

# RURAL TRANSPORT TRAINING MATERIALS

TRAINER'S NOTES

## MODULE 4 RURAL TRANSPORT SERVICES AND INTERMEDIATE MEANS OF TRANSPORT

### Part 1

Agricultural marketing and access to  
transport services

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### Part 2

Community access to marketing  
opportunities: Malawi case study

SESSION 4.3



The World Bank



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<p><b>Session Objectives</b></p>	<p>This session enables participants to:</p> <p><b>Technical paper</b></p> <ul style="list-style-type: none"> <li>● Describe the links between agricultural marketing systems and transport services</li> <li>● Explain how transport costs affect marketing and income to farmers</li> <li>● Analyse the role of IMTs in improving access to markets and marketing systems</li> </ul> <p><b>Case study</b></p> <ul style="list-style-type: none"> <li>● Describe the background to rural transport services in Mali</li> <li>● Explain how transport costs affect the affordability of transport services especially for the poor</li> <li>● Analyse the factors affecting the efficiency of transport services in Mali</li> <li>● Reflect on the key lessons learnt, and how they may be applied to other countries</li> </ul>
<p><b>Rural Transport Knowledge Base materials used with this session</b></p>	<p>Agricultural marketing and access to transport services.  <b>By:</b> John Hine and Simon Ellis. Drawing on Niklas Sieber, Transport Reviews 1999.</p> <p>Community access to marketing opportunities: Malawi case study  <b>By:</b> U. Kleih, Natural Resources Institute (1999)</p>
<p><b>Training Materials</b></p>	<p><u>Presentations</u></p> <p>4.3a Agricultural marketing and access to transport services</p> <p>4.3b Community access to marketing opportunities: Malawi case study</p> <p><u>Activity Sheets</u></p> <p>53 IMTs and Marketing</p> <p>54 A market approach from Malawi</p>

Key Topics	Training Methods
<b>Part 1</b>	
1. Introduction	Presentation
2. Agricultural Marketing 2.1 Exploring the Issues 2.2 Links between transport and marketing	Ideas gathering Presentation with discussion
3. Transport costs	Q & A Presentation
4. Impact of transport costs	Presentation with discussion
5. Markets and Marketing	Presentation with discussion
6. IMTs and Marketing 6.1 Modes of transport and distance to markets 6.2 Crop production, transport costs and IMTs	Presentation with discussion Group activity Presentation with discussion
<b>Part 2</b>	
7. Case Study: Malawi 7.1 Introduction 7.2 Research programme 7.3 Transport infrastructure in Malawi 7.4 Means of transport in Malawi 7.5 Access to information 7.6 A market approach from Malawi	Presentation Presentation Presentation Presentation Case study activity Presentation with discussion
Summary of session 4.3	

## Trainers' Summary

This session is divided into two parts:


**Part 1** is based on the technical paper: Agricultural marketing and access to transport services.

**Part 2** is based on the case study: Community access to marketing opportunities: Malawi case study.


## Session 4.3 Trainers' Notes








### Part 1

## 1. Introduction



<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation</b></p> 	<p>Introduce the first part of session by explaining the learning objectives and session structure.</p> <p>The first part of this session is based on the technical paper: <i>Agricultural marketing and access to transport services</i>.</p> <p>This part of the session explores the links between agricultural marketing systems and transport, especially in rural areas. The effect of transport and marketing systems on overall agricultural production and farmers incomes is examined. The role of Intermediate Means of Transport (IMTs) in improving marketing systems is reviewed.</p> <p><b>Key Points:</b></p> <p><b>Session Overview Part 1</b></p> <ul style="list-style-type: none"> <li>⦿ Agricultural marketing</li> <li>⦿ Transport costs</li> <li>⦿ Impact of transport costs</li> <li>⦿ Markets and Marketing</li> <li>⦿ Potential of IMTs for marketing</li> </ul>	<p>Presentation 4.3a Slides 1 - 5</p>

## 2. Agricultural Marketing

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Ideas Gathering</b></p> 	<p><b>2.1 Exploring the Issues</b></p> <ul style="list-style-type: none"> <li>③ Open the debate on marketing and transport issues by gathering together as many ideas as possible on the topic.</li> <li>③ Write the following question on flip chart and ask participants to make one or two word contributions:  <i>In what ways do transport services affect agricultural marketing in rural areas?</i></li> <li>③ Note points on flip chart. There should be no discussion at this point.</li> <li>③ Based on the participants opinion (NOT the trainer's), group the list of words into the following categories: <ul style="list-style-type: none"> <li>≈ transport cost &amp; financial issues</li> <li>≈ access to markets</li> <li>≈ access to storage facilities</li> <li>≈ modes of transport and IMTs</li> </ul> </li> <li>③ Summarise main points and explain that these will be expanded on in the next part of the session (below).</li> </ul>	<p>Flip chart, pens</p>


Training Methods	Content	Materials
<p data-bbox="145 528 341 629"><b>Presentation with Discussion</b></p> 	<p data-bbox="426 454 1209 495"><b>2.2 Links between transport and marketing</b></p> <p data-bbox="426 533 1225 640">Building on the points listed above, explain and facilitate a discussion on the links between agricultural marketing and transport issues.</p> <p data-bbox="426 645 695 678">Ask questions like:</p> <p data-bbox="426 683 1123 752">What is the nature of marketing systems in many developing countries?</p> <p data-bbox="426 757 1118 826">What sort of marketing system is required by the agricultural industry?</p> <p data-bbox="376 900 555 934"><b>Key Points:</b></p> <ul style="list-style-type: none"> <li data-bbox="426 972 1137 1041">  Efficient transport system is critical for efficient agricultural marketing         </li> <li data-bbox="426 1081 1238 1263">  Transport and marketing systems in many developing countries tend to be           <ul style="list-style-type: none"> <li data-bbox="485 1155 715 1189">✓ monopolistic</li> <li data-bbox="485 1193 695 1227">✓ low volume</li> <li data-bbox="485 1232 667 1265">✓ high cost</li> </ul> </li> <li data-bbox="426 1303 1169 1373">  Economies of scale are possible in transport and marketing operations         </li> <li data-bbox="426 1413 1198 1482">  Transport services, especially in sub-Saharan Africa (SSA) tend to be expensive, slow and infrequent         </li> <li data-bbox="426 1523 1222 1704">  No matter what the road infrastructure condition is, if farmers cannot transport their produce to market, they will not profit from increased agricultural production. Hence it becomes a disincentive to produce greater yields when the produce will spoil         </li> <li data-bbox="426 1744 1214 1888">  Agriculture is best served by:           <ul style="list-style-type: none"> <li data-bbox="485 1783 1214 1816">✓ consistent high urban and international demand</li> <li data-bbox="485 1821 1185 1888">✓ efficient, high volume transport and marketing system</li> </ul> </li> </ul>	<p data-bbox="1270 528 1453 633">Presentation 4.3a Slides 6 - 7</p>

## 3. Transport Costs

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Q &amp; A</b></p> 	<ul style="list-style-type: none"> <li>⦿ Introduce this part of the session by exploring the nature of transport costs in Africa and Asia. Begin the discussion by asking:  <i>What are the issues affecting the provision of transport services to rural areas?</i></li> <li>⦿ Note points made by participants on flipchart.</li> <li>⦿ The Key Points are discussed below.</li> </ul>	<p>Flip chart, pens</p>
<p><b>Presentation</b></p> 	<p>Summarise the points raised above by presenting the key issues associated with transport costs.</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>⦿ Transport operating costs are higher on rough roads, causing higher passenger fares and freight tariffs</li> <li>⦿ Long distance freight transport costs are charges are higher in Africa than Asia, even for the same type of transport</li> </ul>	<p>Presentation 4.3a Slides 8 - 10</p>








## 4. Impact of Transport Costs

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation with Discussion</b></p> 	<p>Facilitate a discussion on the impact of varying transport costs on marketing, and ultimately farmers' incomes. Ask questions like:            What transport factors determine the final market price of agricultural produce?            How does road investment affect transport costs?</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>③ Proportion of <b>transport charges</b> of final market price depends on:               <ul style="list-style-type: none"> <li>✓ commodity type</li> <li>✓ efficiency of the transport and marketing sectors</li> <li>✓ travel distance</li> </ul> </li> <li>③ <b>Marketing margins and transport costs</b> need to be subtracted from the final market price, including the high cost of head loading produce to the village or roadside</li> <li>③ <b>African</b> farmers received 30-50% of final market prices compared to 70-85% received by <b>Asian</b> farmers, and most of the difference is transport costs</li> <li>③ <b>Agricultural supply price elasticities</b> are used to estimate the effect of reduced transport marketing costs on agricultural productivity. This ranges between 0 to 1.5</li> </ul> <p><b>Continued...</b></p>	<p>Presentation 4.3a            Slides 11 - 15</p>


<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
	<p><i>...Continued</i></p> <ul style="list-style-type: none"> <li>  <b>Road investment</b> reduces transport costs, but only if there is a change in transport mode as well         </li> <li>  Other factors: Perishable of food, storage costs and facilities, monopolistic marketing system, farmers have little choice with whom they trade so have little bargaining power, indebtedness of farmers, inadequate supply of vehicles at harvest time         </li> </ul>	


## 5. Markets and Marketing



<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation with Discussion</b></p> 	<p>Facilitate a discussion on the nature of marketing systems, especially the differences between Africa and Asia, and the role of access and storage facilities. Ask questions like:</p> <p>What is the relationship between density of population and markets?</p> <p>How is farmers' bargaining power affected if they have to rely on travelling traders to sell their produce?</p> <p>What determines farmers' choice of vehicle when it comes to sending produce to market?</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>☉ Markets are places where goods and people are amalgamated. This concentrates the demand for transport</li> <li>☉ If populations are dispersed, markets are dispersed and IMTs may not be viable</li> <li>☉ Farmers may get the best price if they sell produce directly to final consumers at rural or urban markets</li> <li>☉ If farmers rely on travelling wholesalers, traders, parastatals, large private marketing companies reduces their bargaining power and demand for transport services</li> <li>☉ Vehicle choice determined by ease of access to storage facilities and the extent to which goods are amalgamated.</li> </ul> <p><b>Continued...</b></p>	<p>Presentation 4.3a Slides 16 - 20</p>

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
	<p><b>...Continued</b></p> <ul style="list-style-type: none"> <li>  If goods are amalgamated the density of demand for vehicle services increases, efficient and cost effective vehicles are justified, and unitary costs of transport are reduced         </li> <li>  If distribution costs are low this increase farm gate prices, and give farmers the incentive to increase production         </li> <li>  Markets and storage facilities tend to be closer to villages in Asia than in the African         </li> <li>  Characteristics of market and storage accessibility in the five survey sites         </li> </ul>	

## 6. IMTs and Marketing






<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation with Discussion</b></p> 	<p><b>6.1 Modes of transport and distance to markets</b></p> <p>Facilitate a discussion on the role of different modes of transport in relation to the distance from markets in rural areas.</p> <p>Ask questions like: How can IMTs be combined with head-loading and motorised improve marketing of agricultural produce?</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>☉ If markets are within walking distance some villagers prefer head-loading. Improvements can be made to foot paths to reduce travel time, accidents and isolation. Also, head loads and market integration can be increased.</li> <li>☉ IMT can increase the carrying capacity, speed, reduce transport costs, economic opportunities, enable farmers to move produce along poor roads/ tracks</li> <li>☉ If markets are too far to walk, IMTs enable farmers to reach distant markets, with heavier loads</li> <li>☉ If markets are beyond the reach of IMTs, then motor vehicles are essential</li> </ul>	<p>Presentation 4.3a Slides 21 - 25</p>

Training Methods	Content	Materials
<p><b>Group Activity</b></p> 	<p><b>6.2 Crop production, transport costs and IMTs</b></p> <p>The purpose of this activity is to explore the relationship between crop production patterns and transport costs with different modes of transport, with particular focus on the role of Intermediate Means of Transport (IMTs).</p> <ul style="list-style-type: none"> <li>④ Divide participants into groups of 4 or 5, and give them Activity Sheet 53.</li> <li>④ Ask participants to analyse the table of data and to discuss the following questions: <ul style="list-style-type: none"> <li>A. <i>What is the relationship between crop production and transport costs?</i></li> <li>B. <i>What role can IMTs play in improving the marketing of agricultural produce?</i></li> </ul> </li> <li>④ Ask participants to write their findings on flip chart, elect a presenter and prepare to feedback to the plenary.</li> <li>④ Ask each group to present their findings to the plenary.</li> <li>④ Facilitate a discussion on the Key Points raised.</li> <li>④ The key learning points from this activity are discussed below.</li> </ul>	<p>Presentation 4.3a Slide 26</p> <p>Activity Sheet 53</p> <p>Flip chart, pens</p>



<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation with Discussion</b></p> 	<p>Building on the points raised in the activity above, explain the role that IMTs in improving agricultural marketing in rural areas. Ask questions like: how can IMTs stimulate agricultural production?</p> <p><b>Key Points</b></p> <ul style="list-style-type: none"> <li>◎ IMTs can increase efficiency of agricultural transportation by reducing the time and money spent transporting goods, such as head loading</li> <li>◎ IMTs can stimulate agricultural production</li> </ul>	<p>Presentation 4.3a Slides 27 - 30</p>
<p><b>Presentation</b></p> 	<p><b>Concluding remarks</b></p> <p>Summarise the first part of this session by highlighting the main issues explored and the essential activities for taking these issues forward.</p>	<p>Presentation 4.3a Slide 31</p>


**Part 2**


## 7. Case Study: Malawi


<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation</b></p> 	<p><b>7. 1 Introduction</b></p> <p>Introduce the second part of this session explaining the objectives with a brief overview of the topics to be covered.</p> <p>This part of the session is based on: <i>Community access to marketing opportunities: Malawi case study.</i></p> <p><b>Key Points:</b></p> <p><b>Session Overview Part 2</b></p> <ul style="list-style-type: none"> <li> The research programme</li> <li> Transport infrastructure</li> <li> Means of transport</li> <li> Access to information</li> </ul>	<p>Presentation 4.3 b Slides 1 - 3</p>




<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation</b></p> 	<p><b>7.2 Research Programme</b></p> <p>Describe the programme that will be examined in the case study, including contextual issues related to liberalisation of markets.</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>☉ Community access to marketing opportunities</li> <li>☉ Objectives of the research programme</li> <li>☉ Contextual issues including the liberalisation of agricultural markets in the early 1990's, and increases in agricultural production</li> <li>☉ The four survey districts</li> </ul>	<p>Presentation 4.3b Slides 4 - 6</p>
<p><b>Presentation</b></p> 	<p><b>7.3 Transport infrastructure in Malawi</b></p> <p>Describe the transport infrastructure in Malawi and the factors affecting the road poor network.</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>☉ Constraints to market access in remote areas include poor roads, lack of transportation, lack of market information, inadequate markets</li> <li>☉ Poor road network due to lack of maintenance funds, poor road and bridge design, reduction of community self-help spirit</li> </ul>	<p>Presentation 4.3b Slides 7 - 8</p>

Training Methods	Content	Materials
<p><b>Presentation</b></p> 	<p><b>74. Means of Transport in Malawi</b></p> <p>Describe the nature of transport services in Malawi, focussing in particular on the role of motorised and non-motorised modes of transport.</p> <p><b>Key Points</b></p> <ul style="list-style-type: none"> <li>☉ Availability of transport provides <b>poor people</b> with better physical access to markets, social amenities e.g. education and health services, enhances agricultural productivity</li> <li>☉ In rural areas the most common means of transport is walking and headloading, the latter mostly by <b>women</b></li> <li>☉ Motorised transport is inadequate to satisfy demand</li> <li>☉ IMTs are needed because of the high cost of headloading and un-profitability of motorised transport in isolated villages</li> <li>☉ The best cost efficiency for transporting agricultural produce is by a combination of animal traction and truck transport</li> <li>☉ The main constraint to access to IMT for resource poor households is the initial capital expenditure</li> </ul>	<p>Presentation 4.3b Slides 9 - 13</p>

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation</b></p> 	<p><b>7.5 Access to Information</b></p> <p>Explain the issues related to information and marketing.</p> <p><b>Key Points</b></p> <ul style="list-style-type: none"> <li>③ Access to information is influenced by poor roads and low traffic volumes</li> <li>③ The central Market Information Service of Malawi has had limited impact on improving access to information</li> </ul>	<p>Presentation 4.3b Slide 14</p>

Training Methods	Content	Materials
<p><b>Case Study activity in groups</b></p> 	<p><b>7.6 A market approach from Malawi</b></p> <p>The purpose of this activity is to reflect on the experiences of the project from Malawi, and to consider how the transport issues may be addressed so as to meet the marketing needs of rural farmers.</p> <p>Three key issues areas are explored: -</p> <ul style="list-style-type: none"> <li>≈ Transport infrastructure</li> <li>≈ Means of transport</li> <li>≈ Access to information</li> </ul> <ul style="list-style-type: none"> <li>⊙ Divide the participants into 3 groups.</li> <li>⊙ Give each group Activity Sheet 54.</li> <li>⊙ Explain that each group will work on only ONE issue. Allocate one issue to each group.</li> <li>⊙ Ask participants to discuss the following question:                     <p><i>What recommendations would you make to address transport issues to meet the marketing needs for agriculture?</i></p> </li> <li>⊙ Ask the groups to prepare their findings on flip chart and to elect a person to present the findings.</li> <li>⊙ Each group presents their findings to the plenary.</li> <li>⊙ Facilitate a discussion on the findings and draw out the key learning points. The key learning points are discussed in detail below.</li> </ul>	<p>Presentation 4.3b Slide 15</p> <p>Flipchart, pens</p> <p>Activity sheet 54</p>

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation with Discussion</b></p> 	<p>Building on the discussions above, describe the recommendations made by the project as a results of village and district workshop carried out during the survey. Facilitate a debate on any differences of opinion between the results of the survey and those of the participants. Ask participants to explain possible reasons for these differences.</p> <p>Draw on the experiences of participants from Malawi (if they have any) and other countries, during the discussion. Ask participants to reflect on the lessons learnt from the Malawi case study and how these may be applied elsewhere.</p> <p><b>Key Points</b></p> <ul style="list-style-type: none"> <li>① Transport infrastructure</li> <li>① Means of transport</li> <li>① Motorised transport</li> <li>① IMTs</li> <li>① Policy and institutional framework</li> <li>① Training and curricular development, and role of IMTs</li> <li>① Access to information – develop a decentralised system, develop pilot projects, and make more use of cheap mass media like FM radio stations</li> </ul>	<p>Presentation 4.3b Slides 16 - 23</p>
	<p><b>Summary of Session 4.3</b></p> <p>Conclude this session by reviewing the issues explored and the key lessons learnt, highlighting areas that may need further investigation or discussion.</p>	