

# RURAL TRANSPORT TRAINING MATERIALS

TRAINER'S NOTES

## MODULE 5 SOCIAL AND ENVIRONMENTAL ISSUES

### Part 1

Transport and Sustainable Rural Livelihoods

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### Part 2

The application of transport and sustainable rural livelihoods in Zambia: a case study

SESSION 5.3



The World Bank



**DFID**

Department for  
International  
Development



theIDLgroup 

<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>④ Describe the components of the SL framework</li> <li>④ Explain how transport affects livelihoods, especially of the rural poor</li> <li>④ Analyse how transport policies and institutions affect livelihoods issues</li> </ul> <p><b>Case study</b></p> <ul style="list-style-type: none"> <li>④ Describe how livelihood capitals are affected by transport issues in rural Zambia</li> <li>④ Analyse transport and livelihoods constraints</li> <li>④ Describe a range of livelihood strategies linked to transport</li> <li>④ List recommendations for improving transport</li> <li>④ Apply livelihood thinking to their areas of work</li> </ul>
<p><b>Rural Transport Knowledge Base materials used with this session</b></p>	<p>Transport and Sustainable Rural Livelihoods  <b>By:</b> P. Fouracre, TRL Limited</p> <p>The application of transport and sustainable rural livelihoods in Zambia: a case study  <b>By:</b> A. S. C Davis, TRL Limited (2000)</p>
<p><b>Training Materials</b></p>	<p><u>Presentations</u></p> <p>5.3a Transport and Sustainable Rural Livelihoods.</p> <p>5.3b The application of transport and sustainable rural livelihoods in Zambia: a case study</p> <p><u>Activity Sheets</u></p> <p>62 Impact of transport on the livelihoods of the rural poor</p> <p>63 Transport and livelihoods in specific countries</p>

Key Topics	Training Methods
<b>Part 1</b>	
1. Introduction	Presentation
2. Background to livelihoods approaches	Presentation
3. The Sustainable Livelihoods Framework	Q & A Presentation Pairs exercise Presentation with discussion
4. Impact of transport on livelihood capitals (assets)	Group discussion Presentation with discussion
5. The role of policies, institutions and processes (PIPs)	Presentation with discussion
<b>Part 2</b>	
<b>6. Case study: Zambia</b>	
6.1 Context and background to the case study	Presentation
6.2 Livelihood capitals in the Northern and Copperbelt Provinces	Presentation
6.3 Livelihood constraints	Presentation
6.4 Livelihood strategies	Presentation
6.5 Recommended transport interventions in rural Zambia	Q & A Presentation with discussion Case study activity
<b>Summary of session 5.3</b>	

## Trainers' Summary


**This session is divided into two parts:**

- Part 1** is based on the Technical Paper: Transport and Sustainable Rural Livelihoods.
- Part 2** is based on the Case Study: The application of transport and sustainable rural livelihoods in Zambia.


## Session 5.2 Trainers' Notes

### Part 1


## 1. Introduction

<i>Training Methods</i>	<i>Content</i>	<i>Materials</i>
<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: Transport and Sustainable Rural Livelihoods. The concepts underpinning Sustainable livelihoods approaches are explored, including ways in which the framework may be used as an analytical tool. The impact of transport on livelihoods is examined, with particular reference to the impact on capitals, and the role played by transport policies and institutions.</p> <p><b>Key Points:</b></p> <p><b>Session Overview Part 1</b></p> <ul style="list-style-type: none"> <li>🌀 Background to livelihoods approaches</li> <li>🌀 The Sustainable Livelihoods Framework</li> <li>🌀 Impact of transport on livelihood capitals (assets)</li> <li>🌀 The role of policies, institutions and processes (PIPs)</li> </ul>	<p>Presentation 5.3a Slides 1 - 5</p>


## 2. Background to livelihoods approaches


<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation</b></p> 	<p>Describe the background to the Sustainable Livelihoods (SL) approach, focussing on the aims of the approach and the role of the Department for International Development (DFID) – UK in its development.</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>☉ DFID – commitment to poverty elimination</li> <li>☉ Sustainable Livelihoods - a people centred approach</li> <li>☉ Builds on the existing assets of the poor - community and individuals</li> <li>☉ Aims to strengthen the sustainability of the poor people’s livelihoods</li> <li>☉ Is underpinned by a core set of principles</li> <li>☉ Uses a framework for holistic analysis, and to help define the scope of the analysis, an understanding of the complexity of rural livelihoods and to set intermediate objectives</li> </ul>	<p>Presentation 5.3a Slides 6 - 8</p>






Training Methods	Content	Materials
<p><b>Presentation</b></p> 	<p>Building on the points above, explain the working definition of a livelihood used by DFID. After this explain that the framework consists of 5 components, and show participants a picture of the framework.</p> <p>Note that the component shown on the diagramme as “Transforming Structures and Process” are now more commonly referred to as: <i>policies, institutions and processes (PIPs)</i></p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>⊙ A livelihood is <i>the capabilities, assets (material &amp; social resources) and activities required for a means of living.</i></li> <li>⊙ A livelihood is sustainable when ... ‘<i>it can cope with and recover from stresses and shocks, and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base</i>’.</li> <li>⊙ The components of the SL framework are           <ul style="list-style-type: none"> <li>✓ capitals (sometimes referred to as assets)</li> <li>✓ livelihood strategies</li> <li>✓ policies, institutions and processes (PIPs)</li> <li>✓ vulnerability context</li> <li>✓ livelihood outcomes</li> </ul> </li> </ul>	<p>Presentation 5.3a Slides 10 - 12</p>





Training Methods	Content	Materials
<p><b>Pairs exercise</b></p> 	<ul style="list-style-type: none"> <li>⦿ A useful way to examine livelihood capitals is to examine those that we as individuals in this session possess. Encourage participants to think about capitals beyond simply income or savings.</li> <li>⦿ Ask participants to work in pairs, and to discuss: <ul style="list-style-type: none"> <li><i>What capitals (or assets) do each of you possess at this point in time?</i></li> </ul> </li> <li>⦿ Note points on flip chart.</li> <li>⦿ When the list has been drawn up, ask participants if other capitals (assets) can be added to the list from say people from other parts of the world and other socio-economic groups such as the poor, landless farmers, forest dwellers, urban slum dwellers and female headed households.</li> <li>⦿ Ask participants to help you divide the list into five main categories of capitals (see trainers' note 1) <ul style="list-style-type: none"> <li>≈ Natural Capital</li> <li>≈ Social Capital</li> <li>≈ Human Capital</li> <li>≈ Physical Capital</li> <li>≈ Financial Capital</li> </ul> </li> <li>⦿ These points may be summarised using slide 11.</li> </ul> <p><b><u>Trainers' Note</u></b></p> <ol style="list-style-type: none"> <li>1. <i>Group the capitals using different coloured pens to draw round the various items, e.g. blue for physical capitals, green for natural capitals, red for social capitals and so on.</i></li> <li>2. <i>An alternative way of exploring capitals is to give each participant some post-its, and ask them to write down all the capitals they can think of (one capital to a post-it) and to stick them all on a large board. The capitals can then be grouped by rearranging the post-its under five headings (representing the 5 capitals).</i></li> </ol>	<p>Flip chart, pens</p>

Training Methods	Content	Materials
<p><b>Presentation with Discussion</b></p> 	<p>Explain the other four components of the framework. Discuss the implications of taking a livelihoods approach and what this could mean for the transport sector.</p> <p>To facilitate discussion during the presentation ask questions like:            What livelihood strategies do we as individuals, have?            What livelihood strategies do poor people have?            Give examples of trends and shocks. How do these affect capitals?            What does 'livelihood outcomes' mean? Give examples.            What are the implications for the transport sector of taking a livelihoods approach?</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>☉ Livelihood strategies: the choices people make and the activities they carry out to build their capitals (assets)</li> <li>☉ Policies, institutions and processes - PIPs component describes               <ul style="list-style-type: none"> <li>✓ policies; laws, legislation (formal institutions); norms, beliefs, culture (informal institutions); organisational structures; the change taking place in policies and institutions</li> </ul> </li> <li>☉ PIPs define poor people's livelihood options and strategies, determines who gains access to assets influences the effective value of each asset</li> </ul> <p><b>Continued...</b></p>	<p>Presentation 5.3a Slides 16 - 19</p>



<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
	<p><b>... Continued</b></p> <ul style="list-style-type: none"> <li>  Vulnerability context describes           <ul style="list-style-type: none"> <li>✓ trends (change over time in such factors as: commodity prices, employment levels, population growth rate, global warming) and</li> <li>✓ shocks (floods, earth quake, sudden illness, civil unrest), and</li> <li>✓ the ability of the poor to cope with these</li> </ul> </li> <li>  Livelihood outcomes - the result of strategies used by people to build their asset base, e.g. more income/sustained income, increased well being           </li> <li>  A livelihoods approach requires the active participation of all sectors which have a vested interest in increasing the capital assets of communities, including the transport sector           </li> </ul>	







## 4. Impact of transport on livelihood capitals

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Group Discussion</b></p> 	<p>The following activity serves as an introduction to both section 4 (impact of transport on livelihood capitals) and section 5 (impact of transport policies and institutional issues on livelihoods of the poor).</p> <p>The purpose of this activity is to examine how transport issues impact on livelihood capitals (assets) of the rural poor, and how transport policies and institutions affect the livelihoods of the poor.</p> <ul style="list-style-type: none"> <li>④ Divide participants into small groups and give them Activity Sheet 62.</li> <li>④ Ask participants to discuss the following questions: <ul style="list-style-type: none"> <li>A. <i>What is the impact of transport on livelihood capitals (assets)?</i></li> <li>B. <i>How do policies and institutions associated with transport affect livelihoods?</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 These points will be explored in more detail in the section below, and section 5 on PIPs that follows it.</li> </ul>	<p>Presentation 5.3a Slide 20</p> <p>Activity Sheet 62</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 from the activity above, facilitate a discussion on the ways in which transport impacts on the livelihood capitals of the poor.</p> <p>To stimulate discussion ask questions such as:            What is the environmental impact of transport? How might these be addressed?            How might the social benefits of transport be assessed?            Do the very poor benefit from transport interventions? If not, why not?            How does transport help build human capitals?            What are the benefits from improving physical capital of transport (i.e. infrastructure)?</p> <p><b>Key Points</b></p> <ul style="list-style-type: none"> <li>☉ Natural Capital – environmental degradation, change in land use, “opens up” remote areas</li> <li>☉ Social Capital – provide access to the outside world for communities; the poor benefit, but the very poor do not benefit, as they have too few resources</li> <li>☉ Human Capital – access to services like education, health; increased road safety issues</li> <li>☉ Physical Capital – some roads are “over designed” – wasted resources; much greater saving from upgrading a path to a motorable track than upgrading a dirt track to a gravel track</li> <li>☉ Financial Capital – in urban areas the main savings are in time; in rural areas the main savings are in transport operating costs – leading to reduced costs of farm inputs</li> </ul>	<p>Presentation 5.3a            Slides 21 - 37</p>


## 5. The role of policies, institutions and processes (PIPs)

Training Methods	Content	Materials
<p><b>Presentation with Discussion</b></p> 	<p>This section builds on the points raised from the group discussion above. Refer back to the flip charts used by the participants when they gave their presentations.</p> <p>Facilitate a discussion on how transport policy and institutional issues impact on the livelihoods of the poor.</p> <p>During the discussion ask questions like:            How well developed is the institutional framework for transport development in various countries?            How well are transport policies linked in with current thinking and the current development context – e.g. do they have a poverty focus?            What institutional developments (including capacity building) need to take place to address transport issues that are constraining the livelihoods of poor people?</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>  Transport sector is relatively well organised with long established body of law, regulations, standards organisational frameworks           <ul style="list-style-type: none"> <li>✓ But many of these instruments are out of step with current practices and thinking</li> <li>✓ This influences the type of transport infrastructure and services available to the rural poor – which directly affects their livelihoods</li> </ul> </li> </ul> <p><b>Continued ...</b></p>	<p>Presentation 5.3a            Slides 38 - 42</p>


<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
	<p><b>... Continued</b></p> <ul style="list-style-type: none"> <li>  Institutional developments take a long time to implement           <ul style="list-style-type: none"> <li>✓ They require detailed planning, training, management – but these elements are often missing or ill-conceived</li> </ul> </li> <li>  Decentralisation of roads and transport planning services</li> <li>  Education and training are needed</li> <li>  Capacity building – good developments have taken place in domestic construction industries and consultancy services</li> <li>  Limited resources require new funding mechanisms</li> </ul>	
<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.</p>	<p>Presentation 5.3a Slides 43 - 47</p>







**Part 2**




## 6. Case Study: Zambia


<i>Training Methods</i>	<i>Content</i>	<i>Materials</i>
<p><b>Presentation</b></p> 	<p><b>6.1 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 the application of transport and sustainable rural livelihoods in Zambia: a case study.</p> <p><b>Key Points:</b></p> <p><b>Session Overview Part 2</b></p> <ul style="list-style-type: none"> <li>◎ Context and background to the case study</li> <li>◎ Livelihood capitals in the Northern and Copperbelt Provinces</li> <li>◎ Livelihood constraints</li> <li>◎ Livelihood strategies</li> <li>◎ Recommended transport interventions in rural Zambia</li> </ul>	<p>Presentation 5.3b Slides 1 - 3</p>








<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation</b></p> 	<p><b>6.2 Context and background to the case study</b></p> <p>Describe the background to the Zambia case study, including the context of the transport system, development of a ‘tool kit’, an overview of rural livelihoods, and a description of the case study areas.</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>☉ Context – role of transport in livelihoods. Poor roads are not the only constraint</li> <li>☉ Policy Tool Kit for Increased Rural Mobility</li> <li>☉ Livelihoods in rural Zambia</li> <li>☉ The case study areas: Northern Province and the Copperbelt</li> </ul>	<p>Presentation 5.3b Slides 4 - 13</p>


Training Methods	Content	Materials
<p><b>Presentation</b></p> 	<h3 data-bbox="422 459 1197 537">6.3 Livelihood Capitals in the Northern and Copperbelt Provinces</h3> <p data-bbox="422 582 1236 728">Present the findings of the Zambia case study, explaining the impact of transport the issues on capitals of rural communities, highlighting the differences between the two regions (Northern Province and the Copperbelt)</p> <p data-bbox="359 795 526 840"><b>Key Points</b></p> <ul style="list-style-type: none"> <li data-bbox="422 873 1220 1019">  Natural Capital           <ul style="list-style-type: none"> <li>✓ land, fishing reserves, livestock declining due to corridor disease, <i>chitemene</i> farming system</li> <li>✓ minerals (copper and cobalt), soil fertility varies</li> </ul> </li> <li data-bbox="422 1052 1157 1198">  Physical Capital           <ul style="list-style-type: none"> <li>✓ Poor transport infrastructure – poor access, impassability, few IMTs</li> <li>✓ Lack of communication</li> </ul> </li> <li data-bbox="422 1232 1220 1355">  Human Capital           <ul style="list-style-type: none"> <li>✓ inadequate health and education provision, long distances to schools</li> </ul> </li> <li data-bbox="422 1388 1197 1534">  Financial Capital           <ul style="list-style-type: none"> <li>✓ Limited access to credit</li> <li>✓ Some credit schemes further marginalised the poor</li> </ul> </li> <li data-bbox="422 1568 766 1646">  Social Capital           <ul style="list-style-type: none"> <li>✓ strong networks</li> </ul> </li> </ul>	<p data-bbox="1268 560 1476 672">Presentation 5.3b Slides 23 - 29</p>

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation</b></p> 	<p><b>6.4 Livelihood constraints</b></p> <p>Describe the livelihood constraints in the two regions of Zambia, and the role of transport issues in exacerbating these constraints.</p> <p><b>Key Points</b></p> <ul style="list-style-type: none"> <li>  In Northern Province the main constraint is food insecurity           <ul style="list-style-type: none"> <li>✓ partly due to lack of access to fertilisers, in turn proliferating “slash and burn” agriculture</li> <li>✓ difficulties obtaining fertiliser due to poor roads</li> <li>✓ poor marketing network – exacerbated by poor roads</li> </ul> </li> <li>  In the Copperbelt the main constraint was inadequate access to markets           <ul style="list-style-type: none"> <li>✓ Issue addressed for two districts through formation of farmers cooperatives to obtain fertiliser, and a donor-funded rural development programme</li> <li>✓ In another district there was no such support or farmers’ cooperatives – area was less fertile, few capabilities to undertake road maintenance. Food security was also a problem here.</li> </ul> </li> </ul>	<p>Presentation 5.3b Slides 30 - 37</p>

Training Methods	Content	Materials
<p><b>Presentation</b></p> 	<p><b>6.5 Livelihood strategies</b></p> <p>Describe the main livelihood strategies in the case study areas, including an overview of the role transport network.</p> <p><b>Key Points</b></p> <ul style="list-style-type: none"> <li>☉ The only transport providers who directly impact on rural livelihoods were informal transporters and rural households who own ox-carts and (more commonly) bicycles <ul style="list-style-type: none"> <li>✓ very little scope to adopt transport-based strategies to markedly improve livelihood potential</li> </ul> </li> <li>☉ In general, livelihood strategies included farming, fishing, mining</li> <li>☉ Livelihood strategies specifically associated with transport and addressing transport difficulties included <ul style="list-style-type: none"> <li>✓ catching a lift to market</li> <li>✓ hiring out ox and cart for transport, and oxen for ploughing</li> <li>✓ leasing out bicycles</li> <li>✓ forming farmers' cooperatives to obtain farm inputs from the Food Reserve Agency (who would only supply cooperatives so as to ensure post-harvest repayments)</li> <li>✓ marketing and income generation – bartering, beer brewing, charcoal production, charging people to use a hammer mill for grinding maize</li> </ul> </li> </ul>	<p>Presentation 5.3b Slides 38 - 44</p>


Training Methods	Content	Materials
<p style="text-align: center;"><b>Q &amp; A</b></p> 	<p><b>6.6 Recommended transport interventions in rural Zambia</b></p> <ul style="list-style-type: none"> <li>  Based on the evidence and experiences they have heard about the transport issues in Northern Province and the Copperbelt of Zambia, ask participants to consider what recommendations <i>they</i> would make to address transport problems. Ask participants to explain the rationale behind their recommendations.         </li> </ul> <p>Encourage participants to think about wide-ranging strategies, not simply technical solutions (improving roads and maintenance), possibility of IMTs, capacity building of roads agencies, community involvement, labour based approaches, policy issues, and so on.</p> <p>Begin discussions by asking:</p> <p><i>What recommendations would you make to address transport issues in these two regions of Zambia?</i></p> <ul style="list-style-type: none"> <li>  Note the points made on flip chart.         </li> <li>  The following section outlines the recommendations mentioned in the case study paper.         </li> </ul>	<p>Flip chart, pens</p>

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation with Discussion</b></p> 	<p>This presentation builds on the discussions above. Describe the recommendations for addressing transport issues given in the case study paper. Compare these with the suggestions given by the participants.</p> <p>Ask questions like:            What issues need to be considered when introducing IMTs?            Why is it important to create a ‘critical mass’ of transport service users?</p> <p><b>Key Points:</b></p> <ul style="list-style-type: none"> <li>③ Increased supply of IMTs – as demand was evident</li> <li>③ Create a ‘critical mass’ of transport service users (e.g. IMTs) to reduce transport and hire costs and to foster provision of spare parts manufacturers &amp; maintenance necessary for sustained utilisation</li> <li>③ Provision of effective credit schemes for farmers</li> <li>③ Relaxation of legislation on informal transport services to encourage the provision of local informal services</li> <li>③ The need to communicate the priority requirements of rural communities to transport decision and policy makers               <ul style="list-style-type: none"> <li>✓ ensure appropriate interventions meet the needs of the poor</li> <li>✓ to avoid wastage of donor funding</li> </ul> </li> </ul>	<p>Presentation 5.3b            Slides 45 - 46</p>

Training Methods	Content	Materials
<p><b>Case Study activity in groups</b></p> 	<p><b>Transport and livelihoods in participants countries</b></p> <p>The purpose of this activity is to provide participants with the opportunity to reflect on the Zambia case study and to apply livelihoods thinking to the areas in which they are working. The aim is to examine transport issues from a livelihoods and poverty focussed perspective that considers the wide ranging issues (policy, social, cultural, economic as well as technical) from a perspectives at a mirco level to a macro. At the centre of this approach is an analysis of <i>people's</i> livelihood concerns, and the role that transport plays in this.</p> <ul style="list-style-type: none"> <li>③ Divide the participants into groups of 4 or 5, and give each group Activity Sheet 63. See <i>trainers note 1 below</i>.</li> <li>③ Give participants a full copy of the case study, which they can refer to during the group discussion.</li> <li>③ Ask participants to discuss the following questions: <ul style="list-style-type: none"> <li>A. <i>What are the livelihood strategies of the poor?</i></li> <li>B. <i>How does transport infrastructure and services affect the livelihoods of the poor? (Include policy and institutional issues, and vulnerabilities).</i></li> <li>C. <i>Make recommendations for how transport issues that are constraining livelihoods may be addressed.</i></li> </ul> </li> <li>③ Ask the groups to prepare their findings on flip chart and to elect a person to present the findings.</li> <li>③ Each group presents their findings to the plenary.</li> <li>③ Facilitate a discussion on the findings and draw out the key learning points. See <i>trainers note 2 below</i>.</li> </ul>	<p>Presentation 5.3b Slide 47</p> <p>Flip chart, pens</p> <p>Activity sheet 63</p>

<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
	<p><b><u>Trainers' Note</u></b></p> <ol style="list-style-type: none"> <li><i>If there are participants from several countries present, it is best to divide them into country groups or into groups from specific regions within a country. This may also provide an interesting contrast between different areas</i></li> <li><i>There are no right or wrong answers to these questions. However, participants should be encouraged to explore a wide range of ideas and issues including technical, social, economic, policy, institutional and governance, as well as vulnerability factors – from micro through to macro levels.</i></li> </ol> <p><i>Encourage participants to focus on the perspective of <u>people</u> especially the poor, and to take a holistic approach to their analysis and challenge any assumptions (e.g. building new bitumised roads is the only answer, or IMT's are appropriate in all cases). Ask participants to consider gender issues that relate to the needs for transport infrastructure and services.</i></p>	



<b>Training Methods</b>	<b>Content</b>	<b>Materials</b>
<p><b>Presentation</b></p> 	<p><b>Concluding remarks</b></p> <p>Conclude the discussions by recapping on the Key Points raised from the Zambia case study.</p>	<p>Presentation 5.3b Slide 48</p>
	<p><b>Summary of Session 5.3</b></p> <p>Finnish the session by reviewing the issues explored and the key lessons learnt, highlighting areas that may need further investigation or discussion.</p>	