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Recent Trends of Entrepreneurship and Industrialization for Rural Development

CHAPTER-06

DAIRY AND LIVESTOCK MANAGEMENT IN RURAL INDIA

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8.1 INTRODUCTION

In rural India, milk and animal care are very important to the farming economy and help millions of people make a living. This abstract gives a quick look at the most important parts of managing dairy and cattle, including their economic importance, the problems they face, and the chances for long-term growth.A lot of people in rural India depend on the dairy industry as their main source of income. Small and marginal farms often do dairy farming as an extra way to make money, which is very important for the growth of the rural economy. Livestock, like cattle, goats, and chickens, also play a big part because they provide rural families with a variety of ways to make money and food.Even though it's important, dairy and cattle management has problems, like not enough veterinary services, not enough infrastructure, and unstable prices. These problems make it harder for the sector to grow and keep rural areas from getting the social and economic benefits they deserve. In order to solve these problems, we urgently need policy changes that focus on making medical facilities better, encouraging environmentally friendly practices, and strengthening market connections.In conclusion, the overall success of rural India depends on the long-term growth of dairy and livestock management. Unlocking the full potential of this sector will require a multifaceted approach that includes policy support, new technology, and community involvement. This will lead to better livelihoods, food security, and total rural prosperity.

There is a rich and complicated tapestry of tradition that is unfolding in the timeless landscapes of rural India. This is a place where the close interaction that exists between humans and animals has been weaving the fabric of agrarian life for millennia. Dairy and livestock management emerge as key components, providing sustenance, tradition, and a means of life to a large number of villages. This is set against the backdrop of rich fields and the rhythmic symphony of nature. There are a variety of animals that traverse these landscapes, including cattle, buffalo, goats, and poultry, which exemplify the richness and resiliency of the nation's agricultural heritage. 'Gau Mata' is a beloved cow in Hindu

mythology, and it represents not just a source of milk but also an embodiment of the divine. Animals that are used for ploughing become partners in the agricultural journey because of their rhythmic ploughing technique. However, as the winds of change blow across these landscapes, spurred by technological advancements, fluctuations in climate, and the dynamics of the market, conventional methods are confronted with problems that have never been seen before. Over the course of this chapter, we will start on a quest to uncover the complexities of dairy and cattle management in rural India. We will also investigate the delicate balance that exists between modernization and tradition. As we delve into the twin narrative of resilience and transition that defines the present and future of dairy farming in the wide canvas of rural India, we do so through the prism of history, cultural significance, and economic relevance. Each of these three factors plays a significant role in our investigation.

8.2 TRADITIONAL PRACTICES

In the heartlands of rural India, farming is based on old ways of taking care of animals that are deeply rooted in culture and family customs. Small herds of cattle, buffalo, goats, and chickens are kept by families, who often live in close-knit communities. These animals play many important parts in the agricultural ecosystem. In Hindu society, the cow, which is revered as "Gau Mata," has a holy place because it gives milk and has spiritual meaning. The toughness and flexibility of buffaloes make them popular in places where being able to handle changes in the weather is important. Everyday life in this traditional setting is planned around what the animals need. There is a timeless rhythm to the beautiful scenes of cows grazing in open fields and families milking their cows under the shade of old trees. Draught animals, usually oxen, plough the fields, making them an essential part of the hard work that goes into farming.

People and their animals have a complicated relationship that goes beyond just doing business. The animals are seen as part of the family and are treated as such. Of course, there are problems with these customs, even though they are beautiful. Concerns have been raised about the low output of traditional methods, which are often blamed on bad feeding methods, a lack of medical care, and the popularity of native breeds that produce less milk. Traditional dairy farming methods can't be scaled up because they don't have modern structures like efficient systems for collecting and transporting milk, storage facilities, and processing units. Traditional ways of doing things are at a crossroads because climate trends are changing and markets are changing. This makes us rethink how long these ways will last. This chapter goes into great detail about these old ways of doing things, showing how strong they are and how hard it is to find the right balance between protecting cultural heritage and making big changes that will help rural towns thrive.

8.3 CHALLENGES IN TRADITIONAL DAIRY FARMING

Traditional dairy farming in rural India faces many problems that make it hard to keep going and work well, even though it is important to culture and has deep roots in tradition.

- **LOW PRODUCTIVITY**

One of the most significant issues is the low productivity that is inherently associated with the use of traditional methods. When compared to their modern equivalents, indigenous breeds typically produce less milk, despite the fact that they do have important cultural significance. Additional factors that contribute to this difficulty include suboptimal feeding practices and restricted access to nutritional supplements, both of which have an effect on the overall output of dairy farming companies.

- **LACK OF INFRASTRUCTURE**

Traditional dairy farming is frequently carried out in regions that do not have the necessary infrastructure to facilitate the collection, transportation, and processing of milk in an effective manner. Consequently, not only does this make it more difficult to transport milk to markets on time, but it also lowers the quality of the milk. The lack of cold storage facilities makes these difficulties even more difficult to deal with, particularly in areas where there is a substantial amount of temperature variation.

- **DIFFICULTY IN OBTAINING CREDIT FACILITIES**

Small-scale dairy producers, who primarily adhere to traditional farming methods, have a tough time gaining access to credit facilities. The lack of financial support that they receive makes it difficult for them to make investments in enhanced breeds, advanced veterinary care, and contemporary technology that have the potential to increase output. As a consequence of this, a great number of farmers find themselves caught in a continuous cycle of subsistence, unable to break free and adopt strategies that are more effective.

- **EXPOSURE TO CLIMATE CHANGE**

The conventional dairy farming industry is vulnerable to the effects of climate change. There are issues in maintaining the health and well-being of the cattle as a result of the variability in weather patterns, which affects the availability of fodder and water. The rising incidence of diseases, which is frequently made worse by the changing conditions of the climate, offers additional dangers to the conventional farming practices that have been used for generations.

- **THE DYNAMICS OF THE MARKET**

Traditional dairy farmers frequently face enormous challenges when attempting to navigate the complexity of modern marketplaces. A number of substantial problems are presented, including fluctuating demand, price instability, and the requirement to comply to quality standards. Traditional farmers are at a disadvantage when it comes to negotiating prices for their produce since they lack information about the market and have restricted bargaining power than other farmers.

8.4 GOVERNMENT INITIATIVES

In light of the fact that dairy and livestock management play a crucial part in the rural economy, the government of India has launched a number of strategic initiatives with the intention of enhancing the sector and providing traditional farmers with more power. In comparison to previous initiatives,

the **National Dairy Plan (NDP)** stands out as a comprehensive programme that was initiated in 2012 with the intention of raising milk output and improving the livelihoods of dairy farmers. The National Democratic Party is committed to advancing scientific breeding, enhancing milk processing capacities, and improving animal nutrition at the same time. Through the use of artificial insemination services, the strategy intends to solve the problem of poor productivity that is linked with traditional farming practices. This will be accomplished by introducing breeds that are both disease-resistant and high-yielding.

Not only does this result in an increase in the quantity and quality of milk produced, but it also make a contribution to the overall health and happiness of the livestock at large. The government has also introduced the **Pradhan Mantri Matsya Sampada Yojana (PMMSY)**, which is a programme that incorporates fisheries and animal husbandry. This programme is in addition to the **National Democratic Party (NDP)**. This holistic approach acknowledges the interconnection of different agricultural practices and seeks to increase the income of farmers who are engaged in these sectors of agriculture. Through the promotion of environmentally responsible methods and the provision of assistance for the development of infrastructure, the PMMSY addresses the issues that are encountered by traditional livestock farmers. In addition, programmes headed by the government place particular emphasis on the establishment and development of rural dairy cooperatives.

The facilitation of collective action, resource pooling, and market access on the part of these cooperatives is an essential component in the process of empowering farmers. Through the establishment of a unified front, small-scale dairy farmers are able to negotiate better prices for their produce, gain access to financial facilities, and reap the benefits of common resources such as veterinary services and modern infrastructure. These programmes not only play a significant role in tackling the issues that conventional dairy farming is currently facing, but they also contribute to the general socio-economic development of rural communities.

Through the implementation of certain regulations and the provision of financial assistance, the government intends to establish an environment that is conducive to the transition of farmers from conventional farming methods to methods that are more environmentally friendly and lucrative. The impact of these programmes is investigated in this chapter, with a focus on identifying success stories and potential areas for improvement in the role that the government plays in defining the future of dairy and livestock management in rural India.

▪ MODERNIZING DAIRY FARMING

The modernization of dairy farming has emerged as a primary priority for several stakeholders in rural India as a response to the changing environment of agriculture and the requirement for higher productivity. The transformation incorporates a number of different aspects with the goal of improving several aspects, including efficiency, sustainability, and the general well-being of farmers and animals collectively.

- **IMPROVED BREEDING PRACTICES**

The adoption of breeds that are genetically superior and have high yields is one of the most important aspects of the modernization of dairy farming. There is a preference for some breeds of cows, such as Holstein Friesian and Jersey cows, due to their elevated milk production and their ability to adapt to contemporary farming techniques. The concern of low productivity that is associated with traditional indigenous breeds is being addressed by the widespread promotion of artificial insemination services. This is being done to ensure a controlled and enhanced genetic pool.

- **MANAGEMENT OF NUTRITION**

In today's dairy farming industry, there is a great emphasis placed on ensuring that livestock receive the best possible nutrition. Implementation of feed practices that are scientifically developed and balanced is being done in order to fulfil the nutritional requirements of the animals, which will ultimately improve their health and production. In order to achieve the highest possible milk production, this includes the utilisation of extra feed, mineral supplements, and cutting-edge feeding methods.

- **TECHNOLOGICAL INTERVENTIONS**

The use of technology is causing a revolution in the dairy farming industry in rural India. The dissemination of knowledge regarding best practices, market trends, and veterinary care is being accomplished through the use of digital platforms and mobile applications. Smart farming technology, such as automated milking systems, biometric identification, and precision farming equipment, are progressively making their way into rural dairy setups. These technologies are helping to streamline operations and improve overall efficiency.

- **MODELS OF COOPERATIVES**

The modernization of dairy farming frequently entails the establishment of dairy cooperatives and the strengthening of those cooperatives. Farmer empowerment is achieved through the promotion of collective action, resource pooling, and market access through the use of cooperative arrangements. Farmers are able to negotiate better pricing, gain access to credit facilities, and invest in common resources such as new equipment and infrastructure when they collaborate with one another.

8.5 CHALLENGES IN ADOPTION OF MODERN PRACTICES

The acceptance of contemporary procedures faces a number of hurdles, particularly among small-scale and traditional farmers, despite the fact that the modernization of dairy farming in rural India holds the potential of greater production and economic growth through the implementation of modern practices.

- **AWARENESS AND EDUCATION**

A significant barrier to the adoption of modern dairy farming practices is the lack of awareness and education among farmers. Many traditional farmers, deeply rooted in age-old practices, may be

unaware of the benefits and intricacies of modern techniques. Extension services, farmer training programs, and awareness campaigns are crucial to disseminate knowledge and encourage the adoption of advanced practices.

- **AVAILABILITY OF RESOURCES**

Small-scale farmers frequently have challenges in gaining access to the critical resources that are necessary for modern dairy farming activities. It is a significant obstacle to have access to loans in order to make investments in enhanced breeds, high-quality feed, and technological advancements. Initiatives from the government and partnerships with the corporate sector are required in order to guarantee that farmers who are prepared to transition to more contemporary and environmentally friendly farming methods have access to the necessary financial resources.

- **INFRASTRUCTURE DEVELOPMENT**

The availability of supportive infrastructure is a critical factor in determining whether or not modern dairy farming practices are successfully brought into use. A significant number of rural areas do not possess the facilities that are required for the efficient collection, transportation, and processing of milk. Therefore, it is very necessary to make investments in cold storage, processing units, and transportation networks in order to establish an environment that is conducive to the shift to modern methods.

- **TECHNOLOGICAL LITERACY**

In order to successfully implement technology in contemporary dairy farming, farmers need to possess a particular level of technological literacy. It is crucial to provide farmers with training programmes that concentrate on the use of digital platforms, mobile applications, and smart farming technology in order to provide them with the skills necessary to navigate the current agricultural landscape.

- **RESISTANCE TO CHANGE**

The cultural fabric of rural communities is heavily rooted in the conventional farming practices that have been used for generations. It is possible that a considerable obstacle will be presented by resistance to change on the part of both farmers and local populations. In order to overcome this opposition, it is necessary to not only educate people about the advantages of contemporary farming practices, but also to recognise and respect the cultural relevance of old farming methods.

- **THE COST OF TRANSITION**

The process of transitioning to contemporary dairy farming operations typically involves initial fees for the acquisition of improved breeds, investments in technology, and upgrades to infrastructure. It is possible that these expenses will be exorbitant for small-scale farmers; therefore, it is vital to have financial support mechanisms, subsidies, or incentives in place in order to allow a transition that is more seamless.

- **ACCESS TO THE MARKET AND QUALITY STANDARDS**

The implementation of modern farming practices frequently necessitates the enforcement of high-quality standards. There is a possibility that small-scale farmers will encounter difficulties in maintaining these requirements and gaining access to markets that require such quality assurances. It is vital to provide farmers with support in the form of quality certification and market linkages in order to guarantee that they will be able to exploit the economic benefits of modernization.

8.6 SUSTAINABLE LIVESTOCK MANAGEMENT

Within the context of rural India, the concept of sustainable livestock management is gaining importance as a response to the growing realisation of the environmental and socio-economic impact that livestock production has. At the same time that it places an emphasis on environmental stewardship, social responsibility, and economic viability, this strategy aims to strike a balance between the needs of the present and the ability of future generations to meet their own needs.

- **Agroecological Principles :** Sustainable livestock management incorporates agroecological concepts, which promotes a holistic approach that takes into consideration the links that exist between animals, crops, and the environment. To maximise agricultural output while minimising the use of external inputs like synthetic fertilisers and pesticides, agroecology places an emphasis on the utilisation of natural processes and biodiversity as a means of increasing agricultural productivity.
- **Recycling of Waste :** The recycling of waste that is produced by livestock is an essential component of environmentally responsible livestock management. Animal dung, when properly managed, has the potential to be an invaluable resource for organic fertiliser, making a positive contribution to the health of the soil and reducing the degree to which chemical fertilisers are utilised. The implementation of this closed-loop system is in line with sustainable agriculture methods, which helps to encourage an approach that is more circular and resource-efficient.
- **Organic Farming Methods :** A significant number of farmers who are committed to the management of their livestock in a sustainable manner choose to use organic farming methods. To do this, it is necessary to steer clear of synthetic inputs and genetically engineered organisms, while also fostering crop rotation and biodiversity. The goals are to increase the fertility of the soil, reduce the negative influence on the environment, and produce products that are of high quality and do not contain any chemicals.
- **Climate Resilience :** The issues that are brought by climate change are addressed by sustainable livestock management, which is the fourth component of climate resilience. Creating farming systems that are resilient to the effects of climate change requires the use of practices such as rotational grazing, agroforestry, and water conservation. The long-term viability of farming methods can be ensured through the use of sustainable livestock management practices, which involve the adaptation to shifting climate patterns and the mitigation of environmental stresses.

- **Participation in the Community :** A fundamental principle of sustainable livestock management is the concept of social responsibility. The incorporation of local communities into decision-making processes, the promotion of fair labour standards, and the consideration of the cultural and social aspects of farming are all vital components. Community-based initiatives that contribute to the overall sustainability of livestock management are those that develop a sense of ownership and collective responsibility within the livestock population.
- **Concern for Animals :** Sustainable livestock management lays a significant emphasis on considering the well-being of animals. The provision of animals with sufficient space, appropriate feed, and access to clean water is not only necessary from an ethical standpoint, but it is also mandatory for the purpose of preserving the health of the livestock and maximising their productivity. It is consistent with the overarching objectives of sustainable farming to incorporate the treatment of animals in a humane and ethical manner.

8.7 SCHEMES-PROGRAMMES FOR LIVESTOCK & DAIRY

The role of employment in poverty-reduction programmes in developing countries has received considerable attention worldwide, in development strategies and policies. Many new employment opportunities in many developing countries are created in the informal sector whose rate of growth may be higher than that of the formal sector. Some important programmes are given here

8.7.1 RASHTRIYA GOKUL MISSION (RGM)

The RashtriyaGokul Mission (RGM) has been in effect since December 2014 with the objective of promoting the growth and preservation of native bovine breeds. The initiative plays a crucial role in improving milk output and productivity of cattle to satisfy the increasing demand for milk, while also making dairy farming more profitable for rural farmers in the country. The plan is further extended as part of the RashtriyaPashudhanVikasYojna umbrella scheme, spanning from 2021 to 2026, with a budget allocation of Rs.2400 crore.

The implementation of the RGM will lead to increased production and advantages of the plan, extending to all cattle and buffaloes in India, particularly benefiting small and marginal farmers. This plan will specifically help women, as they are responsible for more than 70% of the labour involved in cattle farming.

OBJECTIVES OF THE SCHEME

a) To optimise the efficiency of cattle and achieve a sustainable increase in milk output through the utilisation of advanced technologies.

b) To promote the utilisation of bulls with superior genetic qualities for breeding reasons.

c) To improve the coverage of Artificial Insemination by strengthening the breeding network and providing doorstep delivery of Artificial Insemination services to farmers.

d) To facilitate the scientific and comprehensive promotion of indigenous cattle and buffalo rearing and conservation.

8.7.2 NATIONAL LIVESTOCK MISSION

The project primarily emphasises the growth of business and the enhancement of breeding in poultry, sheep, goats, and piggery, which includes the creation of feed and fodder. The scheme is executed through the incorporation of the subsequent three Sub-Missions:

a) The Sub-Mission on Breed Development of Livestock & Poultry focuses on improving the genetic traits and characteristics of livestock and poultry breeds.
b) The Sub-Mission on Feed and Fodder development aims to enhance the quality and availability of feed and fodder for livestock and poultry.
c) Taskforce on Expansion and Advancement

8.6.3 LIVESTOCK HEALTH AND DISEASE CONTROL

The Livestock Health & Disease Control initiative seeks to improve the animal health industry by implementing preventative vaccination programmes for various diseases in livestock and poultry, enhancing capacity building, conducting disease surveillance, and developing veterinary infrastructure.The implementation of the scheme is expected to result in the prevention and control of diseases, leading to their eventual eradication. It will also increase access to veterinary services, improve animal productivity, and enhance trade in livestock and poultry products. Additionally, it will contribute to the improvement of the socio-economic status of livestock and poultry farmers. The financing for the CADCP and the non-recurring components of ESVHD is entirely provided by the central government. For the remaining components, as well as for ASCAD, the funding is shared between the central government and the state government in a ratio of 60:40. However, for hilly and northeastern states, the ratio is 90:10, and for union territories, the funding is provided entirely by the central government.

OBJECTIVE : The objectives of the scheme are -

a) The objective is to execute a Critical Animal Disease Control Programme with the aim of eradicating Peste des Petits Ruminants (PPR) by 2030. This will be achieved by vaccinating all sheep and goats. Additionally, the programme aims to control Classical Swine Fever (CSF) by vaccination the entire pig population. Another goal is to offer veterinary services directly to farmers by means of Mobile Veterinary Units (MVUs).

b) The objective of the Assistance for Control of Animal Disease (ASCAD) programme is to aid States/UTs in preventing and controlling livestock and poultry illnesses that are widespread in different regions, according to the specific priorities of each State/UT.

8.7.4 NATIONAL PROGRAMME FOR DAIRY DEVELOPMENT (NPDD)

The objective of the NPDD project is to improve the quality of milk and milk products and to increase the proportion of milk that is procured through organised channels. The scheme consists of two components :

Component 'A' : The objective is to improve and expand the infrastructure for advanced milk testing equipment and primary chilling facilities for State Cooperative Dairy Federations, District Cooperative Milk Producers' Union, and privately-owned dairies operated by Self-Help Groups. Dairy Farmer Companies, and Farmer Producer Organisations. The project will be implemented nationwide for duration of five years, starting from 2021-22 and ending in 2025-26.

Component 'B' : Dairying through cooperatives offers financial aid from the Japan International Cooperation Agency (JICA) in accordance with the project agreement that has previously been executed with them. This is an externally funded project that is planned to be carried out from 2021-22 to 2025-26 as a pilot initiative in Uttar Pradesh and Bihar. The main goal is to establish essential dairy infrastructure in order to facilitate market connections for agricultural products in rural areas and to enhance the capacity of institutions involved at various levels, from villages to the state.

8.7.5 ANIMAL HUSBANDRY STATISTICS (AHS)

The Animal Husbandry Statistics (AHS) Division of the Department of Animal Husbandry & Dairying (DAHD) is tasked with generating Animal Husbandry Statistics as part of the development projects categorised under the Centrally Sponsored Scheme "Livestock Census and Integrated Sample Survey." This approach comprises two components: (i) Livestock Census (LC) and (ii) Integrated Sample Survey (ISS). The initiative is being implemented by the Department of Animal Husbandry and Dairying in partnership with State Animal Husbandry Departments.

Division's Mandate : Here are the given mandate

a) Doing a Livestock Census (LC) every five years.

b) Doing an Integrated Sample study (ISS) every year as a sample study.

c) To publish a "All India Livestock Report" that lists the number of animals of the main species at the national and state/UT levels, broken down by use, sex, and age.

d) Putting out a breed-by-breed report based on the most recent animal Census, which will include detailed maps of the total and separated breed-by-breed animal populations.

e) There will be a yearly report called Basic Animal Husbandry Statistics that will include estimates of how much milk; meat, eggs, and wool are produced.

8.7.6 NATIONAL ANIMAL DISEASE CONTROL PROGRAMME (NADCP)

The National Animal Disease Control Programme (NADCP) is a prominent initiative introduced by the Honourable Prime Minister in September 2019. Its objective is to control the spread of Foot & Mouth Disease and Brucellosis by vaccinating the entire population of cattle, buffalo, sheep, goats, and pigs for FMD. Additionally, all female bovine calves aged 4-8 months will be vaccinated for brucellosis. The total budget allocated for this programme is Rs. 13,343.00 crore for duration of five years (2019-20 to 2023-24). The primary objective of the National Animal Disease Control Programme for Foot-and-Mouth Disease (FMD) and Brucellosis (NADCP) is to achieve control over FMD through vaccination by

the year 2025, followed by complete eradication of the disease by 2030. This will lead to a rise in domestic output and ultimately result in an increase in the export of milk and livestock products. The implementation of an intensive Brucellosis Control programme in animals is intended to effectively manage the disease in both animals and humans.

The National Animal Disease Control Programme for Foot-and-Mouth Disease (FMD) and Brucellosis, known as NADCP, is a scheme operated by the Central Government. Under this scheme, the Central Government will provide 100% of the cash to the States and Union Territories (UTs).

MAJOR ACTIVITIES UNDER NADCP FOR FMD AND BRUCELLOSIS

i. Administering mass vaccination against Foot-and-Mouth Disease (FMD) to all vulnerable bovines, small ruminants (sheep and goats), and pigs every six months.
ii. Initial immunisation of young bovine calves (aged 4-5 months)
iii. Administering deworming medication one month before vaccination
iv. Nationwide, regional, local, and community-wide campaigns to promote awareness and generate public attention, including training government officials on how to implement the programme effectively.
v. Identifying specific animals for the programme by tagging their ears, registering them, and entering the data into the animal health module of the Information Network for Animal Productivity and Health (INAPH).
vi. Recording immunisation information via Animal Health cards
vii. Conducting serosurveillance/seromonitoring to monitor the antibody levels in the animal population.
viii. Acquiring cold cabinets (such as ice liners and refrigerators) and FMD vaccine for storage.
ix. Investigating and isolating the virus, as well as determining its type, in the event of an outbreak.
x. Keeping records and regulating the movement of animals through temporary quarantine/checkpoints.
xi. Testing samples before and after vaccination to assess effectiveness.
xii. Collecting data and regularly monitoring the program's impact.
xiii. Providing adequate compensation to vaccinators, with a minimum of Rs.3/- per vaccination dose and Rs.2/- per animal for ear-tagging and data entry.

8.7.7 DAIRY PROCESSING & INFRASTRUCTURE DEVELOPMENT FUND (DIDF)

The Union Budget 2017-18 established the Rs 8,004 crore Dairy Processing & Infrastructure Development Fund with National Bank for Agriculture and Rural Development. In its meeting on 12.09.2017, the CCEA authorised the proposal to provide subsidised loans @6.5% to capital-stressed milk cooperatives to replace their decades-old chilling and processing units and build value-added

product factories. The project components of DIDF will cost Rs 10,881 crore, with Rs 8,004 crore from NABARD to NDDB/NCDC, Rs 2,001 crore from end borrowers, Rs 12 crore from NDDB/NCDC, and Rs 864 crore from DAHD for interest subvention. The project installs processing and chilling infrastructure and electronic milk adulteration testing equipment at village level to improve milk procurement. Eligible End Borrowers (EEBs) include State Dairy Federations, District Milk Unions, Milk Producers Companies, Multi State Cooperatives, and NDDB subsidiaries. The scheme would amend its funding duration from 2017-18 to 2019-20 to 2018-19 to 2022-23 and extend its payback period to 2030-31 with a spillover to the first quarter of FY 2031-32.

Objectives of the DIDF scheme : To modernize the milk processing plants and machinery and to create additional infrastructure for processing more milk.

8.7.8 ANIMAL HUSBANDRY INFRASTRUCTURE DEVELOPMENT FUND (AHIDF)

The Prime Minister of India has announced the establishment of a Rs. 15000 crore Animal Husbandry Infrastructure Development Fund (AHIDF) as part of the AtmaNirbhar Bharat Abhiyan stimulus package. The Animal Husbandry Infrastructure Development (AHIDF) has received approval to provide incentives for investments made by individual entrepreneurs, private companies, MSME, Farmers Producers Organisations (FPOs), and Section 8 companies. These investments are intended to establish infrastructure for

a) Dairy processing and value addition,
b) Meat processing and value addition, and
c) An Animal Feed Plant

To enhance the capacity for milk and meat processing and expand product variety, thus facilitating unorganised rural milk and meat producers' entry into the organised milk and meat market.

- To provide the producer with higher price realisation.
- The objective is to provide high-quality milk and beef products to the local consumer.
- To address the need for protein-rich, high-quality food for the expanding population of the country and combat malnutrition in one of the world's most malnourished child populations.
- Foster entrepreneurial activities and facilitate job creation.
- The objective is to enhance the export of milk and meat products and boost their overall contribution to the export industry.
- The objective is to provide high-quality concentrated animal feed to cattle, buffalo, sheep, goat, pig, and poultry, ensuring a balanced diet at cheap costs.

8.7.9 SUPPORTING DAIRY COOPERATIVES & FARMER PRODUCER ORGANIZATIONS

The approval of a programme called "Supporting Dairy Cooperatives and Farmer Producer Organisations engaged in dairy activities" allows for the provision of a loan for operating capital to State Cooperatives and Federations. A sum of Rs. 303 crores have been disbursed to the National Dairy Development Board till December 2021 for the execution of the programme.

Objectives : The objective is to support the State Dairy Cooperative Federations by offering them a soft working capital loan to help them overcome financial difficulties caused by extremely unfavourable market conditions or natural disasters.

- To ensure consistent and reliable market opportunities for dairy farmers.
- The objective is to ensure that State Cooperative Dairy Federations can consistently and promptly pay the dues owed to farmers.
- The objective is to empower the cooperatives to purchase milk from farmers at a profitable price, even during periods of high milk production.

Due to the economic challenges caused by the Covid-19 lockout, the dairy cooperatives and Producer Owned Institutions have had financial difficulties. As a result, it has been determined that the "Interest Subvention on working capital loans" component would be included in the scheme for the year 2020-21, with a budget of Rs. 100 crores. Meanwhile, the provision for working capital loans under the scheme has been temporarily halted during the fiscal year 2020-21. The Standing Finance Committee (SFC) led by Secretary (AHD), has raised the allocation for "interest subvention on working capital loan" to Rs. 203 Crore, in response to the high demand. The allocation for the "working capital loan component" was maintained in abeyance for the fiscal year 2021-22 as well, with the purpose of offering interest subvention on working capital loans. The Department is implementing the interest subvention component in collaboration with NDDB. The initiative offers a 2% annual interest subsidy on working capital loans obtained by qualifying Participating Agencies (PAs) from banks and financial institutions. In order to ensure prompt and timely repayment, an additional interest subvention of 2% per annum will be required at the conclusion of the loan repayment period. The eligible products for obtaining working capital loans include Skimmed Milk Powder (SMP), Whole Milk Powder (WMP), White Butter, and Ghee. The Union Cabinet has approved the implementation of the Supporting Dairy Cooperatives and Farmer Producer Organisations engaged in dairy activities (SDCFPO) as a component of the Umbrella Scheme "Infrastructure Development Fund" from 2021-22 to 2025-26, with a budget of Rs 500 Cr.

8.7.10 CONCLUSION

Within the expansive landscape of rural India, the process of managing dairy and livestock emerges as a dynamic and intricate pattern, composed of elements of tradition, difficulties, and the capacity for transformation. Examining ancient methods uncovers the complex interplay between humans and their cattle, characterised by deep cultural origins and mutually beneficial connections. Nevertheless, as the forces of transformation affect the rural farming areas, the difficulties encountered by conventional dairy farming become evident, necessitating the requirement for adjustment and ingenuity. The National Dairy Plan and Pradhan Mantri Matsya Sampada Yojana are government efforts that provide crucial support to traditional farmers, with the goal of empowering them with the necessary resources for a contemporary and sustainable future. The focused endeavour to enhance dairy cooperatives serves as a symbol of optimism, promoting solidarity

among farmers and establishing opportunities for collective advancement. The modernization of dairy farming is becoming a powerful force for change, as it brings in better breeding methods, technology advancements, and cooperative models that have the potential to completely reshape the sector. However, despite the potential for advancement, there are significant obstacles to the widespread acceptance and implementation of this idea. These barriers include a lack of awareness and education, as well as resistance stemming from long-standing cultural practices. Attaining modernity necessitates more than just significant advancements in technology; it also demands a sophisticated comprehension of the socio-economic structure of rural communities. Amidst this ever-evolving environment, the notion of sustainable livestock management arises as a guiding principle. The utilisation of agroecological concepts, waste recycling, and organic agricultural practices exemplify a symbiotic relationship between agriculture and the environment.

The focus on climate resilience, community engagement, and animal welfare demonstrates a comprehensive approach that goes beyond only economic factors to embrace the overall well-being of the entire ecosystem.As we wrap off this investigation, the fabric of rural India persists in changing, influenced by the interaction between tradition, modernization, and sustainability. The obstacles encountered by conventional procedures are not hindrances but rather invitations for innovation and perseverance. The convergence of government programmes, technological breakthroughs, and sustainability principles creates a future where dairy and animal management not only provide a livelihood but also contribute to rural prosperity, environmental stewardship, and social peace. The upcoming chapters will further reveal the ongoing narrative of rural India's dairy and livestock management, showcasing the themes of adaptability, resilience, and the potential for a sustainable future.

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