

INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE (ILRI)



***Small ruminant value chains to reduce poverty and  
increase food security in India and Mozambique  
[imGoats]***

---

Report of the Third Meeting of the India National Advisory  
Committee

New Delhi, India; 18<sup>th</sup> October 2012



## Table of Contents

1. Background .....	3
2. The Third National Advisory Committee meeting .....	3
2.1 imGoats activities in Jharkhand .....	4
Discussion points.....	4
2.2 imGoats activities in Rajasthan .....	5
Discussion points.....	6
2.3 Feeding of goats.....	7
Discussion.....	8
2.4 Update on value chain analysis.....	8
Discussion.....	9
2.5 Wrap up .....	9
Annex 1- List of participants .....	10
Annex 2 – Agenda .....	11

## 1. Background

The goal of the “Small ruminant value chains as platforms for reducing poverty and increasing food security in dryland areas of India and Mozambique [imGoats]” project is to increase incomes and food security in a sustainable manner by enhancing pro-poor small ruminant value chains in India and Mozambique. The project proposes to transform goat production and marketing from the current *ad hoc*, risky, informal activity to a sound and profitable enterprise and model that taps into a growing market, largely controlled by and benefiting women and other disadvantaged and vulnerable groups; while preserving the natural resource base.

The specific objectives of the project are two:

- a) to pilot sustainable and replicable organizational and technical models to strengthen goat value chains in India and Mozambique that increase incomes, reduce vulnerability and enhance welfare amongst marginalized groups, including women; and
- b) to document, communicate and promote appropriate evidence-based model(s) for sustainable, pro-poor goat value chains.

In addition to goat keepers, beneficiaries include other goat value chain actors, including small-scale traders, input and service providers. The project is following innovation systems approaches within a value chain framework. The value chain models is implemented through the mechanisms of innovation platforms, which is comprised of multiple and diverse stakeholders. Using Outcome Mapping as Monitoring and Evaluation framework, the project documents the participatory approaches used, processes followed, outcomes generated and lessons learned to generate research evidence towards the development of goat value chain models that benefit the poor. Lessons learned and opportunities for scaling up and out will be communicated to policymakers and development practitioners.

The project is being implemented by BAIF in India and CARE in Mozambique, while the overall leadership and co-ordination of the project is done by the International Livestock Research Institute (ILRI).

The second meeting of the imGoats India National Advisory Committee (NAC) took place on 10-11<sup>th</sup> February 2012 in Udaipur. This report provides an account of the third meeting of the imGoats India National Advisory Committee (NAC) held at New Delhi on 18<sup>th</sup> October 2012.

The agenda and the list of participants are provided in annex 1 and 2.

## 2. The Third National Advisory Committee meeting

Saskia Hendrickx welcomed the participants to the meeting on behalf of ILRI and BAIF. She then handed over to Dr Nanda, Animal Husbandry Commissioner, Government of India to chair the meeting.

## 2.1 imGoats activities in Jharkhand

Mr.Navneet, the program manager of imGoats-Jharkhand, presented an overview of the activities and challenges in the Dumka field area. The major activities focussed on health, breed improvement and capacity building activities.

Animal health -- In Jharkhand, the major challenge is that of high disease incidence with limited access to veterinary services. The training of the field guides have continued and a treatment kit was provided to serve the goat keepers' needs better. For this the field guides are also being motivated to avail these services on cost basis. Linkages have been established with the district disease diagnostic laboratory at Dumka for testing the fecal sample tests.

Breed improvement – Black Bengal is the recommended breed for this part of the country by CIRG. Initially the breeding bucks were procured from West Bengal but due to unknown infection, the mortality was high and some of the bucks were culled. Now, the bucks were procured locally (from SDTT project). A nominal charge of Rs. 5 is charged per buck service. Feed concentrate of about 10 kg is given to the buck keeper.

Capacity building activities – A pictorial training manual was developed for field guides.

Feed and fodder – Urea enriched paddy straw, silage and leaf meal preparations were demonstrated to selected groups. Azolla cultivation was also demonstrated. Azolla is encouraged as a protein supplement.

External linkages –Linkages are established with a local NGO – Prahari, for strengthening the goatkeeper groups (in the context of SHGs) and for accessing bank loans.



Jharkhand\_NAC\_Presentation2.pdf

## Discussion points

One observation was that the focus has been on production aspects, which is similar to classical goat development project. As this project follows a value chain approach, what is the involvement of other value chain actors? Although no innovation platform was followed, separate meetings have been conducted with traders and pharmacists.

Marketing strategy –If goatkeeper groups were to work collectively to market goats, what would be the communication strategy for marketing; what is the value proposition for goatkeepers? The value proposition could be more healthy goats and common assembly point where goats are available. There is a lack of market knowledge with respect to consumption of

mutton, main players, capacity of abattoirs, size of abattoirs (sub-urban, rural or Ranchi level). Production systems are at present well in place but one needs to go a step up to market.

Feeding – Farmer and animal acceptability of the feeding technologies introduced (ex. Urea treated straw) was initially low but improved over time. For breeding bucks, Azolla mixed with jaggery was provided. It was felt that focus should not be only on the breeding bucks but other goats also.

Possibilities can be explored and examined regarding acceptance of paddy straw in areas of fodder deficiency (like Rajasthan) – Documentation of any improvement in performance of animals after feeding paddy straw would be useful.

Scaling issue – Depends on volume off take from the project area – link with Jharkhand Development Project – to scale up. For future project, the scaling up strategy should be thought out before project launching.

Besides the pathway of piggy backing on other projects, possibilities also exist to tap into IFC International Finance Corporation (IFC) by exploring scope for small- medium enterprises (ex. opening of an abattoir). Some steps can be initiated along these lines.

PPR vaccination – Although the incidence of PPR is moderate, decrease in mortality has been reported after vaccination. ILRI and BAIF are committed in documenting this properly to show the possible benefits of vaccination.

## 2.2 imGoats activities in Rajasthan

Dr NikhileshModi, Program Manager imGoats-Rajasthan presented the activities, progress and challenges in Udaipur district. He shared experiences about the process of innovation platform in the area, health related activities, capacity building activities, strengthening of goatkeeper groups, role of field guides as service providers, marketing strategies, external linkages and data management and monitoring (for more details, please refer to presentation link).

The process of innovation platform approach is to engage all the actors involved in goat value chain. It provides a dynamic process of identifying problems and developing appropriate action plans. One example of this is undertaking fecal sampling following a suggestion from Dr Bhatnagar, AHD. Identifying the parasites present allows using a more targeted dewormer. Fecal sampling has now become a routine activity for the field guides that allow monitoring parasitic load in the goats.

Field guides are the key actors for sustainability of the project activities. Field guide performs multiple services in terms of primary health care, facilitate collective marketing and

organizational (facilitate group meetings, maintain information flow between innovation platforms and goatkeeper groups and act as key link with the animal husbandry department).

Village level goat fairs are planned in the winter months. For this, a process is followed wherein information is collected about number of bucks for sale, monitoring of weight and health, discussion at group level and contacting traders.

Among the challenges that were encountered while following up on various activities included:

- Cost implications arising from change in dewormer and also availability of specific dewormers in large volumes
- Timely availability of vaccine and plans for cold storage facilities in the local areas
- Sustainability of field guides as service providers
- More time needed for stabilizing the innovation platform



RAJ\_update\_3NAC\_  
mtg\_v4.pdf

## Discussion points

External linkages – As part of IFAD’s knowledge transfer process, the IFAD funded MPOWER project team visited the imGoats project area in 2012 following a suggestion from the MPOWER evaluation team. In addition, BAIF-Udaipur staff will impart training to paravets and pasusakhis(women paravets) in the MPOWER project areas. Possibilities can also be explored to bring supervisors/paravets from MPOWER project into imGoats field area as part of practical training.

Vaccination and cold chain issues– At present, vaccines are available freely and storage facilities available at district level at the Animal husbandry department. The issue is mainly of outreach of vaccinations from department at district level – to Field Guide – to community. How to strengthen this? Lack of infrastructure at village level to store vaccines is a problem. For availability of vaccines at the right time, willingness of the retailers at local level to store vaccines can be looked into. Issues of electricity may crop up. Innovations in terms of keeping them in small coolers (experiences of GalvMed in Orissa) can be thought of. Small vaccine carriers could be a solution to transport vaccines from pharmacist/ department storage to communities in the villages.

Role of Field guides – Field guides are goatkeepers with minimum illiteracy who can read and write. They are trained to provide primary health services to goats in the village and also serve

as linkage between the animal husbandry department and community members. Ideally the field guides should have a strong linkage with local animal husbandry department hospital. One constraint in this regard in Jhadol field area is the vacant position of veterinary doctor that is yet to be filled. Some other thoughts in this regard:

- How can department support Field guides – Possibility of short term certificate course recognized by the State animal husbandry department or veterinary university;
- Possibility of organizing the community along the lines of cooperative and provide linkages to avail financial support, advisory services and record keeping.

Feed issues -- Cyanide poisoning in the area due to pods of *Acacia leaucoploea* is a frequent occurrence during certain periods in a year. Some strategies to tackle this can be:

- Education and awareness about the issue regarding symptoms, period of occurrence and preventive care;
- Advice to farmers regarding primary health care in case of poisoning;
- Medication by using antidote Sodium thiosulphate.

There was some discussion on the possible occurrence of reproductive failures in does in the field area which could result in economic losses. This has not been looked into yet, some points to consider:

- Field guides should be trained on timely identification of signs of estrus and mating;
- It is important to identify why goats have not come into estrus and should become a matter of concern;
- Extra nutrition to bring the does into heat – 1kg of grain to bring a doe into heat – This has the potential to increase production by 20-30%
- Maintenance of records to identify heat -- How many have become pregnant after mating?
- Abortions in the field have to be investigated. For this, linkage with local veterinary hospital is important to collect blood samples for testing

Marketing – Train community members for collective marketing and tie with bigger farmers. There may be collateral benefits that would go to the poor farmers. One example is that of frozen meat seen in poultry. Similar attempt can be made for goat meat.

### 2.3 Feeding of goats

Dr. Avinash Deo, Programme coordinator, imGoats gave insights into the importance of balanced feeding. He suggested enrichment of straws, feeding of Azolla, cultivation fodder trees on field bunds and backyards, production of leaf meal from local trees, silage from surplus

greens and crop residues and complete feed using biomass and concentrates (please refer to the presentation link for more details)

On station feed trails with *Prosopis juliflora* pods in combination with barley indicated higher body weight, higher rate of conception and kidding among the does fed with this combination.

He also advocated use of herbal deworming using Bristol grown on pods of *mucema prurians* based on trails in Karnataka and Orissa.



Feed Trials for 3rd  
NAC-FINAL(Dr. Deo).

## Discussion

- For cost effectiveness of using *prosopis juliflora* pods, it was suggested that one can also learn from similar research at Central Arid Zone Research Institute (CAZRI), Jodhpur.
- Certain aspects like nutritional aspects should be left to food processing laboratories.
- More analysis on Azolla production is needed and also in terms of acceptability by the farmers.
- Efforts should be made to collate existing traditional feed and fodder knowledge systems, identify key people having this knowledge. In general, the inherent family knowledge is passed on over generations. Innovation Platform could be place for disseminating such knowledge.
- Without linking with the panchayat systems upscaling will be a challenge
- “Champions’ (progressive farmers) from other project field areas can be brought to imGoats field area for knowledge sharing and dissemination.
- Look at economic viability of stall feeding and low cost feeding methods developed at Central Institute for Research on Goats (CIRG) at Makhdoom.

## 2.4 Update on value chain analysis

Dr. Meeta presented the value chain study being conducted in the Udaipur field area. The study is still in progress. The process adopted and observations on the major market channels identified and challenges in conducting the value chain analysis were shared (please refer to the presentation link for more details).



VCA\_imGoats\_3NAC  
\_mtg\_v2.pdf



## Discussion

- Producing goats for markets – What is the average cost to a goatkeeper to rear “x” kilos of goat. Are there different costing to bring goats to the same weight? In the present system, there is no expenditure except for the time invested in grazing and other activities.
- Aggregation at producer level harnesses the transaction costs. Organizing the farmers for collective marketing is important to increase the negotiating power. For this, one has to make effort to explain to the farmers the value proposition of coming together as a collective.

### 2.5 Wrap up

Dr. Nanda wrapped up the proceeding by summarizing that both research in laboratory and research in field are important. But the later leads to more development.

The importance of producing policy briefs was stressed. Such readymade products can contribute to the next five-year plan. All inputs from the project could go into developing the Goat Production Mission. For this, an imGoats policy document is expected.

Shaheel Rafique informed that IFAD on behalf of Government of India is preparing a knowledge sharing event for January 2013. At this event State animal husbandry departments will be present and the aim of the meeting is for a few CGIAR centres (including ILRI with the imGoats project) to present ready-to-scale technologies. Technology packages displayed have the potential to be integrated into larger state extension networks. imGoats could avail this opportunity to join the interactions and build up future partnerships to scale up.



## Annex 1- List of participants

Nr	Name	Title and Affiliation	Email address
1	Dr. A.S. Nanda	Animal Husbandry Commissioner, Government of India	<a href="mailto:asinghnanda@gmail.com">asinghnanda@gmail.com</a>
2	Dr (Capt.) A.G. Bandyopadhyay	Director, Animal Husbandry Department, Jharkhand	<a href="mailto:bandyo_ag@rediffmail.com">bandyo_ag@rediffmail.com</a>
3	Dr. C.S. Bhatnagar	Veterinary Officer, Regional Disease Diagnostic Laboratory, Animal Husbandry Department, Udaipur	<a href="mailto:shekharvet@yahoo.co.in">shekharvet@yahoo.co.in</a>
4	Dr. Shaheel Rafique	Implementation Support officer, International Fund for Agricultural Development (IFAD), New Delhi	<a href="mailto:s.rafique@ifad.org">s.rafique@ifad.org</a>
5	Dr. N.G Hegde	Project Leader, imGoats, BAIF, Pune	<a href="mailto:nghegde@baif.org.in">nghegde@baif.org.in</a>
6	Dr. AvinashDeo	Project coordinator, imGoats, BAIF, Pune	<a href="mailto:avinashddeo@rediffmail.com">avinashddeo@rediffmail.com</a>
7	Mr. RS Sharma	CPC,RRIDMA, Udaipur	<a href="mailto:rridma@gmail.com">rridma@gmail.com</a>
8	Dr. NikhileshModi	Program manager, RRIDMA, Udaipur	<a href="mailto:dr.nikhileshudr@gmail.com">dr.nikhileshudr@gmail.com</a>
9	Mr. B G Rathod	Program Advisor, RRIDMA, Udaipur	<a href="mailto:baifrathod@gmail.com">baifrathod@gmail.com</a>
10	Mr. AK Sinha	Program Director, BIRVA	<a href="mailto:sinhaaks1@gmail.com">sinhaaks1@gmail.com</a>
11	Mr. Navneet kumar	Program Manager, BIRVA, Jharkhand	<a href="mailto:navneetiirm@gmail.com">navneetiirm@gmail.com</a>
12	Dr. Meeta Punjabi	Value Chain Analysis consultant, Creative Agri Solutions Pvt. Ltd., New Delhi	<a href="mailto:meeta@creativeagrisolutions.com">meeta@creativeagrisolutions.com</a>
13	Dr. V. Padmakumar	ELKS project coordinator, ILRI, Hyderabad	<a href="mailto:v.padmakumar@cgiar.org">v.padmakumar@cgiar.org</a>
14	Dr. Ramkumar Bendapudi	Special Project Scientist, ILRI, Udaipur	<a href="mailto:r.bendapudi@cgiar.org">r.bendapudi@cgiar.org</a>
15	Dr. Saskia Hendrickx	imGoats project coordinator, ILRI	<a href="mailto:s.hendrickx@cgiar.org">s.hendrickx@cgiar.org</a>

### Apologies:

1	Dr. Devendra Swarup	Director, Central Institute for Research on Goats, Mathura	<a href="mailto:dswarup@cirg.res.in">dswarup@cirg.res.in</a>
2	Ms. Tinni Sawhney	Team Leader, South Asia Pro Poor Livestock Policy Program, New Delhi	<a href="mailto:tinni.sawhney@sapppp.org">tinni.sawhney@sapppp.org</a>
3	Mr. Sudipta Banerjee	Tata International	<a href="mailto:SudiptaBanerjee@tatainternational.com">SudiptaBanerjee@tatainternational.com</a>
4	Dr. Rajesh Mann	Director, Animal Husbandry Department, Rajasthan	<a href="mailto:dir.dah@rajasthan.gov.in">dir.dah@rajasthan.gov.in</a>

## Annex 2 – Agenda

### imGoats 3<sup>rd</sup> National Advisory Committee Meeting October 18<sup>th</sup>, Board room, JaypeeSiddharth Hotel\* – Delhi

Time	Event	Responsible
09:00 – 09:15	Welcome and introduction	Dr A.S. Nanda
09:15 – 10:00	Update from Jharkhand activities followed by discussion	Mr Navneet Kumar
10:00 – 10:45	Update from Rajasthan activities followed by discussion	Dr NikhileshModi
10:45 – 11:15	Health break	
11:15 – 11:45	Update from on station feeding trials	Dr AvinashDeo
11:45 – 12:15	Preliminary results Value Chain Study	Dr Meeta Punjabi
12:15 – 12:45	Update from project coordination	Dr Saskia Hendrickx
12:45 - 13:00	Wrap up and closure of the meeting	Dr A.S. Nanda
13:00	Lunch	

\* Rajendra Place Delhi, DL 110008