# Linking Smallholders to Markets – Opportunities and Challenges

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An estimated 2.6 billion people in the developing world have to live on less than $2 a day. Of these people, about 1.4 billion are extremely poor, surviving on less than $1.25 a day each. Asia harbors the majority of the world's extremely poor, with 933 million, while the density of extreme poverty is highest in sub-Saharan Africa, at one in two people (50 percent) (Chen and Ravallion, 2008; World Bank, 2007). The majority of the poor live in rural areas and many are smallholder farmers with livestock forming an essential component of their livelihoods portfolio. Much has been written about the 'safety-net' function of livestock in subsistence-oriented rural households, and many development interventions have focused on safeguarding the livestock assets of the poor. Recognizing the acceleration of demand for livestock products in the developing world, particularly in rapidly emerging Asian economies, this paper examines on the potential of livestock to act as 'cargo-net' to lift households out of poverty via improved access to growing urban food markets. This perspective advocates a 'market-led' approach to self-directed poverty reduction, a strategy that leverages private agency to complement other forms of development assistance.

## Asia's Food Markets

Asia's food markets have been estimated to be in the order of PPP[1] $ 2 to 2.5 trillion per year, by far the largest of any developing region (WRI, 2007). Approximately 10% of total food expenditure is spend on milk and dairy products (around PPP$ 170 billion in South Asia and PPP$ 50 billion in East Asia). Rising incomes of Asian households and high income elasticities of demand for animal source food (ASF) are projected to lead to tremendous increases in aggregate demand for livestock products over the coming decades. For milk and dairy products, the increase in consumer demand between 2000 and 2030 has been estimated to be in the order of 24 million tons (132% increase) for East Asia while for South Asia the corresponding figure stands at nearly 120 million tons (143%) (Robinson and Pozzi, 2011).

Despite the projected rapid income growth in Asia, the bulk of this demand for food originates in households with per capita incomes of less than PPP$ 3,000 per year, consumers who still favor traditional and 'fresh' produce offered at markets with supply

[1] Purchasing power parity

chains that are mediated mainly by informal and customary networks of low income agri-food intermediaries. In these countries, only the top income decile currently presents a viable market for high-value processed cold chain products.

The current expansion of markets for ASFs in developing countries, and their large degree of diversity therefore represent enormous income potential for the rural poor, many of whom own livestock, as well as their urban market intermediaries. However, which benefits of growing urban food demand go to rural smallholders and which to expanding agrifood industries will depend to a significant extent on policy decisions. Without public commitment to promoting smallholders farmers' and agrifood intermediary market participation, it is likely that these groups will be economically marginalized, while urban growth masks continuously rising inequality.

## Poverty Incidence, Poverty Density and Market Access

Poverty incidence / rate describes how common poverty is in a given location but not how many poor people could be affected by a policy or program that targets that location. As Figures 1a and 1b make this clear for the case of Viet Nam, poverty incidence can be very high (i.e. poverty is common) in remote areas with little if any market access. Targeted market access policies for reducing poverty in these areas could be quite expensive, however, requiring large commitments per capita of scarce public investment funds for transport, communication, health and education infrastructure, without helping most of the poor. In low-income countries, public funds have high opportunity costs, which make such expenditures difficult to justify on the grounds of cost-effectiveness.

In contrast to poverty incidence, poverty density identifies the actual numbers of poor people in given localities across a country. Figure 1c displays poverty density and the results are visually arresting. Although poverty is very common in sparsely populated (remote) provinces, it becomes clear that the majority of the poor live in areas where poverty incidence is comparatively low, often in reasonable proximity to urban areas. This evidence suggests a different strategy for poverty reduction, one that promotes market access incrementally, radiating outwards from urban areas, rather than laying out extensive (and expensive) new corridors to remote areas. From and infrastructure perspective, such access can be facilitated with existing commitments to urban development. This permits development funds to be focused on the institutional barriers to market participation by the poor.

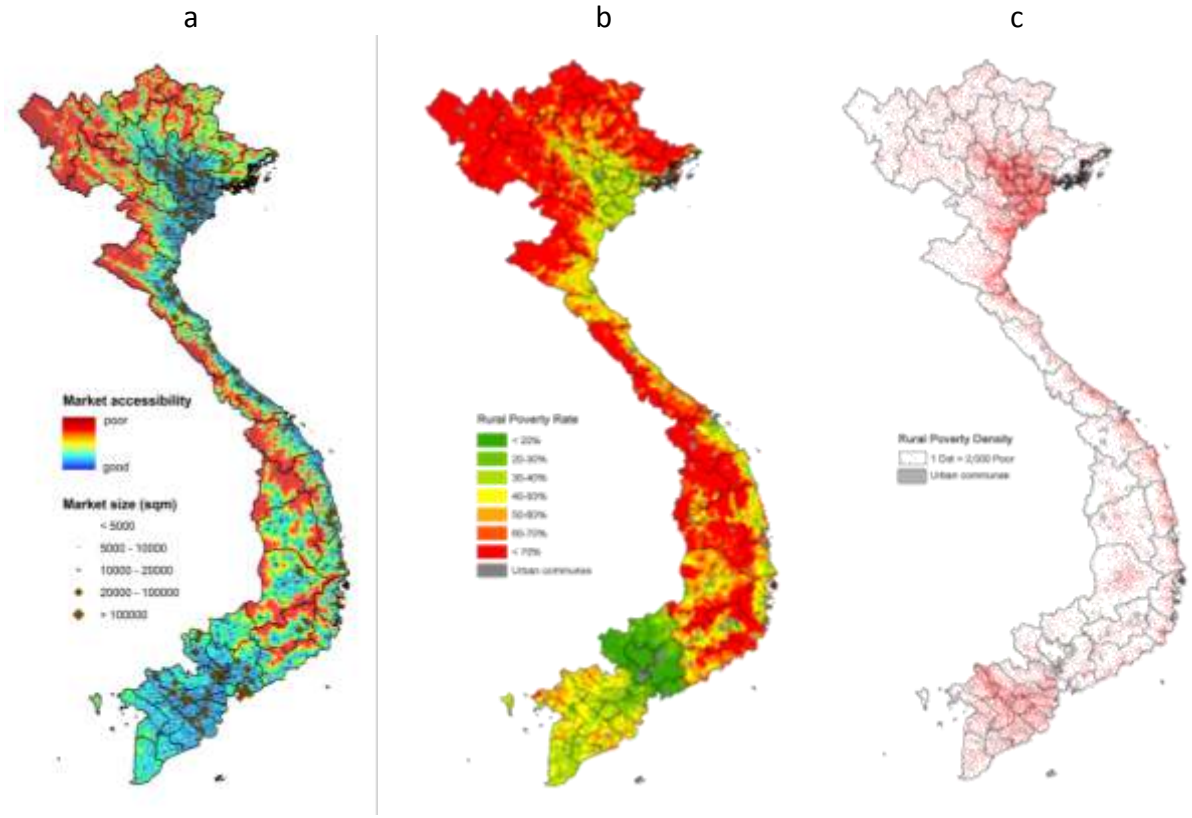


Figure 1. (a) Market accessibility, (b) Poverty incidence / rate. (c) Poverty density

## Barriers to Market Participation

Participation in expanding markets for livestock products does not occur automatically. Wherever there are profits to be made in an emerging urban consumption sector, larger commercial suppliers will compete to capture market share for any product. When household producers are unable to participate in the growing markets that attract larger commercial producers, it is generally because of barriers to market access or entry.

In agrifood supply at its smallest scale, from the smallholder farm gate, a household sells its product to a trader, initiating a chain of exchange relations across a market system that takes the product through a number of stages to reach final consumers. From the first step, this elemental agrifood supply chain is complicated by many market access barriers and information failures, which individually and collectively limit the livelihood potential of family farming. plagued by the following imperfections: (i) Low input quality, (ii) low sanitary standards and inconsistency; (iii) low bargaining power; (iv) moral hazard; (v) low reputation and distrust.

Each of these characteristics/uncertainties undermines willingness to pay and and contributes to serious adverse selection bias in such markets. Ultimately, this problem feeds back to producers, who have little incentive to invest in quality or expansion, actions that could lift them out of poverty by their own agency. Unless these market imperfections can be overcome, the low investment trap will remain individually rational for smallholder farmers, and the livelihood potential of livestock markets cannot be realized.

## Overcoming Barriers to Market Participation

Diversification is a risk management strategy for smallholders, evolving from self-sufficiency and expectations that the burden of external shocks will be borne individually. For smallholders to emerge from this situation, they need a credible strategy of commercialization, specialization and investments in higher value added. Unfortunately, their conditions make smallholders unlikely to compete against established commercial agrifood enterprises in urban markets. To be successful, smallholder producers need to emphasize their strengths – traditional product variety and low resource costs – while policies for inclusive development are implemented to facilitate their market participation.

Willingness-to-pay surveys across a wide range of countries show that consumers put a significant premium on the traditional livestock varieties that have historically been produced by smallholders. The existence of this premium suggests that market access strategies can promote self-directed, privately financed long-term poverty alleviation. Moreover, smallholder producers are linked to downstream consumers through networks of low-income intermediary enterprises, so their continued viability secures pro-poor multiplier effects across the broader economy. Overcoming information and access barriers would improve incentives for individual enterprise investments from farm to fork, meaning that these poverty reduction initiatives could eventually be self-financed – a welcome substitute for open-ended fiscal commitments to public assistance. Finally, demonstrated willingness to pay for traditional livestock products also suggests that the general public has a distinct preference for them, countering the pressure from some commercial interests to phase them – and the associated production systems – out.

Governments can play a critical role in enhancing these pro-poor supply networks by supporting grassroots producer cooperatives and extension services and maintaining a general environment that is congenial to small enterprise development. Among other elements, this would include strengthening animal health services, protecting intellectual property rights, supporting the development of private standards and reputation building through certification or branding programmes, improving existing market infrastructure, and developing small wholesale markets with registered slaughterhouse facilities in strategic urban locations.

Smallholder farmers' access to information and technology should be improved, particularly with respect to product quality, pricing, and other market conditions. On the financial side, micro-credit schemes can accelerate technology adoption and small enterprise modernization, improving productivity and product quality/reliability and leading eventually to established brands and reputation that confer higher long-term value added at lower transaction cost. Education on contracting, negotiation, and conflict resolution would improve the extent and terms of smallholders' market participation. Governments can also reinforce the efforts of farming groups that already apply economically viable production practices, while recruiting farmers interested in emulating these examples. Such initiatives can be modelled on early strategies of Western agrifood producer cooperatives, which are now the primary guarantors of product quality and farm market access in OECD countries.

## Conclusions

In many developing countries, rapidly emerging urban demand for livestock products presents an enormous opportunity for domestic agriculture, but there is also serious risk that smallholder rural majorities will miss this and be marginalized by agrifood industrialization. It must be recognized that the majority of agricultural and rural households in developing countries are unlikely to be recruited directly into agrifood industrialization; even intermediate stages of sector consolidation, such as contract farming, appear to be undertaken at a scale well beyond that of the average smallholder farmer. On the contrary urban demand must be more fully appreciated for its inclusive development potential, and more national livestock and other agrofood markets will only arise from determined policy commitments to overcoming existing entry barriers, information and agency failures, and historic bias in favour of integrated agrifood enterprise development.

## References

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