# ALTERNATIVE SOIL AND WATER AND WEED MANAGEMENT SYSTEMS FOR VLEIS

with emphasis on maize-rice systems

### **MODULE 6: TESTINGALTERNATIVES**





# This is the sixth of 7 training modules

#### A GROUP EXTENSION GUIDE USING PICTURES

#### Picture LP1: COMPARING A NEW TECHNIQUE WITH AN OLD ONE

**Question:** Do you recognise this picture?

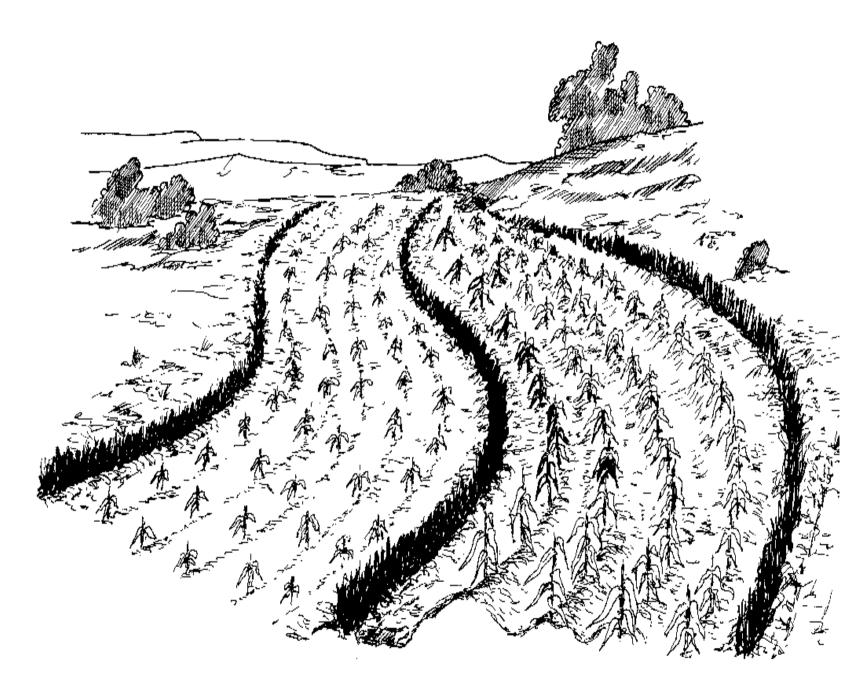
Answer: Two fields of the same crop at different stages.

**Explain:** To see whether a new technique will improve production it needs to be compared with the farmers' normal practice. Without a comparison it is difficult to know whether the new technique is better or worse than the old one.

An easy way to compare a new technique with the usual practice is putting the two side by side in the same field. divide the field in the middle along the contour so that both sides are approximately of equal size. Vetiver grass strips can be used to divide the field.

#### What to consider when experimenting?

- 1) Try it on a small piece of land at first.
- 2) Use the same seed and the same spacing on both sides (unless comparing varieties and spacing)
- 3) Plant both sides on the same day
- 4) Apply the same amount of fertiliser on both sides
- 5) Weed on the same day in the same way on both sides



Vleis - 3 - Module 6: Testing alternatives

## Picture TA2: Farmer evaluating his crop

**Question:** Do you recognise this picture?

**Answer:** A farmer is inspecting his crop

#### Explain:

- Observing your trials helps you to identify the reasons why a certain technique performs better or worse than another one.
- When the crops are grown with two different techniques side by side in the same field you can see the differences more easily.
- For example, on one side the crop might grow faster or be higher than on the other side, or bolls might be bigger on one side.
- Such observations need to be recorded so that they are not forgotten and can be analysed in more detail in future. It is important to be honest in one's own judgements.
- Often one is in favour of an improved technique and becomes 'blind' when it is not as promising as it looks



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# Picture TA3: Farmer keeping records

**Question:** Do you recognise this picture?

Answer: This is a farmer recording details of his crop and not just relying on his memory.

#### Explain:

- Through recording observations from on-farm experiments season by season, reference material for individual farms can be built up alongside individuals' farming knowledge.
- Farmers will also get to know their farms very well through this process.
- The benefit of keeping records is that mistakes will not be repeated and the farmers and extensions workers will be able to recall experiences of the best ways of doing things.



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This is an example of a recording sheet which farmers can use to write down observations from experiments.

Typical records should comprise farmer observations

- · At crop emergence
- · Before first weeding
- · Mid season
- At harvest

It is important that farmers are honest when comparing the new technique against the usual practice – often farmers become 'blind' to a new technique when it is not as promising as they thought it would be.

Experiments do not always result in success.

FARMER EXPERIMENT ASSESSMENT SHEET		
	NEW PRACTICE	OLD PRACTICE
AT COOR EMEDOENCE		
AT CROP EMERGENCE		
BEFORE FIRST WEEDING		
MID SEASON		
AT HARVEST		