Value Chains in developing countries: research situation and relevance to development policy

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Abstract

International trade is increasingly taking place in tightly coordinated forms, either as intra-firm trade or as trade between legally independent firms in quasi-integrated value chains and production networks. UNCTAD estimates that transnational corporations account for about two-thirds of world trade: One third is intra-firm trade, the other third is directly affected by the transnational corporations’ locational and sourcing strategies. Pure spot market transactions, where independent farmers or manufacturers produce without knowing in advance who their customers will be and which product and process standards they expect them to comply with, are no longer the prevalent way of doing business.

What explains the increasing integration of value chains?

Two major market trends are decisive for explaining the global trend towards more tightly coordinated production networks:

1. First, mounting competitive pressure obliges companies to increase efficiency and meet more sophisticated technological demands. This in turn requires closer interaction with partners upstream and downstream in the value-adding process;

2. Second, demand is growing for compliance with social, ecological, hygiene and other standards as well as for greater transparency of input-output relations, forcing firms to take tight control of the whole production process.

Ad 1) Increased global competition is forcing firms to enhance the quality of their products, to improve customer orientation and to accelerate the pace of innovation while at the same time cutting costs. This makes competition more complex. Today even large corporations are unable to generate all the different capabilities internally that are necessary to cope with the requirements of global competition. Success thus critically depends on a capacity to selectively source specialized capabilities outside the firm. Companies which are embedded in networks of complementary firms and institutions have basically four options to improve their performance:

— To improve their internal organization, e.g. developing better products, streamlining work flows, introducing performance-based incentives, and improving quality management;

1 UNCTAD (2001), p. 56.
— to optimize make-or-buy decisions, e.g. getting rid of low-margin activities and possibly developing or acquiring new capabilities which complement the existing core competencies;
— to exert influence on partners upstream and downstream in the value chain with the aim of boosting their performance. This pays off for a firm whenever these improvements lead to greater sales or lower input prices. Influence may be gained either by exerting pressure on or supporting network partners, or by a combination of both;
— to lower transaction costs in the production network within which the firm is embedded, e.g. building trust or standardizing logistics tools at the interfaces where companies interact.

Especially in agrifood chains in developing countries, outsourcing and value chain optimization are often far from being systematically organized, and some large processors and global traders exert astonishingly little influence on what happens upstream in the value chain. This, however, is now changing, with some significant consequences for agricultural producers.

Ad 2) The second major change results from stakeholders demanding compliance with social, ecological, hygiene and other standards and transparent procedures within the chain. Some consumers are willing to pay a price premium for goods with certain product or process characteristics, for instance food products which are free of pesticides or not genetically modified; meat and poultry products from farms that respect certain principles of animal welfare; wood products from sustainably managed forests; kosher and halal products, etc. While the main pressure comes from consumers, recently some ethical investors have started demanding compliance with certain social or ecological standards.

An increasing number of attributes of products are not visible in the product itself, e.g. coffee sells at different prices depending on attributes such as “organically grown,” “grown by smallholders” or “traded fairly”. Goods therefore carry two types of information: the natural appearance of the product (which the consumer may easily verify at the point of purchase) and the symbolic information attached to it. In order to meet the increasing consumer demands for symbolic product properties, companies have to hold control of all upstream activities and sometimes introduce significant changes. In addition, this control has to be proven to the customer, because “symbolic information is detached from the thing to which it refers and its veracity may be corrupted either during production or transmission. Under such circumstances assuring the integrity of the product information chain becomes much more important….“

Consumers are not willing to pay a surcharge unless the information on product and process characteristics provided with the respective good is reliable. Standards and certification procedures designed to control, document and verify attributes of the production process are required, and sophisticated logistics concepts are being developed for tracing products back to the primary producers.

The role of lead firms

The mounting requirements to augment efficiency via management of the value chain and to comply with an ever-increasing variety of standards enhances the role of lead firms. Lead firms are those companies that provide strategic and organizational leadership beyond the resources that lie directly under its management control. Their strategy affects the strategic direction and

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development opportunities of subordinate participants in its value chain, while the latter do not have the same amount of influence over the lead firm. Lead firms set the parameters for products, processes, and logistics to which other firms of the chain conform, thereby determining the conditions for lesser firms to participate in the chain, and they influence the distribution of gains along the chain. They derive their strength from three main capabilities:

- the capability to generate innovations. Lead firms control most R&D resources and have an important part in creating and advertising positive brand images.
- the capability to coordinate networks. As increasing specialization implies a shift from in-house production to purchasing from external sources, hierarchical control has to be replaced by new arrangements to secure fast and reliable availability of inputs in the right quantity at the right time. The lead firm’s ability to master the logistic task of sourcing inputs from different producers with specific locational advantages, distributing merchandise through different channels and integrating all the firms involved in efficient production networks, while keeping transaction costs low, is decisive for the competitiveness of the whole value chain.
- the capability to set and enforce standards. Lead firms are the main drivers for the implementation of different kinds of standards. Even if standards are developed by other actors, in many instances it is the lead firm that uses its market power to specify which parameters other network companies will have to conform to, how strictly they will have to be applied, what audits will be necessary, etc. This holds especially for brand name companies which are responsible for authenticating intangible properties of their products even if these properties are not directly verifiable by the client.

Power relations and governance of production networks

It is only logical that lead firms will use their strong position as the main innovators, coordinators of networks and standard-setters to augment their share in the distribution of gains vis-à-vis other firms in the process of value addition. For this reason, the introduction and enforcement of parameters is also a matter of power. The notion “governance of value chains” refers to the power relationships between actors and the possibility to appropriate profits. According to Kaplinsky and Morris, governance of value chains encompasses four stages: setting rules; supporting other actors in the chain in order to be able to adhere to the rules; monitoring adherence to the rules; and imposing sanctions where rules are violated. Altogether, the power relations between lead companies and ancillary firms largely determine the conditions for subordinate supply chain partners to gain access to global value chains and exploit opportunities to upgrade, especially in developing countries. Specifically, they affect

- the barriers of entry for participation in the production network;
- the share of the value added that subordinate firms from developing countries are able to appropriate;
- the partner firm’s opportunities for technological and organizational learning.

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3 Rugman and D’Cruz (2000), p. 84.
4 Humphrey / Schmitz (2002).
Risks and opportunities for agricultural producers in developing countries

For developing countries the increasing relevance of value chain integration, the growing power of lead firms and the generalized enforcement of different and often increasingly rigid standards entail both risks and opportunities.

A first risk results from the fact that lead firms are almost exclusively based and embedded in OECD countries, while developing country partners are increasingly becoming subordinated standard-takers. Second, there is a tendency for barriers to entry to rise. Suppliers have to bear additional costs of compliance with social, environmental, hygiene and other standards plus the necessary certification procedures and customer audits. Moreover, minimum scale requirements tend to rise along with increasing market concentration. Crowding out of small farms and processing plants, and even of entire locations is likely to occur.

Even though the net effects of value chain integration and increasing performance requirements are probably negative for most developing country suppliers, the same process generates opportunities as well. Trade liberalization and new transportation, information, and communication technologies facilitate international sourcing and the spatial division of value-added processes. As global buyers usually insist in compliance with high standards, they are likely to put some effort into the transfer of technology. Empirical evidence shows a variety of relevant learning processes among Third World suppliers in global production networks. For example, the dissemination of business concepts and standards such as HACCP, GAP or different ecological standards among firms catering to international customers has largely been triggered by a combination of pressure and support from international lead firms.

All in all, the increasing enhanced role of lead firms has far-reaching consequences for developing countries, involving both risks and opportunities. To what extent developing country producers achieve integration in global production networks, and whether they manage to exploit their potential benefits, depends on many factors: Technological characteristics of the respective branch, the corporate strategy of lead firms, the absorptive capacity of local firms and, last but not least, the wisdom of policy-makers and development agencies.

References


