

**THE FEDERAL DEMOCRATIC REPUBLIC OF
ETHIOPIA**

Office of the Road Fund Administration

**Road Fund in Ethiopia:
From Inception to Realization**

(Mid - Term Review Meeting of RSDP)

(6-7 February, 2001)

**January, 2001
Addis Ababa
Ethiopia**

PREFACE

The paper discusses, in its six sections, the core areas that should be dealt in relation to Road Fund in Ethiopia. The first part is devoted to discussion and disclosure of conceptual matters in general. Some points are raised as a prelude to proceed at ease to the body of the paper, and others are merely views to deliver key aspects that need to be addressed prior to dwelling into local situation. Background information on Road and Road Transport is provided to inform the reader about the general situation of the industry before proceeding to next sections. Separate qualitative presentation is made about the current situation of Road Fund in Ethiopia with shortly verified justification. The fourth section is the core part of the paper that covers more detailed analytical understanding of current situation and on-going activities. Presentation is made in the form of SWOT analysis (strengths, weaknesses, opportunities, and threats). Some of the bullet points lead to summary and recommendation section of the paper. Finally, basic quantitative description of the Road Fund performance in Ethiopia is presented in section six of the paper.

Road Fund In Ethiopia: From inception to Realization

1 GENERAL BACKGROUND

- 1.1 Overall transport cost minimization is commonly stated as an economic objective of any transport development program of a country. Total transport cost includes the costs of Road construction and maintenance, vehicle-operating cost, and any other external or third party costs of transport that are associated to the society at large and the environment. Road maintenance cost, as part of total transport cost, is one major determining factor for the upkeeping of Road asset value of a country. Therefore, designing an appropriate Road maintenance policy and strategy, in general, is a prerequisite for the development of a healthy and dependable Road Traffic environment to a country. However, the absence of integrated maintenance intervention measure and lack of comprehensive approach, in Ethiopia, leads to the accumulation of a huge backlog of Road maintenance work. Besides to adverse effect of higher vehicle operating cost, the maintenance costs are escalating unbearably. To overcome the problem in an integrated way concerned bodies are obliged to look for reform alternative actions to its future improvement. Following the four basic building blocks of the Road Management initiative (RMI), the core areas for reform consideration are the aspects of ownership, management, financing and responsibility on roads. Reform program initiatives, at present, are seen mainly in light of the achievements gained through these factors for consideration and used as focal headings for comprehensive evaluation.
- 1.2 Within the premise of the Road management initiative four building blocks, one of the principal financing issue is to relate road use payments directly to Road provision costs. As a result, the creation of Road funds came into picture with an intention of developing a fee-for-service baseline principle in Road management and financing. In line with this intention and the reform programs outlined in the Road sector development program (RSDP), in Ethiopia, the Road maintenance financing reform program started to embark on actions towards the establishment of Road Fund. It is a dedicated fund for Road maintenance, following the principle of road users will pay the cost of maintenance on the bases of road use and services provided. With this in mind and as remedy to resolve

problems faced by the sector, a new Road financing and management arrangement through Road Fund for effective and efficient works execution is being exercised. This is being realized through the process of establishing Road fund and implementing applicable activities required within the principle as part of the Road Sector development reform program. Basically, it is designed with a vision to developing cost effective and dependable Transport system to the country. Adequate and sustainable financing to Roads at an optimum level with the necessity of using it efficiently and effectively is the core area of interest that is being desired for achievement. This is to be realized through the enactment of appropriate maintenance management and financing intervention strategy.

- 1.3 Disseminating the idea of road financing and selling conceptual issues, on a step by step move bases through fee-for-service baseline principle, requires considerable effort to be laid of to convince the different stakeholder groups. The process followed, as it is newly introduced concept, required an intensive lobbying and in-depth awareness building measures to the different target groups at different levels to its effective applicability and acceptability. In fact, success in Road Fund initiative measures in future will highly be used as a trust base for the enrichment of the willingness to pay for road use. This paves way for the achievement of gradual move towards full cost recovery, which is the backbone of the principle. No doubt that in such bad condition of Roads, the Road users would more than be willing to pay for costs of maintenance provided that the proceeds will directly be used for Road maintenance with acceptable effectiveness and efficiency. This in turn will enable beneficiary groups to save costs that are due to be incurred through higher operating costs or through higher transport service charges or as a result of payment to high cost consumable goods. The concrete facts reaffirm, as proved on research and study results, that an expense incurred by the road user as proceeds to Road maintenance will bring about a benefit that is more than double compared to additionally incurred cost for transport.

2. ROAD NETWORK AND ROAD TRANSPORT

- 2.1 A road system mainly involves the Road infrastructure, vehicles with passengers and goods to be transported and pedestrians using the road. Bridging road to road transport and vice-versa, in an interrelated comprehensive way, is an integral part of reform programs on management and financing of roads. There is an inseparable tie-up between actors of the system that can have positive or negative effect directly or indirectly. For instance, the bad condition of Roads have a direct bearing on vehicle operating costs and traffic accidents adversely affect road users and the society at large. These effects could be reduced, somehow to a certain degree, by having an appropriate Road maintenance intervention scheme and Road safety initiated measures. Giving high priority to maintenance and safety initiatives, as a first step measure, can save the Road asset from further damage and lose of human life due to traffic accidents. Moreover, considerable cost saving could be made from reduced vehicle operating costs and hence would enable to have minimized total transport cost to the economy of a country.
- 2.2 The total length of classified Roads in Ethiopia is about 28,000 km. with an estimated 30,000 km. of unclassified roads; which includes tracks, trails and paths. Road network crude density measures in Ethiopia as indicated on the RSDP is about 4.3 km. of Roads per 10,000 population and 23 km per 1000 square kilometer. The Road density levels in Ethiopia are one of the lowest in the world, which is by far below African average standards. Besides, the existing condition of Roads in bad shape is estimated to be not less than 80%; i.e. only about 20% are in good condition (RSDPI). This indicates the presence of a huge backlog of Road maintenance work, which was left undone in the past requiring huge expenditure for major rehabilitation and re-construction works. As a result of deferment of maintenance works, besides to increased vehicle-operating costs, Road maintenance costs are escalating to the extent of unaffordable level to recover costs from payments from road users. The preferred strategic approach to Road financing, according to the maintenance action plan (MAP) is to start action on partial cost recovery base targeting on routine maintenance cost recovery and to proceed to heavy maintenance cost recovery. In due course of time, the rehabilitation and re-constructions cost coverage is expected to come from Government budget and donor financing.

- 2.3 Gradual growth in cost recovery for Road maintenance is a stated approach as described on the maintenance action plan, which is a strategy document to be followed over the program period of RSDP. It is understood that deferment of road maintenance work leads to higher costs to the road user in addition to its effect on the loss of the limited resource outlay to preserve the Road network asset of the country. Therefore, there arise an increasing concern on the side of Road users and stakeholder groups, for the expedient on Road maintenance works in such a way that road use payments are used efficiently and effectively by Road agencies. On the other hand, the request may provoke the system to look for measures to fulfill the ultimate target of responsiveness to the road use payee group. This will enable to laying the ground for the creation of an effective Road Fund working environment that will raise the willingness to pay for road use in future.
- 2.4 Road user charges in place are not realistically reflecting the true cost of road use and provision costs nor are set at a level that will enable to recover the full cost of maintenance. In spite of that, full cost recovery of Road infrastructure is neither unaffordable from direct user point of view nor is bearable when seen in the context of a country like Ethiopia. In addition to that the backlog clearance cost for Road maintenance work is very high. The complexity is compounded when seen from cost structuring differentiation and its arrangement from the general tax regime point of view. At this point in time, there is a move towards a start on how to bring about the proper channeling and rearrangement of road use payments that reflect somehow market based cost values in principle. For instance, as a first step measure to this effect, mileage based Road use reflective costs on fuel consumption is being collected and deposited into the dedicated Road Fund account. However, there still remains the access and license fee based portions of the fixed cost for the total cost recovery. It is hard to conclude that rates correctly reflect the true cost, which should be reviewed and revised regularly so that it will more realistically be closer.
- 2.5 Road and Road Transport are the backbones and determining factors for growth and development. Bringing an insight of relating the operation management to that of infrastructure management is paramount importance for far-reaching strategic development endeavor, which is well underlined in the scope of the Road Sector Development Program. In this regard, augmenting further development of modern

transport provisional arrangement, emphasis is also centered on rural travel and transport service development. This is in line with designing effective development programs within the springboard of agricultural development lead industrialization based economic reform program of the country.

- 2.6 Operational vehicle population of Ethiopia is estimated to be about 100,000 with a further registered 50,000 that are assumed to be non-operational. Looking to crude density measures, there are about 4 vehicles per km. of Road and about 2 vehicles per thousand of population. Comparing the density measures with reference to Road stock and population size, it is one of the lowest even by standards of African countries. As some study findings indicated, modern transport coverage account only about 20% of the total demand for Transport. This compounded by low volume traffic movement on roads, which is typical of the Road Transport system, is the way ahead that confront the Road Fund as a challenge in its exercise towards full cost recovery. This implies that full cost recovery may turn up to be difficult in real terms since the provision and construction cost of Road infrastructure will be on the high side beyond the traffic movement and the general public affordable capacity. Therefore, it is imperative and a common practice to pass costs of construction, rehabilitation and re-construction to government and other sources, so that the cost burden to the community will be shared. On the start, this may relieve Road funds to concentrate on cost recovery arrangement only to routine and part of periodic maintenance from road use payments and to show a gradual step-by-step growth towards full cost recovery.

3 ROAD FUND IN ETHIOPIA

- 3.1 Prior to proceeding to the actual operations of Road Fund in Ethiopia, a number of pre-establishment preparatory measures were taking place. For instance, the awareness building process to promote the essence and concepts of Road Fund took place at discussion forums and workshops. These were held at different levels for the different stakeholder target groups. This was made on one hand both to disseminate the subject matter of Road Fund, and on the other in the course of action to convince decision makers to give it legal base in its formation. Stakeholders' response towards the establishment of Road Fund, on the first instance, was favorably encouraging by being on the positive side. Their view was reflected with conditioned request to give guarantee on use of the money to the intended purpose of Road maintenance. Promotional work is based on Road maintenance initiative conceptual issues, leading them to give full support for the establishment of Road Fund. This was clearly reflected on resolutions passed on a series of meetings and workshops concluded with expression of interest in full support of the formation process. The concern they have on something has to be done to arrest the worsening situation of roads mainly emanating from the frustrating feel they have on existing bad road condition.

- 3.2 The workshop on the Management and Financing of Roads in Ethiopia was one of the main conferences held to the effect of selling the idea. Proceedings of the workshop succeeded in terms of topical issue coverage and attraction of a large variety of stakeholder groups. Papers presented were delivered with purpose targeting on the four basic building blocks of RMI: Ownership, Management, Financing and Responsibility on Roads. Deliberation of the meeting winded by endorsing the need for an effective re-organizational reform action to be taken and endorsement of program implementation to establish the Road Fund. Stakeholders' view, inclusive of the private sector, and statements of this workshop enabled to lay the ground for the next phase actions by giving full support to the effect of Road Fund establishment. Without which, besides to loss of the resolution points, its realization would have been doubtful. This could have a disabling effect that may leave future moves in vain and the envisaged progress without vision on road users' interest.

- 3.3 One of the main factors to lay the ground for Road Fund effectiveness is the attention on the type and legal base formation and arrangement given to its autonomous operation. In this regard, the draft proclamation for the establishment of Ethiopian Road Fund, undergone through a number of step measures with debates and discussions taking place from the technical working group level upto parliament. In fact prior to endorsement by parliament, a public hearing was held to gather the general public view and comments were forwarded. This allowed the working group to incorporate comments and make timely amendments on the draft proclamation before its issuance. Gaining full public support gave the momentum on the move for the issuance of the proclamation to establish the Road Fund, which was issued on March/97 by parliament. The proclamation, which may be cited as the "Road Fund Establishment proclamation No. 66/1997", has 18 sections with relevant articles having pertinent issues. The articles include objectives, source & collection of fund, disbursement procedure, clearly defined management board and the Road Fund office powers and duties, auditing and relevant articles to meet the objective of Road Fund.
- 3.4 One peculiar feature of the Ethiopian Road Fund, prior to its formation process, was the measure taken to give it financial power on the start of its operation. By a special directive of the Council, pre-determined proceeds on the rated Fuel levy amount was deposited to the Road Fund special account early on since September/96. This was made with an intention of giving financial strength and to give chance for maturation of the money in the special account so that non-sustenance will not be a fear during system transformation; i.e. from MOF road maintenance budgeting system arrangement to Road Fund maintenance financing. This further proves the commitment of the government towards establishing a strong Road Fund free from fear of non-sustenance and in-stability on the flow of fund on the start of its business.
- 3.5 Currently the Road Fund board is composed of Federal, Regional and private sector members having equal voting power with a two year ex-office round term bases. Membership to the board is either by appointment or election from the public or private sectors respectively. As clearly stated on articles of the proclamation, the composition and size of the board is to be fixed by the government. Regular board meetings are taking

place at fixed intervals on quarterly bases, unless and otherwise there is a need to call for an extra-ordinary meeting. The existing representation of the board is as follows:

- Federal Government representatives:
 - 1 Minister acting as a chairperson
 - 3 Vice Ministers acting as members
 - 2 General Managers acting as member and secretary

- Regional Governments:
 - 6 Regional government presidents acting as member
(Includes the president of Addis Ababa)

- Private Commercial Transport owners representatives acting as members:
 - 2 from dry cargo transport owners
 - 1 from liquid cargo transport owner
 - 1 from passenger transport owner

This type of Board arrangement is not common in other sector offices and its typical feature is the involvement of private sector with a mix of Federal and regional government's representation. The Road fund operates in an off-budget principle line of work and, as differed from traditional budget review and approval steps, the board is empowered to act on budget review matters as well as approval of programs. An immediate forwarding of the program document to the Prime Minister office follows for notification and follow-up purposes. The full management power of the fund, as clearly stated on the proclamation article, is the responsibility given to the Road Fund board. In addition, the board is empowered to set its own internal administrative and financial disbursement directive and procedures. Not to open a loophole for the drain of road fund monies, the Road Fund office overhead operating budget is generated from government budget through the MOF.

- 3.6 The day-to-day activity of the fund is administered by a small secretariat office, which operates as a legal entity as determined by articles of the proclamation. Powers and duties as well as responsibilities of the board and the office are clearly stated and demarcated onto the proclamation. The board mainly deals on policy matters, program review, budget

approval, performance report evaluation and budget allocation agenda points. Board discussion and decision is basically referring to technical reports of the office with due reference to performance reports of Road agencies. It is a normal practice for reports to be accompanied by physical and financial performance of Road agencies. The office, in general, is in charge of follow-up actions on day-to-day bases for routine matters to effect the implementation of the Board decisions and directives. The office liase with beneficiary Road agencies regularly with regard to physical and financial performance reports. This will be followed by follow-up action on implementation of set programs and extend support to resolve problems that are found to be obstacles on progress of work.

- 3.7 Stated sources of road Fund revenue, as per to the proclamation, are Government budget, Fuel levy, Axle weight based vehicle license renewal fee, overloading fines and any other Road Tariff as may be fixed and approved by necessity. As a kick of step of revenue collection, fuel levies on a pre-determined rates on petrol and diesel, is effectively collected since September/96. Fuel levy rates at which collection is made are 9.5 cents/liter of gasoline and 8.0 cents/liter for diesel. The proclamation (66/97) in its article states that fuel based revenue to Road Fund shall be collected by Ethiopian Petroleum Enterprise and directly deposited to the specially maintained central account of Road Fund. Topping up fuel levy proceeds to road fund, with similar arrangement on transfer of payments, sales and municipality Taxes on petroleum products are also deposited to Road Fund account. This replaces, as a proxy, the expected government budget to be deposited to Road Fund as subsidy to cover the gap between need based maintenance expenditure to that of availed Road Fund money. Currently the level of sales tax rates are 36 cents/litre of gasoline and 19 cents/litre of diesel. This accounts about 65% total Road Fund revenue and varies with pump price revision of the MOT made on quarterly bases.
- 3.8 Municipality tax which is fixed to be 2 cents/liter is also re-channeled to Road Fund, which was formerly going to municipal development programs mainly as proceed for Road maintenance works. This is in conformity with Road Fund responsibility of financing selected municipal Road maintenance works. The other envisaged sources of revenue have not yet been started to be collected, due to the fact that rates should be determined on a comprehensive study base recommendation; which is being under further review. Fuel products levy and tax rated collection arrangement is preferred as a result of

its ease of methodology and simplistic nature. Fuel based payments, besides taking significant share and preference for road use collection, have direct reflective nature to the incurred road use costs to be collected from road users. However, as the Road maintenance expenditure is expected to grow in future, the rates should realistically reflect the true cost of road use payments from users. This requires regular review and updating exercise, as an important task area for further study investigation that is ahead of Ethiopian Road Fund.

- 3.9 Proportional distribution of allocated fund is based on study recommendations of the maintenance action plan of the RSDP and as per to following endorsement by the board. Currently the proportional allocation is in order of 70% for Federal, 20% for Regional and 10% for Municipal roads. Road Fund budget allocation to Road agencies was effected on a partial bases at about the end of the 1990 (1997/98) Ethiopian fiscal year. Transfer of payments, as per to allocated budget, was effected directly from Road Fund since the 1991(1998/99) Ethiopian fiscal year with an annual ceiling budget of 200 million. The criteria followed to fix Regional rural roads budget to re-distribute the allocated amount from the ceiling budget is based on the proportional Road stock ratio they have as classified Roads (RR30 & RR50). The ceiling budget for the current 1993 (1999/00) fiscal year is increased by 25% to 250 million birr.
- 3.10 Designated Road agencies receive their annual budget share from Road fund provided that they produce the annual Road maintenance works program for review and following approval by Road Fund board. Redistribution of budget by Road segments, within the sealed ceiling budget, and operational expenses is to be worked out in detail by each Road agency. In this regard, it is the responsibility of the Road agency to prioritize, allocate budget by Road segment or Road safety activity. The plan of action have to be accompanied by detailed physical works program and financial cash flow requirement to each activity. Once the annual physical works program and financial plan is approved, the road fund office effects transfer of payments to the respective agencies. For transfer of payments, the major pre-requisite or requirement, being production of physical and financial performance reports as per to developed format. This is to be followed by an assessment for satisfactory progress and report based performance evaluation within the framework of approved annual program of the Road agency.

- 3.11 Road users demand for Road Fund responsiveness in turn is a factor for consideration since it influences the decision making process of next budget allocation and re-distribution to Road agencies, through which it passes to the Road. In line with road users and the general public interest, it is important to set an equitable and fair allocation criteria to raise the ground for a better willingness to pay in future. Furthermore, this will enhance the promotion of commercial management of Road financing on a fee-for-service principle, keeping in mind the socio-economic responsiveness of Road Fund. Therefore, in order to have fair allocation criteria and methodology, it is imperative to consider and include common influential factors. Among others, Road condition survey results, Traffic volume in terms of both intensity and composition, population densities, Administrative centrality, number of domicile number of registered vehicles in the area, spatial distribution of roads, and socio-economic parametric factors are the main ones identified for consideration. Complexity of the factors under consideration and shortage of reliable database leads to look for alternative indirect approach to set the criteria to be followed for budget re-distribution. The importance of topping up the available information based on the existing reality through subjective judgement should not be undermined. This is to be gained from practical local experience on Road sector, which is given value as input for decision making.
- 3.12 In the context of Ethiopian Road Fund, the base for the budget allocation is the recommendation given on an intensive study result of the maintenance action plan of RSDP. Basing itself on the action plan, the board reviews and approves a more realistically simplified annual working procedure on fund budget allocation and re-distribution criteria for Road agencies; i.e. 70% for federal ERA, 20% for the Regional RRAs and 10% for the selected municipalities. Regional rural road length ratio is used as a base for the proportional re-distribution of the Regional RF budget, which is to account 20% of the total Road fund budget. Municipal Roads are classified into classes of three groups on the bases of Traffic intensity, administrative centrality and other subjective judgement based socio-economic activity factors for consideration. The capital city of Addis Ababa takes alone 50% of the total municipal budget, which is 5% of total RF budget. Group two towns earn double than that of group three towns from the remaining municipal RF budget; which is 50% of municipal and 5% of the total Road fund budget. The Federal ERA takes 70% of the Road Fund budget and then distribute to the ten

districts for allocation by Road segments. Payments to ERA are effected on performance agreement bases as per to agreed maintenance activity unit rate. Performance payment certificates for each month are sent to Road Fund from ERA and the other Road agencies payments are effected based on quarterly cash flow program bases.

- 3.13 For disbursements to be effected, it is a mandatory requirement for the Road agencies to open a recipient separate Road Fund special account maintained only to Road maintenance financing. In line with this, all Road agencies opened a special road fund account, which is recognized by the fund to be the only recipient account from the central Road Fund account. This, on one hand, protects the possible mixing up of other source monies coming in for other side line activities. On the other hand, it enables and eases the Road Fund auditing to take place separately; i.e. independent of other accounts that can be administered by the Road agency. Authorized signatories of the bank account empowered to effect transfer of payments are reported to the office in order, to keep the list on records for reasons related to accountability on road user money and auditing. The type of bank account to be opened by Road agencies enables them to make use of the deposited money on a rolling bases as budget years end up. The left over balance is transferred to the next budget year works execution, which is unlike MOF budget accounts that are non-transferable from budget year to next budget year.

4. SWOT ANALYSIS

The progress of Road Funds from first generation experience to second generation road funds is being realized and exercised as matter of the acceptance of the principles on commercial management of Roads in a number of countries. In this regard, Ethiopian Road Fund requires assessment and analytical evaluation on the progress so far made by looking from the angles of strengths, weaknesses, opportunities and threats. However, it should be noted that, it may be too early to draw firm conclusion from opinion points. As the time spent on Road fund exercise in Ethiopia is too short, as it is one of the youngest road fund in its establishment, and the complexity of the subject wouldn't let to justify some points with sufficient grounds. Generally as conclusive points, in the form of SWOT analysis, are presented on Road Fund activation practical exercise from the short spanned experience in Ethiopia over the past three years.

4.1 Strengths

- 4.1.1 The foundation of Ethiopian Road Fund is laid on grounds of the comprehensive package of recommendations given on Road Sector Development Program (RSDP). Although conceptual matters emanated from the four basic building blocks of Road maintenance initiative, (currently named Road Management initiative) in the context of Ethiopian experience, it can be said that Road Fund is a by-product of RSDP. The integrity and complimentarity of Ethiopian Road Fund to the RSDP is one strong factor point for its effective realization. As part of the package of reform programs within RSDP, augmented by comprehensive approach followed in program execution, the Road Fund establishment gets sufficient towards effecting and hence of the Road financing reform process. Road Fund complimentarity to RSDP, therefore, can be cited as one major strengths giving rise to take advantage for the smooth realization during the pre and post establishment phases of Road Fund.
- 4.1.2 Road Fund board composition and set-up is a factor which determines the creation of an enabling environment for effective Road Fund. The Ethiopian Road fund board, which is large in size, attracted influential stake holder groups coming from both public and private sectors. The dominance of regional representation and accountability of the board

to the Prime Minister is a strength point; in terms of creating an independent and autonomous Road Fund. On the other hand, these indicated the commitment on the side of the government to give management autonomy emanating from the strong desire for success of the Road Fund. This strength is achieved as a result of full acceptance and endorsement of the RSDP pack of activities, as recommended to have autonomous and independent board manage the Road Fund operation at full swing.

4.1.3 With regard to Road Fund revenue, the chance given as maturation period, on earlier collection of proceeds is one other strong point with an oversight of giving financial power to the Road fund on its start. Prior to official establishment of the Road Fund, fuel levy was deposited to the special account so that the starting account was not at a zero balance. These relieves the transitional period fear of the instability on flow of fund to beneficiaries in addition to guaranteeing the sustainability of the fund write from the kick-off. Furthermore, on an interim period review of the fund balance position, the municipality tax and sales tax on fuel products was earmarked by the government to be deposited to the Road Fund account. The fund financial power was further strengthened, besides to government subsidy replacement, by following a simplified approach for transfer of payments to be made direct to RF account on a regular bases from one core point; EPE. This waived the problem of facing irregularity and interruption that could happen on proceeds of Road fund money collection.

4.1.4 Transfer of payments are made only direct to beneficiary specially maintained accounts opened to the purpose of Road Fund approved program financing. The Road fund account is not to be mixed up with other accounts, which deserves citing as a strength point. This creates a sense of accountability to the road users money as it is considered to be a trust fund. The arrangement in addition eases the auditing work to be simplified due to having separate account and easier follow-up on payments effected from the account by the Road agency. According to the financial disbursement procedure, transfer of payments from the central account can only be made to the beneficiary side Road Fund special account in unmixed way. On the beneficiary side, fund source monies are to be managed and administered by accountable officials that are appointed and designated signatories to the Road agency RF accounts.

4.2 Weaknesses

- 4.2.1 Road Fund allocation criteria are mainly based on distribution equity grounds, which are drawn from a general in scope study recommendations. It is recommended that economic rates of return on maintenance would have been preferable for reasons related to prioritization and choice of more feasible financing schedule. In this regard, the allocation criteria used is not yet well developed to that effect, except that of the study based gross budget re-distribution of 70%, 20% and 10 % to Federal, Regional and municipal roads respectively. This implies, in effect, Road segment condition economic return based budget allocation is not yet well exercised. As a weakness point, this leads to the disability of the working system in principle that road use payments will be correlated to allocation in a more direct responsive way.
- 4.2.2 One major practical weak point observed over the last two years is the capacity limitation of Road agencies that they have on manpower, equipment, institutional, logistics and Road maintenance works execution. This is commonly shared by most of the regions and municipalities, as they are unable to consume the allocated fund with effective and efficient performance rating. Despite intensive re-organizational reform programs going on to the sector, the technical and institutional capacity limitations are bottleneck areas hindering effective and efficient Road maintenance works execution. The weakness is being tackled from different angles of extension of technical and financial support, so that capacity limitation could be remedied to bring about capable capacity to Road maintenance works execution.
- 4.2.3 Although sources of revenue to Road Fund, as stated on proclamation 66/97 include axle based vehicle license renewal fee and overloading fines, effective collection started only on fuel charges. As a result of the delay on endorsement of study recommendations and following launch of collection, there is a lag behind on collection of the pre-determined revenue sources. Since rates and levels are not yet fixed for the other two sources, it seems to be one of the weak point areas. Absence of an established system of collection and organizational limitations of the new office are also contributing to the inability of making collection effective right from the start. Although the expected revenue to be generated is estimated to be not more than 20%, it

should be realized that its complex collection process is not as simple as that of fuel product based revenue collection.

- 4.2.4 Absence of established system with developed procedure to undertake technical and financial audit is a weakness point faced at the start of Road fund. This requires the development of relevant guidelines and procedure manuals to be followed by concerned bodies for Technical and Financial performance Audit on works financed by the Road Fund.
- 4.2.5 The primary target of Road Fund is to finance Road maintenance programs, which to some extent also includes financing of Road engineering safety works execution as part of Road safety activity of Road agencies. Apart from Road maintenance financing, by vested power of Road Fund objectives, Road safety program financing is not well underway as envisaged nor is not well comprehensively programmed for financing. Therefore, there is a critical need to look into integrated program development and financing arrangement to Road safety activities from the Road Fund.

4.3 Opportunities

- 4.3.1 Community participation is one potential source for further development in a country where resources are not in abundance. To mobilize resource, through rural development programs on Transport and Travel for the needy areas, there seem to be a bright opportunity and potential for future development. This indirectly means that there is an opportunity for further intensification of Road Fund activities on community based support programs, be it by establishing community Road Funds or extending support from existing Road Fund to community initiated work programs. It is well addressed by RTTP country program and requires working hand in hand for its success in the foreseeable future. This may extend to bringing public participation on maintenance works and the creation of sense of ownership on low volume access roads.
- 4.3.2 Managing roads like any other business is the most advocated line of thought that is being exercised in Road sector reform programs. The new generations of Road Funds are following commercial principles of fee-for-service approach and promoted to steps of safe and fast return investment venture using Road Fund monies. In this regard, liquid money is invested on profitable rewarding areas to raise financial capacity of the

fund. This gave dual advantage in terms of accelerating fiscal efficiency of the country and contributing to road use charge reduction. Besides, it is a noble compromise idea between the critiques on earmarking inefficiency to the fiscal policy to that of dedicated Road financing from Road Fund as maintained between the old and new arrangements respectively. With this in mind, the Ethiopian Road Fund started to participate on purchase of Government Treasury bills, which is one step forward in that angle. Further to that, there is an opportunity for considering investment areas safer than others without affecting the ongoing Road financing programs.

4.3.3 Road Fund, normally on the start, is mainly focusing on giving high priority to Road maintenance. The step-by-step growth of the available Road fund money would let and enable the progress from routine and periodic maintenance financing to rehabilitation and re-construction works financing. Once the costs are equated to the available income-generating source it will then proceed to costly works such as rehabilitation and re-construction on a phase by- phase bases. Equating revenue to level of expenditure in this regard, is the determining factor for its pace of faster or slower progress. What matters a lot is the past performance on use of Road Fund money effectively is a base to raise the willingness to pay for road use, which comes as a result of being convinced on it in practical terms.

4.3.4 Provided that the future progress of Road Fund would give a trust base for road users and stakeholder payee groups, then there will be chances for attracting other potential sources of revenue. Access fees related to Transit charges, customs duty, and other road tariffs as well as the introduction of Road toll payments will be dependable potential sources in future. The opportunity in this regard is a function of the good performance of Road Fund to the best of the principle and satisfaction of the public in general and road users in particular. Opportunities may glimmer, unless and otherwise, Road Funds are found to be Transparent to the general public about the performance and anticipated plans of action in future endeavor.

4.4 Threats

- 4.4.1 Road condition survey databases and up-to-date information is an important input for Road Fund decision making process especially on budget re-distribution and priority setting. Absence of reliable database is a threat on decision making process of Road Funds both at central and Road agency levels. Since allocation and prioritization is made based on available data source, there is a critical need for having Road condition survey result and reliable information on road stock. In the short run, indirect source information bases could be used alternatively, but may not be realistic unless supplemented by direct purpose made and updated Road condition survey information.
- 4.4.2 Maintenance backlog clearance demands a huge cost that can not be afforded from existing road use payment collection, as has been observed from the status of the available source of fund. Charging road users for the past is not feasible besides to being unaffordable unless subsidized from other sources. Until such time comes, that further deterioration of Roads will be arrested and reach to improved level, the application of the fee-for-service principle approach would be partial in practical terms. Generally, there is a short fall of available resource potential to that of total expenditure requirement for backlog clearance, which remains to be a threat at least on the short run.
- 4.4.3 The level of Road maintenance execution capacity and experience Road agencies gathered, so far in discharging the responsibility given to them, is very highly variable. A hand on experience variability is significant especially between ERA and the Regions. Even within the Regions there is also a wide gap in terms of accumulated experience, capacity (equipment and manpower) and level of awareness on how to exploit Road Fund potentials. In case of municipalities, who are mainly incharge of town development efforts, Road maintenance is given least priority as an activity compared to emphasis given to other efforts for town development. Variability on Road agencies positions is a threat for not having equal ground for progress of Road maintenance works and hence effective performance base consumption of the availed Road fund budget.

5. SUMMARY AND RECOMMENDATION

5.1 Summary

In view of past experience in Road maintenance management and financing, in Ethiopia, a number of encouraging reform measures have already been taking place or are going well underway. In the course of action, to tackle persistent problems of the sector, the reform program actions need further intensification to achieve better results of the RSDP. In effect there is a growing awareness on maintenance benefits through the application of commercial management principle. Furthermore, comprehensive application of the four basic building blocks of RMI brings about fruitful results leading to desired goals and objectives.

The concerted efforts so far laid to establish Ethiopian Road Fund has to be overviewed in light of the underlying factors for assessment and evaluation. Although the time spent in exercising the road fund is too short to draw firm conclusion, the need for strengthening good practice achievement and improvement measures on weak points will be important. However, it should be noted that some points may need further investigation and justification based on appropriate quantitative analysis to draw firm conclusion. Until such time, qualitative assessment is made to give base for discussion to mid-term review meeting of RSDP, as exercised in practice of Ethiopian Road Fund.

5.2 Recommendations

The following points, to bring about much better performance of the Road Fund, may be worth mentioning as conclusive recommendations for consideration.

- 5.2.1 For effective and efficient use of road user monies in a responsive way, it is imperative to put value for money by evaluating the performance of executing bodies. This requires effective control and monitoring exercise on technical and financial aspects of road fund money usage. To this effect, there is a need

to strengthen the financial and technical audit unit of the road fund that may require external assistance to develop appropriate systems, guidelines and manuals.

5.2.2 For a better maintenance works execution there is a critical need of having capacity building program to the industry in general and specifically to public/private sector maintenance units. This is especially meant to replace old equipments and raise performance capacity of road agencies. Training and institutional strengthening support programs are also required for effective maintenance program execution.

5.2.3 Charge levels of road fund has to be regularly reviewed so that Road use payments closely reflect the true cost of Road provision. It is necessary to review cost and expenditure levels with due reference to recommendations of on-going studies, on axle load management, transport regulation and road safety in an interrelated way.

5.2.4 Performance evaluation has to be made based on primary and secondary database. To this effect, regular road condition survey works have to be made primarily. The results, as an input and feed back to concerned bodies, will enable to clearly evaluate performance efficiency and effectiveness of program execution.

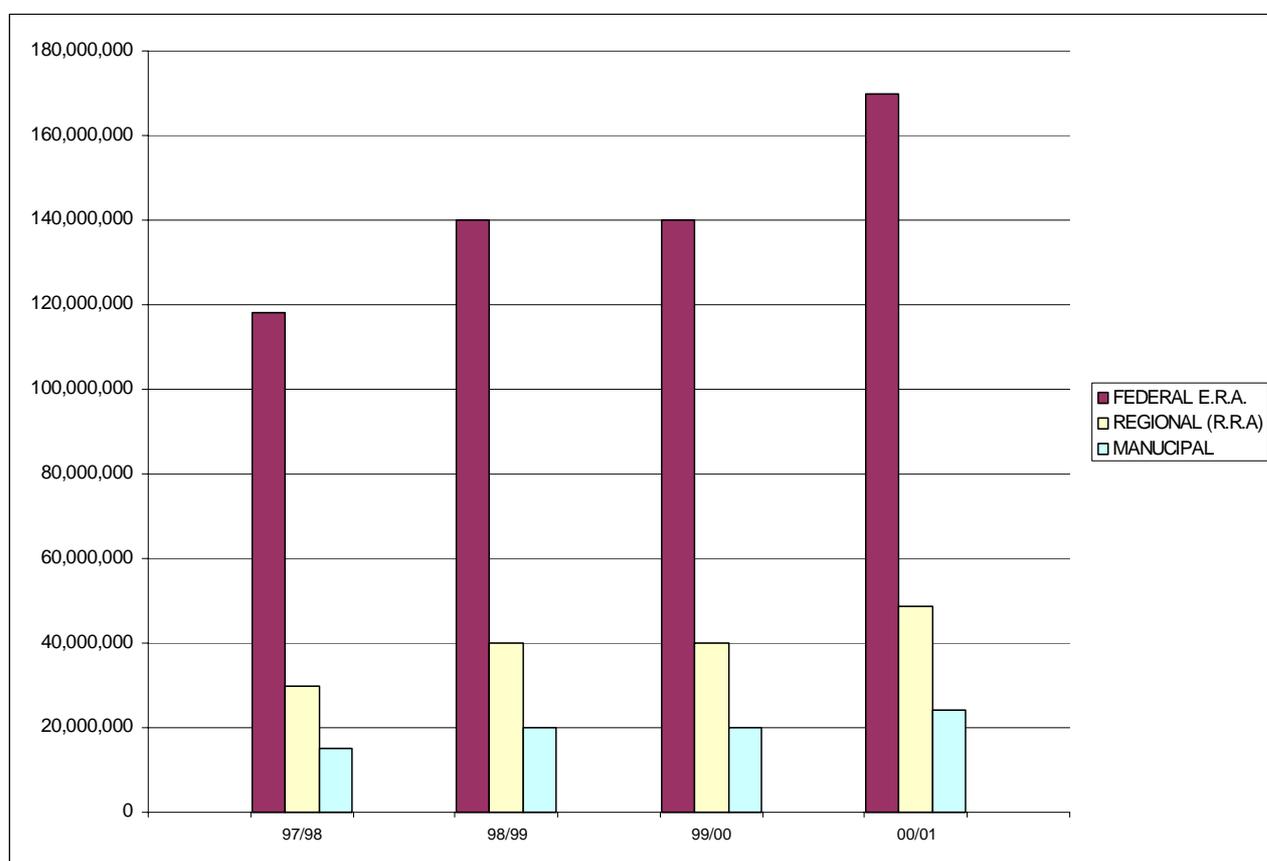
5.2.5 Regular review of findings and new initiatives on Road Funds should be discussed at a common forum to give base in its success. Furthermore, relating local experience to international findings and gauging through common monitoring indicators is a useful tool for progress evaluation. To this effect, the development of standard monitoring indicators to assess the road fund in sector performance would highly be vital and useful.

As conclusive remark point of this paper, the achievements so far gained are encouraging and are indicative of further work awaiting ahead of Ethiopian Road Fund. The Road Fund, to be effective, requires clear vision with commitment of all parties involved. It should be realised that the concept is new and at times difficult to understand and implement it on the right perspective. Therefore, there are a number of points that are open for controversial argumentation, which is unavoidable but desirable for the development of applicable strategy. As stakeholders' view towards Road fund is variable, as it should be the case from one point to other, conclusions drawn from such RSDP mid-term review meeting would highly be valuable source for future consideration.

6. QUANTITATIVE DESCRIPTION OF ROAD FUND PERFORMANCES

6.1 ROAD FUND ALLOCATED BUDGET (BIRR)

Fiscal Year	TOTAL	FEDERAL E.R.A.	REGIONAL (R.R.A)	MANUCIPAL	ROAD SAFETY
97/98	162,999,000	117,999,000	30,000,000	15,000,000	
98/99	200,000,000	140,000,000	40,000,000	20,000,000	
99/00	200,000,000	140,000,000	40,000,000	20,000,000	
00/01	250,000,000	169,750,000	48,500,000	24,250,000	7,500,000

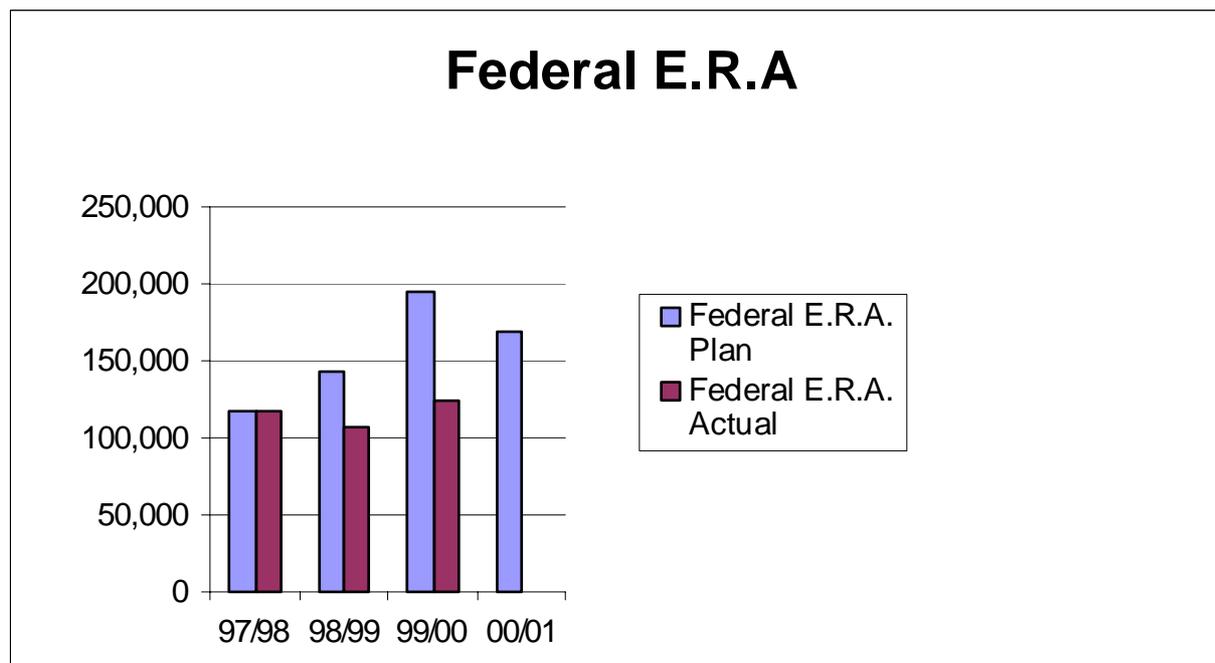
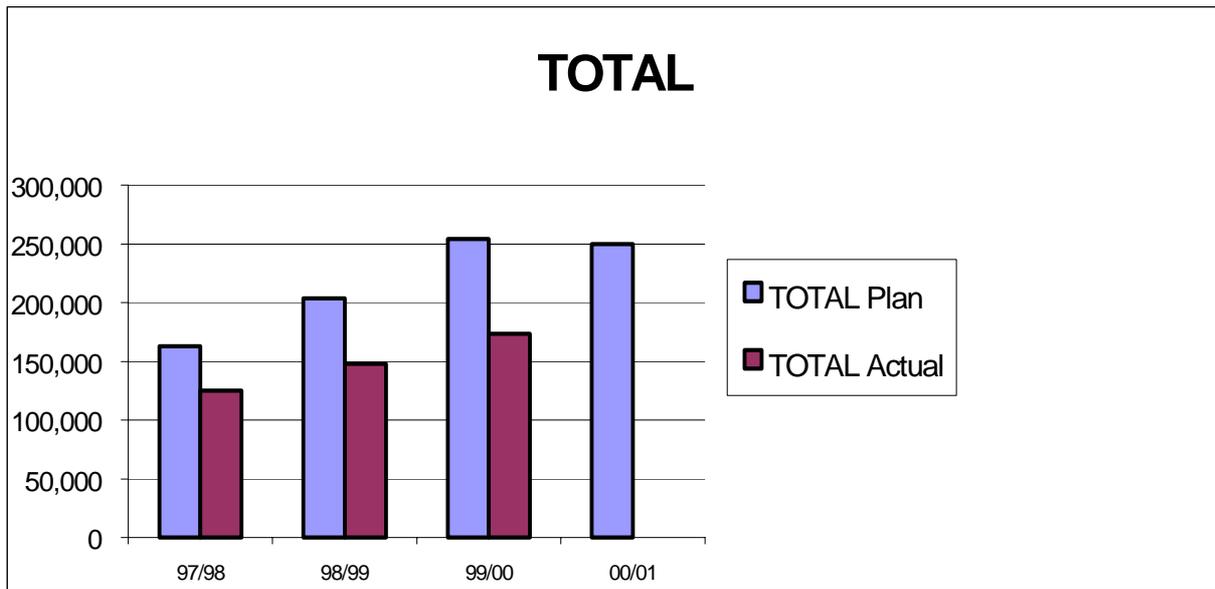


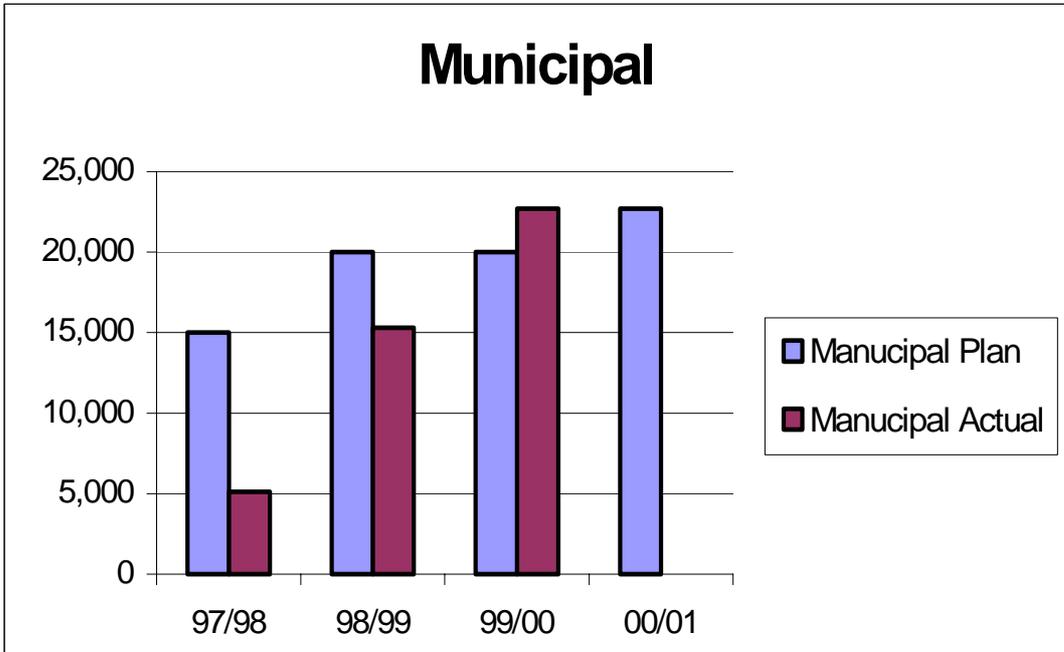
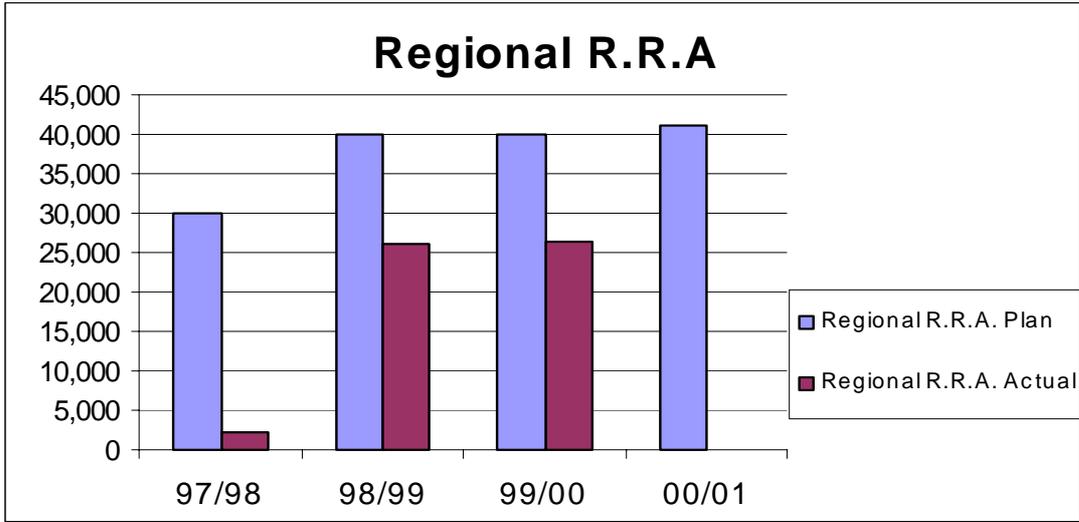
- Road Safety budget earmarked to be 3% of total Road Fund budget as of this Fiscal year.

6.2 ROAD MAINTENANCE FINANCING PLAN AND ACTUAL (DISBURSEMENTS)

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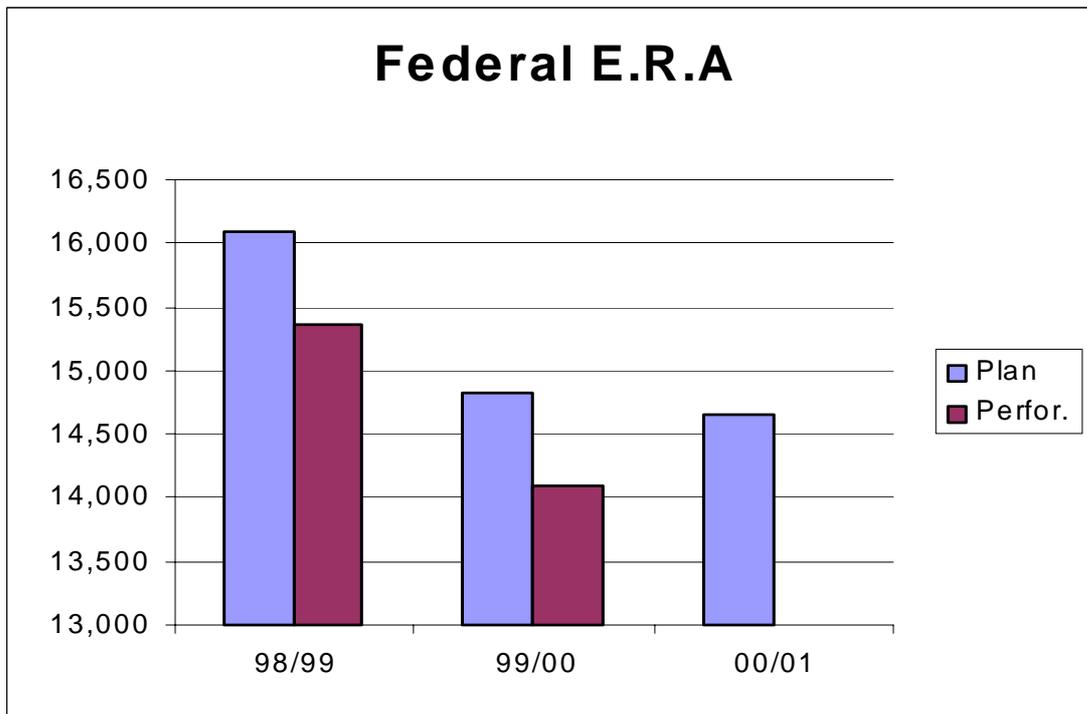
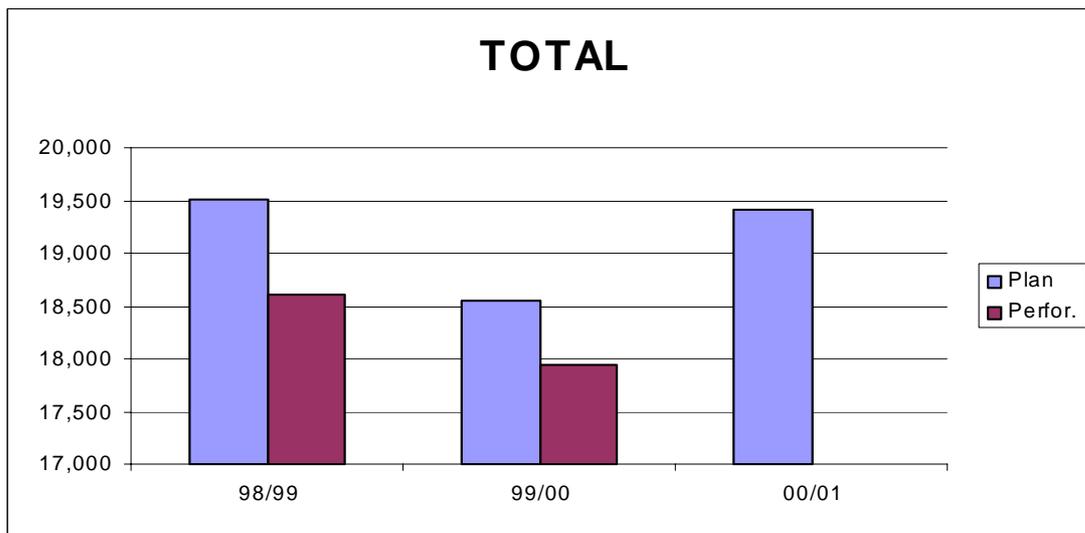
Fiscal Year	TOTAL			Federal E.R.A.			Regional R.R.A.			Municipal			Safety plan
	Plan	Actual	%	Plan	Actual	%	Plan	Actual	%	Plan	Actual	%	
97/98	162958	125331	77	117957	117936	100	30000	2285	8	15000	5110	34	
98/99	203532	148196	73	143532	106807	74	40000	26079	65	20000	15309	77	
99/00	254240	173741	68	194240	124700	64	40000	26352	66	20000	22688	113	
00/01	250000		-	169750			40982			22700			7500



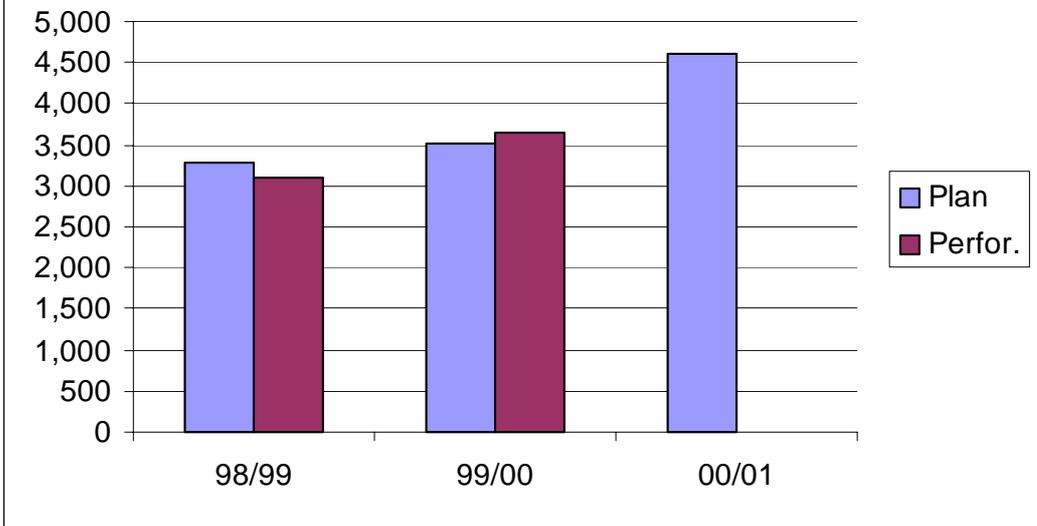


6.3 PHYSICAL PERFORMANCE OF ROAD MAINTENANCE (KM.)

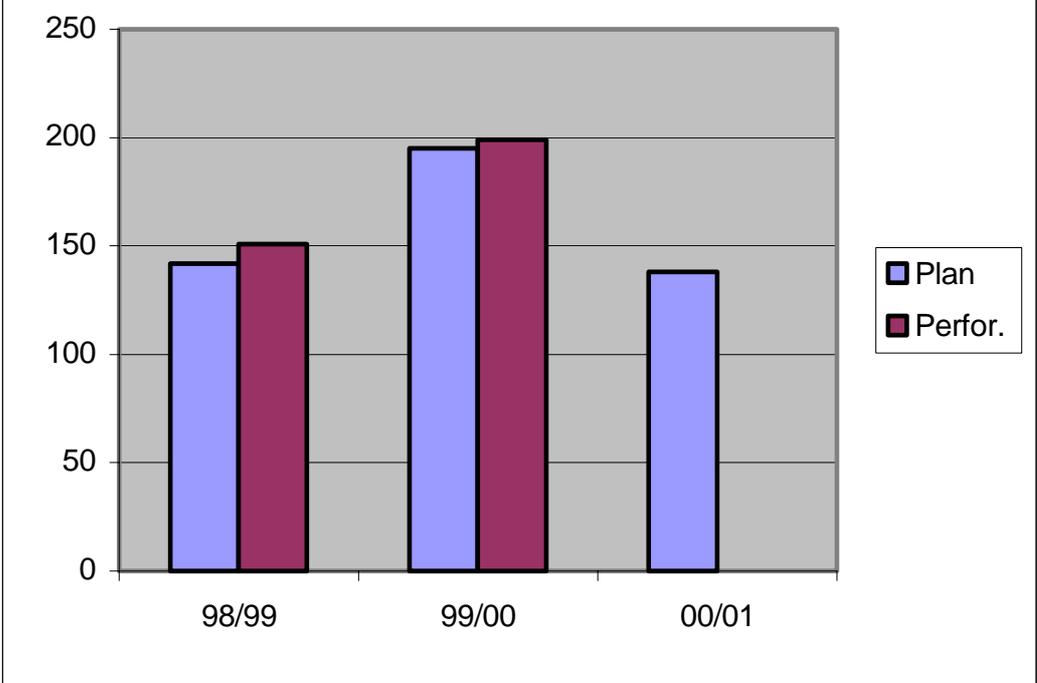
Fiscal Year	TOTAL			Federal E.R.A.			Regional R.R.A.			Municipal		
	Plan	Performance	%	Plan	Performance	%	Plan	Performance	%	Plan	Performance	%
98/99	19516	18610	95	16088	15353	95	3285	3105	95	142	151	106
99/00	18541	17946	97	14820	14097	95	3526	3650	104	195	199	102
00/01	19418			14660			4620			138		



Regional R.R.A

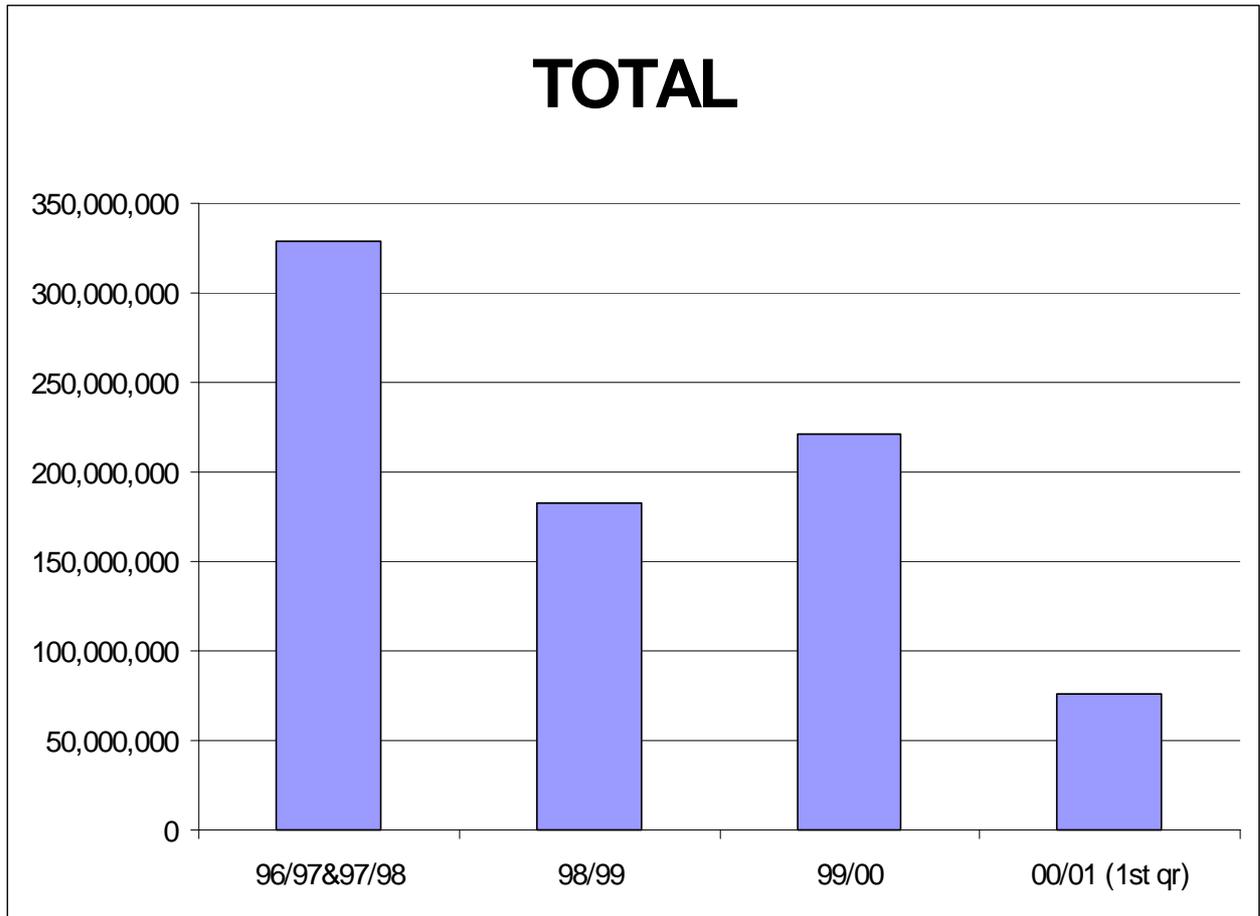


Municipal



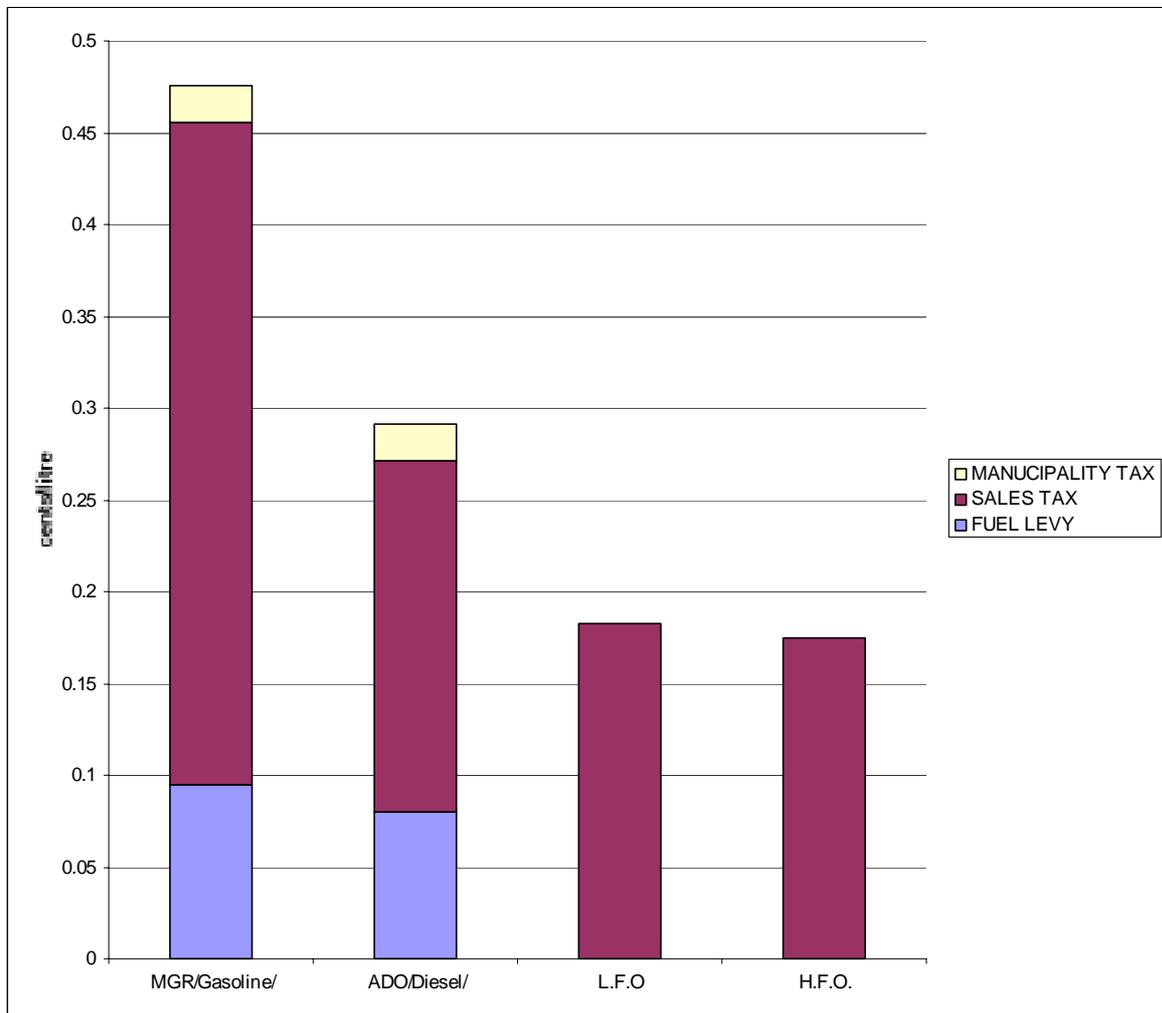
6.4 FUEL BASED REVNUUE COLLECTIONS TO ROAD FUND
(as of end of fiscal year)

Fiscal Year	Fuel based collection	Other Sources	TOTAL
96/97&97/98	328,921,080.07		328,921,080.07
98/99	181,856,204.19	959,750.00	182,815,954.19
99/00	216,989,469.66	3,785,831.00	220,775,300.66
00/01 (1st Qt)	75,843,846.37		75,843,846.37
TOTAL	803,610,600.29	4,745,581.00	808,356,181.29



**6.5 CHARGES ON FUEL PRODUCTS DUE TO ROAD FUND
(AS PER REVISED FUEL PRICE).**

PRODUCT TYPE	FUEL LEVY	SALES TAX	MANUCIPALITY TAX	Cents/ liter
				TOTAL
MGR/Gasoline/	0.095	0.3606	0.02	0.4756
ADO/Diesel/	0.08	0.1917	0.02	0.2917
L.F.O		0.1825		0.1825
H.F.O.		0.1747		0.1747
OIL & LUB.				0.1**

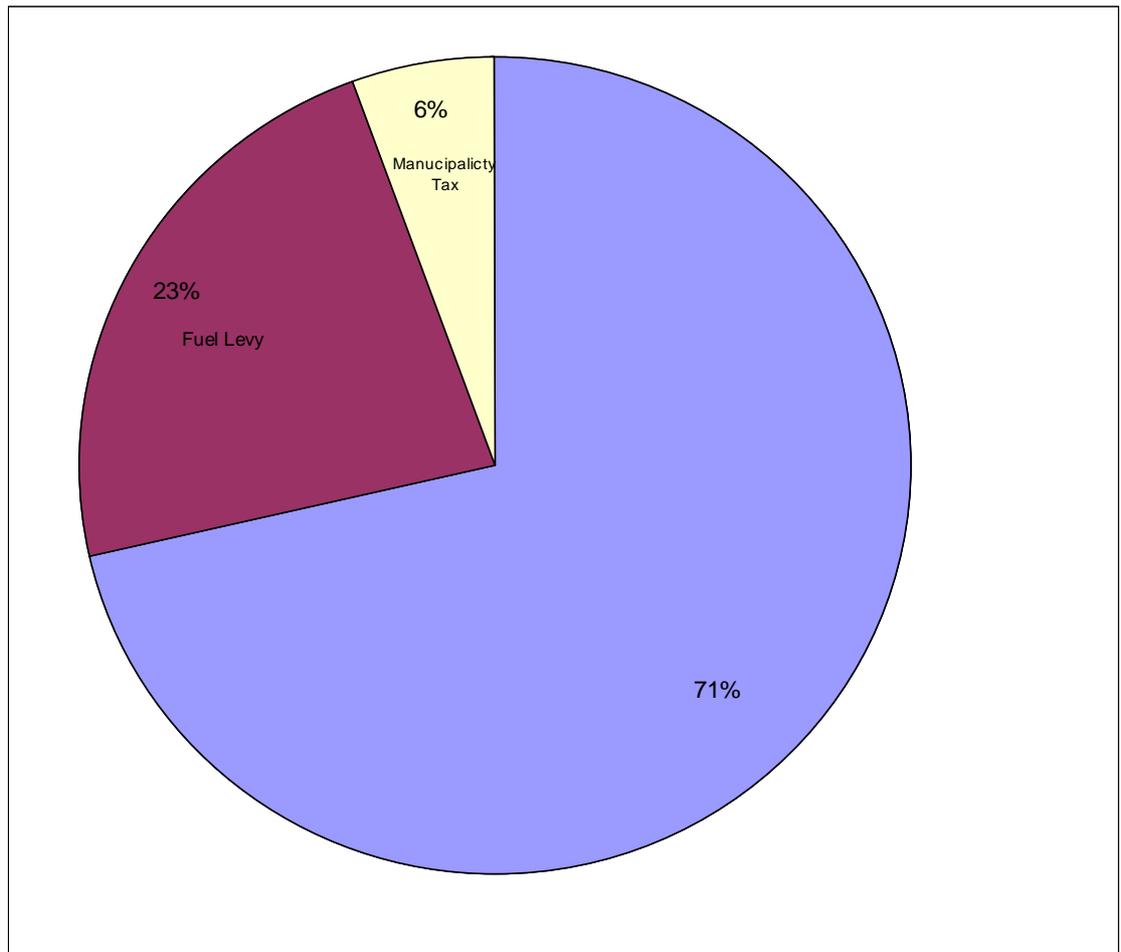


*Pump price of fuel is fixed by Ministry of Trade and Industry and prices are revised every three months.

**Deposits are made direct from fuel companies to Road Fund account.

6.6 FUEL BASED REVENUE COLLECTION OF 1ST QUARTER OF THIS FISCAL YEAR

Month	Sales tax	Fuel Levy	Municipality Tax	TOTAL
July	18,952,915.35	6,517,172.08	1,564,082.96	27,034,170.39
August	16,963,211.86	5,496,674.14	1,312,046.24	23,771,932.24
September	17,893,903.44	5,753,030.98	1,381,809.32	25,028,743.74
Total	53,810,030.65	17,766,877.20	4,257,938.52	75,834,846.37



Office of the Road Fund Administration
6.7 Summary of Allocated and Disburse Budget

Road Agency	Allocation				Disbursement				Disbursed/Allocated in percent			
	1997/98	1998/99	1999/00	Total	1997/98	1998/99	1999/00	TOTAL	1997/98	1998/99	1999/00	TOTAL
ERA	117,957,800	152,210,260	194,240,287	464,408,347	117,957,800	98,392,836	167,868,654	384,219,290	100%	65%	86%	83%
Tigray	1,688,226	2,250,967	2,250,967	6,190,160	1,688,226	-	2,250,967	3,939,193	100%	0%	100%	64%
Afar	752,902	1,003,869	1,003,869	2,760,640	-	752,902	-	752,902	0%	75%	0%	27%
Amhara	6,351,575	8,468,767	8,468,767	23,289,109	6,351,575	-	15,277,795	21,629,370	100%	0%	180%	93%
Oromiya	13,038,143	17,384,190	17,384,190	47,806,523	13,038,143	6,896,437	19,290,675	39,225,255	100%	40%	111%	82%
Somale	331,675	442,233	442,233	1,216,141	-	331,675	-	331,675	0%	75%	0%	27%
Benshangul	331,675	442,234	442,234	1,216,143	331,675	-	795,917	1,127,592	100%	0%	180%	93%
Debub	6,842,454	9,123,272	9,123,272	25,088,998	6,842,454	-	11,448,538	18,290,992	100%	0%	125%	73%
Gambela	331,675	442,234	442,234	1,216,143	331,675	-	-	331,675	100%	0%	0%	27%
Hareri	331,675	442,234	442,234	1,216,143	331,675	-	742,233	1,073,908	100%	0%	168%	88%
Sub Total	30,000,000	40,000,000	40,000,000	110,000,000	28,915,422	7,981,014	49,806,125	86,702,562	96%	20%	125%	79%
Addis Ababa	7,500,000	10,000,000	20,000,000	37,500,000	7,500,000	4,665,000	20,335,000	32,500,000	100%	47%	102%	87%
Diredawa	1,000,000	1,334,000	1,334,000	3,668,000	1,000,000	651,426	1,811,052	3,462,478	100%	49%	136%	94%
Mekele	1,000,000	1,334,000	1,334,000	3,668,000	500,000	1,204,000	1,162,840	2,866,840	50%	90%	87%	78%
Awasa	1,000,000	1,334,000	1,334,000	3,668,000	500,000	500,000	669,694	1,669,694	50%	37%	50%	46%
Adama	1,000,000	1,334,000	1,334,000	3,668,000	500,000	1,134,000	1,064,000	2,698,000	50%	85%	80%	74%
Bahrdar	1,000,000	1,334,000	1,334,000	3,668,000	500,000	500,000	2,534,600	3,534,600	50%	37%	190%	96%
Jimma	500,000	666,000	666,000	1,832,000	250,000	250,000	399,500	899,500	50%	38%	60%	49%
Shahamane	500,000	666,000	666,000	1,832,000	250,000	679,575	236,425	1,166,000	50%	102%	35%	64%
Gondar	500,000	666,000	666,000	1,832,000	250,000	535,429	381,108	1,166,537	50%	80%	57%	64%
Kombolcha	500,000	666,000	666,000	1,832,000	250,000	722,957	834,243	1,807,200	50%	109%	125%	99%
Harar	500,000	666,000	666,000	1,832,000	500,000	241,626	1,090,374	1,832,000	100%	36%	164%	100%
Sub Total	15,000,000	20,000,000	30,000,000	65,000,000	12,000,000	11,084,013	30,518,836	53,602,849	80%	55%	102%	82%
Grand Total	162,957,800	212,210,260	264,240,287	639,408,347	158,873,222	117,457,863	248,193,616	524,524,701	97%	55%	94%	82%

Road Fund in Ethiopia: From Inception to Realization

Office Of The Road Fund Administration
6.8 Physical and Financial Performance Summary Report by Road Agency

NO.	Road Agency	1997/98						1998/99						1999/00					
		Physical Work			Finance			Physical Work			Finance			Physical Work			Finance		
		Plan	Actual	%	Plan	Actual	%	Plan	Actual	%	Plan	Actual	%	Plan	Actual	%	Plan	Actual	%
1	Federal(ERA)				117,957,800	117,936,800	100	16,088	15,353	95	143,532,864	106,807,438	74	14,820	14,097	95	194,240,287	124,700,000	64
2	Regional																		
2.1	Tigray				1,688,226	151,467	9	527	510	97	2,250,967	1,753,718	78	647	651	101	2,250,967	1,691,593	75
2.2	Afar				752,902		-	26		-	1,003,869		-	12		-	1,003,869		-
2.3	Amhara				6,351,575		-	945	1,181	125	8,468,767	5,468,034	65	798	1,050	132	8,468,767	6,496,116	77
2.4	Oromiya				13,038,143	516,740	4	1,288	1,166	91	17,384,190	16,297,600	94	1,708	1,494	87	17,384,190	14,213,570	82
2.5	Somalie				331,675		-			-	442,233		-	26		-	442,233		-
2.6	Benshangul				331,675		-	61		-	442,234	35,300	8	58	73	126	442,234	229,643	52
2.7	S.N.N.P.S				6,842,454	1,616,059	24	390	241	62	9,123,272	2,429,390	27	233	355	153	9,123,272	3,557,731	39
2.8	Gambela				331,675		-	36	7	19	442,234	95,185	22	29		-	442,234		-
2.9	Harari				331,675		-	14		-	442,234		-	17	28	167	442,234	164,310	37
	Sub Total				30,000,000	2,284,266	8	3,285	3,105	95	40,000,000	26,079,227	65	3,526	3,650	104	40,000,000	26,352,963	66
3	City																		
3.1	Addis Ababa				7,500,000	4,110,879	55	25	17	66	10,000,000	8,531,197	85	111	101	91	10,000,000	16,713,645	167
3.2	DireDawa				1,000,000		-	10	17	169	1,334,000	900,746	68	16	38	232	1,334,000	1,332,281	100
3.3	Mekele				1,000,000	499,706	50	4	1	36	1,334,000	478,944	36	7	7	102	1,334,000	1,621,402	122
3.4	Awasa				1,000,000	500,000	50	21	34	164	1,334,000	957,238	72	9	37	395	1,334,000	535,884	40
3.5	Adama				1,000,000		-	9	17	179	1,334,000	1,388,341	104	11	10	95	1,334,000	419,421	31
3.6	Bahrdar				1,000,000		-	7	4	62	1,334,000	393,207	29	21		-	1,334,000	1,120,458	84
3.7	Jimma				500,000		-	1	1	65	666,000	465,310	70	1	1	87	666,000	358,590	54
3.8	Shashamane				500,000		-	37	18	49	666,000	558,524	84	6		-	666,000		-
3.9	Gondar				500,000		-	1	12	864	666,000	469,125	70	1		-	666,000		-
3.10	Kombolcha				500,000		-	10	26	249	666,000	890,850	134	7	2	24	666,000	329,825	50
3.11	Harar				500,000		-	16	5	28	666,000	276,051	41	4	4	89	666,000	256,867	39
	Sub Total				15,000,000	5,110,585	34	142	151	106	20,000,000	15,309,534	77	195	199	102	20,000,000	22,688,373	113
	Grand Total				162,957,800	125,331,651	77	19,516	18,610	95	203,532,864	148,196,199	73	18,541	17,946	97	254,240,287	173,741,336	68

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