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AFRICAN LIVESTOCK POLICY ANALYSIS NETWORK

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NEWSLETTER

INTERNATIONAL LIVESTOCK CENTRE FOR AFRICA (ILCA)
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Since the last issue

1. This is the first issue of the Newsletter in 1988 and it is produced some 18 months after the last one. Newsletter No. 5 raised the problem of the weak participation by the network's African membership. The situation has changed very little and the overall flow of network papers has slowed down -- hence the long delay.

2. In the meantime ILCA has been heavily involved in evolving its strategy which gives it a relatively new research direction and the desired modes of operation. Numerous meetings were held among ILCA staff, between ILCA and NARS representatives and between ILCA and other non-ILCA scientists in order to make the formulation of the strategy and long-term plan as broad-based as possible. The first phase of the exercise culminated in a document entitled ILCA's Strategy and Long-term Plan (ILCA 1987). Among other things, the document sets out the rationale for recasting the Centre's strategy[1/], defines more precisely its operational goals as well as the criteria for project selection.

3. One major element of the present research direction is that work will be carried out under six major thrusts including the Livestock Policy and Resource Use Thrust[2/]. We consider that it would be useful to our ALPAN members to be aware of the contents of this thrust in some detail for several reasons:

1/ "Recognising the Centre's limited financial resources and the number and complexity of factors affecting livestock production in Africa, ILCA's strategy is to choose a limited number of activities that will achieve measurable and sustainable increases in livestock output in sub-Saharan Africa". (ILCA 1987, p. 42).

2/ The other 5 research thrusts are: Cattle Milk and Meat; Small Ruminant Meat and Milk; Animal Traction; Animal Feed Resources; and Trypanotolerance. Although the Training and Information programme is not formally recognised as a thrust, its functions are expected to fulfill an equally important role in improving livestock production in sub-Saharan Africa.

a. The availability of the published documents in their entirety, setting out the details of the overall strategy and programme plans, is likely to be limited, particularly because of the large size of the ALPAN membership. ALPAN is an alternative and appropriate medium to provide relevant information on ILCA's plan and programme to those especially concerned with livestock policy issues in Africa.

b. The strategy and programmes emphasize collaboration with African national agricultural research systems (NARS) as a key element in ILCA's modes of operation. It is our sincere hope that the summary information provided here on proposed or on-going research work under this thrust will trigger the interest of our members in exploring and suggesting ways in which collaborative work can be promoted. Enquiries on further details in regard to the research topics of interest and judged amenable to collaborative work by our members will be most welcome.

c. In Newsletter No. 4 (September 1986) we offered to produce occasionally a list or summary information of policy-oriented or micro-economic research work that economists have done or are doing relating to the livestock sector in Africa. We are renewing that offer in the hope that the proposed research topics under this thrust will provide a more defined framework in which our members can be induced to respond.

Policy services and policy research at ILCA

4. ILCA's Strategy and Long-term Plan defined the rationale and objective of each thrust. Those for the Livestock Policy and Resource Use Thrust in their final form are reproduced below:

Rationale

5. Better policies and resource management are crucial to livestock development in Africa. Policy problems are ubiquitous and broadly similar throughout the continent. However, there is a need to compare the experiences of different countries in their search for solutions, since these will often vary according to the natural and socio-economic environment. For example,

in countries such as Kenya or Zimbabwe which have developed commercial infrastructures able to meet speedily an increased demand for production inputs, increased milk price may be the most effective way of increasing milk supply. In countries without such infrastructures, policies that directly promote it may be a higher priority.

6. Problems of resource use, on the other hand, are at their most acute in the semi-arid and arid lands, where the long-term future of agriculture appears to be threatened. Here there is a need to develop better methods to assess both resources and long-term productivity trends, and to improve the role of livestock in stabilising and sustaining farm income and crop production in marginal areas.

7. The research in this thrust will therefore focus on cross-country comparison of the critical policy issues affecting production and technology uptake, and on the sustainability of crop and livestock production in the rangelands and the semi-arid zone.

8. There are close interactions between the policy and resource work in this thrust; however, the latter will mainly, but not exclusively, involve ecologists and range scientists, while the former will be done by economists. The policy economics research of the thrust will focus primarily on decisions taken by governments, on issues involving strong interdependencies between commodities (e.g. price policy), and on the supply of inputs (e.g. land and capital) which are general to the livestock sector rather than specific to particular policies and species. In contrast, the economics work in the other thrusts will be mainly micro-oriented, concerned with farmers' decisions, inputs and technologies specific to a particular species, and marketing systems.

Objective

9. The objective of the thrust in the medium term is to assist national efforts to improve the policies affecting the livestock sector and to increase the efficiency with which natural and other resources are used in sub-Saharan Africa.

Themes and activities

10. The second phase of the strategy and planning exercise resulted in the publication of a document entitled Sustainable Production from Livestock in sub-Saharan Africa: ILCA's Programme Plans and Funding Requirements, 1989-1993 (ILCA 1988). Further efforts to refine the programme plans have made it possible to incorporate several activities with a common objective under so-called research themes.

11. The objective of the Livestock Policy and Resource Use Thrust is to be pursued under five major themes:

    i. Policy Services

    ii. Policy Research

    iii. Range Trends

    iv. The Role of Livestock in Semi-arid Farming Systems

    v. Resource Services.

12. We will present the contents of (i) and (ii) above in some detail including summaries of the objectives, work programmes and expected outputs of some of the proposed or newly started projects in (ii) above. For convenience, the summaries are tabulated in an annex at the end of the Newsletter. For themes (iii) and (iv) we will present brief texts sufficient to highlight their contents. Boxes 2 and 3 present information on ILCA's low-level aerial survey capability in relation to the last theme (v).

(i) Policy services

13. Appropriate national policies are a necessary condition to ensure both production under existing technology and the efficient and rapid adoption of new technologies developed by ILCA's commodity thrusts. Appropriate policies are policies that identify and balance conflicting objectives and use the most cost-effective policy instruments to achieve their objectives. For example, appropriate milk pricing and distribution policies provide food to poorer families at prices they can afford, while at the same time providing adequate incentives to farmers to produce milk abundantly but within a competitive cost structure.

14. Well-informed policy makers and well-trained policy analysts are needed for the systematic development of appropriate national policies affecting the livestock subsector. Under this theme ILCA will provide research-

based and other appropriate information to African policy makers and analysts and will train them to analyse policy issues and their solutions in a practical way. Specifically we will:

- Give training courses for livestock policy analysts drawn mainly from government planning and development organisations, and provide a training manual and other material to African organisations running similar courses. The manual is expected to be published early in 1989, while the courses will be organized annually throughout the period 1989-93.

- Coordinate the ALPAN (African Livestock Policy Analysis Network) information network and organise meetings through which policy makers and analysts can exchange information and experience with each other and with research organisations. These activities will be pursued throughout the 5-year plan period.

- Publish, and if successful, periodically revise and republish a handbook of comparative African livestock statistics for use by livestock policy makers, analysts and planners. The first edition of this manual is expected to be available early in 1989.

- Prepare and publish during 1989 a manual of livestock systems research which mainly draws on the experience of ILCA's own systems research to provide guidance to NARSs on the techniques and uses of a farming systems approach in the livestock subsector.

- **Outputs.** The outputs expected under this theme are:

  - At least 20 livestock policy analysts trained annually
  - A livestock policy training manual and other training materials
  - Well informed livestock policy makers and analysts
  - A handbook of African livestock statistics
  - A manual of livestock systems research.

15. Here at ILCA we just completed a 4-week course on livestock policy analysis. This is the third course in the series and the second conducted for English-speaking participants. We try to get feedback from course participants both during and after the course. We value such feedback and gain a lot from it in terms of both improving the course content as well as learning about the constraints faced by policy analysts in the real world. Box 1

presents a view by Mr. J. Nzima, one of our participants who attended the 1986 course.[3/]

(ii) Policy research

16. Even well-informed policy makers and well-trained analysts find it difficult to develop appropriate policies if the relationships between policy instruments and policy objectives are not well understood, or if the information essential for effective policy making is not available. Research on these relationships in an African context has been meagre in the past; it is badly needed, and ILCA has special advantages in carrying out some of it, especially that involving inter-country comparisons or cooperation with other international organisations (e.g. IFPRI).

17. In the medium term, ILCA will under this theme carry out research on a few key issues, collaborating whenever possible with NARSs and other organisations. Priority issues identified for 1988-91 are: financing livestock services (already near completion), pricing policy, access to capital (including credit), access to land, mechanisms for the supply of inputs (especially animal health inputs). The next generation of issues, to be tackled when resources become free, will probably include collection methodologies for policy-relevant data, effect of non-pastoral growth (particularly in the subhumid zone) on pastoral areas, and manpower issues.

Outputs. The outputs expected under this theme are:

- Better understanding of key policy relationships and of the consequences of alternative policies.
- Better data-collection and analysis methodologies for generating policy-relevant information.

(iii) Range trends

18. The overall objective of this theme is to obtain improved knowledge on range resource trends of dry African tropics. Specifically it is to:

- identify ecological processes of change in range resources
- analyse long-term trends in range productivity
- promote the monitoring of range resources and use
- identify more appropriate pastoral development policies.

3/ Mr Nzima has since taken the position of General Manager, Malawi Dairy Corporation.

Box 1

A Reflection on the Livestock Policy Analysis Course

As most colleagues who attended the above course would agree, the knowledge gained was very much unique from the conventional agricultural policy analysis (often crop production biased). Of greater benefit to those directly engaged in livestock policy analysis was the approach used to identify policy issues. Unlike the crops production sector, the range of policy options for the livestock sector in most African countries is limited. As a result, there is an urgent need for professional livestock planners to tap on every available research information and knowledge supplied by institutions such as ILCA, ILRAD etc. in devising the most appropriate livestock development policies and national programmes.

My experience with professional colleagues in planning is that they tend to be extremely handicapped when it comes to establishing supply and demand of livestock products where several factors tend to interplay such as the production systems, the livestock pricing and marketing factors.

While it has been invariably easy to apply certain quantitative analysis of different nature as instruments for the analysis of policies, two major issues seem to confound the analysis in the livestock sector. The first is that due to lack of governments' overall support towards the livestock sector, information on livestock is very difficult to get.

The second is that application of the instruments used in market, price and trade policy for livestock differ considerably depending on the existing situation. For example, the application of nominal protection coefficients (NPC) makes sense only where the commodity concerned is actually traded. This may not always be the case. A practical situation given by de Haen and Tangermann (1986) is when there is a relatively wide spread between cif and fob prices. More exactly, it is given if the country under consideration would not import the commodity at the cif price (since this price is too high) and would not export it at the fob price (since that price is too low). An epitome of such a case is liquid milk with its high cost of transportation.

The expertise of a livestock policy analyst may not be fully appreciated in a system which looks at livestock in a narrow sense. It would extremely benefit the livestock sector if those in government authority realise that livestock policy analysis is a specialty, different in several aspects from other sectors of agriculture. This being the case, those of us who have the requisite training in this discipline need to exercise a little more patience and impress upon the authorities about this specialised discipline. This I would imagine is the starting point for the livestock planner engaged in livestock policy analysis.

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References:
H. de Haen and S. Tangermann 1986. **Market, Price and Trade Policies,** *Lecture notes for the* **Livestock Policy Training Course.** *ILCA, Sept. 1-26, 1986.*

19. The work programme includes the following main activities:

- analysis of existing chronological data on changes in range productivity/pastoral production
- experimental study of the ecological processes in range productivity/use
- historical study of changes in range resource productivity at a site or region in the Sahel
- development of suitable techniques (including remote sensing) for spatial generalisation of on site data
- promotion of a regional network on range resources and use monitoring (both livestock and vegetation).

(iv) Semi-arid livestock in the Sahel

20. The objective of the theme is:

- To improve the stability, sustainability and mean-level of productivity of Sahelian mixed farming systems by improving the role of livestock.

21. The work programme includes the following activities:

- description and quantification of existing crop-livestock relationships
- identification, development and testing of new technologies and management practices
- appraisal of alternative technologies and farming practices
- identification and evaluation of policies
- dissemination of research results.

(v) Resource services

22. Justification:

- Lack of up-to-date and reliable information is a major impediment to the better use of natural resources
- Low-level aerial survey is a suitable technique for obtaining such information speedily and at low cost
- ILCA has the experience and skills to do low-level aerial surveys using the systematic reconnaissance flight (SRF) technique.

23. Objective:

- To facilitate improved resource use in Africa by providing ILCA's capacity in SRF and other kinds of resource survey to clients at cost.

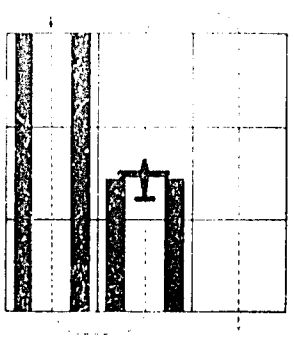
Box 2

Resource Services: Cost-effective low-level aerial survey

ILCA offers a cost-effective, accurate data collection service for researchers who study resource use and distribution but encounter difficult and expensive data collection methods that may still produce unreliable data. For these researchers, low level aerial survey may be the answer. Collecting livestock and human population data over thousands of square kilometers in a harsh or inaccessible terrain can be expensive, time consuming, and delivery of results may be too late to be of any use.

Aerial survey is faster than around survey in two respects. It is possible to cover a huge area in as little as 10 days, so that errors arising from human and animal movements are reduced, and the time from flight to report is shorter, as little as 1 month. An approximate distribution map could be delivered in the field.

In 1987, an ILCA aerial survey of a large area usually cost about US$1.50 per km². Cost varies depending on the location, the number of parameters and the precision required. The technique used by ILCA is known as systematic reconnaissance flight (SRF) carried out by flying parallel tracks at 500-2500 ft. above ground and observing variables in a systematic series of sample strips (rather than total photographic coverages as in conventional aerial surveys) whose boundaries are set by two parallel rods (see figure).



This method of survey can provide data valuable to both researchers and development project planners.

- *Researchers can use the data to correlate range condition with animal condition.*
- *A planner needs to know what the seasonal livestock changes are, and what an area is used for in the wet and dry season. If animals are to be located in dry areas, then water supplies need to be developed.*

(continued on page 10)

- *Knowing how many animals are in an area and the seasonal changes in their distribution can help plan the number and location of veterinarians, and what supplies they will need.*
- *If a ministry of agriculture is planning a range management system, then aerial survey data can be used to determine how the proposed system fits with current uses.*

Source: Adapted from ILCA Newsletter Vol. 7 (1). Jan. 1988.

Contact: Assefa Eshete or Stephen Sandford at ILCA HQ.

24. There are many parameters that an ILCA low-level aerial survey can record, but the fewer parameters the observers are asked to look at, the more accurate the data. Some of the common parameters that the aerial survey team observes are listed in Box 3 below.

Box 3

What can a low-level aerial survey record?

* *animal populations by species*
* *human settlements by type: tents, huts, houses*
* *land use by type: cropped, fallowed, grazed, irrigated, non-irrigated, cultivated by hand, draught-animal cultivated, cultivated by tractor*
* *tree and bush populations by height or canopy cover*
* *grass cover*
* *burned areas*
* *bare surface*
* *rocky areas and their vegetative cover*
* *track intensity by type: trellised, dendritic, parallel, winding*
* *erosion by type: gulley, sheet, wind*
* *soil types identified by colour and*
* *water sources by type: ponds, pools, rivers.*

Source: ILCA Newsletter Vol. 7 (1). Jan. 1988

In this issue

25. The three network papers of this set span the main themes now forming the basis of the Livestock Policy and Resource Use Thrust. The issues addressed in Network Paper No. 16 relate both to policy research as well as to resource use and management. Network Paper No. 17 discusses a topic that pertains to the policy research theme. The topic of Network

Paper No. 18 closely relates to one of the activities under the policy services theme -- livestock statistics for use by policy-makers, analysts and planners.

26. Why do pastoral livestock projects continue to perform poorly even after the implementation problems (disease, poor transport and communications infrastructure, shortage of technical staff etc.) of the 1960s ("first generation projects") seem to have been overcome? The paper by Jon Moris provides an answer: African official livestock development programmes continue to rely on "elite" technical packages which perform poorly because "at the local level where pastoralists become part of the [whole] system, adverse trends have become strongly entrenched." The success of elite technical packages requires that favourable conditions prevail within the production environment which has not been the case over the past two decades. And yet livestock development objectives in Africa continue to assume that these exist.

27. Moris' paper provides a synoptical review of the technicecal and institutional interventions which have been tried in several parts of Africa with the above assumption. The discussion on the adverse influences which have emerged in and since the "second generation" projects are grouped into insightful categories of adverse influence -- natural and/or man-made (e.g. drought, deforestation), spontaneous (e.g. enclosure) and systemic (e.g. economic crises) -- which have contributed to the poor performance of past interventions. As the author says these categories of adverse trends interact and overlap (e.g. loss of animals and emergence of agro-pastoralism), and yet it would still be quite interesting if one were to be able to attach weights to the these categories of adverse influences. It would also be interesting to delineate those which 'appropriate' policy could reverse. In this context the cutback in focused research which Moris brings out as a final issue under the policy implications section raises a relevant and timely concern.

28. In the abstract to Network Paper No. 17 (not reproduced with the paper) John Holtzman says: "Urban price controls often have strong disincentive effects on food system participants reaching back to the farmgate and the rangeland." The paper examines how production and marketing of stall-fed cattle in one region in northern Cameroon has been constrained by retail price controls on beef marketed in urban areas. Although the findings

of the research are country/region specific, the lesson of 'inappropriate' policies undermining the adoption of a particular technology clearly comes across. It is particularly instructive to observe that the implications of inter-regional divergent pricing policies even within a country (see paras 19 and 20) have their parallels in the wider context of inter-country livestock trade flows in many African countries.

29. Network Paper No. 18 by Ayayi et al addresses a topic which many a policy-maker or analyst in Africa will tend to raise as a major impediment to proper policy planning. Where you have no data you cannot adequately analyse and plan policy, and "data cost money" which a country or a development agency of a government may not be able to raise. The authors say: not only the cost but also the value of data need to be assessed to determine what and how much information you collect and process. Second, one needs to prioritize the collection of information in relation to its strategic role in policy planning. Related to this last point, do not aimlessly generate data which could not be used efficiently. These are just a few pointers gleaned from the paper which could be useful to those of us attempting to collect and process adequate data for policy planning and analysis.

Addis Anteneh
Editor

ANNEX

Summary of Some Policy Research Projects

Project Title	Objectives	Work Programme	Expected Output	Envisaged Collaborators	Principal Researcher/ Contact Person (ILCA)
1. ***Impact of Pricing Policies on Meat and Milk Output in SSA***	- *provide comparative picture of objectives and policy instruments used in livestock sector by SSA countries* - *estimate effects of trade and price interventions on livestock output, technology adoption and producer income*	- *collection and analysis of data and descriptive cross-country comparison of objectives and alternative policy instruments* - *estimation of static measures of price distortions -- e.g. NPC, EPC* *End date: End 1989*	- *policy goals identified* - *alternative policy instruments identified* - *effect of policy instru-instruments determined* - *deviation of policy effects from objectives quantified*	*MALRR-Zimbabwe* *FLD-Nigeria* *OMBEVI-Mali* *SODEPRA-Cote d'Ivoire* *MOA, ONCCP-Ethiopia* *MLD - Kenya* *MAR - Sudan*	*Timothy Williams*
2. ***The Role of Credit in the Adoption of Livestock Technology***	- *determine the structure and functioning of credit institutions operating in the livestock sector* - *assess accessibility of credit to livestock producers* - *assess the role of credit (demand & supply) in the uptake and design of technology*	- *collect, analyse and report on (literature, questionnaire) on structure and functioning of livestock credit markets (15 countries)* - *analyse role of credit in technology adoption at producer level (3 case studies)* *End date: 12/1990*	- *multi-country information on credit institutions in livestock sector* - *better understanding of role of credit in technology uptake and design* - *policy options in livestock credit supply*	*NARS* *African Develop. Bank* *Other IARCs-IFPRI?* *Int. Organisations and donors?*	*Addis Anteneh*

ANNEX (contd.)

Project Title	Objectives	Work Programme	Expected Output	Envisaged Collaborators	Principal Researcher/ Contact Person (ILCA)
3. *Land Tenure and the Adoption of Livestock Technology*	- *assess the determination (incl. extent and circumstance) of the adoption of new livestock technology by land tenure* - *assess the effects of technoloty and other economic factors on land tenure* - *determine policy implications for tenure change and technology design*	- *define programme and methodology (workshop)* - *determine and prepare field work* - *carry out field work* - *publish report* *End date: late 1993*	- *improved understanding of relationship between land tenure and adoption of technology* - *assimilation of results into curriculum of ILCA policy analysis course and that of others*	*NARS researchers* *Land Tenure Center at University of Wisconsin, U.S.A.*	*Stephen Sandford*
4. *Mechanisms for Supply of Inputs: Animal Health Services*	- *identify appropriate ways of delivering animal health and related services to livestock holders under different environmental, social and economic circumstances*	- *identify suitable case studies* - *field work for case studies* - *synthesis report* *End date: 12/1991*	- *improved understanding of appropriate delivery mechanisms* - *dissemination of results* - *participation of experienced and interested African researchers*	*University of California Berkley (D. Leonard)* *OAU/IBAR?* *NARS researchers*	*Stephen Sandford*