What should we do differently in livestock breeding sector?

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Livestock breeding

SDG Linkage

Key contribution to SDG:

Goal-2: Zero hunger

By way of:

Improve productivity of livestock

Conservation of genetic resources.

Connected SDG Target

2.3 By 2030, double the agricultural productivity and income of small-scale food producers, in particular women, indigenous people, family farmers, pastoralists, fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.

2.5 By 2020 maintain genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at national, regional and international levels, and ensure access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge as internationally agreed.
Artificial insemination (AI) ➔ **holistic breeding support**

Sharing of both benefit and risk of AI with farmers. Supporting them for planned breeding strategies for his / her farm in given context *(including handling of infertility, nutrition support, scientific calf rearing and culling practices etc.)*
Animal identification and farm premises registration is key for success of breeding programs and efficient functioning of field operation e.g. progeny testing, straw distribution, monitoring of disease transmission through semen and A I workers etc.
ALDA should be more assertive and ensure through regulation that any organization (Public / Private) providing Artificial Insemination services share breeding related data (in given standard format) with Assam Livestock Development Agency (ALDA). Note: responsibility of implementation of breeding policy lies with ALDA.
"Before I write my name on the board, I’ll need to know how you’re planning to use that data."
ALDA should be more assertive and get requisite legal power to act as Unique Animal Identification Authority for the state and issue of Animal / Premises unique IDs. It should also ensure appropriate use of animal data generated by any private entity.
We need regulation to promote private sector participation in trade of germplasm, trade of live animals, management of stray animals and disposal of culled animals.
ALDA should join hands with Agriculture Skill Council of India (ASCI) to act as joint certification, master trainer provider and quality monitoring agency for Field Artificial Insemination worker.
We need to develop a comprehensive system for real-time data generation and dashboard-based analysis for effective use.
We need to focus on careful selection of indicators and agree on the impact areas!
Suggested targets for ALDA : 2030

1. To maintain superior quality grade in semen production and to achieve 100% demand driven area coverage through efficient supply of semen straw, ensuring partnership with service providers (Public / Private)
2. 100% identification of breedable animal population receiving AI for focused IT based data generation.
3. To put in place a credible mechanism for efficient regulatory role, to ensure progeny testing and for calculation of standard / agreed breeding related performance criteria.
4. To support 50 private breeders and 100 DCSs for production of healthy and quality crossbred heifer. (Target number of heifer production per year to be fixed based on local situation assessment)
5. To facilitate availability of demand driven certified skilled inseminators.
ALDA should ensure that cross breeding operation within the state must be guided by state breeding policy for the concerned species and it should focus more on clusters/commercial units.
8 point strategy to streamline breeding operations.

1. Extension programs for awareness to technology adoption and handling (Awareness of key pre-requisite for success both amongst inseminators and farmers)

2. Focused investment on progeny tested and genomic tested animals, Animal Identification, real time data management and monitoring of performance of AI workers.

3. Enhanced demand based spatial coverage, GIS based mapping of routes and adherence to quality norms for targeted and regular distribution, minimizing wastage at all stages.
8 point strategy to streamline breeding operations.
(Contd.)

4. Capacity building for technology implementation related skill development at various level and to handle infertility issues at field.

5. Enforcement of supervisory framework, last mile protocol for A I service delivery and motivation of trained field level public funded inseminators through performance-based incentives.

6. Incentives for breeding linked support enterprises e.g. Enterprises doing calf to heifer rearing, enterprises providing assisted reproductive services, Enterprise producing and promoting calf ration etc.
8 point strategy to streamline breeding operations. (Contd.)

7. Enhanced production of semen straws maintaining top grading status of existing semen station.

8. Constitution of technical committee for localized outsourcing of A I service, review of use of semen of indigenous bulls and sorted (Sexed) semen with price subsidy.
Suggested indicators

1. Increase demand for semen straw.
2. Reduced wastage.
3. Increase number of certified inseminators.
4. Improved conception rate of supplied semen.
5. Reduced calf mortality.
6. Improved availability of dairy animals to farm with as measured by trade record of heifer from supported units.
7. Increase adoption of Artificial Insemination technology within the supported localities.
Suggested indicators (Contd.)

8. Improved pregnancy and calving rate in supported cluster areas.

9. Emergence of private enterprises providing modern breeding related services.
We help organizations conduct studies and implement development projects in the field of animal health care, animal welfare, livestock development, food safety and public health.

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