“Successful innovation depends on being able to look widely and ahead…Innovation is a process not a single event.”
(Joe Tidd, John Bessant and Keith Pavitt 2001)

1. Introduction

Promoting development in rural areas is a slow and complex process. It requires simultaneous action in various sectors, in an environment undergoing rapid, sometimes volatile change. The change comes from internal as well as external processes such as privatization and globalization, by forces appearing scattered and disparate (Bauman 1998). What is the lot of rural societies in this change? Just to adjust to a rapidly changing and highly competitive international economy (World Bank 2005, 61), or to have a more innovative and proactive role?

When even well-informed researchers debate on the character of the present global processes, admitting that they do not yet fully understand what is happening in the global economy (see Dicken, Kelly, Olds and Yeung 2001), how can we then expect the rural poor to understand new global trends, respond to new challenges and tap opportunities? For this reason alone, it is important for all stakeholders to work together and identify which aspects of globalization will affect the livelihoods and welfare of the rural poor and how. But we need deep analysis. We must critically analyse global processes from the point of view of indigenous and endogenous knowledge systems, and ask whether local knowledge systems and social systems can cope with ever rapid change.

2. Global Challenges and Opportunities

While the present trends, challenges and opportunities are getting somewhat clearer, the efforts required to address them remain less clear.

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Globalization is a major source of change. It is a complex process, consisting of global penetration of finance and market, information and media, technology and culture, transport and tourism, and even crime. Globalization in all of its aspects may not be new.

Liberalized trade regimes as well as more integrated and consumer driven agricultural and food markets are globalizing rapidly and driving innovations, forcing farmers to adapt or lose out. At the country level, it is increasingly the system of growers-packers-exporters of a country that competes against the business system of another country, and not necessarily business entities independently. (Nitchke and O’Keefe referred by Matopoulos et al).

We are in the midst of a transformation to a network economy with a shift from markets to networks, from quantities to qualities, from commodities to niches, and from supply-driven to demand-driven large chains. The new developments have provided opportunities for small farmers too. Some of them are linked to supermarkets (in certain products at least). But the process is uneven. According to latest research (Reardon, Berdegué, Timmer, Mainville, Flores, Hernandez. Neven and Balsevich 2005) the great majority of Africans have not yet substantially entered supermarket diffusion.

At least the ‘new age’ brokers have started to prefer direct ties to producers. The new market outlets also prefer stability and consistency of (quality) supply (as important as price) with long term contracts. All of these are expected to offer challenges to smallholders but also unexpected opportunities. (Busch)

Reardon and Timmer (2005) have proposed two theoretical perspectives to understand the transformation of markets in developing countries over the past half century: (1) structural transformation as a regular economic process, with both demand and technological drivers; and 2) induced technological, organisational, and institutional changes, which respond to those drivers. Increased competition is driven by policies of market privatisation and economic liberalization, and liberalization of foreign direct investment leading to influx of foreign competitors and rising sectoral concentrations. There has been a change to specialized wholesalers and various degrees of partial vertical integration with preferred suppliers as well
as an institutional change in the adoption of contracts and other “vertical restrictions” on standards (see Ibid). There has been a profound retail transformation to supermarkets. It has been argued that this revolution has been the leading edge towards a globalisation of domestic agrifood systems, and not as the literature currently emphasizes, an opening to international trade. The challenge for the farmers at farm level is the scarcity of management ability to meet high quality standards and to deliver reliably a safe product that meets environmental requirements and is fully traceable to its point of production. (Ibid)

Small farmers are particularly challenged (not necessarily excluded, as at the moment and under certain circumstances, small farmers in Latin America, Asia and Africa are included in procurement systems of large-scale agro-processors and supermarket chains) to meet the volume, quality, and consistency requirements of the increasingly dominant supermarket chains and large-scale agro-processors (Reardon and Timmer, 2005). As supermarkets tend to source as much as possible from medium and large growers, the small farmers, to stay in the game, need to form farmers’ associations or cooperatives to reduce transaction costs. Yet, this may not be sufficient, and it has been proposed to deepen the analysis of agri-food output markets and develop innovative approaches tailored to the transformed agrifood systems. (Ibid)

Climate change is another challenge. It affects the rural poor more, because they reside in geographically and environmentally marginal environments with poor infrastructure such as roads. Shifts in temperature as well as extreme and erratic weather with floods and droughts affect more drastically their livelihoods, including crop production. Although the rural poor have the least capacity to manage shocks, they are mostly uncovered by risk management structures.

Other challenges on rural societies and livelihoods include the effects of HIV/AIDS, increasing internal conflicts, emerging knowledge economy with bio-patenting of endogenous and indigenous knowledge, decreasing biodiversity, withdrawal of state, out-migration and aging of rural societies. Emerging animal epidemics, such as the present bird flu also need to be seen as a threat to rural livelihoods rather than just a threat to urban people.
In addition to the opportunities mentioned above I would add the role of ICT as a major opportunity to rural livelihoods and poverty reduction. It can play a major role in enhancing the activities of the rural poor and increasing their productivity. It can facilitate access to services and to market information or lower transaction costs of poor farmers and traders. ICT can also play a major role in helping to monitor food security related issues (such as weather, droughts, crop failures, pests), and to inform governments on impending food scarcities and famines. (Kelles-Viitanen 2003).

Opportunities for rural organisations come also from increasing democratisation. According to some estimates the number of democratic countries has increased from 41 in 1974 to 121 in 2002. With increasing political decentralisation, the rise of civil society and increasing relevance of participatory policy processes also come many opportunities to influence development directions at local and global levels. (Birner and Resnick 2005).

Some present trends may also change. There are some indications that at least in some countries out migration to cities could reverse. There could even be a comeback of rural community, rural renewal or new rurality as pointed out by some (Water-Bayers and Barkin and Baron).

3. Innovation as a Challenge: Whose Knowledge?

The open ended process of innovation can be a challenge to many organizations and societies, which are used to standard management practices that control linear processes with expected outcomes. (Keith Pavitt 2003). Innovators move forward, but they also back up, go sideways, chase parallel paths for a while, consolidate, go forward again and come up with unexpected results. (Vadim Kotelnikov).

Innovation in development is somewhat different from that in the private sector. The private sector focuses mainly on product development. In development we also need to develop strategies and new, often integrated approaches that make a difference in poor people’s livelihoods. Livelihoods are also rooted in societies and therefore social change is a part of any sustainable goal.

In principle, everyone seems to agree that innovation is a good thing. In practice, innovation may not be welcome to all people. Innovation unsettles
old patterns of thinking and working. This can be a challenge to the status quo and vested interests. Dominant discourses usually produce a structure of knowledge that permits only some problems to be seen and, hence be addressed. (Koenig et al). Domination can also lead to the formation of institutions that not only perpetuate and reproduce inequalities in power, status and wealth, but also discourage innovation and risk-taking. (World Bank 2006) We can expect this to be the case particularly when addressing the concerns of the rural poor in unequal societies with unequal power structures. Since existing powerful interest groups can block the introduction of innovations, the issue is also: how to overturn or transform entrenched hierarchies of knowledge? (See Acemoglu and Robinson 2000 on social change).

Innovation in the interest of the rural poor can even generate conflict. Sometimes unsuspected opponents emerge during the initial stages of the process and seek to join forces against the envisaged action. Sometimes they come up during implementation with complex and subtle games of power and influence. In the fact-sheets of innovative actions, everything appears relatively consensual, whereas in reality the process is more messy. An innovation process has to overcome conflicts, convince the people that have to be convinced and build the alliances necessary for the action to succeed. (See Innovation and Rural Development www.rural-europe.aeidl.be). Action is also required by the state and the non-profit sector to level the playing field and broaden access to knowledge.

Is all innovation good? Are not terminator seeds, innovation gone wrong? (http://www.grain.org/front/ and ETC Communiqué Issue 90. September/October 2005). And when is new better than old? (See Pavitt for examples in the private sector). And who benefits from innovations?

Traditional knowledge can be appropriated from communities that are not familiar with Western commercial practices and are geographically situated in the remote areas. Apparently less than 0.001 per cent of profits from drugs developed from natural products and traditional knowledge have accrued to indigenous people and cultural minorities, who provided the technical leads for the research. (Shaman Pharmaceuticals and the Body Shop are exceptions by providing various types of compensation to the indigenous people and ethnic minorities) (Pretorius 2002, 186.)
Knowledge and innovation is also a legislative issue requiring some safeguarding. (National legislation such as the one passed by the Indian Parliament in 2001 e.g. the Plant Variety Protection and Farmers’ Rights Act is exemplary in this regard. See Sahai 2002). It is also a patent issue, as it has been noted that the absence of financial and organisational competences of the indigenous and local people to monitor and enforce patents in modern economic space will inevitably lead to the use of their knowledge without due compensation. (Pretorius 2002, 187) Their knowledge and innovation, therefore, need to be protected through multilateral recognition of their rights, including through TRIPS (Trade-Related aspects of Intellectual Property rights in WTO.)

The Innovation System

Innovation, therefore, is not a simple process. Nor is research the only element in it. (Barnett 2004). The concept of an innovation system is useful in understanding the wider comprehensive processes and patterns of linkages that lead to innovation, and the way institutions, incentives and policies shape the innovation process. (Raina on Web www.cphp.uk.com/projects/22.9.2005).

According to the World Bank (WB Concept note: Agricultural Innovation Systems 25 January, 2005) agricultural innovation system consists of:

I. conducive institutional environment with flow of knowledge and collaboration, experimentation and implementation of innovations;
II. well-articulated demand for and capacity to adapt and adopt innovations (with demand side which is often poorly developed); and
III. effective supply of new knowledge.

All these elements need to work in harmony and interact with each other.

According to Andy Hall (2004) innovation should lead to social and economic change, as a result of technological and institutional development. Institutional development means new ways of doing things, new norms, new ways of deploying science, and new ways of ensuring that poor stakeholders’ needs are addressed. Others, however, have noted (Barnett 2004) that poor producers have great difficulty in specifying their needs for
new knowledge. So how to translate the ‘needs’ of poor people into ‘effective demand’? And how to find and develop local capacity for innovation and emergence of locally appropriate solutions and innovations?

We not only need to address the needs of the rural poor, but we need to work with them. We need to promote local innovators and recognize farmers and other rural people as legitimate experts in the area where they work. We need to support and help to upscale innovative and successful local action. To do all this, we also need to consider our approaches. How to have a positive approach, that starts from, but is not confined to local ideas, which focuses on local people’s strengths and explores the particular opportunities open to them – rather than dwelling on their weaknesses and problems –? (IK Notes No.76 January 2005). How to move from problem-based programs towards strengthening the solutions to be found in local communities, building upon existing strengths and initiatives and supporting innovation? (Reij and Waters-Bayer).

The role of other stakeholders also needs to be clarified. The private sector has an important economic role. It is also a powerful innovator. It is less clear, however, how it will contribute to the broader sustainable goals of development. Its profit making goals may not always be in line with the social goals of poverty reduction and pro-poor development, which also needs to tackle equity issues.

Finally, how to set priorities with multiple stakeholders? What kind of learning and innovation alliances with researchers, practitioners, policy makers, private sector and rural poor (see on this Barnett 2004) are required that could lead to greater poverty reduction impact as well as facilitate broader ownership of innovation processes? How to build alliances with those most likely to oppose new changes?

4. IFAD’s Role in Innovation?

Finally, how can IFAD support innovation processes – flexible and open ended, as they are? What kind of flexible financing mechanisms are required to support innovation in the field? Are new coordinating or other actions required? Do we need to have new multi-stakeholder compacts to make various partners responsible to each other in delivering development commitments? Should we have interactive agricultural knowledge systems with multiple disciplines and actors as proposed by some? (Waters-Bayer
s.d) How to support rural poor and smallholders not only to tap opportunities provided by the global economy, but also to have a say over resources and to influence policies?

It has been suggested that only through networks, can we map and understand the increasingly complex aspects of global society and political economy. (Emily Perkin and Julius Court 2005). How can we create a network involving farmers, extension workers, government, private sector, researchers and policymakers to increase our understanding and be informed of new challenges and opportunities as well as enriching each other, spawing innovation on all sides? (Waters-Bayer). How can we develop new forms of influencing policy agendas in the interest of the rural poor that fulfill the three characteristics of democratic bargaining: i) representation; ii) full information; and iii) non-domination? (Drahos 2002, 163-164).

Clearly, innovation requires a new capabilityiv and learning cycle, too: one that allows learning from the future as it emerges, rather than just reflecting on past experiences.

Sources


Kotelnikov: www.1000ventures.com/business_guide/innovation_vs_operations.html

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Reardon Thomas and C. Peter *Timmer 2005*: Transformation of Markets for Agricultural Output in Developing Countries since 1950: How has Thinking Changed? –


Waters-Bayer Ann sine datum: Rural Transformation and agricultural innovation processes.


Footnotes

i Instead of abandoning their communities for the burgeoning cities, as previous generations did, today Mexico’s rural population is assuming responsibility for constructing viable alternatives at home. (Barkin and Baron).

ii As noted by Wilberforce (2005), it is groups whose political power, not economic rents, are eroded that will block technological advances. If agents are economic losers, but have no political power, they cannot impede technological progress. It is therefore agents who have political power and fear losing it, and will have incentives to block it.

iii Nonprofit sector here denotes institutions between state and market.

iv Discussion on this approach can be found in Scharmer 2000.