

Livestock disease prioritisation: listening to the voices of the poor

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Introduction In recent years, with the advent of the New Poverty Agenda and the wide acceptance of the Sustainable Livelihoods Approach, the role of livestock in poverty alleviation has been recognised. Indeed, NGOs and donors increasingly justify livestock projects as a means of directly supporting the well-being of the poor. However, a large-scale review of over 600 livestock development projects revealed that many interventions had little or no impact on poverty reduction (LID, 1999). Reasons offered include the lack of a poverty focus, inappropriate targeting and the development of technologies that were unsuitable and/or not delivered (*ibid.*). To address the issues, a number of agencies and institutions have undertaken priority-setting exercises to better focus activities on poverty alleviation (Thornton *et al.*, 2000; McLeod *et al.*, 1998). Indeed, a recent initiative funded by DFID (Perry *et al.* 2001) attempted to prioritise the livestock disease constraints of the poor, with the aim of improving the poverty-impacts of livestock-related research and development. The study was based upon the following premises:

1. Sere and Steinfeld's 1996 Livestock Production System classification combined with current poverty figures may derive the location and numbers of poor livestock keepers.
2. The animal disease priorities of the poor may be illuminated from expert consultations with a wide variety of stakeholders, excluding the poor.

Nevertheless, a variety of problems may be noted with the approach. Firstly, Sere and Steinfeld's 1996 classification, while describing the many agro-ecological zones in which livestock are present, may be inadequate in locating the poor. Secondly, and perhaps most importantly, without including the voices of the poor, it is unlikely that an accurate assessment of the livestock diseases of importance to poverty alleviation may be illuminated. Therefore, the following paper first explores where and how poor people keep livestock utilising a dataset of approximately 4,000 households in Kenya, Bolivia and India. Secondly, perceptions regarding the role and impact of livestock disease on livelihoods are examined. Finally, the priority diseases as detailed by the poor themselves are detailed and possible reasons for the discrepancies with expert opinion offered.

Materials and Methods The study utilised both qualitative and quantitative techniques to illicit both household and community level perceptions regarding livestock disease and animal health-related issues. At the community level, core participatory techniques included stakeholder meetings, focus groups and semi-structured interviews. In total, over 280 communities across the three countries participated in the study. At the household level, interviews were held with more than 3,000 individuals in Kenya, Bolivia and India. Ranking and sorting exercises were performed regarding animal health, production and management. Furthermore, households participated in problem ranking exercises in an attempt to place livestock disease in the wider context of livelihood constraints.

Results The study found that with regard to geographic location, not surprisingly, poor livestock keepers most often reside on the margins of traditional production systems. For example, among subsistence farmers, the poor generally have access to inferior quality and lower quantities of land. Equally, a large proportion of livestock keepers are landless. Poor pastoralists, on the other hand, often lack sufficient labour to maintain effective herding strategies. Hence, less well-off households are often forced to keep livestock around peri-urban settlements, which are commonly overgrazed. As such, management and often husbandry strategies differed greatly between the poor and their better-off counterparts. Current livestock classification systems do not capture either the geographic marginalisation of the poor or the manner and means in which they keep livestock.

With regard to livelihood constraints, overall, livestock disease ranked second to access to fodder and water as the primary problem faced by poor producers. However, the priority given to livestock disease varied widely across production systems and countries. For example, Kenyan pastoralists and lowland farmers in Bolivia ranked livestock disease more highly than other constraints. Conversely, urban producers across the study set perceived lack of space for livestock keeping and access to fodder and water as far more problematic than livestock disease. Not surprisingly, in most of the study sites, the lack of access to animal health services corresponded with an increased weighting given to livestock disease.

With regard to the importance of specific livestock diseases, farmer's perceptions varied greatly from the experts as detailed in Perry *et al.* (2002). For example, Perry *et al.* (2001) concluded that in South Asia, the top four diseases of importance to the poor were Foot and Mouth Disease, reproductive disorders, *Toxicara vitulorum* and *Brucella abortus*. Alternatively, in East, Central and Southern Africa, the most important constraints were neonatal mortality, helminthosis, haemonchus and New Castle Disease (*ibid.*). Conversely, the study found in ranking exercises with over 1,300 poor livestock keepers in India

that the top four diseases/symptoms perceived by farmers to be of greatest importance were Foot and Mouth Disease (43%), diarrhoea from non-specific causes (14%) followed by fever (12%) and Hemorrhagic Septicaemia (8%). Equally, in Kenya, the study found that diarrhoea (from both specified and non-specified causes) (37%), tick borne diseases (27%) and respiratory infections (16%) were considered the most problematic to farmers. Although the former study's ranking attempted to incorporate wider criteria such as socio-economic, human health and national-level, livestock sector impacts, it is apparent that livestock development practitioners and the poor themselves vary widely in their perceptions of priority diseases.

Conclusions The study offers three main conclusions. First, traditional, livestock production system classifications (Jahnke, 1982; Pagot, 1992; Sere and Steinfeld, 1996) do not appear to be sufficiently sensitive to capture the large diversity in livestock management strategies or the agro-ecological marginalisation of the poor. Consequently, the risk in using the systems as a basis for locating the poor or prioritising their problems is that the diverse needs and constraints faced by the disparate groups of the poor are lost. Second, livestock disease was considered a secondary problem to the lack of access to sufficient fodder and water as the greatest problem faced by poor producers. Hence, in order to be successful, animal health interventions should acknowledge and respond to the core-concerns of clients. Finally, with regard to priority diseases, the study found that the perceptions of the poor themselves varied widely from expert opinion. As such, more research is required to better understand and bridge the differences between decision makers and the poor.

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