



MOVING THE NEEDLE IN THE FIGHT AGAINST MALNUTRITION



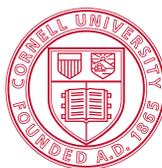
**TECHNICAL ASSISTANCE AND RESEARCH FOR
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it more nutrition sensitive. States such as Andhra Pradesh, Himachal Pradesh, Telangana, and Tamil Nadu have already added pulses to the basket of subsidized goods sold through the PDS. However, the study shows that adding subsidized pulses to the PDS basket leads to only a small increase in household consumption and an almost negligible net nutritional impact. States that have added pulses to the PDS provide only 1–2 kg of subsidized pulses per month per family. Also, in such a situation, the increase in pulse consumption from the PDS is offset by decreases in pulse consumption purchased from the market. Therefore, the quantity of pulses provided will have to be increased many times to have any substantial impact on total consumption and nutrition.

Also, the availability of pulses is low—both in India and in the international market. Therefore, subsidizing pulses through the PDS does not seem to be a feasible option to increase household-level consumption. Moreover, there is low substitution among different varieties of pulses, as Indian consumers show strong preferences for specific pulses in different regions. This implies that increasing the consumption of pulses requires policy support to increase the production of different varieties of pulses.

From a policy lens, the study indicates that the PDS operations should be decentralized as much as possible. Needs assessment and its mainstreaming in design and implementation of the PDS can offer more locally relevant systems that are accessible and acceptable to the households in different localities.

Interim findings highlight that assessing infrastructural capacities including banking facilities, awareness, and education are required before shifting to DCT in rural areas. The study also recommends that the feasibility of a change from the PDS to cash transfers should be studied in the local context. Based on local or regional preferences, the distribution mechanism for using food coupons (PDS and non-PDS) can also be explored as a pilot program and scaled up, based on an evaluation of the pilot. The food coupon system needs to be reoriented as a food stamp program, and the acceptability of food stamps by non-PDS shops must be ensured.

PROMOTING LIVESTOCK TO ENHANCE FOOD SYSTEM DIVERSITY

Enhancing Quality of Small Ruminants through Improved Animal Health Services

Promoting small ruminants like goats and poultry, dairy production through improved animal health services, and advanced livestock management is another strategy of TARINA for achieving better nutrition through a **strengthened income pathway**. Drawing on BAIF's expertise on small ruminants, TARINA is working toward enhanced health care, linkages with existing services, and better management of goats in the Munger district of Bihar. **Improved breeding, feeding systems, preventive health care, and better market linkages** are the pillars on which the intervention with small ruminants is designed



“There has been a substantial increase in the value of goats in the market. Earlier, our goats sold for INR 200–300/kg, but now go for INR 400–500/kg. This has made goat farming viable for small farmers like us,” shared Rami Kumari Soren, Goat Keeper, Village Lakadkola, Munger district, Bihar.

and are mediated through **the Buck User Groups (BUGs)**. As of August 2018, BUGs had been formed in nearly **one-quarter** of all the TARINA villages

Impacted and Counting...

- Ready to implement **3,000** artificial inseminations (AI) per month for improved breed of goats
- **6,966** goat-dewormings, **5,830** goat vaccinations; **721** poultry dewormings, and **1,587** poultry vaccinations have resulted in improved animal health in TARINA villages

BUGs consist of women members from 7-10 households, with each group keeping 40-50 goats. The members are encouraged to meet regularly for availing inputs and health care services for goats and for collective marketing to improve their incomes.

in Munger, and **36 Black Bengal bucks** have been provided to service the goats in these groups. To build the capacity of the goat keepers, as of August 2018, trainings had been provided to **686** individuals on methods of **goat weighing, castration, deworming, and vaccination**.

The trainings and awareness about available animal health care services in the locality have translated into increased practices of timely vaccination and deworming of goats (Figure 14).

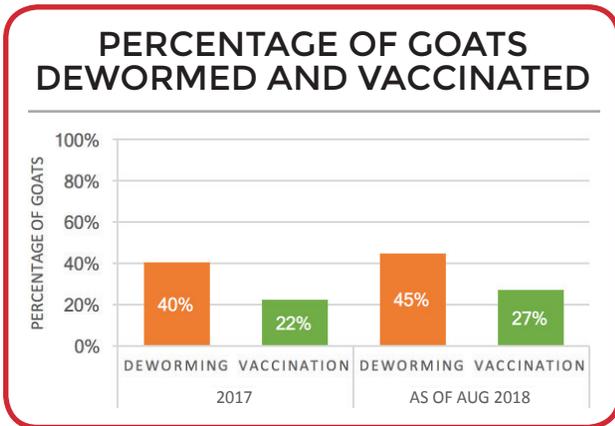


Figure 14: Increased number of animal health services in TARINA villages. (Source: Program monitoring data)

Reduced morbidity among goats is enabling goat keepers to fetch higher prices in the markets. As mentioned by Rami Kumari Soren, a goat keeper from Lakadkola Village from the Munger district, improved breeding and better health care of goats have started reaping results and have increased the value of their goats in the markets.

To give impetus to the technical knowledge for better animal health care, TARINA also provides partial financial support to goat keepers for the construction of goat sheds. A goat shed is a spacious housing for goats with high-raised dry platforms for health management, the use of which has been reducing cases of diseases among the goats.



TARINA provides partial financial support for construction of goat sheds.

Artificial Insemination

As part of breed improvement initiatives, TARINA has initiated **Artificial Insemination (AI)** of goats. With a technical facility set up in the Pune district of Maharashtra, TARINA is now equipped to produce at least **3,000 semen straws (per month)** drawn from various varieties of improved bucks.

“AI service is available at the doorstep, and it leads to better quality of breed selection. This method also eliminates the chances of disease transmission. For goat farmers, this method has helped us address morbidity among goats,” said Bipin Yadav, Goat Keeper, Village Amari, Munger district, Bihar.

Since the AI services are being delivered to the doorstep, the initiative has been gradually gaining ground and acceptance among goat keepers.

“We had been long using traditional methods of breeding, but when we got to know about AI through cluster meetings, and awareness camps, we thought of introducing AI in our goats. Through AI, we can better ensure the quality of breed selection and reduce morbidity. We have attended various training sessions and have an increased knowledge of AI, care of pregnant goats, etc.,” shared Pramila Devi, Goat Keeper, Village Panchrukhi, Munger district, Bihar.