

A Menu of Livestock Sector Policies Rationale and Structure

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1. The Issue

The livestock sector has for long been considered an appendage to agriculture: scattered and incoherent public interventions have characterized the sector – with a focus on animal breeding, health and feeding – and few countries, if any, have designed and implemented comprehensive livestock sector development policies and associated strategies. However, over the last decade or so, following a growing appreciation of the increased contribution of livestock to agricultural growth and poverty reduction, a number of developing country governments have formulated livestock sector development policies and strategies, while the international community has also shown increased commitment towards supporting the development of the sector.

Designing and implementing effective livestock sector policies and strategies is repeatedly proving a daunting task, both because of limited information, capacity and resources of livestock sector policy makers, and because the development of the sector depends on the broader agricultural and macroeconomic policy framework that is beyond the scope and responsibility of the Livestock Department. The prevailing policy thrust in developing countries, however, provides livestock policy makers with unprecedented opportunities to address developmental constraints both within and outside the livestock sector, as witnessed by several new and innovative interventions in the livestock sector which many developing country governments are experimenting with.

The Livestock Sector Policy Menu identifies and systematises some conventional and innovative policy instruments available to policy makers to promote a sustainable and equitable development of the livestock sector, including a brief description, their pros and cons, and a country example.

2. Designing effective livestock sector policies and strategies

Several developing country governments in Asia, Africa and Latin America – often backed by the international community – have been designing more or less comprehensive livestock sector policies and strategies, such as in Bangladesh (2007), Chhattisgarh, India (2008), Gabon (2008), Indonesia (2000), Malawi (1995), Mali (2003), Mauritania (2002), Orissa, India (2002), Peru (2006), Tanzania (2002), and Zambia (2004).

Livestock sector development policies / strategies are usually impressive technical documents. They are however built on two strong assumptions: the first is that livestock policy makers have complete knowledge of all the constraints in the sector; the second is that livestock policy makers have the capacity to entirely remove the

identified distortions, which entails the adoption of policy instruments both within and outside the livestock domain, such as: '*Micro-finance packages better tailored to the production cycles of various livestock species*' (Livestock Development Strategy of an Asian country).

Whilst the implementation of a well-designed livestock development policy / strategy will bring some good as all constraints are simultaneously removed, the chances that the strategy is perfectly formulated and successfully implemented appear small. What happens in practice is that, among the many interventions envisaged in the development strategy, the Livestock Department goes for those which seem to be technically feasible, stay within the budget constraint, and are politically doable. This approach is very pragmatic, and at least something is done. The big problem is that such piecemeal approach is faulty in its economic logic as there is no guarantee that any partial reform taken on its own will contribute to the development of the livestock sector – in the worst circumstances it may even be welfare-reducing – because all other constraints remain binding. Assume that policy makers formulate a two-pronged livestock sector development strategy, including the provision of animal vaccines to villagers and paving feeder roads. The Livestock Department manages to vaccinate the entire livestock herd in the villages but is unable to have the Ministry of Public Works pave the roads. As a result, the increased production of animal source food ends up in local markets, prices drop, and the livestock keepers are eventually worse-off.

The (likely) impossibility of fully implementing wholesale reforms calls for different, more practical approaches. One could be to assess all the subsidiary interactions of the envisaged public actions and then only select that or those which have the largest welfare-enhancing effect. The difficulty with this strategy is that many, if not most of the secondary interactions are hard to identify and quantify ex-ante, and they are typically figured out only ex-post.ⁱⁱ In the vaccine-feeder road example, for instance, it could be difficult to conclude ex-ante that lower food prices in local markets may lead to reduced malnutrition, and that the overall benefits for consumers will outweigh the income loss suffered by the livestock keepers.

Since wholesale livestock reforms are practically impossible and partial reforms entail secondary effects which cannot be figured out ex-ante and may ultimately be welfare-reducing, some other way to implement livestock sector strategies needs to be envisaged. Livestock sector policy makers may wish to go for those public actions which have the largest direct impact on a specific target group, so that the biggest bang from the policy shift is produced and the chance of secondary welfare-reducing interactions is greatly reduced. This requires that livestock sector policy and strategy (i) be centred around the various actors along the livestock supply chain, with an understanding of the role of livestock in their livelihoods, rather than around the farm animal; (ii) the envisaged interventions be not simply listed, but ranked according to their direct impact on defined target groups. Partial equilibrium models and cost-benefit analysis are standard tools for ex-ante assessment of the direct impacts of specific interventions.ⁱⁱⁱ

The proposed approach appears appealing as, on the one hand, it requires developing a long-term development strategy for the sector – which is critical for budgetary planning and allows consistency with the broader agricultural and policy framework – and, on the other, it allows to target interventions which enhance political consensus as, when livestock production systems are far below their potential, even moderate movements in the right direction suffice to produce a big growth payoff. An issue with this approach could be that some, if not the majority of

the identified constraints / instruments are beyond the scope and responsibility of livestock sector policy makers, including macroeconomic and agricultural bottlenecks. In the vaccine-feeder road example, paving the feeder road could end up being the intervention with the largest positive impact on the livestock keepers, but the Livestock Department has neither the responsibility nor the capacity to pave rural roads. The prevailing policy thrust in developing countries, however, provides livestock policy makers with unprecedented opportunities to address developmental constraints both within and outside the livestock sector.

3. A menu of livestock sector policies

There are three elements which these days support effective livestock policy and strategy making. The first two are exogenous to the livestock domain: improved and sound macroeconomic fundamentals in much of the developing world constitute a critical underpinning to the efficacy of livestock sector policies; the increased adoption by governments of national and sector-wide approaches allows the livestock sector to be systematically integrated into broader poverty reduction and agricultural development policies and strategies. The third relates to the process of economic liberalization, privatization and fiscal austerity, which characterizes a large majority of developing countries. Such policy shift has barely reduced the degrees of freedom of livestock policy makers; on the contrary, it has created unmatched opportunities to formulate and implement effective livestock sector policies and strategies.

In a market-based economy the government should supply public goods and ignite innovations and changes when markets are imperfect and/or produce socially undesirable outcomes. The government thus retains the freedom to step in markets for both efficiency and equity reasons and, depending on the circumstances, can intervene indirectly or indirectly: for instance, it can disseminate information; regulate market access; provide one-off incentives to some key market actors and then step out; directly supply private goods when alternative instruments prove ineffective.

For the Livestock Department, which typically manages a comparatively small budget and has limited capacity to allure the Minister of Finance, a market based approach to livestock policy and strategy making is promising. (i) The Department is expected to spend its resources largely on the supply of public goods, thereby getting rid of the ineffective spray-gun approach which frequently characterizes government-driven livestock programmes. (ii) A share of the budget, including extra-budgetary resources, could be allocated to design and promote market-based interventions, which can have far-reaching effects on the growth of the livestock sector. They in fact require that the government triggers the development of livestock-related markets and then steps out – such as providing the private sector with a one-off grant to establish cattle dipping tanks, which can then survive on user fees – and do not entail continuous government spending, which is most likely unfeasible and inefficient because of both budget constraints and red tape and rent seeking activities. (iii) As far as the market mechanisms are respected, there are no pre-determined boundaries to the interventions of livestock policy makers, who thus have a first time opportunity to address the most binding constraints to livestock sector development, rather than forcibly focusing on animal health, animal breeding and other livestock-related services.

Whilst the principles underpinning market-based policy instruments are straightforward, there is no unique correspondence between the functions that the

government should perform and the way they have to be performed. Market-based principles can be in fact packaged into a variety of institutional designs, i.e. a multiplicity of policy instruments could be potentially used to address just one developmental constraint. The Livestock Sector Policy Menu represents an attempt to identify and review some of the conventional and innovative policy instruments – including a brief description, their pros and cons, and a country example – available to livestock sector policy makers in the land / water / feed / insurance / animal health and other services / finance / marketing / research / environmental protection and trade domains. It is then up to policy makers to select and adapt the most appropriate instrument or set of instruments to promote the development of the livestock sector in their respective countries.

The Menu shows, for instance, that in the domain of animal health different policy instruments have been tried out in different countries to enhance the quality and coverage of animal health services, such as cost-recovery mechanisms in Zimbabwe; combined animal-human health services in Chad; distribution of input vouchers to livestock keepers in Romania; provision of grants to veterinarians to establish animal health clinics in rural areas in India; support to organizations which supply livestock services to their members in Kenya; sub-contracting private veterinarians in Mali; institutionalization of community animal health workers in Indonesia and several other countries.^{iv} Some experimentation, driven both by the private and public sector, is also on-going in non-livestock markets. For instance, whilst livestock policy makers are not responsible for regulating micro-credit in rural areas, they can urge financial institutions to explore ways to accept farm animals as collateral for small loans (Uganda) or make use of non-bank agents to deliver financial services to some livestock-dependent communities (Brazil); whilst they are not responsible for the national research policy, they can set up competitive research funds (Uganda) or matching grants (Malaysia) to promote livestock research in a given domain; while livestock policy makers are not responsible to build roads, they can support the establishment of periodic livestock markets (Kenya) or facilitate marketing contracts along the supply chain (Pakistan) to facilitate market access; while they will never be responsible for the broader environmental and trade policy framework, they can promote sustainable land co-management experiments (Tanzania) and contribute to the establishment of export facilities (Djibouti).

Note that livestock sector policy makers are not promoting changes in the overall policy framework of say the credit and research domain, but within the broader livestock development policy and strategy, they seek to crowd in investment and entrepreneurship in those markets whose development is likely to contribute the largest to livestock sector growth. In any case, they remain primarily responsible for the supply of public goods and market-driven interventions in the three major livestock domains, namely animal health, breeding and feeding.

4. Conclusions

Comprehensive livestock sector policies and strategies are critical to build a vision about sector development, create political consensus, and identify broad areas of interventions. Despite being technically sound, however, they could hardly ever be successfully implemented because of financial, human, informational and administrative limitations of the government. Rather than going after too many targets all at once in the hope that some will be hit, it is thus suggested that livestock sector development strategies identify priority areas of interventions according to the magnitude of their direct impact on selected target groups. Many of the envisaged

interventions will be livestock-related and under direct responsibility of the Livestock Department, while some will not pertain to the livestock domain. But the market paradigm which today dominates the policy scenario in much of the development world allows livestock policy makers to design and experiment with policy instruments which crowd in investment and entrepreneurship both within and outside the livestock domain. The Pro-Poor Livestock Sector Policy Menu is an attempt to identify and describe those instruments which can be used by policy makers to promote the functioning of markets in a variety of livestock-related domains, including land / water / feed / insurance / animal health and other services / finance / marketing / research / environmental protection and trade.

The proposed approach requires significant changes in the ways livestock sector policies and strategies are designed. First, livestock stakeholders along the value chain and not the farm animal should be at the centre of the livestock policy and strategy; second, since some of the interventions will not pertain to the livestock domain, livestock policies should not be exclusively designed by technical staff in livestock department but a certain degree of inter-disciplinarity is called for; finally, a certain amount of policy experimentation must be accepted, as only some goods will be directly supplied by the Livestock Department and the success of market-based interventions is uneven and unpredictable, depending on the response of the private sector to policy actions.

ⁱ This section elaborates on Rodrik D., A. Velasco, R. Hausmann (2008) Growth Diagnostics. In N. Serra, J. Stiglitz, *The Washington Consensus Reconsidered. Towards a New Global Governance*. Oxford University Press.

ⁱⁱ Some interesting efforts to combine micro and macro data to ex-ante assess the impact of policy changes in the livestock sector have been recently attempted. See Otte J., D. Roland-Holst, S. Kazybayeva, I. Maltoglou (2005) *Integrated Poverty Assessment of Livestock Promotion: The Case of Viet Nam*. PPLPI Research Report, May 2005, FAO, Rome; Roland-Holst D., J. Otte (2007) Livestock and Livelihoods: Development Goals and Indicators Applied to Senegal. *African Journal of Agricultural Research*, 2(6): 240-251.

ⁱⁱⁱ A general review of traditional methods to assess interventions in livestock systems is Rusthon J. (2003) *Methods of Assessment of Livestock Development Interventions in Smallholder Livestock Systems*. PPLPI Working Paper No.3, FAO, Rome.

^{iv} For a detailed review of animal health policy options see Pica-Ciamarra U., J. Otte (2008) *Animal Health Policies in Developing Countries – A Review of Options*. PPLPI Research Report, 08-08, FAO, Rome.