

Bridging the Knowledge Divide

A National Workshop on

Equipping the Scientific Community and Civil Society Groups To Understand and Strengthen

**Livestock Livelihood Resources in the Emerging Context
10th to 12th December 2008 Hyderabad.**

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Context

A large portion of rural Indians derive their livelihood from livestock and livestock rearing activities. Livestock rearing assumes considerable importance in over 66% of India, which falls under arid-semi arid agro-ecological conditions. Gender and livestock livelihoods are paramount, as women constitute 71% of the labour force. Unlike agriculture, livestock rearing is also substantially practiced by pastoral and non-pastoral nomadic groups who form 7% of the countries population. India also boasts one of the largest bovine and small ruminant populations in the world.

Predominant modernizing development approaches towards agriculture and livestock have often deemed small-scale indigenous production systems as inefficient. Just as the green revolution approach to agriculture sought to change the face of traditional Indian agriculture, modernization and development are altering livestock production systems. These development approaches coupled with a loss of breeds, inability of new technology to work on the ground are jeopardizing both fragile livelihoods dependent on livestock and livestock diversity and environments¹. Furthermore, a growing divide between the knowledge, priorities and perceptions of farming communities and the scientific community in relation to production objectives and strategies is becoming commonplace.

Many scientists within the research institutions and the animal husbandry departments have adhered to state funded or market driven paradigms. In addition the modernization of livestock and agriculture is located in the interface of agriculture, forestry, commodities, trade and health. Arguably, research in universities has contentious relevance to ground realities, often not benefiting the needs of poor communities. These developments indicate that there is little sensitised exchange between livestock rearing communities, the scientific community and the state department, which is responsible for animal husbandry or development and there is an urgent need for discussion across disciplines and science and society boundaries.

¹ Anthra (2008). Bridging the Knowledge Divide. Livestock livelihood resources in the emerging context.

Theoretical Approach:

A critical aspect of sustainable agriculture, safe food production and food sovereignty in India lies in restoring our livestock wealth, in ways which will give farmers control over their food production. While there are various initiatives being made in the context of revitalizing dryland agriculture / ecological agriculture, there is a huge gap at various levels in terms of perspectives, skills, practice and policy for addressing the livestock question in the larger efforts of building an environment for farmers to farm in ways that will build food, fodder and livelihood sovereignty.

Anthra intends to re-address this situation, by pro-actively sensitizing and building perspectives amongst a critical community of practitioners, scientists/researchers and policy makers. These efforts will provide a range of key actors with the opportunity to critically re-examine existing livestock development approaches and their impact. Furthermore, they will make an effort to take forward new visions of livestock development which are in tune with the larger objectives of restoring the organic linkages between agriculture and livestock towards rebuilding livelihood security, food sovereignty and responding to emerging climate change challenges.

Recent Developments

A participatory National Workshop was conducted in December 2008 with over 135 farmers, scientists and researchers from different agricultural universities, veterinary colleges, KVK's, women studies departments, feminist groups and academicians from different parts of India, attending to interact, exchange knowledge and share problems, innovations and learning's around rural farming and livestock livelihoods.

Different farming communities representing 8 states in India, presented their practical experiences of strengthening peoples livelihoods with livestock which touched upon aspects related to livestock asset building, indigenous breeds, fodder, animal health, access to resources, livestock and environment concerns. Special focus was placed on their experiences of including women at all levels of process, as also working with historically marginalized rural communities such as dalits, adivasis and pastoralists.

Four broad panel themes were discussed:

- Livestock and Rural Livelihoods
- Livestock and Indigenous breeds
- Livestock, Land use, Environment and Climate Change
- Livestock Health, and Nutrition

Each panel included representatives from the communities presenting their visions/ innovations, as also senior scientists / policy makers from mainstream research institutions sharing the government policies and programs on the specific thematic area. Each panel also had a moderator (an academic who was familiar or an expert on the panel theme) to facilitate the presentations and flag critical issues, highlight differences between the governments plans, and people's needs and approaches, and raise issues for further discussion and dialogue. The main findings of the workshop are presented as recommendations that emerged through deliberative dialogue between farmers and scientists.

Recommendations

Livestock & Livelihoods

1. Main Challenges / problems faced by communities

- No support from the government for rearing local breeds.
- Scanty information flow on livestock treatment, medicines/vaccines, feeding and fodder especially in remote areas
- Grazing restrictions especially for goats in the forests, leading to conflicts and difficulties for farmers
- Livestock insurance facility not available for individual animals, especially for small ruminants, only flock insurance possible and only for those animals given on loans from government.
- For those communities (like dalits) who have recently taken up livestock rearing as a livelihood activity there is little information or support
- Change in cropping patterns including the introduction of GM crops has a negative impact on livestock in terms of fodder availability, quality and grazing

2. Compounding factors

1. People are unable to put pressure on the government through democratic processes.
2. Agriculture and Animal Husbandry dept. have a casual sometimes negligent attitude towards poor farmers
3. Government policies are formulated as blanket policies for the entire country, no region specific aspects.
4. Policy makers do not really understand the problems of the farmer nor do they make an effort to consider the existing knowledge and experiences while formulating the policies.
5. No focus on the conservation of local animals by the government

3 Changes required

1. Bring different groups of livestock owners together onto a common platform
2. Region Specific Policies
3. Farmers, shepherds and the Gram-Sabha, should also be involved in designing, developing and deciding on micro level policies
4. Farmers should be helped to use RTI to get access to information
5. Livestock rearers and farmers should be organized locally to fight locally for policies and programs which are conducive for them
6. Scientists should regularly visit the field and understand the problems of livestock rearers.

Group II : Livestock and Indigenous Breeds

Problems :

- Development agencies tend to import livestock from outside for breeding leading to dilution of local genetic material
- All local breeds are indiscriminately categorized as non-descript without understanding their true genetic potential
- No local institutions for furthering animal breeding work
- Population of Draft animals has decreased which can become a problem in the future with rapid depletion of fossil fuels .
- Proper facilities for conserving breeds in their own tract not available
- Breed programmes tend to be static and inflexible

Changes required

- There should be no introduction of outside breeds in local flocks and herds
- Informed consent of the beneficiary is a must before introducing a new animal /breed into a region.
- So called “Non-descript” animals need to be characterized.
- Encouragement to establish breed clubs /association in different areas
- Strengthening of village level breeding systems & institutions (such as . village bull)
- Draught animal power needs to be encouraged rather than discouraged
- Policies must favour and support communities to rear local breeds
- Selective breeding within local breeds across different species having decentralized breeding stations & AI facilities
- Breed conservation has to remain dynamic.

Group III : Livestock, Land use , Environment and Climate Change

Problems

Livestock obtain fodder from three principle sources: forests , grasslands and agriculture . Competing land use systems can create problems especially for poor people rearing their livestock. Today, farmers feel that the bulk of the fodder for their livestock comes from agricultural crop residue. This is primarily because forest lands and pastures have been slowly diverted to other uses including bio fuel plantation which do not support grazing. Unless grazing lands and designated pasture lands in forests receive government and policy support they

may be lost for ever and this could in turn lead to enormous loss of habitat and bio diversity.

There could be multiple land use patterns within an administrative unit (which is especially true for hilly terrains). Often these multiple uses are subsumed under policies which aim to “develop” a region exclusively for “a” particular land-use such as horticulture or mono-crops. An interesting exception though is recently in Maharashtra the government has declared that land and natural resource use would be divided into watershed units rather than administrative units.

Changes / policy initiatives sought

For developing sustainable livestock systems the prevalent agriculture and livestock systems must be complimentary. Intensive agriculture or intensive livestock rearing systems are not complimentary and lead to competing land use. Low input and extensive systems tend to be more complimentary. Crop livestock mixed farming systems are some of the most complimentary systems today, lead to sustainable land use and help preserve biodiversity.

Administrative units must not be the determining factor for land use. Rather, the area should be carefully studied / understood and the different land uses and the production systems therein, categorized for future planning.

Group IV: Livestock Health and Nutrition

Theme	Problems	Recommendations
Promotive Health Nutrition	Lack of nutrition and a balanced diet	The need to encourage cultivation of local food crops that provide crop-residues and fodder crops (that are not water intensive), to meet the nutrition needs of animals as prerequisite for good health
	Pollution- and its impact on animals (factories, chemicals, pesticides, fertilizers)	Factories should be not encouraged near livestock and human habitations Discourage use of chemicals and fertilizer based farming, and encourage organic farming
Extension	Lack of extension, information and advise to farmers	Urgent need to strengthen the extension system within the government – in both university and animal husbandry departments. Currently

		<p>these are non-existent, and proposals are their to privatize extension services.</p> <p>For example this can be done through extension directorates of universities. Extension has to be a service provided to farmers free of cost. Interns from universities should be placed with farmers to learn from farmers and assist in extension</p> <p>Need for a health worker in every village who will provide extension, advice, vaccinations etc but this person should be supported by government through the panchayat.</p>
Prevention	<p>Insufficient production / availability of vaccines in relation to the livestock population.</p> <p>Spurious vaccines</p> <p>Inaccurate doses</p> <p>Cold Chain</p> <p>Non availability either no stock or insufficient or not available on time.</p> <p>A need to do vaccines on a seasonal calendar basis and not when outbreak happens (as is the practice today by animal husbandry depts)</p> <p>Emerging Diseases</p>	<p>Vaccines must be produced locally by the state authorities and be made available in sufficient quantity in relation to the livestock population of the region (for all species).</p> <p>Vaccinations must be carried out based on seasonal calendar before disease outbreak</p> <p>Research to be done on vaccines imparting long-term immunity</p>
	Deworming	Regular monitoring and strategic deworming to be encouraged
Disease Diagnostics and reporting -	Lack of effective disease diagnostic facilities for all	Need for Establishing effective Diseases Diagnostic facilities at Block level

	species –esp goats, sheep, poultry etc	Need for vets to go to the village to diagnose diseases, conduct Post Mortems's etc
	Absence of effective disease reporting system and fear amongst vets to report diseases as this will be taken “negatively”	Put in place a strong system of diseases reporting from flock / village to district which should be the basis for planning effective health program / preventive vaccine plan etc.
	1. Emerging Diseases 2. Disaster Diseases 3. Reluctance of the scientists to investigate emerging problems such as negative impact of animals fed/ grazed on Bt cotton	Special awareness to be prepared for these diseases Researchers in public institutions have to stand on the side of farmers , and investigate the problems that farmers observe and experience.
Treatment	Herbal Medicines	Needs to be encouraged and supported Communities need to be supported in using , growing these Researchers to be supported in studying these Students to be introduced to this in curriculum
	Lack of medicines Spurious medicines Medical shops prescribing drugs to shepherds/ farmers	Ensure that the hospitals have the drugs which vet prescribe to farmers Regulation and control of drugs and their sales
	Bias against species like goats and stopping services to these animals	All species have to be covered under the government system of health care
Research	Research within the public sector is progressing in a direction completed unrelated to farmers	Create a system by which farmers can present their problems to the vets in govt and universities and ensure that these problems are researched upon.

	<p>problems, and where farmers have no say in influencing the research.</p>	<p>2 way exchange between farmers and scientists on an ongoing basis (from local level upwards)</p> <p>Research must be determined by the problems farmers face .</p>
<p>Government and other Service providers</p>	<p>Exploitative paravets / private actors want to make money and profits from disease Insufficient vets in the service- empty posts,</p>	<p>Regulatory mechanism is required for all para-professionals</p> <p>Stop the privatization of vet services. Recruit vets regularly based on a plan related to livestock population and farmers needs.</p>