EXTENDING THE MARGINS OF MARKETIZATION

Frontier Regions and the Making of Agro-Export Markets in Northern Ghana

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Abstract

This paper demonstrates how the global commodity chain approach has mutated from a critical tool to study the production of inequality in the global economy to an instrument of development policy that extends the frontiers of marketization to so-called "peripheries" in the Global South. Taking an outgrower scheme for the global production of organic mangoes in northern Ghana as point of departure, and situating this case study within the broader context of market experiments in the Ghanaian agricultural sector, it develops an account of global capitalism as a diverse, heterogeneous and messy arrangement of local borderlands. As a zone of inclusive exclusion these borderlands are brought into being by an economic discourse which separates the inside of the capitalist world from its supposed outside. The so-called integration of smallholders into global markets relies on exclusionary representations and the forging of new associations. First, economic practices in northern Ghana are portrayed by economists as defective and in so doing it is determined what lies outside the market. Second, within this "outside" - on which the "inside" actually depends global capitalism mediated through the market models and rhetoric of international development organizations now literally touches the ground in specific geographical settings. Hence frontier regions as represented by our case study bear the paradoxical character of the work of economics and are an instructive example for the performative power of economic theories. Marketization is revealed as a complex and socio-technically entangled process full of hidden prerequisites and unforeseen consequences that open up new social spaces of multiple ontological reconfigurations. Keywords: marketization, performativity, global value chains, globalization, agriculture, Africa

1. Introduction

The global market for agricultural commodities has been undergoing tremendous changes since the 1990s. New consumption patterns in the Global North, a rising demand for convenience food and fresh from harvest "just in time"-products, and increasingly oligopolistic retail competition are some of its driving forces. At the same time food scares like foot and mouth disease, BSE and pesticide residue scandals have evoked doubts about the reliability of the hidden hand of anonymous markets. Consumers are more than ever before concerned about food safety and particularly North American and European retailers have invested heavily in the manufacture of trust through traceability systems, standards and brands. For producers in many African countries the privatization of agri-food regulation and quality assurance has had significant repercussions. Private certification schemes have become entry-barriers to the market due to their technical complexity and monetary requirements, but they also allow for the creation of new niches and opportunities for small-holders and exporters (Ouma, 2010).

One of the markers of these changes is the rising importance of high value non-traditional agricultural exports¹, particularly horticultural products. Between 1980 and 2005, the global trade in fresh fruits and vegetables increased by 243 percent² and horticulture exports of many African countries rose considerably (see figure 1). Products and assortments, which just one decade ago were barely known to consumers in the North, have become so-called "destination goods"; they are regarded as being crucial to attract customers to a supermarket of "their choice". Their demand has lead to an expansion of the global market to peripheral areas with favourable resource endowments and to the construction

By "non-traditional exports" (NTE) we refer to horticultural products such as fresh fruit and vegetables, ornamentals such as cutflowers, and nuts. Aquacultures have experienced a similar rise over the last two decades, but are not included here.

² Calculated from FAO, Faotstat – Tradestat. http://faostat.fao.org/site/535/DesktopDefault.as-px?PageID=535#ancor (5 December 2008).

of new import-export relationships which link European consumers to farmers in South America, Africa and Asia. As a consequence, export portfolios and agrarian structures in many countries of the Global South have profoundly changed. While the share of traditional agricultural exports in the total export portfolios of developing countries declined from 39.2 to 18.9 percent between 1981 and 2001, the share of horticultural products increased from 14.7 to 21.5 percent (Jaffee, 2005, p. 2).

[FIGURE 1 ABOUT HERE]

The new market segments constituted by these trends have attracted considerable attention from international development organizations, NGOs and many African countries' National Departments of Agriculture, Industry and Trade. New opportunities for agricultural production and export do not only promise to improve the situation of the poorest of the poor but also to deliver development impulses for peripheral areas often still characterized by a high degree of subsistence production. In the broader context of these endeavours, "market integration" becomes — once again, one may argue, but with a new undertone — the one-size-fits-all approach for poverty reduction, service provision and the allocation of hitherto public goods. We use the example of recent projects of market expansion in the horticulture subsector of Ghana to show that what is commonly called "integration" requires a comprehensive reconfiguration of socio-material relations which cannot be fully captured by orthodox economic perspectives on markets. Taking this reconfiguration as a vantage point we discuss the concepts of "Frontier Regions" and "marketization" to come to terms with struggles about the expansion of market relations.

We start with a brief look at the different market concepts underpinning recent development programmes which have put market integration at their centre. In section two we present the case study from a region in northern Ghana where since 1999 almost 1,300 smallholders started to produce organic mangoes for the European market.³ Situated into wider processes of market transformation in Ghanaian agriculture, this case study is used to trace back some of the socio-material linkages which had to be cut or newly established in order to make market integration in this area possible. It serves as a background against which the peculiarities and restrictions of conventional theoretical approaches to markets become clearer. In the last section we draw some conclusions which go beyond the empirical case.

2. Value Chains for Market Integration?

The integration of Southern farmers into the global agricultural market produces competing narratives. In their seminal work "Living under Contract" – the first one to comprehensively engage with the rise of new commodity spaces in Sub-Saharan Africa –, Little and Watts (1994) conceive of world market integration of farmers through new contractual relations with big agribusiness companies as an industrial appropriation of selected rural activities, giving rise to new regimes of capital accumulation in the Global South. In his treatise on contract farming in the same book, Watts (1994, p. 64) develops a critical account of the penetration of new rural spaces in the South by transnational agro-capital. Reflecting upon the social implications of contract farming, he notes that "(n)ominally independent growers retain the illusion of autonomy but have become in practice what Lenin called propertied proletarians, workers cultivating company crops on private allotments".

This contribution is based on fieldwork carried out in Ghana during four stays between 2008 and 2010. It draws directly or indirectly on 33 semi-structured qualitative interviews with farmer groups, administrative staff of a farmer-based organization, individual farmers, traditional authorities, managers of an agrobusiness company, international development organizations and civil servants of different ministries. It furthermore builds on complementary ethnographic research on the market-making practices of company staff and farmers as well as on document analyses (e.g. contracts, policy documents etc.).

Watts' capitalism-/market-critical stance can be contrasted with the stark counterposition of neoclassical economics and the policy-prescriptions derived from it, which encouraged many African countries to embrace a market-friendly, export-oriented strategy, with non-traditional exports becoming a new panacea for development. These theories and recipes were often based on some core assumptions on the "nature" and "logic" of agricultural markets and "the Market" more generally. Simplified, they read as follows: Getting the prices (e.g. through a conducive exchange rate regime) and institutions (e.g. through secured property rights) right, utilizing comparative advantages and enhancing investor confidence through liberalisation and sector deregulation would unleash the beneficial forces of the market (Addo and Marshall, 2000, p. 356), integrating the periphery into a "Ricardian space of flows" (World Bank, 1993, p. 40).

Despite their different theoretical inclinations and treatment of the consequences of world market integration, the apparently opposing views presented here do share a striking commonality. Both implicitly absolutize, ontologize and essentialize "the Market" (Barber, 1993). By the hand of scholarly abstractions, a discrete economic entity equipped with a self-evident quality is created. In these narratives, "the Market" to varying degrees either features as grand destructive or grand empowering force, but it is rarely explained what markets are or how they come into existence. However, markets do not simply fall out of thin air if the environment was "enabled" (a typical World Bank jargon), nor do they befall and subjugate local actors as inexorable global forces, as political economic critiques of globalisation would claim. Markets do not reside outside the ongoing practices of marketization, they are "inextricable from the implementation of new social technologies, and the spread of new social practices" (Elyachar, 2005, p. 5), and thus need to be constructed in the very first place.

This commonality notwithstanding it is astonishing that in Ghana since 2005 a practical tool for market integration became mainstreamed, which – with some modifications – builds on this reified understanding of markets and seems, in a similar vein as the concept of "the Market" itself, to bridge the gap between critical political economy and business administration: The value chain approach. As the analysis of "commodity chains" it has one of its roots in world-system theory where it serves to understand the linkages between different world regions by looking at global production processes and tracing the origin of final goods backwards up the chain to the raw materials out of which they consist. Thereby, it emphasises the ranges and patterns of labour division and value creation as the primary modes of unequal global integration.

Within world-system theory the commodity chain approach clearly focuses on macro level processes while it neglects concrete producers and firms, strategic decisions of single actors, different forms of governance within a chain or varying involvement in market relations as compared to other modes of exchange. These topics became the focus of more recent strands of literature for which the volume "Commodity Chains and Global Capitalism" edited by Gereffi and Korzeniewicz (1994) is probably the most popular example. They later mutated into the global value chain (GVC) framework (Gereffi et al., 2001; Gibbon and Ponte, 2005; Bair, 2009), which departs in significant ways from the macrosociological tradition of the global commodity chain perspective. Alongside this, an economistic lens gained importance which shifted the focus from the spatially distantiated production of commodities within a broader capitalist system to technical questions of value generation, allocation and enhancement framed through a functionalist governance typology (Gereffi, Humphrey and Sturgeon, 2005).

Another root of value chain approaches to economic development was the concept of "supply chain management" which began to play an increasing role in business administraefficiency of production and the strategic position of a company within a chain (Cox, 1999, p. 169). The underlying assumption is that the success of a firm can be traced back to the way its supply chains were organized or – going beyond that – that the future of competition in many markets is generally shifting from single companies as crucial players to chains which succeed or fail as entities (Busch, 2007). Consequently, to optimize efficiency means both: Vertically to increase one's share of the profit generated within an entire chain and horizontally to generate higher profits than direct competitors. Concrete ways to organize and control a supply chain are regarded here as subjects for empirical research to derive more generalized models and competitive strategies whereby the question which resources and processes have to be retained internally and what can be outsourced is of central importance.

In Ghana market integration via the construction or improvement of value chains became *the* tool for enhancing economic development during the last five years.⁴ The Ministry of Food and Agriculture (MoFA) has officially adopted the value chain approach as a new model of agricultural development in 2007⁵ and members of the ministry were trained by the "German Technical Cooperation" (GTZ) which published a comprehensive "Value Links Manual" in 2007 (Springer-Heinze, 2007). The United Nations are supporting value chain improvement projects,⁶ the US-funded Millennium Challenge Account⁷ (MCA, 2007-2012) is focusing on value chains and wants to reach as much as 60.000 smallholders, the

Interviews with representatives of Ghanaian ministries, international organizations and NGOs were conducted in September and October 2010.

⁵ Within the second "Food and Agriculture Sector Development Policy" (FASDEP II).

Via the MoFA-coordinated \$ 105 Mio. "Northern Rural Growth Program" (NRGP) financed by the International Fund for Agricultural Development, a specialized agency of the United Nations.

With \$ 547 Mio. the "Millennium Challenge Account" represents the single largest bilateral grant in the history of Ghana. One of its components is an ambitious agricultural transformation programme, which, as an involved land economist noted, 'is to ensure increased agricultural production and productivity of high-value cash and food crops with a view to enhancing competitiveness of such crops on the local and international markets' (see Karikari, 2006, p. 1). Two out of twelve project lines of the Millennium Development Authority's (MiDA) "Compact Program" deal with value chains.

United States Agency for International Development (USAID) is financing an "Agricultural Development and Value Chain Enhancement programme",⁸ GTZ runs currently projects on the value chains for pineapples, mangoes, citrus, chili peppers, aquaculture, guinea fowls and maize,⁹ and in April 2010 the German Development Bank KfW established a new "Outgrower and Value Chain Fund",¹⁰ to name just some of the most prominent initiatives. Presently, the various organizations working on value chains are trying to harmonize their endeavors within a national joint "Value Chain Practitioners Forum" and a recent initiative of MoFA and the GTZ aims at incorporating the topic in the economics curricula at various Ghanaian universities.

Looking at all these initiatives from a more practical point of view – i.e. the implementation strategies – things become messy. The market concept as it can be derived by analyzing practical interventions is neither the essentialized political economic nor the neoclassical one in pure form. Markets are not seen just to be "there" and "do" things as soon as all obstacles have been removed, they have actively to be created and shaped by – among others – the work of development organizations. This resembles what Peck and Tickell (2002), primarily with regard to North America and Western Europe as the 'heartlands' of neoliberalism, describe as the change from 'roll back' to 'roll out' strategies. Not to repel the range of state intervention – as development organizations were doing in Ghana in the 1980s and 90s – but to actively prepare the field of the social for the market principle becomes now the main focus of economic (and development) policy. New forms of 'institutional hardware' (Peck and Tickell, 2002, p. 389), new market-compatible practices, new regimes of calculation as well as the respective enabling material infrastructure and new forms of

Implemented by Agricultural Cooperative Development International/Volunteers in Overseas Cooperative Assistance (ACDI/VOCA).

Within its "Market-Oriented Agriculture Programme" (MOAP).

Originally, this fund had a capital stock of € 11 Mio. In 2009, then, KfW decided to increase it by an additional € 34 Mio. (interview with KfW programme manager, 29 September 2010).

knowledge that define what is inside and what is outside the market are the cornerstones of this endeavor.

In practice, this construction work focuses heavily on the very top end of the chains, the smallholder-producers and their immediate buyers. Lowering transaction costs and the creation of trust, the reduction of price information asymmetries, the mainstraming of quality assurance and facilitation of loan access are considered to be focal intervention areas. Widely neglected however are the global structural environment and power relations – even the usually omnipresent question of "governance" in value chains is rarely accounted for in practice – as well as what one could call the "horizontal entanglements" of vertical chains, their dependence on broader networks of social relations. In brief, a wide gap between "value chains as a practical tool to make markets" and "value chains as an analytical tool to understand the making of markets" is blatantly obvious. Before continuing this argument we shall give a brief example for what could be called the anchoring of the top end of a new commodity chain by rearranging people, products and other relevant "things" as well as norms and routines to fit the requirements of market relations and exchange. We situate this rearrangement into the broader context of market experiments that have populated Ghanaian agriculture since the 1990s.

3. Making Export Markets in Ghana

3.1 Ready for Take Off

The development of horticultural industries across several African countries has received particular attention in development policy circles since the 1990s. With the promise of relatively higher returns on "high value crops" (fresh vegetables, cut flowers and tropical fruits) compared to traditional agro-commodities, rising consumer demand for these commodities in the Global North, and opportunities for local value addition through processing, several

international donor organizations such as the World Bank have promoted the creation of horticultural industries as a strategy for export-led development. In this regard, Ghana has been framed as a potentially preferred source of exotic fruits and vegetables (World Bank, 1993). Endowed with favourable climatic conditions, a stable political and economic environment, and a low-wage labour pool, the country is perceived to have a comparative advantage due to its proximity to the European market.

Agricultural exports from Ghana have traditionally been confined to a narrow range of 'colonial' agro-commodities such as cocoa and palmoil, but have slowly diversified into other non-traditional crops over the past decade. Exports of non-traditional agricultural crops (such as yam, shea nuts, pineapples, papayas, mangoes, cashew, fish and sea foods) more than doubled between 2000 and 2007 from 74.54 to \$ 197.24 million (GEPC, 2008a). The total exports of fruits and vegetables rose from 9.800 mt to 131.422 mt between 1992 and 2007 (GEPC, 2008b) with fruits such as pineapples and mangoes scoring significant growth rates since the mid-1990s (see figure 2).

[FIGURE 2 ABOUT HERE]

In 2004, the NTE-sector (non-traditional exports) contributed 23.7 percent of the total foreign exchange earnings from agriculture with the remaining coming from traditional products like cocoa and timber (Afari-Sefa, 2006, p. 3). Although, over the past four years the contribution of horticultural non-traditional exports to overall export earnings has been falling due to market demand problems mainly for pineapples (CEPA, 2009, p. 9), horticulture is still embraced as a strategic field of intervention in a number of agricultural development initiatives.

Such an export-based strategy has not come without its challenges, as the integration of farmers and agro-business enterprises into "modern supply chains" requires investments into financing, quality assurance systems, business-support and extension services, logistics and cold chains, institutional and firm-/farm-based capacity building, marketing, market information systems, and conducive sector-policy frameworks. Mastering these challenges is perceived as the necessary precondition for a horticulture-based "take-off" and Ghana is said to have climbed up the "agro-Rostowian" growth-ladder up to this decisive point of transformation. This was well highlighted in a publication titled "Ready for Take-off", promoted by the Federation of the Ghanaian Exporters (FAGE) in 2007 (FAGE, 2007). It showed how over the past decade, several donor and government initiatives have been set up to boost the development of the horticultural sub-sector and claimed it was now due to utilize the infrastructural and institutional foundations laid in order to sustainably tap into the global agricultural market. While such an assertion may be dismissed as mere policy rhetoric, this publication nevertheless conveyed an important message. It was indicative of nothing more than the belief that it would be possible to socio-technologically engineer a whole industry and transform the horticulture sub-sector into a diversified, well-organized and globally competitive part of the economy.

3.2 Models of Organizing the Economy

In retrospect, the much appraised take-off has been a prolonged one. In the 1980s, the horticulture sub-sector started benefiting from liberalization reforms under the *Rawlings*-regime. Under the so-called "Economic Recovery Programme" (ERP) launched in 1983, the government and donor agencies were encouraged to promote NTE in order to diversify the country's narrowly confined export portfolio, but those efforts lacked a comprehensive policy framework and implementation. The sector was more strategically supported

throughout the 1990s, e.g. as part of the World Bank's "Agricultural Diversification Project" (ADP, 1991-1999), but this often happened in a fragmented and uncoordinated manner that did not come close to any kind of well-tailored, focused and locally owned industrial policy.

It was only in 2004 when a \$9.0 million horticultural component was added to the World Bank-funded "Agricultural Services Sub-Sector Investment Programme" (AgSSIP, 2000-2006) after a report had identified key constraints to sector-development and outlined a comprehensive investment programme (Voisard and Jeager, 2003). This component was called "Horticulture Export Industries Initiative" (HEII), and tied into newly established donor initiatives such as the "Trade and Investment Programme for a Competitive Export Economy" (TIPCEE, 2004-2009) funded by USAID, or the "Market Oriented Agriculture Programme" (MOAP, 2004-2013) funded by the German GTZ. These initiatives conducted a number of experiments in order to enhance the efficiency and competitiveness of farms and firms in the sector, targeting high potential areas in the Southern Horticultural Belt, the Afram Basin, and the Northern Agricultural Crescent. Different components such as institutional capacity building, business-service development initiatives, support to farmer-based organizations (FBOs), the provision of high-quality seedlings to mango and pineapple farmers, the implementation of food safety and quality assurance schemes such as "GlobalGAP", and infrastructural upgrading have been cornerstones of these experiments. Cooperation between companies and smallholder farmers has been considered to be a key model for unleashing the positive forces of the market, providing smallholders with access to credit, extension services and technological knowledge in order to access and achieve competitiveness in the global agricultural market. Some of these initiatives, such as the promotion of farmer-based organizations and the implementation of quality assurance schemes, have been further pursued under more recent programmes such as the "Millennium Challenge Account" and the African Development Bank-funded "Export Marketing and Quality Awareness Project" (EMQAP, 2007-2012).

While not all activities under these initiatives have been coordinated properly with each other or have proven to be successful, they represent a much more holistic and concerted effort to transform the horticultural sub-sector. Moreover, many of them differ from earlier initiatives in terms of the practical tools and underlying economic models mobilized. While these were mainly based on macro-economic recipes of "fixing the economy" (exchange rate liberalization, export incentives such as duty drawback, and foreign exchange retention), more recent interventions have – alongside meso- and macro-level programmes – embraced micro-economic concepts, with the value chain approach figuring prominently as a way to support sector development. The words of a former retail manager who became a key figure in TIPCEE and who co-authored a strategy paper on the Ghanaian horticulture sub-sector (Voisard and Jaeger, 2003) strikingly illustrate the changing perspective on export-led agricultural/horticultural development in Ghana:

"It's the quality assurance world, it's the new way of doing business, this kind of seamless flow of products right up to the end market with the various agents making the whole system go through and developing, you know, a way of distributing the value added base like that. It's not holding a product, selling it to the next agent, holding it, selling it to the next agent, that doesn't exist anymore, especially in the fresh produce sector! Now the transactional system is not from one warehouse to the other, it's a pipe that connects directly to the production base and the more efficient this pipe works, right up to the end market, the more money there is to make."

The shift to a "market access via value chain integration-strategy" for agricultural and agribusiness development is also exemplified by the new "Food and Agricultural Sector Development Policy" (FASDEP II) of the Ministry of Agriculture (MoFA, 2007), which was first

¹¹ Interview with TIPCEE project manager, Accra, Ghana, 03 March 2008.

drafted in 2007 and represented a radical break with previous "rural development through poverty reduction" policy positions of the ministry.

3.3 Poverty, North-South Disparities and the Promises of the Market

Export-led agricultural development has been embraced with the promise to engineer a broad-based economic growth as 70 percent of the Ghanaian population is employed in the agricultural sector. However, much of the economic growth induced by the horticulture industry over the last two decades has benefited the south, actually sharpening interregional disparities between the poor north and the relatively better-off south. Although between 1985 and 2005, exports contributed 40 percent to the increase in Ghana's GDP, this growth was largely based on increases in gold, cocoa and horticultural production, all commodities which are not produced in the Ghanaian north. Patterns of extreme poverty continue to persist in a region, which has been structurally neglected since colonial times, is constrained by unfavourable conditions for agricultural production, and was hard-hit by the removal of subsidies for cash-crops under the ERPs. While the national incidence of poverty declined from 52 percent in 1992 to 40 percent in 1999, the three northern regions (Upper East, Upper West, Northern Region) still scored poverty rates of 90, 84 and 70 percent respectively (Al-Hassan and Diao, 2007, p. 3). Furthermore, the north has until recently never featured prominently in policy frameworks on horticulture and agribusiness development. According to Al-Hassan/Diao (2007, p. 3) the north's lagging behind other "growth regions" can be attributed to a single factor: "[N]orthern Ghana did not benefit from this growth and poverty reduction because of the low representation of the region's production in international trade". The recipe is simple: Although the authors acknowledge that it is not clear "whether the same path of export-led growth can be pursued for the north [as for the south], or whether a focus on sub-regional markets and internal trade in

staple crops can be equally beneficial", they emphatically state that "[t]here is no question about the role of expanded markets in generating growth" (Al-Hassan and Diao, 2007, pp. 4-5).

How are the frontiers of the market extended in a concrete case and what implications do projects to enhance market integration in Ghana's north have? In the following section we present an example which sheds some light on the introduction of comprehensive new local arrangements often all too easily just called "market relations" or "the market".

3.4 Implementing Organic Mango Production

Whereas whole pineapples are one of Ghana's well established cash crops with export values reaching \$ 22 million at its peak in 2004, mango exports scored a significant increase from \$ 26,000 to almost \$ 1 million between 1996 and 2007 (Afari-Sefa, 2006, p. 46; GEPC, 2008a). Since the late 1980s market analyses and consultancy expertise had recommended mango production as one of the promising fields for Ghanaian agriculture and created an atmosphere which stimulated new production initiatives (GEPC, n.d.). From 2000 onwards, more than 3.000 ha of new mango orchards have been established (GEPC, 2008b).

In northern Ghana the single biggest project for mango production took shape in 1999 when the Organic Fruit Company (OFC)¹² began to open up a small 155 ha farm to grow organic mangoes for export. The founding capital came from an established Dutch-Ghanaian importer and exporter of agricultural inputs and products, which is a major player in the Ghanaian cocoa- and maize-sector. In the 1970s, one of its shareholders had worked in the north under the agricultural self-reliance programme "Operation Feed Your-

¹² Name changed.

self' where he forged important personal and political connections and became interested in the development of Ghana's "poverty house".

Quickly OFC realized that not a farm but an outgrower scheme would fit best for them to organize production of organic mangoes in northern Ghana. 2.000 farmers in 44 communities, mainly belonging to the ethnic groups of the *Dagomba* and *Mamprusi*, were targeted to participate in the project. The idea was to give them seedlings, some equipment for the cultivation of land, supply water for irrigation, train them and provide extension services under a long-term credit-scheme. The farmers should in turn prepare the land, build fences, grow the mangoes and bring them to a central village where the OFC built up a packing house. OFC would market the fruits and deduct 30 percent of the annual net harvest value for loan recovery. Three complexes of efforts had to be tackled for this endeavour:

First, OFC had to *mobilize support from a broader environment* – financial, political and administrative – for a project which required considerable expenses and different kinds of permissions. This meant to involve third parties from various fields like state agencies, traditional authorities, international organizations and NGOs who often pursued their own agendas. "Involvement" in the weakest sense of the term could just mean to accept externally set interest rates like it is the case in any investment project but could also extend to the concrete terms of outgrower contracts, the maximum size of the mango field for each smallholder or the support to public infrastructure provision in the villages. Not all of these "involvements" were agreed upon in a formal way; "mobilization of support" could sometimes just mean to act in a way which made the company a well respected local player in a more general sense.

Already from the very beginning PSOM, a Dutch governmental programme for private sector investment, had helped to establish the 155 ha "nucleus farm" and later

assisted the first outgrowers who started to prepare 50 ha of land for mango cultivation. When the operation was enlarged in 2004, the Dutch development organization CORDAID supported another 400 outgrowers to participate in the project. It insisted to focus on small-scale farming with a maximum of one acre of land for each farmer and interfered strongly in drafting the contracts with the outgrowers. The crucial support from CORDAID was embedded into its wider Africa-based programme "Small Producers in the Value Chain", which adopts a "market oriented approach" to development and "recognises the important role of the private sector as a key stakeholder in market or value chains". Within this programme, the "value chain is used as a way to analyse the position of small-scale farmers and afterwards to decide about the kind of CORDAID support, and whether to intervene starting from the farmers, or through the SME [small and medium enterprises] angle, or through the banking/MFI [microfinance institutions] sector" (CORAID, 2008).

But PSOM and CORDAID were by far not the only non-profit organizations involved in the project. In 2005 the United Nations Development Project (UNDP) sponsored 100 outgrowers and in the same year the African Development Foundation (ADF) supported another 283 farmers. ADF as an US-government development organization which has a special focus on community institutions insisted on the establishment of the "Association of Organic Mango Outgrowers" (AOMO)¹³ among the small-scale farmers working for OFC. Briefly after that the Ministry of Food and Agriculture decided to support the project and helped to erect office buildings for AOMO. The World Bank also provided grant assistance by paying for new seedlings via the Horticulture Export Industry Initiative (HEII). And finally USAID helped OFC via the "Trade and Investment Programme for a Competitive Export Economy" (TIPCEE).

¹³ Name changed.

TIPCEE was primarily focusing on technological support; it assisted for example in issuing so-called "Farmer Passports" for each single peasant and began to set up a GIS-system for the land under cultivation. The engagement of these actors tied well into the broader policy goal to integrate the lagging Northern Region into modern agricultural markets to achieve pro-poor growth.

Extending the global market for organic mangoes to northern Ghana had started with the initiative of one decisive player. But after only five years this player found itself in the sometimes favourable and sometimes restricting position of being one ally within a broader coalition of various, sometimes conflicting interests. The ground which was to be prepared for the project by mobilizing support had now become the field where ideas about pro-poor growth, community development, infrastructural development, female participation, the organization of farmers, HIV/AIDS prevention, education and – finally – making profit met. All of these ideas contributed to the shaping of the market for organic mangoes in northern Ghana.

Second, peasants who were to become *outgrowers had to be introduced to new ways of agricultural production*. Although mangoes had been known in the area for a long time they were only sold on local and regional markets and not cultivated intensively. Household economies were dominated by cattle rearing, fishing, shea nut trade, yams, rice, maize, beans, millet and groundnut cultivation. Most farmers were cultivating a few acres of food crops using a rotational slash and burn system. Shifting to a cash crop which was of limited use for consumption meant to trust a hitherto unknown regional player (the OFC) and its promises about prices and guaranteed purchase.

But becoming an outgrower implied much more than engaging in new relationships of trust, cooperation, and obligation. As a first step, peasants had to undergo an assessment test worked out by OFC which should help to select qualified candidates,

thereby adding a new component to the making of one's reputation as a "good farmer" (or at least having the potential to become a good farmer). Then OFC required the candidates to join the project in groups of 10 farmers as a minimum, because it would have been too expensive for the company to set up infrastructure and deliver construction materials for irrigation and fencing for distributed plots of only one acre of land. Members mutually agreed on which works on the field they would carry out communally (like fencing and manuring) and which responsibilities were attached to single mango trees and their owners (like watering in cases where no irrigations systems existed). Whereas cooperative arrangements utilized customary forms of communal labour (kpariba) and dispute-settlement in causes of group conflicts (zabil goibu), individual attachments were in practice often much more "messy" than formally laid down and frequently caused conflicts among group members.

Property rights over land were another important issue to be solved. Land in northern Ghana is usually not officially registered with the state but vested in the institution of the "chief" or individual families within a complicated system of diverse rights and obligations (Abdulai and Ndekugr, 2008; Kasanga and Kotey, 2001). In most cases OFC avoided to interfere directly in land matters but it needed at least medium term security for its investment in land. Therefore, only groups of peasants were accepted who had their land successfully released for mango production by local chiefs or family heads. This made the project much more than a bilateral agreement between the OFC and single peasants by anchoring it in the customary system of communal property and usufruct rights relations and binding it to the consent of village authorities.

Finally, a written contract had to be signed which confirmed that a "peasant" and "smallholder" was accepted as an "outgrower". As such he (and in some cases she) acquired the right to receive certain inputs necessary for mango production and became

at the same time a "debtor" who had to repay advances in the future. He was also attributed a position as the lowest link in a chain of hierarchical relations stretching from the farm management over the chief outgrower manager and regional outgrower managers down to field assistants who supervised the process of cultivation. Outgrowers accepted to be taught new agricultural practices derived from agro-science, new hygienic practices and a new understanding of "quality" as a prerequisite to receive the precious "organic" label of the UK Soil Association or to meet the Global Good Agricultural Practice (GlobalGAP) standard.

Third, new *physical infrastructure had to be set up and – more important – made work*. The whole area is quite remote from the seaport in Tema, a functioning cold chain does not exist and in general technical preconditions for more complex forms of agriculture are poor. Equipment like trucks, irrigation systems and drying facilities for mangoes had to be bought – often abroad –, brought to northern Ghana and installed. Making it work required the dissemination of knowledge as well as continuous training. The newly erected infrastructure made the OFC visible in the region and established it as a player of which even outsiders took notice.

4. Frontier Regions and the Local Arrangement of Global Markets

This short story of a long lasting process unveils an astonishing diverse spectrum of actors, organizations, norms, fields of knowledge, techniques, formal rules, resources of power etc. The seemingly simple market integration of smallholders via value chains is revealed as a complex and socio-technically entangled process full of hidden prerequisites and unforeseen consequences. How can one come to terms with this diversity, accounting for the contingency of the outcomes as well as for their relatedness to a more general pattern which could be called "marketization"? Instead of using a tool kit derived from economic

theory and identifying categories like "new opportunities for profit", "rational and strategic decisions", "laws of supply and demand" etc. we suggest to put the careful and precarious arrangement of new relations and heterogeneous elements at centre stage. People and organizations are part of this arrangement as are techniques and things, and the forging of certain links as well as the simultaneous severing of others can be read as a synonym for "marketization". It relies on a permanent process of evaluation and re-evaluation which distinguishes between the "market" and its "constitutive other" to subject the latter to comprehensive re-orderings. These re-orderings lie at the core of the concept of "Frontier Regions" (Mitchell, 2007, p. 247), which are characterized by the experimental testing of new "solutions" for newly identified "problems" of non-market relations.

4.1 Re-Arranging Socio-Technical Relations

Here we draw on Michel Callon's seminal work on the "anthropology of economization" in which markets are conceptualized as socio-technical "agencements" (Callon, 2007; Caliskan and Callon, 2010). These arrangements of heterogeneous elements (conventions, rules, technical devices, infrastructures, logistical procedures, calculating systems, texts, discourses, scientific knowledge, embodied skills, human beings and so forth) organize the circulation of goods together with the property rights attached to them through the contradictory encounter of quantitative and qualitative valuations. The term agencement carries perfectly this heuristical setup: It conveys the idea of a (spatial) assemblage of heterogeneous elements that have been carefully arranged as well as the notion of agency: Agencements are "socio-technical assemblages endowed with the capacity to bring about agency, to act and to give meaning to action" (Callon, 2007; Caliskan and Callon, 2010). The convincing advantage of this inclusive perspective is the heightened attention that is given to technical and material devices – from analytical techniques to pricing models, from purchase settings

to merchandising tools, from trading protocols to aggregate economic indicators – in the shaping of processes of marketization (Callon et al., 2007).

Marketization then is the process of designing, implementing, maintaining and reproducing specific socio-technical agencements that allow for a calculated, propertied and monetarized exchange of goods and services. It implies a closely interrelated set of three "framings" that format commodities, agencies and market encounters:

Commodities: To make things which are deeply inflected into relationships of practice and meaning ready for market exchange they have first to be defined as discernable entities. Second, property rights must be attached to these entities as a prerequisite for buying and selling. This requires often substantial changes of established concepts of "belonging" and considerable "investments" in codified rules and law. In an environment overwhelmingly organized along the market principle the recursive definition of entities ("objects") and property rights is so common that it might itself appear more as one of the natural building blocks of social organization than as the outcome of historic and ongoing processes of framing. But a mango tree has first to be "decomposed" into fruits, leaves and wood before it is possible to decide to whom a fruit belongs which grows at this tree, financed on credit by an NGO and being located on a plot of land belonging to a village community, only temporarily allocated to a single farmer. Third, mechanisms and technical devices for qualitative and quantitative valuations have to be established which constitute one – but not the only! – factor influencing the agreement on prices for exchange. An organic mango might for example receive higher prices on the market. But being classified as "organic" is the outcome of technical procedures and rules of conduct which are always in flux; recent discussions about the inclusion of environmental effects of air freighted agricultural products ("food miles") as additional criteria for the UK Soil Association's "organic" label are an impressive example which

illustrates that many different and presumably "distant" parties are contributing to the valuation of objects (Zambu, 2007). Finally, forms of exchange have to be found which allow for the mobilization of the objects in question, give legitimacy to the transfer of property rights and guarantee a full disentanglement from contexts of production or — in a more general sense — their social history. Only an entity which is clearly discernable, endowed with property rights, qualified and quantified and potentially tradable is a successfully framed "commodity".

Agencies have to be framed which might be individual actors in the conventional sense of social theory, but also arrangements of distributed cognitive bodies, technical devices, tools for calculation etc. In our case study the transformation of farmers into "mango outgrowers" is perhaps the most impressive example. It implies four different types of entanglement which allow for the production, valuation and mobilization of mangoes. First, a new relationship of claims and obligation, but also of trust and mutual dependence with a market mediator - the OFC - is formally established in a contract. This contract makes an independent farmer an "outgrower" and as such an element of an entirely new network of exchange. It involves, second, a new long-term alignment in time and space as outgrowers become debtors for probably more than 15 years and are thus required to stay and work on their mango plot for the same time. Third, new daily practices and routines of farm work based on the new imperatives of agro-scientific knowledge about plants, soils, climate and diseases and the respective handling of agricultural equipment have to be internalized. The invisible existence of bacteria and the mechanisms of their spreading have as well to be taught as the consequences of irregular watering for the size and quality of mangoes. Finally, farmer-outgrowers become entangled in new global connections via the world market for agricultural goods which is virtually always present as an "international price", "demands of European retailers and importers" or the "preferences of European consumers". The knitting of the new "mango network" relied of course to a great extent on local knowledge, ways of doing things, conflict resolution, and communal structures of living and production. But many of the customary practices and relations had to be transformed, some new were added and others abandoned and as a consequence, becoming a mango outgrower meant a comprehensive process of social and socio-technical transformation.

Encounter: For qualification of objectified commodities (first framing) by calculating agencies (second framing) to happen, the encounters of goods and agencies have to be framed and formatted, too. Differing and conflicting qualifications need to be reconciled. One important mechanism of reconciliation is the production of a price as the result of a transformation of "qualculation" – qualitative and quantitative evaluations (Callon and Law, 2005) – into numeric calculation. But if the chain between producers and consumers is lengthened as it is the case between Ghanaian outgrowers and European super-market buyers, mediators get involved and the quality of the mango is altered along the chained biography of the commodity. An array of different encounters take place, different prices have to be agreed upon. For global value chain analysis this is simply the value added in the vertical setup of the commodity chain. But how is the complicated pricing being accomplished?

The market encounter between producing outgrowers and OFC as world market mediator is based upon a contractual agreement that stipulates an algorithm of sequential calculating procedures. It starts with a decisive test that classifies the delivered produce in two market categories – either for the international market, if existing requirements for export are met, or for the local market. The quality test is accompanied by AOMO representatives serving as a trustee for the outgrowers. Once the seasons' price for export quality fruit is determined by OFC following the signing of contracts with its

buyers, and communicated to AOMO, the net sales of the export fruit is calculated by deducting the packing, transportation and export costs (reviewed every year and submitted to AOMO in advance of the harvesting season) from the gross sales value. From the net sales value, an advance payment of 25 percent is payable to the outgrower within 24 hours after acceptance at the packing plant. Another 45 percent is due seven days after the fruit has been sold in Europe, but not later than thirty days after delivery to the packing house. The remaining 30 precent of the net sales value is used for loan repayment to OFC (Outgrower Contract § 5).

Other regulations and reports agreed upon (e.g. computerized farmer data and plantation management, individualized loan balance sheets) aim at reciprocal control and transparency of costs, debts and profits. As field work has demonstrated so far the price fixing procedure raises multiple issues of conflicting accountability. Not only has the formal accountancy of the AOMO-OFC organizational complex been a very self invented improvised system. Many inputs the farmer naturally counted on – like irrigation – were later tagged with a price and actually included in accounting procedures. Other disputes erupted recently over irregularities of price fixing and loan repayment. The limited force of contractually documented conventions moves the question of accountability in its polysemic multitude at centre stage: Accounts are kept, are given and people are called to account for their actions (Stark, 2009, p. 25). A diverse set of justification schemes is deployed in these "encounters of accounting" where evaluative judgements in the dimensions of bookkeeping, narration and accountability have to be arranged in new and creative market agencements.

4.2 Performing Re-Arrangements

If "markets are above all places where the quality of goods is tested and evaluated" (Eymard-Duvernay et al. 2003, p. 12), then in Frontier Regions the very organization of markets itself has to be tested and evaluated. How to integrate farmers into the world market who had never been exposed to its workings before? How to gain access to land and render it an individualized production factor in a region where land is still held as a collective property? How to establish frames of long-term planning and calculation for perennial tree cultures, which had never been grown commercially in the area? How to invoke contractually assigned roles, the responsibilities of producer and buyer, of debtor and creditor? How to introduce agricultural and hygienic practices that comply with the stringent standards of the global organic market? How to control nature in the most effective, efficient and legitimate ways in order to achieve and retain competitiveness in the global market for organic mangoes? How to fix a price against multiple frames of evaluation? For all these "problems" readymade solutions are not at hand and organizing the new market therefore inevitably bears the character of a trial and error process.

But the playing field is clearly demarcated and solutions have not to be found from scratch. After all, the differentiation between market and non-market aims not only at a task to accomplish but contains at the same time a theoretical concept which points the way. It is shaped by formal economic knowledge as well as by individual experience informed by concrete markets which are themselves imbued with the imperatives of economic knowledge. Participants in the re-arrangement project draw on both repertoires of knowledge to actively create markets which then are sometimes misleadingly described as emerging from "zero", a point where the idea of market is entirely absent. This recursive relationship between the market as a scientific concept and markets as socio-material practice lies at the heart of the performativity approach (Callon, 1998; Caliskan and Callon,

2010): Different forms of economics are inevitably performative in that they bring about the world which they presumably only describe. Ontologically it is therefore impossible to differentiate between "economics", the science, and "the economy", a pre-given state of social affairs; caged economist in universities and research organizations are permanently occupied with writing scripts for the performances of economists in the wild.

Frontier Regions bear the paradoxical character of the work of economics and they are therefore one of the most instructive examples of economics' performative power, which increasingly articulates itself in the mobilization of pre-defined notions of markets as part of "value chain promotion projects" in the Global South. They are brought into being by an economic discourse which separates the inside of the capitalist world from its outside and become at the same time the preferred object of transformation efforts which aim at their dissolution via integration. The term Frontier Region has to be understood metaphorically, denoting both the territorially and non-territorially bounded social domains which become scenes "of political battles, in which new moral claims, arguments about justice, and forms of entitlement are forged" (Mitchell, 2007, p. 247) to establish market principles. With respect to neoliberal marketization there is obviously no categorical difference between northern Ghana and academia (e.g., the ongoing endeavours to measure quality), arts and culture (e.g., within the "creative industries discourse") or transportation systems (e.g., privatization projects) in many parts of the Global North.

5. Conclusion

While chain approaches to the global economy served for quite some time as analytical tools to unravel the mystery of uneven development, this strand of theorizing has considerably lost its appeal during the last decade. Admittedly, the distribution of value creation between regions and nodes of production is still an essential part of many economic geog-

raphy papers dealing with globalization issues. But the recent merger of the global commodity chain perspective with management studies literature at the end of the 1990s, displayed by the semantic shift from global commodity to global value chains (Gereffi et al., 2001; Gereffi, Humphrey, and Sturgeon, 2005), and their rising prominence as "supply chains" in business administration (Cox 1999; Busch 2007) have turned them into something very different: a powerful tool for marketization.

The GVC approach thus became performative. It contributes to the reshaping of the world according to conditions of economic theories so that their confined models, developed under controlled premises – *ceteris paribus* – work in the wild, too (Callon, 1998; Callon, 2007; Thrift, 2000). It is part of the multiple sets of framings which cut off certain relations and forge others to objectify goods, evaluate agencies and organize encounters and by that it helps to rework Frontier Regions of marketization where at particular places social relations are moved across an imaginary line separating the realm of the market from its outside – e.g. local smallholders not selected as outgrowers, mangoes not classified as international, modes of evaluation not compatible with the demands of the world market and so forth. The starting point of this project is itself performative, because it is economics that determines what lies outside the market by rendering "these ways of life defective, almost dead, by grasping them in terms of the economic rationality and forms of representation they are said to lack" (Mitchell, 2007, p. 268).

The production of organic mangoes in northern Ghana is explicitly part and at the same time a tellingly example of this greater neoliberal endeavour of marketization and the rhetoric of market access via value chain enhancement is present in many of the surveys, programmes and policy papers mentioned above. However, this example demonstrates that the effects of the performativity of economics must by no means be treated as all-encompassing or homogenous. The capitalist forms which both "caged economists" and

"economists in the wild" (Callon, 2005, p. 9; Mitchell, 2005, p. 298) usually tend to mobilize are always engaged in "worldly encounters" (Tsing, 2005, p. 4) at particular sites within specific historical conjunctures (Tsing, 2005, p. 8); they depend on compromises and the temporary smoothening of all the controversies which would threaten the legitimacy of newly established market architectures. It is this engagement of universals which constitutes global agricultural markets that seem to be based on a single format and which surprisingly plays into the hands of both orthodox (neoclassical) and critical (Marxist and Polanyiesque) economic accounts in their representational essentialization of the market. Deessentializing markets, unveiling their often messy and compromised construction from below and reconstructing the diversity of legitimate arrangements that finally evolve from the encounters of a diverse range of market makers remains one of the daunting challenges for the local and translocal analysis of global capitalism.

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Figures

Figure 1: Exports of horticulture products from selected African to EU-15 countries between 1995 and 2007

Figure 2: Trends in mango and pineapple¹⁴ exports from Ghana

Figure excludes processed (e.g. fresh-cut) pineapples. The volumes reported by the Ghana Export Promotion Council and the Sea Freight Exporters Association of Ghana do not match for the years 2000 through 2007.