

### 3 Switching between management approaches for the transition towards sustainable agriculture

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Three management approaches for the transition towards sustainable agriculture are compared in this paper. Consumer demand is the main driving force in the "chain approach". The "sector approach" is based on cooperation between farmers belonging to the same primary production system and associated industry. The "regional approach" aims at social and environmental coherence through interactive spatial planning and is specific for a limited region. Although the approaches are quite complementary with respect to sustainability criteria, we do not recommend integration, but rather stress the importance of switching between approaches and associated networks during the successive stages of transition.

#### **Introduction**

There is as yet little consensus on the preferred transition management pathway towards sustainable agriculture. The goal of this study was to gain more insight in the strengths and weaknesses of three different approaches that are currently being applied in the search of a more sustainable agriculture, namely 'chain approach', 'sector approach' and 'regional approach'.

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## Procedure

In order to assess the contribution of the approaches to sustainability, we chose the framework as outlined in chapter 2. This framework with the 3P concept is visualized in figure 1. We added the dimensions of time and space to take account of the interests of next generations (later) and other places (elsewhere).



Figure 3.1. Visualized 3P concept, i.e., People (blue pie), Planet (green pie) and Profit (red pie), used as Framework for the analysis (see also chapter 2)

In order to collect information we did interviews with experts representing each of the three approaches. In each interview we followed the same guidelines that were derived from the framework of analysis. In addition we organized a workshop with members of the reference group, consisting of policy makers from the Ministry of Agriculture, Nature and Food Quality (LNV) and the Ministry of Housing, Spatial Planning and the Environment (VROM), to apply each of the approaches to two problems regarding agriculture in the Netherlands.

## Comparison of the approaches:

Essentially, the approaches are quite different (table 1). The 'chain approach' is driven by the shared economic interest of the consecutive links (supplying industry - farm - processing industry - trade - retail - consumer). The main sustainability issues at this moment are to reduce waste, transport and energy. The environmental issues very often only play a role as limiting condition and are regulated by the government. The 'regional approach' chooses the environment and social-cultural aspects in a region as a

starting point, including the ways it is experienced by the people that live and work there. Several interests have to be balanced, taking into account the specific features of the region, both in the physical and the social sense. Working on the transition to sustainability through the primary producers, joined per sector, is called the 'sector approach'. Traditionally, farmers are organized by production sectors to stand stronger as suppliers in the free market. The sector approach mostly focuses on technical innovations to increase yields, improve product quality and to reduce the emission and the use of resources.

*Table 3.1: Context of the three approaches examined*

<b>Approach</b>	<b>Chain</b>	<b>Sector</b>	<b>Regional</b>
Motto	Profit and quality	Together we stand	Society and environment
Concept of man	Consumer	Producer	Land user/inhabitant
Driving force	Consumer demand	Joint interest	Livability
Strengths	World market orientation Integration over production chain	Degree of organisation Knowledge transfer and technology	Social support Spatial design
Weaknesses	Drop-outs Few big players Sustainability is hard to sell	Little control: farms are chained and captured in the region Majority delays innovation	Process control Knowledge transfer Friction participation versus innovation
Network	Worldwide	National	Regional (platform)
Business	Chain players	Farmers organisations	Individual entrepreneurs
Government	National and EU	National and EU	Province Water board Municipality
NGO's	Consumers interest Nature & environment 3 <sup>d</sup> world development Labour organisations	Dependent on regional or chain initiatives	Nature & environment Regional landscape
Knowledge	Own R&D and Research institutes	Research institutes Extension services	Dependent on actors involved

Figure 2 summarizes the contribution to sustainability of the three approaches that we deduced from the gathered information in this study. The figure is meant to give a first impression of the difference in focus on People, Planet and Profit and is not meant to rate the approaches. In all approaches and at all scales, profit is a boundary condition for sustainability; without sustainable finance, the focus on People and Planet would not last. Obviously, on the local scale and in present time the approaches differ: the chain approach focuses on Profit, while in the regional approach People and Planet (landscape, liveability) get more attention. The sector approach takes an intermediate position and is mainly focused on Profit and Planet. The figure does not distinguish between specific sectors (arable, animal, horticulture, etc.), although they contribute differently. The chain approach pays most attention to international issues,

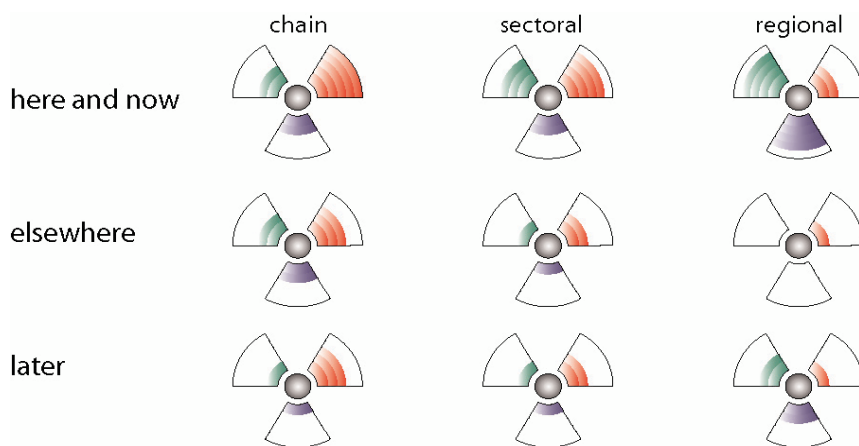


Figure 3.2: Comparison of the Chain, sectoral and regional approaches. The contribution to sustainability by each approach is indicated by the colouring of the different pies, i.e., green for Planet, red for Profit and blue for People.

while the regional approach mainly concentrates on the smaller (regional) scales. Here too, the sector approach takes an intermediate position as some sectors are strongly connected to international chains. All approaches have a heavy emphasis on the current situation and pay less attention to future issues.

Although the interests of next generations (later) and other places (elsewhere) are addressed insufficiently, the three approaches appear to be quite complementary as far as the three P's are concerned.

### **Relation with transition process and associated network**

How can we make use of the complementarities of the approaches in the transition towards sustainable agriculture? To answer this question we need to go into the transition process. Ros et al. (2003) divided the transition process into 6 so-called arena's, focused activities (see also figure 1 of chapter 1).

Especially during the first two arena's (problem perception, imaging the future) it is important to involve actors from outside the traditional network to make sure that all sustainability aspects get proper attention during the transition process. Industries, for instance, tend to seek solutions in the production chain, whereas it might be necessary to take the effects of each link on the nearby environment into account. Inhabitants, on the other hand, tend to organize a local or regional interest group to fight the deterioration of environmental quality. However, it might be useful to seek solutions in the production chain or sector. In the first phases of the transition process it is important that problems are not transferred but shared, and that solutions are searched from different perspectives. The strengths of the different approaches can be utilized during the next arena's when plans have to be worked out. It is important to mutually report results and to see if separate plans have to be retuned. At those moments the process can or should switch between the three approaches.

In order to stimulate switching between the three approaches during the transition process, overlaps between the associated networks have to be organized, especially during the first two arena's (figure 4). Traditionally, there is an overlap between the chain and the sector networks, as primary production sectors are one of the links of the chain. The regional and sector networks may be linked by the individual farms from a sector in a certain region. However, links between the regional and chain networks are sporadic. Farms may indeed form part of chain, sector and regional network, but individually they exert insufficient steering power to reach an integrated approach. Actually, the problem of integration of all sustainability

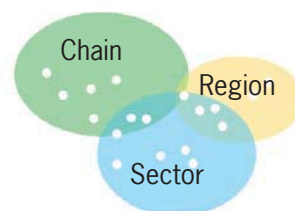


Figure 3.3: Networks associated with the three approaches

aspects in the primary production process is transferred to the farmer. To prevent this, there should be overlap between the three networks. Either the actors that are traditionally associated with each of the approaches or a governmental organization should take the initiative to broaden the network at the beginning of a transition. A stakeholder analysis will be useful at this stage.

### **References**

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