

## Reference 27 End-of-season evaluation

### Summary

The end-of-season evaluation is a very useful tool that helps improve the overall performance of a farm. It consists of comparing expectations and outcome, and analyzing the differences. An end-of-season evaluation analyzes the season's results, but also prepares for the next season. The importance of calculating value/cost ratios in the financial analysis of a new technology is also explained.

### Elements required for an end-of-season evaluation

The elements required for an end-of-season evaluation are: the predicted financial balance sheet, the actual financial balance sheet, an analysis of the difference between the two, and recommendations for improvement, leading to a new work-plan and expected financial balance sheet for the next season. The work-plan takes into account timing of crop management interventions as budgeted in the financial balance sheet.

#### *Financial balance sheet*

This is a table (Table 27.1 showing an example for an inland valley with good water management) with a number of line items, showing costs of inputs and value of agricultural produce. The actual numbers obtained at the end of the growing season need to be compared with the predictions at the start of the season.

#### *Financial analysis of the performance of a new technology*

When introduced to farmers, a new technology has a chance of being considered viable and adopted by the producers if the ratio value/costs exceeds 1.5 or 2. This ratio points at the additional benefit attributable to the technology minus the costs linked to this yield profit (e.g. additional costs for harvesting, threshing, etc.). In this ratio, the costs are the additional costs necessary to apply this technology. A minimum ratio of 2 has been suggested for the use of mineral fertilizers in Africa.

### Bibliography

- Crawford, E., and M. Kamuanga, 1991. L'analyse économique des essais agronomiques pour la formulation des recommandations aux paysannes. *Michigan State University International Development Papers*. Reprint No. 6F, 1987. MSU, East Lansing, USA, 30 pp.
- Mokwunye, A.U., A. de Jaeger and E.M.A. Smaling (Ed.), 1996. Restoring and maintaining the productivity of West African soils: key to sustainable development. *Miscellaneous Fertilizer Studies* No. 14. International Fertilizer Development Center, Lomé, Togo.

**Table 27.1. Example of financial balance sheet**

<b>Items</b>	<b>Quantity</b>	<b>Units</b>	<b>Unit cost</b>	<b>Total cost</b>
<b>Variable costs</b>				
Crop management operations	_____	_____	_____	_____
Plowing	_____	_____	_____	_____
Other	_____	_____	_____	_____
Agricultural inputs				
Seeds	_____	_____	_____	_____
Urea	_____	_____	_____	_____
NPK	_____	_____	_____	_____
Herbicides				
Propanil	_____	_____	_____	_____
Weedone	_____	_____	_____	_____
Other phytosanitary products	_____	_____	_____	_____
Input transport	_____	_____	_____	_____
Harvest				
Bags	_____	_____	_____	_____
Human labor				
Harvest	_____	_____	_____	_____
Handling	_____	_____	_____	_____
Harvest transport	_____	_____	_____	_____
<b>Total variable costs</b>	_____	_____	_____	_____
<b>Other costs</b>				
Dikes, embankments maintenance	_____	_____	_____	_____
Other	_____	_____	_____	_____
<b>Total costs (a)</b>	_____	_____	_____	_____
<b>Production value (b)</b>	_____	_____	_____	_____
<b>Net revenue (b) – (a)</b>	_____	_____	_____	_____