

**ICAR-All India Co-Ordinated Research Project on Goat Improvement
Osmanabadi Goat Field Unit**

Impact of Technology

1. We **established good rapport with the villagers** and got excellent cooperation from them apart from a few exceptions.
2. We were able to **convince goat owners** to have **plastic ear tags** put on their goats for **individual identification**. This made it easier to collect individual weights, milk yield and other measurements and maintain and analyze records.
3. An **additional benefit of the weighing of kids** is that village goat keepers participating in the project are now able to obtain much **higher (in some cases double) prices for their kids** since they now know their weights.
4. **Incomes** of adopted goat keepers have **increased** because of better management and feeding of their goats due to awareness created and services provided by the Osmanabadi Field Unit.
5. Decrease in sudden mass mortality and improvement in health of animals due to vaccination and treatments: All goats and kids in project villages are vaccinated against E.T., H.S. and P.P.R. and dewormed and sprayed against ecto-parasites as required. This has reduced the mortality among kids substantially.
6. We have been able to identify good milk producing does in the villages. 14 does (2.8%) out of 499 does whose 100-day lactation milk yields were analyzed, were found to yield more than 200 litres and one doe had a 100-day lactation yield of 330 litres. This indicates the availability of excellent genetic potential for milking in Osmanabadi goats and the scope for developing Osmanabadi as a dairy goat breed for the benefit of village women goat keepers.
7. **Capacity building:** Due to training and awareness creation by Project personnel, 65% of the Osmanabadi goat kids sold for slaughter by their owners, were sold at the rate of more than Rs.200 per kg live weight. This is a high rate considering that meat is sold for Rs.350 to Rs.400 per kg.
8. **Fifty three bucks** have so far been **purchased** for dissemination to goat keepers in villages under project for breeding their own and other owners' goats. The bucks are being appreciated greatly by the villagers.
9. **About 30,000 straws (0.25 ml French mini straws) of frozen semen of 37 Osmanabadi bucks have been produced so far** in NARI's Frozen Semen Laboratory. 9,800 straws were supplied to A.I. technicians and farmers for breeding Osmanabadi goats. This includes 500 straws provided to the National Bureau of Animal Genetic Resources, Karnal, Haryana for breed conservation as per the technical programme of the AICRP-Goat Improvement. Also **20,000 straws were supplied to Animal Husbandry Department of Government of Karnataka in September 2016.**
About 213 Osmanabadi does belonging to farmers in the Phaltan area were artificially inseminated with the frozen semen of Osmanabadi bucks purchased under the project on NARI's farm. One woman AI technician Mrs. Surekha Kalel of Manndeshi Foundation in

Mhaswad in Mann Taluka was trained by NARI in doing artificial insemination in goats. She is carrying out AI successfully and also training more women in the technique. During 2015-16, she inseminated 25 does with Osmanabadi buck frozen semen, out of which 21 were followed up and 12 does were found to have kidded. Thus the conception rate to frozen semen was 57%.

The superior Osmanabadi genetics obtained under the project is thus being spread widely outside the project villages.

10. **Wider awareness creation:** The P.I. wrote an article in the leading Marathi agricultural daily newspaper Agrowon about how the Osmanabadi Goat can be elevated to the status of a world-class meat producing goat breed if systematic genetic improvement is carried out over the long term (>10 years). Hundreds of visitors visit our institute annually and are given information about the work of the Osmanabadi Field Unit.
11. Eight information booklets in Marathi language have been distributed to participating and other goat keepers for better goat management practices.
 1. First aid treatment in sheep and goats – one booklet and one folded leaflet
 2. Vaccination in sheep and goats - folded leaflet
 3. Abortions in sheep and goats: prevention, treatment, nursing and precautions to be taken to avoid infection to humans
 4. Misconceptions and superstitions in livestock treatment
 5. Adverse effects of early breeding of young does: consequences and prevention
 6. Goat rearing package of practices for small holders
 7. Package of practices for goat artificial insemination (AI)
 8. Economics of stall-fed goat production
 9. Taking care of kids
12. During 2013-15, fodder seed of the legume *Desmanthus virgatus* and of multi-cut fodder sorghum COFS-29 developed by the Tamil Nadu Agricultural University are being supplied to 28 goat owner sin Wadgaon, Kamone and Sakat village. In 2014-15, three plants each of psyllid-resistant *Leucaena collinsii* subabhul were also supplied to six goat keepers in Wadgaon. In June-August 2016, fodder seed of the legume *Stylo seabrana* was supplied to 36 goat keepers in Alkud, Sakat and Kamone villages. In August 2016, 5 plants each of *Leucaena collinsii* subabhul were supplied to 10 goat keepers in Alkud.
13. An SQL based comprehensive data base has been developed and established for all data of the Osmanabadi Field Unit since 2009 and these data are now easily available for analysis and interpretation.
14. Authentic data on Osmanabadi goats are being collected in different regions of Western and Central Maharashtra.