also, allocation rules mitigate the risk of political influence on allocation of RF resources for different types of works and types of network/road. Political influence might translate in instability in terms of level of resources allocated among networks resulting in lack of sustainability of these networks.

Allocation rules by type of network/road are defined in the secondary legal documents of most of the RFs, except Assam, Rajasthan and UP RFs. All of them give priority to NHs and SHs and actual allocation seems to comply with the rules in most of the cases. For instance, RBN allocates 70% of its resources to the Strategic Road Network,[20] which has about 70% sealed roads, and 30% to the local road network managed by District Development Committees and Municipalities. Box 1 details the allocation rules for India CRF.

Some RFs use different allocation rules by type of work instead of by network. This is the case in the Rules and Regulations or other supplemental legislative documents of three RFs (RBN, Pakistan RMA, and Karnataka RF). The rules give priority to types of work which were earlier under-funded and were the main reason for the establishment of several RFs: for example, routine maintenance in the case of RBN and Pakistan RMA and development of roads in the case of Karnataka RF. Actual use of RF resources seems to comply with priorities assigned to the RFs. As far as the other Indian RFs are concerned, their respective legal documents either do not define what type of works should be prioritized or they explicitly state that State Governments can allocate RF

[20] Strategic Road Network comprises NHs and feeder roads connecting local roads with NHs.

resources as needed. As a result, priorities are often given to types of works (e.g., widening and strengthening instead of maintenance in the case of UP, consultants' fees in case of Kerala RF), which were often not the primary reasons for the establishment of a RF.

Box 1. Allocation formulae in India CRF

Rs 2.00 per litre is collected as cess both on petrol and High Speed Diesel (HSD).

a. Out of the Rs 2.00, the cess amount of Rs. 1.50 is being allocated in the following manner:

(i) 50% of the cess on HSD (of Rs.1.5/liter) for development of rural roads/PMGSY.[21]
(ii) 50% of the cess on HSD (of Rs.1.5/liter)and petrol (Rs.1.5/liter) are there after allocated as follows.

- An amount equal to 57.5% of such sum for the development and maintenance of NHs
- An amount equal to 12.5% for construction of road under or over bridges and safety works at unmanned railway crossing;
- An amount equal to 30% on development and maintenance of State Roads. Out of this amount, 10% is kept as reserved by the Central government for allocations to states for implementation of state road scheme of inter sate connectivity and economic importance.

b. The remaining cess of Rs. 0.50 per liter, both on HSD and petrol (out of the total of Rs. 2.00) is entirely allocated for development and maintenance of NHs.

In summary:

Scheme	**Petrol, Rs/litre**	**HSD, Rs/litre**
Development of Rural roads/PMGSY	--	0.75
Development and maintenance of National Highways (NHs)	0.86 +0.50	0.43 +0.50
Construction of road under or over bridges and safety works at unmanned railway crossing	0.19	0.09
Development and maintenance of State Highways (SHs)	0.45	0.23
Total	**2.00**	**2.00**

Source: Department of Road Transport and Highways. "Annual Report 2006-2007." Ministry of Shipping, Road Transport and Highways. Government of India.

MAIN FINDINGS

The main findings of the review based on the comparison between RFs in South Asia and the seven criteria characterizing 2G RFs are presented hereafter:

i. Only Roads Board Nepal can be characterized as being close to a 2G RF as it has more features of 2G RF than the other eight RFs subject of the review.

ii. Most of the RFs currently operating in the region finance development of roads, and only RBN and Pakistan RMA are dedicated to financing of routine maintenance.

iii. All Indian RFs finance development and/or major improvements of roads despite some of them having been established to fund maintenance.

iv. Overall, RFs have a weak legal basis with the exception of RBN and Indian CRF. Even in these two cases, the legislations still lack provisions for proper implementation.

v. There is a clear separation of the purchaser and provider functions in all RFs, except Pakistan RMA, where the same organization – NHA – administers the road fund resources (RMA) and maintenance works financed from those resources.

vi. None of the RFs use relevant performance indicators for monitoring and evaluation purpose. Only RBN uses financial data for the monitoring purpose, but little analysis of these data is carried out.

vii. Three out of 9 RFs under study – India CRF, Rajasthan and MP RFs – do not have management boards.

viii. The Boards of the concerned RFs are not autonomous from the governments and are potentially at risk of political interference, as they are chaired by a high ranking public official and public sector representatives constitute a majority.

ix. Road users participation in the decision-making process is very weak because it is limited to including in the Board one-three representatives from a truck or transportation-related association with limited contributive capacity.

x. The extent of RF's accountability is limited to the completion of financial audits, with no disclosure of legal documents, annual reports with financial data or reports on execution of programs financed by the RFs to the general public and road users.

xi. RBN is the only RF where accountability and transparency in resource allocation is a legal requirement and is enhanced in relation to road agencies spending RBN's resources.

xii. Fuel levy is a major source of revenue for RBN and most of Indian RFs, and only Pakistan RMA is not financed from this source.

xiii. Potential sources of revenues for most of the RFs are very diverse in addition to traditional fuel levy and

[21] PMGSY stands for the Pradhan Mantri Gram Sadak Yojana (PMGSY), which was launched by the Government of India to provide connectivity to unconnected rural Habitations as part of a poverty reduction strategy.

budgetary support but most of these sources are not used with the exception of road tolls.

xiv. All RFs receive their revenues transferred through national or state treasuries, except for road tolls collected by Pakistan RMA and RBN.

xv. A majority of the RFs, except Karnataka and UP, are non-lapsable and can carry unspent resources over to the next fiscal year.

xvi. Allocation rules by type of road or network are stipulated in the legal framework of most of the RFs, while allocation rules by type of works are stipulated in the legal framework of only three RFs: RBN, RMA and Karnataka RF.

Annex 1 summarizes the characteristics of the RFs in South Asia based on the seven criteria used in the review.

LESSONS LEARNED

Three main lessons were drawn as a result of this assessment and are presented below. Despite the fact that they are based on the experience of the South Asian countries, they can be found relevant and applicable worldwide.

- **Improved governance at the country (or state) level is one of the key success factors for effective performance of a RF.** As the Nepal experience shows, although RBN was established through an Act, its status is vulnerable and decisions are not always implemented properly in compliance with the legal framework because of lack of good governance at the country level. Thus, it does not matter which legal instrument – Act or Rule or Notification - is used to establish a RF, governance mechanisms must be enhanced to secure soundness of the RF's legal basis and its proper implementation.

- **Fuel levies are never deposited directly to the RF account.** This reflects the political economy of road maintenance financing using a fuel levy. The experience of RFs in South Asia only proves what has already been observed in other regions of the world:[22] collected fuel levies are often deposited to the national or state treasury and later transferred to RF's account. It should be recognized that governments are reluctant to release the power of controlling the inflow and distribution of revenues from fuel levies because they bring a much more significant amount of revenues than road tolls and other types of user charges. This is even more true in an environment where the price of oil is very volatile and is expected to stay high with significant consequences on the countries' economies. The political price of increasing the price of fuel to include a fuel levy is felt much higher by Governments than the benefits from maintaining roads using revenues from a fuel levy.

- **RFs cannot be the only institutions held accountable for the management of roads.** An overall road management framework is expected to include other aspects, besides financing, such as partnership between the public and private sectors, strategic planning, technical and administrative role of the executing agency, investment and operations aspects of road maintenance. An accountability framework has to be established of which RFs are only one element. This review has been limited to the RFs in South Asia and further analysis of service providers (DORs/PWDs) would be required to have a comprehensive assessment of the current governance and accountability framework for road maintenance.

RECOMMENDATIONS

This study suggests that the following recommendations be taken into consideration by the Bank when revising its transport policy strategy in the region and advising the governments on setting up Road Funds:

- **The establishment of a RF is an appropriate answer when there is a budget system failure.** However, even when there is no budget failure, the creation of a RF or a similar funding mechanism (e.g., Pakistan RMA) may be justified. When revenues come from road user charges and other various sources it is critical to ensure that (i) all resources are consolidated in one account, (ii) these consolidated resources are efficiently and transparently managed by an institution that has a sound FM system, and (iii) revenues coming from road user charges are allocated to the road sector for which services road users pay.

- **Assessment of governance should be conducted at the country level before promoting the establishment of a RF.** The lesson learned from the experience of RBN is that much of the RF's success depends on the degree of governance in the country and/or state. Assessment should help identify weaknesses in the national/state system, which may threaten or undermine the effective performance of a newly established RF, and recommend measures to mitigate possible risks which may result from these weaknesses. Establishment of a 2G RF should be encouraged only after governance issues are addressed at the country level; otherwise the risk is higher that the principles of a 2G RF will not be followed.

- **Priority should be given to achieving good governance of the RF and its Board**. It is often expected that the establishment of a RF will lead to an increase in road maintenance resources. While this may be one of the positive outcomes, this should not be treated as the ultimate goal of establishing a 2G RF. It is improvement of governance in management of resources which should be considered as the key objective. By improving governance in resource management, resources are used more efficiently and not diverted for political purpose. The maintenance funding constraint will not be resolved if the level of resources has increased but is still used for different purposes than specified in the legal framework. Good governance, in particular transparency and accountability, of the RF and its Board can be considered equivalent to an increase in the level of maintenance funding. This is key for securing sustainability and adequate levels of

[22] Independent Evaluation Group. "Evaluation of Bank Support for Road Funds." 2007. The World Bank. P.18.

additional resources for road maintenance. This can be achieved through, for example, setting up a sound Financial Management system, improving control systems through financial and technical audits and improving reporting mechanisms.

- **A political economy analysis of road maintenance is a prerequisite before considering a financing mechanism such as a Road Fund.** This will guide in understanding the agenda of the many stakeholders and in identifying those who can support or oppose the various characteristics of a 2G RF. This will help assess the feasibility of a Road Fund. Particular attention should be paid in the political economy analysis to road maintenance financing. For example, while some may oppose the use of a fuel levy because of macro-economic principles, it may be found that it is easier to create a fuel levy than to increase a fuel tax. The political economy analysis is the tool to arrive at an agreement on the RF and road financing framework beyond the vested interests of various stakeholders.

- **Where the road agency has good capacity for road management, the RF can concentrate on management of resources and focus more on its role as financial institution.** Thus, road users should be more involved at the level of a road agency that manages road assets, while representatives from other financial institutions (Central Bank, development banks) and Ministry of Finance should be involved in management of the RF to improve and strengthen its FM system and capacity. Putting the RF under the authority of the Ministry of Finance rather than under the sectoral Ministry (e.g., Ministry of Transport or Public Works) may also be considered to increase autonomy vis-à-vis the road sector institutions.

- **The creation of a RF should be considered in parallel with development or strengthening of the road management capacity of an executing road agency** (DOR or PWD). While the present review did not cover this issue in depth, the experience of RFs in other regions of the world shows that successful performance of the RF (or specifically full disbursement of allocated resources for maintenance works) depends much on the capacity of the executing road agency. This issue should not be ignored but receive equal attention along with the establishment of a RF because the success and performance of the overall road maintenance framework requires that both the RF and road agency have adequate and strong capacity.

- **An accountability mechanism should be developed to ensure that all revenues collected from fuel charges and designated as RF resources in accordance with the relevant legal framework are transferred in full from the central treasury to the RF account.** When the fuel levy cannot be transferred directly to the RF account and must transit through the Government treasury, as this is always the case presently in South Asia and most RFs in other regions, efforts should be made to develop such an accountability mechanism. The following monitoring indicators may be used in the accountability mechanism; the first two are at the MOF/treasury level and the other three at the RF level: (i) projected revenues from fuel levy, (ii) revenues actually collected, (iii) resources budgeted by the RF; and (iv) resources actually disbursed to the RF.

- **The designation of the road institution in charge of monitoring the quality of the road network needs to be clarified.** A RF is first of all an institution with a financing role. It is established with the mandate of providing sustainable funding for maintenance. The mandate of monitoring the quality of the road network has been given to 2G RF in a context of weak road agencies, based mostly on the African experience. In a context of stronger road agencies with efficient road management system, the RF, like any other funding institution, may request the executing road agency to set up a results monitoring framework and/or to be provided with access to the database on condition of roads to assure that its funding has been used for the specified purposes and the condition of the maintained roads has improved as planned.

- **Governments should continue providing budgetary support to road maintenance**. The target of collecting revenues from road user charges at the level adequate to meet the financing needs has proved to be difficult to achieve in most countries. This is likely to become even more difficult in the future because of the increasing price of fuel. Since roads are a public good which have to be provided by the government for its citizens who have an equal right to access economic opportunities and social services, it is acceptable for the governments to contribute as one of the sources for road maintenance financing. With the increasing constraints in mobilizing revenues from road users, the role of RFs will likely become to supplement Government budget but not replace it. This should be clarified in discussing with Governments the creation of RFs as the experience has shown that some governments do not allocate any more resources to road maintenance when a Road Fund is created, based on the assumption that the RF becomes fully responsible for financing road maintenance, even if this assumption is not realistic.

- **User fees should not be used as revenues of a development Road Fund**. The practice of using user fees for development RF violates the principle of equity as well as the fee for service concept of 2G RFs. Since a road is a public good, for equity reason its construction and rehabilitation (as a result of the government's failure to maintain it) should remain the responsibility of the government through the budget system. The exception can be when a road is constructed under PPP and it can be considered a private good. In this case it is macro-economically acceptable for its construction, operation and maintenance to be financed to some extent by road user charges. If all road users are requested to contribute through road user charges to the development of new roads, only some of them will eventually benefit from these newly constructed, improved or rehabilitated roads making financing of road development inequitable. Maintenance is not a public good, it is a service required as a result of using the road by road users (including government, public and private users). That is why the fee-for-service principle of a 2G RF is acceptable in giving road users the responsibility to pay for using the road.

One could argue that the equity concern is irrelevant in a country where the infrastructure deficit is huge and the number of development projects is such that most road users end up benefitting from these projects. This is the case, for example, in India. However, the CRF represents a minor share of resources allocated to development, most of the resources coming from the Government budget. Thus the equity concern remains as the number of development projects financed by the CRF remains relatively small. For Indian States, the CRF is an incentive to allocate resources to road infrastructure and has had a positive impact in this respect. However, this could have been achieved with central government resources without using road user charges. Thus there is no clear evidence that a road development fund financed from road user charges is a solution to allocating more resources to road development.

- **Allocation rules by type of road/network should be defined in the Legal Act** not in additional rules and regulations which are considered secondary after the country's Law. This will prevent a Board from diverting resources to new priorities different from those specified in the Act/Law. The inclusion of a provision on allocation rules by type of road/network in the Legal Act would secure sustainability of financing for each type of network, ensuring that it receives its share of RF resources as specified every year. This is because amendments to a Legal Act are not approved so frequently and easily as supplemental rules and regulations can be revised.

- **Decisions on the allocation of resources by type of work for local road networks should be decentralized and not made by the RF.** Decisions regarding allocation of resources by type of work for local road network should not be made by the Board, which normally do not have any representatives from local communities but a couple of local public officials. These few local officials do not represent all local governments and can easily influence the decision of the Board to receive financing for those works which would satisfy their political needs and interests. This right for allocation by work for local networks should be given to local authorities. However, they should still be reminded that routine maintenance is still a priority and that other types of works can be financed after routine maintenance receives adequate funding.

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Annex 1: Summary of characteristics of RFs in South Asia

Criteria	RBN	RMA	CRF	Assam	Karnataka	Kerala	MP	Rajasthan	UP
Dedicated to routine maintenance	√	√	X	X	X	X	X	X	X
Sound legal framework: Legal Act/Law & additional rules & reg-ns	Legal Act & additional Rules	NHA Code & additional Rules	Legal Act & additional Rules	X	Government Order	Legal Act	Gazette Notification	Legal Act	Gazette Notification
Split of purchaser and provider	√	X	√	√	√	√	√	√	√
Key performance indicators used for M&E	X	X	X	X	X	X	X	X	X
Management Board	√	√	X	√	X	√	√	√	X
Private sector representatives as a majority on Board	X	X	No Board	X	No Board	X	No Board	X	X
Board chaired by non-public sector representative	X	X	No Board	X	No Board	X	No Board	X	X
Use of financial & technical audits as accountability mechanisms	Fin & No Tech Audit	Fin & Tech Audits	Fin & No Tech Audit	Fin & Tech Audits	None	Fin & No Tech Audit	Fin & No Tech Audit	Fin & No Tech Audit	Fin & No Tech Audit
Disclosure of RF's legal documents & annual reports	Legal documents & annual reports	Limited financial data	X	X	X	X	X	X	X
Representatives from truck or other transport association on Board	√	X	No Board	√	No Board	X	No Board	√	√
Consultations with and surveys of road users	Road user survey to take place soon	Consultation with road users to take place soon	X	X	X	X	X	X	X
Funds deposited directly to RF account	Except revenues from fuel levy	√	X	X	X	No info	No info	X	X
Fuel levy as one of RF resources	√	X	√	X	X	X	X	√	No info
Government support as one of RF resources	X	√	X	√	X	X	X	X	No info
Other resources besides fuel levy revenues	√	√	X	X	√	√	√	X	No info
Lapsable or non-lapsable	Lapsable for fuel levies; Non-lapsable for others	Non-lapsable	Non-lapsable	Non-lapsable	Lapsable	Non-lapsable	Non-lapsable	Non-lapsable	Lapsable
Allocation rules by type of work in legal framework	√	√	X	X	√	X	X	X	X
Allocation rules by type of road/network in legal framework	√	√	√	X	√	√	√	X	X

Notes: √ : Characteristics present in RF; X Characteristics not present in RF.

Annex 2: Date of and major reasons for establishment of RFs and missions of RFs in South Asia

Country/State: Name of RF	WB involved in establishment	Year of establishment	Major reasons for establishment	Source/Mission statement
Nepal: Roads Board Nepal (RBN)	Yes	2002	To establish an adequate and stable source of funding for the maintenance of all roads through the user-pay and fee-for-service principle	Legal Act (*official translation in English*): To carry out routine, recurrent, periodic, and emergency repair and maintenance works of the road and to make an arrangement for imposition on and collection of tolls from the motor vehicles plying on the road (*ED's Introduction on the website*: to provide sustainable fund for planned maintenance to keep the roads serviceable with cheaper operation cost and travel comfort)
Pakistan: Road Maintenance Account (RMA)	Yes	2003	To provide an adequate, secure and stable source of funding for maintenance of national highway network	RMA Rules 2003: to ensure a stable and secure source of maintenance and operations funding
India: Central Road Fund (CRF)	No	2000	For development and maintenance of national highways and improvement of safety at railway crossing	Legal Act: for development and maintenance of national highways and improvement of safety at railway crossing
Assam State Road Fund (ASRF)	Yes	2003	To meet huge financial requirements for maintenance and upgrading of existing roads	Consultant's report: A repository of Funds from as many as eleven sources
Karnataka Chief Minister's Rural Road Development Fund (KCMRRDF)[a]	No	2004	To mobilize resources for maintenance and upkeep of rural roads	Government Order: for maintenance and upkeep of rural roads
Kerala State Road Fund (KSRF)	No	2002	To meet the need for establishment of a statuary board and a fund for investments in the transport facility[b] projects	Legal Act: for investments in the transport facility projects in the State
Madhya Pradesh Farmer's Road Fund (MPFRF)[c]	No	2000	To support development, maintenance and upgrading of roads in rural areas	Consultant's report: development of roads including their maintenance and upgradation in the rural areas of the State
Rajasthan State Road Development Fund (RSRDF)	No	2004	To support construction of new roads, widening and strengthening of existing roads and preserving the road assets	Legal Act: for development of state roads
Uttar Pradesh State Road Fund (UPSRF)[d]	No	1998	To support maintenance of roads	Consultant's report: for maintenance, by renewal coat, pavement riding quality improvement (PRQI), including patch work under PR and PRQI, widening and strengthening for all roads except National Highways in the State

a. Original name is Karnataka Chief Minister's Mukhya Mantri Rasthe Abhivridhi Nidhi
b. The Kerala Road Fund Act defines "transport facility" as "depending on the case, a bridge or a tunnel including approach and exit roads thereto or a road or any section of bridge or tunnel or road or a specified combination of all or some of them".
c. The original name is Madhya Pradesh Kishan Sarak Nidhi.
d. The original name is Uttar Pradesh Rajya Sarak Nidhi.

Annex 3: Legal framework for establishment and performance of RFs

Country/ State: Name of RF	Established by Law or Decree	Legal Act				In Law/Act, Decree or Rules/Regulations	
		Administrative autonomy[a]	Financial autonomy[b]	Regular financial and technical auditing	Allocation rules for type of works (details in Annex 6)	Allocation rules for type of road/network (details in Annex 6)	Collecting and channeling mechanisms
Nepal: RBN	Roads Board Act 2002	Low, because Executive Director is appointed by the Board mainly comprising of public sector representatives	1. Yes, because independent from general taxation 2. Independence of FM system is not stipulated in the legal documents, but in reality FM system is independent from DOR/MPPW	1. Financial audit by the Office of Auditor General Nepal 2. No requirement on technical audit	Yes	Allocation rules stipulated in Roads Board Rules 2060BS	Partial description in the Act
Pakistan: RMA	Govt. Of Pakistan Notification of NHA RMA Rules 2003	No, because RAMD is recommended by Executive Board and approved by Federal Government	1. Yes, because independent from general taxation **2.** FM system is based on international accounting standards as accepted in Pakistan for financial reporting and is maintained by the Finance Wing of NHA	NHA RMA Rules 2003: 1. (i) financial audit by chartered accountants appointed as independent auditors by the Executive Board of NHA 2. Technical audit by independent, reputable professional firm or individual hired by Executive Board	NHA RMA Rules 2003; Eligible Expenditures	RMA Rules 2003	RMA Rules 2003, Standard Operating Procedures for RMA, 2002 revised in 2005
India: CRF	The Central Road Fund Act, 2000	No, because Central Government is responsible for administration and management of CRF	No, part of central government's FM system	(i) Financial audit by the Comptroller and Auditor General of India (ii) no requirement on Technical Audit	Yes	CRF Rules, 2007	Collecting mechanism not described in the Act
Assam: ASRF	No Act/Law; because decision was taken by State Cabinet	Low administrative and institutional autonomy, because high level PWD officials and staff constitute the General Body (acting as a RF Board)	(i) No, because dependent on general taxation (ii) yes, because independent FM system	Rules and Regulations: (i) financial audit by chartered accountant or the Auditor (ii) Bylaws and Rules require technical audit	No, because allocation rules are already determined by sources of funding for this RF	No, because allocation rules are already determined by sources of funding for this RF	(i) depending on the source of funding (ii) unclear for fuel levy

a. Administrative and institutional arrangements are independent from the Line Ministry, DOR/PWD; levels of independence are Full, Medium, Low and No
b. Independence from general taxation and independent financial management system

Country/ State: Name of RF	Establis hed by Law or Decree	Legal Act				In Law/Act, Decree or Rules/Regulations	
		Administrative autonomy	**Financial autonomy**	**Regular financial and technical auditing**	**Allocation rules for type of works (details in Annex 6)**	**Allocation rules for type of road/network (details in Annex 6)**	**Collecting and channeling mechanisms**
Karnataka: KCMRRDF	Government Order	No administrative and institutional autonomy because no specific Board	No FM autonomy	No requirements on auditing stipulated in the Order	Yes, in the Government Order	Yes, in the Government Order	Not in the Government Order (it's a budget line)
Kerala: KSRF	The Kerala Road Fund Act, 2001	Not clear on institutional autonomy; No administrative autonomy because Principle Secretary of PWD as Executive Director of RF Board	(i) No, because dependent on general taxation (ii) Incomplete information provided	(i) financial audit by chartered accountants (ii) No requirement on technical audit stipulated	No	No	No complete description on mechanism provided
Madhya Pradesh: MPFRF	Notification 2000	No institutional/administrative autonomy	No FM autonomy	(i) Financial audit as part of Road Development Authority by chartered accountant (ii) No technical audit, but internal audit control	No rule (Incomplete information provided)	Yes, allocation rule for rural network in the Notification	Yes, in the Rules
Rajasthan: RSRDF	Rajasthan State Road Development Fund Act 2004[a]	No institutional autonomy because of high level government staff; No administrative autonomy, because PWD administers	(i) No, because dependent on general taxation (ii) No, because FM system part of PWD's FM system	(i) Financial audit by Comptroller Auditor General; (ii) No requirement on technical audit, but independent quality and monitoring as part of PWD	No	No	In the Notification
Uttar Pradesh: UPSRF	Notification 2000	No information provided	No information provided	(i) Financial audit by Comptroller Auditor General; (ii) No information provided on requirement for technical audit	No information provided	No information provided	No information provided

a. The Act was not provided; all information filled in the next columns has been extracted from the Consultant's report

Annex 4: Composition of Road Fund Boards

Country/State: Name of Road Board	**Size**	**Number of private sector representatives**	**Chairman independent from Government**
Nepal: RBN	13	5	No, chaired by Secretary of Ministry of Physical Planning and Works
Pakistan: NHA Executive Board	9	0	No, Chairman, NHA
India: CRF	No specific Board set up for this RF		
Assam: General Body[a] in the capacity of RF Board	14	2	No, chaired by Chief Minister
Karnataka:[b]	No specific Board set up for this RF		
Kerala: KSRF	10	3[c]	No, chaired by Chief Minister
Madhya Pradesh:	No specific Board set up for this RF		
Rajasthan: RSRDF	11	4	No: Chaired by Minister of Physical Planning and Works Ministry
Uttar Pradesh: UPSRF	19	7	No, chaired by PWD Minister

a. Registered as a Society
b. Rural Road Development Committee at the State level has a mandate to review and monitor maintenance and upgrading of rural roads funder by the Karnataka Chief Minister’s Rural Road Development Road Fund
c. Including representatives of State bank, Infrastructure Development Finance Co. Ltd. (IDFC), and Housing and Urban Development Co. Ltd. (HUDCO)

Annex 5: Entities carrying out administrative work of RF Boards' decisions

Country/State: Name of RF	Operation of administrative work
Nepal: RBN	Board Secretariat composed of an Executive Director and small professional staff
Pakistan: RMA	Road Asset Management Directorate (RAMD) of NHA
India: CRF	No specific entity
Assam: ASRF	PWD
Karnataka: KCMRRDF	PWD and Rural Development and Panchayat Raj Department
Kerala: KSRF	Essentially no administrative work carried out by Executive Committee because it had 9 meeting during 2002-2007 (while the Board had 7 meetings during the same period)
Madhya Pradesh: MPFRF	Rural Road Development Authority
Rajasthan: RSRDF	The PWD serving as Administrative Department and Secretariat for all matters pertaining to the operation of these Rules
Uttar Pradesh: UPSRF	PWD

Annex 6: Key functions of RF Boards in accordance with the respective legal frameworks

Country/State: Name of RF	Regulation of levies/user charges	Definition of rules for allocation of funds	Procurement of works and services funded from RF	Approval of Road Programs	
				Content (list of roads)	Financing
Nepal: RBN	Roads Board Act: to suggest increase in tolls to Government	No	No	Yes ("to approve annual budget and programme of the Board"[a]	
Pakistan: RMA	NHA Code 1999, revised in 2005: RAMD to recommend to the Chairman of the NHA Executive Board adjustments to the level of tolls and other levies being channeled into the RMA	No; the rules for allocation of funds is stipulated in Rule 7, 9 and 10 of the RMA Rules 2003 and explained in the Standard Operating Procedure for RMA 2002, revised in 2005 (Annexure 2) of NHA Code 1999, revised in 2005	No	Annual Maintenance Programs approved by NHA Executive Board	
India: CRF	No specific Board				
Assam: ASRF	No power	No power	No power	Do not approve	Do not approve, only management of funds because everything was determined by sources of funding
Karnataka: KCMRRDF	No specific Board				
Kerala: KSRF	Act: yes, in case of concessions; but limited power in case of levies	No power	No power	No	Yes ("to sanction funds to a government agency or a concessionaire for construction of a transport facility…")
Madhya Pradesh: MPFRF	No specific Board				
Rajasthan: RSRDF	No power	No power	No power	No power	No power
Uttar Pradesh: UPSRF	No power	No power	No power	No power	Propose for financing

Despite the Act providing RBN the authority to allocate RF resources, the government rules state that only a sector ministry, in this case, MPPW, has the authority to spend what is specified in the Red Book – Government of Nepal's budget book.

Annex 7: Allocation rules in RFs (by type of work and type of road/network)

Country/State: Name of RF	Priority areas	
	As the Act stipulates	In Reality
Nepal: RBN	**<u>Roads Board Act:</u>** I. a. For repair and maintenance of road b. For repair and maintenance of district and urban roads on a cost sharing basis as determined by the Board c. For sharing the amount to be borne by His Majesty's Government for a donor financed road repair and maintenance project d. For disbursement on selected road safety project as determined by the Board e. For enforcement of prescribed standards in regard to pay load capacity and per axle load of the motor vehicle f. For research in regards to repair and maintenance of the road g. For administrative expenditure concerning implementation of functions, duties of the Board and management of the fund. Provided that such administrative expenditure shall not exceed for our percent of the total income or estimated total income in each fiscal year II. A balanced amount after allocation for the business as referred to in section (1) *[Authors: section above]*, which shall not exceed 15% of total or total estimated income, may be used to upgrade the existing road or to carry out minor road related activities, as the Board may prescribe based on recommendation of the road related agency III. If the balanced amount in the fund is not to be expended in the Board's business for the time being, the Board may, with prior approval of His Majesty's Government invest in such amounts in debentures or securities issued by His Majesty's Government or Nepal Rastra Bank, as the case may be. **<u>Roads Board Rules:</u>** I. a. Routine, recurrent, periodic, and emergency maintenance of NHs, feeder roads, and for bridges on such roads b. Maintenance of those roads which are not included in the above clause c. Research related to road d. Implementation of the prescribed standards in regards to pay loads and per axle load of unit vehicle e. Road safety f. Rehabilitation and reconstruction of roads g. In case of availability of funds: upgrading of existing roads but with the provision that allocation for such upgrading does not exceed 15% of RBN's total revenue II. a. Minimum 70% of RBN's revenues allocated for works under (a) and (b)and remaining amount for other works III. First priority shall be given to manage the fund for Board's contribution in amount to be incurred by His Majesty's Government according to clause 25, sub-clause 1, section (Ga) of the Roads Board Act *[Authors: see above part I: a-g quoted from Roads Board Act].* However, in case of road rehabilitation and reconstruction with support from any donor agency, in order to contribute in counter part fund incurred by His majesty's Government, and if fund has been allocated according to sub-section 91), clause (f) by the Board; such amount shall be limited to the allocation thus made	**<u>By type of work</u>**: Routine, recurrent, periodic maintenance and rehabilitation, reconstruction and upgrading **<u>By type of road/network:</u>** 70% for Strategic Road Network, which includes NHs and feeder roads and 30% for Local Road Network

Pakistan: RMA	According to the RMA Rules 2003 – Rule 9; Eligible Expenditure: **By type of work:** 1. Routine maintenance 2. Rehabilitation 3. Geometric improvement and highway safety improvement 4. New toll plazas and weigh stations 5. Corridor management **By type of road/network**: National Highways	1. Routine, periodic and emergency maintenance 2. Rehabilitation 3. Geometric improvement and highway safety improvement 4. New toll plazas and weigh stations 5. Corridor management[a] 6. Bridge financing in PSDP and payment of salaries of NHA RAMD employees involved in item 1 of eligible expenditures
India: CRF	**By type of road/network:** a. Development and maintenance of NHs; b. Development of the rural roads; c. Development and maintenance of other State roads including roads on Inter-State and Economic Importance; d. Construction of roads either under or over the railways by means of bridge and erection of safety works at unmanned rail-road crossings; and e. Disbursement in respect of such projects as may be prescribed.	a. The cess amount of Rs. 1.50 is being allocated in the following manner: (i) 50% of the cess on high speed diesel (HSD) oil (of Rs.1.5/liter) for development of rural roads/PMGSY. (ii) 50% of the cess on HSD (of Rs.1.5/liter)and the entire cess collected on petrol (Rs.1.5/liter) are there after allocated as follows. - An amount equal to 57.5% of such sum for the development and maintenance of NHs - An amount equal to 12.5% for construction of road under or over bridges and safety works at unmanned railway crossing; - An amount equal to 30% on development and maintenance of State Roads. Out of this amount, 10% is kept as reserved by the Central government for allocation to states for implementation of state road scheme of inter sate connectivity and economic importance (ISC & EI). b. The remaining cess of Rs. 0.50 per liter (out of the total of Rs. 2.00) is entirely allocated for development and maintenance of NHs
Assam: ASRF	No specific rules because they are already determined by the sources of funding of this RF	
Karnataka: KCMRRDF	**By type of work**: 10% for emergency works and 90% for planned maintenance and upgrading of MDRs and ODRs under PWD and rural roads and village roads under Zilla Panchayat (ZP) **By type of road/network:** 70% of RF's resources to PWD and 30% to ZP (Within 70%: 60% for new works and 40% for committed works)	No data published by RF; data maintained by the State Department of Finance: not clear how much was collected and how much was transferred for RF's purpose
Kerala: KSRF	a. For providing financial assistance to a concessionaire on behalf of a Government agency in respect of a transport facility approved by the Board b. For meeting any development cost c. For defraying the administrative expenses of the Board d. For meeting any expenditure as may be prescribed	Consultants' fees
Madhya Pradesh: MPFRF	**By type of work**: no rule **By type of road/network**: all rural roads	Construction of rural roads
Rajasthan: RSRDF	"The State Government may allocate and disburse such funds as it considers necessary for the implementation of road projects in the State"	RF is being leveraged to take up large / mega State Highways project; no data is published by the Road Fund Board to determine how much is allocated and disbursed
Uttar Pradesh: UPSRF	No rules	Maintenance and widening and strengthening

a. Source: UNESCAP's Report "Road Financing in Pakistan, 2006": http://www.unescap.org/ttdw/common/TIS/AH/files/egm06/financing_pakistan.pdf

Annex 8: Collecting and channeling mechanisms

Country/State: Name of RF	Funds lapsable/ non-lapsable	Fund flow mechanism: As the legal framework stipulates	Fund flow mechanism: In Reality
Nepal: RBN	Lapsable for revenues transferred from the central treasury and non-lapsable for other revenues[a]	**Collecting and channeling mechanism:** "The functions, duties, and power of the Board shall be as follows: …(b) to collect the toll additional charges leviable for the use of roads and recover penalties under this Act... (g) to disburse the toll amount at the prescribed rate to repair and maintenance of such a road from where amount was collected under this Act…."	**Collecting mechanism:** DOR collects tolls and deposits to RBN account; agencies collect other RF's revenues and money deposited to first to MOF **Channeling mechanism:** Funds which are deposited to MOF are released to road agencies on a trimester basis following government procedures. In the first release, 1/3 of the allocated budget is released on the approval of the budget. The two subsequent trimester releases are made by Financial Comptroller General Office (FCGO) based on financial spending performance in the preceding trimester. Before RBN can allocate resources to road agencies for an approved maintenance program, it has to receive authorization from MPPW.
Pakistan: RMA	Non-lapsable	**Collecting mechanism (Rule-3 of the RMA Rules 2003)**: The NHA shall maintain a commercial non-lapsable account in Pakistani scheduled banks designated as Roads Maintenance Account. All revenues from road users accruing to the NHA, from the stipulated sources, net of collection costs, shall be expeditiously transferred into the RMA. The NHA shall also transfer all revenues accruing to it, from time to time, from the stipulated other sources into the RMA.	**Collecting mechanism**: (i) NHA has contracted various collections activities such as tolls, road user charges, axle load charges etc., which are collected and deposited into RMA as stipulated, net of collection costs. (ii) Fines collection for traffic offense by National highway and Motorway Police (NH&MP) which is an independent entity not subservient to the NHA. (iii) Other revenues are managed by the NHA directly (see Annex 8) **Channeling mechanism:** Revenues deposited to the designated Bank account called the RMA

a. Fuel Levy is collected at customs check point and goes to the basket of government revenues. But RBN gets the fund on a trimester basis from the treasury based on the budget allocated by MOF for RBN. Toll is collected by RBN through contractor or by their staff and directly deposited to RBN account in a commercial bank. So, unused toll revenues remain in the account of RBN. Any unspent toll fund can be used by RBN in the next year.

Country/State: Name of RF	Funds lapsable/ non-lapsable	Fund flow mechanism	
		As the legal framework stipulates	**In Reality**
India: CRF	Non-lapsable[a]	Proceeds of the cess levied are credited to the Consolidated Fund of India, and the Central Government may, if Parliament by appropriation made by law in this behalf so provides, credits such proceeds to the Fund from time to time, after deducting the expenses of collection, for being utilized exclusively for the purposes of this Act	**Collecting and channeling mechanisms** The cess collected on petrol and diesel by Oil Companies goes to the Consolidated Fund of India. MOF apprises the Planning Commission about the total accrual under CRF during a financial year. After passing of annual budget, Planning Commission appropriates/allocates the amount to MOSRTH, Ministry of Rural Development (MORD) and Ministry of Railways (MOR) according to the formula laid down in the Act.
Assam: ASRF	Non lapsable	No Act	Whatever money is received by the Road Fund is deposited in State Bank of India as a Savings Bank A/c and does not lapse.
Karnataka: KCMRRDF	Lapsable	No Act	(i) Collected by Finance Department (ii) From Finance Department (Consolidated Fund) to PWD and Rural Development and Panchayat Raj Department (RDPRD) (Budget Line)
Kerala: KSRF	Non-lapsable	Not completely clear on channeling mechanism: deposited in any nationalized or scheduled Bank, State Co-operative Bank or District Co-operative Bank or in such other financial institutions as may be decided by the Board	Incomplete information provided
Madhya Pradesh: MPFRF	Non-lapsable	Not clear: Separate Account of this fund will be kept in Bank.	Mandi cess levied on the produce in the Mandi is collected by the marketing committee of each Mandi and cheque of the accrued amount is sent to the Office of State Agricultural Marketing Board at Bhopal. All such cheques are deposited in P.D. Account operated with the permission of State Govt. (FD) and Accountant General, Bhopal (Under CAG, New Delhi). Funds from this deposit are transferred to MPRRDA and State PWD for development of roads.
Rajasthan: RSRDF	Non-lapsable	Collected by Oil Companies, transferred to Consolidated Fund and then to RF	Collected by Oil Companies, transferred to Consolidated Fund and then to PWD
Uttar Pradesh: UPSRF	Lapsable[b]	Incomplete information provided	(i) Collected by Oil Companies (ii) Deposited to Consolidated Fund

a. The Section 11(5) of the CRF Act states that "the balance to the credit of the Fund in respect of any allocation shall not lapse at the end of the financial year." Although CRF is non lapsable yet the increased allocation to the extent of saving (unspent balance) during the current financial year will have to be got made in the next financial year or future financial years from MOSRTH. The allocation is released by the MOSRTH through their Chief Controller of Accounts, New Delhi.

b. Saving of the Current FY cannot be utilized in the next FY as it lapses on March 31st of the current FY. In the next year fresh allocation including the amount of lapsed budget, under UP Road Fund, has to be transferred from the Finance Department.

Annex 9: Sources of RF's revenues

Country/State: Name of RF	Sources of RF's revenues: As the Act stipulates	Sources of RF's revenues: In Reality
Nepal: RBN	1. Road tolls 2. Fuel levy 3. Vehicle registration charges 4. Vehicle registration charges on vehicles registered abroad and entering Nepal 5. Penalties for non-compliance with the rules under this Act 6. Central government grant 7. Grants or loans from foreign governments and international organizations 8. Other sources	In FY 2004-05: 1. Fuel levy – 52% 2. Road tolls – 7% 3. Vehicle registration charges – 41%
Pakistan: RMA	In accordance with NHA RMA Rules, 2003: 1. Tolls on roads and bridges 2. Road use related fines (e.g., overloading, traffic offence etc.) 3. Axle load charges 4. Supplementary heavy vehicle fee 5. International transit fees and 6. Border fees. NHA shall also transfer all revenues accruing to it, from time to time, from the following other sources into the RMA, namely: 1. Charges for commercial use of right of way; 2. Profits on bank deposits and income on investment of moneys in the Roads Maintenance Account; 3. Annual maintenance grant from the Federal Government; 4. Maintenance funds provided by international donor agencies; 5. Loans secured to finance any maintenance work shortfall; and 6. Endowments and donations for maintenance and road safety from any organization, group or person.	1. Government grant – 22% 2. Toll income – 64 % 3. Police fine collection, etc – 10%[a] 4. Other sources (rental income, sale of tender documents, etc) - 4%
India: CRF	1. Cess on petrol and diesel	As of April 1, 2005, cess in the amount of Rs.2 on petrol and diesel
Assam: ASRF	11 different programs, including PMGSY, grants released by the State Government grants for maintenance of roads under major head 3054 (maintenance) of budgetary allocation, cess on diesel and petrol, toll on city roads, others (not specified in the Consultant's report)	1. Only grants released under Major head 3054 of the State Budget 2. No levying cess on diesel and petrol, no toll on city roads
Karnataka: KCMRRDF	1. Sales tax 2. Fee for conversion of agricultural land into non-agricultural land 3. Toll on bridges 4. Appointment of 50% of the proceeds of APMC market fee for development and transportation fee on forest produce 5. Appointment of 50% of infrastructure development cess from sales tax, motor vehicle tax, stamps and registration and state excise	All sources prescribed in the Government Order according to the consultant's report

a. Based on the average of financial data for 2002-2005: http://www.nha.gov.pk/Downloads/RFPs.asp

Country/State: Name of RF	Sources of RF's revenues	
	As the Act stipulates	**In Reality**
Kerala: KSRF	1. All money received from the Central Road Fund 2. the contribution made by the Government under sub-section (3) *[an amount equal to 10% of the tax collected under the provisions of the Kerala Motor Vehicles Taxation Act]* 3. All fees, fines, and other amount collected by Government as per the provisions of the Kerala Highway Protection Act, 1999 (6 of 2000) 4. All payments made by concessionaire as per the concession agreement 5. All amount standing to the credit of the Bridges Fund 6. The user fees collected by the Government agency or the statuary body under this Act 7. Grants or loans or advances made by the Government of India or any institution 8. Grants or loans or advances made by the Government 9. All returns on investments made by the Board directly or through a Government agency or statutory body 10. Any amount borrowed by the Board 11. any other amount authorized for credit to the Fund under the provisions of this Act or rules made thereunder or any other law for the time being in force	10% of motor vehicle tax
Madhya Pradesh: MPFRF	Incomplete information on the legal framework	Cess 2% of agricultural produce sale: 85% of 50% allocated to RF
Rajasthan: RSRDF	a. sales tax, taxes on trade, etc. b. other receipts c. cess on diesel and petrol	Cess only
Uttar Pradesh: UPSRF	No information on legal framework has been provided	No information has been provided