



Innovation and Inclusive Development

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Innovation

In the conventional literature, innovation is often confused with invention. The latter, refers mainly to novelty and is a key criterion for patenting. In contrast to invention, the innovation systems approach stresses that innovation is neither research nor science and technology, but rather the application of knowledge by firms and other actors to the production of goods and services that are new to them, irrespective of whether they are new to their competitors, their countries or the world.

Seen from this perspective, innovation can and has taken many different forms: from the radical changes at the frontier of knowledge to the many small changes that collectively modify products and processes, improve quality, reduce costs, increase efficiency and ensure environmental sustainability. Such changes can also potentially open opportunities for the inclusion of smallholder farmers in the innovation process. But developing the local capabilities, strengthening local linkages, and building the necessary support structures will not be easy, as this brief paper points out.

To some extent this is due to a number of changes in the pattern of global production and competition that have taken place over the last several decades. These have put pressure on firms everywhere to engage in a continuous process of learning and innovation. Two of these stand out in particular: i) the growing knowledge intensity of production and; ii) the emergence of innovation based competition. In addition to their impact on the high-tech sector, these changes have played an important role in stimulating and shaping agricultural production for export from countries in the developing world.

As traditional barriers to international trade and investment were dismantled, innovation based competition diffused around the globe intensifying the pressure on developing country firms to master imported technology and in some cases to innovate. Not all exporting countries, however, took advantage of these changes to do so. Nor have local governments played a major role in building the capacity for producers, notably those from smallholder farming communities, to learn and to innovate as the case of flowers in Colombia illustrates.

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It was early in this period, for example, that Colombia emerged as a major exporter of flowers to the United States. Although these were initially based on local plant varieties, as global competition intensified, growers shifted to the production and export of roses. It is important to note, however, that the growth of flower exports in Colombia did not stimulate a process of innovation. From the outset, most of those who moved into the flower growing sector were seeking more lucrative investment opportunities for their land which had previously been used for grazing. Initially they had no competence as plant breeders and thus licensed the varieties they used from Dutch and, to a lesser extent, French and Italian breeders.

As international competition in the cut flower sector developed, and in view of the country's strengths in agricultural research one might have expected that a move towards building domestic capacity in plant breeding might take place. Despite the development of local research and innovation in export sectors such as coffee, nothing similar emerged in the flower sector and the practice of importing planting material did not change, though the costs of doing so rose. More recently this made the sector vulnerable to foreign takeovers, undermining the likelihood that local plant breeding might one day develop (Mytelka and Bortagaray, 2005, p.19-20). Over the years, moreover, it has also made it more difficult for smallholder farmers, who could not afford memberships in Asocoflores, the Colombian Flower Growers Association, to build the capacity and the knowledge base needed to develop local flower varieties for export. (Mytelka & Bortagaray, p.33).

Inclusive Development

Inclusive development began as a critique of the 'Green Revolution' but has now been taken on board as a broader reaction to the need to preserve smallholder farming and sustainable agriculture globally. Smallholder farmers in developing countries, however, face many challenges of their own in producing agricultural crops for export and at the same time, preserving local land ownership, as foreign investors seek long term leases for the local production of export crops. They also lack access to critical knowledge and information that strengthens the ability of local communities to adapt when conditions change. Governments have an important role to play in building such capacities and stimulating and supporting these processes.

To a large extent, however, the role of government in strengthening learning and innovation through channels that are accessible to smallholder farmers has been limited. In some cases this has resulted from the widespread acquisition of land destined for large scale export production in a number of developing countries. As the case of Ghana shows, this can have quite negative effects on smallholder farming communities notable those whose land is largely under the control of local Chiefs who, without consultation, can lease land to foreign companies. "Since the rural economy of Ghana is largely agrarian, securing rights to land is a central issue in rural parts of Ghana, with respect to livelihoods, food security, economic growth and human rights (Acheampon *et.al.* 22 July 2014, 4502)

New Policies and New Practices

Current global trading practices have put smallholder farmers under pressure everywhere. There is thus a growing need to rethink current policies and practices in the commercialization of agricultural products and do so within the context of smallholder farming. This is particularly important where smallholder farms, producing for export, are owned or managed by foreign enterprises. Three changes in current practices would be of particular importance.

One is the need to move away from short term practices that fail to take into consideration the changes in prices, tastes and competitive practices that shape international trade in agriculture. A longer-term perspective is particularly important in a world where farming for export has become a major source of income for many developing countries. In this connection, the capacity to analyze such practices and to adjust production to them is critical and requires that flexibility be built into farming practices from the outset. This in turn, will require the strengthening of local knowledge bases.

A second is the need to build dialogues with smallholder farmers. In the context of export agriculture, the absence of such dialogues is particularly problematic for change and thus for inclusive development. To introduce the required flexibility, export agriculture needs to be rethought in a way that opens opportunities for learning and capacity building and strengthens flexibility in response to the need for changes in land use over time. Dialogues have a potentially important role to play in this process.

Until recently, however, dialogues did not feature centrally in policymaking or project planning. Although they relate to the broader set of habits, practices and norms that affect learning and innovation processes, they were not well established practices. Instead, the common approach involved a top-down linear process in which the flows of knowledge and information were driven by governments, research or, business. These were of two sorts: Communication and Consultation.

Communication is the transfer of information through the distribution of material, awareness - raising campaigns and formal training programs. Consultation involves focus groups and stakeholder meetings that give the impression of being dialogues but in fact, they have pre-established boundaries that provide little opportunity for those consulted to express interests, needs or preferences not already on the agenda.

In contrast to the above, interactive dialogue processes offer room for the articulation of a broad range of views, interests, preferences and needs that are essential for confidence and consensus building in transition processes. They can also play a role in developing and institutionalizing processes of working together and joint problem solving that can open channels for innovative ways to deal with problems. In sum, by recognizing the legitimacy of local concerns, interests, and needs, they strengthen confidence building measures that are supportive of the change process.

Lastly, new practices that foster learning to scale up to engage in international exports will need to be developed. Currently, most decisions that deal with these issues are taken by foreign

investors. To a large extent this is because moving towards global markets requires a quite different management model and involves greater knowledge of foreign markets and their uncertainties. It is now time for a change.

Conclusion

In summary of critical importance in stimulating an innovation process that brings smallholder farmers in, is the realization that learning to innovate is itself, a part of that process. Learning to learn and learning to innovate are thus twin imperatives that put a heavy burden on governments in developing countries to build the policy environment that will trigger and supporting smallholder innovation processes.

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