A Living from Livestock
Pro-Poor Livestock Policy Initiative

Methods for the Assessment of Livestock Development Interventions in Smallholder Livestock Systems

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EXECUTIVE SUMMARY

This working document presents a framework to assess livestock disease impact at household and local economy levels. The aim of this framework is to help decision and policy makers in their selection of poverty focussed livestock interventions and try to protect them from strong non-objective political voices. Three key issues were identified that need to be implemented and/or strengthened in current systems:

- A systematic process for compiling and storing data on livestock, crop and household activities;
- A structure for user friendly and transparent analysis;
- Output that provides disaggregated information on the impact of changes in the livestock sector.

The users of the framework and its outputs are expected to be:

- **Assessment practitioners** – consultants who have to evaluate interventions and are users of the methodology;
- **Finance providers** – multi and bi-lateral donors and possibly NGOs. These are users of the output;
- **Finance recipients** – governments receiving aid, communities receiving support. These are also users of the output.

This paper is divided into the following chapters:

- Chapter 1 Introduction.
- Chapter 2 describes a conceptual framework for assessing the impact of livestock interventions at household and local level.
- Chapter 3 explains the "look and see" component of the proposed method. A worked example, using data from the southern region of Chuquisaca, Bolivia, illustrates how the method can be applied in practice.
- Chapter 4 provides in-depth analysis of the household and local economy modelling component. Examples of application are based on smallholder dairy producers in southern India and highland Kenya.
- Chapter 5 Conclusions and Recommendations.

Conceptual framework

The proposed conceptual framework for the assessment of livestock interventions involves three steps:

1. Rapid assessment or "look and see" to identify potential interventions and select interventions for further analysis. This analysis draws on secondary data sources and primary data.
2. More rigorous assessment of selected interventions using household and local economy models to determine the impact of an intervention.
3. Implementation of a selected intervention with monitoring that provides data to refine household and local economy models. These should produce results that are useful for future policy making.

All steps have a data and information capture component to provide a source of data and information for future assessments. Once a sufficient body of data and information is generated it is expected that steps 1 and 2 will begin to merge.

"Look and see"

The "look and see" method is based on participatory and scientific data collection, and analysis of primary data with secondary data. The identified livestock problems are assessed using a matrix that contains a mixture of qualitative and quantitative information on socio-economic aspects of livestock keeping and the impact of the problems. The latter uses the livelihoods approach. Problems selected using the first matrix are then analysed in a second matrix that examines the potential for success of intervention alternatives to solve the problems.

Classification, household and local economy modelling

For the more in depth analysis of livestock in the household and local economies there is a need to use modelling methods and systems of classification. This Working Paper proposes that, where possible, existing classification systems are used to direct primary and secondary data collection on household activities. Data can then be used to develop representative household models for each system that has been identified. The results from the household model can be combined with information on the number of households in each system in order to examine economic issues at local and regional levels. This could include, for example, the impact on employment and on market prices of livestock inputs and outputs.

The results of the household model provide important insights into livestock technologies and their impact at household level. It is believed that the data requirements for such modelling processes could be significantly reduced with access to secondary data or expert opinions. The aim would be that the analysis of household and local economies would become an integral part of the "look and see" methodology. The constraints to this goal are identified as being: access to reliable secondary data; and a model structure that is user friendly.

Groups working on different aspects of the conceptual framework

The groups working on different aspects of the framework are divided into five distinct areas:

1. Groups that are working on methods of assessing the socio-economics of livestock diseases.
2. Groups that are investigating the role of livestock in the livelihoods of smallholder producers.

3. Groups that are investigating the use of local or regional economy models.
4. Institutions with the capacity to manage a database system that can receive, store and provide access of secondary data.
5. Institutions working on bringing information together in a mapping format.

Points 1 to 4 are directly related to the further development of the conceptual framework. Point 5 is related to the need to present analysis in a format that is attractive and easily understood by policy makers.

Recommendations

In order to turn the conceptual framework into a workable model, the following actions are recommended:

1. The matrices described for the "look and see" assessment should be presented to potential users and refined according to their reactions.
2. Key institutions, groups or individuals should be identified to further develop different aspects of the conceptual framework.
3. Existing household and local economy models should be selected for further development and refinement.
4. A database structure should be developed on the basis of the data requirements of the models selected. This structure should be able to receive and allow access to data through the Internet.
5. Important output from the household and local economy models should be determined through consultation with potential users.
6. Key data are identified from the household model that can then be combined with the classification of smallholder livestock systems for use in the local economy model.
7. A user-friendly front-end structure for the household and local economy models is developed for data entry. The basic model should be "collapsible" and flexible, allowing it to be used either in a very simple manner, where data and time are lacking, or in a more complex way where resources are sufficient for further data collection and analysis.
8. A user friendly output screen structure is developed that can be downloaded electronically or as a hard copy.
9. Sites for testing the model should be selected in consultation with potential users.
10. The methods should be refined through further testing.
11. Training of users of the methodology and in the output produced.

It is anticipated that the time frame for the development of the methodology to a point where a database is accessible through the Internet and a flexible and userfriendly model structure is available for field use would be between two to three years. Therefore, it is a project of medium term impact, but the advantage is that it will generate tools that can provide a basis for informed policy decision-making. Hence the methodology will help to protect policy makers from making decisions under pressure from strong non-objective political voices.

Pro-Poor Livestock Policy Initiative (PPLPI)
Website: http://www.fao.org/ag/pplpi.html
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