



Trainer's Guide

Maintenance

Labour-Based Technology

for Rural Road Works



**Don Bosco Foundation
Training Center in Comoro**

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Trainer's Guide, Maintenance Labour-based Technology for Rural Road Works

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1 Introduction

These training guidelines for training of small scale contractors and Community Maintenance Groups in Labour-Based road maintenance have been developed to assist trainers in planning, organizing and implementing training programmes for road maintenance. The training guidelines consist of practical advice, reference material for the training but do not contain extensive pedagogical theories and are also not meant as a substitute to necessary teaching skills

The training guidelines should be used to as an aid to develop the trainer's plans and used as reference material. The guidelines are used together with other training material such as: (i) Technical Manual for Labour-based Road Construction (ii) Service Agreement for Community Maintenance, including Terms of Reference and Specifications (iii) pre-printed power points slides in labour based road construction training (iv) sample of exercises and (iv) site administrative formats etc.

2 Overall training Programme

The overall training programme is offered to domestic contractors with some experience of managing labour-based rural road works include technical and management training, and to Community Maintenance Groups involved in the actual implementation of the maintenance works.

Because of their different backgrounds and their different roles in the maintenance activities they require different types of training. The training programme has therefore been divided into two types, namely (i) management training and (ii) technical training. Management training is offered to company directors and company supervisors plus any other supervisory staff, eg from ERA or Public Works. The technical training is offered to the communities, including the company supervisors who will participate as resource persons. The bar chart below shows proposed type and duration of training for the different categories of staff.

Staff/type of training				Days								
		Announcement		1	2	3	4	5	6			
Company Director	Management Training											
Company Supervisor (1-2)	Management Training											
	Technical Training											
ERA/PW Supervisors	Management Training											
	Technical Training											
Community Members (CMG)	Technical Training											
										Tender		

These training guidelines are developed for the Routine Road Maintenance training for the contractor staff and CMG with aims to equip the contractor's staff and CMG with sufficient knowledge and appropriate techniques to plan, monitoring and carry out the routine road maintenance.

Training topics for Routine Road Maintenance training are tabulated below:

Participants	Session code	Topics
Contractor's director, supervisors and ERA's engineer	M-1	- How roads deteriorate? Why maintain the road? - Terminology of road maintenance
	M-2	- Type of road maintenance and introduction. - Process of routine maintenance. - Maintenance structure.
	M-3	- Maintenance timing/priority. - Hand tool and Productivity norm
	M-4	Introduction of road condition assessment form
	M-5	- Bill of Quantity and cost estimate for road routine maintenance. - Incentive payment scheme
	M-6	- Selection of CMG leader and member. - Internal Agreement
	M-7	Duties and responsibility of supervisor and CMG leader
	M-8	- Introduction of maintenance activity - Technical Specification
	M-9	Site practice for filling Monthly site inspection form
	M-10	Working on result of the site practice
	M-11	Maintenance Plan and report
	M-12	Inspection and payment for the road routine maintenance.
	M-13	Understanding Maintenance contract/agreement
	M-14	- Environmental awareness, - Gender issue. - Occupational Safety and Health (OSH)
Supervisors, CMG leader and members, ERA engineer (resource person)	T-1	- How road deterioration. - Why maintain road ? - Maintenance timing and priority
	T-2	- Hand tools for road maintenance. - Incentive payment scheme. - Sample of productivities rates.
	T-3	Internal Agreement between CMG leader and member and tasks/responsibility of the CMG
	T-4	- Inspection & Payment. - Monthly plan
	T-5	Carry out activities of road routine maintenance
	T-6	Site practical for carrying out maintenance activities

Supervisors, CMG leader, ERA's engineer (resource person)	T-7	 Understanding agreement between CMG leader and contractor
	T-8	 Filling monthly inspection form and muster roll
	T-9	 Site practice for filling form of Monthly inspection report

3 How to use these training guidelines

These training guidelines have been prepared as guide for trainers and should be read together with **Road Maintenance Manual**. The trainer will also need to introduce the **Service Agreement and Specifications for Maintenance**.

These training guidelines consist of:

- a) the introduction and timetable / training programme
- b) guidelines for the training course elements
- c) sample of course assessment
- d) sample of exercises
- e) Forms
- f) pre-printed power points slides presentation for each course element

The recommendations for the use of handouts, flipcharts included in these training guidelines, do not exclude the possibility of using overheads or beamers, where available. Some of the elements of the training programme are more suitable for active participation by the participants, and many other topics which may be new, need to be introduced in the form of a presentation or lecture. Wherever possible there should be variety in the presentation and involvement of the participants in order to retain their attention and interest in what is being presented.

The modules include instruction / suggestions of how the trainer can present various topics. These are suggestions and can be replaced by the trainer's own ideas, provided the involvement of the participants is guaranteed.

The training for the Maintenance Management course (for Director and Supervisors) will take place at Don Bosco whereas the Technical Maintenance training (for Supervisors and CMG's) should be conducted in a location along the road that will be maintained and where there is an opportunity to carry out practical field work nearby.

4 Time table/Training programme

ENHANCING RURAL ACCESS (ERA)

MAINTENANCE MANAGEMENT TRAINING FOR CONTRACTOR AND SUPERVISORS AND ENGINEERS

Week	Day 1	Day 2	Day 3	Day 4	Day 5
	Monday	Tuesday	Wednesday	Thursday	Friday
8:30-9:15	Opening and Introduction	M-6 Selection of CMG leader and member. Internal Agreement	M-10 Working on result of the site practice		
9:15-10:00	M-1 How road deterioration ?. Why maintain road ?. Terminology of road maintenance	M-7 Ducty and responsibility of supervisor and CMG leader	M-11 Inspection and payment for the road routine maintenance		
Tea break					
10:30-11:15	M-2 Type of road maintenance and introduction. Process of routine maintenance. Maintenance structure.	M-8 Introduction of maintenance activity and specification	M-12 Inspection and payment for the road routine maintenance. M-11 Maintenance Plan and report		
11:15-12:00	M-3 Maintenance timing/priority and hand tool and Productivity norm	M-8 Introduction of maintenance activity and specification	M-13 Understanding Maintenance contract/agreement		
Lunch break					
13:30-14:15	M-4 Introduction of road condition assessment form	M-9 Site practice for filling Monhtly site inspection form	M-13 Understanding Maintenance contract/agreement		
14:15-15:00	M-5 Bill of Quantity and cost estimate for road routine maintenace		M-14 Environmental awereness, gender issue. Occupational Safety and Health (OSH)		
Tea break					
15:30-16:30	M-6 Bill of Quantity and cost estimate for road routine maintenace. Incentive payment scheme		Training assessment and closing training		

ENHANCING RURAL ACCESS (ERA)
MAINTENANCE TRAINING FOR CMG LEADER AND MEMBERS

Week	Day 1	Day 2	Day 3 : For CMG leader and supervisor		
8:30-9:15	Opening and Introduction / Abertura no Introduçao	T-5 Carry out activities of road routine maintenance	T-7 Understanding agreement between CMG leader and contractor		
9:15-10:00	T-1 How road deterioration. Why maintain road ? Maintenance timing and priority	T-5 Carry out activities of road routine maintenance	T-8 Filling monthly inspection form and musterroll		
Tea break					
10:30-11:15	T-2 Hand tools for maintenance. Incentive payment scheme. Sample of productivities rates.	T-6 Site practical for carrying out maintenance activities	T-9 Site practice for filling form of Monthly inspection report		
11:15-12:00	T-3 Internal Agreement between CMG leader and member and tasks/responsibility of the CMG				
Lunch break					
13:30-14:15	T-3 Internal Agreement between CMG leader and member and tasks/responsibility of the CMG		Training assessment and closing the training		
14:15-15:00	T-4 Inspection & Payment. Monthly plan				
Tea break					
15:30-16:30	T-5 Carry out activities of road routine maintenance	Closing of training for CMG members			

5 Guidelines to training topics and session plans

The training topics should be presented as the guide suggests. Sessions correspond to the schedules in section 3 and 4 above. It is important to ask trainees to fill in the assessment of each training topic at the end of each day.

Training topics with session code M-1 to M-14 are for Maintenance Management training for Directors and Supervisors. Training Topics with session code T-1 to T-9 are for Technical Maintenance training for Supervisors and CMG.

The following questions should be asked to the participants to check that the important training elements have been understood.

The following 4 questions should be posed at the end of each topic:

- (i) Level of understanding of each topic
- (ii) How the trainee felt about the training technique used by the trainer
- (iii) How well the trainee felt that training material responded to the training topics
- (iv) Any comments from the trainee

A sample of the daily assessment form is attached in Annex 1.

Session: Opening and Introduction of the Training	1h
Objective It is important to get to know each other, backgrounds experiences and expectations. The trainer should therefore immediately following the opening spend some time on introductions. The trainer should also explain some administrative matters and go through and agree with the trainees some ground rules to make sure sessions are running smoothly. The trainer will introduce the training topics to be covered in more detail, and explain the expected outcomes at the end of the training.	
Trainer's material  Road Maintenance Manual  Power point slide presentation(#Introduction)  Flip chart  Post-It and Markers	
Hand out  Administrative Information  Training Schedule	
How is this topic conducted It is important to get off to a good start. There may be an official opening before the actual training starts. Whether there is an official opening planned or not it is good to provide the context for the training, an overview of the course and what the expectations might be. 1) All the trainees to introduce themselves start from the trainer. Each person should introduce him or herself eg by: name, where they come from, which company/institution they belong to, a brief description of their relevant experience. 2) Brief trainees about administrative arrangement during the training. 3) Brief trainees about the training programme and the topics covered in the training, and techniques used for various session, the mix of lectures, exercises and practical training. 4) Introduce the "Road Maintenance Manual". Explain that the technical manual will be distributed in the end of the class room training. 5) Explain the use of power point slides, prepared to support the Technical Manual, and that printouts of the power point presentation will be distributed at the end of each session. 6) Setting rules for the training: After the introduction, the trainees should agree on a set of rules for the training. The rules shall then be written on a flip chart and displayed for the entire duration of the training. For instance: No smoking in the class room, to keep mobile phone on silent mode, to be punctual and disciplined, to respect each other, etc.	
Expectations: Each trainee is given a different colour post-it to write his or her expectations of the training and what they hope to have learned from the training. All Post-It are posted on a flip chart paper. Read out some expectations and keep until the end of the class room training.	

Session M-1: Road Deterioration and Maintenance	1h
Objective To ensure that the participants understand how a road deteriorate and what causes road deterioration. To ensure that the participants understand the concept of road maintenance and understand the importance of road maintenance. It is also to ensure that all participants appreciate the savings that can be made through proper road maintenance.	
Trainer's material  Road Maintenance Manual  Power point slide presentation  Flip chart	
Hand out  Pre-printed power point slides (M-1) of: (i) how roads deteriorate and causes (ii)why road maintenance (iii) road terminology and what is road maintenance	
How is this topic conducted This topic can be conducted as a questions and answers session (i) How roads deteriorate and the causes 1) Write on a flip chart " why do we need roads" and ask the participants to contribute their ideas. Write down the answers on a flip chart. 2) Write on a flip chart "what cause to road deterioration" and ask the participants to contribute their own ideas. Write down the answers on the flip chart. 3) Show the power point slide what causes road deterioration and compare with the answers. Conclude that the four factors that are cause to road deterioration. 4) Showthe power point slide how road deteriorates. Explain the three steps of road deterioration. 5) Results from 1-4 guided by the trainer to ensure that the main points were brought out in the answers. (ii) Why maintain road 1) Use the power point slide and explain why maintenance of the road is important 2) Show the table of cost comparison of road with maintenance and road without maintenance. 3) The most important points that the trainers should have learned in this session are: ✓ With maintenance, the road remains in a good condition for longer ✓ With maintenance, the community can continue using the road easily ✓ Over 5 or more years maintenance costs are much less than the reconstruction costs ✓ The money saved can be used for other community projects and priorities. (iii) Road Maintenance Terminology 1) Use the power point slide to display road elements without terminology. Ask the	

participants to insert the terminology of the road element.

- 2) Result from the answer, guide the participant to ensure that the correct maintenance terminology and road element are met.
- 3) The trainer explains definition of each road element and road maintenance terminology and their functions.

Exercise

Session M-2: Type and Process of Road Maintenance	1h
Objective To ensure that the participants know road maintenance process and structure for managing and supervising road maintenance.	
Trainer's material ✚ Road Maintenance Manual ✚ Power point slide presentation ✚ Flip chart	
Hand out ✚ Printed power point slides (M-2)	
How is this topic conducted This topic can be conducted as questions and answers session to get interaction from the participants and presentation. (i) What is road maintenance 1) Write and ask the following questions: what is road maintenance? what are the different types of maintenance? Ask the participants to contribute their own ideas write the answer in the flip chart. 2) Results from the answers guided by the trainer to ensure that the main points were brought out in the answers. (ii) Process of road maintenance and organisational structure 1) Explain and draw up step by step the process of road routine maintenance. Ask the participants to contribute their own ideas. 2) Explain who is the responsible person for each step of the maintenance process. 3) If time permits, show in brief in the power point slide each step of the maintenance process. 4) Same process as 1) above to draw up maintenance management and supervision structure. To explain and ensure that the participants understand a reporting system of the road maintenance. Briefly explain responsibility of each level of supervision staff.	
Exercise	

Session M-3: Maintenance Timing/Priority and Tools	1h
Objective To ensure that the participants know when each maintenance activity can be carried out and to ensure that the participants know what type of hand tools and required quantities for carrying out the maintenance activities and know the productivities norm.	
Trainer's material ✚ Road Maintenance Manual ✚ Power point slide presentation ✚ Flip chart ✚ A set of hand tool of routine road maintenance works	
Hand out ✚ Printed power point slides (M-3).	
How is this topic conducted This topic can be conducted as questions and answers session to get interaction from the participants and presentation. (i) Maintenance timing/priority 1) Write maintenance activities on the white board, Ask the participants to contribute their own ideas that what activity should be carried out in what season and frequency of the works. 2) Present the power point slides and explain timing and priority of each maintenance activity. (ii) Hand tools and Productivity 1) Prior to commencing this topic a full set of maintenance hand tools should be brought to the class room for the explanation. 2) List down all maintenance activities. Individual exercise for the participants to list the hand tools required for those maintenance activities. 3) Ask few participants to list their result in the flip chart 4) Use the power point slide and conclude type of hand tools and quantities for each maintenance member. 5) In this session, should explain procedure of how the hand tools are kept after work and regular repair. Explain that proper hand tools, in sufficient numbers and of appropriate quality, is necessary in order to achieve productivities.	
Exercise	

Session M-4: Introduction to Road Condition Assessment		1h
Objective To ensure that the participants understand how to a road condition assessment and know how to fill the road condition assessment form and calculate WDs for each maintenance activities.		
Trainer's material ✚ Road Maintenance Manual ✚ Power point slide presentation ✚ Flip chart		
Hand out ✚ Power point slides (M-4) and ✚ Road condition assessment form.		
How is this topic conducted This topic can be conducted as presentation and then group exercise. 1) Use power point to display a blank form for road condition assessment. Select one or two work items and to fill in the form with the participants 2) Group exercise to fill the form 3) Each group present the result in the white board. The trainers should explain necessary correction.		
Exercise ✚ Divide the participants in group of 3-5. Distribute a blank forms of road condition assessment to each of participants. Sample of Road Condition Assessment Form in Annex 3.		

Session M-5: Introduction of Task Rates, Bill of Quantity and Cost Estimate for Maintenance	2-3h
Objective To ensure that the participants understand and can fill Bill of Quantity and estimate cost for road maintenance. To ensure that the participants understand of Task Work system that is suitable for managing labour for the road rehabilitation and road maintenance.	
Trainer's material ✚ Road Maintenance Manual ✚ Power point slide presentation ✚ Flip chart ✚ Sample of a filled Bill of Quantity.	
Hand out ✚ Power point slides (M-4) and ✚ Blank Form Bill of Quantity	
How is this topic conducted This topic can be conducted as presentation and then group exercise. (i) Bill of Quantity and cost estimate for road routine maintenance 1) Use the power point slide to show a blank form of the BoQ. Explain to the participants which part of the BoQ to be filled by client and which part to be filled by contractor. Advise the participants that the information on how activities are measured and paid for is fully explained in the technical specifications. 2) Fill in one or two work items together with the participant as sample 3) Divide the participants in group of 3-5. Distribute the blank forms of BOQ to each participant. 4) Group exercise to fill the BoQ form and then estimate cost of the road maintenance. 5) Each group present the result on the white board. 6) Explain that the BOQ and unit rate will link to the payment certificate and for payment. (ii) Incentive Scheme for road routine maintenance 1) Give an example clearing grass activity of 1,000 m² using labourers. Ask one or two participants to suggest different methods to carry out the clearing activity. Note the answers in the flip chart. 2) Guide the participants to have an answer and conclude that there are three incentives payment scheme can be applied for the labour based road works. 3) From the above example, discuss and compare advantage and disadvantage of the three incentive scheme and recommend an option (Task Work) which is suitable for the labour based road work. 4) For the maintenance work to explain and conclude that Group Task Work is the most	

appropriate work system.

Exercise

- ✚ Individual exercise: calculate Number of labour to carry out clearing grass of 1,000 m². Task rate is 80 m²/WD
- ✚ If time permits, give same exercise for other maintenance activities such as: filling portholes, grubbing, etc

Session M-6: Selection of CMG Member, Agreements	1h
Objective To ensure that the participants can organize a fair selection process and equal access to work for women and men. To ensure that the participants understand and can insert relevant details within the standard agreement form to complete a routine maintenance agreement	
Trainer's material  Road Maintenance Manual  Power point slide presentation  Flip chart	
Hand out  Power point slides (M-6).  Sample agreement between CMG leader and contractor and  Sample employment contracts CMG leader and members.	
How is this topic conducted <i>(i) Selection of CMG leader and member</i> This topic can be conducted as presentation and discussion. 1) Use the power point slide to present criteria for selection of CMG leaders 2) Explain balloting process of selection of the CMG leaders 3) Show flow chart of the selection process of CMG leader 4) Open discussion if any other selection process can be considered and take note if necessary to revise the selection process if needed. 5) Emphasis should be given to providing fair opportunity for men and women, both as CMG leader and as CMG members. <i>(ii) Internal Agreement</i> This topic can be conducted as presentation and exercise. 1) Use the power point slides to show the internal agreement between CMG leader and contractor, and the employment contracts between the CMG leader CMG Member. provide this as handouts to all trainees. 2) Individual exercise to fill the form 3) Ask one participants to read the entire agreement after the form is filled 4) Repeat the same exercise for second agreement form. 5) Take questions from the participants if any and respond accordingly	
Exercise  Fill in Agreement and Employment Contract	

Session M-7: Duties and Responsibilities for the CMG Leader and for the Supervisor	1h
Objective To ensure that the participants know responsibilities of supervisors and CMG leader.	
Trainer's material  Road Maintenance Manual  Power point slide presentation  Flip chart	
Hand out  Pre-printed power point slides (M-7).  Sample Service Contract between ERA and Contractor  Sample agreement between CMG leader and contractor and  Sample employment contracts CMG leader and members.  Translated TOR of road maintenance agreement.	
How is this topic conducted This topic can be conducted as presentation and exercise. 1) Ask the participants to contribute their own ideas of responsibility of supervisor. List down their answers. 2) Use the power point slides to show the TOR of road maintenance, in particular the section of responsibility of the supervisor. 3) Ask one participant to read the relevant responsibility in the TOR 4) Repeat the same exercise for the responsibility of the CMG leader 5) Take questions from the participants if any and respond accordingly	
Exercise	

Session M-8: Maintenance activities and specifications		2h
Objective To ensure that the participants understand the maintenance activities and the description of the maintenance works.		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Flip chart  Works specification for road maintenance.		
Hand out  Power point slides (M-8).  Translated technical specifications for road maintenance.		
How is this topic conducted This topic can be conducted as presentation and questions. 1) Ask one or two participants to list down maintenance activities on a flip chart 2) Use power point slides to show the description of maintenance activities 3) Distribute the translated works specifications of road maintenance. Ask the participants to read one by one of each activities and explain the activities accordingly. 4) Explain what hand tools are needed for each activity		
Exercise		

Session M-9: Monthly Site Inspection Form		3-4h
Objective To allow the participants to test the Monthly site inspection report format which have been presented in the class room. The purpose is to give the participants an opportunity to try out some of the process on site. This should give the participants the confidence to use the form on their own. This will throw up any difficulties that they are facing and may bring out suggestions for improvements.		
Trainer's material ✚ Road Maintenance Manual ✚ Power point slide presentation ✚ Flip chart ✚ Long and short measuring tapes		
Hand out ✚ Power point slides (M-8). ✚ Enough forms of Monthly site inspection report.		
How is this topic conducted 1) The trainer should introduce and facilitate the site work and offer support where requested. 2) The trainer should select maintenance activities for 4-5 activities to be filled in the form 3) Each participant to assess and fill the form of about 1 km road section of the selected road		
Exercise Field Works ✚ The trainers will have selected a suitable site as close to the training venue as possible. To arrange transport, food and water for the site practice.		

Session M-10: Result of Site Practice		1h
Objective To provide participants in dealing with the results from the site practice to calculate monthly cost of the maintenance work and also to convert the cost to payment certificate.		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Flip chart  Sample filled form of the monthly site inspection report.		
Hand out  Power point slides (M-8).  Record from the site practice of each participants		
How is this topic conducted 1) The participants to work in group of 3-5 to convert the information from the field in to WDs of each maintenance activity and than cost for the maintenance work for that particular section 2) Guide the participants how to convert the recorded information into quantities, workdays and costs using the formats provided. 3) Each group present the result and explanation of the result		
Exercise Field Works		

Session M-11: Inspection and Payment for Maintenance		1h
Objective To ensure that the participants understand process of inspection of the maintenance works. And to ensure that the participants can prepare and process the monthly payment of the maintenance works and how the payment forms are filled.		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Flip chart		
Hand out  Power point slides (M-11)  Blank payment certificate  blank muster-payroll		
How is this topic conducted This topic can be conducted as presentation and exercises. 1) Use power point slide to present step by step process of inspection of maintenance works before preparation of payment. 2) Use power point slide to present step by step of how payment process is carried out. Explain the responsible persons and process of payment 3) Distribute blank form of payment certificates. Use the result from the site practice of the filled site inspection report as reference of the exercise. Together with the participants fill 1 or 2 items in the payment certificate and group exercise of 3-5 participants. 4) Each group representative present result of the exercise and plenary. 5) Repeat the same step for filling the muster roll form 6) In this session it is importance to mention that final payment can be released after returning the hand tools.		
Exercise Field Works		

Session M-12: Maintenance Plan and Report		1h
Objective To ensure that the participants understands how to calculate and plan WDs and know how to prepare monthly report for the maintenance works		
Trainer's material ✚ Road Maintenance Manual ✚ Power point slide presentation ✚ Flip chart		
Hand out ✚ Power point slides (M-12). ✚ Blank of WDs plan and report.		
How is this topic conducted This topic can be conducted as presentation and exercises. 1) Use projector show blank form of the WDs plan and report 2) Explain how / who and when the form is filled 3) Distribute blank form of WDs plan and report. Together with the participants to fill the form of 1 or 2 items and conduct group exercise of 3-5 participants. 4) Each group representative present the result with planery.		
Exercise Field Works		

Session M-13: Maintenance Contract		2h
Objective To ensure that the participants understand contract agreement of the road maintenance contract.		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Flip chart  Set of translated service contract agreement of road maintenance.		
Hand out  Sample of a set translated service contract agreement for road maintenance contract.		
How is this topic conducted This topic can be conducted as presentation. 1) Distribute a sample of translated service contract agreement. 2) Use Power Point to show selected parts of the service contract agreement like: condition of contract, TOR... Ask one or two participants to read the selected parts. 3) Open for questions from the participants if any and respond accordingly.		
Exercise Field Works		

Session M-14: Environment, Gender, OSH		1h
Objective To ensure that the participants aware of the environmental issue, gender issue and occupational safety and health.		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Flip chart  Set of safety equipment.		
Hand out  Power point slides (M-14).		
How is this topic conducted This topic can be conducted as presentation. 1) Before commencing this session a set of safety equipment should be brought in the class room 2) Show in the power point slides presentation. Together with the participants go through the slide. 3) Except in the session of OSH, request 2 participants to demonstrate how the safety equipment are used. Explain when the equipment are used		
Exercise Field Works		

Session M-15: Closing and Evaluation		1h
Objective At the end of the Maintenance Management training and before closure it is important that there is an evaluation of the training to ascertain whether it has been useful or not		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Flip chart		
Hand out  A suggested evaluation format is provided in Annex 2.		
How is this topic conducted 1) After filling the training assessment the expectations that have been submitted by the participants during the beginning of the training can then be revisited to see if the training has covered them or if indeed the training has been very different from that which was anticipated		
Exercise Field Works		

Session T: Opening	1h
Objective This is the starting of the technical maintenance training. It is important to get all the trainees know each other and the trainer take the opportunity to know the other participants. The training also introduces the training topics to be covered for the entire training. It is important to invite local authorities like Xefe Suko and Xefe Aldeia to open the training. The introduction should be done immediate after the opening.	
Trainer's material  Road Maintenance Manual  Power point slide presentation  Printed Pictures  Flip chart	
Hand out 	
How is this topic conducted 1) All the participants to introduce themselves, start from the trainer. The participants should tell the others their name, where they come from (village). 2) Brief on administrative arrangement during the training. 3) Brief on training programme to be covered in this training. 4) Hand outs of pre-printed power point slides. 5) Printed pictures on road maintenance activities are used as presentation during technical session for the CMG.	
Exercise Field Works	

Session T-1: How roads deteriorate, why maintenance	1h
Objective To ensure that participants understand how roads deteriorate and what causes to road deterioration. To ensure that the participants understand the importance of road maintenance, and that roads have to be maintained continuously to remain in good condition. To ensure participants understand how they can contribute to their community by working on road maintenance and that participants appreciate the savings that can be made through proper road maintenance.	
Trainer's material  Road Maintenance Manual  Power point slide presentation  Printed Pictures  Flip chart	
Hand out  Power point slides (M-1) of: how road deterioration and causes.	
How is this topic conducted (i) How roads deteriorate This topic can be conducted as questions and answers session and presentation / lecture. 1) Write topic of "why do we need roads" ask the participants to contribute their own ideas. Write down answers on a flip chart and conclude by adding ideas from the trainer. 2) Write topic of "what causes roads to deteriorate" ask the participants to contribute their own ideas. Write down the answers on a flip chart and conclude by adding ideas from the trainer 3) Show on A-2 pre printed power point slide causes to road deterioration and compare the answers and conclude that the four factors that cause to road deterioration. 4) Results from 1-3 guided by the trainer to ensure that the main points were brought out in the answers. (ii) Why maintain the road This topic can be conducted mostly as presentation with some questions and answers. 1) Show on A-2 pre-printed power point slides a cost comparison of road with maintenance and road without maintenance. 2) The most important points that the trainers should have learned in this session are: ✓ With maintenance, the road remains in a good condition for longer ✓ With maintenance, the community can continue using the road easily ✓ Over 5 or more years maintenance costs are much less than the reconstruction costs ✓ The money saved can be used for other community projects and priorities.	
Exercise Field Works	

Session T-2: Hand Tools and Incentive Schemes	1h
Objective To ensure the participants know what quantities and type of hand tools are required for maintenance activities, to ensure participants understand productivity norms and incentive schemes and that the understand that Group Task works system is most appropriate for the maintenance works.	
Trainer's material  Road Maintenance Manual  Power point slide presentation  Printed Pictures  Flip chart	
Hand out  Pre-printed power point slides (T-2)  A set of hand tools	
How is this topic conducted (i) Hand tools This topic can be conducted as presentation and questions and answers session with interaction from the participants. 1) Prior to commencing this topic a full set of maintenance hand tools should be brought to the class room for the explanation. 2) List down all maintenance activities. Ask 2 or 3 CMG members to answer what type of hand tools to be used for each maintenance activities. 3) It is important to explain that each CMG member should be equipped with a set of hand tool. 4) In this session the trainer should explain procedure of how the hand tools are kept after work and regular repair. To get the participants understand that the hand tools are belong to the Contractor/Client and should be returned after ending of the maintenance contract and before the final payment is made. (ii) Productivity norm and incentive Scheme for maintenance This topic can be conducted as presentation and with examples. 1) Give an example to carry out of clearing grass of 1,000 m² with distance of 150 m road to be completed in 1 day. 2) Explain that the work should be carried out in group to finish within one day. 3) Then the people will receive the daily wage example USD 4.5 4) To convince participant that working in groups on group tasks is the best option for the maintenance work	
Exercise Field Works	

Session T-3: Employment Contract and Responsibilities	2h
Objective To ensure that the participants understand in detail the agreement the CMG has signed with the contractor and to ensure that the participants understand their duty and responsibility as outlined in their individual employment contracts	
Trainer's material  Road Maintenance Manual  Power point slide presentation  Printed Pictures  Flip chart  CMG Agreement and Employment Contract	
Hand out  Power point slides (T-3).  Sample CMG Agreement and Employment Contract between CMG leader and members.	
How is this topic conducted <i>(i) CMG Agreement and CMG Member Employment Contract</i> This topic can be conducted as presentation and exercise. 1) Distribute the CMG Agreement between the Contractor and the CMG Group 2) Ask a supervisor to read the agreement and explain point by point. 3) Take question from the participants if any and respond accordingly 4) Repeat point 1-3 for the Employment Contract <i>(ii) Duties and responsibilities the CMG member</i> This topic can be conducted as presentation. 1) Ask the participants to contribute their own ideas of responsibility of CMG leader. List down their answer 2) Distribute the hand out of duty and responsibility of the CMG leader. 3) Ask one participant to read the responsibility of the CMG leader listed in the hand out 4) Repeat the same exercise for the responsibility of the CMG member 5) Take question from the participants if any and respond accordingly	
Exercise Field Works	

Session T-4: Inspection and Payment		1h
Objective To ensure that the participants understand process of inspection of the maintenance works. And to ensure the participants understand the payment process in the CMG level		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Printed Pictures  Flip chart		
Hand out  Power point slides (T-4).  Blank muster-payroll.		
How is this topic conducted This topic can be conducted as presentation. 1) on the flip chart explain step by step of payment process start from measuring the completed work and then preparing the muster payroll 2) The muster roll shall be prepared based on completed work and attendance and based on actual output (ie work days may need to be converted) 3) On the A-2 muster roll form to fill the muster roll together with participant and explain how the form is filled 4) Explain process of getting approval and making payment to the labour by the contractor. 5) The trainer should explain in brief on payment to the CMG leader and amount will be paid to the CMG member.		
Exercise Field Works		

Session T-5: Routine maintenance activities		2-3h
Objective To ensure that the participants understand how the maintenance activities can be carried out and how quality control of the maintenance works can be conducted.		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Printed Pictures  Flip chart		
Hand out  Pre-printed power point slides (T-5).		
How is this topic conducted This topic can be conducted as presentation and contribution ideas from participants. 1) In the flip chart explain start from setting out string line and pegs for controlling and how the activities are carried out. These activities start from clearing, grubbing, filling potholes... 2) Show the pre-printed A-2 power point slide of the maintenance. 3) In this session should include task rate which has been converted into meter to be easy to understand by the CMG leader and members		
Exercise Field Works		

Session T-6: Site practice for routine maintenance activities		3-4h
Objective To ensure that the participants can carry out the maintenance activities and know how the quality control is carried out. This should give the participants the know how the hand tools are used and safety equipment.		
Trainer's material ✚ Road Maintenance Manual ✚ Power point slide presentation ✚ Printed Pictures ✚ Flip chart ✚ Set of hand tools		
Hand out ✚ Pre-printed power point slides (T-5).		
How is this topic conducted 1) To physically carry out maintenance activities like: clearing grass, filling potholes, grubbing, removal of land slide, etc 2) Make sure all the activities are set out using pegs and string 3) The trainer should be there to introduce and facilitate the site work and offer support where requested.		
Exercise Field Works ✚ The trainers will have selected a suitable site as close to the training venue as possible to avoid the use transport of participants. ✚ To arrange hand tools for all participants include safety equipment, setting out tools (string line, measuring tapes and pegs) and first aid.		

Session T-7: Agreement between Contractor and CMG Leader		1h
Objective The participants (CMG Leader and Contractor Supervisor) to understand the agreement and can fill the forms needed to plan the works and to prepare the claim.		
Trainer's material ✚ Road Maintenance Manual ✚ Power point slide presentation ✚ Printed Pictures ✚ Flip chart ✚ Sample Agreement between contractor and the CMG leaders		
Hand out ✚ Sample Agreement between contractor and the CMG leaders		
How is this topic conducted This topic can be conducted as presentation. 1) Distribute the blank internal agreement form between the CMG leader and the contractor 2) Ask the CMG leader to fill the blank form 3) Ask one CMG leader to read the agreement that fill by them. 4) Take question from the participants if any and respond accordingly		
Exercise Field Works		

Session T-8: Monthly Site Inspection Report and Musterroll		1h
Objective To ensure the CMG leader can fill the muster roll and the site inspection report.		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Printed Pictures  Flip chart  Sample of a filled muster roll and monthly site inspection report.		
Hand out  Blank forms of muster roll and monthly site inspection report.		
How is this topic conducted This topic can be conducted as presentation and exercise. 1) Distribute the blank of Muster roll and monthly site inspection report 2) Explain how the form is used and its functions 3) Fill together with the participants for one or two work items 4) Individual exercise to fill the form and present the result 5) Take questions from the participants if any and respond accordingly		
Exercise Field Works		

Session T-9: Monthly Site Inspection Report and Musterroll		2h
Objective To allow the CMG leader to test the monthly site inspection form which have been presented. This should give the CMG leaders the confidence to use the form on their own. This will throw up any difficulties they are facing and may bring out suggestions or questions.		
Trainer's material  Road Maintenance Manual  Power point slide presentation  Printed Pictures  Flip chart		
Hand out  Enough forms of Monthly site inspection report. Long and short measuring tapes		
How is this topic conducted 1) Each participant to assess and fill the site inspection report form of about 1 km road section of the selected road 2) The trainer should select maintenance activities for 4-5 activities to be filled in the form. 3) The trainer should be there to introduce and facilitate the site work and offer support where requested.		
Exercise Field Works  The trainers can use the site that was used for carrying out the maintenance activities.		

Session T-10: Closing and Evaluation		1h
Objective At the end of the Technical Maintenance Training and before closure it is important that there is an evaluation of the training to ascertain whether it has been useful or not		
Trainer's material ✚ Road Maintenance Manual ✚ Power point slide presentation ✚ Flip chart		
Hand out ✚ A suggested evaluation format is provided in Annex 2.		
How is this topic conducted After filling the training assessment the expectations that have been submitted by the participants during the beginning of the training can then be revisited to see if the training has covered them or if indeed the training has been very different from that which was anticipated		
Exercise Field Works		

6 Course Assessment

Daily Assessment

Data: 22 /08/2012 FORMULARIO AVALISAUN LORON - LORON NIAN Tau marka (✓) ba ita katak laran tuir valor compesaun ita boot nian.				
Bid Evaluation	Diak los	Diak	Nato'on	La diak / La comprende
	⊕⊕	⊕	⊖	⊖⊖
Oinsa ita boot nia compesaun / halene				
oinsa ho metodu husi treinador nian				
Kopia hirak ne'ebe ita boot simu ne'e oinsa				

End of Course Assessment

EVALUATION ON MAINTENANCE TRAINING

PERIOD FROM :/...../.....2013 to/...../.....2013

Date:/...../.....2-13

Thank you for successfully completing the maintenance training

Favor prene kuesionario kona ba asesmentus hirak ne'ebe tuir mai nee:

- Atu bele hetan sugestaun balu hodi bele modifika ka hadiak liu tan ita nia kursu.
- Hodi monitorija efektividade husi treinamentu nian.

Kuesionario: (Favor hatan perguntas tuir ita boot nia hatene?)				
1	Em jeral oinsa lalaok treimanmentu ne'e?			
	Diak Los ☐	Diak ☐	Nato'on ☐	La Diak ☐
2	Treinador sai mata ladan ba ita boot sira atu komprende materia?			
	Diak Los ☐	Diak ☐	Nato'on ☐	La Diak ☐
3	Rezultadu husi kursu ida ne'e ita boot sira sei uza iha ita boot sira nia servisu fatin ka lae?			
	Diak Los ☐	Diak ☐	Nato'on ☐	La Diak ☐
4	Kopias husi material (hand out) ne'ebe ita bo'ot hetan ne'e responde ba topik sira nee ka lae?			
	Diak Los ☐	Diak ☐	Nato'on ☐	La Diak ☐
5	Treinamento ida nee responde ita boot sira nia espetasaun?			
	Diak Los ☐	Diak ☐	Nato'on ☐	La Diak ☐
6	Oinsa ita bo'ot nia valor ba iha efektividade husi treinamentu ne'ebe hato'o ka fo'o?			
	Diak Los ☐	Diak ☐	Nato'on ☐	La Diak ☐
7	Oinsa ita boot sira nia hatene ka komprensaun kona ba treinamentu tekniku?			
	Diak Los ☐	Diak ☐	Nato'on ☐	La Diak ☐
8	Oinsa Ita bo'ot sira nia hatene ka komprensaun durante treinamentu ne'e ?			
	Diak Los ☐	Diak ☐	Nato'on ☐	La Diak ☐
9	Iha komentariu seluk ruma:.....			
				
				
				

Obrigado barak ba informasaun hotu ne'ebe mak fo'o ona no ita bo'ot sira nia partisipasaun diak durante treinamentu. Ita sei tau hanoin hirak ne'e hodi bele hadiak liu tan ita nia treinamentu tuir mai !!!

7 Forms

Road Assessment

Assementu no programasaun ba sevisu manutensaun rutina estrada nian																												From A-3		
Distrito:														Sub - seksaun ba kontrato ida ne'e Ch:										Suko:						
No. contrato:														Seksau ida ne'e naruk hira:										Pagina, no:						
Estrada:														Data:																
Nu. de Rubrika	Aktividade manutensaun rutina ba iha servisu estrada	Unidade	Kondisaun	Chainage															Quantidade Total	WD/Unit	Frequencia	Total loron servisu annual								
				200	400	600	800	0	200	400	600	800	0	200	400	600	800	0					200	400	600	800	0			
RM-1	Inspesaun Jeral No Muda Obstrusaun		WDs																								3.75 wds/month/km			
RM-2	Hamos deker no manila hus	No	Kama'an																								1			
			Nato'on																											2
			Todan																											4
RM-3	hasai material hirak ne'ebe monu iha ponte, drift no causeway nia leten ka laran	No	Kama'an																								3			
			Nato'on																											7
			Todan																											15
RM-5	Baleta no be dalan hirak ne'ebe halo ona tenki hamos husi foer hotu	Km	Kama'an																								25			
			Nato'on																											40
			Todan																											50
RM-6	Scour check ne'ebe at ona presija hadia	No	Kama'an																								0.25			
			Nato'on																											0.33
			Todan																											0.5
RM-8	hadia estrada ninin ne'ebe be ke'e (erosaun)	Km*	Kama'an																								21			
			Nato'on																											27
			Todan																											40
RM-9	Hadia estrada kuak		M2																								0.10			
RM-10	Hadia estrada klean ne'ebe iha tamba roda		M3																								0.45			
RM-11	hamos estrada nining husi du'ut	Km*	Kama'an																								10			
			Nato'on																											13
			Todan																											20
RM-12	Dada tama fali gravel ne'ebe mak sai husi estrada laran ba iha estrada ninin no tate		Km*																								33			
RM-13	Lere du'ut no tesi sai tiha soko hirka ne'ebe iha	Km*	Kama'an																								9			
			Nato'on																											11
			Todan																											14
RM-14	Kuda du'ut		M2																								0.10			
RM-15	Hasai hotu material hirak ne'be la serve atu iha estrada laran nomos rai ne'ebe monu taka iha estrada laran		M3																											
Nota:* sekarak halo estrada sorin rua ne'e hotu entaun														Gravel iha pagina ida ne'e hira(1/5) (m3)										Total loron servisu iha pagina ida n						
														Gavel iha pagina liu ba ne'e hira (m3)										Total loron servisu iha pagina liu ba						
ense rua no se ida deit ense ida														Sub-total Gravel (m3)										Sub - Total loron servisu						

Bill of Quantity

Bill of Quantity /Estimasuaun kustu annual ba servisu manutensaun estrada nian.										Form A-4
Nu. De Kontratu:			Distribitu: Ermera				Husi: 01/03/13-31/05/13			Paginas 2
Estrada:			Sub-distribitu: Railaco				Suco(s): Railaco Craic 0-8km, Railaco Leten 8-13.8km			
Nu. de Rubrika	Estrada						Road Lihu-Samaleten Total			
	Suco						Qtd Total	Total nu. husi WD	Tarifa unitaria USD	Montante USD
	Road section									
	Deskrisaun de servisu	Uni.	Qtd	WD	Qtd	WD				
	Kustu ba iha trabalhadores									
RM-1	Inspesaun Jeral No Muda Obstrusaun	Km								
RM-2	Hamos deker no manila husi foer (inklui mos husi be tama no sai fatin)	No								
RM-3	Hasai material hirak ne'ebe monu iha ponte, drift no causeway nia leten ka laran	No								
RM-5	Baleta no be dalan hirak ne'ebe halo ona tenki hamos husi foer hotu	Km								
RM-6	Scour check ne'ebe at ona presija hadia	No								
RM-8	hadia estrada ninin ne'ebe be ke'e (erosaun)	Km								
RM-9	Hadia estrada kuak	M2								
RM-10	Hadia estrada klean ne'ebe iha tamba roda fatin	M3								
RM-11	hamos estrada nining husi du'ut	M2								
RM-12	Dada tama fali gravel ne'ebe mak sai husi estrada laran ba iha estrada ninin no tate	Km								
RM-13	Lere du'ut no tesa sai tiha soko hirka ne'ebe iha	Km								
RM-14	Kuda du'ut	M2								
RM-15	Hasai hotu material hirak ne'be la serve atu iha estrada laran nomos rai ne'ebe monu taka iha estrada laran	M3								
	Sub total									
II	Kustu ba material, feramentas no equipamentus									
	Sirtu / Laterite (Hatama no sama hotu ona)	m³								
	Feramentas	Ls								
	Kustu ba iha Ekipamentus N/A	Ls								
	Estabelisimentu Kontrator nian	Ls								
	Kustu sira seluk inklui mos OSH+First Aid	Ls								
	Sub total									
III	Kustu indiretu									
	Kustu ba supervizaun	Kada fulan								
	Lukru no kustu ba impreza nian	12%								
	Total manutensaun ba estrada Lihu - Samaleten									
	Total jeral ba estrada nian hotu ne'ebe inklui iha kontratu laran									

Work Plan Labour Input

Planu servisu annual no relatoriu kona ba Kriasaun empregu															Form A-5	
Distritu:										Data hahu:						
Nu. Kontratu:										Durasau:						
Estrada:																
Suco Seksaun estrada nian (chainage) no suku	Total loron (WD)	Kustu ba iha trabalhadores inklui ho supervizaun	Planu loron servisu (wd)/ Aktual	Jan	Feb	Mar	Apr	Maio	Jun	Julhu	Aug	Sept	Oct	Nov	Dez	
Estrada A:																
			Planu													
			Aktual													
			Planu													
			Aktual													
TOTAL loron servisu (WD) no kustu ba iha trabalhadores nian	0	0														
Akumulasaun loron servisu ne'ebe planeado no aktual	Planu					0	0	0								
	Aktual															
	Akumulasaun husi planu					0	0	0								
	Akumulasaun ba aktual															
Data: / /										Data: / /						
Prepara husi:										Verfika husi:						
Assinatura: (Engenheiro Manutensaun)										Assinatura: (Chefe Engenheiro Projeto)						

List of Hand Tools

Quantity and cost of hand tools required for the routine road maintenance works					Form A-5
Tools to be procured by the Contractor and list submitted to the ERA project (LS indicated in contract)					
District:		Contract Number:			
Number of CMG's:		Total Number of Workers:			
No	Hand tools	Unit	Quantity	Unit price. USD	Amount. USD
1	Kanuru bo'ot	Pcs			
2	Ensada ho nia ulun	Pcs			
3	karau dikur ho nia ulun	Pcs			
4	Baliu ho nia liman	Pcs			
5	Katana	Pcs			
6	Garfu	Pcs			
7	Bote/Raga	Pcs			
8	Regador (jerigen)	Pcs			
9	Karosa	Pcs			
10	Luvras	Pair			
11	Maskra	Pcs			
12	Staka (ai / au)	Pcs			
13	Tali	Kg			
14	Metro (5m)	No			
15	Metro (30m)	No			
16	Ai tidin (Kompaksaun manual)	Pcs			
17	NST				
18	NST				
Total amount					
Nota: Wainhira kontratu projecto manutensaun ne'e hotu, feramentas hirak ne'e sei sai propriedade projecto nian Responsabilidade Kontractor hodi halo distribuisaun feramentas hirak ba iha Leader CMG			Data: / / Naran: Assinatura: Director da Kompanhia		

Feramentas hirak ne'ebe entrega ba iha Leader CMG				Form A-8
Distributu:		Suko:		
Nu. Kontratu:		Estrada:		
Kontrator:		Siksaun:		
Nu.:	Feramentas	Unidade	Quantidade	Kondisaun feramentas (foun/tuan)
1	Kanuru bo'ot	Pcs		
2	Ensada ho nia ulun	Pcs		
3	karau dikur ho nia ulun	Pcs		Karau dikur 1 ba ema nain 3-4
4	Baliu ho nia liman	Pcs		Baliu 1 ba ema nain 3-4
5	Katana	Pcs		
6	Garfu	Pcs		
7	Bote/Raga	Pcs		
8	Regador (jerigen)	Pcs		
9	Karosa	Pcs		Karosa 1 ba ema nain 3 - 4
10	Luvax	Pair		
11	Maskra	Pcs		
12	Staka (ai / au)	Pcs		
13	Tali	Kg		
14	Ai tidin (Kompaksaun manual)	Pcs		Ai tidin 1 ba ema 3-4
15	NST			
16	NST			
Leader CMG mak sei distribui tutan ba iha nia membru sira (feto/mane). Kada membru sei responsabiliza ba feramentas hira nia manutensaun no sekarak lakon membru ne'ebe simu mak sei responsabiliza.				
Data: / /		Data: / /		
Naran:		Naran:		
Assinatura:		Assinatura:		
(Simu husi leader CMG)		(Fo'o husi Supervizor kompanhia nian)		

Monthly Plan and Site Inspection Report

Planu aktividade kada fulan/Relatoriu inspeksaun

Form A-9

Distrito:				Estrada:				Suko:	
Nu. De Kontratu:				Naruk husi seksaun ne'e:				Name of CMG Leader:	
Kontrator:				Kontratu ida ne'e iha seksaun Ch: to Ch:				Supervizor nia naran:	
Planu aktividade ba periodu fulan: / / to'o / /									
Nu. Rubrika	Aktividades manutensaun rutina ba estrada	Output per WDs (work norm)	Quantity of works	Manutensaun fulan ida ne'e nia naruk		Informasaun adisional	WD Planeadu	Porsentu hirak mak Kompletana	Sertifikasaun ba servisu
				From Ch	To Ch				
RM-1	Inspesaun Jeral No Muda Obstrusaun								
RM-2	Hamos deker no manila husi foer (inklui mos husi be tama no sai fatin)								
RM-3	Hasai material hirak ne'ebe monu iha ponte, drift no causeway nia leten ka laran								
RM-5	Baleta no be dalan hirak ne'ebe halo ona tenki hamos husi foer								
RM-6	Hadia scour check ne'ebe at								
RM-8	Hadia estrada ninin ne'ebe be ke ka erosaun								
RM-9	Taka estrada kuak								
RM-10	hadia klean sira ne'ebe iha tamba roda fatin								
RM-11	Hamos estrada husi du'ut								
RM-12	Dada hadia fali gravel ne'ebe sai husi estrada laran								
RM-13	Hamos tiha du'ut no soko hirak ne'ebe iha								
RM-14	Kuda du'ut								
RM-15	Rubrika seluk ne'ebe sem standar								
Supervizaun halao husi GMG Leader									
Total loron servisu ba fulan ida ne'e (Σ wd's)									
Nota: (a)=Toatal naruk estrada nian - km (b)= WDs/km/tinan				(c)=(a) x (b) /12 =Total average WDs available during the month. In dry season should be given less and more in rainy season					
Data: / /				Data: / /			Data: / /		
Hata'an husi:				Sukat husi:			Sasin husi:		
Asinatura:				Asinatura:			Asinatura:		
(Lider GMG)				(Supervizor Kontrator Nian)				(Egeneiru Manutensaun ERA Nian)	

Payment Certificate

SERTIFIKADU PAGAMENTU BA SERVISU RUTINA MANUTENSAUN ESTRADA NIAN									
Form A-10									
Distrito:					Nu. Kontrato:				
Contractor:					Nu. Sertifikado:				
Endereso:									
Durasan de Kontrato Husi / / To'o / /					Sertikado pagamentu ba periodo / / To'o / /				
Ida ne'e atu sertifika katak servisu manutensaun rutina ba estrada nian lao tuir ona detailu inspeksaun ne'ebe halao ona no tuir BoQ hateten iha kontratu manutensaun rutina ba estrada nian katak kompleta ona, simu no hetan aseitasaun husi projectu ERA tuir termus no kondisaun kontratu nian.									
Seksaun estrada/ Chainage/ Kompojsaun husi equipa	Unidade	Loron servisu hira to'o iha fulan ida ne'e no progresso servisu iha fulan ida ne'e				Progressu de pagamentu. (Montante USD)			
		Kontrato	Liu ba (previous)	sertifikadu ida ne'e	Total hamutuk ho sertifikadu ida ne'e	Valor de kontrato	Valor husi sertifikadu hotu ne'ebe liu ona	Valor husi sertifikadu ida ne'e	Total (incl. this certificate)
Valor de contrato									
Seksaun A (Suko A)	WD Lider								
0+000-5+000	WD Membru								
M= F=	WD Feto	>30%					%	%	%
Seksaun B (Suko B)	WD Lider								
5+000-10+000	WD Membru								
M= F=	WD Feto	>30%					%	%	%
Seksaun C (Suko C)	WD. Lider								
10+000-15+000	WD. Membru								
M= F=	WD Feto	>30%					%	%	%
Estrada: B etc									
Seksaun Nst.	WD Lider								
Chainage etc	WD Membru								
M= F=	WD feto	>30%					%	%	%
Total Loron servisu hira no montante hira									
Total=	WD Lider								
M=	WD Membru								
F=	WD Feto	>30%					%	%	%
Feramentas									
Laterite M³									
Salario ba supervisor kada fulan									
Lukro kada fulan nian fixado + sobrecarga									
materias seluk. Nst		Deskrisaun							
Adiantamentus		Deskrisaun							
Kontizensia		Deskrisaun							
Note: Relatorio inspeksaun mensal no lista de prejensa iha tereno, assina halo lolos no hatama ka anexa iha sertifikado pagamentu ida ne'e.					Total				
					Kortes seluk				
					Montante ne'ebe halo				
Inspeksaun de servisu halao husi Egenheiro Manutensaun ERA nian					Assinatura:				
Hetan Aseitasaun Husi Diretor Contrator					Assinatura:				
Hetan aprovasaun Chefe Engenheiro Projeto ERA					Assinatura:				
					Data: / /				
					Data: / /				
					Data: / /				

8 Power Point Slides

Labour-based rural road work manuals for training provided by Don Bosco Training Center



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Training modules developed through the Enhancing Rural Access Project, with technical support from the ILO and funding from the European Union and the Government of New Zealand