



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

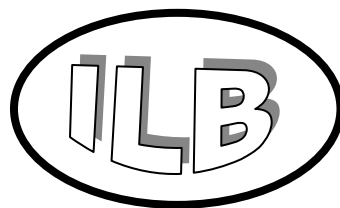
# System Dynamics and Innovation in Food Networks 2012

*Proceedings of the 6<sup>th</sup> International European Forum on System Dynamics and Innovation in  
Food Networks, organized by the International Center for Food Chain and Network  
Research, University of Bonn, Germany  
February 13-17, 2012, Innsbruck-Igls, Austria  
officially endorsed by*

*EAAE (European Association of Agricultural Economists)  
IAMA (International Food and Agribusiness Management Association)  
AIEA2 (Assoc. Intern. di Economia Alimentare e Agro-Industriale)  
INFITA (Intern. Network for IT in Agric., Food and the Environment)*

**edited by**

**U. Rickert and G. Schiefer**



© 2012, Universität Bonn-ILB, Germany,  
**ISSN 2194-511X**

**Published by**  
Universität Bonn-ILB Press, Bonn  
(Rheinische Friedrich-Wilhelms-Universität Bonn,  
Institut für Lebensmittel- und Ressourcenökonomik)

**Order Address:**  
Department of Food and Resource Economics, University of Bonn  
Meckenheimer Allee 174, D-53115 Bonn, Germany  
Phone: ++49-228-733500, Fax: ++49-228-733431  
e-mail: uf.ilr@uni-bonn.de  
**Printed by**  
Universitätsdruckerei der Rheinischen Friedrich-Wilhelms-Universität  
Bonn

## **Sustainability Management in Agribusiness: Challenges, Concepts, Responsibilities and Performance**

***Nina Friedrich, Matthias Heyder, and Ludwig Theuvsen***

*Georg-August University of Göttingen*

*Department of Agricultural Economics and Rural Development*

*Platz der Göttinger Sieben 5, 37073 Göttingen, Germany*

*nina.friedrich@agr.uni-goettingen.de; Matthias.Heyder@agr.uni-goettingen.de ;*

*Theuvsen@uni-goettingen.de*

### **Abstract**

The idea of sustainable management has recently gained growing attention in the agribusiness sector. This is mainly due to a widespread discontent with the industrialization of agricultural production and food processing and growing public pressure on agribusiness firms to implement more sustainable management practices. In this paper we present the results of an explorative empirical study of sustainability management in German agribusiness firms. The study shows that agribusiness firms have developed a broad understanding of sustainability management and perceive a multi-faceted spectrum of societal demands they have to meet. The most important arguments for implementing more sustainable management practices are that companies have to make sure that they are trusted by society in the long run and that the perception of a company by external stakeholders has become more and more important. The companies surveyed know quite a number of sustainability programmes and standards, but the number of companies that actually participate in these initiatives is much smaller. Nonetheless, the majority of the respondents feels that their company is more successful with regard to sustainability management than industry average.

**Keywords:** *Corporate social responsibility; external stakeholders; performance; sustainability*

### **1 Introduction**

Companies in the agribusiness sector are increasingly exposed to the public eye (JANSEN and VELLEMA 2004) and face growing pressure to move towards more sustainable management practices. This is mainly because the agribusiness sector is located at the crossroads of various societal conflicts. Some of the conflicts between agribusiness and society have a long tradition and often stem from disparities between consumers' (or other stakeholders') expectations and modern farm practices (BRUHN 2003). Intensive livestock production, for instance, is criticized for its high emissions, contributions to nutrients oversupply in areas with high livestock densities, long-distance animal transports, and low animal welfare standards. Conventional high-input arable farming is blamed for causing erosion, loss of biodiversity, pesticide residues, and nitrate emissions. Furthermore, monocultures and the high energy input of modern agriculture are criticized (JANSEN and VELLEMA: 2004).

Other conflict areas have popped up in more recent times. Meat consumption and, thus, livestock production are perceived as major contributors to global climate change (EEA 2006). Furthermore, against the background of widespread famine in developing countries, activists regard the massive use of soy beans for livestock production in industrialized countries as unethical and a contribution to "virtual land grabbing" (STEINFELD et al. 1997). Soy bean production is also a major driver of the growing prevalence of genetically modified organisms (GMOs) in world agriculture (ISAAA 2011). Due to a widespread opposition against GMOs mainly in continental Europe (GRUNERT, BREDAHL and SCHOLDERER 2003), this

development is observed with increasing ethical condemnation. Bioenergy is a comparatively new production sector but has already lost much of its green and environmentally friendly image. Oil palm farming in Malaysia and sugar cane production in Southern America, for instance, are blamed for being eco-unfriendly due to land use changes including the cutting down of rainforest (CASSON 1999). Furthermore, the “food or fuel” debate is propelled by food price spikes on increasingly volatile agricultural markets which is considered to be mainly the outcome of growing bioenergy production in industrialized countries (TANGERMANN 2011). This non-exhaustive list could easily be complemented by references to other conflicts over, for instance, the major outlines of the Common Agricultural Policy in the European Union or food safety issues (JANSEN and VELLEMA 2004).

Not only the agricultural sector but also upstream and downstream industries in the agribusiness sector face societal conflicts. Life science industries, for instance, are criticized for their biotechnology programmes contributing to the proliferation of GMOs and other controversially discussed practices such as cloning. Plant protection and fertilizer companies are being charged for systematically contaminating the environment (JANSEN and VELLEMA 2004). The food and beverage industries are blamed for deceiving consumers and promoting the consumption of too much fat, sugar, salt and alcohol and, thus, contributing to various health problems of modern societies such as obesity, coronary diseases, diabetes and alcohol abuse (SIMON 2006). Unfair trading practices at the expense of small-scale farmers in developing countries have provoked public debates (BACON et al. 2008). In work intensive industries such as the meat industry, even in industrialized countries such as Germany working conditions are often poor and various meat scandals have contributed to a bad industry image and a loss of consumer trust in food quality and safety (SPILLER et al. 2005).

The perception of the wider public is not only increasingly critical and risk-conscious (HADDOCK 2005); the influence capacity of stakeholders is rapidly growing (GERLACH 2006) and protests, for instance against new investments into livestock production or bioenergy plants, have developed to an ever more professional level (BECKER and OPPERMAN 1994). Nongovernmental organizations (NGOs) such as Greenpeace or World Wildlife Fund have accumulated much social capital and, thus, are trusted by most consumers to a much larger extent than industry representatives or scientists and use their good relations with the mass media for promoting their ideas and organizing protests against industry action (JÄCKEL and SPILLER 2006).

It can be summarized that there is a “general discontent with the industrialization of agricultural production and food provision systems has put agribusiness and the food industry at the core of societal debates” (JANSEN and VELLEMA 2004: 4). This development has put pressure on the agribusiness sector in general and individual companies to avoid controversially discussed management practices and improve the sustainability of products and processes. In this sense it has repeatedly been argued that agribusiness firms must implement changes in the way they do their business to maintain their “license to operate” and their “license to deliver” to the ever more demanding markets in the post-modern societies of industrialized countries (VELDKAMP et al. 2008; HEYDER and THEUVSEN 2008).

Only very little research has been done so far on how agribusiness firms perceive external pressures for more sustainability and how they react to external stakeholders’ (consumers’, customers’, nongovernmental organizations’ etc.) demand for more sustainable management practices. Existing literature tends to focus on specific aspects, for instance

animal welfare (DEIMEL et al. 2010) or media coverage of societal conflicts around agribusiness (FEINDT and KLEINSCHMIT 2011; BÖHM, KAYSER and SPILLER 2011). Therefore, a comprehensive understanding of sustainability management in agribusiness firms is still missing.

Against this background it is the objective of this paper to highlight how agribusiness firms perceive external pressures concerning their sustainability, how they react to these pressures and how they have defined internal responsibilities for sustainability management. Furthermore, the paper sheds some light on the success and performance effects of sustainability management. In section 2 we introduce some basics about sustainability management, corporate social responsibility (CSR) and the CSR-performance relationship. Section 3 presents materials and methods and section 4 selected findings. In the final section we draw some conclusions and highlight future research directions.

## **2 Sustainability, Corporate Social Responsibility, and Performance**

The concept of sustainability has recently gained growing attention in the agribusiness sector (FRITZ and SCHIEFER 2008). „People, planet, and profit“ – this is the widely known trilogy of sustainability. It has been derived from the popular notion of sustainability as defined by the World Commission on Environment and Development: „Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs“ (BRUNDTLAND REPORT 1987). In 1992, the UN Conference on Environment and Development declared sustainable development as a global vision. The delegates identified economic efficiency, social justice and the protection of natural resources as basic and equally important principles. Therefore, economic, social and ecological sustainability are considered cornerstones of management practices which do not only aim at increasing profits and serving firm owners but take into account a broader range of stakeholder interests and societal issues (CRANE and MATTEN 2004).

In a management context, sustainability is often referred to through a corporate social responsibility (CSR) approach. This concept has gained a prominent position in the general management literature (DE BAKKER, GROENEWEGEN and DEN HOND: 2005) despite some uncertainties about its exact definition and content (CARROLL 1999) and the prevalence of similar and in some cases overlapping concepts such as corporate citizenship, accountability or good corporate governance (Hiss 2006). A multi-stakeholder dialogue conducted by the European Union has provided some clarification. It was concluded that CSR can be defined as a concept that on a voluntary basis integrates social and environmental demands into business operations and the relationships with firm stakeholders (EUROPEAN COMMISSION 2001). In a very similar way, the World Business Council on Sustainable Development defines CSR as a concept that embraces “the integration of social and environmental values within a company’s core business operations and to the engagement with stakeholders to improve the well-being of society” (WBCSD 2002). CSR, thus, means the responsibility of enterprises for the effects of their business operations on the environment, their employees and the wider society.

Based on this conceptual understanding of CSR, CARROLL (1998) distinguishes between a firm’s economic, legal, ethical and philanthropic responsibility. An enterprise acts economically responsible, if it is offering socially desirable goods and services at fair prices.

Through selling these goods and services, the enterprise secures employment and contributes to the wealth of society. Legal responsibility requires companies to act in compliance with laws. Ethical responsibility includes compliance with rules and values of a society even if they are not legally codified. Philanthropic responsibility stands for philanthropic actions of enterprises, for instance charitable giving or donation of voluntary labor. HEYDER (2010) sees these four aspects of a firm's responsibility based on the fundament of the triple bottom line of sustainability which reflects a company's economical, ecological and social performance (figure 1). CSR, thus, is a concept seeking to balance the economical, ecological, and social performance of an enterprise (LOEW et al. 2004; ELKINGTON 1994).



**Figure 1.** Firm responsibilities and the triple bottom line of sustainability (HEYDER 2010)

It has often been discussed in how far CSR activities and more sustainable management practices could have an influence on financial firm performance. Proponents of the neo-classical view of the firm, on one hand, are skeptical about this. They perceive the provision of employment and taxes and the maximization of shareholder value as the only social responsibilities companies have (FRIEDMAN 1970). On the other hand, behavioural theorists argue that it is in the enlightened self-interest of firms to undertake various forms of CSR. The benefits of taking a broader perspective that also includes ecological and social goals encompass enhanced reputation, stronger employee loyalty and legitimacy for firm operations granted by the wider public, governments, employees and other stakeholders (MOIR 2001: 17). Similar arguments can be deduced from the resource dependence perspective in organization theory and the stakeholder approach. Resource dependence theory argues that companies depend on critical resources owned by external parties, for instance suppliers, customers, or regulators, and that it is crucial to manage the dependencies stemming from these relationships (PFEFFER and SALANCIK 1978). Improving business relations with critical third parties, for instance regulators or a powerful nongovernmental organizations, can require the implementation of more sustainable management practices. Stakeholder theory argues in a similar vein (FREEMAN 1984). Depending on a stakeholder's potential for cooperation and threat potential (SAVAGE et al. 1991), it can be in the best interest of a company to improve the sustainability of its management practices and implement a more advanced CSR concept if this stakeholder expects a company to do this.

Another theoretical strand takes a moral approach stressing social expectations. In this context a moral obligation is called for because companies are owners of resources and skills and, therefore, should participate in solving social problems. In particular, the reference to social legitimacy is noteworthy. MOIR (2001: 17) argues that there is “some form of social contract”. This perspective implies that there are social expectations that a legitimate business would conduct in a specific manner. A similar idea prevails in the neo-institutional approach in organization science. It assumes that companies are subject to economic as well as social expectations. It is hypothesized that meeting social expectations is essential for gaining legitimacy and the ongoing support by influential groups (MEYER and ROWAN 1977). This is the more important the more critically observed an industry is and the higher the expectations concerning firm behavior are.

A multitude of empirical studies have tried to empirically investigate the performance effects of CSR. Some of these studies show that companies pursuing CSR strategies are more successful than others (ORLITZKY et al. 2003; MACKEY et al. 2007; CRAMER 2002). In line with the theoretical arguments outlined above, it can be assumed that the better performance of enterprises that are regarded as acting responsibly is due to better reputation, higher customer loyalty or higher legitimacy. Nonetheless, there are also studies that do not find a positive performance effect of CSR (MCWILLIAMS and SIEGEL 2000) but only positive effects on company reputation (HEYDER 2010). Due to additional costs of CSR, some authors even expect lower performance in firms behaving more sustainably. Finally it has also been argued that CSR is linked to past performance since only financially successful companies can afford CSR strategies (MCGUIRE, SUNDGREN and SCHNEEWEIS 1988). But high financial performance may also hamper CSR. BARNETT (2007: 808), for instance, argues that CSR activities by firms with a very good corporate financial performance (CFP) could eventually be recognized critically because “excessive CFP indicates that a firm is extracting more from society than it is returning and can suggest that profits have risen because the firm has exploited some of its stakeholders in order to favor shareholders and upper management.” It can be summarized that the relationship between CSR and financial performance is complex and, thus, clear cause-effect relationships are difficult to examine.

### **3 Material and Methods**

In order to answer the research questions outlined above, a comprehensive explorative empirical study of sustainability management in German agribusiness firms was conducted in collaboration with the University of Giessen and the Institute for Sustainable Management (ifnm), Bonn. Between March and August 2011, 142 firms from various agribusiness subsectors were surveyed through an online questionnaire. The study focused on perceived external pressure to improve the sustainability of products and processes, the development status of the firms' sustainability management, the CSR measures implemented in the companies surveyed, and the success of sustainability management. Data analysis has started with univariate analyses with SPSS; additional bivariate and multivariate analyses will follow in the next phase.

As most of the respondents (79.6 %) are responsible for sustainability in their company, a good quality of the answered questionnaires could be expected. The dominating industry sectors in our survey are retailers (14.2 %), slaughtering and meat processing (13.5 %),

bakery products (10.3 %), fruit and vegetable processing (9.7 %), confectionary processing (9.0 %) and beverage processing (7.1 %). The missing 36.2 % belong to eight other subsectors, such as fishery products or milk processing. In reference to company size, the answers are widespread. We find 33.9 % small companies with an average business turnover below 10 mill. €; 32.2 % generate a turnover between 10 and 100 mill. €, and 33.9 % have an annual turnover of more than 100 mill. €. Regarding their internationalization strategies, most of the companies surveyed do business in Germany, Western Europe, and Eastern Europe including Russia.

## 4 Results

### Challenges

Sustainability embraces ecological, economic and social aspects. This widely accepted view is – despite a slightly higher emphasis on ecological aspects – also shared by the companies in our survey (figure 2). The answers reflect a balanced understanding of sustainability management which has overcome the narrow-minded view in microeconomics that the maximization of shareholder value is the ultimate company goal (FRIEDMAN 1970; RAPPAPORT 1986). Instead it is much more in line with approaches which propose that companies usually have (or should have) a broad goal spectrum including, but not restricted to, financial performance goals (HENRI 2004; KAPLAN and NORTON 1996). A clear majority also agrees that sustainability management is something beyond minimum legal requirements. This perception is in line with many definitions of sustainability management and CSR (for instance, EUROPEAN COMMISSION 2001).

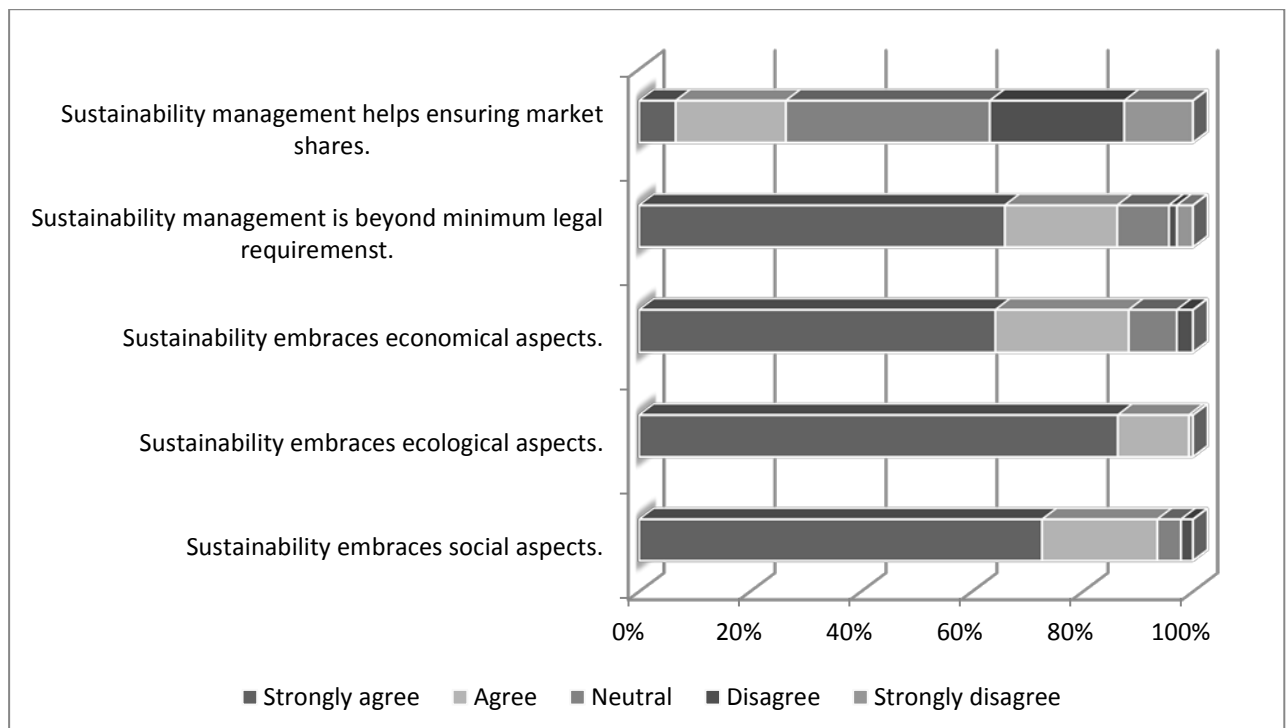
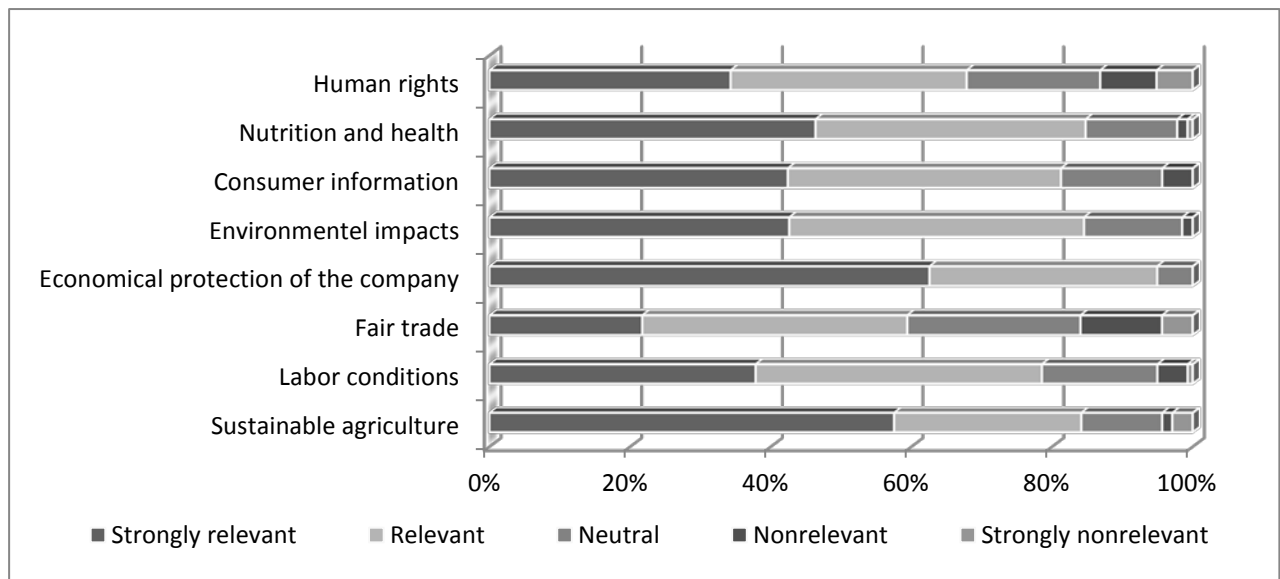


Figure 2. Aspects of sustainability management

In line with their broad understanding of sustainability, the companies surveyed perceive a multi-faceted spectrum of societal demands they have to meet. It includes such diverse aspects as sustainable agriculture, labor conditions, consumer information and human rights



(figure 3). The only topic that receives only moderate agreement is fair trade since this only affects traders and processors of tropical products such as cocoa or coffee (RAYNOLDS, MURRAY and WILKINSON 2007).



**Figure 3.** Societal demands faced by agribusiness firms

According to the neo-institutional approach, companies are subject to external pressures from their economic and institutional environments (MEYER and ROWAN 1977). In a similar vein, stakeholder and behavioural theories point to the multitude of stakeholders companies have and which can – to various degrees – influence management practices (FREEMAN 1984; SAVAGE et al. 1991). This situation is also reflected in the companies' answers to the question whom they consider to be their central addressees of sustainability management. Figure 4 reveals that the respondents perceive the need to meet the demands of various stakeholders. Employees, consumers, and future generations are most frequently mentioned. Interestingly, nongovernmental organizations are not major addressees of corporate CSR activities although these organizations are often described as „social change agents“ (SIMSA 2001) which have the power to strongly influence the management practices of companies through challenging their legitimacy.

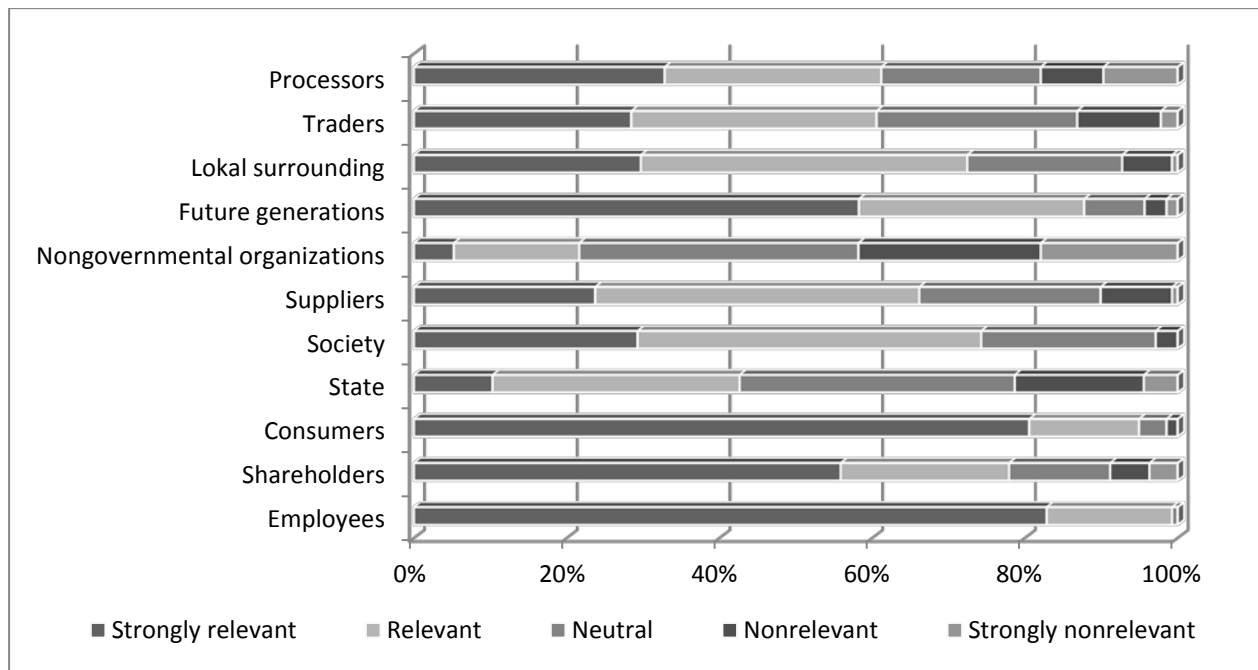


Figure 4. Addressees of sustainability management

The respondents mention various reasons why agribusiness firms tackle the issue of sustainability (figure 5). The two central arguments are that companies have to make sure that they are trusted by society in the long run and that the perception of a company by external stakeholders has become more and more important. Both arguments reflect the pressures from institutional environments which the companies surveyed have to meet if they want to secure their “license to operate” and “license to deliver” (Hiss 2006). The perceived demand to meet the requirements of important customers, for instance large retailers, to improve sustainability can be interpreted in a similar way.

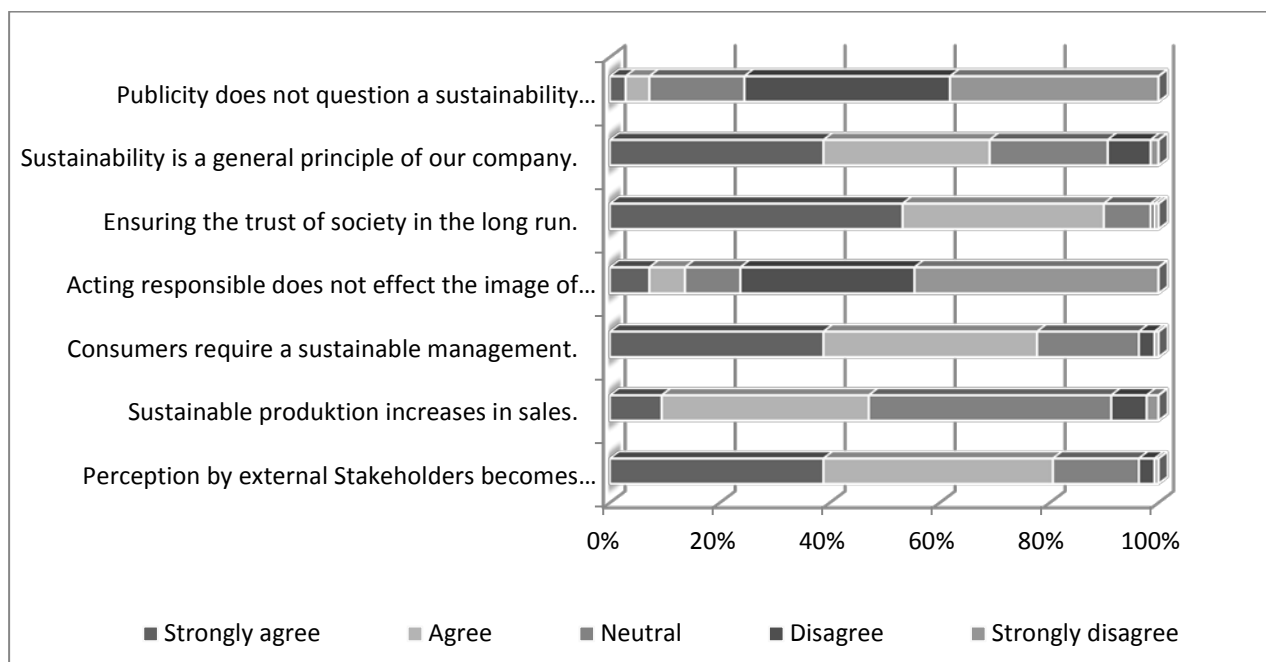


Figure 5. Reasons for improved sustainability management

All in all it becomes clear that agribusiness firms face various challenges from manifold internal and external stakeholders. This raises the questions which concepts they apply to meet these challenges.

### Concepts

Sustainability and CSR are new topics on the management agenda of agribusiness firms. 11.3 % of the respondents say they have not implemented any form of sustainability management as yet. Only 38.7 % of the firms surveyed have implemented sustainability management at least five years ago; 50 % did so within the last five years. Not surprisingly, only 68.3 % of the companies surveyed allocate budgets for sustainability management. The infant status of corporate sustainability management is also reflected in the development status of planning activities. The survey reveals that only 63 companies have already defined sustainability criteria and collect relevant information. A small minority of 29 companies grade their sustainability management systems as “advanced”. 11 companies have implemented a benchmarking process in order to compare their own sustainability management with other companies.

Due to the various facets of sustainability, the companies surveyed have implemented diverse measures to improve their sustainability. Resource-efficient production, reduction and recycling of waste materials, and the abatement of greenhouse gas emissions are mentioned most frequently (figure 6). These measures have in common that they are characterized by complementarity between ecological and economic goals. More demanding sustainability concepts that could raise costs get less affirmation.

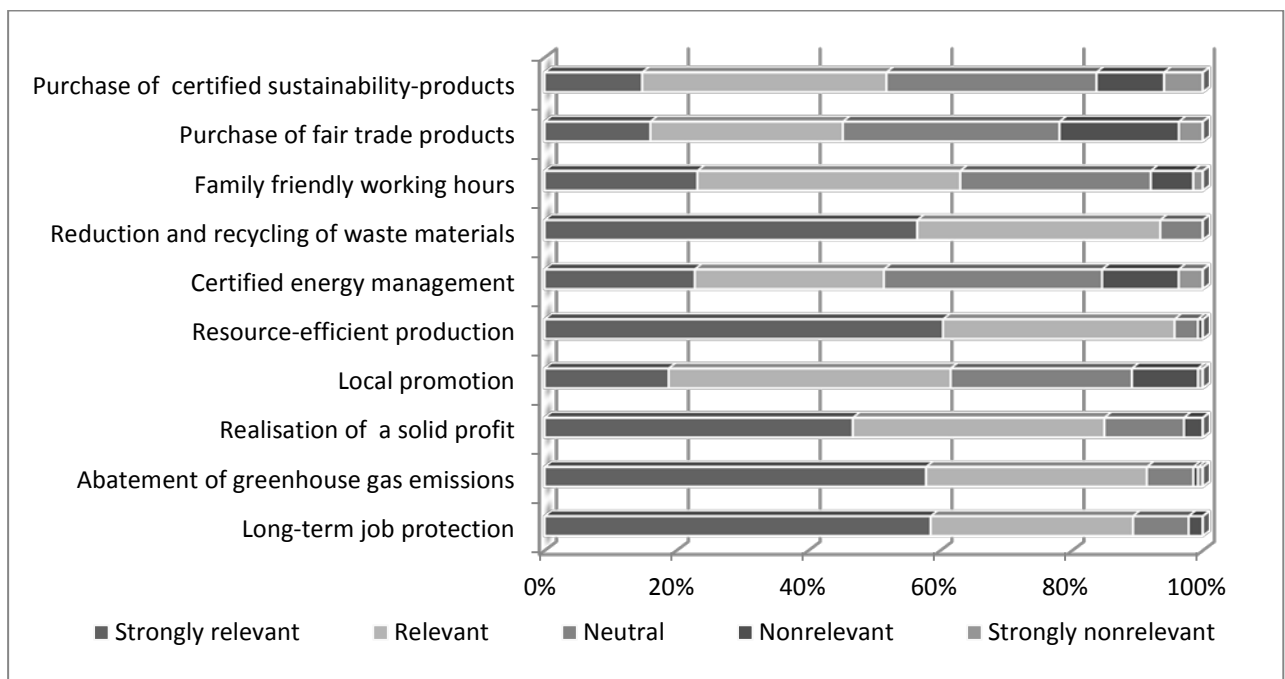


Figure 6. Sustainability management measures

In the agribusiness sector certification systems have gained considerable importance over the last decade (HATANAKA, BAIN and BUSCH 2005; GAWRON and THEUVSEN 2009). Some of these systems aim at improving food safety, whereas the majority differentiates agricultural and food products by highlighting organic production, fair trade, higher animal welfare

standards, regional production or other process characteristics (THEUVSEN and SPILLER 2007). Certification systems are also widely prevalent in sustainability management where they guarantee certain ecological or social standards. Many of these certification systems use labels to help companies to communicate their efforts to the wider public or other stakeholders. Other systems refrain from granting labels but assist companies in analyzing the sustainability of their products and processes (for instance, calculation of greenhouse gas emissions) or reducing or compensating negative ecological effects of company activities through, for instance, the buyout of carbon credits (THEUVSEN 2011).

The companies surveyed know quite a number of sustainability programmes and standards. Fair Trade (124 respondents), ISO 14000/EMAS (85), Rainforest Alliance (83), Marine Stewardship Council (77), Roundtable on Sustainable Palm Oil (65), the OECD Guidelines for Multinational Enterprises (59), ISO 26000 (53), Carbon Reduction Label (48) and the Business Social Compliance Initiative (42) are mentioned most frequently. The number of companies that already actively participate in one of these initiatives or have acquired a label is much smaller. ISO 14000/EMAS (31 respondents), Roundtable on Sustainable Palm Oil (21), the Social Compliance Initiative (14), the ILO Convention (14), Fair Trade (14), the OECD Guidelines for Multinational Enterprises (13), Marine Stewardship Council (12), ISO 26000 (11) and the Global Reporting Initiative are mentioned by at least ten companies.

Since external pressures from various stakeholders are major drivers of improved sustainability in the agribusiness sector, communication with these stakeholders is paramount. Communication through the internet is perceived as most appropriate. Printed environmental and social reports, once cornerstones of sustainability communication in many companies, are graded rather inappropriate (figure 7). These assessments reflect a general trend not only in the agribusiness sector to more heavily rely on electronic communication (HETTLER 2010).

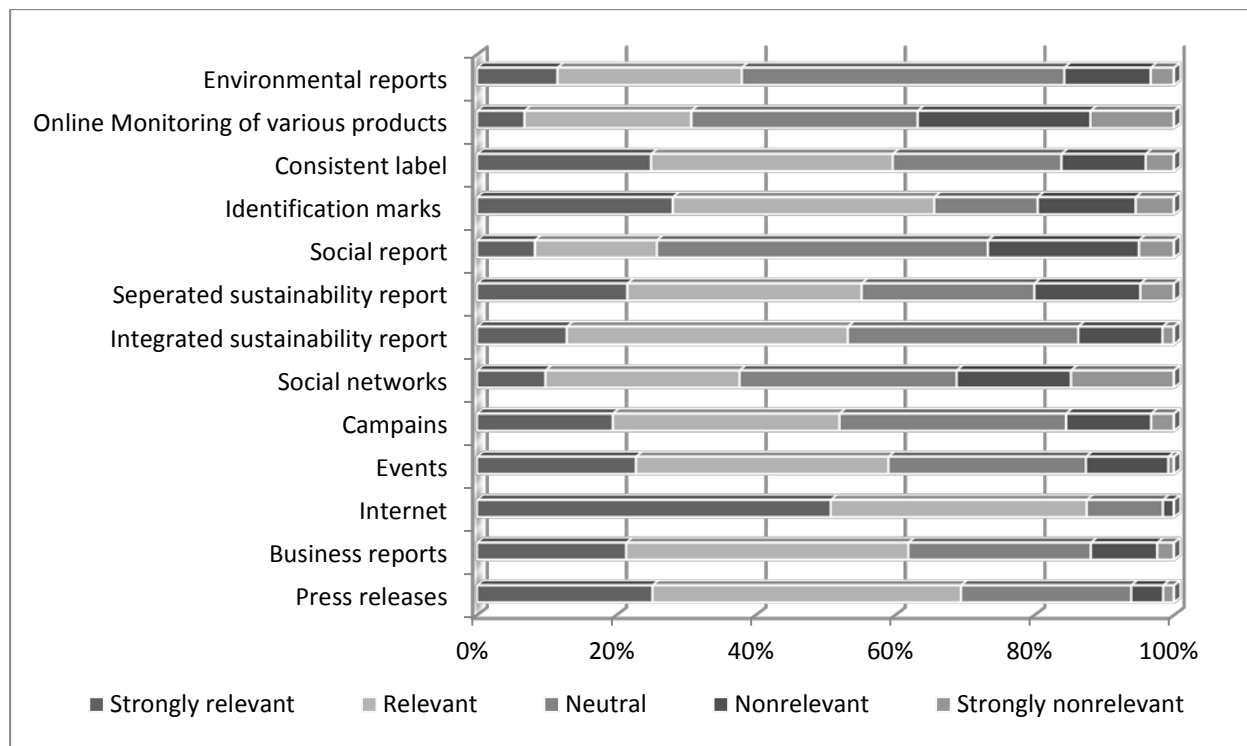


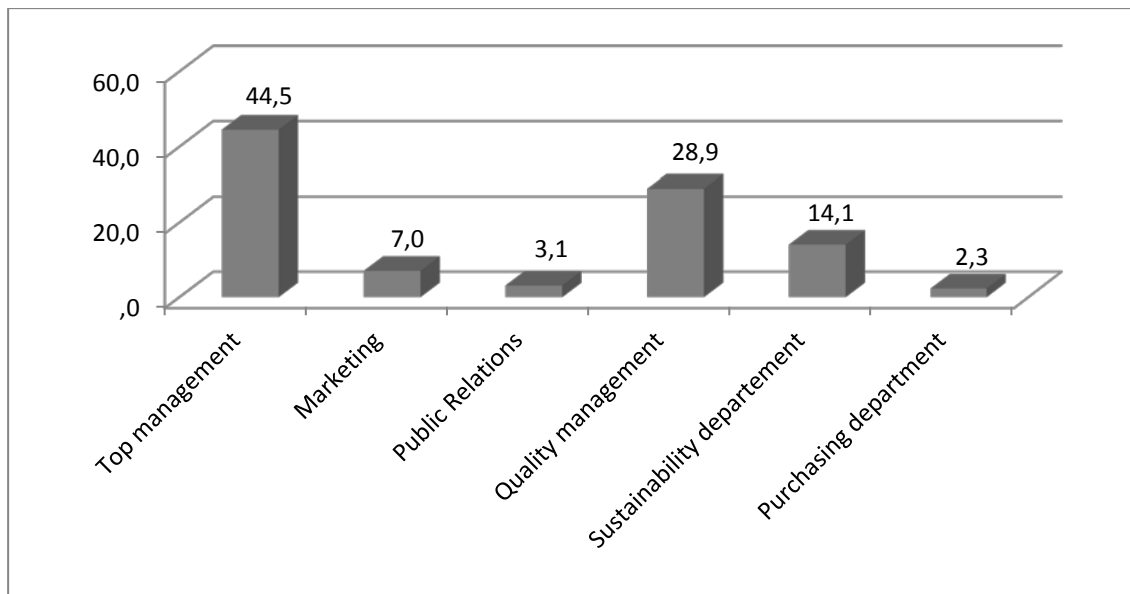
Figure 7. Appropriateness of various media for sustainability communication

## ***Responsibilities***

Organization structures are influenced by various external (for instance, technological and market uncertainty, customer structure, competition) and internal (firm age, size, production technology, management philosophy etc.) contingency factors (SCOTT 2001). Where the responsibility for performing a specific task is located within a company and how much authority is granted to the organizational unit responsible for performing this task very much reflect the need for coordination with other tasks and the strategic relevance attributed to that task (FRESE, GRAUMANN and THEUVSEN 2012).

Against that background, it is interesting to see that the companies surveyed have implemented diverse organizational solutions. 44.5 % account sustainability management a top management task (figure 8). This reflects a high strategic relevance attributed to this task. This relevance can only be met if CSR strategies are coordinated with other strategies, for instance competitive strategies or functional strategies such as purchasing and human resource management strategies. Furthermore, top management responsibility for sustainability management guarantees sufficient financial and management resources and sufficient assertiveness in intra-firm power struggles and against competing firm goals, for instance cost cutting. In this sense, attributing sustainability management to the top management team is a strong symbol that demonstrates the high relevance of this task to internal and external stakeholders and contributes to the development of a sustainability-oriented organizational culture (SCHEIN 2004).

28.9 % of the companies have assigned sustainability management to the quality department (figure 8). This reflects the trend towards integrated quality management concepts which include various tasks closely linked to quality management such as waste management, safety-at-work management, hygiene management, or carbon dioxide management (THEUVSEN and FRIEDRICH 2012). 14.1 % have created an independent organizational unit for sustainability management. In such a central staff unit, the required competencies can be pooled so that a professional and company-wide task fulfillment is guaranteed (FRESE, GRAUMANN and THEUVSEN 2012). 10.1 % of the companies have assigned sustainability management to the marketing or the public relations department. On the one hand, this clearly reflects the need to communicate CSR activities to external stakeholders, for instance customers or the wider public. On the other hand, this solution evokes critical statements about CSR as a greenwashing of unsustainable products and processes (BAZILLIER and VAUDAY 2010).



**Figure 8.** Responsibilities for sustainability management (%)

### ***Performance***

The relationship between sustainability management or CSR and financial performance is heavily disputed (see section 2). Such disputes are difficult to resolve since corporate financial performance is a bottom-line measure which is influenced by a multitude of determinants. Nobel prize winner Herbert Simon once compared the challenge of measuring the financial effects of specific management decisions to the task of determining the effects of a Minnesota spring shower on the water volume of the Niagara Falls (SIMON et al. 1954). Therefore, it is often necessary to evaluate corporate actions by reference to more operational sub-goals or indicators (FRESE, GRAUMANN and THEUVSEN 2012).

Due to these difficulties, the respondents were first asked to assess the success of their company's sustainability management activities. In order to do so, they were summoned to compare their own company's sustainability management with the goals set, the top 5 companies in their industry and industry average. Figure 9 reveals that the majority of the companies surveyed claim to have a successful sustainability management which at least meets or even outperforms the defined benchmarks. This result can be due to a lack of representativeness of the study at hand or a systematic overestimation of the firms' development status with regard to sustainability management.

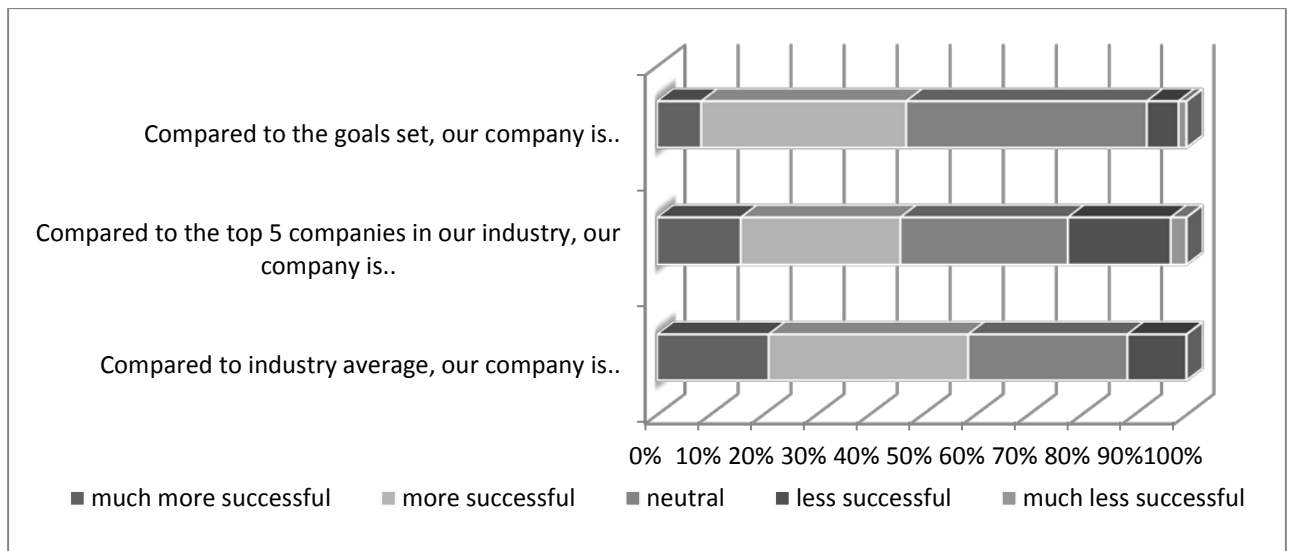


Figure 9. Success of sustainability management

## 5 Conclusions

The empirical results show that agribusiness firms have started to react to growing discussions about the sustainability of their products and business processes by implementing sustainability management or CSR activities. In most of the companies surveyed sustainability management is still in its infancy. Anecdotic evidence from interactions with firms from various agribusiness subsectors show that many companies are still in a trial-and-error phase and which they seek to find out how to tackle sustainability issues. Many companies are, for instance, uncertain whether it is better to offensively communicate improvements with regard to the social or ecological sustainability of products and processes or to refrain from comprehensive communication with stakeholders. Therefore, it can be assumed that many companies will readjust their sustainability management approach after some time.

This indicates that it could be useful to track the implementation of sustainability management concepts in the agribusiness sector over time and to see where the industry moves and whether a dominant design emerges. It could also be interesting to do more in-depth research into the contingency factors that determine the design of a firm's sustainability management approach and its effectiveness and efficiency. Finally, a detailed analysis of the communication strategies agribusiness firms apply could be informative.

## References

- Bacon, C. M., Méndez, V. E., Gliessmann, S. R., Goodman, D., and Fox, J. A. (eds.) (2008). *Confronting the Coffee Crisis: Fair Trade, Sustainable Livelihoods and Ecosystems in Mexico and Central America*. MIT Press: Cambridge, MA.
- Barnett, M. L. (2007). Stakeholder Influence Capacity and the Variability of Financial Returns to Corporate Social Responsibility. In: *Academy of Management Review*, Vol. **32**: 794-816.
- Bazillier, R., Vauday, J. (2010). The Greenwashing Machine: Is CSR more than Communication? <http://hal.archives-ouvertes.fr:hal-00448861>. Download: February 11, 2012.
- Becker, H., Oppermann R. (1994). Der Ärger mit der Landwirtschaft. Working Paper, Bundesforschungsanstalt für Landwirtschaft, Braunschweig.
- Böhm, J., Kayser, M., and Spiller, A. (2010). Two Sides of the Same Coin: Analysis of the Web-Based Social Media with Regard to the Image of the Agri-Food Sector in Germany. In: *International Journal on Food System Dynamics*, Vol. **1**, No. 3: 264-278.
- Bruhn, M. (2003). Der Landwirt als moderner Unternehmer – Ein Konzept für mehr Akzeptanz und Vertrauen, in: DLG (ed.): *Wege zu besserem Image und Ansehen*. DLG-Verlag: Frankfurt a. Main: 173-196.
- Brundtland Report (1987). Our Common Future. <http://www.un-documents.net/ocf-ov.htm#1.2>.
- Carroll, A. B. (1998): The Four Faces of Corporate Citizenship. In: *Business & Society Review*, Vol. **100**, No. 1: 1-4.
- Carroll, A. B. (1999). Corporate Social Responsibility: Evolution of a Definitional Construct. In: *Business & Society*, Vol. **38**: 268-295.
- Casson, A. (1999). The Hesitant Boom: Indonesia's Oil Palm Sub-Sector in an Era of Economic Crisis and Political Change. Program on the Underlying Causes of Deforestation, Bogor Indonesia, Centre for International Forestry Research.
- Cramer, J. (2002). From Financial to Sustainable Profit. In: *Corporate Social Responsibility and Environmental Management*, Vol. **9**, No. 2: 99-106.
- Crane, A., Matten, D. (2004). *Business Ethics. A European Perspective. Managing Corporate Citizenship and Sustainability in the Age of Globalization*. University Press: Oxford.
- de Bakker, F. G., Groenewegen, P., and den Hond, F. (2005). A Bibliometric Analysis of 30 Years of Research and Theory on Corporate Social Responsibility and Corporate Social Performance. In: *Business & Society*, Vol. **44**: 283-317.
- Deimel, I., Franz, A., Frentrup, M., von Meyer, M., Spiller, A., and Theuvsen, L. (2010). Perspektiven für ein Europäisches Tierschutzlabel. URL: <http://download.ble.de/08HS010.pdf>.
- EEA – European Environment Agency (2006). EU Greenhouse Gas Emissions Increase for Second Year in a Row. Press release. Copenhagen, June 22, 2006.
- Elkington, J. (1994). Towards the Sustainable Corporation: Win-win-win Business Strategies for Sustainable Development. In: *California Management Review*, Vol. **36**: 90-100.
- European Commission (2001). *Promoting a European Framework for Corporate Social Responsibility*. Green Paper, Brussels.
- Feindt, P.H., Kleinschmit, D. (2011). The BSE-Crisis in German Newspapers: Reframing Responsibility. In: *Science as Culture*, Vol. **20**, No. 2: 183-208.



- Franz, A., von Meyer, M., and Spiller, A. (2010). Prospects for a European Animal Welfare Label from a German Perspective: Supply Chain Barriers. In: *International Journal on Food System Dynamics*, Vol. **1**, No. 4: 318-329.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Pitman: Boston, MA.
- Frese, E., Graumann, M., and Theuvsen, L. (2012). *Grundlagen der Organisation. Entscheidungsorientiertes Konzept der Organisationsgestaltung*. 10<sup>th</sup> ed., Gabler, Wiesbaden.
- Friedman, M. (1970). The Social Responsibility of Business is to Increase its Profits. In: *The New York Times Magazine*, September 13, 1970.
- Fritz, M., Schiefer, G. (2008). Sustainability in Food Networks. Paper presented at the GEWISOLA conference, September 24-26, 2008, Bonn.
- Gawron, J.-C., Theuvsen, L. (2009). Certification Schemes in the European Agrifood Sector: Overview and Opportunities for Central and Eastern European Countries. In: *Outlook on Agriculture*, Vol. **38**, No. 1: 9-14.
- Gerlach, S. (2006). *Relationship Management im Agribusiness*, Ph.D thesis, University of Göttingen.
- Grunert, K. G., Bredahl, L., and Scholderer, J. (2003). Four Questions on European Consumers' Attitudes towards the Use of Genetic Modification in Food Production. In: *Innovative Food Science and Emerging Technologies*, Vol. **4**: 435-445.
- Haddock, J. (2005). Consumer Influence on Internet-Based Corporate Communication of Environmental Activities: the UK Food Sector. In: *British Food Journal*, Vol. **107**, No. 10, pp. 792-805.
- Hatanaka, M., Bain, C., and Busch, L. (2005). Third-party Certification in the Global Agrifood System. In: *Food Policy*, Vol. **30**: 354-369.
- Henri, J.-F. (2004). Performance Measurement and Organizational Effectiveness: Bridging the Gap. In: *Managerial Finance*, Vol. **30**: 93-123.
- Hettler, U. (2010). *Social Media Marketing. Marketing mit Blogs, Sozialen Netzwerken und weiteren Anwendungen des Web 2.0*. Oldebourg: Munich.
- Heyder, M. (2010). *Strategien und Unternehmensperformance im Agribusiness*. Cuvillier: Göttingen.
- Heyder, M., Theuvsen, L. (2008). Legitimizing Business Activities Using Corporate Social Responsibility: Is there a Need for CSR in Agribusiness? In: M. Fritz, U. Rickert and G. Schiefer (Eds.): *System Dynamics and Innovation in Food Networks 2008*. Bonn: 175-187.
- Hiss, S. (2006). *Warum übernehmen Unternehmen gesellschaftliche Verantwortung: Ein soziologischer Erklärungsversuch*. Peter Lang: Frankfurt a. Main and New York.
- ISAAA (2011). *Global Status of Commercialized Biotech/GM Crops 2011*. ISAAA Brief 43-2011.
- Jäckel, K., Spiller, A. (2006). Public Orientation im Agribusiness: Eine empirische Studie zur Interaktion von Unternehmen und Gesellschaft. In: Bahrs, E. et al. (eds.): *Unternehmen im Agrarbereich vor neuen Herausforderungen*. Landwirtschaftsverlag: Münster-Hiltrup: 327-337.
- Jansen, K., Vellema, S. (Eds.) (2004). *Agribusiness and Society: Corporate Responses to Environmentalism, Market Opportunities and Public Regulation*. Zed Books, London.
- Kaplan, R. S., D. P. Norton (1996). *The Balanced Scorecard: Translating Strategy into Action*. Harvard Business School Press: Boston, MA.
- Loew, T., Ankele, K., Braun, S., and Clausen J. (2004). *Bedeutung der internationalen CSR-Diskussion für Nachhaltigkeit und die sich daraus ergebenden Anforderungen an Unternehmen mit Fokus Berichterstattung*. Münster and Berlin.

- Mackey, A., Mackey, T. B., and Barney, J. B. (2007). Corporate Social Responsibility and Firm Performance: Investor Preferences and Corporate Strategies. In: *Academy of Management Review*, Vol. **32**: 817-835.
- McGuire, J.B., Sundgren, A., and Schneeweis, T. (1988). Corporate Social Responsibility and Firm Financial Performance. In: *Academy of Management Journal*, Vol. **31**: 854-872.
- McWilliams, A., Siegel, D. (2000). Corporate Social Responsibility and Financial Performance: Correlation or Misspecification? In: *Strategic Management Journal*, Vol. **21**: 603-609.
- Meyer, J. W., Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. In: *American Journal of Sociology*, Vol. **83**: 340-363.
- Moir, L. (2001). What Do We Mean by Corporate Social Responsibility? In: *Corporate Governance*, Vol. **1**, No. 2: 16-22.
- Orlitzky, M., Schmidt, F. L., and Rynes, S. L. (2003). Corporate Social and Financial Performance: A Meta-analysis. In: *Organization Studies*, Vol. **24**: 403-441.
- Pfeffer, J., Salancik, G. R. (1978). *The External Control of Organizations: A Resource Dependence Perspective*. Harper and Row: New York.
- Rappaport, A. (1986). *Creating Shareholder Value: A Guide for Managers and Investors*. Simon & Schuster, New York.
- Raynolds, L. T., Murray, D. L., and Wilkinson, J. (eds.) (2007). *Fair Trade: The Challenges of Transforming Globalization*. Routledge: New York.
- Savage, G. T. et al. (1991). Strategies for Assessing and Managing Organizational Stakeholders. In: *Academy of Management Executive*, Vol. **5**, No. 2: 61-75.
- Schein, E. H. (2004). *Organizational Culture and Leadership*. 3<sup>rd</sup> ed., Jossey-Bass: San Francisco.
- Scott, W.R. (2001). *Organizations: Rational, Natural, and Open Systems*. 5<sup>th</sup> ed., Prentice Hall, Englewood Cliffs NJ.
- Simon, H. A., Guetzkow, H., Kozmetsky, G., and Tyndell, G. (1954). *Centralization vs. Decentralisation in Organizing the Controllers Department*. Controllershship Foundation: New York.
- Simon, M. (2006). Can Food Companies Be Trusted to Self-regulate? An Analysis of Corporate Lobbying and Deception to Undermine Children's Health. In: *Loyola of Los Angeles Law Review*, Vol. **39**: 169-236.
- Simsa, R. (2001). *Gesellschaftliche Funktionen und Einflussformen von Nonprofit-Organisationen: Eine systemtheoretische Perspektive*. Peter Lang: Frankfurt a. Main and New York.
- Spiller, A., Theuvsen, L., Recke, G., and Schulze, B. (2005). *Sicherstellung der Wertschöpfung in der Schweineerzeugung: Perspektiven des Nordwestdeutschen Modells*. Stiftung Westfälische Landschaft: Münster.
- Steinfeld H., de Haan C., and Blackburn H. (1997). *Livestock & the Environment: Finding a Balance*. Brussels: EU Directorate General for Development.
- Tangermann, S. (2011). *Policy Solutions to Agricultural Market Volatility: A Synthesis*. Issue Paper No. 33, International Centre for Trade and Sustainable Development. Geneva.
- Theuvsen, L. (2011). Was steckt hinter dem Klimaversprechen? Klimalabel im Vergleich. Paper presented at BioFach 2011. February 18, 2011, Nuremberg.
- Theuvsen, L., Friedrich, N. (2012). Vom Qualitäts- zum Nachhaltigkeitsmanagement: Wo steht das deutsche Agribusiness? In: Woll, R. (ed.): *Vielfalt Qualität – Tendenzen im Qualitätsmanagement*. Shaker: Aachen (in press).

- Theuvsen, L., Spiller, A. (2007). Perspectives of Quality Management in Modern Agribusiness. In: Theuvsen, L. et al. (eds.): Quality Management in Food Chains, Wageningen Academic Publishers: Wageningen 2007:. 13-19.
- Veldkamp, A. et al. (2008). Triggering Transition towards Sustainable Development of the Dutch Agricultural Sector: TransForum's Approach. In: *Agronomy for Sustainable Development*, Vol. **29**, No. 1: 87-96.
- WBCSD (2002). The Business Case for Sustainable Development: Making a Difference toward the Johannesburg Summit 2002 and Beyond. Geneva.