Sustainability of Flemish farms: Advising farmers and policymakers

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Introduction
Today, ‘sustainability’ has rightfully gained its place in the vision, mission and strategy of companies, organizations and governments, also in agriculture. However, putting the theoretical concept into practice often proves to be very difficult. Hence, the objective of this paper is to address the ‘sustainability-paradox’ between intention and action, by presenting two complementary methods that are helpful to advise both farmers and policy makers concerning sustainability of Flemish farms.

Methods
During the last decade, there has been an explosion of activity to develop sustainable development indicators, in order to determine whether sustainable development is actually being achieved. Hereby, two major approaches can be distinguished: (i) a set of indicators listed or presented together within a single table or diagram (visual integration) and (ii) a single, composite index of sustainability (numerical integration). Each approach has its pros and cons and one has to choose a particular approach depending on the specific goal and intended use. We present two approaches in this paper: a visual integration approach (MOTIFS) and a numerical integration approach (the sustainable value approach). Both approaches have already proven to be useful to assess the farm sustainability of Flemish dairy farms.

MOTIFS
MOTIFS (Meul et al., 2008a) is an indicator-based sustainability monitoring tool for Flemish dairy farms. It allows us to monitor farm progress towards integrated sustainability, i.e. taking into account economic, ecological as well as social aspects, using a set of relevant indicators. The tool offers a visual aggregation of indicator scores into an adapted radar graph, considering ten sustainability themes related to ecological, economic and social aspects.

Sustainable Value approach
The sustainable value approach is developed by Figge & Hahn (2004) and it shows in monetary terms the value that a company creates or destroys by the use of a set of different resources. A positive value contribution indicates that a resource is used in a value-creating way by a company. To determine how much value is created by the entire bundle of resources, the sustainable value can be calculated by summing up all value contributions and by dividing this value by the number of resources. More information of an application of the sustainable value approach for Flemish farms can be found in Van Passel et al. (2007).

Case-studies
MOTIFS has been applied on 20 Flemish dairy farms participating in a Leader+ project ‘Strong with Milk, 2006–2008’ with the aim to monitor sustainability and stimulate communication and exchange of knowledge between farmers. For a number of selected sustainability themes, farmer discussion groups were organized, in which the MOTIFS-results were discussed.

The sustainable value approach is currently applied in a European funded project (within the 6th FP) called SVAPPAS, with a major aim to develop and adapt the sustainable value methodology for the assessment of sustainability at farm, sector, national or cross-national
level. Besides, the methodology is tested for different case study areas and the data needs and data availability to arrive at a standard approach for sustainability analysis of farms and farm policies are assessed.

Discussion and conclusions
Both methods can and should be used complementary to assess sustainability performance of Flemish farms and to advise both farmers and policymakers on sustainability aspects. This is shown in Figure 1.

**Figure 1. Complementary use of the sustainable value approach and MOTIFS for sustainability assessment and advice to farmers and policymakers within the Flemish farming sector.**

MOTIFS is designed to guide farmers towards a higher level of sustainability. The visual integration of relevant themes of ecological, economic and social sustainability aspects and sustainable entrepreneurship, allows an immediate and integrated interpretation of a farm’s overall sustainability level and gives an overview of the farm’s strengths and weaknesses. MOTIFS was found particularly interesting to be used in a discussion group of farmers to mutually compare results and exchange knowledge and expertise (Meul et al., 2008b).

Moreover, by using the monitoring system to compare farm performances of an individual farm over time, the farmer can follow-up whether management actions actually result in the aimed effect. This makes MOTIFS a useful management tool for farmers.

The sustainable value integrates sustainability aspects in a numerical way. The approach is extremely suitable to support decision makers in their selection of good resource users and to follow up structural or sector evolutions. Policymakers can be informed on which are good and bad performing sectors, so they may e.g. decide to help bad performers to improve their sustainable resource use. The method can also be used to identify major characteristics within a specific sector that influence the sustainability performance of the related farms. For example, Van Passel et al. (2007) found that both structural and managerial characteristics have an impact on the sustainable value of Flemish dairy farms.

References
Meul, M., et al., 2008b. Ecological indicators. (in press, available online)