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Editorial: Dynamics in agricultural value chains

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1. Introduction

In industrialised societies, agricultural production no longer plays a significant role as a basis for growth and employment because of a sectoral shift to manufacturing and services. In the Global South, on the other hand, agricultural production is, even today, often the most important sector for employment and income for a large share of the population. However, the function and characteristics of agriculture in this part of the world are strongly changing today; subsistence production is more and more replaced by market-oriented production of cash crops; and agricultural producers are integrated into supra-regional commodity chains. The agricultural producers, but also other actors in agricultural trade and production (e.g. middlemen or traditional processors like mills and dairy companies) – both in the North and the South –, are increasingly dependent on the participation in integrated interregional and international value chains. Such chains are dominated and controlled by powerful buyers (usually large supermarket chains) and often marked by high entry barriers (e.g. complex standards). As a result, these actors need to find strategies to deal with these value chains or look for alternative ways of doing business (e.g. organic farming or renewable energies). This special issue of the journal DIE ERDE analyses, discusses and conceptual-

ises current conventional and alternative agricultural value chains and their chances and threats for the integrated actors; the contributions are based on different case studies in the Global North and South.

In this editorial we will first give a brief overview on current approaches on value chains and production networks in general and, more specifically, in the field of agriculture. Based on this background we will outline where we see new conceptual and applied perspectives for research in these areas and in how far the papers of this special issue can contribute to them. Here, we especially outline five areas:

- Governance and power in value chains from a gender perspective;
- Powerlessness or adaptation – strategies and chances of small-scale farmers and traders to cope with large-scale value chains;
- Convention theory and the role of trust and reputation;
- Finding the niche – sustainable farming as an opportunity for farmers in the Global South;
- Leaving the niche – conventionalisation of organic food value chains.

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2. State of the art

While the cluster approach and its related concepts (see, e.g., *Bathelt et al. 2002; Dannenberg and Kulke 2005; Maillat and Lecoq 1992; Porter 2000*) were the dominating conceptual framework for research in Economic Geography around the world about a decade ago, the last years of research have been dominated by scientific analyses based on various value chain approaches (*Kulke 2007*).

2.1 Value chains and production networks

As outlined by *Franz and Warburg (2013)* the first value chain approaches go back to *Hopkins and Wallerstein*, who published their original commodity chain idea in 1977. Since then a growing field of studies in different disciplines has been developed that deals with the analysis of the relationships between the production, the trade and the consumption of goods (*Neilson and Pritchard 2009*). Today *value chain* is an umbrella term including different approaches like Commodity Chains (*Hopkins and Wallerstein 1977*), Value Chains (*Kaplinsky 2000*), Value-Adding Chains (e.g., *Porter 1985*), Commodity Systems (e.g. *Friedland 2005*), Filière (e.g. *Lenz 1997*), Commodity Circuits (e.g. *Cook and Crang 1996*), Global Commodity Chains (e.g. *Gereffi and Korzeniewicz 1994*), Global Value Chains (e.g. *Gereffi et al. 2005*) and Global Production Networks (e.g. *Henderson et al. 2002*). Out of the “plethora of different approaches” (*Neilson and Pritchard 2009: 31*) especially the last three approaches became relevant for Economic Geography.

The Global Commodity Chains (GCC) approach, which was developed by a group of scholars around the US sociologist *Gary Gereffi*, is mainly used to understand the organisation and coordination of value chains (*Gereffi 1996*). It focusses on the power relation in the chains and distinguishes different types of chains according to the most powerful drivers in the chain (producers or buyers) who control the other actors. This approach was further developed by *Gereffi et al. (2005)* to the Global Value Chains (GVC) approach. The strength of the GVC approach lies in the identified factors for the development of different coordination forms in chains:

- the complexity of information and knowledge transfer required to sustain a particular transaction, especially with respect to product and process specifications;

- the extent to which this information and knowledge can be codified and therefore transmitted efficiently without transaction-specific investment between the parties in the transaction;
- the capabilities (e.g. technical or financial) of actual and potential suppliers in relation to the requirements of the transaction (*Gereffi et al. 2005: 85*; see also *Dannenberg 2013: 20*).

Whilst GCC and GVC both mainly focus on the vertical coordination and organisation structures within the chain, the strength of the Global Production Networks approach – developed by economic geographers from the so-called “Manchester School” – on the other hand is to include a stronger focus on horizontal linkages with actors outside the chain (*Henderson et al. 2002*). Relations are considered in the dimensions of vertical and horizontal interdependencies in the analytical dimensions of the elements of embeddedness, power and value. This includes in particular the influence of collective power (e.g. trade unions and NGOs) and institutional power (e.g. political institutions).

2.2 Agricultural value chains and networks

Right from the beginning the development of these approaches was strongly linked to the analysis of production, trade and consumption of agricultural products (*Franz and Warburg 2013*). Many case studies can be found that focus on agricultural products (e.g. *Neilson and Pritchard 2009* about tea and coffee, *Franz and Hassler 2010* on pepper, *Oro and Pritchard 2011* on meat, *Dannenberg 2011* on fruits and vegetables).

In the last years, there have been a large number of studies on how small-scale farmers are integrated into supply chains around the world (see e.g. *Dannenberg and Kulke 2005; Kirsten and Sartorius 2002*). Such studies included work on the constraints placed by transaction costs (*Matungul et al. 2001*); the role of trust in business relationships (*Ortman and King 2010*); the potential role of contracting in linking smallholders to agribusiness firms (*Vermeulen et al. 2008*); linking smallholders to supermarkets (*Bienabe and Vermeulen 2007*); and the effects of participation in supermarket channels on the agricultural units (*Rao et al. 2012*).

Generally, in food value chain analysis the tendency can be observed to combine aspects of differently named approaches, on the one hand, and to combine

them with other theories and approaches, e.g. with convention theory or the livelihood approach, on the other hand (Franz and Warburg 2013).

Besides these academic and often very theoretical discussions, there is a growing body of policy papers, handbooks and manuals that see value chain approaches as development concepts that can be used to build up or optimise value chains in various fields. This includes textbooks for future supply chain managers (e.g. Hertel et al. 2011) or guidebooks for the inclusion of farmers in the Global South into the value chains of agribusinesses (e.g. GIZ 2012) just as manuals for regional sourcing or marketing as a part of endogenous regional development or environmental initiatives (e.g. Wannemacher and Kuhnert 2009). In this body of literature elements of the analytical tools are used as models to configure supply chains in a way that they fulfil the respective aims of the authors. These aims can range from fostering value capture in a region or of a company to saving carbon dioxide.

3. New perspectives – our contribution

Based on the outlined background on agricultural commodity chains our five thematic perspectives are as follows:

3.1 Governance and power in value chains from a gender perspective

Whereas the gender perspective has generally been only poorly regarded in Economic Geography so far, there have already been some studies on gender relationships and the role of female (not so much on male) workers in Southern agricultural value chains (Barrientos et al. 2003; Barrientos et al. 2005; Chen et al. 2004). However, the studies on gender issues seem to be rare, and differentiated case studies, for instance studies on the gender roles in small-scale commercial farming, are needed.

In his paper “Gender relations in global agri-food value chains – a review” Kim Schumacher gives an overview of the research literature concerning the gender relations in global agri-food value chains and outlines major insights which the analysis of gender issues in global value chains offers. Maria Velte and Peter Dannenberg show, based on a case study from Kenya, in how far a combination of gender and value chain approaches can be used to explain current gen-

der roles in farming, besides the chances and threats of export trade for women empowerment.

3.2 Powerlessness or adaptation – strategies and chances of small-scale farmers and traders to cope with large-scale value chains

With the growing importance of supermarkets and the installation of their highly professionalised, centralised and standardised procurement systems, which aim for large-scale supply of professional buyers, it seems questionable in how far small-scale businesses – especially from the Global South – can participate in such supply chains. One strategy to achieve the integration in such value chains can be contract farming in which usually large numbers of small-scale farmers are integrated into a system of vertical coordination between grower and buyer; the buyer can control the conditions of production through contractual obligations (Ouma 2010). Such a strategy involves chances and problems (e.g. the strong dependency of the leading contract firm) for the involved small-scale farms and the dependent livelihoods, as discussed by Marc Vicol using the example of potato contract farming in rural India.

While such a strategy may help producers, it may be a danger for small-scale traders, so-called middlemen, who buy farming products at the farm gates or collecting points and link the farmers with commercial and international markets. So far, it was often expected that, with the rise of supermarkets and their professional procurement systems, with the establishment of integrated production systems as schemes but also with the broad proliferation of information and communication technology (ICT), in particular mobile phones, most middlemen would vanish from the chains. Alexandra Appel, Martin Franz and Markus Hassler, however, show, using the example of transforming market structures in the grocery segment in Turkey, that even such small-scale middlemen can successfully develop strategies to cope with these new developments and stay in the market. Dannenberg and Nduru (2013) already presented the strategies of small-scale individual farmers to remain integrated even in highly standardised professional agricultural chains, whereas Appel et al. give further evidence that sometimes even small-scale businesses can successfully stay in professional conventional agricultural chains if they find the right ways (and support) to adapt with the system. Furthermore, Madlen Krone, Kim Schumacher and Peter Dannenberg

illustrate in how far the use of ICT can influence the chances of farmers to access the required knowledge to produce for commercial value chains.

3.3 Convention theory and the role of trust and reputation

Recent investigations (e.g. *Franz and Warburg 2013; Ouma 2010*) have shown that even in highly standardised and controlled value chains there are broad possibilities for different actors to supply the buyers and the consumers – without their knowledge – with suboptimal products which do not fulfil the demand of the buyers. As a result, buyers are seeking various formal and informal ways of risk management and quality control, especially in the case of process elements (e.g. labour and environmental standards) that cannot be controlled ex-post. Here reputation and trust (e.g. in long-term relationships) can play an important role. *Amelie Bernzen* analyses the importance of reputation based on two regional studies.

3.4 Finding the niche – sustainable farming as an opportunity for farmers in the Global South

The proliferation of global standards in agricultural value chains has been critically assessed by different studies as it bears the danger of excluding large numbers of farmers in developing countries which cannot afford or do not have the knowledge or technical skills (capability) to fulfil these standards. On the other hand, sustainable and organic farming standards may also be a chance for farmers which do not intensify their production (e.g. by using herbicides, pesticides and other chemicals; see *Dannenberg 2007*). In this case also small-scale farmers in developing countries, who are able to adjust their products (product upgrading) and production methods (process upgrading) to sustainable standards, may be able to find a niche for producing for international markets. As the consumer prices for sustainable product are usually higher than for conventional products, sustainable production may even bear the potential to increase income.

3.5 Leaving the niche – conventionalisation of organic food value chains

In the last years, the value chains of organic farming have been intensively analysed and compared with

conventional food chains. Whilst *Morgan and Murdoch (2000)* outlined the fundamental differences between conventional and organic food value chains, the growing demand for organic food, the increasing sales via supermarkets and the increasing professionalisation and expansion of organic production, the question is raised in how far the distribution systems of organic food are changing. By analysing the distribution systems for organic farming produce in Spain and Poland *Ewa Kacprzak and Barbara Maćkiewicz* give evidence that at least some European organic food value chains are becoming similar to conventional value chains.

4. Concluding remarks

The establishment of global and supraregional commodity chains for agricultural products is a relatively new phenomenon for the Global South; it has strong effects on the role of actors and their functions and changes agricultural production fundamentally. But besides the changes in the Global South, agricultural production, distribution and consumption in the North is also affected by these changes. This special issue highlights important elements of these changes; it is based on presentations and fruitful discussions during an IGU conference in Berlin in 2013, where relevant dimensions of ongoing research were discussed.

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