

National Animal Disease Control programme and National Artificial insemination programme

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Manifest pedagogy: The growing importance of livestock and allied activities is vital for doubling farmers incomes through diversification. Moreover, this provides a safeguard during situations of droughts and floods by actively safeguarding farmers incomes. Thus, the disease control programs act as supplementary to insurance programmes for the benefit of the farming community as a whole.

In news: Two new programmes related to livestock were recently launched by honourable PM Narendra Modi.

Placing it in syllabus: Schemes related to livestock (explicitly mentioned)

Static dimensions:

- Livestock in india
- Agriculture development verification and extension programmes

Current dimensions:

- Productivity of livestock
- Reasons for low productivity
- National Animal Disease CONTROL programme
- National Artificial insemination programme

Content: Livestock in India:

Livestock plays an important role in Indian economy. About 20.5 million people depend upon livestock for their livelihood. Livestock contributed 16% to the income of small farm households as against an average of 14% for all rural households. It also provides employment to about 8.8 % of the population in India. **Livestock sector contributes 4.11% to GDP** and 25.6% of total agricultural GDP.

19th Livestock census, 2012 highlights:

- The total livestock population consisting of **Cattle, Buffalo, Sheep, Goat, pig, Horses & Ponies, Mules, Donkeys, Camels, Mithun and Yak** in the country is 512.05 million numbers in 2012.
- The total livestock population has **decreased by about 3.33%** over the previous census(2007).
- Livestock population has increased substantially in Gujarat, Uttar Pradesh and Assam.
- The total **Bovine population** (Cattle, Buffalo, Mithun and Yak) shows a **decline of 1.57%**.
- The number of **milch animals (in-milk and dry) in cows and buffaloes** has seen an **increase of 6.75%**.
- The **exotic/crossbred milch cattle** saw an **increase of 34.78%** whereas the indigenous milch cattle saw an increase of 0.17%.
- The total **poultry** population in the country has **increased by 12.39%**.
- The total **sheep** in the country is 65.06 million numbers in 2012, **declined by about 9.07%**.
- The **Goat population has declined** by 3.82% over the previous census.
- The total **pigs** in the country have **decreased by 7.54%** over the previous census.
- Horses & Ponies population has increased by 2.08% over the previous census.
- **Camel population has decreased** by 22.48% over the previous census.



Agriculture development verification and extension programmes:

1952: Community Development Programme 1953: The National Extension Service

1960: Intensive Agricultural District Programme (IADP)

1965: Intensive Agriculture Area Programme (IAAP)

1966: High Yielding Varieties Programme (HYVP)

1967: Farmers Training Centers

1969: Small Farmers Development Agency (SFDA)

1969: Marginal Farmers and Agricultural Labourers Programme (MFAL)

1974: **Krishi Vigyan Kendras (KVK) – the Knowledge Hub**, established by ICAR at district level

1976: **District Rural Development Agency** (DRDA)

1978: Integrated Rural Development Programme (IRDP)

1979: Lab to Land Programme sponsored by ICAR (LLP)

1980's: **'Training and Visit' (T & V) system** was introduced with the World Bank assistance.

1993: Broad Based Extension System (BBES)

2005-06: **Agriculture Technology Management Agency (ATMA) Model**

ATMA is a **registered society of key stakeholders** (farmers, line/development departments, non government organizations, input dealers, mass media, agri-business companies, farmers organizations, etc.) involved in agriculture activities for sustainable agricultural development in the district.

It's objective is to provide an effective mechanism for coordination and management of activities of different agencies involved in technology adoption / validation and dissemination at the district level and below.

The **State Department of Agriculture** serves as a **nodal agency** for implementing ATMA. Government of India is funding ATMA programme in all the districts of the country.

2005-06: Human Resource Development through training and demonstrations is an integral part of the **National Horticulture mission**.

2006-07: National Agricultural Innovation Project (NAIP), implemented by Indian Council of Agricultural Research (ICAR).

State Agricultural Universities apart from lending support in implementing ICAR sponsored extension programmes, have evolved several innovative extension models to effectively reach the farming community all over the country.

Productivity of livestock (comparison with other countries)

- At the global level, livestock contributes 15 percent of

total food energy and 25 per cent dietary protein (2009 FAO report).

- With only 2.4 per cent of the land area of the world, **India is maintaining about 10.71 per cent of the world's livestock.**
- The livestock sector contributed 4.11 per cent to the national GDP during 2012-13 (with the total animal population of 512.05 million).



Reasons for low productivity:

(According to World Bank report)

- *Bovine production* systems face a number of constraints including **slow productivity growth, feed scarcity, breeding problems, diseases, large population of low producing indigenous cattle, inadequate infrastructure, poor extension services.**
- *Small ruminant production* systems have come under stress because of **deteriorating quality and quantity of grazing resources, low yielding animals, high mortality rates** due to diseases and **lack of marketing facilities.**
- The *poultry* sector growth is impeded by a number of factors including **lack of feed supplies and diseases.**
- **Farmers are also increasingly moving from cereals to cash crops which give less fodder resulting in higher fodder prices.**
- In nominal terms, public expenditure increased over time, but the share of the central government spending has declined.
- Expenditure on research, education and is meagre and has increased only marginally over time.
- Weakening traditional institutions and increasing land pressure have also threatened the natural grazing lands.
- Pastoralists are abandoning livestock production,

voluntarily or involuntarily, in increasing numbers.

- Climate variations like increasing temperature and decreasing rainfall are reducing the yield of pastures leading to overgrazing and degradation.

National Animal Disease Control programme(NADCP):

- NADCP was launched on 11th, September, 2019 from **Mathura in Uttar Pradesh.**
- Objective is to eradicate the **Foot and Mouth Disease (FMD) and Brucellosis** in the livestock.
- **100 Percent funding** from the Central Government, of Rs 12,652 Crores for a period of five years till 2024.
- The programme aims at **vaccinating over 600 Million Livestock including cattle, buffalo, sheep, goats and pigs** against the **FMD.**
- Also aims at **vaccinating 36 Million Female Bovine Calves** annually in its fight against the **Brucellosis** disease.
- The Programme has **two components** – to control the diseases by 2025 and eradication by 2030.

National Artificial insemination programme:

Artificial insemination is a novel method of **bringing about impregnation in female breeds.**

It prevents the spread of certain diseases which are genital in nature, thereby enhancing the efficiency of the breed.

- The PM launched the National Artificial Insemination Programme on September 11, 2019.
- A country wide workshop in all the **Krishi Vigyan Kendras(KVKs) in all the 687 Districts** of the country on vaccination and disease management, Artificial Insemination and Productivity was also launched.

KVKs:

- The first KVK was established in 1974 at Puducherry.
- The KVK scheme is **100% financed by Govt. of India** and

the KVKs are sanctioned to Agricultural Universities, ICAR institutes, related Government Departments and Non Government Organizations (NGOs) working in Agriculture.

- It is an integral part of the **National Agricultural Research System (NARS)**, aims at assessment of location specific technology modules in agriculture and allied enterprises, through technology assessment, refinement and demonstrations.
- They have been functioning as **Knowledge and Resource Centre** of agricultural technology supporting initiatives of public, private and voluntary sector.

The Prime Minister also launched several other programmes concerning Livestock Health, Nutrition and Dairy Farming. To promote innovations and new technology from villages and generate employment, "**Start up Brand Challenge**" has been launched.