

Improving livestock breeding

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(MainsGS3:Economics of animal rearing.)

Context:

- Livestock breeding in India has been largely unorganised which leads to gaps in forward and backward integration across the value chain.
- This scenario impacts the quality of livestock that is produced and in turn negatively impacts the return on investment for livestock farmers.

Animal breeding:

- Animal breeding is the branch of science concerned with maximizing desirable traits in animals.
- Animal geneticists have identified elements within genes that can enhance animal growth, health, and ability to utilize nutrients.
- These genetic advances can increase production while reducing environmental impacts.

Enhance the productivity:

- Animals and livestock contribute 40 percent of the global value of agricultural output and contribute to the livelihoods and food security of almost a billion people worldwide.
- Approximately 200 million Indians are involved in livestock farming, including around 100 million dairy farmers.
- Roughly 80% of bovines in the country are low on productivity and are reared by small and marginal farmers.
- To enhance the productivity of cattle, the Rashtriya Gokul Mission was initiated in 2014.

Rashtriya Gokul mission:

- Under this scheme, breed improvement activity is supported through support to semen production facilities, bull production programmes and breed multiplication farms.
- 50% capital subsidy is made available to entrepreneurs directly for breed multiplication farms for production and supply of high genetic merit heifers to farmers.
- The extension of artificial insemination coverage is undertaken primarily through incentives for AI technicians and promoting usage of sex sorted semen.
- Further, the scheme focuses on making available reproductive technologies at farmers' doorstep at affordable prices.

Bringing entrepreneurship:

- The revised version of the Rashtriya Gokul Mission and National Livestock Mission (NLM) proposes to bring focus on entrepreneurship development and breed improvement in cattle, buffalo, poultry, sheep, goat, and piggery.
- This improvement will take place by providing incentives to individual entrepreneurs, farmer producer organisations, farmer cooperatives, joint liability groups, self-help groups, Section 8 companies for entrepreneurship development and State governments for breed improvement infrastructure.

Breed multiplication:

- The breed multiplication farm component of the Rashtriya Gokul Mission is going to provide for capital subsidy up to ₹200 lakh for setting up breeding farm with at least 200 milch cows/ buffalo using latest breeding technology.
- The entrepreneur will be responsible for the arrangement of and would be able to sell at least 116 elite female calves every year out of this farm from the third year.
- The entrepreneur will also start generating income out of the sale of 15 kg of milk per animal per day for around 180 animals from the first year.
- This breeding farm will break even from the first year of the project after induction of milk in animals.
- Moreover, the strategy of incentivising breed multiplication farm will result in the employment of 1 lakh farmers.
- The grassroots initiatives in this sphere will be further amplified by web applications like e-Gopala that provide real-time information to livestock farmers on the availability of disease-free germplasm in relevant centres, veterinary care, etc.

Poultry entrepreneurship:

• The poultry entrepreneurship programme of the NLM will provide for capital subsidy up to ₹25 lakh for setting up of a parent farm with a capacity to rear 1,000 chicks. Under this model, the hatchery is expected to produce at least 500 eggs daily, followed by the birth of chicks that are in turn reared for four weeks.

- Thereafter, the chicks can be supplied to local farmers for rearing. Under this model, the rural entrepreneur running the hatchery will be supplying chicks to the farmers.
- An entrepreneur will be able to break even within 18 months after launching the business. This is expected to provide employment to at least 14 lakh people.

The sheep and goat:

- In the context of sheep and goat entrepreneurship, there is a provision of capital subsidy of 50% up to 50 lakh.
- An entrepreneur under this model shall set up a breeder farm, develop the whole chain will eventually sell the animals to the farmers or in the open market.
- Each entrepreneur can avail assistance for a breeder farm with 500 does/ewe and 25 buck/ram animals with high genetic merit from the Central/State government university farms.
- This model is projected to generate a net profit of more than ₹33 lakh for the entrepreneur per year.

Generate profit:

- For piggery, the NLM will provide 50% capital subsidy of up to ₹30 lakh.
- Each entrepreneur will be aided with establishment of breeder farms with 100 sows and 10 boars, expected to produce 2,400 piglets in a year.
- A new batch of piglets will be ready for sale every six months.
- This model is expected to generate a profit of ₹1.37 crore after 16 months and 1.5 lakh jobs.

Conclusion:

The revised scheme of NLM coupled with the Rashtriya Gokul Mission and the Animal Husbandry Infrastructure Development Fund has the potential to dramatically enhance the productivity and traceability standards of our livestock.