Step workshops - guide for facilitators

Department of Agriculture and Food, Western Australia

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STEP WORKSHOPS OVERVIEW

The STEP workshops can be run as independent modules or as part of the “A Million Hectares for the Future” workshop series of which the overarching learning outcome is:

**Participants will be able to identify and make informed decisions to profitably manage salinity on their farms.**

The preferred pathway for this series of modules is outlined below. However, after completing the first module, “Introduction to Salinity”, the order in which participants complete their other chosen modules is entirely flexible.

### Recommended Pathway

**Introduction to Salinity workshop**

**STEP workshop 1 Introduction**

**Key Practice Workshops**

*Choose from:*

- Lucerne
- Surface Water Management
- Saltland Pastures
- Deep Drainage
- Perennial pastures

**Other STEP workshops**

*Choose from:*

2A. Hands-on use of STEP model
3A. Running simulations on a standard farm
4A. Setting up own farms
2B. Developing a standard farm
3B. STEP analyses on a standard farm

### The STEP decision support tool workshops

The STEP decision support tool is computer spreadsheet model that simulates the whole farm business. The STEP tool looks at whole farm profit over a number of years. It allows the user to set up a farm business and then to introduce changes. The STEP tool will simulate the effect that these changes have on the cumulative profit of the farm business.

Experience with groups has shown that participants in workshops with the STEP tool are likely to have different requirements. The STEP workshop series has been developed to cater to these differing requirements.

Following the completion of the introductory Workshop 1 participants have several choices about how they can proceed with follow up workshops.
**Path A:** Some individuals will want to learn how to use the STEP tool with a view to entering their own farm business. Others also want to learn how to use STEP but would rather develop a standard farm for their area and run the analysis of priority scenarios as a group.

**Path B:** Another group of participants may have no inclination to learn how to use STEP but would like to develop a standard farm and different scenarios for their area and ask the facilitator to perform the analysis and present the results for discussion.

The choice of workshops is entirely flexible. Farmer groups may wish to choose one or more workshops from either of these paths or suggest their own combination of workshops. Groups are not restricted to following one particular path (A or B) and may switch between paths at any point in the process. Even within one group there may be a sub-group who wish to take a more hands-on approach than the rest of the group.

The facilitator may suggest a minimum number for the individual workshops.

**Example:**

A group may choose to do workshop B2. There may be participants in this group who then decide that they would like to learn to use STEP. They could then do Workshop A2 before joining with the rest of the group for Workshop B3.

They may then choose to go away and set up their own farms or meet again for workshop A4. Following workshop B3 the group may also like the facilitator to perform further STEP analyses on the standard farm and organise a fourth meeting or the facilitator may just send out the results of these analyses.

**The Workshop Choices**

The workshop choices are presented in the tables below. There is a Guide for Facilitators and Workshop Manual for Participants for each workshop.
## Workshop Series for participants who want to learn how to use the STEP tool to perform their own analyses (Path A)

<table>
<thead>
<tr>
<th>Workshop 1</th>
<th>Introduction to the STEP Decision Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Participants will learn what the STEP decision tool is and how it can be used to assess the financial impact of change on the farm business</td>
</tr>
<tr>
<td></td>
<td>• Participants receive farm survey sheets</td>
</tr>
<tr>
<td></td>
<td>• Participants receive worksheets to capture relevant information from other million hectares workshops</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Workshop 1 activities in preparation for workshop 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Participants complete farm survey sheets and send to facilitator</td>
</tr>
<tr>
<td>• Facilitator develops standard farm in the STEP tool specific for the group based on the survey</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workshop 2A</th>
<th>Participants learn how to use the STEP tool</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Participants receive a detailed hands-on guide through STEP worksheets using the newly developed standard farm</td>
</tr>
<tr>
<td></td>
<td>• Participants have the option of developing scenarios to run at home or Workshop 3 if time permits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Workshop 2A activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Participants take a copy of the standard farm to practise entering own data and running simulations</td>
</tr>
<tr>
<td>• Participants may be confident enough to enter their own farm business into STEP without further assistance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workshop 3A</th>
<th>Participants run relevant scenarios in the STEP tool as a group activity using the standard farm. Workshop 2A is a pre-requisite for this workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Participants develop scenarios of interest to the group</td>
</tr>
<tr>
<td></td>
<td>• Participants use the standard farm to run analyses of scenarios of interest to the group in the STEP tool</td>
</tr>
<tr>
<td></td>
<td>• Participants discuss results</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Workshop 3A activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Participants can run scenarios at home</td>
</tr>
<tr>
<td>• Participants may be confident enough to enter own business into STEP without further assistance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workshop 4A</th>
<th>Participants want to enter their own farm business into STEP in a workshop environment. Workshop 2A is a pre-requisite for this workshop</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Participants set up their own farms on the STEP base model</td>
</tr>
<tr>
<td></td>
<td>• Participants run simulations using own farm</td>
</tr>
<tr>
<td></td>
<td>• Participants take away a copy of the STEP base model containing own farm data</td>
</tr>
<tr>
<td></td>
<td>• Participants can discuss results as a group</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Workshop activities 4A</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Facilitator provides support as required</td>
</tr>
</tbody>
</table>
Workshop Series for participants who do not wish to learn how to use the STEP tool. Participants want the facilitator to do the STEP analyses and present the results (Path B)

<table>
<thead>
<tr>
<th>Workshop 1</th>
<th>Introduction to the STEP Decision Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Participants will learn what the STEP decision tool is and how it can be used to assess the financial impact of change on the farm business</td>
</tr>
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<td></td>
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<tr>
<td></td>
<td>• Participants receive worksheets to capture relevant information from other million hectares workshops</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Workshop 1 activities in preparation for Workshop 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Participants complete farm survey sheets and send to facilitator</td>
</tr>
<tr>
<td>• Facilitator develops standard farm in the STEP tool specific for the group based on the survey</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workshop 2B</th>
<th>Facilitator presents the standard farm to group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Show standard farm to group with a current, future and transition scenario prepared as an example</td>
</tr>
<tr>
<td></td>
<td>• Group to develop priority scenarios for facilitator to perform as desktop analyses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Workshop 2B activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Facilitator to do STEP analysis on the scenarios determined by the group</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workshop 3B</th>
<th>Facilitator presents the results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Facilitator to present results of desktop analyses</td>
</tr>
<tr>
<td></td>
<td>• Discuss results and transition strategies</td>
</tr>
<tr>
<td></td>
<td>• Develop further scenarios for analysis</td>
</tr>
<tr>
<td></td>
<td>• Arrange further meetings as desired</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post Workshop 3B activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Facilitator to perform analyses as required</td>
</tr>
</tbody>
</table>
STEP WORKSHOP 1

INTRODUCTION TO
STEP

Guide for Facilitators
ACKNOWLEDGEMENTS

This Workshop has been developed as part of the GRDC/NDSP-funded “A Million Hectares for the Future” project, with support and input from key personnel within the Department of Agriculture, Western Australia.

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January 2005

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INTRODUCTION

This module is the first of a series of STEP workshops designed to help participants assess the financial potential of any proposed changes to their farming systems. It is an introduction session to highlight the features of the STEP (Simulated Transitional Economic Planning) tool and to show how it can be used.

Learning Outcomes

In this session the main learning outcome is to:

Build knowledge in the use of STEP as an economic decision tool for assessing changes to the farming system.

The associated learning outcomes required to achieve this are:

1. Understand concepts of how the STEP model can be used.
2. Recognise the effect of a transition strategy on the farm business.
3. Build understanding of application of the worksheets in the STEP model.
4. Consider application of STEP in individual farm businesses.
5. Consider application of STEP within the group.

At the end of this workshop participants will have an understanding of how the STEP tool can be used to assess the financial potential of any proposed change to a farming system.

Workshop duration

The total time to complete the workshop is a half-day. However this will depend on the level of computer literacy and the specific needs of the group. Alternatively, you could arrange the activities such that there is at least one computer-literate person per work group.

It is important to be flexible in designing the timing of the workshop based on the needs of the participants. For instance, an early start may allow participants the rest of the day to attend to their farm business or to attend a second half-day workshop. On the other hand if, for example, participants are currently spraying for weeds it may be useful to start the workshop later in the morning to allow time for this prior to attending the workshop. Any decision should be made in consultation with the group and their needs.

Environment for delivery

The target audience will be landholders and managers faced with managing existing or potential future salinity problems and who may be considering changes to their farming systems.

The workshop will be delivered indoors. The presenter will need a computer and data projector conveniently located for ease of presentation.
RESOURCES

Data projector, spare globe and screen

Extension cords

Power boards

Standard farm example relevant to the area (Choose from the standard farms provided in the facilitator’s resource kit or develop your own)

Slides of Learning Outcomes (see facilitator’s resource kit)

PowerPoint presentation for Session 2 (NOTE: You may choose slides from the presentations provided in the facilitator’s resource kit or replace them with your own containing material for an example farm relevant to the group)

Workshop 1 Manual for Participants (1 per person)

Gross Margins Guide 2003, Department of Agriculture, Western Australia, Miscellaneous Publication 18/2002 or equivalent

Bankwest Benchmarks 2004 or equivalent

STEP User Manual

Marker pens

Whiteboard/Butcher’s Paper

Handouts
1 Agenda
2 Copy of slide presentation (Ensure that the slides are readable. A maximum of three slides per page with space for note-taking is recommended).
3 Evaluation sheet

Explanation of resources required

In this workshop use of the STEP tool will be demonstrated. Where possible the farm should be in an area familiar to the majority of the group attending. It would be of most use for you to have worked up your own example(s) so that you have an understanding of the farming system and are familiar with the data used. Alternatively, you can use one of the standard farms provided in the facilitator’s resource kit.
WORKSHOP OVERVIEW

This workshop is divided into 5 main sessions:

1. Introduction
2. What the STEP tool can do
3. Guide through the STEP worksheets
4. Where to from here?
5. Evaluation

Facilitation requirements

The key requirements of the facilitator are:

1. Experience in using the STEP model through:
   - One introductory formal training session
   - Adequate time spent developing your own standard farm examples to include a current, future and transitional run, under the guidance of a mentor.

2. Experience in presenting the STEP model to a group.
   - Facilitators presenting to a group for the first time should be provided with the support of someone familiar with the STEP model.

3. A reasonable knowledge of farm budgeting.

4. To be familiar with farming systems in your region.
Your facilitator's resources kit contains a choice of standard farm examples to use for Session 3.

**NOTE**

The standard farms supplied in the Facilitators Resource Kit are useful in providing an example of a STEP run showing the layout of the STEP spreadsheets and of the allocation of Land Management Units and enterprises. However, *caution must be exercised* before using any of the yields, stocking rates, costs, prices and budget figures shown in the standard farm STEP worksheets. The figures used are only examples used in one of many runs performed using these particular standard farms and will not necessarily reflect the situation that you as a facilitator wish to convey. *It is imperative that you do your research prior to using any of these standard farms* by checking the best rotations and long-term prices, yields, stocking rates, etc, for your area and ensure that you fully understand the rationale behind your figures, rotations and stock structure. You should also develop your own future and transition runs to reflect relevant salinity management options for your area.

It may be of more value to set up your own STEP model example of a standard farm relevant to the group. Ideally you should prepare the simulations you run to include:

1. a typical current farming system

2. a future farming system of interest to the group and

3. at least one transition strategy from the current to the future system.
WORKSHOP FACILITATION OUTLINE

A suggested agenda is outlined below. You may use the template provided in the facilitator’s resources kit to develop your own agenda to use as Handout 1. Times can be altered to suit the needs of the group but it is important to ensure that there are adequate breaks.

AGENDA

Introduction to STEP workshop

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mins</td>
<td>Tea/coffee</td>
<td>Arrival</td>
</tr>
<tr>
<td>30 mins</td>
<td>Presentation</td>
<td>1. Welcome and introduction</td>
</tr>
<tr>
<td>1½ - 2 hours</td>
<td>Computer activity with whole group</td>
<td>2. What the STEP tool can do</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Guide through STEP model spreadsheets</td>
</tr>
<tr>
<td></td>
<td>Morning/Afternoon tea</td>
<td>Morning /Afternoon tea</td>
</tr>
<tr>
<td>45 mins</td>
<td>Discussion</td>
<td>4. Where to from here?</td>
</tr>
<tr>
<td>30 mins</td>
<td></td>
<td>5. Evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Close</td>
</tr>
</tbody>
</table>
SESSION 1: INTRODUCTION

Time 5 minutes

Resources Data projector and screen; Slides of Workshop 1 Learning Outcomes, Handout 1 (agenda)

Purpose

- Outline the workshop sessions
- Establish the learning outcomes

Suggested approach

- Provide an overview of why we are here. This can include:
  - Establish the learning outcomes (Show slides and go through the learning outcomes)
  - Outline the workshop sessions - detail of how the sessions will be run, timeline, breaks, etc (Handout 1 - agenda)
SESSION 2: WHAT THE STEP TOOL CAN DO

Time 30 minutes

Resources Data projector and screen; PowerPoint presentation showing the results of a worked example relevant to the area, Handout 2 (copies of the PowerPoint presentation with space for notes).

Purpose

- Understand concepts of how the STEP model can be used.
- Recognise the effect of a transition strategy on the farm business.

Suggested process

- Deliver a PowerPoint presentation from those provided in the facilitator’s resources kit (you can use the “Introduction to STEP” presentation combined with slides from a case study presentation illustrating how STEP can be used) or one similar and relevant to your example farm.

The presentation should address the following points:

- description of STEP and how it can be used
- current and future farming system options analysed using STEP
- composition of the farming system examples
- assumptions
- financial comparison of the different farming system options
- sensitivity analyses
- comparison of different transition scenarios
- discussion on the effect of different transition strategies.

Give the group handouts of the presentation with space for note taking (Handout 2).

Allow 5 minutes at the end of the presentation for questions.
SESSION 3: GUIDE THROUGH THE STEP WORKSHEETS

Time        1½ - 2 hours

Resources   Data projector and screen

Purpose
  ❖ Build understanding of application of the worksheets in the STEP model

Suggested process
  ▪ Guide the participants through the main features of the STEP model worksheets. Participants can watch as you demonstrate how to use the STEP spreadsheets and show the results of your runs.
    • Present a worked example relevant to the area, developed prior to the workshop. Ideally it should include:
      (1) a current farming system
      (2) a future farming system and
      (3) at least one transition strategy from the current to the future system.
    • Go through the main features of the set-up, LMU, stock, budget, farm summary and graphs sheets showing the current farming system example you have used.
    • Highlight the features of the future farming system example and the effect on the farm’s cumulative position.
    • Highlight the features of your transition strategy and show the effect on the farm’s cumulative position.
    • Emphasise that the results of your example demonstrate how the STEP tool can be used to assess the effect of changes to a specific farming system and you are not making recommendations.
    • Allow time for questions, comments and discussion at appropriate points in the process.
SESSION 4: WHERE TO FROM HERE?

Time 15 minutes

Resources Whiteboard /butcher’s paper, data projector and screen, STEP workshops pathways (facilitator’s resource kit and in the STEP Workshop 1 Manual for Participants)

Purpose

- Consider application of STEP in individual farm businesses.
- Consider application of STEP within the group.

Suggested process

- Ask the group for their comments on the STEP model and what it can do.
- Record comments on a whiteboard or butcher’s paper.
- Develop a plan for how the group wants to proceed with future STEP workshops.

The mode of delivery of subsequent workshops will best be determined by consultation with the group based on their needs. Two possible pathways to follow are outlined in the STEP workshop pathways (in the Facilitator Guidelines folder of the facilitator’s resources kit and in the STEP Workshop 1 Manual for Participants).

- For participants who wish to proceed further with the STEP workshops, go through the post-workshop activity worksheets (see the Workshop 1 Manual for Participants and Appendix 1) to be completed prior to attending a second STEP workshop.

Explain that participants can record their own farm data for the current enterprise sections of the farm survey sheets but production data and costs for the future enterprise sections may be collected during completion of other key practice module choices (eg saltland pasture, lucerne, deep drainage) using the activity sheets provided for each of these modules.

Set a time to have a copy of the farm survey sheets completed and sent to you. You must then devote time to develop a standard farm specific for the needs of the group and in accordance with the chosen course of workshops.
SESSION 5: EVALUATION

Time 30 minutes

Resources Whiteboard /butcher’s paper, evaluation sheets (Appendix 2; A template is provided in the facilitator’s resources kit).

Purpose

❖ To review the lessons of the day
❖ To obtain participant feedback

Suggested process

Option 1

▪ Reiterate the overall learning outcome for the workshop.

Ask for the group for their comments, questions, suggestions for improvements and record these on a whiteboard or butcher’s paper.

Ask the group what they will take back and apply in the workplace. Record the answers.

Option 2

▪ Ask participants to fill out an evaluation sheet (see Appendix 2 or prepare your own as Handout 3).

Use the feedback to evaluate your workshop and make appropriate changes or improvements in the delivery of future workshops.

FURTHER INFORMATION


Uses a precursor of the STEP model to compare two alternative farming systems with the current wheat-lupin rotation in the sandplain area of the Northern Agricultural Region.
For the next workshop your facilitator will develop a standard farm specific for your group based on the information you supply about your own farm. It is very important that you complete the required information by completing the following activity sheets and forwarding these to your facilitator prior to attending the STEP workshop at a date agreed upon by your group. You will also need to bring along this information if you attend the workshop where you set up the model for your own farm (4A).

Default figures will be used where you are unable to supply the required data from your own farm business.
Enterprise description for STEP analysis

1. Soil types and rotations

<table>
<thead>
<tr>
<th>Soil type</th>
<th>Area (ha)</th>
<th>Current rotation</th>
<th>Possible future rotation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

TOTAL ha

NOTE: This total should equal your total farm area
2. **Crop productivity**  Please enter your crops across the first row of the table, soil types down the first column and their yields (t/ha) in the respective cells.

<table>
<thead>
<tr>
<th>Crops</th>
<th>Yield (t/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>eg wheat</td>
<td></td>
</tr>
<tr>
<td><strong>Soil types</strong></td>
<td></td>
</tr>
<tr>
<td>eg sandy loam</td>
<td>1.68</td>
</tr>
</tbody>
</table>

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Introduction to STEP 17/01/05
Page 16
3. **Stock productivity** Please enter your pastures across the first row of the table, soil types down the first column and their stocking rates (DSE/ha) in the respective cells.

<table>
<thead>
<tr>
<th>Pastures</th>
<th>eg volunteer pasture</th>
<th>eg Cadiz</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil types</td>
<td>S</td>
<td>W</td>
<td>S</td>
<td>W</td>
<td>S</td>
<td>W</td>
<td>S</td>
<td>W</td>
<td>S</td>
<td>W</td>
</tr>
<tr>
<td>eg yellow sand</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Guide for Facilitators STEP Workshop 1
Introduction to STEP 17/01/05
4. **Livestock enterprises**  List both current and future enterprises down the first column and then complete the rest of the table.

<table>
<thead>
<tr>
<th>Livestock enterprise</th>
<th>Current enterprise (Tick your enterprises)</th>
<th>No. of adult animals</th>
<th>Lambing/calving %</th>
<th>Possible future enterprise (Tick enterprises you are considering)</th>
</tr>
</thead>
<tbody>
<tr>
<td>eg trade sheep</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eg. cattle – self replacing breeder</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. **Other future enterprises** (tick those listed of interest to you or add other enterprises)

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Tick enterprise of interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>pines</td>
<td></td>
</tr>
<tr>
<td>tagasaste</td>
<td></td>
</tr>
<tr>
<td>hay</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Your current farm enterprise

Please complete the following tables to include additional data required for your current farm and for your proposed future alternatives. Bring these to workshop where you will set up the model for your own farm. An example sheet has been completed for you at the end of the section.

1. FARM ENTERPRISES

a) Crops and pastures

Complete the following table for your different pasture and crop enterprise.

<table>
<thead>
<tr>
<th>Enterprise (e.g. wheat)</th>
<th>Price ($/t)</th>
<th>Fertiliser ($/ha)</th>
<th>Sprays ($/ha)</th>
<th>Fuel/oil grease ($/ha)</th>
<th>Repairs ($/ha)</th>
<th>Crop insurance ($/ha)</th>
<th>Seed and/or treatment ($/ha)</th>
<th>Contractor ($/ha)</th>
<th>Other costs ($/ha)</th>
</tr>
</thead>
</table>
b) Livestock

In the table below, enter your livestock enterprises, their production parameters and costs.

<table>
<thead>
<tr>
<th>Livestock name</th>
<th>Female</th>
<th>Castrates</th>
<th>0-1 yr old</th>
<th>Breeding male</th>
<th>Female</th>
<th>Castrates</th>
<th>0-1 yr old</th>
<th>Breeding male</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSE rating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sale price ($/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase price ($/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product (unit/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product price ($/unit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product B (unit/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product B price ($/unit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproductive percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at first joining</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of cull</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vet costs (dips etc, $/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tags/mulising/branding ($/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting (eg shearing, $/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other costs ($/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. **Other expenditure**

List any other expenditure which may be important.

<table>
<thead>
<tr>
<th>Other Expenditure</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crops</strong></td>
<td></td>
</tr>
<tr>
<td>Crops - Freight</td>
<td></td>
</tr>
<tr>
<td><strong>Livestock</strong></td>
<td></td>
</tr>
<tr>
<td>Repairs and maintenance</td>
<td></td>
</tr>
<tr>
<td>Fuel, oil and grease</td>
<td></td>
</tr>
<tr>
<td>Wool packs</td>
<td></td>
</tr>
<tr>
<td>Freight</td>
<td></td>
</tr>
<tr>
<td>Fodder</td>
<td></td>
</tr>
<tr>
<td><strong>Other variable costs</strong></td>
<td></td>
</tr>
<tr>
<td>Lime</td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td><strong>Fixed costs</strong></td>
<td></td>
</tr>
<tr>
<td>Overheads</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
1. FARM ENTERPRISES
   a) Crops and pastures

   Complete the following table for your different pasture and crop enterprise.

<table>
<thead>
<tr>
<th>Enterprise (eg wheat)</th>
<th>wheat</th>
<th>barley</th>
<th>canola</th>
<th>lupins</th>
<th>oats</th>
<th>chickpeas</th>
<th>field peas</th>
<th>triticale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price ($/t)</td>
<td>185</td>
<td>160</td>
<td>345</td>
<td>170</td>
<td>130</td>
<td>460</td>
<td>240</td>
<td>160</td>
</tr>
<tr>
<td>Fertiliser ($/ha)</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>22.6</td>
<td>40</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Sprays ($/ha)</td>
<td>20</td>
<td>20</td>
<td>60</td>
<td>55</td>
<td>15</td>
<td>90</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Fuel/oilgrease ($/ha)</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Repairs ($/ha)</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Crop insurance ($/ha)</td>
<td>2.7</td>
<td>2.5</td>
<td>3.7</td>
<td>1.7</td>
<td>1.8</td>
<td>3</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Seed and/or treatment ($/ha)</td>
<td>11.3</td>
<td>9.8</td>
<td>25</td>
<td>18</td>
<td>8.5</td>
<td>34</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>Contractor ($/ha)</td>
<td></td>
<td></td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other costs ($/ha)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
b) Livestock

In the table below, enter your livestock enterprises, their production parameters and costs.

<table>
<thead>
<tr>
<th>Livestock name</th>
<th>Merino</th>
<th>Traders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Castrates</td>
</tr>
<tr>
<td>DSE rating</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Death (%)</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Sale price ($/hd)</td>
<td>40</td>
<td>45</td>
</tr>
<tr>
<td>Purchase price ($/hd)</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Product A –wool (unit/hd)</td>
<td>5</td>
<td>5.5</td>
</tr>
<tr>
<td>Product A price –wool ($/unit)</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Product B (unit/HD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product B price ($/unit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproductive %</td>
<td>85%</td>
<td>75%</td>
</tr>
<tr>
<td>Age at first joining</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Age of cull</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Vet costs (dips etc, $/hd)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Tags/mulsing/branding ($/hd)</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Harvesting (e.g. shearing, $/hd)</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>Other costs ($/hd)</td>
<td>5.75</td>
<td>6.5</td>
</tr>
</tbody>
</table>
APPENDIX 2: STEP WORKSHOP EVALUATION

Workshop Name: …………………………………………………….. Date: ………………..

Please circle the appropriate response, or write your response as indicated.

1. The materials provided were very useful in supporting my learning.
   - strongly agree
   - mostly agree
   - not sure
   - mostly disagree
   - strongly disagree

2. The presenter/s knowledge of the subject was very good and their enthusiasm stimulated me.
   - strongly agree
   - mostly agree
   - not sure
   - mostly disagree
   - strongly disagree

3. I felt comfortable working in the group and able to discuss issues openly.
   - strongly agree
   - mostly agree
   - not sure
   - mostly disagree
   - strongly disagree

4. The activities I participated in assisted me to understand the concepts discussed.
   - strongly agree
   - mostly agree
   - not sure
   - mostly disagree
   - strongly disagree

5. Which activities did you find most useful?
   1 .............................................................................................................................
   2 .............................................................................................................................
   3 .............................................................................................................................
   4 .............................................................................................................................

6. I feel confident I can apply the information and skills I learnt.
   - strongly agree
   - mostly agree
   - not sure
   - mostly disagree
   - strongly disagree

7. This workshop was a profitable use of my time.
   - strongly agree
   - mostly agree
   - not sure
   - mostly disagree
   - strongly disagree

8. My expectations of what I would learn were achieved.
   - strongly agree
   - mostly agree
   - not sure
   - mostly disagree
   - strongly disagree

9. What did you learn and/or what skills have you developed as a result of the workshop?
   1 .............................................................................................................................
   2 .............................................................................................................................
   3 .............................................................................................................................

10. The information covered during the workshop will help me achieve my business and personal goals.
    - strongly agree
    - mostly agree
    - not sure
    - mostly disagree
    - strongly disagree

11. I believe I will undertake further training in the near future.
    - strongly agree
    - mostly agree
    - not sure
    - mostly disagree
    - strongly disagree
STEP WORKSHOP
2A

LEARNING HOW TO USE THE STEP DECISION SUPPORT TOOL

Guide for Facilitators
ACKNOWLEDGEMENTS

This Workshop has been developed as part of the GRDC/NDSP-funded “A Million Hectares for the Future” project, with support and input from key personnel within the Department of Agriculture, Western Australia.

Developed and compiled by Megan Abrahams and Caroline Peek, Department of Agriculture, Western Australia, Geraldton, Western Australia

January 2005

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<td>14</td>
</tr>
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<td>APPENDIX 1</td>
<td>15</td>
</tr>
<tr>
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<td>16</td>
</tr>
</tbody>
</table>
INTRODUCTION

This module is one of a series of STEP workshops designed to help participants assess the financial potential of any proposed changes to their farming systems. It is a hands-on session, designed to follow the first STEP introductory workshop, for participants who want to learn how to use the STEP model to run their own analyses using a standard farm developed specifically for the group.

Learning Outcomes

In this session the main learning outcome is to:

**Build skills in using STEP as an economic decision tool for assessing changes to the farming system**

The associated learning outcomes required to achieve this are:

1. Practise using worksheets in the STEP model.
2. Run a simulation of a farming system option for a standard farm.
3. Run a simulation of a transition.

At the end of this workshop participants will have gained some experience in using the STEP model to run simulations of farming system options.

Workshop duration

The total time to complete the workshop is a half-day. However this will depend on the level of computer literacy and the specific needs of the group.

It is important to be flexible in designing the timing of the workshop based on the needs of the farmers. Any decision should be made in consultation with the group.

Environment for delivery

The target audience will be landholders and managers faced with managing existing or potential future salinity problems and who may be considering changes to their farming systems.

The workshop will be delivered indoors at local schools or telecentres to provide access to computers. The group should consist of no more than 6 to 8 farm businesses with one computer per farm business and enough power points to accommodate this. The presenter will also need a computer and data projector conveniently located for ease of presentation.

You may want to arrange the group such that participants with similar levels of computer literacy are seated together. A second facilitator can then help the less computer-literate participants.
RESOURCES

Data projector, spare globe and screen

Extension cords

Power boards

1 computer per farm business

Slides of Learning Outcomes (see facilitator's resource kit)

Standard farm specific to the group

STEP base model with the group’s standard farm data entered on set up sheet (1CD per person)

Instructions containing data for working through the practice examples – Session 2 (for presenter to follow)

Workshop 2A Manual for Participants (1 per person)

Farm Budget Guide 2004 or equivalent

BankWest Benchmarks 2004 or equivalent

Gross Margins Guide 2003, Department of Agriculture Western Australia, Miscellaneous Publication 18/2002 or equivalent

STEP User Manual (1 per participant)

Marker pens

Whiteboard/butcher's paper

Handouts

1 Agenda

2 List of enterprise codes (see Appendix 1)

3 Worked practice examples

4 Evaluation sheet (see Appendix 2)
Explanation of resources required

In this workshop the STEP tool will be used to analyse a standard farm developed specifically for the group (for details see Workshop Preparation). This involves you developing the standard farm example using information collected from the group following STEP Workshop 1. You must have an understanding of the farming system and be familiar with the data used.

Prior to the workshop the STEP model example you wish to use must be loaded onto each computer. Copies may be emailed to individual computers or stored on CD or disc. To load “zipped” copies of the STEP model on disc, computers must have a Winzip facility. At the end of the workshop participants should be given a copy of the STEP tool for further practice sessions. They should also receive a clean base version with the standard farm loaded onto the set-up sheet and a copy of the STEP User Manual.

The latest Farm Budget Guide, Gross Margins Guide and BankWest Benchmarks, or equivalent, are useful to have if there is a need to source default costs/prices.
WORKSHOP OVERVIEW

This workshop is divided into five main sessions:

1. Introduction
2. Hands-on guide through the STEP model worksheets
3. Individual practice session (optional)
4. Where to from here?
5. Evaluation

Pre-requisites

Participants must have completed workshop1, learning how to use STEP, prior to attending this workshop.

FACILITATION REQUIREMENTS

It is recommended that the workshop be run by at least two people, one as the main facilitator and the other(s) to assist when participants are doing the hands-on activities. The key requirements of the facilitator are:

1. Experience in using the STEP model through:
   - One introductory formal training session
   - Adequate time spent developing your own standard farm examples to include a current, a future and a transitional run, under the guidance of a mentor.

2. Experience in presenting the STEP model to a group.
   - Facilitators presenting to a group for the first time will be provided with the support of someone familiar with the STEP model.

3. A reasonable knowledge of farm budgeting

4. To be familiar with farming systems in your region
WORKSHOP PREPARATION

Development of District Specific Standard Farm

Develop a standard farm specific for your group using the information you have collected from farm survey sheets completed following STEP Workshop 1. Set up the LMUs of the farm to include all the soil types of the group and with enough sub-units to cover its requirements. You should also include all the crop and livestock enterprises of participants of your group.

TIP

If the standard farm is complex with a lot of LMUs and enterprises, develop a simplified version for the training exercise. Once the group has learned how to use the STEP tool the more complex version can be used.

Prior to this workshop prepare some simulations to include:

(1) a representative current farming system

(2) a future farming system of interest to the group and

(3) at least one transition strategy from the current to the future system.

Where possible, use data provided by and representative of the group. You may also need to supply other data from sources such as Bankwest Benchmarks, the Gross Margins Guide and the Farm Budget Guide.

For the workshop provide participants with copies of the base model of this standard farm and they will then enter information under your instruction. Therefore, it is recommended you prepare worked examples for the group for entering rotation, livestock and budget information on the relevant worksheets. A suggestion is to prepare examples of a current farming system and a transition to a future farming system for participants to run.

Participants should be provided with compact disc copies of the standard farm to further practise using the STEP model after completion of the workshop.
A suggested agenda is outlined below. You may use the template provided in the facilitator’s resources kit to develop your own agenda to use as Handout 1. Times can be altered to suit the needs of the group but it is important to ensure that there are adequate breaks.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mins</td>
<td>Welcome and introduction</td>
</tr>
<tr>
<td>2 ½ - 3 hours</td>
<td>Computer activity with whole group</td>
</tr>
<tr>
<td>2 ½ - 3 hours</td>
<td>Guide through STEP model spreadsheets</td>
</tr>
<tr>
<td>30 mins – 1 hour</td>
<td>Practical session (optional)</td>
</tr>
<tr>
<td>15 mins</td>
<td>Discussion</td>
</tr>
<tr>
<td>15 mins</td>
<td>Evaluation</td>
</tr>
<tr>
<td></td>
<td>Close</td>
</tr>
</tbody>
</table>

**AGENDA**

**STEP workshop 2A**

- **1. Welcome and introduction**
- **2. Guide through STEP model spreadsheets**
  - *Morning/ Afternoon tea*
  - Computer activity with whole group
  - *continued 2. Guide through STEP model spreadsheets*
- **3. Individual practice session (optional)**
- **4. Where to from here?**
- **5. Evaluation**

Guide for Facilitators STEP Workshop 2A
Learning how to use the STEP decision tool 17/01/05
SESSION 1: INTRODUCTION

Time 5 minutes

Resources  Data projector and screen; Slides of Workshop 2A learning outcomes, Handout 1

Purpose

- Outline the workshop sessions
- Establish the learning outcomes

Suggested approach

- Provide an overview of why we are here. This can include:
  - Establish the learning outcomes (Show slides and go through the learning outcomes)
  - Outline the workshop sessions - detail of how the sessions will be run, timeline, breaks, etc (Handout 1 - agenda)

SESSION 2: HANDS-ON GUIDE THROUGH STEP MODEL SPREADSHEETS

Time 2 ½ - 3 hours

Resources  Data projector and screen, 1 computer per person, STEP base model with standard farm data entered on Set Up Sheet (1 per person), STEP User Manual, Handout 2 (Enterprise codes), step-by-step guide to practice examples (this is for your own use but can also be distributed as Handout 3). A template for Handout 2 is provided in the facilitator’s resources kit.

Purpose

- Practise using worksheets in STEP model.
- Run a simulation of a farming system option for a standard farm.
- Run a simulation of a transition.

Suggested process

- Guide participants through the main features of the STEP model worksheets.

Participants should be given a copy of the base model of STEP containing the data for the standard farm you have developed for them. They should save this copy of the STEP base model by using the SAVE function in Excel to save the file, then use the SAVE AS function in Excel to save the file under a new name. This is the working copy of the STEP base model to be used for this session.
Start the exercise with the Set-Up Sheet already complete. Use the data projector and have participants follow your lead at their own computers. When you have sufficiently explained the Set-Up Sheet, have the participants press the button to enter the transitional model and explain how this generates the STEP worksheets.

Participants will now follow your instructions on how to enter the data for your prepared current farm example. Allow sufficient time for them to enter the data and to ask questions. For simplicity and timeliness, you should limit the data entry to a small number of LMUs, paddocks and enterprises. Refer to the worked examples in the manual as support material and/or provide your own worked examples as Handout 3. The suggested order of completing the worksheets is:

1. LMU sheets
2. Stock sheets
3. Budget sheet
4. Farm summary sheet
5. Graphs sheet

Allow time for questions, comments and discussion at appropriate points in the process.

- Guide the participants through the process of running a transition.

When participants have entered the data and looked at the results for the current farm, go through the steps of running a transition to a prepared future farm.

You could show the group the results of a future farm you have run and then instruct them on how to enter the data to run the transition to this future farm. Refer to the worked examples in the STEP User Manual as support material and/or prepare your own worked examples as a handout 3. Participants may take home a CD copy of their runs.

Allow time for questions, comments and discussion at appropriate points in the process.
SESSION 3 (OPTIONAL): RUNNING OWN SIMULATIONS OR
DEVELOPING OPTIONS FOR RUNNING AT ANOTHER WORKSHOP

There may not be time to run this session as the participants may need more time to complete Session 2 or they may have had enough for the day.

There are two options for running this session:

- Option 1. Participants practise using the worksheets in the STEP tool, or
- Option 2. Participants develop potential farming system scenarios with a view to having another workshop (3A) to run these options through STEP.

**Time**

30 minutes - 1 hour

**Resources**

1 computer per person, STEP base model with standard farm data entered on Set-Up Sheet, STEP User Manual, whiteboard/butcher’s paper, marker pens

**Purpose**

- Practise using worksheets in STEP model
- OR
- Develop potential farming system scenarios for STEP analyses

**Suggested process**

**Option 1**

- Ask participants if they want to spend some time running their own simulations.

This is an optional practice session for participants to gain further hands-on experience with the STEP model by entering their own rotations, livestock schedules, etc. The facilitators should provide assistance where required.

Allow 10 minutes at the end of the activity for participants to discuss their results. Use questioning to lead the discussion if necessary.

**OR**

**Option 2**

- Ask participants to suggest different farming system scenarios for STEP analyses

Record the scenarios on the whiteboard or butcher’s paper and discuss. If participants choose to attend Workshop 3A they will have the opportunity to run these scenarios using the STEP model set up for the group-specific standard farm.
SESSION 4: WHERE TO FROM HERE?

**Time** 15 minutes

**Resources** Whiteboard /butcher’s paper, marker pens, STEP workshop pathways (in the Facilitator Guidelines folder of the facilitator’s resources kit and in the STEP Workshop 1 Manual for Participants)

**Purpose**
- To review how the group will progress with STEP

**Suggested process**
- Ask the participants how they want to proceed with using STEP following this workshop.

The possible options are presented in the STEP workshop pathways table and summarised in the Workshop 2A Manual for Participants. Discuss with the group the pathway participants wish to follow and the pre-requisites for each workshop. Alternatively, participants may decide not to proceed with further STEP workshops.

Record the comments and plan how to proceed with future STEP workshops.

SESSION 5: EVALUATION

**Time** 15 minutes

**Resources** Whiteboard /butcher’s paper, evaluation sheets (Appendix 2; A template is provided in the facilitator’s resources kit)

**Purpose**
- To review the lessons of the day
- To obtain participant feedback

**Suggested process**

**Option 1**
- Reiterate the overall learning outcome for the workshop.

Ask for the group for their comments, questions, suggestions for improvements and record these on a whiteboard or butcher’s paper.

Ask the group what they will take back and apply in their farm business. Record the answers.
Option 2

- Ask participants to fill out an evaluation sheet (see Appendix 2 or prepare your own as Handout 4.)

Use the feedback to evaluate your workshop and make appropriate changes or improvements in the delivery of future workshops.

FURTHER INFORMATION


*Uses a precursor of the STEP model to compare two alternative farming systems with the current wheat-lupin rotation in the sandplain area of the Northern Agricultural Region.*
APPENDIX 1

Enterprise codes list

The enterprise codes in this table are listed as an example for the low rainfall standard farm of the Northern Agricultural Region, Western Australia, used in the Deep Drainage key practice workshop. Prepare a similar table for use as Handout 2 in Session 2. Substitute enterprise codes of the standard farm you will use.

<table>
<thead>
<tr>
<th>Enterprise Code</th>
<th>Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>w</td>
<td>wheat</td>
</tr>
<tr>
<td>b</td>
<td>barley</td>
</tr>
<tr>
<td>c</td>
<td>canola</td>
</tr>
<tr>
<td>l</td>
<td>lupins</td>
</tr>
<tr>
<td>o</td>
<td>oats</td>
</tr>
<tr>
<td>cp</td>
<td>Chickpeas</td>
</tr>
<tr>
<td>fp</td>
<td>Field peas</td>
</tr>
<tr>
<td>t</td>
<td>Triticale</td>
</tr>
<tr>
<td>pleg</td>
<td>Legume pasture</td>
</tr>
<tr>
<td>pvol</td>
<td>Volunteer pasture</td>
</tr>
<tr>
<td>pfal</td>
<td>Fallow</td>
</tr>
<tr>
<td>pnew</td>
<td>New pasture</td>
</tr>
<tr>
<td>psbare</td>
<td>Bare saltland</td>
</tr>
<tr>
<td>psb est</td>
<td>Bare saltland estab.</td>
</tr>
<tr>
<td>ps est1</td>
<td>Moderate salt. 1st</td>
</tr>
<tr>
<td>ps est2</td>
<td>Moderate salt. 2nd</td>
</tr>
<tr>
<td>ps est3</td>
<td>Moderate salt. 3rd</td>
</tr>
<tr>
<td>psgood</td>
<td>Good saltland</td>
</tr>
<tr>
<td>psmod</td>
<td>Moderate saltland</td>
</tr>
<tr>
<td>wlu</td>
<td>Wheat after lupins</td>
</tr>
</tbody>
</table>
APPENDIX 2: STEP WORKSHOP EVALUATION

Workshop Name: .......................................................... Date: .................

Please circle the appropriate response, or write your response as indicated.

1. The materials provided were very useful in supporting my learning.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

2. The presenter/s knowledge of the subject was very good and their enthusiasm stimulated me.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

3. I felt comfortable working in the group and able to discuss issues openly.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

4. The activities I participated in assisted me to understand the concepts discussed.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

5. Which activities did your find most useful?
   
   1. ............................................................................................................................
   2. ............................................................................................................................
   3. ............................................................................................................................
   4. ............................................................................................................................

6. I feel confident I can apply the information and skills I learnt.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

7. This workshop was a profitable use of my time.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

8. My expectations of what I would learn were achieved.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

9. What did you learn and/or what skills have you developed as a result of the workshop?
   
   1. ............................................................................................................................
   2. ............................................................................................................................
   3. ............................................................................................................................

10. The information covered during the workshop will help me achieve my business and personal goals.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

11. I believe I will undertake further training in the near future.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree
STEP WORKSHOP 2B

DEVELOPING FARMING SYSTEM OPTIONS FOR STEP ANALYSES

Guide for Facilitators
ACKNOWLEDGEMENTS

This Workshop has been developed as part of the GRDC/NDSP-funded “A Million Hectares for the Future” project, with support and input from key personnel within the Department of Agriculture, Western Australia.

Developed and compiled by Megan Abrahams and Caroline Peek, Department of Agriculture, Western Australia, Geraldton, Western Australia

January 2005

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INTRODUCTION

This module is one of a series of STEP workshops to help participants assess the financial potential of any proposed changes to their farming systems. It is designed for participants who, after completing the introductory STEP (Simulated Transitional Economic Planning) workshop, are interested in viewing the results of STEP analyses but do not wish to use the model for themselves. Instead the facilitator performs the STEP analyses using a standard farm designed specifically for the group.

Learning Outcomes

In this session the main learning outcome is to:

Develop farming system scenarios for STEP analyses of a standard farm.

The associated learning outcomes required to achieve this are:

1. Collect your own farm data for development of a standard farm.
2. Assess the profitability of farming system options for the standard farm.
3. Plan future farming system scenarios for STEP analysis.

At the end of this workshop participants will have a group-specific standard farm and have formulated scenarios for the facilitator to analyse.

Workshop duration

The total time to complete the workshop is a half-day.

It is important to be flexible in designing the timing of the workshop based on the needs of the farmers. Any decision should be made in consultation with the group.

Environment for delivery

The target audience will be landholders and managers faced with managing existing or potential future salinity problems and who want to know the economic consequences of making changes to their farming systems.

The workshop will be delivered indoors with a group of 10 -15 farm businesses. The presenter will need a computer, data projector and screen.
RESOURCES

Data projector, spare globe and screen

Extension cords

Power boards

PowerPoint presentation of the analyses you performed on the standard farm designed for the group

Slides of Learning Outcomes (see facilitator’s resource kit)

STEP model set up with the analyses you prepared using the standard farm designed for the group

Workshop 2B Manual for Participants (1 per person)

Gross Margins Guide 2003, Department of Agriculture Western Australia, Miscellaneous Publication 18/2002 or equivalent

Farm Budget Guide 2004 or equivalent

Bankwest Benchmarks 2004 or equivalent

STEP User Manual

Marker pens

Whiteboard/butcher’s paper

Handouts

1 Agenda

2 Copy of slide presentation (Ensure that the slides are readable. A maximum of three slides per page with space for note-taking is recommended.)

3 Planning sheet (see Appendix 1)

4 List of enterprise codes (see Appendix 2)

5 Evaluation sheet (see Appendix 3)

Explanation of resources required

For this workshop you will develop a standard farm example using the information collected from the group following the introductory STEP workshop. You will perform some preliminary STEP analyses using the standard farm and prepare a PowerPoint presentation of the results (for details see under Workshop Preparation).
WORKSHOP OVERVIEW

This workshop is divided into five main sessions:

1. Introduction
2. Presentation of standard farm and farming system analyses.
3. Development of farming system scenarios for STEP analyses.
4. Where to from here?
5. Evaluation

FACILITATION REQUIREMENTS

The key requirements of the facilitator are:

1. Experience in using the STEP model through:
   - One introductory formal training session
   - Adequate time spent developing your own standard farm examples to include a current, a future and a transitional run, under the guidance of a mentor.

2. Experience in presenting the STEP model to a group.
   - Facilitators presenting to a group for the first time will be provided with the support of someone familiar with the STEP model.

3. A reasonable knowledge of farm budgeting

4. To be familiar with farming systems in your region
WORKSHOP PREPARATION

Development of District Specific Standard Farm

Prior to this workshop, participants must collect the relevant information from their own farm by sending you their completed post-workshop activity sheets, distributed at the introductory STEP workshop (farm survey sheets). Completion of this activity satisfies the requirements of Learning Outcome 1.

Using this information, develop a standard farm specifically for your group. Set up the LMUs of the farm to include all the soil types of the group and with enough sub-units to cover its requirements. You should also include all the crop and livestock enterprises of the participants of your group.

Prior to this workshop prepare some simulations to include:

(1) a representative current farming system

(2) a future farming system of interest to the group and

(3) at least one transition strategy from the current to the future system.

Where possible, use data provided by and representative of the group. You may also need to source other data from Bankwest Benchmarks, Gross Margins Guide, Farm Budget Guide and local information.

Prepare a PowerPoint presentation to demonstrate the composition of the standard farm and the results of the analyses performed. The presentation should contain:

- Soil types, areas and current and future rotations
- Main assumptions and production data
- Major costs
- Comparison of the cumulative profits of the current and future farming system options
- Results of at least one transition strategy

The facilitator's resource kit contains some example presentations developed for other standard farms.
A suggested agenda is outlined below. You may use the template provided in the facilitator's resources kit to develop your own agenda to use as Handout 1. Times can be altered to suit the needs of the group but it is important to ensure that there are adequate breaks.

### AGENDA

**STEP workshop 2B**

<table>
<thead>
<tr>
<th>Time</th>
<th>Tea/coffee</th>
<th>Arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mins</td>
<td></td>
<td>1. Welcome and introduction</td>
</tr>
<tr>
<td>45 mins</td>
<td>Presentation</td>
<td>2. <strong>ANALYSES OF FARMING SYSTEMS FOR A GROUP-SPECIFIC STANDARD FARM.</strong></td>
</tr>
<tr>
<td>1 hour</td>
<td>Group discussion</td>
<td>3. Development of farming system scenarios for STEP analyses.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Morning/ Afternoon tea</em></td>
</tr>
<tr>
<td>15 mins</td>
<td>Discussion</td>
<td>4. WHERE TO FROM HERE?</td>
</tr>
<tr>
<td>15 mins</td>
<td></td>
<td>5. <strong>EVALUATION</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Close</em></td>
</tr>
</tbody>
</table>

Guide for Facilitators STEP Workshop 2B
Developing farming system options for STEP analyses  17/01/05  Page 8
SESSION 1: INTRODUCTION

Time 5 minutes

Resources Data projector and screen; Slides of Workshop 2B learning outcomes, Handout 1 (agenda).

Purpose

- Outline the workshop sessions
- Establish the learning outcomes

Suggested approach

Provide an overview of why we are here. This can include:

- Establish the learning outcomes (Show slides and go through the learning outcomes). Note that the requirements of Learning Outcome 1 are actually achieved by completing the post-workshop activity from the introductory STEP workshop.
- Outline the workshop sessions - detail of how the sessions will be run, timeline, breaks, etc (Handout 1 - agenda).

SESSION 2: ANALYSES OF FARMING SYSTEMS FOR A GROUP-SPECIFIC STANDARD FARM

Time 45 minutes

Resources

Data projector and screen, PowerPoint presentation of analyses on a standard farm designed for the group, handout 2 (copy of PowerPoint presentation), STEP model with standard farm analyses, whiteboard/butcher’s paper, marker pens

Purpose

- Show the standard farm that has been developed from data collected by the group in the farm survey sheets.
- Assess the profitability of farming system options for the standard farm.

Suggested process

- Deliver the PowerPoint presentation you have prepared containing the results of your STEP analyses on the standard farm.

Give the group handouts (Handout 2) of the presentation with space for note taking.

Allow 5-10 minutes at the end of the presentation for participants’ feedback.
Have the STEP model for the standard farm on hand in case you need to refer to it to answer questions or show the group specific parts of the analysis you have completed.

You may need to ask the group questions to establish:

- Whether they are satisfied that the standard farm and the data used is representative of their group
- If they have any comments on the farming system analyses you have presented.

Record the comments on the whiteboard/butcher’s paper.

**SESSION 3: DEVELOPMENT OF FARMING SYSTEM SCENARIOS FOR STEP ANALYSES.**

**Time** 1 hour

**Resources** Butcher’s paper, marker pens, Handout 3 (Planning sheet - see Appendix 1), handout 4 (List of enterprise codes – see Appendix 2). Templates for Handouts 3 and 4 are provided in the facilitator’s resources kit.

**Purpose**

- Plan future farming system scenarios for STEP analysis.

**Suggested process**

- Ask participants to form small groups to plan farming system scenarios and transition strategies for STEP analysis using the group’s standard farm.

The facilitator will perform the required STEP analyses based on these scenarios following the workshop and arrange a third workshop to present the results.

Participants can record their ideas on the planning sheet (Handout 3) and/or butcher’s paper. Handout 4 should list the enterprise codes for the standard farm.

Allow 15 minutes at the end of the activity for participants to report their ideas to the rest of the group. The scenarios should then be modified as required. It is important that the scenarios are recorded as clearly as possible so the facilitator understands the group’s exact requirements when he/she performs the STEP analyses. It is also a good idea to record the names of the individuals who developed the scenario should clarification be required at a later date.
SESSION 4: WHERE TO FROM HERE?

Time 15 minutes

Resources  Whiteboard-butcher’s paper, marker pens, STEP workshop pathways
(Facilitator Guidelines folder of the facilitator’s resources kit and in the STEP Workshop 1 Manual for Participants)

Purpose

❖ To review how the group will progress with STEP

Suggested process

▪ Ask the participants how they want to proceed with using STEP following this workshop.

Refer to the STEP workshop pathways for the options available.

Record the comments and plan how to proceed with future STEP workshops

Participants who wish to use STEP to set up their own farms (Workshop 4A) should bring along a copy of the completed activity sheets from STEP Workshop 1 (Post-workshop Activity: Planning your model farm) containing their farm information. (As the participants have already forwarded these to you to develop the group standard farm, you may need to supply a copy).
SESSION 5: EVALUATION

Time       15 minutes

Resources  Whiteboard /butcher's paper, (Appendix 3; A template is provided in the facilitator’s resources kit).

Purpose

 ❖ To review the lessons of the day
 ❖ To obtain participant feedback

Suggested process

Option 1

 ▪ Reiterate the overall learning outcome for the workshop.

Ask for the group for their comments, questions, suggestions for improvements and record these on a whiteboard or butcher’s paper.

Ask the group what they will take back and apply in the workplace. Record the answers.

Option 2

 ▪ Ask participants to fill out an evaluation sheet (see Appendix 3 or prepare your own as Handout 5).

Use the feedback to evaluate your workshop and make appropriate changes or improvements in the delivery of future workshops.

FURTHER INFORMATION


*Uses a precursor of the STEP model to compare two alternative farming systems with the current wheat-lupin rotation in the sandplain area of the Northern Agricultural Region*
## Example of a planning worksheet

The information in this table is for a low rainfall standard farm developed for the Northern Agricultural Region, Western Australia used in the Deep Drainage and Surface Water Management key practice modules. Prepare a similar table for use as Handout 3 in Session 3. Substitute the soil types/LMUs, areas and rotations of the standard farm you have developed for Session 3. You may use the Planning Sheet template provided in the facilitator’s resources kit.

<table>
<thead>
<tr>
<th>Soil type</th>
<th>Current Area (ha)</th>
<th>Current Rotation</th>
<th>Future Area (ha)</th>
<th>Future Rotation</th>
<th>Suggested transition strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>sandy gravel</td>
<td>418</td>
<td>pvol pvol pfal w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yellow sand</td>
<td>760</td>
<td>pvol w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brown sandy loam</td>
<td>418</td>
<td>w w b l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>York gum loam</td>
<td>608</td>
<td>pfal w w w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>red loamy sand</td>
<td>722</td>
<td>l w w b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wodjil</td>
<td>152</td>
<td>pvol pvol pvol w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tight gravel</td>
<td>38</td>
<td>pvol pvol pvol pfal w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clay flat</td>
<td>76</td>
<td>pfal w w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bare saline</td>
<td>91</td>
<td>pvol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average saline</td>
<td>91</td>
<td>pvol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>good saline</td>
<td>46</td>
<td>pfal w w b</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX 2

**Enterprise Codes list**

The enterprise codes in this table are listed as an example for the low rainfall standard farm of the Northern Agricultural Region, Western Australia, used in the Deep Drainage and Surface Water Management key practice workshops. Prepare a similar table for use as handout 2 in Session 2 using the template in the facilitator’s resources kit. Substitute enterprise codes of the standard farm you will use.

<table>
<thead>
<tr>
<th>Enterprise Code</th>
<th>Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>w</td>
<td>wheat</td>
</tr>
<tr>
<td>b</td>
<td>barley</td>
</tr>
<tr>
<td>c</td>
<td>canola</td>
</tr>
<tr>
<td>l</td>
<td>lupins</td>
</tr>
<tr>
<td>o</td>
<td>oats</td>
</tr>
<tr>
<td>cp</td>
<td>Chick peas</td>
</tr>
<tr>
<td>fp</td>
<td>Field peas</td>
</tr>
<tr>
<td>t</td>
<td>Triticale</td>
</tr>
<tr>
<td>pleg</td>
<td>Legume pasture</td>
</tr>
<tr>
<td>pvol</td>
<td>Volunteer pasture</td>
</tr>
<tr>
<td>pfal</td>
<td>Fallow</td>
</tr>
<tr>
<td>pnew</td>
<td>New pasture</td>
</tr>
<tr>
<td>psbare</td>
<td>Bare saltland</td>
</tr>
<tr>
<td>psb est</td>
<td>Bare saltland establishment</td>
</tr>
<tr>
<td>ps est1</td>
<td>Moderate saltland 1(^{st}) year of establishment</td>
</tr>
<tr>
<td>ps est2</td>
<td>Moderate saltland 2(^{nd}) year of establishment</td>
</tr>
<tr>
<td>ps est3</td>
<td>Good saltland establishment (same as moderate saltland 3(^{rd}) year of establishment)</td>
</tr>
<tr>
<td>psgood</td>
<td>Good saltland</td>
</tr>
<tr>
<td>psmod</td>
<td>Moderate saltland</td>
</tr>
<tr>
<td>wlu</td>
<td>Wheat after lupins</td>
</tr>
</tbody>
</table>
APPENDIX 3: STEP WORKSHOP EVALUATION

Workshop Name: ................................................................. Date: .................

Please circle the appropriate response, or write your response as indicated.

1. The materials provided were very useful in supporting my learning.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

2. The presenter/s knowledge of the subject was very good and their enthusiasm stimulated me.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

3. I felt comfortable working in the group and able to discuss issues openly.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

4. The activities I participated in assisted me to understand the concepts discussed.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

5. Which activities did you find most useful?
   
   1 .............................................................................................................................
   2 .............................................................................................................................
   3 .............................................................................................................................
   4 .............................................................................................................................

6. I feel confident I can apply the information and skills I learnt.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

7. This workshop was a profitable use of my time.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

8. My expectations of what I would learn were achieved.
   
   strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

9. What did you learn and/or what skills have you developed as a result of the workshop?
   
   1 .............................................................................................................................
   2 .............................................................................................................................
   3 .............................................................................................................................

10. The information covered during the workshop will help me achieve my business and personal goals.
    
    strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

11. I believe I will undertake further training in the near future.
    
    strongly agree   mostly agree   not sure   mostly disagree   strongly disagree
STEP WORKSHOP
3A
RUNNING SIMULATIONS USING THE STEP DECISION SUPPORT TOOL SET UP WITH A STANDARD FARM

Guide for Facilitators
ACKNOWLEDGEMENTS

This Workshop has been developed as part of the GRDC/NDSP-funded “A Million Hectares for the Future” project, with support and input from key personnel within the Department of Agriculture, Western Australia.

Developed and compiled by Megan Abrahams and Caroline Peek, Department of Agriculture, Western Australia, Geraldton, Western Australia.

January 2005

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INTRODUCTION

This module is one of a series of STEP workshops designed to help participants assess the financial potential of any proposed changes to their farming systems. It is a practical session for participants to develop and run farming system scenarios in STEP using a standard farm developed specifically for the group.

Learning Outcomes

In this session the main learning outcome is to:

Design and run farming system scenarios using STEP set up for a standard farm.

The associated learning outcomes required to achieve this are:

1. Plan future farming system scenarios for STEP analysis.
2. Run a simulation of a farming system option for a standard farm.
3. Run a simulation of a transition.

At the end of this workshop participants will have gained further experience in using the STEP model to run simulations of farming system options.

Workshop duration

The total time to complete the workshop is a half-day. However this will depend on the level of computer literacy and the specific needs of the group.

It is important to be flexible in designing the timing of the workshop based on the needs of the farmers. Any decision should be made in consultation with the group.

Environment for delivery

The target audience will be landholders and managers faced with managing existing or potential future salinity problems and who may be considering changes to their farming systems.

The workshop will be delivered indoors at local schools or telecentres to provide access to computers. The group should consist of no more than six to eight farm businesses with one computer per farm business and enough PowerPoints to accommodate this. The presenter will also need a computer and data projector conveniently located for ease of presentation.
RESOURCES

Data projector, spare globe and screen

Extension cords

Power boards

1 computer per farm business

Standard farm specific to the group

STEP base model with the group’s standard farm data entered on set up sheet (1 per person)

Slides of Learning Outcomes (see facilitator’s resource kit)

Workshop 3A Manual for Participants (1 per person)

Farm Budget Guide 2004 or equivalent

BankWest Benchmarks 2004 or equivalent

Gross Margins Guide 2003, Department of Agriculture Western Australia, Miscellaneous Publication 18/2002 or equivalent

STEP User Manual

Marker pens

Whiteboard/Butcher’s Paper

Handouts (Templates with examples provided in the facilitator’s resources kit)

1 Agenda

2 Planning sheet (see Appendix 1)

3 List of enterprise codes (see Appendix 2)

4 Evaluation sheet (see Appendix 3)
Explanation of resources required

In this workshop the STEP tool will be used to run farming system scenarios using the standard farm provided on CD following workshop 2A.

Prior to the workshop the STEP model standard farm must be loaded onto each computer. Copies may be emailed to individual computers or stored on CD or disc. To load “zipped” copies of the STEP model on disc, computers must have a Winzip facility. Participants may even bring their own copies of the standard farm received in Workshop 2A. At the end of this workshop participants can take a copy of the simulations they have run for further practice sessions. You may also like to have at hand a clean base version with the standard farm loaded onto the set up sheet in case any additions to the set up sheet are required. Participants should have received a copy of the STEP User Manual at Workshop 2A.

The latest Farm Budget Guide, Gross Margin Guide and BankWest Benchmarks or equivalents are useful to have if there is a need to source default costs/prices.
WORKSHOP OVERVIEW

This workshop is divided into six main sessions:

1. Introduction
2. Refresher guide through the STEP model worksheets
3. Development of farming system scenarios for STEP analyses
4. Run simulations of farming system scenarios.
5. Where to from here?
6. Evaluation

FACILITATION REQUIREMENTS

It is recommended that the workshop be run by at least two people, one as the main facilitator and the other(s) to assist when participants are doing the hands-on activities. The key requirements of the facilitator are:

1. Experience in using the STEP model through:
   - One introductory formal training session
   - Adequate time spent developing your own standard farm examples to include a current, a future and a transitional run, under the guidance of a mentor
2. Experience in presenting the STEP model to a group.
   - Facilitators presenting to a group for the first time will be provided with the support of someone familiar with the STEP model.
3. A reasonable knowledge of farm budgeting.
4. To be familiar with farming systems in your region.
A suggested agenda is outlined below. You may use the template provided in the facilitator’s resources kit to develop your own agenda to use as Handout 1. Times can be altered to suit the needs of the group but it is important to ensure that there are adequate breaks.

**AGENDA**

STEP workshop 3A

<table>
<thead>
<tr>
<th>Time</th>
<th>Tea/coffee</th>
<th>Arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mins</td>
<td></td>
<td>1. Welcome and introduction</td>
</tr>
<tr>
<td>30 minutes</td>
<td>Presentation</td>
<td>2. Guide through STEP model spreadsheets</td>
</tr>
<tr>
<td>45 minutes</td>
<td>Group Discussion</td>
<td>3. Develop farming system scenarios for STEP analyses</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Morning/Afternoon tea</em></td>
</tr>
<tr>
<td>2 hours</td>
<td>Practical session</td>
<td>4. Run simulations of farming system scenarios</td>
</tr>
<tr>
<td>15 mins</td>
<td>Discussion</td>
<td>5. Where to from here?</td>
</tr>
<tr>
<td>15 mins</td>
<td></td>
<td>5. Evaluation</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Close</em></td>
</tr>
</tbody>
</table>
SESSION 1: INTRODUCTION

**Time**  
5 minutes

**Resources**  
Data projector and screen; Slides of workshop 3A learning outcomes, Handout 1 (agenda).

**Purpose**
- Outline the workshop sessions
- Establish the learning outcomes

**Suggested approach**
- Provide an overview of why we are here. This can include:
  - Establish the learning outcomes (Show slides and go through the learning outcomes)
  - Outline the workshop sessions - detail of how the sessions will be run, timeline, breaks, etc (Handout 1 - agenda)
SESSION 2: REFRESHER GUIDE THROUGH STEP MODEL WORKSHEETS

Time 30 minutes

Resources Data projector and screen, STEP model with standard farm data and current farming system entered, STEP User Manual

Purpose

Provide a quick refresher on the content of the STEP worksheets.

Suggested process

Review the main features of the STEP model worksheets.

Use the data projector to go through the STEP worksheets of the standard farm example. Point out the main sections where data can be inputted and, which sections on the set-up sheet cannot be changed once the simulation is run. The suggested order of presenting the worksheets is:

1. Set-up sheet
2. LMU sheets
3. Stock sheets
4. Budget sheet
5. Farm summary sheet
6. Graphs sheet

Make reference to the appropriate sections of the STEP User Manual for participants to follow during the practical sessions (Chapter 2 for the overall order of entering the data, Chapter 3 for more specific instructions on setting up individual variables and Chapter 5 for worked examples).

Allow time for questions at appropriate points in the process.
SESSION 3: DEVELOPMENT OF FARMING SYSTEM SCENARIOS FOR STEP ANALYSES

Time  
1½ - 2 hours

Resources  
Butcher’s paper, marker pens, Handout 2 (Planning sheet - see Appendix 1), Handout 3 (List of enterprise codes – see Appendix 2). Templates for Handouts 2 and 3 are provided in the facilitator’s resources kit.

Purpose

❖ Plan future farming system scenarios for STEP analysis.

Suggested process

▪ Ask participants to form small groups to plan farming system scenarios and transition strategies for STEP analysis using the group’s standard farm.

Participants can record their ideas on the planning sheet (Handout 2) and/or butcher’s paper. Handout 3 lists the enterprise codes for the standard farm.

Allow 15 minutes at the end of the activity for participants to report their ideas to the rest of the group. The scenarios should then be modified as required. It is important that the scenarios are recorded as clearly as possible so both the facilitator and participants understand the exact requirements when he/she performs the STEP analyses. It is also a good idea to record the names of the individuals who developed the scenario should clarification be required at a later date.
SESSION 4: RUN SIMULATIONS OF FARMING SYSTEM SCENARIOS

Time

30 minutes - 1 hour

Resources

1 computer per person, STEP base model with standard farm data entered on Se-Up Sheet, STEP User Manual, Whiteboard/Butcher’s Paper, Marker pens

Purpose

- Run a simulation of a farming system option for a standard farm.
- Run a simulation of a transition.

Suggested process

- Participants to run simulations of a future farming system scenario and a transition to this scenario

Participants should be given a copy of the STEP base model with the group’s standard farm data already entered on the set-up sheet. They can decide which scenario they wish to run and the facilitators should assist as necessary. Any additions or changes in the Set Up The Model, Set Up Your Farm, Enterprise and Enterprise Code sections of the set-up sheet should be made prior to entering the transitional model.

Workshop participants should not click on the button to enter the transitional model until you have checked the entries on their Set-Up sheets.

Participants should first run a simulation of a future farming system scenario. If the system looks financially promising, then a transition should be run. Participants can perform as many runs as time permits. If there are scenarios which have not been investigated in this session, these can either be completed after the workshop or at another workshop.

Where a simulation produces results of interest, the facilitator should record these results for wider distribution to interested parties within or outside of the group.
SESSION 5: WHERE TO FROM HERE?

Time
15 minutes

Resources
Whiteboard /butcher's paper, marker pens, STEP workshop pathways
(Facilitator Guidelines folder in the facilitator's resource kit and in the STEP Workshop
1 Manual for Participants)

Purpose

- To review how the group will progress with STEP

Suggested process

- Ask the participants how they want to proceed with using STEP following this
workshop.

If there are scenarios that still have not been run in the previous session, participants
may decide to:

1. Meet for another workshop to continue running simulations (3A).

2. Ask the facilitator to perform the required STEP analyses and either report the
results at another workshop (2B) or send out the results.

3. Participants perform the analyses outside of a workshop environment and
disseminate the results amongst the group.

4. Run the scenarios using their own farm set up in the STEP model (workshop 4A).

Possible options for STEP workshops are presented in the STEP workshop pathways
table. Discuss with the group the pathway participants wish to follow and the pre-
requisites for each workshop. Alternatively, participants may decide not to proceed with
further STEP workshops.

Record the comments and plan how to proceed with future STEP workshops.
SESSION 6: EVALUATION

Time 15 minutes

Resources Whiteboard / butcher’s paper, evaluation sheets (Appendix 3; A template is provided in the facilitator’s resources kit).

Purpose

❖ To review the lessons of the day
❖ To obtain participant feedback

Suggested process

Option 1

▪ Reiterate the overall learning outcome for the workshop.

Ask for the group for their comments, questions, suggestions for improvements and record these on a whiteboard or butcher’s paper.

Ask the group what they will take back and apply in their farm business. Record the answers.

Option 2

▪ Ask participants to fill out an evaluation sheet (see Appendix 3 or prepare your own as Handout 4.)

Use the feedback to evaluate your workshop and make appropriate changes or improvements in the delivery of future workshops.

FURTHER INFORMATION


Uses a precursor of the STEP model to compare two alternative farming systems with the current wheat-lupin rotation in the sandplain area of the Northern Agricultural Region.
APPENDIX 1

Example of a planning worksheet.

The information in this table is for a low rainfall standard farm developed for the Northern Agricultural Region, Western Australia used in the Deep Drainage and Surface Water Management key practice modules. Prepare a similar table for use as Handout 3 in Session 3. Substitute the soil types/LMUs, areas and rotations of the standard farm you have developed for Session 3. You may use the Planning Sheet template provided in the facilitator's resources kit.

<table>
<thead>
<tr>
<th>Soil type</th>
<th>Current Area (ha)</th>
<th>Current Rotation</th>
<th>Future Area (ha)</th>
<th>Future Rotation</th>
<th>Suggested transition strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>sandy gravel</td>
<td>418</td>
<td>pvol</td>
<td>pvol</td>
<td>pfal</td>
<td>w</td>
</tr>
<tr>
<td>yellow sand</td>
<td>760</td>
<td></td>
<td>pvol</td>
<td></td>
<td>w</td>
</tr>
<tr>
<td>brown sandy loam</td>
<td>418</td>
<td>w</td>
<td>w</td>
<td>b</td>
<td>l</td>
</tr>
<tr>
<td>york gum loam</td>
<td>608</td>
<td>pfal</td>
<td>w</td>
<td>w</td>
<td>w</td>
</tr>
<tr>
<td>red loamy sand</td>
<td>722</td>
<td></td>
<td>l</td>
<td>w</td>
<td>w</td>
</tr>
<tr>
<td>wodjil</td>
<td>152</td>
<td>pvol</td>
<td>pvol</td>
<td>pvol</td>
<td>w</td>
</tr>
<tr>
<td>tight gravel</td>
<td>38</td>
<td>pvol</td>
<td>pvol</td>
<td>pvol</td>
<td>pfal w</td>
</tr>
<tr>
<td>clay flat</td>
<td>76</td>
<td>pfal</td>
<td>w</td>
<td></td>
<td>w</td>
</tr>
<tr>
<td>bare saline</td>
<td>91</td>
<td></td>
<td>pvol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>average saline</td>
<td>91</td>
<td></td>
<td>pvol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>good saline</td>
<td>46</td>
<td>pfal</td>
<td>w</td>
<td>w</td>
<td>b</td>
</tr>
</tbody>
</table>
APPENDIX 2

Enterprise Codes list

The enterprise codes in this table are listed as an example for the low rainfall standard farm of the Northern Agricultural Region, Western Australia, used in the Deep Drainage and Surface Water Management key practice workshops. Prepare a similar table for use as Handout 2 in Session 2 using the template in the facilitator's resources kit. Substitute enterprise codes of the standard farm you will use.

<table>
<thead>
<tr>
<th>Enterprise Code</th>
<th>Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>w</td>
<td>wheat</td>
</tr>
<tr>
<td>b</td>
<td>barley</td>
</tr>
<tr>
<td>c</td>
<td>canola</td>
</tr>
<tr>
<td>l</td>
<td>lupins</td>
</tr>
<tr>
<td>o</td>
<td>oats</td>
</tr>
<tr>
<td>cp</td>
<td>Chick peas</td>
</tr>
<tr>
<td>fp</td>
<td>Field peas</td>
</tr>
<tr>
<td>t</td>
<td>Triticale</td>
</tr>
<tr>
<td>pleg</td>
<td>Legume pasture</td>
</tr>
<tr>
<td>pvol</td>
<td>Volunteer pasture</td>
</tr>
<tr>
<td>pfal</td>
<td>Fallow</td>
</tr>
<tr>
<td>pnew</td>
<td>New pasture</td>
</tr>
<tr>
<td>psbare</td>
<td>Bare saltland</td>
</tr>
<tr>
<td>psb est</td>
<td>Bare saltland establishment</td>
</tr>
<tr>
<td>ps est1</td>
<td>Moderate saltland 1\textsuperscript{st} year of establishment</td>
</tr>
<tr>
<td>ps est2</td>
<td>Moderate saltland 2\textsuperscript{nd} year of establishment</td>
</tr>
<tr>
<td>ps est3</td>
<td>Good saltland establishment (same as moderate saltland 3\textsuperscript{rd} year of establishment)</td>
</tr>
<tr>
<td>psgood</td>
<td>Good saltland</td>
</tr>
<tr>
<td>psmod</td>
<td>Moderate saltland</td>
</tr>
<tr>
<td>wlu</td>
<td>Wheat after lupins</td>
</tr>
</tbody>
</table>
APPENDIX 3: STEP WORKSHOP EVALUATION

Workshop Name: ........................................................................ Date: .................

Please circle the appropriate response, or write your response as indicated.

1. The materials provided were very useful in supporting my learning.
   - strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

2. The presenter/s knowledge of the subject was very good and their enthusiasm stimulated me.
   - strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

3. I felt comfortable working in the group and able to discuss issues openly.
   - strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

4. The activities I participated in assisted me to understand the concepts discussed.
   - strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

5. Which activities did your find most useful?
   1. ............................................................................................................................. .
   2. ............................................................................................................................. .
   3. ............................................................................................................................. .
   4. ............................................................................................................................. .

6. I feel confident I can apply the information and skills I learnt.
   - strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

7. This workshop was a profitable use of my time.
   - strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

8. My expectations of what I would learn were achieved.
   - strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

9. What did you learn and/or what skills have you developed as a result of the workshop?
   1. ............................................................................................................................. .
   2. ............................................................................................................................. .
   3. ............................................................................................................................. .

10. The information covered during the workshop will help me achieve my business and personal goals.
    - strongly agree   mostly agree   not sure   mostly disagree   strongly disagree

11. I believe I will undertake further training in the near future.
    - strongly agree   mostly agree   not sure   mostly disagree   strongly disagree
STEP WORKSHOP 3B

ASSESSMENT OF FARMING SYSTEM OPTIONS FOR MY AREA

Guide for Facilitators
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January 2005

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<tr>
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RESOURCES

Data projector, spare globe and screen

Extension cords

Power boards

PowerPoint presentation of the analyses you performed on the standard farm designed for the group

Slides of Learning Outcomes (see facilitator's resource kit)

STEP model set up with the analyses you prepared using the standard farm designed for the group

Workshop 3B Manual for Participants (1 per person)

Gross Margins Guide 2003, Department of Agriculture Western Australia, Miscellaneous Publication 18/2002 or equivalent

Farm Budget Guide 2004 or equivalent

Bankwest Benchmarks 2004 or equivalent

STEP User Manual

Marker pens

Whiteboard/butcher's paper

Handouts

1 Agenda

2 Copy of slide presentation (Ensure that the slides are readable. A maximum of three slides per page with space for note-taking is recommended).

3 Planning sheet (see Appendix 1)

4 List of enterprise codes (see Appendix 2)

5 Evaluation sheet (see Appendix 3)

Explanation of resources required

For this workshop you will present the results of the STEP analyses of the standard farm you have performed to determine the profitability of different farming system scenarios and transition strategies planned in Workshop 2B.
WORKSHOP OVERVIEW

This workshop is divided into five main sessions:

1. Introduction

2. Presentation of STEP analysis results of farming system options and transition strategies.

3. Development of further farming system scenarios for STEP analyses (optional).

4. Where to from here?

5. Evaluation

FACILITATION REQUIREMENTS

The key requirements of the facilitator are:

1. Experience in using the STEP model through:
   - One introductory formal training session
   - Adequate time spent developing your own standard farm examples to include a current, a future and a transitional run, under the guidance of a mentor

2. Experience in presenting the STEP model to a group.
   - Facilitators presenting to a group for the first time will be provided with the support of someone familiar with the STEP model.

3. A reasonable knowledge of farm budgeting

4. To be familiar with farming systems in your region
WORKSHOP PREPARATION

Analyses of Farming System Options for the District Specific Standard Farm

Prior to this workshop, perform the required simulations of the farming system scenarios planned by the group in Workshop 3B. A suggestion is that you compare:

(1) a representative current farming system

(2) the future farming system scenarios planned by the group and

(3) transition strategies from the current to the future systems. (The details of these strategies may have been specified by the group or you may have to decide on these yourself. For example, you could run a rapid transition and a slower transition for each future farm.)

Where possible, use data provided by and representative of the group. You may also need to use data from sources such as Bankwest Benchmarks, Gross Margins Guide, Farm Budget Guide or equivalents and local information.

Prepare a PowerPoint presentation to demonstrate the comparative profitability of the analyses performed. The presentation should contain:

- Soil types, areas and rotations of the current farming system
- Rotations and livestock for the future farming system scenarios
- Main assumptions and production data
- Major costs
- Comparison of the cumulative profits of the current and future farming system options
- Results of the different transition strategies
WORKSHOP FACILITATION OUTLINE

A suggested agenda is outlined below. You may use the template provided in the facilitator's resources kit to develop your own agenda to use as Handout 1. Times can be altered to suit the needs of the group but it is important to ensure that there are adequate breaks.

<table>
<thead>
<tr>
<th>Time</th>
<th>Tea/coffee</th>
<th>Arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mins</td>
<td></td>
<td>1. Welcome and introduction</td>
</tr>
<tr>
<td>1 hour</td>
<td>Presentation</td>
<td>2. Analyses of farming system scenarios</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and transition strategies for the standard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>farm</td>
</tr>
<tr>
<td>1 hour</td>
<td>Group discussion</td>
<td>3. (Optional) Development of further</td>
</tr>
<tr>
<td></td>
<td></td>
<td>farming system scenarios for STEP analyses</td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>Morning/ Afternoon tea</em></td>
</tr>
<tr>
<td>15 mins</td>
<td>Discussion</td>
<td>4. Where to from here?</td>
</tr>
<tr>
<td>15 mins</td>
<td></td>
<td>5. Evaluation</td>
</tr>
</tbody>
</table>

*Close*
SESSION 1: INTRODUCTION

Time 5 minutes

Resources Data projector and screen; Slides of Workshop 3B Learning Outcomes, Handout 1 (agenda)

Purpose

❖ Outline the workshop sessions
❖ Establish the learning outcomes

Suggested approach

Provide an overview of why we are here. This can include:

• Establish the learning outcomes (Show slides and go through the learning outcomes)

• Outline the workshop sessions - detail of how the sessions will be run, timeline, breaks, etc (Handout 1 - agenda of activities)

SESSION 2: STEP ANALYSIS RESULTS OF FARMING SYSTEM OPTIONS AND TRANSITION STRATEGIES.

Time 1 hour

Resources Data projector and screen, PowerPoint presentation of analyses on a standard farm designed for the group, Handout 2 (copy of PowerPoint presentation), STEP model with standard farm analyses, whiteboard/ butcher’s paper, marker pens

Purpose

❖ Compare the profitability of different farming system options.
❖ Understand the effect of different transition strategies on the farm business.
❖ Discuss further farming system options for STEP analysis

Suggested process

▪ Deliver the PowerPoint presentation you have prepared containing the results of your STEP analyses on the standard farm.

Give the group handouts (Handout 2) of the presentation with space for note taking.

▪ Allow 20-30 minutes at the end of the presentation for discussion of the results.

Have the STEP model for the standard farm on hand in case you need to refer to it to answer questions or show the group specific parts of the analysis you have completed.
You may need to ask the group questions such as:

- whether they are satisfied that the data used is representative of their group
- their comments on the farming system analyses you have presented.

Record on the whiteboard/ butcher’s paper any comments, suggested changes and other farming systems options to analyse.

**SESSION 3: DEVELOPMENT OF FURTHER FARMING SYSTEM SCENARIOS FOR STEP ANALYSES.**

**Time**

1 hour

**Resources**

Butcher’s paper, marker pens, Handout 3 (Planning sheet - see Appendix 1), Handout 4 (List of enterprise codes – see Appendix 2). Templates for Handouts 3 and 4 are provided in the facilitator’s resources kit.

**Purpose**

- Discuss further farming system options for STEP analysis

**Suggested process**

- Ask participants to form small groups to plan farming system scenarios for STEP analysis using the group’s standard farm.

The facilitator will perform the required STEP analyses based on these scenarios following the workshop and either arrange another meeting to present the results or send these out.

Participants can record their ideas on the planning sheet (Handout 3) and/or butcher’s paper. Handout 4 should list the enterprise codes for the standard farm.

Allow 15 minutes at the end of the activity for participants to report their ideas to the rest of the group. The scenarios should then be modified as required. It is important that the scenarios are recorded as clearly as possible so the facilitator understands the group’s exact requirements when he/she performs the STEP analyses. It is also a good idea to record the names of the individuals who developed the scenario should clarification be required at a later date.
SESSION 4: WHERE TO FROM HERE?

Time
15 minutes

Resources
Whiteboard /butcher’s paper, marker pens, STEP workshop pathways (Facilitator Guidelines of the facilitator’s resources kit and in the STEP Workshop 1 Manual for Participants)

Purpose

To review how the group will progress with STEP

Suggested process

Ask the participants how they want to proceed with using STEP following this workshop

The possible options are:

1. No further workshops. If there are further analyses to be completed, send a report of the results to farmers.
2. Participants attend another workshop where the facilitator reports the results of the analyses (another Workshop 3B).
3. Participants interested in using STEP themselves (Workshop 2A).
4. Participants analyse scenarios themselves using the STEP model set up for the group’s standard farm (Workshop 3A).
5. Participants want to use the STEP model themselves to set up their own farms (Workshop 4A).

Record the comments and plan how to proceed with future STEP workshops.

Participants who wish to use STEP to set up their own farms (Workshop 3A) should bring along a copy of the completed activity sheets from STEP Workshop 1 (Post-workshop Activity: Planning your model farm) containing their farm information. (As the participants have already forwarded these to you to develop the group standard farm, you may need to supply a copy).
SESSION 5: EVALUATION

Time
15 minutes

Resources
Whiteboard /butcher’s paper, evaluation sheets (Appendix 3)

Purpose

❖ To review the lessons of the day
❖ To obtain participant feedback

Suggested process

Option 1

❖ Reiterate the overall learning outcome for the workshop.

Ask for the group for their comments, questions, suggestions for improvements and record these on a whiteboard or butcher’s paper.

Ask the group what they will take back and apply in their farm business. Record the answers.

Option 2

❖ Ask participants to fill out an evaluation sheet (see Appendix 3 or prepare your own as Handout 5.)

FURTHER INFORMATION


Uses a precursor of the STEP model to compare two alternative farming systems with the current wheat-lupin rotation in the sandplain area of the Northern Agricultural Region
Example of a planning worksheet

The information in this table is for a low rainfall standard farm developed for the Northern Agricultural Region, Western Australia used in the Deep Drainage and Surface Water Management key practice modules. Prepare a similar table for use as Handout 3 in Session 3. Substitute the soil types/LMUs, areas and rotations of the standard farm you have developed for Session 3. You may use the Planning Sheet template provided in the facilitator's resources kit.

<table>
<thead>
<tr>
<th>Soil type</th>
<th>Current Area (ha)</th>
<th>Current Rotation</th>
<th>Future Area (ha)</th>
<th>Future Rotation</th>
<th>Suggested transition strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>sandy gravel</td>
<td>418</td>
<td>pvol pvol pfal w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yellow sand</td>
<td>760</td>
<td>pvol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brown sandy loam</td>
<td>418</td>
<td>w w b l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>York gum loam</td>
<td>608</td>
<td>pfal w w w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>red loamy sand</td>
<td>722</td>
<td>l w w b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wodjil</td>
<td>152</td>
<td>pvol pvol pfal w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tight gravel</td>
<td>38</td>
<td>pvol pvol pvol w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clay flat</td>
<td>76</td>
<td>pfal w w</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bare saline</td>
<td>91</td>
<td>pvol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>average saline</td>
<td>91</td>
<td>pvol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>good saline</td>
<td>46</td>
<td>pfal w w b</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2

Enterprise Codes list

The enterprise codes in this table are listed as an example for the low rainfall standard farm of the Northern Agricultural Region, Western Australia, used in the Deep Drainage and Surface Water Management key practice workshops. Prepare a similar table for use as Handout 2 in Session 2 using the template in the facilitator’s resources kit. Substitute enterprise codes of the standard farm you will use.

<table>
<thead>
<tr>
<th>Enterprise Code</th>
<th>Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td>w</td>
<td>Wheat</td>
</tr>
<tr>
<td>b</td>
<td>Barley</td>
</tr>
<tr>
<td>c</td>
<td>Canola</td>
</tr>
<tr>
<td>l</td>
<td>Lupins</td>
</tr>
<tr>
<td>o</td>
<td>Oats</td>
</tr>
<tr>
<td>cp</td>
<td>Chickpeas</td>
</tr>
<tr>
<td>fp</td>
<td>Field peas</td>
</tr>
<tr>
<td>t</td>
<td>Triticale</td>
</tr>
<tr>
<td>pleg</td>
<td>Legume pasture</td>
</tr>
<tr>
<td>pvol</td>
<td>Volunteer pasture</td>
</tr>
<tr>
<td>pfal</td>
<td>Fallow</td>
</tr>
<tr>
<td>pnew</td>
<td>New pasture</td>
</tr>
<tr>
<td>psbare</td>
<td>Bare saltland</td>
</tr>
<tr>
<td>psb est</td>
<td>Bare saltland establishment</td>
</tr>
<tr>
<td>ps est1</td>
<td>Moderate saltland 1st year of establishment</td>
</tr>
<tr>
<td>ps est2</td>
<td>Moderate saltland 2nd year of establishment</td>
</tr>
<tr>
<td>ps est3</td>
<td>Good saltland establishment (same as moderate saltland 3rd year of establishment)</td>
</tr>
<tr>
<td>psgood</td>
<td>Good saltland</td>
</tr>
<tr>
<td>psmod</td>
<td>Moderate saltland</td>
</tr>
<tr>
<td>wlu</td>
<td>Wheat after lupins</td>
</tr>
</tbody>
</table>
APPENDIX 3: STEP WORKSHOP EVALUATION

Workshop Name: ................................................................. Date: .................

Please circle the appropriate response, or write your response as indicated.

1. The materials provided were very useful in supporting my learning.
   
   strongly agree       mostly agree       not sure       mostly disagree       strongly disagree

2. The presenter/s knowledge of the subject was very good and their enthusiasm stimulated me.
   
   strongly agree       mostly agree       not sure       mostly disagree       strongly disagree

3. I felt comfortable working in the group and able to discuss issues openly.
   
   strongly agree       mostly agree       not sure       mostly disagree       strongly disagree

4. The activities I participated in assisted me to understand the concepts discussed.
   
   strongly agree       mostly agree       not sure       mostly disagree       strongly disagree

5. Which activities did your find most useful?
   
   1 ............................................................................................................................. .
   2 ............................................................................................................................. .
   3 ............................................................................................................................. .
   4 ............................................................................................................................. .

6. I feel confident I can apply the information and skills I learnt.
   
   strongly agree       mostly agree       not sure       mostly disagree       strongly disagree

7. This workshop was a profitable use of my time.
   
   strongly agree       mostly agree       not sure       mostly disagree       strongly disagree

8. My expectations of what I would learn were achieved.
   
   strongly agree       mostly agree       not sure       mostly disagree       strongly disagree

9. What did you learn and/or what skills have you developed as a result of the workshop?
   
   1 ............................................................................................................................. .
   2 ............................................................................................................................. .
   3 ............................................................................................................................. .

10. The information covered during the workshop will help me achieve my business and personal goals.
    
    strongly agree       mostly agree       not sure       mostly disagree       strongly disagree

11. I believe I will undertake further training in the near future.
    
    strongly agree       mostly agree       not sure       mostly disagree       strongly disagree
STEP WORKSHOP
4A
SETTING UP THE STEP DECISION SUPPORT TOOL WITH YOUR OWN FARM

Guide for Facilitators
ACKNOWLEDGEMENTS

This Workshop has been developed as part of the GRDC/NDSP-funded “A Million Hectares for the Future” project, with support and input from key personnel within the Department of Agriculture, Western Australia.

Developed and compiled by Megan Abrahams and Caroline Peek, Department of Agriculture, Western Australia, Geraldton, Western Australia

January 2005

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INTRODUCTION

This module is one of a series of STEP workshops designed to help participants assess the financial potential of any proposed changes to their farming systems. This workshop was designed specifically for participants to set up their own farms in the STEP model and run their own analyses.

Learning Outcomes

In this session the main learning outcome is to:

Use the STEP tool to analyse farming system options for your own farm.

The associated learning outcomes required to achieve this are:

1. Enter your own farm data into the STEP worksheets.
2. Run simulations of farming system options for your own farm.
3. Use STEP to examine one or more transitions for your farm.

At the end of this workshop participants will take away the STEP model set up for their own farms and will have furthered their experience in using the model to analyse their farming system options.

Workshop duration

The total time to complete the workshop is a half-day. However this will depend on the level of computer literacy and the specific needs of the group.

It is important to be flexible in designing the timing of the workshop based on the needs of the participants. Any decision should be made in consultation with the group.

Environment for delivery

The target audience will be landholders and managers who want to use STEP as an economic decision tool for managing salinity problems by making changes to their farming systems.

The workshop will be delivered indoors at local schools or telecentres to provide access to computers. The group should consist of no more than six farm businesses with one computer per farm business and enough PowerPoints to accommodate this. The presenter will also need a computer and data projector conveniently located for ease of presentation.
RESOURCES

Data projector, spare globe and screen

Extension cords

Power boards

1 computer per farm business

Slides of Learning Outcomes (see facilitator’s resource kit)

Standard farm specific to the group (Choose from the standard farms provided in the facilitator’s resource kit or develop your own)

STEP base model (1 copy per person)

Workshop 4A Manual for Participants (1 per person)

Farm Budget Guide 2004 or equivalent

BankWest Benchmarks 2004 or equivalent

Gross Margins Guide 2003, Department of Agriculture Western Australia, Miscellaneous Publication 18/2002 or equivalent.

STEP User Manual

Marker pens

Whiteboard/butcher’s paper

Handouts

1 Agenda

2 Evaluation sheet (see Appendix 1)
Explanation of resources required

In this workshop farmers will set up their own farm businesses in the STEP tool and run simulations of their proposed changes. They will bring to the workshop:

- Their own farm information and data already collected in the farm survey sheets, prior to Workshops 2A and 2B.
- Information relevant to their farm they have obtained from other key practice modules in the “A Million Hectares for the Future” workshop series.

Facilitators will be required to assist participants so they can leave the workshop able to use the STEP tool for their own farm businesses.

Prior to the workshop the STEP model example you wish to use must be loaded onto each computer. Copies may be emailed to individual computers or stored on CD or disc. To load “zipped” copies of the STEP model on disc, computers must have a Winzip facility. At the end of the workshop participants will be given a copy of the clean base version of the STEP tool and a copy of STEP with the information that they entered on the day, for use in their farm businesses. Once the STEP tool has been entered and has generated the worksheets, it is a large file which must be stored on a zipdisc or CD.

The latest Farm Budget Guide, Gross Margin Guide and BankWest Benchmarks are useful to have if there is a need to source default costs/prices.
WORKSHOP OVERVIEW

The workshop is divided into six main sessions:

1. Introduction
2. Refresher guide through the STEP model worksheets
3. Enter data on set-up sheet
4. Complete other STEP worksheets and run simulations.
5. Where to from here?
6. Evaluation

Pre-requisites

Participants must have completed Workshop 2A, learning how to use STEP, prior to attending this workshop.

FACILITATION REQUIREMENTS

It is recommended that the workshop be run by at least two people to assist participants during the practical sessions. The key requirements of the facilitator are:

1. Experience in using the STEP model through:
   - One introductory formal training session
   - Adequate time spent developing your own standard farm examples to include a current, a future and a transitional run, under the guidance of a mentor.

2. Experience in presenting the STEP model to a group.
   - Facilitators presenting to a group for the first time will be provided with the support of someone familiar with the STEP model.

3. A reasonable knowledge of farm budgeting.

4. To be familiar with farming systems in your region.
A suggested agenda is outlined below. You may use the template provided in the facilitator’s resources kit to develop your own agenda to use as Handout 1. Times can be altered to suit the needs of the group but it is important to ensure that there are adequate breaks.

**AGENDA**

**STEP workshop 4A**

<table>
<thead>
<tr>
<th>Time</th>
<th>Tea/coffee</th>
<th>Arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 mins</td>
<td>Presentation</td>
<td></td>
</tr>
<tr>
<td>45 mins</td>
<td>Practical session</td>
<td></td>
</tr>
<tr>
<td>2 hours</td>
<td>Practical session</td>
<td></td>
</tr>
<tr>
<td>5 mins</td>
<td>Discussion</td>
<td></td>
</tr>
<tr>
<td>15 mins</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Welcome and introduction
2. Refresher guide to STEP spreadsheets
3. Enter data on Set-Up Sheet
4. Complete other STEP worksheets and run simulations

*Morning/ Afternoon tea*

4. (continued) Complete other STEP worksheets and run simulations

5. Where to from here?
6. Evaluation

*Close*
SESSION 1: INTRODUCTION

Time  5 minutes

Resources  Data projector and screen; Slides of Workshop 4A learning outcomes, Handout 1 (agenda)

Purpose

- Outline the workshop sessions
- Establish the learning outcomes

Suggested approach

- Provide an overview of why we are here. This can include:
  - Establish the learning outcomes (Show slides and go through the learning outcomes)
  - Outline the workshop sessions - detail of how the sessions will be run, timeline, breaks, etc (Handout 1 - agenda)
SESSION 2: REFRESHER GUIDE THROUGH STEP MODEL SPREADSHEETS

Time 30 minutes

Resources Data projector and screen, one computer per person, STEP model with standard farm data entered, STEP User Manual

Purpose

✓ Provide a quick refresher on the content of the STEP worksheets.

Suggested process

- Review the main features of the STEP model worksheets.

Use the data projector to go through the STEP worksheets of a standard farm example. You may choose one from the facilitator's resource kit or one you have prepared for your group.

NOTE

The standard farms supplied in the Facilitators Resource Kit are useful in providing an example of a STEP run showing the layout of the STEP spreadsheets and of the allocation of Land Management Units and enterprises. However, caution must be exercised before using any of the yields, stocking rates, costs, prices and budget figures shown in the standard farm STEP worksheets. The figures used are only examples used in one of many runs performed using these particular standard farms and will not necessarily reflect the situation that you as a facilitator wish to convey. It is imperative that you do your research prior to using any of these standard farms by checking the best rotations and long-term prices, yields, stocking rates, etc, for your area and ensure that you fully understand the rationale behind your figures, rotations and stock structure. You should also develop your own future and transition runs to reflect relevant salinity management options for your area.

Point out the main sections where data can be inputted and, which sections on the set-up sheet cannot be changed once the simulation is run. The suggested order of presenting the worksheets is:

1. Set-up sheet
2. LMU sheets
3. Stock sheets
4. Budget sheet
5. Farm summary sheet
6. Graphs sheet
Make reference to the appropriate sections of the STEP User Manual for participants to follow during the practical sessions (Chapter 2 for the overall order of entering the data, Chapter 3 for more specific instructions on setting up individual variables and Chapter 5 for worked examples).

Allow time for questions at appropriate points in the process.

---

**SESSION 3: ENTERING DATA ON SET-UP SHEET**

<table>
<thead>
<tr>
<th>Time</th>
<th>45 minutes</th>
</tr>
</thead>
</table>

**Resources**  
1 computer per person, farmers bring own farm information (completed post-workshop activity sheets from STEP Workshop 1), STEP User Manual, STEP base model

**Purpose**

- Enter your own farm data into the STEP worksheets.

**Suggested process**

- Help participants to complete their STEP set-up sheets using their own farm data.

Make clear the importance of keeping a “clean” version of the STEP base model. This can be achieved by using the Save As function after entering the set-up sheet data, saving this working copy in a new file. In this way an intact version of the base model can also be maintained (see STEP User Manual sections 2.1–2.2).

Workshop participants should *not* click on the button to enter the transitional model until you have checked the entries on their Set-Up sheets.

Facilitators should do a thorough check on the Set-Up sheet of each participant *before* they enter the transitional model. When you are satisfied that the Set-up sheet is correct, participants may *click on the button to enter the transitional model*.

Participants should work at their own paces and be free to ask questions at any point in this session.
SESSION 4: COMPLETE OTHER STEP WORKSHEETS AND RUN SIMULATIONS

Time 2 hours

Resources One computer per person, farmers bring own farm information (completed post-workshop activity sheets from STEP Workshop 1), STEP User Manual, STEP base model

Purpose

- Run simulations of farming system options for your own farm.
- Use STEP to examine one or more transitions for your farm.

Suggested process

- Participants continue to enter their own farm data in the remaining spreadsheets.

When participants have generated worksheets by entering the transitional model, they should continue entering their own farm information. Remind them to refer to the STEP User Manual (particularly Chapters 2, 3 and 5) for instructions and facilitators will assist where necessary. Farmers may wish to set up simulations for their current farm, a future farm and a transition.

As for Session 3, participants can work at their own pace and make use of the facilitator’s assistance where required.
SESSION 5: WHERE TO FROM HERE?

**Time**
5 minutes

**Resources**
Whiteboard / butcher’s paper, marker pens, STEP workshop pathways
(Facilitator Guidelines folder in the facilitator’s resources kit and in the STEP Workshop 1 Manual for Participants)

**Purpose**

- To review how the group want to continue with using STEP.

**Suggested process**

Ask the group if/how they would like to proceed with using STEP.

Tell the group that you as their facilitator will remain their contact person should they need further help with STEP when using it for their own farm businesses. Other options are shown in the STEP workshop pathways table. Participants may:

1. Attend one of the other STEP Workshops (2B, 3B) where the facilitator presents the group with results of analyses on a standard farm.

2. Meet back as a group and share their own farm results.

Record how the group plans to proceed with STEP.
SESSION 6: EVALUATION

Time  
15 minutes

Resources  
Whiteboard / butcher’s paper, evaluation sheets (Appendix 1; A template is provided in the facilitator’s resources kit)

Purpose

- To review the lessons of the day
- To obtain participant feedback

Suggested process

Option 1

- Reiterate the overall learning outcome for the workshop.

Ask for the group for their comments, questions, suggestions for improvements and record these on a whiteboard or butcher’s paper.

Ask the group what they will take back and apply in their farm business. Record the answers.

Option 2

- Ask participants to fill out an evaluation sheet (see Appendix 1 or prepare your own as Handout 2.)

Use the feedback to evaluate your workshop and make appropriate changes or improvements in the delivery of future workshops.

FURTHER INFORMATION

*Future Farming Systems for the Medium Rainfall Northern Sandplain.* Department of Agriculture Miscellaneous Publication 13/2002

*Uses a precursor of the STEP model to compare two alternative farming systems with the current wheat-lupin rotation in the sandplain area of the Northern Agricultural Region.*
APPENDIX 1: STEP WORKSHOP EVALUATION

Workshop Name: .................................................... Date: ......................

Please circle the appropriate response, or write your response as indicated.

1. The materials provided were very useful in supporting my learning.
   strongly agree  mostly agree  not sure  mostly disagree  strongly disagree

2. The presenter/s knowledge of the subject was very good and their enthusiasm stimulated me.
   strongly agree  mostly agree  not sure  mostly disagree  strongly disagree

3. I felt comfortable working in the group and able to discuss issues openly.
   strongly agree  mostly agree  not sure  mostly disagree  strongly disagree

4. The activities I participated in assisted me to understand the concepts discussed.
   strongly agree  mostly agree  not sure  mostly disagree  strongly disagree

5. Which activities did you find most useful?
   1. ............................................................................................................................
   2. ............................................................................................................................
   3. ............................................................................................................................
   4. ............................................................................................................................

6. I feel confident I can apply the information and skills I learnt.
   strongly agree  mostly agree  not sure  mostly disagree  strongly disagree

7. This workshop was a profitable use of my time.
   strongly agree  mostly agree  not sure  mostly disagree  strongly disagree

8. My expectations of what I would learn were achieved.
   strongly agree  mostly agree  not sure  mostly disagree  strongly disagree

9. What did you learn and/or what skills have you developed as a result of the workshop?
   1. ............................................................................................................................
   2. ............................................................................................................................
   3. ............................................................................................................................

10. The information covered during the workshop will help me achieve my business and personal goals.
    strongly agree  mostly agree  not sure  mostly disagree  strongly disagree

11. I believe I will undertake further training in the near future.
    strongly agree  mostly agree  not sure  mostly disagree  strongly disagree
TRAIN THE TRAINER
STEP WORKSHOPS 1 AND 2

Guide for Facilitators
ACKNOWLEDGEMENTS

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Developed and compiled by Megan Abrahams and Caroline Peek, Department of Agriculture, Western Australia, Geraldton, Western Australia

January 2005

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**INTRODUCTION**

**Learning Outcomes**

This module is designed to train potential facilitators to deliver workshops to landholders and managers on the use of the STEP (Simulated Transitional Economic Planning) tool. However, it may also be directed at other non-farmer groups who wish to use the STEP tool for analysing farming systems (e.g. DAWA Development Officers, Community Landcare Co-ordinators, consultants). In this session the main learning outcome is to:

**Build knowledge and skills in the use of STEP as an economic decision tool for assessing changes to the farming system.**

The associated learning outcomes (LOs) required to achieve this are:

1. Understand concepts of how STEP model can be used.
2. Recognise the effect of a transition strategy on the farm business.
3. Practical use of worksheets in STEP model.
4. Use farm data to set up a model farm and run simulation/s.
5. Appreciate the importance of flexibility in delivering STEP to farmer groups.

**Workshop duration**

There are several essential components to this workshop:

1. Participant attends a half-day Workshop 1 which covers LOs 1-3.
2. Participant preparation – in order to set up model farms, which are specific to districts, participants are required to complete the post-workshop activity sheets, “Planning your model farm” (Appendix 1)
3. Participant attends half-day Workshop 2 which covers LOs 4-5.
4. Follow-up: One-to-one contact with the presenters.

The total time to complete the workshop is **two half-days** in addition to time spent collecting farm information/data prior to the second workshop. The first workshop will cover learning outcomes 1 to 3. Potential facilitators must also complete learning outcomes 4 and 5 in the second workshop. However, these learning outcomes are **optional for other non-farmers not intending to facilitate future workshops.**
Environment for delivery

The target audience will be Department of Agriculture Development Officers, Community Landcare Co-ordinators and others requiring training as facilitators for the delivery of the STEP workshop component of the “A Million Hectares for the Future” workshop series.

The workshop will be delivered indoors in a room appropriate for a group of 10-15 people with one computer per person and access to sufficient PowerPoints to accommodate this need. The presenter will also need a computer and data projector conveniently located for ease of presentation.
RESOURCES

Data projector, spare globe and screen

Extension cords

Power boards

1 computer per person

STEP base model with standard farm data entered on set up sheet (Choose from the standard farms provided in the facilitator’s resource kit or use your own data)

Instructions containing data for working through the practice examples - Session 3 (for presenter to follow)

Slides of Learning Outcomes (see facilitator’s resource kit)

PowerPoint presentation for Session 2 (NOTE: You may choose from the presentations provided in the facilitator’s resource kit or replace them with your own containing material for an example farm relevant to the group)

Workshop Manual for Participants (1 per person)

Farm Budget Guide 2004 or equivalent

Gross Margins Guide 2003, Department of Agriculture Western Australia, Miscellaneous Publication 18/2002 or equivalent

Bankwest Benchmarks 2004 or equivalent

STEP User Manual (1 per participant)

Whiteboard Marker pens

Whiteboard/Butcher’s paper

Handouts

1.1 Workshop 1 Agenda

1.2 Copy of slide presentation (Ensure that the slides are readable. A maximum of 3 slides per page with space for note-taking is recommended).

1.3 Practice examples: step-by-step guide

2.1 Workshop 2 Agenda

2.2 Evaluation
Explanation of resources required

In these workshops the STEP tool will be used to analyse an example farm. Where possible the farm should be in an area familiar to the majority of the group attending. It would be of most use for you to have worked up your own example(s) so that you have an understanding of the farming system and are familiar with the data used. It is important that you contact your local experts to check the soundness of the information and data you input into the model.

Prior to the workshop the STEP model example you wish to use must be loaded onto each computer. Copies may be emailed to individual computers, stored on CD or disc. To load “zipped” copies of the STEP model on disc, computers must have the Winzip facility. At the end of the workshop participants will be given a copy of the STEP tool for further practice sessions.

The latest Farm Budget Guide, Gross Margin Guide and BankWest Benchmarks or equivalent are useful to have if there is a need to source default costs/prices.
WORKSHOP OVERVIEW

This training session was designed for those who will facilitate STEP workshops as independent modules or as part of the “A Million Hectares for the Future” workshop series of which the overarching learning outcome is:

**Participants will be able to identify and make informed decisions to profitably manage salinity on their farms.**

The recommended pathway for this series of workshops is outlined below. However, after completing the Introduction to Salinity workshop, the order in which participants complete other workshops is entirely flexible.

**Recommended Pathway**

The two training workshops have been developed to build the knowledge and skills of potential facilitators in the use of STEP as an economic decision tool for assessing changes to the farming system. They will subsequently use these skills to deliver the STEP workshops outlined above to clients.
The workshops are divided into sessions as shown:

**WORKSHOP 1**

1. Introduction to Workshop 1.
2. Presentation describing the concepts of what STEP does and the effect of the transition strategy on the farming business.
3. A hands-on guide through the STEP spreadsheets using a simple example relevant to the area.
4. Preparation for Workshop 2.
5. Evaluation of Workshop 1.

**WORKSHOP 2**

1. Introduction to Workshop 2.
2. Individual activity in setting up a farm and running simulations.
3. Discussion of the different options for delivery of the STEP tool to farmer groups.

**FACILITATION REQUIREMENTS**

It is recommended that the workshop be run by at least two people, one as the main facilitator and the other(s) to assist when participants are doing the hands-on activities. The key requirements of the facilitator are:

1. Experience in using the STEP model through:
   - One introductory formal training session.
   - Adequate time spent developing your own standard farm examples to include a current, a future and a transitional run, under the guidance of a mentor (e.g. STEP workshop facilitator, local economist, etc).

2. Experience in presenting the STEP model to a group.
   - Facilitators presenting to a group for the first time will be provided with the support of someone familiar with the STEP model (e.g. STEP workshop facilitator, local economist).

3. A reasonable knowledge of farm budgeting.

4. To be familiar with farming systems in your region.

You may want to arrange the group such that participants with similar levels of computer literacy are seated together. The second facilitator can then help the less computer-literate participants.
Development of District Specific Standard Farm

In workshop 2, participants have the option of setting up their own farms in the STEP model and running simulations. To do this, participants will need to prepare a plan (individually or as a group) prior to the workshop. The farm survey sheets in Appendix 3 provide a template to collect the information and data needed to plan the farm and its current and possible future enterprises. The activity in the second workshop can be tailored to the specific needs of a group and driven by a group leader.

Participants who do not complete the post-workshop activity can use the standard farm provided by the facilitator to run simulations. However, they will not have the opportunity to complete the Set-Up sheet in the STEP model with their own farm data.

WORKSHOP FACILITATION OUTLINE

Suggested agendas are outlined below. You may use the template provided in the facilitator’s resources kit to develop your own agenda to use as Handouts 1.1 and 1.2. Times can be altered to suit the needs of the group but it is important to ensure that there are adequate breaks.

<table>
<thead>
<tr>
<th>AGENDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>“Train the Trainer” STEP Workshop 1</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Times</th>
<th>Tea/coffee</th>
<th>Arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mins</td>
<td></td>
<td>1. Welcome and introduction</td>
</tr>
<tr>
<td>30 mins</td>
<td>Presentation</td>
<td>2. Concepts of what the STEP tool can do</td>
</tr>
<tr>
<td>2 ½ hours total</td>
<td>Computer activity with whole group</td>
<td>3. Hands-on guide through STEP model spreadsheets</td>
</tr>
</tbody>
</table>

**Morning/Afternoon tea**

<table>
<thead>
<tr>
<th>Computer activity with whole group</th>
<th>continued 3. Hands-on guide through STEP model spreadsheets</th>
</tr>
</thead>
</table>

| 10 mins | Discussion | 4. Preparation for workshop 2 |
| 30 mins | Discussion | 5. Evaluation |

**Close**
## AGENDA

“Train the Trainer” STEP Workshop 2

<table>
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<tr>
<th>Times</th>
<th>Tea/coffee</th>
<th>Activity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mins</td>
<td>Arrival</td>
<td>1. Welcome and introduction</td>
<td></td>
</tr>
<tr>
<td>2 hours total</td>
<td>Computer Activity</td>
<td>2. Set up own farm and run simulations</td>
<td></td>
</tr>
<tr>
<td>45 mins</td>
<td>Discussion</td>
<td>3. Delivery of STEP to farmer groups</td>
<td></td>
</tr>
<tr>
<td>30 mins</td>
<td>Discussion</td>
<td>4. Preparation for Workshop 2</td>
<td></td>
</tr>
<tr>
<td>30 mins</td>
<td></td>
<td>5. Evaluation</td>
<td></td>
</tr>
</tbody>
</table>

*Morning/afternoon tea*

*continued 2. Set up own farm and run simulations*
WORKSHOP 1
SESSION 1: INTRODUCTION

Time 5 minutes

Resources  Data projector and screen; Slides of Train the trainer STEP Workshop learning outcomes, Handout 1.1

Purpose

- Outline the workshop sessions
- Establish the learning outcomes

Suggested approach

Provide an overview of why we are here. This can include:

- Establish the learning outcomes (Show slides and go through the learning outcomes emphasising that learning outcomes 1-3 will be covered in this workshop)
- Outline the workshop sessions - detail of how the sessions will be run, timeline, breaks, etc

(Handout 1.1 - agenda of activities)

SESSION 2: WHAT CAN THE STEP TOOL DO?

Time 30 minutes

Resources  Data projector and screen; PowerPoint presentation showing the results of a worked example relevant to the area; Handout 1.2 of slide presentation.

Purpose

- Understand concepts of how the STEP model can be used.
- Recognise the effect of a transition strategy on the farm business.

Suggested process

- Deliver a PowerPoint presentation provided in the facilitator’s resources kit (you can use the “Introduction to STEP” presentation combined with your selected slides from a case study presentation) or one similar and relevant to your example farm. The presentation should address the following points:
  - description of STEP and how it can be used
  - current and future farming system options analysed using STEP
• composition of the farming system examples
• assumptions
• financial comparison of the different farming system options
• sensitivity analyses
• comparison of different transition scenarios
• discussion on the effect of different transition strategies

Give the group handouts (Handout 1.2) of the presentation with space for note taking.

- Allow 5 minutes at the end of the presentation for questions.

### SESSION 3: HANDS-ON GUIDE THROUGH STEP MODEL SPREADSHEETS

**Time**  
2 ½ hours

**Resources**  
Data projector and screen, 1 computer per person, STEP base model with standard farm data entered on Set Up Sheet, STEP User Manual (1 per person), step-by-step guide to practice examples (can also be distributed as a Handout 1.3)

**Purpose**

- Practise using worksheets in STEP model.

**Suggested process**

- Guide participants through the main features of the STEP model worksheets.

Use the **base model** of STEP containing the data of a standard farm example entered on the Set-up sheet. For simplicity it should be limited to a small number of Land Management Units (LMUs), paddocks and enterprises. You may use any of the standard farms supplied in the facilitator resource kit or one designed for your particular group. You will need to design your own current, future and transition runs.
NOTE

The standard farms supplied in the Facilitators Resource Kit are useful in providing an example of a STEP run showing the layout of the STEP spreadsheets and of the allocation of Land Management Units and enterprises. However, caution must be exercised before using any of the yields, stocking rates, costs, prices and budget figures shown in the standard farm STEP worksheets. The figures used are only examples used in runs performed using these particular standard farms and will not necessarily reflect the situation that you as a facilitator wish to convey. It is imperative that you do your research prior to using any of these standard farms by checking the best rotations and long-term prices, yields, stocking rates, etc, for your area and ensure that you fully understand the rationale behind your figures, rotations and stock structure. You should also develop your own future and transition runs to reflect relevant salinity management options for your area.

Start the exercise with the Set-Up Sheet already complete. Use the data projector and have participants follow your lead at their own computers. When you have sufficiently explained the Set-Up Sheet, have the participants press the button to enter the transitional model and explain how this generates the STEP worksheets.

Participants will now follow your instructions on how to enter the data for your prepared current farm example. Allow sufficient time for them to enter the data and to ask questions. Refer to the worked examples in the manual as support material and/or provide your own worked examples as a handout. The suggested order of completing the worksheets is:

1. LMU sheets
2. Stock sheets
3. Budget sheet
4. Farm summary sheet
5. Graphs sheet

Allow time for questions, comments and discussion at appropriate points in the process.

- Guide the participants through the process of running a transition.

When participants have entered the data and looked at the results for the current farm go through the steps of running a transition to a prepared future farm.

You can show the group the results of a future farm you have run and then instruct them on how to enter the data to run the transition to this future farm. Refer to the worked examples in the STEP User Manual as support material and/or prepare your own worked examples as a handout.

Allow time for questions, comments and discussion at appropriate points in the process.
SESSION 4: PREPARATION FOR WORKSHOP 2

Time 10 mins

Resources Post-workshop Activity: Planning your model farm (Appendix 1 and Train the Trainer Workshop Manual for Participants)

Purpose

❖ Describe the post-workshop activity to be completed prior to Workshop 2.

Suggested process

❖ Explain that the group will have the opportunity in the second workshop to set up their own farms in the STEP model.

They will need to do some preparation in planning their own farms, as individuals or as a group. This will involve determining their Land Management Units, crop and pasture rotations, livestock, yields, costs and price data, budget information.

Point out the activity sheets (Appendix 1) in the Workshop Manual for Participants to be used for collating this information.

Other sources for costs and yields are Bankwest Benchmarks, Gross Margins Guide, Farm Budget Guides or equivalents and local sources of information. Long-term averages should be used where possible.

SESSION 5: EVALUATION

Time 30 minutes

Resources Whiteboard /butcher’s paper

Purpose

❖ To review the lessons of the day
❖ To obtain participant feedback

Suggested process

❖ Reiterate the overall learning outcome for the workshops and the three learning outcomes covered in Workshop 1.

Ask for the group for their comments, questions, suggestions for improvements and record these on a whiteboard or butcher’s paper.

Ask the group what they will take back and apply in the workplace. Record the answers. You may like to use the ORID Discussion process as a guide (Appendix 2).
WORKSHOP 2.

SESSION 1: INTRODUCTION

Time 5 minutes

Resources Data projector and screen; Slides of Train the Trainer STEP Workshop learning outcomes, Handout 2.1

Purpose

- Outline the workshop sessions
- Establish the learning outcomes

Suggested approach

Provide an overview of why we are here. This can include:

- Establish the learning outcomes (Show slides and go through the learning outcomes emphasising that learning outcomes 4 and 5 will be covered in this workshop)

- Outline the workshop sessions - detail of how the sessions will be run, timeline, breaks, etc

(Handout 2.1 - agenda of activities)

SESSION 2: SET UP OWN FARM AND RUN SIMULATIONS

Time 2 hours

Resources 1 computer per person; STEP base model with standard farm data on set up sheet (1 per person), post-workshop activity sheets completed by participants (from Train the Trainer STEP workshop1), Bankwest Benchmarks, Farm Budget Guide, Gross Margins Guide or equivalents, STEP User Manual

Purpose

- Use farm data to set up a model farm and run simulations.

Suggested process

- Assist participants to enter their own farm data collected through the post-workshop activity from Workshop 1.

Participants are provided with a copy of the STEP base model containing the data for a standard farm. They should save this copy of the STEP base model by using the SAVE function in Excel to save the file, then use the SAVE AS function in Excel to save the file under a new name. This is the working copy of the STEP base model to be used for this session.
Participants can write over the existing standard farm data with their own farm enterprises, costs, etc (Option 1) or use the standard farm to run simulations (Option 2).

**Option 1: Setting up own farm**

Participants complete the Set-Up sheet using the data collected from the activity sheets prior to this workshop. The standard farm data can be used for default values where necessary.

Workshop participants should **not** click on the button to enter the transitional model until you have checked the entries on their Set-up sheets.

Facilitators should do a thorough check on the Set-up sheet of each participant before they enter the transitional model. When you are satisfied that the Set-up sheet is correct, participants may click on the button to enter the transitional model and then complete the LMU, stock, and budget sheets, with their current farm plan.

Participants make the appropriate changes to the sheets in entering data for their future farms.

If the future farm looks promising, participants may attempt to run a transition.

**Option 2: Run simulations using standard farm**

Participants are provided with a copy of the STEP base model with the set-up sheet completed for a standard farm.

They then press the button to enter the transitional model and then complete the LMU, stock and budget sheets, with their current farm plan.

Participants make the appropriate changes to the sheets in entering data for their future farms. If some direction is needed you could set a specific task (e.g. increase cropping on the farm, change the values for the yields, etc).

If the future farm looks promising, participants may attempt to run a transition.

- Allow about 20 minutes at the end of the activity for individuals or groups to discuss their results.

Use questions to lead the discussion based on the following:

- What were our results and what did we do to get these results?
- What didn’t we do?
- What could we do next time?
- What did we learn?
- How can the STEP tool be of use to you?

Again the ORID discussion process (Appendix 2) could be used as a useful tool to guide this process.
SESSION 3: DELIVERY OF STEP TO FARMER GROUPS

Time
30 minutes

Resources
STEP workshop pathways (Appendix 3 and in the Workshop Manual for Participants)

Purpose

❖ Appreciate the importance of flexibility in delivering STEP to farmer groups.

Suggested process

❖ Present some options for how to proceed with delivery of the STEP workshops to farmer groups as outlined in the STEP workshop pathways tables. Ask for comment on these suggested pathways and other foreseeable ways to present STEP. Record any comments on a whiteboard or butcher’s paper.

❖ Discuss with the group the idea that this workshop is the first part of their training in the use of STEP.

They have seen what the STEP tool can do and have had some practical experience. It is suggested that before they can facilitate a workshop on their own they must: spend adequate time developing their own standard farm examples to include a current, a future and a transitional run, under the guidance of a mentor.

Stress that facilitators who are presenting to a group for the first time should be provided with the support of someone more experienced with the STEP model.

Ask the group for their comments on this suggested approach.
SESSION 4: EVALUATION

Time 30 minutes

Resources Whiteboard /butcher’s paper, evaluation sheets (Appendix 4; A template is provided in the facilitator’s resources kit).

Purpose

❖ To review the lessons of the day
❖ To obtain participant feedback

Suggested process

Option 1

❖ Reiterate the overall learning outcome for the workshop.

Ask for the group for their comments, questions, suggestions for improvements and record these on a whiteboard or butcher’s paper.

Ask the group what they will take back and apply in the workplace. Record the answers.

Option 2

❖ Ask participants to fill out an evaluation sheet (see Appendix 4 or prepare your own as Handout 2.2)

FURTHER INFORMATION

Future Farming Systems for the Medium Rainfall Northern Sandplain. Department of Agriculture Miscellaneous Publication 13/2002

Uses a precursor of the STEP model to compare two alternative farming systems with the current wheat-lupin rotation in the sandplain area of the Northern Agricultural Region.
APPENDIX 1

Train the Trainer STEP workshop

Post-workshop Activity: Farm Survey Sheets

In this workshop you will have the opportunity to enter data for your own model farm and run simulations of your own farming system scenarios. You will need to plan your farm and collect the required information prior to attending the STEP workshop by completing the following two worksheets.

Default figures will be provided if you are unable to collect the required data for your own model farm.
Enterprise description for STEP analysis

1. Soil types and rotations

<table>
<thead>
<tr>
<th>Soil type</th>
<th>Area (ha)</th>
<th>Current rotation</th>
<th>Possible future rotation</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

**TOTAL ha**

**NOTE:** This total should equal your total farm area
2. **Crop Productivity**  Please enter your crops across the first row of the table, soil types down the first column and their yields (t/ha) in the respective cells.

<table>
<thead>
<tr>
<th>Crops</th>
<th>Yield (t/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. wheat</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Soil types</th>
<th>Yield (t/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. sandy loam</td>
<td>1.68</td>
</tr>
</tbody>
</table>
### 3. Stock Productivity

Please enter your pastures across the first row of the table, soil types down the first column and their stocking rates (DSE/ha) in the respective cells.

<table>
<thead>
<tr>
<th>Pastures</th>
<th>Stocking rate (DSE/ha) – Summer (S) and Winter (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. volunteer pasture</td>
<td>e.g. Cadiz</td>
</tr>
<tr>
<td>Soil types</td>
<td>S</td>
</tr>
<tr>
<td>e.g. yellow sand</td>
<td>1</td>
</tr>
</tbody>
</table>
4. Livestock enterprises  List both current and future enterprises down the first column and then complete the rest of the table.

<table>
<thead>
<tr>
<th>Livestock enterprise</th>
<th>Current enterprise (Tick your enterprises)</th>
<th>No. of adult animals</th>
<th>Lambing/calving %</th>
<th>Possible future enterprise (Tick enterprises you are considering)</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.g. trade sheep</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>e.g. cattle – self replacing breeder</td>
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</tbody>
</table>

5. Other future enterprises (tick those listed of interest to you or add other enterprises)

<table>
<thead>
<tr>
<th>Enterprise</th>
<th>Tick enterprise of interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>pines</td>
<td></td>
</tr>
<tr>
<td>tagasaste</td>
<td></td>
</tr>
<tr>
<td>hay</td>
<td></td>
</tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Your current farm enterprise

Please complete the following tables to include additional data required for your current farm and for your proposed future alternatives. Bring these to workshop where you will set up the model for your own farm. An example sheet has been completed for you at the end of the section.

1. FARM ENTERPRISES

a) Crops and pastures

Complete the following table for your different pasture and crop enterprise.

| Enterprise (e.g. wheat) | Price ($/t) | Fertiliser ($/ha) | Sprays ($/ha) | Fuel/oilgrease ($/ha) | Repairs ($/ha) | Crop insurance ($/ha) | Seed and/or treatment ($/ha) | Contractor ($/ha) | Other costs ($/ha) |
b) Livestock

In the table below, enter your livestock enterprises, their production parameters and costs.

<table>
<thead>
<tr>
<th>Livestock name</th>
<th>Female</th>
<th>Castrates</th>
<th>0-1 yr old</th>
<th>Breeding male</th>
<th>Female</th>
<th>Castrates</th>
<th>0-1 yr old</th>
<th>Breeding male</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSE rating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sale price ($/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Purchase price ($/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Product (unit/hd)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Product price ($/unit)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Product B (unit/hd)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Product B price ($/unit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproductive percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at first joining</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of cull</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vet costs (Dips etc,$/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tags/mulising/branding ($/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvesting (eg shearing, $/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other costs ($/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. **Other expenditure**

List any other expenditure which may be important.

<table>
<thead>
<tr>
<th>Other Expenditure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crops</strong></td>
<td>$</td>
</tr>
<tr>
<td><strong>Livestock</strong></td>
<td>$</td>
</tr>
<tr>
<td>Repairs and maintenance</td>
<td>$</td>
</tr>
<tr>
<td>Fuel, oil and grease</td>
<td>$</td>
</tr>
<tr>
<td>Wool packs</td>
<td>$</td>
</tr>
<tr>
<td>Freight</td>
<td>$</td>
</tr>
<tr>
<td>Fodder</td>
<td>$</td>
</tr>
<tr>
<td><strong>Other variable costs</strong></td>
<td>$</td>
</tr>
<tr>
<td>Lime</td>
<td>$</td>
</tr>
<tr>
<td>Labour</td>
<td>$</td>
</tr>
<tr>
<td>Other</td>
<td>$</td>
</tr>
<tr>
<td><strong>Fixed costs</strong></td>
<td>$</td>
</tr>
<tr>
<td>Overheads</td>
<td>$</td>
</tr>
<tr>
<td>Other</td>
<td>$</td>
</tr>
</tbody>
</table>
1. FARM ENTERPRISES

a) Crops and pastures

Complete the following table for your different pasture and crop enterprises.

<table>
<thead>
<tr>
<th>Enterprise (e.g., wheat)</th>
<th>wheat</th>
<th>barley</th>
<th>canola</th>
<th>lupins</th>
<th>oats</th>
<th>chick peas</th>
<th>field peas</th>
<th>triticale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price ($/t)</td>
<td>185</td>
<td>160</td>
<td>345</td>
<td>170</td>
<td>130</td>
<td>460</td>
<td>240</td>
<td>160</td>
</tr>
<tr>
<td>Fertiliser ($/ha)</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>22.6</td>
<td>40</td>
<td>35</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Sprays ($/ha)</td>
<td>20</td>
<td>20</td>
<td>60</td>
<td>55</td>
<td>15</td>
<td>90</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Fuel/oil grease ($/ha)</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Repairs ($/ha)</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Crop insurance ($/ha)</td>
<td>2.7</td>
<td>2.5</td>
<td>3.7</td>
<td>1.7</td>
<td>1.8</td>
<td>3</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Seed and/or treatment ($/ha)</td>
<td>11.3</td>
<td>9.8</td>
<td>25</td>
<td>18</td>
<td>8.5</td>
<td>34</td>
<td>21</td>
<td>10</td>
</tr>
<tr>
<td>Contractor ($/ha)</td>
<td></td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other costs ($/ha)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**b) Livestock**

In the table below, enter your livestock enterprises, their production parameters and costs.

<table>
<thead>
<tr>
<th>Livestock name</th>
<th>Merino</th>
<th></th>
<th></th>
<th></th>
<th>Traders</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Castrates</td>
<td>0-1 yr old</td>
<td>Breeding male</td>
<td>Female</td>
<td>Castrates</td>
<td>0-1 yr old</td>
<td>Breeding male</td>
</tr>
<tr>
<td>DSE rating</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
<td>1.5</td>
<td>1</td>
<td>1</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Death (%)</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Sale price ($/hd)</td>
<td>40</td>
<td>45</td>
<td>50</td>
<td>35</td>
<td>40</td>
<td>45</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>Purchase price ($/hd)</td>
<td>50</td>
<td>500</td>
<td>50</td>
<td>500</td>
<td>50</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Product A –wool (unit/hd)</td>
<td>5</td>
<td>5.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product A price –wool ($/unit)</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Product B (unit/hd)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product B price ($/unit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reproductive %</td>
<td>85%</td>
<td>75%</td>
<td>85%</td>
<td>75%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age at first joining</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of cull</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Vet costs (dips etc, $/hd)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Tags/mulsing/branding ($/hd)</td>
<td>0.5</td>
<td>0.5</td>
<td>0.15</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.15</td>
<td>0.5</td>
</tr>
<tr>
<td>Harvesting (e.g. shearing, $/hd)</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>Other costs ($/hd)</td>
<td>5.75</td>
<td>6.5</td>
<td>5.5</td>
<td>6.25</td>
<td>5.75</td>
<td>6.5</td>
<td>5.5</td>
<td>6.25</td>
</tr>
</tbody>
</table>
APPENDIX 2

Tools for Evaluation Session - ORID Discussion

ORID stands for a four-stage process that can be used to evaluate an activity. It is a group discussion process designed to help members analyse a group activity and make decisions both for the group and for themselves about future activities or action they may make.

The acronym ORID stands for:

O  objective
R  reflective
I  interpretive
D  decisional

Process

Each stage consists of open-ended questions which relate to the action learning process:

Objective – what was the most interesting thing or idea that you noted? What did you see, hear, do, during the activity?

Reflective – how did you feel about this idea or thing – at first, now? What does it mean to you?

Interpretive – Why is this idea or thing important for you? What did you learn that you can use in your work or home?

Decisional – how can you or will you apply what you have learnt in your own situation? What will you do now? What are the first steps that you will take?

Tips for the ORID Process

The questions need to be specific at each stage and require some samples and illustrations in their answer.

Questions must be open-ended so they cannot be answered YES or NO.

It is important to separate the stages clearly and not have the group move into the next stage before completing the one they are in, e.g. concentrate on seeing and doing in the first step, not on what was felt or learnt.

Leave sufficient time for this if you are doing it immediately after the activity.
APPENDIX 3

Options for delivery of farmer STEP workshops

Delivery of the STEP model to farmer groups may involve a series of separate workshops. It is recommended that the first workshop be an introduction to STEP. The mode of delivery of subsequent workshops will best be determined by consultation with the group based on their needs. Two possible pathways to follow are outlined overleaf.

Farmers may wish to choose one or more workshops from either of these paths.
**Workshop Series for participants who want to learn how to use the STEP tool to perform their own analyses (Path A)**

<table>
<thead>
<tr>
<th>Workshop 1</th>
<th><strong>Introduction to the STEP Decision Tool</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Participants will learn what the STEP decision tool is and how it can be used to assess the financial impact of change on the farm business</td>
</tr>
<tr>
<td></td>
<td>• Participants receive farm survey sheets</td>
</tr>
<tr>
<td></td>
<td>• Participants receive worksheets to capture relevant information from other million hectares workshops</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-workshop 1 activities in preparation for workshop 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Participants complete farm survey sheets and send to facilitator</td>
</tr>
<tr>
<td>• Facilitator develops standard farm in the STEP tool specific for the group based on the survey</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workshop 2A</th>
<th><strong>Participants learn how to use the STEP tool</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Participants receive a detailed hands-on guide through STEP worksheets using the newly developed standard farm</td>
</tr>
<tr>
<td></td>
<td>• Participants have the option of developing scenarios to run at home or Workshop 3 if time permits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-workshop 2A activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Participants take a copy of the standard farm to practise entering own data and running simulations.</td>
</tr>
<tr>
<td>• Participants may be confident enough to enter their own farm business into STEP without further assistance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workshop 3A</th>
<th><strong>Participants run relevant scenarios in the STEP tool as a group activity using the standard farm. Workshop 2A is a pre-requisite for this workshop</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Participants develop scenarios of interest to the group</td>
</tr>
<tr>
<td></td>
<td>• Participants use the standard farm to run analyses of scenarios of interest to the group in the STEP tool</td>
</tr>
<tr>
<td></td>
<td>• Participants discuss results</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-workshop 3A activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Participants can run scenarios at home</td>
</tr>
<tr>
<td>• Participants may be confident enough to enter own business into STEP without further assistance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workshop 4A</th>
<th><strong>Participants want to enter their own farm business into STEP in a workshop environment. Workshop 2A is a pre-requisite for this workshop</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Participants set up their own farms on the STEP base model</td>
</tr>
<tr>
<td></td>
<td>• Participants run simulations using own farm</td>
</tr>
<tr>
<td></td>
<td>• Participants take away a copy of the STEP base model containing own farm data</td>
</tr>
<tr>
<td></td>
<td>• Participants can discuss results as a group</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Post-workshop activities 4A</th>
<th><strong>Participants use the STEP tool to help plan changes to their farm business</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Facilitator provides support as required</td>
<td></td>
</tr>
</tbody>
</table>
Workshop Series for participants who do not wish to learn how to use the STEP tool. Participants want the facilitator to do the STEP analyses and present the results (Path B)

| Workshop 1 Introduction to the STEP Decision Tool | • Participants will learn what the STEP decision tool is and how it can be used to assess the financial impact of change on the farm business  
• Participants receive farm survey sheets  
• Participants receive worksheets to capture relevant information from other million hectares workshops |
| Post-Workshop 1 activities in preparation for workshop 2 | • Participants complete farm survey sheets and send to facilitator  
• Facilitator develops standard farm in the STEP tool specific for the group based on the survey |
| Workshop 2B Facilitator presents the standard farm to group | • Show standard farm to group with a current, future and transition scenario prepared as an example  
• Group to develop priority scenarios for facilitator to perform as desktop analyses |
| Post-Workshop 2B activities | • Facilitator to do STEP analysis on the scenarios determined by the group |
| Workshop 3B Facilitator presents the results | • Facilitator to present results of desktop analyses  
• Discuss results and transition strategies  
• Develop further scenarios for analysis  
• Arrange further meetings as desired |
| Post-Workshop 3B activities | • Facilitator to perform analyses as required |
APPENDIX 4: STEP WORKSHOP EVALUATION

Workshop Name: …………………………………………………………… Date: ………………..

Please circle the appropriate response, or write your response as indicated.

1. The materials provided were very useful in supporting my learning.
   strongly agree mostly agree not sure mostly disagree strongly disagree

2. The presenter/s knowledge of the subject was very good and their enthusiasm stimulated me.
   strongly agree mostly agree not sure mostly disagree strongly disagree

3. I felt comfortable working in the group and able to discuss issues openly.
   strongly agree mostly agree not sure mostly disagree strongly disagree

4. The activities I participated in assisted me to understand the concepts discussed.
   strongly agree mostly agree not sure mostly disagree strongly disagree

5. Which activities did your find most useful?
   1 ............................................................................................................................. 
   2 ............................................................................................................................. 
   3 ............................................................................................................................. 
   4 ............................................................................................................................. 

6. I feel confident I can apply the information and skills I learnt.
   strongly agree mostly agree not sure mostly disagree strongly disagree

7. This workshop was a profitable use of my time.
   strongly agree mostly agree not sure mostly disagree strongly disagree

8. My expectations of what I would learn were achieved.
   strongly agree mostly agree not sure mostly disagree strongly disagree

9. What did you learn and/or what skills have you developed as a result of the workshop?
   1 ............................................................................................................................. 
   2 ............................................................................................................................. 
   3 ............................................................................................................................. 

10. The information covered during the workshop will help me achieve my business and personal goals.
    strongly agree mostly agree not sure mostly disagree strongly disagree

11. I believe I will undertake further training in the near future.
    strongly agree mostly agree not sure mostly disagree strongly disagree