GENETIC IMPROVEMENT OF SUPERIOR GERMPLASM OF SHEEP BY USING SUPERIOR FARMERS FLOCK AS MULTIPLICATION CENTERS

LOGICAL FRAME WORK:

	Summery	Indicators	Risks and Assumptions
Objectives	To carry out genetic improvement using superior farmers flock as multiplication centers	Identification of superior farmers, flocks Inducting them genetic improvement programmes	Superior flocks available in the field Difficult to convince the shepherds
	To produce large number of superior ram lambs for distribution among farmers	Large number of ram lambs produced in farmers flocks	Identification of progeny obtained from superior parents Procurement of the same possible
	To use progressive farmers, flocks as technology demonstration units	Adapt ion of superior technologies	Easy to convince the fellow farmers
	To carry out extension activities among farming community	Identification of technology gaps	Identification of suitable technologies possible Large scale apation possible through field demonstrations
Out puts	Faster genetic improvement possible due to high intensity of selection and large population size	Large number of farmers participation Large sample size available for selection	Organising the sheep farmers difficult
Inputs	Superior farmers, flocks Strengthening the labs Qualified human resource	Available Procurement of equipment Placing them in position	Farmers readiness to participate Available for purchase Human resource available

BACKGROUND:

Andhra Pradesh ranks first in the country with the 217.76 lakh sheep population Famous breeds like Nellore from this state. But sheep husbandry is still in the hands of shepherd community who are maintaining them in traditional extensive system of rearing under zero input condition. The traditional practice of using home grown am lambs as future sires also resulted in reduced performance in production and reproduction due to inbreeding depression. Further most of the Government initiatives are directed towards health management and disease control. Concerted efforts were not made for the genetic improvement of any breed. The genetic improvement programmes carried out at various Government institutes were limited with a little reach.

Therefore present project is proposed which is designed to work in close co-ordination with farming community using the superior farmer flocks for genetic improvement.

OBJECTIVE:

1. To carry out genetic improvement using superior farmers flock as multiplication centers.
2. To produce large number of superior ram lambs for distribution among farmers.
3. To use progressive farmers' flocks as technology demonstration units.
4. To carry out extension activities among farming community.

COMPONENTS:

Location: Livestock Research Stations located at Palamaneru

Production Units: Presently Livestock Research Stations Palamaneru, has Superior flocks pertaining to Nellore sheep.

Approach:

- It is unique project as it is a field based genetic improvement in sheep.
- It will be concurrently run in three regions using Nellore sheep in Rayalaseema,
- In each region 100 superior farmers will be identified and their flocks will be used as breeding flocks
- Incentives in the farm of subsidized inputs veterinary care and insurance coverage will be provided to the farmers involved in this genetic improvement programme.
- In the first stage 100 superior rams in each breed will be procured from the breeding tract and introduced in to the selected farmers flocks after removing their on rams .
- The ram lambs born in these farms after introducing the genetically superior rams will be evaluated for their growth up to 6 months.

- At 6 months age top 10% ram lambs are selected and brought to central farms for rearing up to breeding age.
- After attaining the breeding age these rams will be distributed to the needy farmers on subsidized rates.
- The cycle will continue till the end of project funding period.

RISKS AND ASSUMPTIONS:

Unlike in cattle, there are no programmes aimed at genetic improvement in sheep. Further, due to lack knowledge, inbred or home grown rams are commonly used leading to expression of inbreeding depression. There is great demand for genetically superior rams. So far farmers are maintaining sheep in traditional way. There is an urgent need for knowledge improvement and transfer of technology in sheep husbandry.

Strategy :

- Superior flocks of farmers will be used for large scale multiplication.
- Initially 100 superior quality rams will be procured and distributed among superior farmer flocks.
- Top 10% of the ram lambs born will be selected and procured from the superior farmers.
- There ram lambs will be reared up to 1½ year age and distributed to needy farmers.

FINANCIAL OUTLAY : (Rs. in Crores)

S. No.	2014-15	Budget
1	Towards purchase of superior germplasm (Nellore) for production of superior stock	0.45
2	Towards maintenance of breeding stock and their followers	
3	Towards purchase of ram lambs from farmers and maintenance of ram lambs up to breeding age	
	GRAND TOTAL	**0.45**