Managing knowledge for goat keepers– a neglected research factor!

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Introduction

There is a perception among many bilateral donors that research in the natural resources sector 'has not delivered' in that its impact on the livelihoods of the poor in the developing world has been small (LID 1998). Consequently or coincidentally, funding for research in this sector and particularly in agriculture (including livestock research and development) has decreased dramatically in real terms over the last 10-15 years. This paper discusses one of the major issues responsible for the perceived poor delivery by identifying the gaps which exist in the management of research information and its transfer between researcher and farmer. It also identifies the institutional issues involved and proposes a way forward to increase the likelihood of researcher-derived 'information' becoming farmer 'knowledge'.

To begin with, we need to accept the fact that the communication of knowledge between scientist and farmer via the various intermediary 'messenger' institutions is a highly researchable area, particularly in the developing world. Currently, the vast majority of scientists in the 'south' are encouraged by their employers and the various research donor agencies to carry out scientific research (the white coat stage), write up a paper as a scientific publication and move on to a new problem to be 'solved' within as short a time span as possible. The inference here is that the scientists undertake the 'clever stuff' while the dissemination of research outputs to extension services, policy makers and farmers either requires a different (or lower) intellect or else can be taken-up remotely by civil society, commodity groups or (largely inoperative) extension systems. This view is characterised by government research agencies and universities who still interpret the criterion of academic success (and consequently a researcher's career progression) as numbers of papers accepted in top scientific journals and not on the promotion of the results to 'users' nor what benefit or relevance the research product has to society.

The effective transformation and transmission of research information via poorly defined intermediary 'messenger' institutions to policy makers and farmers is poorly understood and hence in need of considerable intellectual input and research. Charged with the responsibility to disseminate research information, these institutions themselves need to be convinced of the value of, and be competent in, the suggested interventions and policy changes. Unfortunately, these issues are not thought about enough and funding agencies still provide the vast proportion of available funds for conventional 'white coat' research rather than to dissemination and capacity building; consequently, the shelves become increasingly cluttered with potentially useful knowledge that never reaches farmers, research effort is further duplicated and value for money is eroded.

Figure 1 identifies the journey which researcher derived information needs to travel in order to become farmer knowledge, accepting the fact that appropriate institutions are in place. The time element and actions (rugby balls) required to reach the different milestones (boxes) will vary with local circumstances but a decade is an approximate time span. What relevance does all this have on goat research? We will deal with this question by looking at three issues: institutional structures, knowledge formats, and processes.

Institutional structures and trust issues

Where government extension agencies exist, they are often so under-funded that they understandably pass-on advice to the relatively few better-off farmers and ignore the mass of risk-averse resource-poor farmers. The only credible alternative institutions taking over this role are civil society and commodity organisations or farmer/community controlled groups. These institutions have difficulty in accessing suitable information, are often unsure about the relevance of that information to local circumstances, and are uncertain about the credibility of the 'messenger' institution. Trust factors abound in the dissemination and adoption of

knowledge; this can be exemplified by reference to a project (R7425) commissioned by the LPP in Kenya a few years ago. Figure 2 (overleaf) identifies 23 'messenger' institutions which were involved in the dissemination of information of potential relevance to poor householders in two locations in Meru District, central Kenya. As can be seen, these varied from the state extension and research systems to civil society groups, schools, the church, radio stations etc. When householders were asked in a PRA study which institutions they trusted, the 20 institutions were dramatically reduced to 7; and when they were asked whose information they would consider adopting, the number of institutions reduced to 2. These two cases - women's groups and the Church- were the only ones poor farmers (mostly women) trusted and the trust factor was engendered through regular dialogue. In most other cases, the information flow was one way, sporadic, not appropriate, too complex or too expensive.

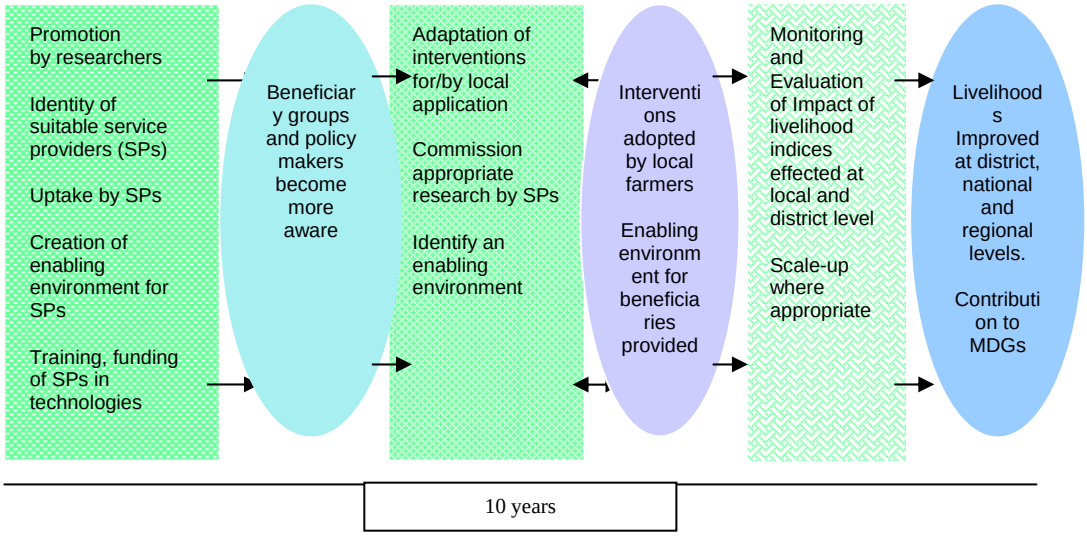

Figure 1 Road map – from research output to developmental impact – a 10 year journey
(SP is service provider)

The management of knowledge

When information is transferred to local, national or international databases, transformation of the science 'language' into an extension format is often poorly done. This is a specialised and difficult task to undertake properly and is normally beyond the scope and training of scientists: they are too aware of levels of confidence in the information they have generated and so normally too sceptical about the findings.

Fortunately, the last 10 years has seen an enormous revolution in the media, the internet and the accessibility of electronic information. This has facilitated the transformation of documents from hard copy to electronic copy and facilitated the organisation of the information into searchable CDs, web sites or simple databases. Whereas not everyone has access to the internet or indeed computers, and many people still prefer to look at paper versions rather than stare at a computer screen, the electronic revolution now provides researchers with an extremely powerful tool to ensure research information is made very widely accessible. Research outputs tend to deal with the resolution of problems which arise, many/most of which are due to poor basic husbandry practices. In addition to research findings therefore, there is a special place for basic husbandry guidances to be transcribed into electronic text.

Over the past year, the LPP has been looking at different ways of packaging information for goat keepers and the institutions working with them. One development has been a CD containing details of projects funded by the LPP, Danida and ACIAR, hyper-linked to electronic outputs generated by the projects. The anticipated audience for this is researchers. The second development is the creation of a problem-driven sheep and goat toolbox, aimed at extension oriented institutions.

Figure 2 Agricultural information sources, flows and preferences of poor rural households in Kyeni South and Karurumo locations (Bain et al 2002)

Process issues and time

Accepting that information becomes available in nice neat parcels and is easily interpretable by extension agents/NGOs/policy makers etc, what level of confidence in that information is required before they are convinced to take it up, become proficient in it and finally promote it to farmers? The confidence and trust issues are of immense importance and neither can be rushed. The desperate need to provide more training is clearly one important element in this process, not only on interventions and basic (husbandry) information but also in transforming it into posters, theatre material, conventional extension leaflets or inclusion into farmer field school curricula etc. More time is required by extension agents and policy makers to acquire trust in the information and provide them with the confidence to promote it to farmers; and time is required for a period of adaptive 'research' to enable farmers to modify the information to suit local conditions before it is adopted as knowledge. Unfortunately, time is an element most development agencies are hostile towards because of a need to achieve the often unreasonable 'targets' made by their political masters.

Conclusion

There is an enormous body of information available to improve the contribution of goats and other livestock species to the livelihoods of the poor in the developing world. Unfortunately, much of this information is not directly available to the key messenger institutions, and where it is available, it is in a format/language/style which is not easily interpretable. It would appear that ways forward include a change of approach from donor and research institutions to ensure that extra resources and time are provided for research and capacity building aimed at transforming information into farmer knowledge.

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