

Government of Nepal
Ministry of Local Development
Department of Local Infrastructure Development and Agricultural Roads
(DoLIDAR)

RURAL ROAD MAINTENANCE DIRECTIVE

(Approved at Ministers Level, Government of Nepal on 20th March 2008)



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Preface

This Rural Road Maintenance Directive is prepared for Workers, Professionals/Technicians, and DDC with the view of simplifying their involvement in maintenance work. Firstly, this Directive is prepared with the purpose of making rural road maintenance work, planned, effective, and unified. It will help both for road maintenance planning and management and will provide appropriate technical direction towards successful completion of maintenance work. The need for this Directive corresponds with inputs for different kinds of District Rural Road Maintenance Work, which need to be performed timely and with ease. In this Directive, all maintenance works are illustrated with examples for effective guidance. It is believed that this Directive will support and improve the road maintenance work system with the continuation of knowledge, skill, understanding, lessons learnt, and experiences from an Institutional and Managerial perspective. Suggestions and feedback are also expected from experience gained while working with this directive. It is anticipated that this Directive will be periodically updated as time demands. Feedback to DoLIDAR in writing is requested from concerned users stating the topics to be updated.

In this Directive, special focus and emphasis is given for the maintenance of earthen rural roads. Apart from this, cleaning of drainage, removal of grass and vegetation, keeping the road surface as built and clean, drainage system management and supervision of structures of road are covered. The application of different classifications, for example: routine, recurrent, periodic, preventive, emergency maintenance through methodologies and processes are included in a 'what-how' basis. There is less chance to obtain sufficient maintenance funds to perform advanced level maintenance work on rural roads. It is necessary to prioritize the maintenance work by using the available resources at their maximum efficiency. This Directive will be useful to select prioritized projects of road maintenance and for updating the budgeting system.

This Directive has emphasized the application of best practice from practical experiences for rural road maintenance works. Beside this it will also help to conduct the appropriate maintenance work in prioritized systems such as maintenance project planning, arrangement of human and financial resources, their management and mobilization. Hopefully this Directive will be useful to all related District Stakeholders, Committees, Users, Supervisors, and Monitors. I would like to express sincere gratitude to GTZ-RPN, DFID-RAP, SDC-DRSP, INFRIN, and USAID for their help in preparing this Directive. Likewise for their advisory role in editing and updating of this Directive, the Rural Road Forum (RRF), Nepal Forum for Rural Transport and Development (NFRTD) including all Projects, Forums and Donor Organizations and all involved representative participants, technicians and managements.

I would also like to thank on behalf of DoLIDAR, especially GTZ-RPN for its encouragement, continuous initiation and efforts, collection of data and worthy technical support and for its active role. Likewise, I would also like to thank my DoLIDAR colleague technicians for their continuous, restless attempt and active participation to develop this Directive.

Upon submission of the final draft of this Directive significant input was received from the Ministry of Local Development, its concerned Government Agencies, and other Agencies and Donor Organizations affiliated with the Department and Rural Roads. This included holding vigorous discussions for strengthening the presentation of this draft, which yielded highly useful and fruitful suggestions. For this, this Department expresses its sincere regards to Ministry.

Having received suggestions and feedback from different agencies including Ministry to present this directive in its final form, I would like to specially thank the Maintenance Expert working under Asian Development Bank Technical Assistance. Likewise, I would also like to thank RAP-PMU of DFID for their support in publishing this First Edition of this Directive.

Finally, I anticipate with full confidence that this Rural Road Maintenance Directive will be an exceedingly useful, important and a helpful source for all users.

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1. Introduction

1.1 The need for the Directive

Currently in Nepal more than 22,000 km of Rural Roads are recorded of which nearly 10,000 km are pliable by vehicle. The increase in length and network of rural roads has made the need of maintenance obvious. Implementation of planned maintenance work needs to be applied to get maximum benefit from investment, achieve minimum transport costs, provide a sustainable road service level, and ensure reliable transport.

The maintenance of rural roads has been implemented through Local Agencies for several years now. To some extent, the National Plan for Rural Road Maintenance (NPRRM) 2056 provides information of the maintenance of rural roads but it is not yet implemented in a planned, effective and unified manner by the Local Agencies.

There is provision in Local Self-Governance Act (LSGA), 2055 clause no. 207 (1) (2) for National Planning Commission and related Ministry of Nepal Government to provide necessary instruction to District Development Committees for preparation of District Development Plan and its implementation.

The National Plan for Rural Road Maintenance, 2056, calls for the making of a detailed maintenance directive. In accordance with Local Infrastructure Development Policy, 2061, Clause 7.3, the Ministry of Local Development through Department of Local Infrastructure Development and Agricultural Roads (DoLIDAR), is responsible for making directives to be used by local agencies in the preparation of norms, specifications, environmental and social studies for projects to be implemented at the local level. Furthermore, the Local Infrastructure Development Policy, 2061, on Local Transport, and its Strategic Action Plan, 2064, Clause 7.1.2 enacted by MoLD, requires that central agencies including DoLIDAR support the local agencies with policy and guideline directives that deal with the quality of road works.

MoLD has now approved the rural road maintenance directives as prepared by DoLIDAR in accordance with the Local Self-Governance Act 2055, Clause 207, Sub-clauses 1 and 2 for planning and effective road maintenance in an institutionalised manner at local level, and National Plan for Rural Road Maintenance, 2056, and the Local Infrastructure Development Strategic Action Plan, 2064. All District Development Committees should now follow this maintenance directive.

1.2 Objectives of the Directive:

The main objective of this Directive is to develop a nationwide system to implement rural road maintenance by the Local Agencies, other rural road affiliated organizations and communities, in an effective and planned way. By using this directive, it is expected that Local Agencies will be able to plan road maintenance works and implement these based on priority ranking and a unified system of cost estimation. In addition, other objectives of this Directive are mentioned below:

- To mobilize available resources from Nepal Government, Local Agencies, Road Board Nepal and other sources in a managed way into a Local Agencies Rural Road Maintenance Fund,
- Help to mobilize local resources in a participatory and coordinated pattern with Local Agencies and concerned community groups,
- Support the preparation of annual district rural road maintenance programs for rural roads, to be implemented through priority ranking,
- Simplify and manage tasks such as maintenance work monitoring and supervision, and
- Unify all local agencies to establish maintenance fund and mobilization mechanisms.

1.3 Users of the Directive

For the uniform performance of planned and effective maintenance works on rural roads in local levels in an institutionalised way, this Directive is produced and enacted for all local agencies (DDCs and

VDCs). The users of this Directive will be all DDCs, VDCs, other rural road affiliated agencies, district rural road maintenance committees, contractors, professional technicians and users communities. Likewise, rural roads covered by the municipalities in rural areas can also use this Directive as a guideline.

1.4 Major Contents of the Directive

Six chapters are included in this Directive

1. Introduction
2. Rural Road and Maintenance Identification
3. Mobilization of Resources for Maintenance
4. Maintenance Project Planning and Implementation
5. Information Systems and Maintenance Monitoring, Evaluation and Reporting
6. Institutional and Policy Arrangements

In addition, the Directive includes 9 related Annexes

1.5 Limitations of the Directive

Although this Directive gives more emphasis to road maintenance institutional and managerial matters, other available Policy Documents such as Rural Road Maintenance National Policy, 2056, Local Infrastructure Development Policy 2061 (LIDP), Local Self-Governance Act, 2055 and LSGA Regulation, 2056 (with amendment) and Local Agency Financial Administration Regulation, 2064 also need to be used.

On the basis of this Directive as the main document, a Rural Road Maintenance Handbook will be developed and enacted, which will be useful to concerned technicians and road maintenance workforces.

1.6 The process of revising the Directive

This Directive is published for the first time in 2064, and will be revised and updated by DoLIDAR based on feedback received from the field experiences of users.

1.7 Preparation of the Directive

Preliminary writing of this Directive was done by GTZ-RPN. Incorporating comments received from RAP, USAID, DRSP, INFRIN, RRF, and NFRTD the draft was reviewed at a finalization workshop organized by DoLIDAR together with feedback received from Ministry of Local Development.

2. Rural Road and Maintenance Identification

Huge financial investment is made in road construction. Therefore, appropriate maintenance arrangements must be introduced for the reduction in cost of vehicle operation, slowing road deterioration to increase the lifespan of the road and make available safe and reliable transport services. Road maintenance means the activities which are to be performed for the road and road related physical structures to achieve their regular, effective, sustainable operation and use.

2.1 Definition of Rural Road

The roads, which are operated and maintained by local agencies, including motorable roads and agricultural roads, are grouped as Rural Roads for the provision of maintenance. Rural roads may be earthen, gravelled or blacktopped. Roads constructed in districts by other than local agencies (Department of Roads, Department of Irrigation, Nepal Electricity Authority, Nepal Army etc.) are not included as district roads unless these are handed over to the local agency.

2.2 Classification of Rural Roads

Rural roads are classified as follows:

- On the basis of service facility

- A) All Weather Road- roads that can be operated year-round.
- B) Fair Weather Road- roads that can be operated in dry season only.

- On the basis of road surface

- A) Earthen Road
- B) Gravelled Road
- C) Black Topped Road

- On the basis of road importance

- A) Rural Road Class A (District Road, RRA)
- B) Rural Road Class B (Village Road, RRB)
- C) Rural Road Class C (Main Trail, RCC)
- D) Rural Road Class D (Village Trail, RRD)
- E) Rural Road Class E (Rope Way, RRE)

- On the basis of maintenance category

- A) Maintainable Road
- B) Non-Maintainable Road

Classification of Rural Road and Road Design Standard are included in Annex A and Annex B respectively.

2.3 Objectives of Maintenance

The long term use of a road and environmental effects lead to road surface deterioration and loss of road surface materials. The reduction of those effects and keeping the road in a serviceable condition is termed, road maintenance.

Road maintenance works are performed to achieve following objectives:

- **Maintain regular road service:**
Roads have to be maintained through appropriate maintenance for uninterrupted operation of the vehicle.
- **Reduction in transportation cost and travel time:**
It is easier to ply vehicles on well-maintained roads. Frequent damage to parts of the vehicle, higher consumption of fuel and early damage of tires occur on deteriorated roads. Well maintained roads help to reduce travel time from one place to other, reduce operation cost and makes travelling more comfortable.
- **Reduce accidents:**
There are higher chances of accidents where lack of maintenance causes narrow road width and sliding of adjacent cut slopes of the road. On well-maintained roads, there are fewer chances of such accidents occurring.
- **Reduce magnitude and cost of major maintenance work:**
By performing small maintenance works on a regular basis, the road can be protected from critical types of damage thus saving huge expenses of more major maintenance and the need of reconstruction.
- **Assuring long term use of the road and assets:**
An appropriately maintained road receives additional life, which helps to achieve maximum benefit of cost investment along with preservation of the road assets.
- **Continued Social and Economic achievement:**
Achievement of improved social and economic values results from strong rural access.

2.4 Types of Maintenance

Climate, type of vehicle and weight, amount of traffic flow, engineering design, road construction quality and types of road surface (earthen, gravelled, black topped) etc., determine the appropriate frequency for road maintenance work, type of maintenance and necessary budget.

The following 5 types of road maintenance work are carried out on rural roads:

- Routine Maintenance
- Recurrent Maintenance
- Periodic Maintenance
- Preventive Maintenance
- Emergency Maintenance

Activities of road maintenance start only after the completion of the road construction period. Preventive and other necessary maintenance performed during the construction period are considered part of road construction.

Rehabilitation and upgrading works are not maintenance works, and are therefore not included within the frame of this Directive. As such, these works are to be performed under different budget headings.

2.4.1 Routine Maintenance

Small maintenance works to be carried out in all seasons on all roads fall under the definition routine maintenance. These are to be carried out on a regular basis and comprise simple categories of maintenance works, particularly not requiring forecast and assessment of their specific nature. Regular works to keep the road at an appropriate standard and protect it from further degradation fall under this category. Generally, there is no need for skilled person power. This work is conducted at fixed cost and generally carried out through users committees deploying length persons.

2.4.2 Recurrent Maintenance

Small maintenance works to be carried out depending on the season of a year but not categorized under routine maintenance. Recurrent maintenance work can arise from vehicular traffic flow or due to rainfall. These works are to be carried out from time to time, typically 2-3 times in a year. This work may also need some skilled person power. Before starting the maintenance work, needs identification and preparation of cost estimate should be performed.

2.4.3 Periodic Maintenance

Maintenance works to be carried out in intervals of years and of large-scale fall under this category. It is not always possible to maintain the road in a useable state through routine and recurrent maintenance alone and roads requiring quantitatively large volumes of maintenance fall under this category. Periodic maintenance works are to be typically carried out once at intervals on black topped roads of 5 to 7 years, on gravelled roads of 3 to 5 years and on earthen roads as per road condition but typically 2 to 3 years but on some rural roads every year particularly after rainy season. This work may generally require skilled person power. Before starting the maintenance works for this type of maintenance work, identification and preparation of cost estimate is needed.

2.4.4 Emergency Maintenance

Emergency maintenance works are to be carried out due to unexpected and sudden blockage of roads that stop vehicular movement due to natural disasters. Immediate works to be executed for the quick opening of the road, reinstating vehicular movement and to protect the road from further damage are termed emergency maintenance. Reinstating the damaged road to its original condition after completion of emergency maintenance works is not included under this heading.

2.4.5 Preventive Maintenance

Preventing roads from future possible damage, protection from the need to reconstruct, for the protection of right of way; such maintenance works are called preventive maintenance. These works are influenced by geotechnical, geological and environmental reasons. For this type of maintenance, it is not possible to predict the time interval, but if the need arises an attempt should be made using available resources.

List of different types of road surface maintenance works is included in Annex C.

2.5 Priority of Maintenance Activities

From a financial point of view, it is not possible to implement all types of maintenance works on rural roads at once. With this view the maintenance, activities are to be carried out with the best use of available resources and to assure the long-term use of the road. The following is the order of priority rankings of operation:

1. Emergency Maintenance
2. Routine Maintenance
3. Recurrent/Occasional Maintenance
4. Periodic Maintenance

Among maintenance activities, regular maintenance of road drainage system is the basis of all other maintenance works.

Note: Preventive maintenance is not included in priority ranking because it is not practical to specify the time interval.

3. Mobilization of Resources for Maintenance

3.1 Special Fund for Maintenance

There is an arrangement for Special Fund for maintenance in DDC according to Local Agencies (Financial Administration) Regulation 2064 rule 54 (c) and for Municipalities in the same Regulation rule 33(B). Therefore, according to the provision, DDCs and Municipalities need to arrange necessary resources to run the physical infrastructure and perform maintenance works. Although not mentioned in this Regulation, it is appropriate for VDCs to also manage such type of fund by the decision of VDC Assembly. According to the provision made in the regulation, DDCs and Municipalities will decide how to divide the budget for this fund from their collected internal income resources. DDCs, Municipality and VDCs will be guided by the following in ensuring sufficient funds are allocated:

- At least 3% of the total sum of internal income resources of DDC, Municipality and VDCs shall be allocated for maintenance,
- Total sum allocated for maintenance during preparation of yearly plan of operation of concerned local agencies shall not be less than 2% of the internal and central grant for the use of each areas for infrastructure development,
- For projects which will be implemented with the help of other agencies, an amount allocated by those agencies for operation and maintenance,
- Total sum made available by Nepal Government and other agencies for maintenance and,
- Collected fund from productive operation of the road.

The amount collected by these means can be augmented by funds from Nepal Government, Roads Board Nepal and Donor Organization supported Road Projects as a part of complementary budget to be arranged by local agencies.

3.1.1 Fund Management Procedure

Special Fund for maintenance related financial management works shall be operated as provisioned in Local Agency (Financial Administration) Regulation, 2007 or as ruled by the local agencies through financial management working process.

3.2 District Rural Road Maintenance Fund (DRRMF)

Special Fund for maintenance caters for all kinds of district infrastructure structures (e.g. water supply, irrigation, community buildings, roads, tracks, main trails, cable bridges, small hydroelectricity etc.). For this reason the maintenance of rural roads under the Special Fund for maintenance should be termed "District Rural Road Maintenance Fund". Financial resources will be collected for this fund from resources as described in 3.3.

The amount contributed by the local agencies and complementary contribution provided by Government of Nepal shall be lodged in the District Rural Road Maintenance Fund. A part of the amount contributed by the local agencies as per the provision of Local Self-Governance Act 2055, the amount collected by DDC/VDC, the investment done by the own resources of DDC/VDC, part of amounts received by beneficiaries and investment from non-governmental organizations/agencies, will be contributed together with the received grant from centre.

After the approval of Yearly Maintenance Program from the related agencies and the contribution of related District Development Committees, local agency funds will be deposited in Rural Road Maintenance Fund. Based on the collected part of contribution as aforementioned, and the part contributed by Government of Nepal, provision should be made for releasing the concerned Rural Road Maintenance fund.

To obtain the complementary contribution from Nepal Government, each and every District Development Committee should fulfil the criteria stated in Annex D.

3.2.1 Release of Budget for Maintenance

For sustainable maintenance and operation of rural roads, formation of Rural Road Maintenance Users Committee at Local Level is mandatory. Legal Constitution and working process is necessary to manage the different aspects of maintenance including maintenance related meetings, discussions and decision taking.

The process of calling maintenance related meetings, holding discussions and taking decisions is given in Annex E.

For each rural road of a district, the rural road maintenance users committee, registered in district level requests necessary amount to be released from District Rural Road Maintenance Fund (DRRMF) upon the recommendation of District Rural Road Maintenance Committee. A clear record of the resources and expenses must be updated indicating available resources from DRRMF.

Related detail descriptions for the formation of Rural Road Maintenance Users Committee are provided in Chapter 6: "Institutional and Policy Arrangements"

3.3 Financial Resources for District Rural Road Maintenance Fund

Amounts will be available for the District Road Maintenance Fund from following sources:

- i. Disbursed Annual Budget from Nepal Government
- ii. District Development Committee (DDC)
- iii. Municipality/VDC
- iv. Roads Board Nepal
- v. Different Rural Road Construction Projects
- vi. Other Miscellaneous Resources

3.3.1 Disbursed Annual Budget from Nepal Government

Through the Ministry of Local Development and DoLIDAR, Nepal Government disburses the budget each year under Rural Road Maintenance Fund headings. This total sum available for DDCs is one of the most important sources for the Rural Road Maintenance Fund.

3.3.2 Resources available from DDC

Using delegated authority provided by Local Self-Governance Act 2055, each DDC collects financial resources from local taxes, vehicle taxes etc., some part of which is made available to VDCs as a grant. From the annual budget of DDC, some amount needs to be disbursed for Rural Road maintenance.

3.3.3 Resources available from Municipality/VDC

Using delegated authority provided by Local Self-Governance Act 2055, each municipality/VDC makes collection of amount under different headings through local taxes. Apart from this, Block Grant is made available directly from Central Level to Municipality/VDCs. From the amount received from different resources of Municipality/VDCs annual budget, there needs, to be some amount disbursed for Rural Road Maintenance.

3.3.4 Resources available from Roads Board Nepal

For rural road maintenance work, Roads Board Nepal disburses amounts each year. To receive this allocation it is necessary to fulfil criteria and conditions specified by the Board.

For the maintenance of Rural Roads, the amount available from other agencies including Roads Board Nepal is small compared to the actual need. In addition, other local resources need to be maximised for the maintenance of Rural Roads.

3.3.5 Resources available from different Rural Road Construction Projects

To assure that road maintenance works are practiced, all the rural road construction projects implemented under DDC need to allocate a definite budget. In this way projects for new road construction, rehabilitation and upgrading of road surface should generally make provision to contribute for road maintenance work by an amount not less than 5% of the construction cost (apart from any amount to be deposited in the Special Fund for maintenance). For the road projects running with the support of donor organizations, there also needs to be provision made in the project documents for allocation of amount for DRRMF.

The part of complementary amount to be contributed from the side of local agencies for rural road maintenance should be 10% minimum.

Amounts deposited in the District Rural Road Maintenance Fund should be given priority for concerned road maintenance as per need, but upon the decision of DDC can be used for other road maintenance work also.

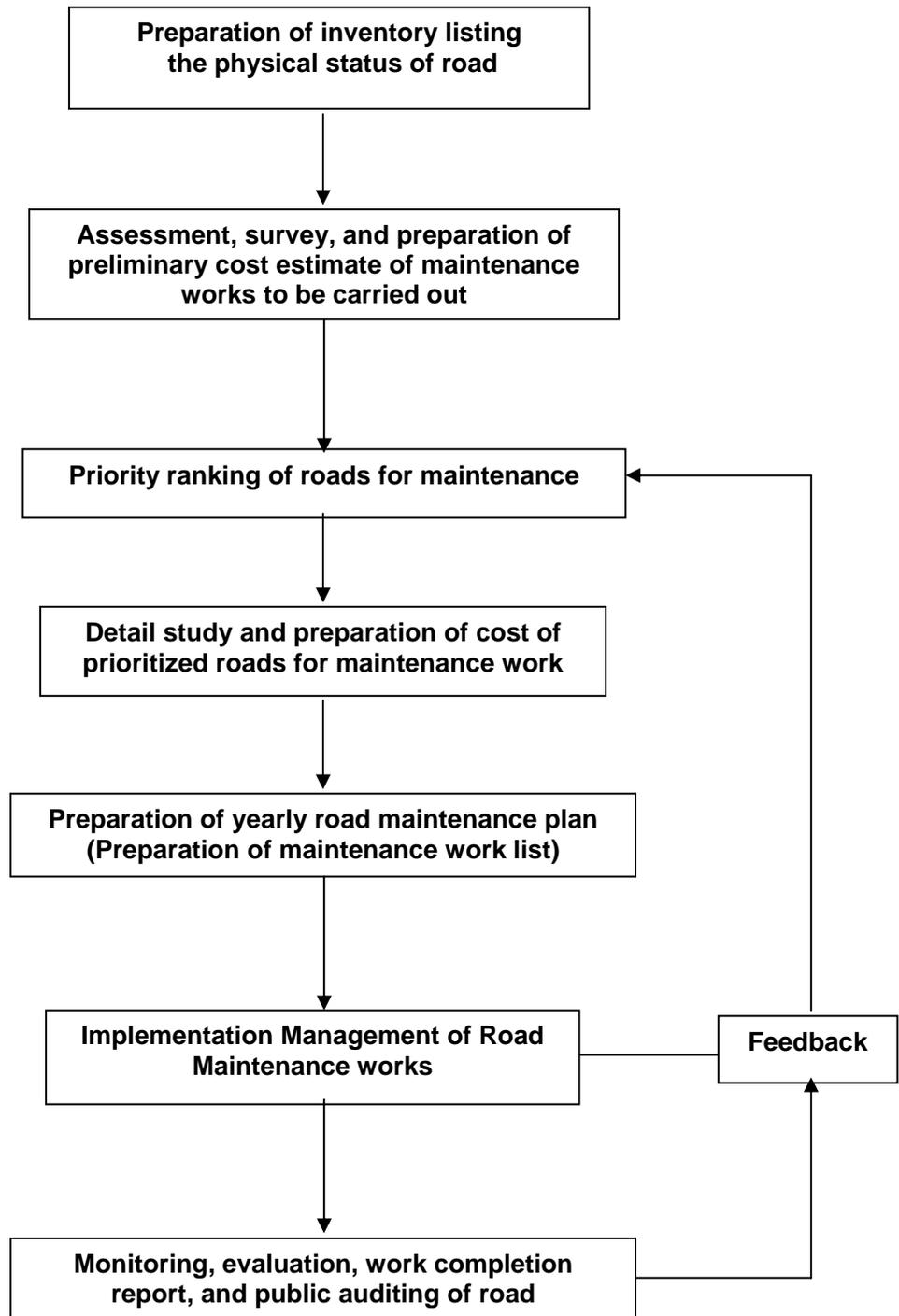
3.3.6 Other Miscellaneous Resources

Apart from above resources, NGOs/INGOs active in rural areas, transport entrepreneurs, direct beneficiaries etc. can also be sources of resource for road maintenance.

4. Maintenance Project Planning and Implementation

4.1 Introduction

Rural Road Maintenance Project Planning, Implementation, and Monitoring are to be performed as presented in the following management cycle:



4.2 Preparation of Inventory of Physical Characteristics of Road

After completing construction of any road, an inventory of the physical road characteristics needs to be prepared. After preparation of inventory, it needs updating each year.

The model of Rural Road Inventory is presented in Annex F.

For District Level and Village Level Roads, field level inspection of each road is mandatory in preparing road status inventory of the road and its structures.

4.3 Assessments, Survey, and Preparation of Preliminary Cost of Maintenance Works

After inspecting the roads each year on which maintenance work is to be carried out, a maintenance project plan with preliminary cost shall be prepared.

4.4 Priority Ranking of the Roads for Maintenance

As availability of sufficient financial resources for all rural road maintenance is scarce, it is necessary to prioritize the roads for maintenance. During prioritization, the possibilities of further damages due to not doing timely maintenance work should be considered.

In order to receive the budget from Central Agencies e.g. Roads Board Nepal, the maintenance work will need to fulfil certain criteria of prioritization and other standards.

Prioritization of roads to be maintained will need to be done in two steps; District Level and Central Level. At District Level, it will be necessary to prepare Annual Road Maintenance Plan (ARMP) and Yearly Plan of Operation (YPO). Accumulating the received annual road maintenance plans from all districts, according to available resources and on the basis of prioritization, DoLIDAR will prepare Integrated Annual Road Maintenance Plan (IARMP) at Central Level.

Prioritization of roads for maintenance work will be ranked as follows:

District Level	Central Level
⇒ Status of Road	• Priority ranking made from the District
⇒ Traffic Volume	• District's implementation capacity
⇒ Priority of the District	• The situation of poverty and backwardness of the District
⇒ Strategic Importance	• Population benefited

The table for prioritization and cost estimation for rural road maintenance is included in Annex G.

After completing the selection of roads for maintenance and the activities to be carried out on that road, the priority ranking will be done according to Chapter 2.5.

4.5 Preparation of Annual Road Maintenance Plan

The prepared list of roads for maintenance and their maintenance requirements should be presented annually in a Yearly Maintenance Plan. During preparation of the maintenance plan, special emphasis should be given to landslide prone areas and other dangerous locations, which should be described, and reference made to any special precautions required during the maintenance at such locations.

According to Local Self-Governance Act, 2055 the yearly road maintenance plan needs to be approved from District Assembly and information of that passed to DoLIDAR. According to the specified standard of central level, the budget for rural road maintenance will be disbursed. The received amount from central level for road maintenance needs to be expended as per specified guideline for which regular reports must be sent to the concerned Agency/DoLIDAR. If the report from concerned local agencies is not received on a regular basis, disbursed budget from central level to that agency will cease and; if already released a refund can be demanded.

4.6 Implementation Management of Maintenance

It is necessary to get approval from the concerned agency or committees regarding the selection of implementation management, concept of implementation and implementation process before proceeding with maintenance work.

4.6.1 Implementation Arrangement

The District Rural Road Maintenance Committee shall decide how to perform the road maintenance work and whether by centralized or decentralized, labour based or capital based, direct use of workers or through users committee or providing the work through contract to the organization or person.

4.6.2 Implementation Approach

Rural Road Maintenance Work, according to Local Infrastructure Development Policy 2061, should be labour based, local resource focused, use environmentally friendly technology and be implemented according to Nepal Government decentralized policy. Participatory development approach including the application green road approach should also be considered during implementation.

4.6.3 Implementation Modality

Implementation of rural road maintenance work should proceed keeping in mind the available labour force, material and means, activeness of participation of users in development works etc. within the frame of Local Agencies (Financial Administration) Regulation 2064, as mentioned below. Accordingly, any process for the security (insurance) of the workers is to be managed by the implementation agencies.

4.6.3.1 Direct Implementation Process (Direct hiring of workers)

In this process, the implementation agency uses its own equipment and arranges the workforce directly on permanent or temporary basis. Generally, this process will be applied for routine maintenance works.

4.6.3.2 Implementation by Workers Groups through Users Committee

Under this process the District Development Committee with the technical assistance of District Technical Office carries out the rural road maintenance works by using workers group through users committee and makes payment on the basis of work quantity done. Generally, it is recommended to assign the maintenance work to a resident workers group from nearby the road. In the process of participation of users committee, a local contribution can be arranged in the form of a participatory free labour contribution where otherwise they are unable to arrange fund. Generally, this process can be adopted for routine and recurrent maintenance works and for other maintenance works of a suitable nature.

4.6.3.3 Implementation through local contractors

Works will only be carried out through contractors, where it is not possible to complete by length person or workers group or where works are critical from a technical point of view and need the use of

equipment for maintenance. Generally, this process will be appropriate for periodic maintenance and rehabilitation where the nature of works is substantial.

4.6.4 Maintenance Plan; Implementation and Responsible Agency

S.N	Work Description	Activities	Responsible Agency
1.	Project Planning	<ul style="list-style-type: none"> Preparation of lists of existing rural roads Preparation of District Transport Master Plan (DTMP) Identification of required maintenance work and roads 	DDC DDC DDC
2.	Preparation of program and priority ranking	<ul style="list-style-type: none"> Priority ranking of the roads applying the specified criteria Preparation of district annual road maintenance plan with design and cost estimate Approval of road maintenance plan Commitment for management of complementary resources to be contributed by the local agency Sending the information of Assembly approved maintenance plan to Department (DoLIDAR) Preparation of Integrated Annual Road Maintenance Plan (IARMP) 	DDC DDC District Assembly DDC DDC DoLIDAR/MoLD/NPC
3.	Fund mobilization and financial management	<ul style="list-style-type: none"> Coordination among local responsible agencies and mobilization of local resources Establishment of DRRMF and opening of its bank account Make deposit in bank account of amounts to be contributed by local agencies 	DDC DDC DDC
4.	Budget management	<ul style="list-style-type: none"> Disbursement of annual budget from internal and central resources to carry out maintenance plan Division of resources to be provided from centre according to fixed standard for maintenance 	DDC/Municipality DoLIDAR/MoLD/NPC
5.	Preparation of road maintenance work	<ul style="list-style-type: none"> Preparation of Bill of Quantities (BoQ), specification, work list Preparation of timetable for the supply of labour and materials Formation and registration of maintenance users committee 	DDC DDC DDC / UC
6.	Implementation management	<ul style="list-style-type: none"> Work procurement (UC or Contract) Procurement of goods and services Monitoring and evaluation Payment Work completion evaluation report 	DDC DDC DDC DDC / UC DDC / DoLIDAR

S.N	Work Description	Activities	Responsible Agency
7.	Technical Supervision	<ul style="list-style-type: none"> • Assignment of technical person • Technical instruction and support • Supervision/quality control • Work evaluation 	DDC / DTO DDC / DTO DDC / DTO DDC / DTO
8.	Implementation of maintenance work	<ul style="list-style-type: none"> • Make available materials and equipments • Perform maintenance work • Resolution of local dispute / conflict 	DDC/UC/Contractors Workers/Workers group/Contractor Workers group/ UC
9.	Trainings	<ul style="list-style-type: none"> • Identification of training need • Conduct local users facilitation program • Conduct training for local contractors • Conduct training for local technicians • Arrangement of workshop and observation visits 	DDC / DoLIDAR DDC / DoLIDAR DDC / DoLIDAR DDC / DoLIDAR DDC / DoLIDAR
10.	Technical and managerial support	<ul style="list-style-type: none"> • Make available technical and managerial support to DDC • Support for policy formulation and their implementation • Support to make available financial resources to DDC 	DTO / DoLIDAR / MoLD MoLD / DoLIDAR MoLD / DoLIDAR
11.	Monitoring and evaluation	<ul style="list-style-type: none"> • Do reassessment, auditing and reporting of ARMP • Perform monitoring of ARMP and periodic reassessment • Study of work completion evaluation 	DDC DoLIDAR / Road Board / MoLD DoLIDAR / MoLD / NPC
12.	Legalization of road use	<ul style="list-style-type: none"> • Development and implementation of rules, directive, guidelines for appropriate use and management of rural transport • Regulation and controlling of rural transport system 	DDC / DoLIDAR / MoLD DDC

5. Information Systems and Maintenance Monitoring, Evaluation and Reporting

5.1 Rural Transport Management Information System (RTMIS)

For the construction of transport infrastructure and appropriate management of maintenance work, there will be a provision of computer based Central Statistics System in DoLIDAR. The inventory and description of the physical status of rural roads, main trails, cable bridges, bridges, culverts, causeways etc., will be included in updated form in the Rural Transport Management Information System (RTMIS).

By using this system, the following data will be available:

- Up to date details of rural roads
- Types and status of structures constructed on rural roads; bridges, culverts, causeways and other road structures, etc
- Future requirement of bridges, causeways, and identification of possible locations on existing roads.
- Main or local trails, cable bridges and their related details

To update the system statistics on a regular basis, each DDC will collect data and report in the given format by sending this information to DoLIDAR and MoLD on a yearly basis. Coding system will be applied strictly during the collection of data as directed by RTMIS, which includes a coding system for bridge, culvert, and causeways.

Available data will be used during execution of maintenance of rural roads, for the preparation of annual maintenance program and for priority ranking.

At the first stage, the collected data of 10 model districts will be stored in this system. Gradually all districts will be added to the system for updating rural transport related details.

5.2 Maintenance Activities Monitoring, Evaluation, and Reporting

There will be provision for regular and effective monitoring and evaluation of maintenance work to control the activities under the rural road maintenance program, to supervise the systems and check prescribed processes are followed, to evaluate the capacity of local rural road maintenance users committee, district rural road maintenance committee, and the DDC.

The technician who is involved in the supervision of maintenance work needs to prepare details of labour, construction material, equipment and work progress on a daily basis.

The technician supervising maintenance work implementation will submit regular details to DRRMC and DDC regarding work progress, effectiveness, quality, and problem areas identified on the road. DRRMC will report to DDC after holding discussions and assessing received reports with their decisions.

DDC will need to send their report to DoLIDAR on a trimester basis after assessing the reports received from DRRMC with their decisions. District Technical Office will also report on ongoing rural road maintenance projects having technical supervision and inspection with the preparation of work progress and completion report on a trimester basis to DDC and DoLIDAR.

DoLIDAR will then submit its report to MoLD in trimester basis after having studied the reports received from the Districts. This will address problems in rules and regulations and technical problems, together with the efforts made to resolve it.

On the basis of the report received from the Department, MoLD will assess the status of program implementation and will provide necessary instruction to DoLIDAR. DoLIDAR will forward the received instruction from the Ministry together with its opinion, suggestions, and feedbacks to DDC for implementation. DDC accordingly will provide necessary instruction and information to DTO and DRRMC for action.

6. Institutional and Policy Arrangements

6.1 Background

As mentioned in the Local Infrastructure Development Policy 2061, local agencies will need to disburse the budget for new projects only after management of existing maintenance budget and maintenance projects to be carried out by the users committee itself. New projects must not be run without first doing clear identification of necessary resources for implementation of maintenance.

In the absence of appropriate maintenance, there is no justification to emphasize additional new road construction. It is necessary to change the thinking within central government and donor organizations that construct the road, to also carry out maintenance and institutionalization of maintenance at local level. Therefore, there must be an organized maintenance committee to take responsibility of maintenance at a local level. This committee needs to delegate with authority to take care the road, carryout maintenance, and collection of resources from vehicular movement on the road by applying the existing taxation rules.

6.2 Commitment for the implementation of rural road maintenance

After completing road construction work using various resources including donor organizations, there will be self-dependency at local level for maintenance and operation. Possible maintenance works to be carried out during road construction stage will be considered as part of the road construction work, and needs to be financed by the project until the completion of construction.

After completion of road construction work, those benefited from road construction – VDCs, DDC, organized user groups, and rural communities, should express commitment for operation of the road by carrying out the maintenance work including taking necessary responsibilities.

Roads constructed by users committee need to have developed a self-maintenance concept and necessary management for the operation. To develop this concept self-funding can be coordinated with income earning groups (other organized self help, saving and credit, farmer, forestry mother groups etc).

To achieve sustainable maintenance, local agencies must mobilize their own resources together with amounts received under conditional and unconditional grant of Nepal Government for road sector. The annual amount disbursed will be the minimum 10% of the total available budget.

6.3 District Rural Road Maintenance Committee (DRRMC)

DDC should form a District Rural Road Maintenance Committee (DRRMC) at district level for the management of rural road maintenance work according to following:

- | | |
|--|------------------|
| 1. DDC chairperson or DDC member assigned by him/her | Chairperson |
| 2. Coordinator Physical Infrastructure Development Committee | Member |
| 3. Representative of District Industry and Commerce | Member |
| 4. Technical Representative of related Division Road Office | Member |
| 5. From the rural road maintenance users committees within the district, one male and one female, nominated by Chairperson | Member |
| 6. Representative of district level Transport Entrepreneurs | Member |
| 7. DDC Secretary (LDO) | Member |
| 8. Head of the District Technical Office | Member Secretary |

Aforesaid DRRMC will perform the following works:

- Identification and mobilization of local resources for rural road maintenance fund,
- After identification of rural roads to be maintained, prioritize and recommend according to specified standard,
- Support implementation of approved projects for maintenance
- Perform regular monitoring of roads for maintenance
- Maintenance related running activities and operating rural roads, perform work assessment at least holding meeting once in a trimester and produce the assessment report to DDC.

6.4 Road Maintenance Users Committee (RMUC)

In addition to DRRMC, there will be a provision for a minimum one “Road Maintenance Users Committee” to operate the projects in sustainable manner in each rural road. This committee will work under the instruction of DRRMC.

Formation of road maintenance users committee according to provision of Local Agency Financial Administration Regulation, 2064 will need to be formed through the meeting of direct beneficiaries of road users. This committee needs to be represented from the connected area/VDCs, female members not less than 33% of total members and with appropriate representation of castes, indigenous people, and ethnic groups. This committee will need to list, register, and renew legally from the concerned local agencies.

Chairperson	:	1 person
Vice Chairperson	:	1 person
Secretary	:	1 person
Treasurer	:	1 person
Members	:	5 to 7 persons
Total		9 to 11 persons

The road maintenance users committee should clarify themselves and operate according to existing rules and regulation in acceptance of local agencies making appropriate constitution, own committee formation process, implementation limitations and working process.

Model constitution of Road Maintenance Users Committee is included in Annex H.

6.5 Road Maintenance Rules and Working Policy

6.5.1 Road maintenance and management responsibility

- This Directive is applied for District Level and Rural Roads classified by DTMP.
- DRRMC to be formed for the management of district level rural road.
- For every rural road, at least one “Road Maintenance Users Committee” will be formed and will delegate the responsibility for maintenance.
- DRRMC will nominate the representatives from road maintenance users committee and road construction users committee.
- Formation of road maintenance users committee according to constitution of the committee to be carried out by calling a meeting of local users.
- Road maintenance users committee will determine the working procedure internally and will operate according to their registered constitution.
- The implementation of work through rural road maintenance users committee by users group, provision and roles, responsibility and authority of that committee, will be as per Local Agency Financial Administration Regulation, 2064.

The role of Road Maintenance Concerned Agencies is included in Annex I.

6.5.2 Maintenance and implementation Management Rules and Regulations

The DRRMF is permitted to make expenses only for rural road maintenance. Transport taxes can be introduced due to use of the road according to provision made in Local Self-Governance Act and Regulation by making a decision from local agencies. All vehicular transport will need to pay transport taxes except Ambulances and the Fire Brigade.

For rural roads, the operation of vehicles will be as below:

- Generally, for earthen roads the concerned Local Agency will assess the road condition and will stop the vehicular movement in the rainy season (Mid-June to Mid-September).
- Likewise, for earthen roads heavy vehicles of more than 6 ton (including weight of vehicle) capacity will be prohibited.
- 15 days before road stoppage in the rainy season, public notices will be placed by the Road Maintenance Users Committee as approved by the Local Agency.
- During stoppage period of vehicular movement, the owner of the operated vehicle can be penalized as per the provision made in Local Self-Governance Act and Regulation under the concerned Local Agency's decision.

6.5.3 Maintenance Work Schedule

- Routine Maintenance: Routine maintenance will be carried out for 12 months a year (whole year).
- Emergency Maintenance: Carried out at any time of the year and specifically during rainy months according to need of emergency maintenance work. There needs to be allocated sufficient budget keeping view of the past year experiences.
- Preventive Maintenance: On the basis of possible dangers and available resources, can be carried out at any time of the year.

6.5.4 Maintenance Work Implementation Arrangements

- Rural Road maintenance work to be implemented through users committee needs to be implemented according to provision in Local Agency Financial Administration Regulation, 2064 rule 155 and 156.
- Road maintenance users committee will perform routine maintenance work with length person system or worker group as per their decision. Depending upon the road condition one-length person needs to be arranged for a length of the road from 3 to 5 km.
- The workers assigned for routine maintenance work are to be recorded in muster roll and upon recommendation of Supervisor/Technician; payment will be made by RMUC.
- Preventive maintenance work will be carried out on the basis of necessary volume of work with cost estimation.
- For Recurrent and Periodic maintenance work, a contract should be made between RMUC and DDC/DTO as per approved program with approved cost estimate for implementation. RMUC will carry out this work by forming a worker group and payment of work will be done by RMUC as per the evaluation of the technician.
- The works, which are not possible to carry out using length person or workers group and which are critical from a technical point of view and needing the use of machinery, should only be carried out through contractual process.
- For cost estimate and evaluation during analysis of rate, DoLIDAR Norms need to apply or not mentioned in these Norms then other Norms can apply. Such cases shall apply with the approval of concerned agency as per existing rules and regulation.

6.5.5 Arrangement of Technical Resources

DTO under DDC for road maintenance work needs to make available the required technical person power. For this purpose, DTO needs to nominate technicians and define their responsibilities. If due to

non-availability of technical persons from DDC/DTO, the VDC or concerned UC can themselves manage the technical person power with the approval of DDC.

6.5.6 Training and People Awareness

DDC will provide road maintenance related training as required by RMUC. RMUC will arrange an awareness campaign at local level for road maintenance and sustainable use of the road.

6.6 Road Maintenance Action plan

A clear work chart will be introduced concerned with road maintenance and operation, preparation and application of the action plan. The model for this shall be as stated below:

Name of the Road: Rural Road Length of the Road: Km
 District: Road connected municipality/ VDC, ward nos.:.....

Work Chart

S.N.	Activities	Time for completion	Responsible Agency	Remarks
1.	Formation of road maintenance users committee a) Calling of users group meeting b) Formation RMUC and Registration c) Information circulation of the formation of RMUC	----- ----- -----	DRRMC/VDC/Users Groups/UC/VDC VDC/UC	
2.	Opening of Bank Account of RMUC and Information circulated to DDC/DRRMC and VDC	-----	RMUC/VDC	
3.	Preparation of Road Maintenance Policy and get approval from DDC	-----	RMUC/DDC	
4.	Fixing the rate of transportation tax	-----	RMUC/DDC	
5.	Starting collection of taxes as per new rate	-----	RMUC	
6.	Arrangement of Fund	-----	DDC, Municipality, VDC, RMUC	
7.	Handing over of road a) Preparation of project details and handing over form b) Handing over of project	After completion of construction	DDC, DRRMC, RMUC	
8.	Provide maintenance management training	-----	DDC, DTO, Project	
9.	Preparation of Maintenance Plan	After completion of construction	DDC, DRRMC, RMUC	

6.7 Establishment of Road Maintenance Users Committee Fund

Every DDC upon the initiation of DRRMC will establish a Maintenance Fund to be run by Local RMUC. In that fund the amounts received from DDC, VDCs will remain for road maintenance. Apart from this, the local RMUC will collect additional resources as approved by constitution, deposit, and run the fund.

Amounts will be deposited in RMUC Fund as stated below:

1. As per approved program of DDC, RMUC will deposit the amount received from DRRMF for the maintenance of specified road.
2. Available amount from DDC on a, per km per year basis for the concerned road maintenance.
3. According to Local Self-Governance Act, 2055 as per approval of concerned agency, the grant amount received from road service provision by VDCs (road connected and also not connected) for the road maintenance.
4. Collected amount from transport tax, penalty from transport services plying on the road, for road maintenance according to approval of concerned agency.
5. Cash or volunteer labour contribution received from direct road benefiting households and other users.
6. Under Nepal Government's rural road maintenance fund at central level and fixed in annual budget, the available amount through DDC to the specified road for maintenance work through users committee.
7. Among the disbursed amount from Roads Board Nepal to specified roads for maintenance available through DDC for the implementation of the works through users committee.
8. Other local agencies such as: Municipality and VDC who annually receive block amount or grant amount at rate of per km basis for the concerned road maintenance work.
9. According to acceptance by DDC from different projects, the allocated amount to be used for maintenance work on the particular road through users committee.

For Example: Rural Community Infrastructure Works (RCIW) and Decentralized Rural Infrastructure and Livelihood Project (DRILP) under which there is a provision of establishment of one District Level Maintenance Fund for the maintenance of rural roads. From this fund as per the decision of DDC, the approved amounts needs to be deposited to Road Maintenance Users Committee Fund for the maintenance of road through users committee. In the case of RCIW, the concerned DDC and VDC each deposit a minimum of 4,000 and 2,000 per km per year respectively. Accordingly, from the start of road construction the provision is made to deposit the amounts to the account of RMUC under DRRMC Fund as approved by DDC.

Classification of Rural Roads

According to Approach for the Development of Agricultural and Rural Roads 1999 of DoLIDAR, the Rural Transport Network is classified in following 5 categories:

A. District Road, RRA

All kinds of rural roads which connect one or more than one, main expansion centre (market, tourist centre, industry, etc.) or different VDCs of the same district or district head quarter of neighbouring district, directly or with National Strategic Road Network.

B. Village Road, RRB

- All rural roads which connect the VDC centre with any one of the following places:
 - ⇒ Other VDC centre
 - ⇒ National Strategic Road Network
 - ⇒ District Road
 - ⇒ Main expansion centre of the same district or neighbouring district
- All agricultural roads which connect agricultural lands to small market centres or agricultural production centres (sugar industry, food processing industry etc.)
- All rural roads which connect a particular place of village (river bank, small market centre, school, health post, residential area, community forest, water mill industry, rural electric centre, parallel wells etc.) to following places:
 - ⇒ VDC centre of a village
 - ⇒ Other places of entire VDC
 - ⇒ One place of neighbouring VDC
 - ⇒ National Strategic Road Network
 - ⇒ District Road

C. Main Trail RRC

All track/trails not pliable by vehicles, which connect a VDC, centre with any one of the following:

- ⇒ District head quarter of the same district or neighbouring district
- ⇒ National Strategic Road Network
- ⇒ District Road
- ⇒ Village Road
- ⇒ One main expansion centre of the same district or neighbouring district

D. Village Trail, RRD

All track/trails not pliable by vehicle, which connect one place of a village to one of the following:

- ⇒ VDC centre of a village
- ⇒ Other places of entire VDC
- ⇒ One of the place of neighbouring VDC
- ⇒ National Strategic Road Network
- ⇒ Village Road
- ⇒ Rural Road
- ⇒ Main Trail
- ⇒ Other roads of village

E. Rope Way, RRE

High Mountain and Hill Area where construction of Main Trail (with appropriate width) is not possible, may possibly be connected by ropeway. Main objectives of these ropeways is to transport the daily consumption commodities, fuel, fertilizer, agro stuffs and animal husbandry production etc. in main areas, where production of high cost commodities take place. Necessary expenses for the construction of ropeway and expenses of yearly maintenance can be proved justifiable based on the social and economic benefits received.

Rural Road Design Standards

Definition

Design Capacity: (Applicable to RRA and RRB only)

Design capacity (design traffic volume) provides the basis of rural road classification determination. The basis of connected road network standard also determines the classification of rural roads. To assure the service standard of the road, the traffic volume existing on the road or future growth can be the basis for upgrading the class accordingly. For example, if there is a high traffic volume on the road class 'B' the road may need to upgrade in class 'A'.

Design capacity provides the basis for the determination of the interval of lay-bys (Passing Zones) also.

Design Speed: (Applicable to RRA and RRB only)

Design for higher speeds needs a higher design standard, which assures road safety, capacity, facilities to users and to reduce the transport operation expenses. Selection of design speed depends upon the road class, traffic volume, available budget, and geographical condition etc.

Geographical condition: (Applicable to RRA, RRB, RRC and RRD only)

The geographical condition through which the road passes effects directly the selection of road geometry standard (width of carriage way, right of way, radius of curvature/ turning, gradient, camber, interval of passing zone places etc.). Elements based on geographical condition e.g. land use, availability of land, natural disruptions (forest, vertical cliffs, high speed springs, rice cultivation nearby road, critical geographical structures, etc.) can affect the geometric standard of the road. For example, limited availability of land makes more difficulties for hill roads than Terai roads.

Rural Road Design Standards

Design standards: (only for RRA, RRB, RRC and RRD)

The following standards, and parameters (DoLIDAR Standard) are prescribed for the design of the Rural Transport Network and to operate maintenance:

S. N	Design Parameters	RR “A” (District Road)		RR “B” (Village Road)		RR “C” (Main Trail)	RR “D” (Village Trail)
		Hill	Terai	Hill	Terai		
1.	Design capacity-both way vehicle nos.(unit per day)	200 (400)	400 (800)	100 (200)	200 (400)		
2.	Design Speed (Km. per hour)	20	40	15	30		
3.	Right of way (both side from road centre)	10	10	7.5	7.5	2.5	1.5
4.	Road Width (m)	5.0	6.0	4.0	4.5	2.0	1.2
5.	Width of carriageway (m)	3.0	3.0	3.0	3.0	2.0	1.2
6.	Total width of both side soldiers (m)	1.0	1.5	0.5	0.75	0	0
7.	Road surface	Gravel	Gravel	-	-	-	-
8.	Min. Radius of curvature (m)	10	20	10	20		
9.	Max. Average gradient (up to 75 m)	8	5	8	5		
10.	Maximum Gradient	12	7	12	7		
11.	Increasing height of each 500 m rate, lengthwise easing of gradient (%)	0.50	-	0.50	-		
12.	Min. gradient of Hill road for the drainage of water (%)	1.0	-	1.0	-		
13.	Free Board	0.50	0.50	0.50	0.50	0.50	0.50
14.	Min. stoppage Distance required (m)	20	40	15	30		
15.	Camber (%) of carriageway	4	4	5	5		
16.	Camber of shoulder (%)	5	5	5	5		
17.	Width of carriageway of culvert/bridge (m)	3.0	3.0	3.0	3.0	2.0	1.2
18.	Size of lay-bys/passing zone (mX m)	3.0*20	3.0*20	3.0*20	3.0*20		
19.	Interval of lay-bys/passing zones (m)	300	500	300	500		
The following design standards are also included which are not seen in above standard (Based on the Construction of Green Road Concept and RCIW experiences of road construction).							
1.	Annual Average Daily Traffic Nos.	40		20			
2.	Maximum Axle Load (ton)	8		6			
3.	Excess width for less than 20 meters radius of turning/curvature	2		2			

Maintenance Activities on Different Road Surfaces

Types of Maintenance	Black-Topped Road	Gravelled road	Earthen Road
Routine Maintenance	<ul style="list-style-type: none"> • Cleaning of road-edge drainage, culvert, bridge, slight diversion of drainage, • Cleaning of road surface, • Maintenance of road edges, • Removal of grass/herbs from the road surfaces and surroundings • Removal of simple landslides or slips • Cleaning of other road furniture. 		
Recurrent Maintenance	<ul style="list-style-type: none"> • Maintenance work of drainage • Maintenance work of culvert, surface drainage, • Maintenance work of road edges • Maintenance work of the other road furniture 		
	<ul style="list-style-type: none"> • Pot hole patching • Crack sealing • Edge repair 	<ul style="list-style-type: none"> • Spot graveling • Dragging • Grading 	
Periodic Maintenance	<ul style="list-style-type: none"> • Fog seal • Slurry seal • Surface dressing • Sand seal • Thin overlay • Re-gravelling of shoulders • Road markings 	<ul style="list-style-type: none"> • Re-gravelling 	
Emergency Maintenance	<ul style="list-style-type: none"> • Emergency traffic operation management • Opening of blocked road removing the landslide/flood • Maintenance work of damaged embankment and cut slope • Construction of diversion • Emergency maintenance of bridge/culverts 		
Preventive Maintenance	<ul style="list-style-type: none"> • Slope stabilization • Maintenance work of river training structures • Removal of hanging cliff/rock • Bioengineering works and its maintenance 		

Criteria to be fulfilled by the District Development Committees to obtain resources from Centre for Road Maintenance

- A. Prepare inventory of existing rural road conditions of the District
- B. Prepare or update the District Transport Master Plan (DTMP) according to Approach for the Development of Agriculture and Rural Roads, 1999.
- C. In specific format including following detail descriptions prepare the Annual Road Maintenance Plan (ARMP) and obtain approval.
 - Roads requiring maintenance and maintenance work types
 - Priority of maintenance work
 - Road maintenance work design and cost estimate
 - If the work is to be carried out by DDC or DTO, detail description including information of the technical working personnel of that office
 - Information on the available physical facilities/services and technical resources
 - Modality of implementation
 - Prepare as shown in Annex G “Rural Road Maintenance Prioritization Cost Estimate Chart”
 - Maintenance Work Plan, etc.
- D. Include details of the local contribution, commitment of amount and commitment on the application of Directive/Guideline received from Nepal Government.

Procedure for calling meetings, discussions, and decision making for maintenance

Rural people need to be given the opportunity to advise and to hold discussions in a participatory manner as a prerequisite to making decisions for road construction and maintenance works. For this, it is necessary to call a meeting of community and concerned users. In this way, a mass gathering to discuss any relevant subject matter can form the meeting. A gathering of users group members to discuss road maintenance is termed the road maintenance meeting.

Reasons to organize meeting?

1. Disseminate information regarding the maintenance work to be carried out and enable the people attending the meeting to express their views in front of all attendees. If the views of all are expressed, there will be an opportunity to modify the output.
2. Making decisions of any, work with the participation of people increases the trust for that work and level of participation. To get trust and participation for all work it is necessary to organize a meeting of local people.
3. Poor understanding by the user's participants of the work nature and why and how it is being to be carried out can cause people not to participate. The meeting should clarify all such matters. Therefore, to encourage people's participation an organised meeting of income earning group, users group, or committee is essential.

How to organize meeting?

Organizing the meeting of road related committees or the local people can be achieved through the following methodology.

1. Finalise what subject matters to be discussed in the meeting before organizing the meeting and prepare details.
2. Information should be circulated to the members concerned with the meeting regarding, place, date and time, at a location accessible to all.
3. Write down the discussions and decisions of the meeting and maintain a separate meeting register (Book).
4. Record the meeting No. of each meeting and date.
5. Meeting must start only after gathering a sufficient number of members achieving the quorum of the meeting.
6. To conduct the meeting, Secretary needs to take responsibility as per the instruction of Chairperson. It is necessary to nominate the Chairperson of the meeting. Chairperson of the meeting needs to give opportunity to all participants to express their own suggestions and opinions.
7. At the start of the meeting, information should be provided to all participating members, on what subject matters it is necessary to take decisions and why.
8. Only one subject matter at a time should be presented for discussion and decision. Arrange discussion to listen to all the member participants' views regarding the subject matter. The decision by the majority of gathered members, discussion, and conclusion needs to be written in the meeting register (book).
9. At the end of the discussion, the written notes in the meeting register need to be read to all participating members and upon satisfaction take signatures. The model is given below for preparing meeting notes.

Model for recording meeting decisions in the meeting Register (Book):

Meeting No:-

Today of.....year.....month.....date, the day. (Name of the road) road maintenance users committee's chairperson Mr., upon his/her chairmanship organized meeting with following participation of the members. The following subject matters were discussed and decisions made.

Participant Members Name and Signature: -

1. Chairperson:

2. Vice Chairperson:

3. Secretary:

4. Treasurer:

5. Member:

6. Member:

Invitees participants Name and Signature:-

1.

2.

3.

4.

5.

6.

Discussed subject matters:-Example

1. About Road Alignment

2. About the arrangement of Free Labour Contribution

3. Delegation arrangement to discuss the proposal of project with Donor Organization

Decisions:-

1. Carry out the road maintenance by arranging village labour contribution

2. Persons involved in maintenance provide Rs.50/person as Tiffin and bear that amount from the Committees Fund, etc.

Road Condition Inventory for Maintenance (Sample)													
Name of the Road:		Length:k.m Section: From to					Year of construction:						
Development Region:		District:		VDC:		Earthen: Gravelled: Black Topped:							
Right of Way (RoW):		Width of Carriageway: Shoulder: Left m. Right m. Total width: Road Related S.No.:.....											
Kilometres		+ 000	+ 100	+ 200	+ 300	+ 400	+ 500	+ 600	+ 700	+ 800	+ 900	+ 000	
Right Side	<u>Road Safety Signals / Structures:</u>												
	Parapet, Pole, Kilometre post etc.												
	<u>Road Structures:</u>												
	Retaining walls												
	Breast wall												
	Check-Dam etc.												
	<u>Drainages:</u>												
	Cement masonry, Concrete, Dry, Earthen etc												
	Bio-Engineering Structures												
	<u>Cross Drainage:</u>												
	Bridge												
	Culvert												
	Causeway												
	<u>Road Area</u> <i>Road Central Line</i>												
	City and Village												
	Intersection, Fork												
	<u>Others:</u>												
		Place of availability of local construction materials (Gravel, stone etc.)											
		Place of disposal of waste materials											
		Bench Mark (B.M)											
	Left Side	Bio-Engineering Structures											
<u>Drainages:</u>													
		Cement masonry, concrete, dry, earthen etc.											
<u>Road Structures:</u>													
Retaining wall													
Breast wall													
Check-Dam etc.													
<u>Road Safety signals/Structures:</u>													
	Parapet, pole, kilometre post etc.												

Priority Ranking and Cost Estimate for Rural Road Maintenance

Table of Priority Ranking and cost estimate for Rural Road Maintenance

Date of Assembly Decision:

Date of DDC Decision:

S. N	Details of Road (Road Inventory)				Basis of Prioritization			Cost contribution				Pliable road length after maintenance	Remarks
	Name of the road & section	Types of maintenance	Road classes	Length in k.m.	No. of vehicles per day	Benefited population (in thousand) per k.m.	Cost (in thousand) per k.m.	Community	Local Agency	Nepal Government	Total Cost Rs. (in Thousand)		
					Total								

Note: Necessary papers to be produced with this Format

1. Copy of decision of DRRMC
2. Attested copy of the decision of DDC
3. Detail estimate with design
4. Account no. of DRRMF
5. Residence population of 1.5 km area of right and left of the road
6. Priority ranking no. according to DTMP

Requested as per above decision and commitment

Name Title:
Signature:
Post: Chief, DTO

Name Title:
Signature:
Post: LDO

Name Title:
Signature:
Post: DDC chairperson

The Model Constitution of Road Maintenance Users Committee

Foreword

.....Anchal.....District.....of Nepal, situated in Rural Roads Maintenance Work to be carried out regularly. The arrangement (collection) of Financial, Physical and Human Resources and their use may support the people to make long-term movement easier and promote development of local market and purchase / sale of agro based daily consumable goods. To promote the objectives of self-sustaining capacity of local people residing in the road area of..... Anchal Districtin cooperation and mutual sharing of rural road (beneficiaries), this constitution is activated for the formation of road maintenance users committee and its operation.

The main objective of this constitution is to provide direction for long-term use of rural roads with the formation of road maintenance users committee to operate rural road maintenance work.

Chapter-1

Initial (Preliminary)

1. Name of the committee: Name of this organization will be ".....Road Maintenance Users Committee."
2. Address of the committee: Road Maintenance Users committeeVDC..... District.
3. Commencement: This constitution will come into force from the approved date of concerned Local Agency (.....).
4. Working Authority: Rural Road Maintenance and Management under which different kinds of maintenance works and road related structures falls. Necessary maintenance work operation and management will be carried out in this area.
5. Affiliation: This committee will be affiliated with concerned Local Agency (.....) and
6. According to existing Rules and Regulation: Provisions are made in this Constitution under Local Agency Financial Administration Regulations, 2064 and existing Rules and Regulations. This committee will execute the works within the frame of Nepal Government's concerned Local Agencies Policy Instruction.
7. Existence of the Committee: This committee will be an organized, self-disciplinary, non-profit making, non-political and non-governmental social organization.
8. Committee as a Person: This committee will remain as a person. This committee can make a complaint against anyone and may receive complaint against it.
9. Stamp and Logo of the Committee: Separate stamp will be of this committee for formal use, which will be in a circular form. At the centre of the circle.....Road Maintenance Users Committeewill be written with year of formation of the committee.

Chapter-2

Not interpreted as otherwise by subject or sense in this Constitution:

- A. "Constitution" means.....Road Maintenance Users Committees Constitution, 206.....
- B. "Regulation" means Local Agency Financial Regulation, 2064.

- C. "Sub-regulation" means under this Constitution Executive Committee formulated and operated sub-regulation.
- D. "Executive Committee" means according to this Constitution elected among the users.....Road Maintenance Users Committee.
- E. "Committee" meansRoad Maintenance Users Group.
- F. "Sub-committee" means underlying Executive Committee with total or part of the authority delivered for works to be executed in specific locations or areas from time to time.
- G. "Work Plan" means according to this Constitution, the projects to be operated by Maintenance Users Committee and maintenance related program.
- H. "Non-Governmental Social Organization" means as per existing Rules registered in concerned agency a service motivated social organization.
- I. "Donor Organization" means National and International, Government and Non-Government Organization.
- J. "People's Participation" means free service receiving / providing from the people, people's help, free labour contribution and people's involvement in maintenance work.
- K. "Users (Beneficiaries)" means according to this Constitution, the person benefited by using service and facility for which maintenance work is to be carried out.
- L. "Group" means Users Group Community.
- M. "Users Group" means the group or community getting service and facilities directly or indirectly through this committee.
- N. "General Assembly" means users group "Meeting" according to Constitution sitting.
- O. "Committee Executives" means the Chairperson, Vice-chairperson, Secretary, Treasurer and members elected as per Constitution only.
- P. "Chairperson, Vice-chairperson, Secretary, Treasurer" means the Chairperson, Vice-chairperson, Secretary and Treasurer elected as per Constitution of Maintenance Users Committee.
- Q. "Service Charge" means the charge determined by the committee for receiving the service and facilities from projects.
- R. District Level- "District Rural Road Maintenance Committee" means the committee formed under the chair of DDC Chairperson by the DDC.
- S. "Special Fund for Maintenance" means the created fund for all types of infrastructure structures of the district under which there will be a District Rural Road Maintenance Fund.

Chapter-3

Objectives

Under the frame of existing Rules, Law, and Regulations, the main objective of this committee to operate the works will be as below:

- A. To make movement safe and easy to the people surrounding the rural road by maintaining the quality of rural road and operating the maintenance work to run the road in a sustainable way.
- B. To collect available contributions from National, International, Governmental, Non- Governmental Donor Organizations support to District Level Special Fund for Maintenance and Rural Road Maintenance Committee.
- C. Collect resources and equipments as a grant for the maintenance of the project from DDC, DRRMF, Municipality, or neighbouring VDC.
- D. Prepare the maintenance program with the help of DDC, Municipality, and Neighbouring VDCs.
- E. Select and appoint the rural road maintenance Front-liner; the appropriate person chosen from among the users and manage to provide technical training as required.
- F. Seek support from DDC for the technical work, which is beyond the capacity of Local Maintenance Front-Liner.
- G. Regarding road operation and maintenance management, make an assessment under DDC officials, 2 times a year.
- H. Regarding the long term use of the road, environmental cleaning and aim of the project, inform the people, raise awareness and make arrangements for people's participation for the implementation of program.

- I. For the work of project maintenance, arrange operation of labour, equipment, and available resources.
- J. Encourage participation from all users for the maintenance works to be carried out.
- K. Support concerned agency for the protection of common property and heritage.
- L. Be prepared to maintain peace and security in coordination with concern agency.
- M. Become involved in other current development works.
- N. To operate the activities of this organization, it will run in coordination with DDC as per Rural Road Maintenance Directive, Local Agency Financial Administration Regulation, 2064 and the approved program of concern agency.

Chapter-4

General Membership

1. General Membership

General member of the committee will be nominated from the direct beneficiaries of the road..... VDC's road connected ward no. (ward no.....) users family members, one member from each family by organizing a users mass meeting. Such nominated members are considered as General Members only after registration in the committee. Despite this, the General Meeting can nominate some members according to need.

General membership letter will be provided to the registered member. The no. of general members should be at least 50. Among them, there should be at least 5 members from each VDC, and each ward connected by the road.

2. Qualification for the Membership:

A person can be considered as qualified for General membership or maintenance Users Committee member as stated below:

- A) Agrees to obey the Constitution of the Committee & Group decision.
- B) No mental disorder.
- C) Physically fit, can walk through the road and over 18 years of age.
- D) Must be a Nepali Citizen.
- E) Must be a permanent residence of road connected Ward.
- F) Not convicted by the Court in criminal affairs.

3. Conditions for terminating membership:

- A) If it is proved that there is a mental disorder
- B) Activities are performed against the Constitution of committee or by not obeying the decision of the group, which creates disturbances in the work program of the committee.
- C) Death occurred
- D) Migration took place

4. Termination from membership:

In the following conditions any one person will be considered terminated from the membership

- A) If it is proved that resources of the committee are misused
- B) Repeatedly not obeying the decision of committee

5. All members must agree to obey the provisions made in the constitution.

Chapter-5

Assembly, meeting and decision making process

1. General Assembly of users group will be held at specified place, date and time by the committee. General Assembly will be held at least once a year.

Provisions of General Assembly:

- A) The General Assembly meeting will be called by Chairperson and Secretary after making decision by the meeting of road maintenance committee.
- B) All members of users group will be the members of that General Assembly. All the members of the users group will have right to nominate themselves and to nominate others. Will need to inform in writing and place the notice in public places about the General Assembly regarding holding date, place, time, and the subject matter.
- C) In the presence of at least 51% of the members among the total members, the General Assembly activities can be run.
- D) If less than 51% of the members are present on a specified day, it will be necessary to stop the General Assembly of users group and arrange another assembly within 15 days.
- E) If for a second time on the specified date, day and time the presence of the members is less than 51% but more than 30% of the total members, the meeting of the General Assembly will take place. But if there is less than 30% presence of total members, the meeting of that day needs to stop and be recalled within 3 days for a third time. On the third occasion the majority of the members present will sanction the proposals.

2. Special Assembly Meeting

In special circumstances, if there will be a written demand of General Assembly, by at least 25% of the members in total, the Chairperson of maintenance committee and Secretary will need to call a special meeting within a month.

3. The roles / responsibility and authority of General Assembly:

- A) Make evaluation of previous 1-year work, sanction the rule and make programs for coming 1 year.
- B) Discuss and sanction the report presented by Users Committee
- C) Hold discussions and make decision on listed matters under consideration as presented by the Chairperson.
- D) From time to time, clarify any matters having contrary effect on the fundamental objectives of the Constitution.
- E) According to the objectives of the users group for the expansion of the programs, form committees and subcommittees on a need basis and specify their role, responsibility, and authority. By using the provided authority by the Constitution Chapter-3, clause 7 sanction the Rules.
- F) Form the Election Executive Committee for holding elections.
- G) For maintenance of the project, prepare the plan for free labour contribution, make the budget and equipment available, and plan for their implementation and operation.

4. Chairmanship of General Assembly Meeting of Users Group:

The Chairperson of Maintenance Committee will take the Chairmanship of General Assembly Meeting of Users Group. In the absence of Chairperson, Vice-chairperson or in his/her absence the eldest member of the committee will take the Chairmanship.

5. Formation of Road Maintenance Users Committee (RMUC):

The Users Group will form a Road Maintenance Users Committee according to Local Agency Financial Administration Regulation, 2064 to complete the project smoothly and on time, safeguard and care for it and ensure its development and operation. Within the posts of Chairperson, Vice chairperson, Secretary or Treasurer, there will be represented at least one woman and one scheduled caste.

Within the formation of users committee as below, there will be at least 33% representation of female members.

Chairperson	: 1 person
Vice chairperson	: 1 person
Secretary	: 1 person
Treasurer	: 1 person
Members	: 5-7 persons

Total : 9-11 persons

Working period of all executive members of Road Maintenance Users Committee will be 3 years. Not more than 3 necessary advisors (without voting rights) can be nominated in this committee.

6. Conditions for withdrawal from the post of Road Maintenance Committee:

- A) Tendering resignation and obtain approval from the post of committee member
- B) Death
- C) Absent 3 times continuously from committee meeting without notification subject to failure to produce clarification with appropriate reason.
- D) No vote of confidence made against any member by at least 2/3 of the members of the Users Group General Assembly
- E) Deformation of the committee.

7. Meeting of the Road Maintenance Users Committee:

- A) Generally, committee meeting will be held once each month.
- B) The meeting of Road Maintenance Users Committee will be held as required at a date and time specified by the Chairperson.
- C) Upon the written request of at least 51% of the committee members, the Chairperson will be required to call a meeting within 7 days of such notification.
- D) The committee meeting can as necessary call the Officials of concerned offices and other persons as invitees.

8. Quorum

Presence of at least 51% of the committee members is considered a quorum for the committee meeting.

9. Decision making process:

For all subject matters presented in the meeting for discussion, the majority of members present must sanction a decision.

10. The role, responsibility and authority of RMUC will be as follows:

- A) Implement decisions sanctioned by the General Member's Assembly.
- B) Ensure the current and fixed property of the organization is managed to protect and promote best use.
- C) Sanction the annual budget and produce income / expense details in the General Assembly Conference.
- D) Run different programs to achieve the objectives of the organization.
- E) For the different sub-committees, delegate the authorities as needed for the fulfilment of the objectives of the users group,
- F) Submit bi-annual progress report and annual financial statement of the organization to DRRMC.
- G) Information sharing/communication and develop neighbourhood relationship with Local, District Level Organizations and other Road Maintenance Committees.
- H) Observe, inspect, and control the various sub-committees.
- I) Ensure the smooth operation of maintenance work and make necessary work plan and procedures, submit to General Assembly and apply.
- J) Work together with users group, Donor Organizations, and other agencies.

- K) Make available to the users group on a regular basis, the progress of works and details of expenses.
- L) Apply the policy instructions of Nepal Government, DDC, DRCC, DRRMC.
- M) Make available details required by DDC, DRCC, DRRMC and VDC/Municipality.
- N) According to Local Agency Financial Administration Regulation, 2064 perform work in the capacity of users committee.

Chapter-6

The role, responsibility and authority of the Executives will be as stated below:

1. Role, Responsibility and Authority of Chairperson:

- A) Take Chairmanship of Road Maintenance Users Committee and General Assembly Meeting.
- B) Observe and inspect the work performance of the executives and members of road maintenance users committee and provide instructions as required.
- C) Cast the deciding vote, if there is equal voting at the meeting.
- D) During emergency maintenance work to be carried out on a project, obtain acceptance from forthcoming meeting to make expenses in a month not more than Rs..... (In words Rs.)
- E) According to the objectives of the organization leadership provide for well-managed development construction including running the social service programs.
- F) Take care of the current, fixed property of the organization.
- G) Apply the decisions made by the committee.
- H) Submit the required details and report to Nepal Government and concerned Agencies.
- I) During absence delegate own authority to Vice-chairperson and in the absence of Vice-chairperson to the eldest member of the committee.

2. Roles, Responsibility, and Authority of Vice-chairperson:

- A) Bear the responsibility and authority of the Chairperson in absence of the Chairperson.
- B) Work as an Acting Chairperson if Chairperson post is vacant, pending a permanent assignee.
- C) Provide necessary support to the Chairperson.

3. Roles, Responsibility, and Authority of Secretary:

- A) Perform the office management work to run the program of the project and activities of the committee in an effective manner.
- B) For General Assembly of users committee and users group make necessary preparations and management.
- C) Maintain in writing the decisions of meeting of users group and committee.
- D) Inform all members of the decisions of each meeting.
- E) Arrange people's participation within the concerned area of the project.
- F) Perform the tasks specified by users committee.
- G) Prepare the progress report of the project and send it to VDC, DRRMC, DDC along with the decision of users committee meeting.

4. Roles, Responsibility, and Authority of Treasurer:

- A) Collect the funds of road maintenance users committee, maintain the income expense account.
- B) Prepare the annual budget of committee/organization and submit through committee to General Assembly to be sanctioned.
- C) Arrange auditing.
- D) Supervise and control the financial transactions of the committee.
- E) Ensure payment and collection of taxes, which are to be collected by the committee, keep account of the payments owed.

- F) Keep a record in the appropriate manner of received capital, equipments, materials, and labour contribution from DDC, VDC, Municipality, Donor Organization, People's Participation, and other resources for the committee.
- G) Take responsibility of received capital and materials for the committee and maintain details of use.
- H) Perform other works as specified by the committee.

5. Roles, Responsibility, and Authority of Members:

- A) Carryout road maintenance project finalisation for the required quantity of labour, skill, and materials.
- B) Observe and inspect the implementation status of the project related maintenance work.
- C) Arrange participation of the users of project area as required.
- D) Inform the project status to area users.
- E) Perform the tasks specified by the users committee.
- F) Make proposals for projects, participate in discussion, finalize, and get sanctioned.

Chapter -7

Financial Management

1. Fund arrangement:

- A) There will be a separate internal Fund for the organization in which the received amount according to chapter-7, clause 2 will be deposited.
- B) The fund will be used according to specified work plan and working policy of the committee.
- C) From time to time, the committee will check and provide necessary instruction to ensure the fund is used appropriately.
- D) The operation of Fund, Accounting System, Auditing, and other fund related process will be according to specified processes.
- E) DDC, DRRMC, concerned VDC and Municipality may demand details of fund amount at any time and can check and provide necessary instruction.

2. Financial Resources:

- A) Grant received from DDC, VDC/Municipality, received financial support from various Personalities and Agency, collected amount from different activities run by the committee, received amount from various National and International Organizations, will be considered the income sources of the committee. Decision-making authority to collect transport taxes lies with the concerned Local Agency according to Local Governance Act and Regulation and as per the decision from local agency; the concerned RMUC will apply it.
- B) Labour, Capital, and Materials to be received from people's participation.
- C) Foreign aid can be taken only upon prior approval of Nepal Government.

3. Operation of Bank Account:

The bank account will be opened in a nearby available bank with the signatory of Chairperson, Secretary, and Treasurer. The signatory of Treasurer is mandatory and among the other two, one signatory only is mandatory to operate and make transactions.

4. Implementation of Work Plan:

Necessary resources for maintenance, the labour, skill, capital and material supply according to work nature and condition will be fulfilled and accounted by the Committee from its own resources or taking necessary fees from users or with the support of Nepal Government, DDC, VDC, Municipality and Donor Organizations. Implementation of work plan will take place upon the recommendation of Nepal Government or DRRMC and sanctioned from DDC according to Rural Road Maintenance related Policy and Working Policy.

5. Audit provision:

- A) Auditing of account of the organization will be carried out by a registered Audit committee/Auditor appointed by DDC. Work Completion and Audit Report of the project will be submitted to the Local Agency.

Chapter – 8

Miscellaneous

1. Election related provision:

- A) The election of RMUC Executives and Members will be nominated from among the General Assembly Members based on their unified decision. If there is no unification for the election, the Election Committee will be formed with 3 members amongst them.
- B) Election Committee will set out the electoral process itself.
- C) In election related activities, the decision of Election Committee will be final.
- D) The election of RMUC will be held every 3 years.

2. Proposed vote of no confidence:

- A) Proposed vote of no confidence can be submitted to the Group against any of the RMUC executives and members. In this condition, if the proposal is sanctioned by 2/3 majorities of total membership numbers, membership will be terminated.
- B) The proposed vote of no confidence with clear reason and blame stated in writing is to be registered with RMUC before holding the general assembly by 25% of the users group members with joint signature.

3. Filling of vacant post:

If a post is vacant for any reason, fulfilment for remaining period shall be according to the same process by which the post was originally filled.

4. Rectification of Constitution:

If a need for rectification of Constitution arises, written proposal of this needs to be submitted through the committee in General Assembly. If 2/3 of the majority of the General Assembly sanctions, then the Constitution will be rectified. The rectified Constitution can be applied after getting approval from the concerned Local Agency (DDC). The proposal of Constitution rectification will need to be registered in writing in the office of RMUC 15 days before holding the General Assembly.

5. Vacancy of the post:

The post of committee Executives and Members is considered vacant in the following conditions:

- A) According to chapter -4, clause 4, and non-continuation of general membership.
- B) Absent regularly 3 times without appropriate notified reason, but committee will need to produce the evidence that meeting notice was issued and received.
- C) According to chapter -8, clause 2, sanction the vote of no confidence.
- D) Sacking from the committee in disciplinary action.

6. Resignation:

Users committee Executives and Member can submit their resignation to the Chairperson. Chairperson can accept or reject the resignation by obtaining the general opinion of Executive Committee. Chairperson can tender his/her resignation to the committee through Vice-chairperson and if resignation is accepted by 2/3 majority of the committee member, resignation of the Chairperson is considered approved.

7. Committee dissolution:

If the committee could not run the activities according to the approved Agreement and Constitution or if by any reason committee dissolution takes place, the total assets of the committee, current and fixed capital will according to DDC decision be transferred to the name of DDC or concerned VDC/Municipality.

8. Dismissal of Protection:

- A) Before this, the total activities run by the name of RMUC will be considered as applicable under this Constitution.
- B) In case of contradiction between illustrated matters in this Constitution and the existing Constitution, Policy, Rule and Regulation will be automatically inactive.

9. *Adhoc* Committee related provisions:

- A) By not registering this Constitution, organizing first meeting of General Assembly, holding election of Executive Committee according to this Constitution and not holding the condition of that election, the whole activities to be performed by the Executive Committee, the meeting of DRCC hold on dated, of Rural Road (Name of Road), the total planning, emergency work activities and for operation management formed "RMUC" will remain as *Adhoc* Committee for road operation and maintenance.
- B) An *adhoc* Committee set up to run the activities, will comprise the following executives in road maintenance and users committee:

S.No.	Name	Post
1		Chairperson
2		Vice Chairperson
3		Secretary
4		Treasurer
5		Member
6		Member
7		Member
Advisors		
1	Program Officer,.....	
2	Chief, DTO	
3	Any one: Special Personality, if any	

10. The responsibility of *Adhoc* Committee:

- A) As described in chapter –8, clause 9 (A) of this Constitution, the *Adhoc* Committee must register this Constitution. After registration of the Constitution within the time frame 20..... the General Assembly Meeting should be called according to chapter -5, clause 1 of this Constitution. According to chapter-5, clause 5 and chapter – 8, clause 1 it is required to hold election/nomination and with the recommendation of VDC inform the DDC and DRRMC.
- B) Until the formal election of Executive Committee, the *Adhoc* Committee will perform the total activities of the Executive Committee according to this Constitution.

The role of different Stakeholders (Agencies) for Rural Road Maintenance

A) The role of District Development Committee (DDC)

According to Local Self-Governance Act, 2055, DDC will perform the following activities regarding rural road maintenance and management:

- 1) Coordination among various agencies /stakeholders (DRRMC, VDC, Municipality, Road Maintenance User Committee and User Group).
- 2) Do the selection of projects of maintenance on all District Level Roads within the district, under DTMP on the basis of priority ranking and get the approval of the District Assembly.
- 3) According to priority basis of the selected projects, allocate the amount from DDC Budget.
- 4) Take initiatives to make available the resources for maintenance expenses from other sources such as: Roads Board Nepal, Nepal Government's Budget.
- 5) In the district level the DDC Chairperson or the DDC member nominated by him/her being Chairperson, will be responsible for ensuring the DRRMC manage the District Rural Road Maintenance related works.
- 6) Manage the required technical services.
- 7) Regarding the activities of selected maintenance projects, provide the role of coordination, inspection, supervision, monitoring, evaluation and necessary instruction.
- 8) Recommend to DDC for timely release of advance money from DRRMF to the workers involved in maintenance work through local rural road maintenance users committee, for the payment of labour wages to them.
- 9) Provide support in all types of rural road maintenance related forthcoming activities.
- 10) Manage necessary training.
- 11) Raise public awareness regarding road maintenance and prohibit constructing houses, sheds, and structures in an illegal and uncontrolled manner within the Right of Way (RoW). Likewise, control on haphazard tree cutting, and extraction of stones/soil from either sides of road boundary.
- 12) Perform the necessary management to prepare timely ARMP in the format provided by Road Board Nepal.

B) The role of District Rural Road Maintenance Committee (DRRMC)

- 1) Coordinate among the different agencies (stakeholders) (DRRMC, VDC, Municipality, RMUC and User Group)
- 2) Recommend fixing the transport tax according to the nature of transport vehicle and ownership.
- 3) Transfer authority to RMUC to collect the transport taxes.
- 4) Provide support to make and upgrade maintenance Policy.
- 5) Identify and operate the local resources for DRRMF.
- 6) After identification of rural roads to be maintained select and provide recommendation.
- 7) Provide support for the implementation of approved projects for maintenance.
- 8) Provide necessary instruction to RMUC.
- 9) Pay regular monitoring visit to rural roads, which are under implementation for maintenance.
- 10) For rural roads, which are under implementation of maintenance and under operation, make an assessment once every 3 months and send the assessment report to concerned agencies/stakeholders (DDC, DoLIDAR, and Roads Board Nepal).

C) The role of Village Development Committee (VDC)

Within the frame of Local Self-Governance Act, 2055 VDC will perform the following activities:

- 1) Disburse the amount from VDC Fund for the maintenance of its own VDC area rural roads on priority basis.
- 2) Perform the monitoring, evaluation of maintenance project activities of its own VDC area roads.
- 3) Provide facilitation and support to road maintenance users committees to form the labour groups for maintenance.
- 4) Develop encouragement of users in free labour contribution.
- 5) Provide necessary suggestions to RMUC.
- 6) Support to develop people's awareness regarding the need of the road and it's importance in local area.
- 7) Perform the activities to develop people's awareness regarding road maintenance, prohibit constructing houses, sheds, and structures in illegal and uncontrolled manner within the Right of Way (RoW). Likewise, will not allow/ control the haphazard tree cutting, extraction of stones/soil within the periphery of roads surrounding boundary area.

D) The role of Road Maintenance User Committee (RMUC)

- 1) To make easy, accessible and safe movement of rural road traffic for the surrounding people, maintaining the quality of maintenance and to operate the road in sustainable manner.
- 2) Provide necessary suggestions to technicians in the preparation of road maintenance Work Plan.
- 3) Enter into agreement with DDC or DRRMC for the implementation of maintenance plan.
- 4) Perform the management of maintenance work, inspection, and supervision.
- 5) Resolve any apparent social problems during maintenance.
- 6) Release timely amounts for the prompt payment of labour wages according to the agreement with DDC or DRRMC.
- 7) Perform the public audit in presence of maintenance workers including all concerned representatives from time to time.
- 8) Manage safe storage of purchased tools during road construction and maintenance.
- 9) Settle the advance and the original bill vouchers of the expenditures made in maintenance work, audit report, and progress report to DDC, VDC, Municipality, and DRRMC.
- 10) Inform the people and support and develop awareness about the proper use of the road, its long-term benefits, and its maintenance.
- 11) Forming the users groups of necessary nos. for the maintenance and performance the maintenance work.
- 12) Take initiatives to get the necessary funds for road maintenance.
- 13) Collect the transport taxes after getting approval from the concerned agency.
- 14) Implement received instructions, suggestions, and advice from DDC, DRRMC, VDC, Municipality, and Users.
- 15) Perform activities to develop people's awareness regarding road maintenance, prohibit constructing of houses, sheds, and structures in illegal and uncontrolled manner within the Right of Way (RoW). Likewise, control on haphazard tree cutting, extraction of stones/soil from within the periphery of roads surrounding boundary area.

E) The role of Road Maintenance Users Group (RMUG)

- 1) Form the RMUC.
- 2) Assess maintenance work once a year at mass meeting.
- 3) Make available free labour contribution for maintenance work if necessity arises.
- 4) Provide necessary support to RMUC.
- 5) Participate in and encourage others to participate in Public Audit.
- 6) After completion of Road Maintenance Work return to the UC all received tools and remaining construction materials.

F) The role of District Technical Office (DTO)

- 1) Provide necessary technical suggestions to DDC to prepare the maintenance plan according to priority basis of rural roads
- 2) Prepare and perform all the survey, design, and cost estimate of the maintenance work of the roads, which are under priority.
- 3) Provide necessary technical support to RMUC in road maintenance work.
- 4) Provide support to RMUC to prepare the maintenance work plan for operation of maintenance works.
- 5) Perform and prepare the quality control, measurement, and evaluation of the maintenance work.
- 6) Provide necessary support to RMUC for the payment of work wages.
- 7) Perform regular monitoring and evaluation of maintenance work.
- 8) Provide technical support to DDC for the procurement of necessary works, materials, and services for the maintenance.
- 9) Recommend to DDC for the approval of bill vouchers received from the maintenance committee after checking.
- 10) Submit to concerned agency the prepared maintenance project progress reports.
- 11) Provide necessary technical suggestions to DDC to fix the transport fare (passengers and goods) and transport taxes.
- 12) Provide necessary support to DRRMC in the programs of long-term use of the roads.
- 13) Perform the necessary evaluation and recommend the maintenance projects of the district roads on a priority basis.
- 14) Recommend updating the rates/wages of construction works as per time demand.
- 15) Report to the concerned agency to make the update the construction works Norms, Specification, Standard Design, and Maintenance Directives as per time demand.
- 16) Prepare details (e.g. ARMP) in specified format to obtain the resources from central agency such as Roads Board Nepal.

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- National Consultative Workshop on Rural Road Maintenance Manual, May 16, 2005 Proceedings.

Abbreviations and Acronyms

AADT	Annual Average Daily Traffic
ARMP	Annual Road Maintenance Plan
CBO	Community Based Organization
CDO	Chief District Officer
DDC	District Development Committee
DFID	Department for International Development
DoLIDAR	Department of Local Infrastructure Development and Agriculture Roads
DoR	Department of Roads
DR	District Road
DRRMF	District Rural Road Maintenance Fund
DRRMC	District Rural Road Maintenance Committee
DRSP	District Roads Support Program
DTMP	District Transport Master Plan
DTO	District Technical Office
FY	Fiscal Year
GRECO	Green Road Concept
GTZ	German Technical Cooperation
IARMP	Integrated Annual Road Maintenance Plan
INFRIN	Infrastructure for Income
INGO	International Non-Government Organisation
Km	Kilometre
LDO	Local Development Officer
LGSA	Local Self-Governance Act
MoLD	Ministry of Local Development
NFRTD	Nepal Forum for Rural Transport Development
NGO	Non-Government Organization
NPC	National Planning Commission
NPRRM	National Plan for Rural Road Maintenance
NRs	Nepali Rupees
RAP	Rural Access Programme
RBN	Roads Board Nepal
RCIW	Rural Community Infrastructure Works
RMUC	Rural Maintenance User's Committee
RoW	Right of Way
RPN	Rural Programme Nepal
RR	Rural Road
RRF	Rural Roads Forum
RRMD	Rural Road Maintenance Directive
RTMIS	Rural Transport Management Information System
SDC	Swiss Agency for Development and Cooperation
UC	Users Committee
UG	Users Group
USAID	US Agency for International Development
VDC	Village Development Committee
YPO	Yearly Plan of Operation