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The Challenge of Reaching Transparency: 'T-readiness' of Enterprises and Sector Networks

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ABSTRACT

Discussions on the safety and quality of food as well as growing interest in the sustainability of the production, distribution and consumption of food have contributed to the emergence of 'transparency' as a critical success factor for the food sector. However, reaching transparency for different stakeholders from different backgrounds and cultural identities is a dynamic process which depends on certain capabilities of enterprises and organizations along the food value chain but also on the realization of a fitting communication scheme within the sector. This discussion asks for the identification and utilization of an indicator that could identify deficiencies and support enterprises and the sector in reaching a level of transparency that could serve specified transparency needs.

1   Overview

With increasing requirements on the characteristics of food production and food products from consumers, policy, industry and any other stakeholders along the food value chain, the provision of 'transparency' has become an important issue in the design and management of food chains and networks (CIAA, 2007). The broad range of requirements from the different stakeholders is usually captured under the general term *sustainability* representing a multidimensional view of environmental, economic, and social impact domains (Aiking and Boer, 2004).

The relevance of impact domains for enterprise and food chain management initiatives is subject to interests of markets, society, policy or other interest groups. Global Warming, Biodiversity, Fairness in Trade or Food Quality and Safety are just a few examples of impact domains that presently receive specific attention. It is evident, that the food sector is confronted with an increasing diversity in the relevance of impact domains.

For serving the different interests in sustainability domains, food chain actors need to provide the appropriate information on the relevant domain characteristics of their production and products. *Transparency*' is reached if the requested information is being provided. However, reaching transparency involves a number of complexities:

1.   The information interests of consumers, policy or other stakeholders have to be identified.
2.   The information necessary for serving the interests has to be clarified regarding a.o. source, content, recipient, processing needs, format, and ownership.
3.   Enterprises need to have the technological, organizational, and intellectual capability as well as the legal and contractual right to collect, process, provide, and communicate the requested information.
4.   Enterprises involved in the production of food products along the food value chain need to operate on a similar level of expertise and capability and participate in a communication scheme which assures that the communication of information along the food value chain from its source until its destination is feasible and operational.

2   T-readiness for serving transparency needs

If the first three complexities have been dealt with, enterprises within the food network are ready to serve specified transparency needs. This could be expressed as 'T-readiness' at enterprise level, a term which is related to the concept of 'E-readiness' (Bui et al., 2003) which was initially used to describe a country's ability to use information and communication technologies (ICT) for economic development. With an enterprise view, e-readiness can be considered a subset of T-readiness which involves a technological base but reaches far beyond.

However, serving transparency needs of stakeholders towards the end of the food value chain including consumers requires a level of chain or network development where

   a)   trading partners operate on a similar level of T-readiness and

   b)   participate in a communication scheme that allows to integrating relevant information from all

           stages of the food value chain.

In a sector with changing trade relationships within a network of enterprises along the food value chain, such requirements would need to build on sector wide agreements, comparability in enterprise based T-readiness and the organization and operation of fitting communication schemes within the trading network ('T-readiness' at sector level).

The sector challenge is a major development barrier in serving transparency needs of stakeholders that depend on information involving different enterprises along the food value chain, as the organization of an appropriate level of T-readiness within the sector is beyond the decision competence of individual enterprises. Furthermore, enterprises that invest in reaching higher levels of transparency might not be able to generate benefits as long as the sector's level of T-readiness is not improved accordingly. Improving a sector's ability to serve transparency needs beyond what individual enterprises could achieve requires some kind of coordination scheme. It is evident, that countries with well developed organizational communication infrastructures have a potentially better base for reaching sector wide agreements for joint action than countries without. As a consequence, one can conclude that improvements in T-readiness are closely linked with the quality of a country's organizational infrastructure.

3   Research challenge

With the increasing interest of a.o. consumers, industry, and the society in the impact of food production alternatives on various sustainability domains, the realization of transparency becomes a critical success factor for the sector's long term development towards sustainability. It requires the understanding of transparency and information needs but, in addition, involves a research challenge that asks (for any specified transparency requirement at e.g. consumers' end) to

   a)   analyze the required and actual level of T-readiness at enterprise and sector level,

   b)   analyze the sector's organizational infrastructure for coordination support, and to

   c)   identify deficiencies, development barriers and development needs.

Meeting this challenge requires a multidisciplinary approach where economists, food scientists, engineers, information scientists and others may need to cooperate.

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