GENETIC IMPROVEMENT PROGRAM FOR GOATS IN INDIA: EXPERIENCES AND IMPACT

All India Coordinated Research Project at a glance

All India Co-ordinated Research Project(AICRP) on Goat Improvement is a long term aimed to bring upon genetic improvement and conservation of goat genetic resources of the India in their natural habitat, covering almost all type ecological region. The programme explores genetic variation in local breeds through systematic animal identification, pedigree and performance recording, selecting superior goats on the basis of performance. Basic Mandate of this project is to develop high yielding germplasms in goat for enhancing the production of milk, meat and fibre in the country. Presently, AICRP on goat improvement is working with 15 registered goat breeds and five local genotypes in 10 different eco-zones ranging from humid to semi-arid and cold arid to hot arid. The major thrust of the project is to build up long term capacities of goat keepers through introduction & dissemination of improved bucks, technology transfer, creation of knowledge base, application of health management practices for enhancing production potentials on sustainable basis. This project is operational at 461 villages and also working in more than 35 tribal villages and contributing for a better livelihood in the tribal regions.

AICRP on Goat Centers

Experiences of project

In 1970's, all india co-ordinated research project on goat carried out experiments to achieve rapid increase of genetic potential of indigenous goat for improved milk, meat and fibre yield by crossbreeding indigenous breeds with exotic breeds like Alpine, sanen, anglo Nubian and toggenbreg. The results of the crossbreeding were not so encouraging either for meat or milk production. The reason for poor performance was primarily ascribed to climate stress, inbreeding and poor management conditions. In the year 1990, in order to improve the milk and meat production, selective breeding was followed and it is still being used. Thereafter, various goat breeds have been added in the project for genetic improvement and conservation. It was also felt that there was a scarcity of superior buck in field as farmers sell best buck at higher prices and higher mortality was also a big issue in field.

Achievements

- Significant improvement in growth, milk and fiber was observed e.g. Positive genetic trend for milk and meat Jamunapri goat.
- Conservation of caprine biodiversity i.e. Jamunapari, Surti and Sanganeri are no more endangered breeds
- The AICRP have significantly produced and distributed 1022 improved animals in a year.
- Preventive health care was provided to 169497 animals. The mortality rate varied from 1.96 to 8.10%.
- Improving the farmer's income by 32%. A higher population growth amongst breeds resulted into increased selection intensity, thus realized genetic gains could be high in a year to farmers for breed improvement as well as up-gradation of local germplasm.
- Technological interventions under the project have benefited more than 2277 goat rearing families in different units over fifteen states of the country.

Impact

- This project has developed a model to implement genetic improvement programme in goat in different agro-climatic zones. Subsequently the project design is being used to develop national breeding plan for goats all over the country.
- Farmers achieved "breed survivor award" & come forward to conserve their native germ-plasm
- Established goat farming as suitable venture for business initiative.
- Peoples started utilization of goat milk which has application in health & nutraceuticals development.






On Behalf of Custodians of GnGR of the Country
Thanks

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