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ORIGIN, GROWTH AND DEVELOPMENT OF DAIRYING IN INDIA

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ABSTRACT
The study examines the historical and contemporary dynamics of dairying in India presenting its evolution from ancient to modern day practices. Secondary research as a tool traces of the origin from archaeological, cultural and economic prospects by highlighting the contributions from Indus Valley Civilizations, Vedic period and different dynasties for the development of dairying, which later carried on during the British as a need base leading to the establishment of national level dairy development and research institutes and the schematic development that is being witnessed after Independence.

INTRODUCTION
India is a vast country with a land courage of 3.287 million sq. km (1) and population is around 1.416 billion (2). The survey (2021 data) depicts that 65 per cent of total population residing in rural among, 47 per cent of the population is agriculture dependent for livelihood (3).Dairying an allied sector of Agriculture, play a key role in Indian economy among which dairying plays a prominent role in determining the economic status of about 70 million epically at family level. Dairying assures employment and nutrition to farm family (4). Dairying can be considered as the one of the oldest form of livelihood that prevailed in India even before British invasion and can also be observed that it is linked to the culture. In this context the current study is an attempt to analyze the dynamics of dairying in India from days old to the present.

METHODOLOGY
The current study is a secondary research study i.e. to analyze the emergence of the practice of dairying especially cattle and buffalos from ancient India to present schematic promotion of dairying that depicts origin and growth. The development of dairying is expressed in terms of total milk production, percapita availability of milk, cattle and buffalo population. Research articles, books and websites of dairying bodies are considered as the sources of data.
The study is segregated into four main sections namely: Early India, British India, Independent India and Dairy Development.

OBJECTIVES
1. Identify the possible starting of dairying in India.
2. Sequelize the practice of dairying from the identified starting point to present days.
3. Highlight the achievements of each period that depicts dairying and its development.
4. Evidence the development of dairying in India.

REVIEW AND ANALYSIS
EARLY INDIA
Dairying in Ancient India
There are evidences that animal rearing is centuries old practice. Evedences of the art of the cave dwellers prove that animal rearing began before the written history started. The archaeological evidences of Harappa and Mohenjo-Daro of Indus-valley civilization exposed the information of animal keeping. People of this period raised livestock, used them for recreation and games. Livestock products like ghee, curd, milk, etc. were consumed on the other side hides and skin were documented for important uses like clothes and ornaments**.** Including other animals cattle is also mentioned vastly as food during Harappan period. Various seals and stamps, scripts and paintings stood as the mirrors displaying the activities of animal husbandry during Indus valley civilization (5).

Indus Valley Civilization
In the Vedic period, the animals were gained more importance. The cows were considered as religious entity and referred as ‘Aghanya’ which mean ‘not to be killed’. It is also stated that, people used to feed their cows on pastures near their homes, if sufficient pastures are not available forest lands were cleared to raise pastures and cows were milked trice a day.

Aryans considered cattle as wealth, sacred and meant not to be killed (6). They also waged wars by the name “Gavishti” to acquire cows of local tribes. Aryans preferred cows over buffalos for milk. Selective breeding was also practiced for breeding bull which was called as ‘Nandi’. The process of castration was also

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practiced and oxen were used for agriculture, irrigation, plowing and transport (5). Aryans knew the importance of pastures and forest. They used to take cattle for pastures in the morning and bring them back in the evening (6). The sacred books of Rigveda states that barley, sugarcane and deoiled sesme cake were used as feed for domesticated animals. In Vedic hymns it is mentioned the use of medical herbs and dietary supplements for curing of animals. Atharvaveda also mentions the practice of animal ayurveda. Practice of surgical methods such as grafting, treatment of dislocations, removal of foreign bodies, fistula and fractions for managing the animal diseases was also mentioned (7).

Post Vedic

The witness of the post-Vedic age also known as Iron age of India through the great epics of Hindus- Ramayana and Mahabharata states that cattle was an important occupation and practiced by all (6). It also mentioned that trained Vaidhyas perform the animal disease management and curing by medicine, oils, herbs and surgeries. The importance of cow dung for agriculture was noticed in this period.

In the Krishna or Gopala era (900-1000 BC) 'Gaupalan' and 'Gau Sanrakshan' were became popular which mean the keeper/protector of cattle. Govinda was another name of Krishna which also means protector of cows. During this period milk and milk products were assumed importance and tax was paid in terms of milk-butter to the king. A special day after Deepawali called Gopashtami was started by Krishna to worship cows. Panchagavya that includes five things i.e. cow milk , curd and ghee made from cow's milk, urine and dung gainrd importance and used for religious rituals during this period. The 'Shrimad Bhagawat' a religious text of this era mirrors the role and importance of cow husbandry in the society in the form of poetry and paintings (5).

Mauryan Era

During Mauryan period the cattle breeding was wide spread and was important source for milk, draught power, meat and herd size was large (8). Arthashastra written by Kautilya of Mauryan period documented the care and management of domestic animals which also include the duties and role of king in promoting care and protection to cows. It was during this period the buffalos were also recognized for dairying and identified the differences in fat content in cow and buffalo milk indicating the high fat percent in buffalo milk. Mauryan period is also known for state funded veterinary services (7). The appointment of 'Gopas' village-based accountants under separate department in the state for accounting and livestock and land maintained for pastures was suggested in Arthashastra. Arthasastra also describes optimum herd size, male to female ratio of cattle, feeds and fodder. The laws (veterinary Jurisprudence) for provision of punishments and penalities imposed on committing crime (ill treatment of cows or robbery) and non-compliance to pay taxes related to animal husbandry were mentioned in Arthasastra.(5).

Medieval Era

The medieval era of India is between the end of Gupta Empire (6th Century) and the start of Mughal empire (1526). During this period India subcontinent was contemporarily ruled by 32 dynasties in different geographical regions. Among 32 dynasties 16 dynasties have the evidence of documents on animal husbandry (9).

During eastern Chalukya period the practice of donating cows, goats and sheep for practicing daily sacred activities was noticed. A community group called 'Golla or Boya' used to maintain the animals which were donated according to number of perpetual lamps in temple(10).

During Rashtrakuta dynasty buffalos were also used for business travels.

During Chola empire cows were given almost equal rights of humans besides this cows were worshiped and during famines provision of food to humans and feed to animals was similar(5).

Mughal Era

The Mughals prevailed India from 1526 to 1857 during which the country was home to large cattle population(5). Ain-e-akbari the book written during the period of Akbar mentions that cattle farming was the major occupation of agriculture, taxes were collected on cattle and cattle farming was imposed on farmers. Several books like 'Tuzak-iBaburi' 'Humayunnama', 'Tuzuk-i-Jahangiri' etc highlighted the importance of cattle rearing for milk, drought power, manure, meat, skin bones etc (8).Historian Irfan Habib in his book 'The Agrarian system of Mughal India' quoted that India had more cattle than Europe but have lower milk yields. In India the milk productivity of cattle and buffalo ranged from 1 to 5 seers and 2 to 30 seers respectively (1 seer ~ 1 KG). The cattle of Gujarat and Buffalo of Punjab were considered the best. Milk productivity of the animal decides the feeding management of animal. "Khas" class/breed was used to indicate the high milk producers of milk and fed about 6 kg of grain and 15 kg of green grasses per day while other classes/breeds were fed with the half of this ration. Peasents of Mughal era used to take extra care of buffalos by providing about 8 kg of wheat flour, 500 gms of molasses, 20 kg of green grass and 1.5 kg of grain as feed as buffalos were main milch breed. Besides traction, livestock were used for improving soil fertility.

During the Mughal period many indigenous products of milk like khir, phirni, rabri, etc were most popular. In 16th century a "traditional Indian ice-cream" called Kulfi was originated(5).

BRITISH INDIA

The company rule in India effectively started from 1757 and ended with the 1857 rebellion after that, British directly ruled the country until the Independence in 1947(5). During the early colonel rule cattle rearing was highly affected as the pastoral land was converted to agricultural land for cultivation of cotton and food grains that reduced the grazing space(8)(11).The straight rules prohibited grazing of animals in the forest.

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First military dairy farm was established at Allahabad in 1889, later more farms were established across the country which reached to around hundred by the time of independence in 1947 and this was considered as the initial point towards organized dairy farming. High yield verities were reared by maintaining the proper records(12). In 1920, to analyze the status of dairy sector and propose the plan for growth of dairy sector an imperial dairy expert team was appointed which witnessed a rise in cattle rearing in an organized way(6). Artificial Insemination was started in 1925 which drove to the improvement of the herd to some extent. Local breed protection was also done in some farms (5).

During the period of British the yield of buffalo and cattle was around 2.27 liter per day and 0.4 to 1.8 liters per day, respectively. Buffalos were preferred over cattle because of their high yields(13). Over the local breeds the breeds like Gujarat, Sind, Ongole and Nellore were considered better as they have vast scope for improvement. For maintaining good productivity for good diary animals cotton seed and oil cake were fed.

With the suggestions of William Frazer breeding of indigenous cattle with Nagore breed bulls was done. Later in 1815 Government cattle farm of Hisar also started cattle breeding with a main focus on dual-purpose breed of Haryana. Mysore cattle were crossed with Sind, Ongole, Gujarat and Nagore breeds to improve milk yield. Poor health and low milk yield of the breeds of Indian cattle is main constraint for dairy development stated by The Royal Commission of Agriculture (1928) that resulted in introduction of exotic breeds to India for breeding. Bulls of Ayrshire and Friesian were recommended for crossing the native cows(5).

In the year 1868 cattle plague commission was formed due to huge out-break of Rinder-pest (Cattle plague) in 1865-67 with millions of animals died(14). Government was forced to take the counter steps against the spread of the disease to military farms. More over between 1901 and 1904 treatment activities for anthrax and hemorrhagic septicemia were carried out. Vaccine for against rinderpest and black-quarter was developed.

Due to lack of chilling and fast transportation facilities 68.8 percent of milk was converted to curd, ghee, butter and khoa. In 1940 collection and distribution centers between rural producers and urban consumers were formed, which later implemented in Delhi, Madras, Calcutta, Karachi and Nagpur by well organized milk marketing organizations. The first large scale dairy established in India was at Bombay in the year 1915 and called as Polson dairy. Keventers and Express Dairy were other popular dairy processors. They didn't concerned about rural producers as profit was their main motive. Middleman and contractors exploited the farmers that led to the dissatisfaction of dairy farmers(15). The cooperative moment in dairying led to establishment of Kaira District Cooperative Milk Producers Union in Gujarat in 1946. The success of this dairy cooperative union encouraged the formation of similar dairy cooperative unions across the country after Independence (5).

In 1857 by the end of the first war of independence, many people collectively started a movement for protection of cows. Between 1810 and 1893 a large number of gaushalas were established. One of the Swaraj Moment's objective was Prohibition of Cow Slaughter. In 1944 British Government imposed restrictions on cattle slaughtering which include –army was not allowed to slaughter working cattle, milking and pregnant animals and cattle fit for bearing offsprings(5).

In 1882 at Lahore first veterinary college was established. Cattle plague commission which was appointed in 1868 led to creation of Civil Veterinary Departments in the provinces to encounter plague outbreak in 1889.In 1902 Indian Council Veterinary Department was established which assigned the responsibilities of animal husbandry and dairying till the provinces in 1919(5).

In 1871 Cattle Plague Commission submitted its report(15). In Pune an Imperial Bacteriological Laboratory was established where scientific work on animal diseases was started(17). In 1893 for the favorable cool climate that suits bacteriological research and vaccine preservation Imperial Bacteriological Laboratory was shifted to Mukteswar of Uttarkhand. At Izatnagar of Bareilly another branch of laboratory was opened for bulk production of serum and vaccines in 1913 later in 1925 which was renamed as Imperial Institute of Veterinary Research which again renamed I 1930, 1936 and 1947 respectively as Imperial Veterinary Serum Institute, Imperial Veterinary Research Institute and Indian Veterinary Research Institute. Meanwhile an institute named as Imperial Institute of Animal Husbandry and Dairying was established in Bangalore in the year 1923 for dairy specific research which was renamed as Imperial Dairy Research Institute in 1936. Later in 1955 after Independence its headquarters was shifted to Karnal of Haryana and renamed it again as National Dairy Research Institute(5).

INDEPENDENT INDIA

As government gave importance for development of cattle and started various programs in the five year plans, cattle rearing developed in a planed way in India. In the first five year plan Key Village scheme was implemented to develop cattle at village level. In second five year plan Intensive Cattle Development Project was developed to strengthen Key Village Scheme and develop the quality of cattle in India. Besides all these programs Operation Flood program stood tall making India self sufficient in production and improving per capita availability of milk.

Key Village Scheme

After Independence, India's first step for an effective and organized attempt to develop cattle of villages was Key Village Scheme (KVS) launched during the first five year plan in 1950. KVS is Government of India's general comprehensive scheme by adopting scientific methods of Grading and selective breeding, Artificial Insemination, develop feed and fodder and forming co-

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operative societies to increase cattle population with the aim to cover 5000 number of breedable buffalos and cows that later increased up to 10,000. KVS is meant for group of villages or whole village or part of a village or an area. (8)(18)

Intensive Cattle Development Programme

As KVS was not able to accomplish the expected results led to a new programme called Intensive Cattle Development Programme (ICDP) introduced to produce required quantity of milk for processing in established dairy plants especially in milk sheds and breeding tracks of indigenous breeds of buffalos and cattle. ICDP was started in the year 1964 and was to cover a lakh of breedable cattle and buffalos. With the target of increasing milk production by 30 percent, 70 percent of the cattle and buffalo population was selected for breeding purpose in the selected area for a period of 5 years. During the third- five year plan government of India provided 100 percent assistance from the central and after 2 years of completion the program was transferred to state government(8)(18).

AMUL and Evolution

The Kaira District Cooperative Milk Producers' Union was registered by the milk producers in 1946 now it is popular as AMUL. The Kaira District Union procured milk from associated village-level milk societies and this was considered as genesis of the organized milk marketing of India.

In 1952 AMUL's policy of obtaining total rights for the sale of milk to the Bombay milk scheme was achieved as Bombay cancelled its contract with Polsons. In peak winter seasons to keep up the confidence of societies and to utilize surplus of milk, a new dairy plant to produce ghee, butter and milk powder was setup at Anand in 1955. In 1965 second dairy was build followed by a product manufacturing unit in 1971. Later in 1993 fully automatic modern dairy was constructed at Anand adjacent to original AMUL dairy plant. (15)

National Dairy Development Board (NDDB)

In 1964 the then Prime minister of India Lal Bahadur Shastri during his visit to AMUL cattle feed plant for its inauguration and impressed by the socio-economic impact of milk cooperatives and expressed his desire for a national level organization replicate Anand model dairying cooperatives all over India.This resulred in formation of NDDB in 1965 which was registered under the Societies Registration Act, the Charitable Trust Act and the Public Trust Act with its head quarters at Anand.(15)(19)

Operation Flood

"Launched in 1970, Operation Flood has helped dairy farmers direct their own development, placing control of the resources they create in their own hands. A National Milk Grid links milk producers throughout India with consumers in over 700 towns and cities, reducing seasonal and regional price variations while ensuring that the producer gets fair market prices in a transparent manner on a regular basis. Operation Flood's objectives included:

- Increase milk production ("a flood of milk")
- Augment rural incomes
- Reasonable prices for consumers

Operation Flood was implemented in three phases."(20)

Department of Animal Husbandry and Dairying (DAHD)

"The Department of Animal Husbandry and Dairying (AH&D) is one of the Departments of the newly created Ministry of Fisheries, Animal Husbandry & Dairying.

The Department advises State Governments/Union Territories in formulation of policies and programme in the field of Animal Husbandry and Dairy Development. The main thrust areas are:

- Development of requisite infrastructure in States/ UTs for improving animal productivity.
- Preservation and protection of livestock through provision of health care.
- Strengthening of central livestock farms (Cattle, Sheep and Poultry) for development of superior germplasm for distribution to states."(21)

National Project for Cattle and Buffalo Breeding.

"Genetic improvement in bovines is a long term activity and Government of India has initiated a major programme "National Project for Cattle and Buffalo Breeding" (NPCBB) from October 2000 over a period of ten years The project envisages 100% grant-in-aid to Implementing Agencies.

The Objectives of the scheme is to:

- Arrange delivery of vastly improved artificial insemination service at the farmers door-step.
- Bring all breedable females among cattle and buffalo under organized breeding through artificial insemination or natural service by high quality bulls within a period of 10 years.
- Undertake breed improvement programme for indigenous cattle and buffaloes so as to improve the genetic makeup as well as their availability."(22)

Rastriya Gokul Mission

"The Rashtriya Gokul Mission (RGM) is being implemented for development and conservation of indigenous bovine breeds since December 2014. The scheme is important in enhancing milk production and productivity of bovines to meet growing demand of milk and making dairying more remunerative to the rural farmers of the country.

Objectives

- a) To enhance productivity of bovines and increasing milk production in a sustainable manner using advance technologies.
- b) To propagate use of high genetic merit bulls for breeding purposes.
- c) To enhance Artificial insemination coverage through strengthening breeding network and delivery of Artificial insemination services at farmers doorstep.
- d) To promote indigenous cattle & buffalo rearing and conservation in a scientific and holistic manner."(23)

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National Dairy Plan Phase I (NDP I)

"National Dairy Plan Phase I (NDP I) is a Central Sector Scheme for a period of 2011-12 to 2018-19.

Objectives

NDP I is a scientifically planned multi-state initiative with the following Project Development Objectives :

- To help increase productivity of milch animals and thereby increase milk production to meet the rapidly growing demand for milk
- To help provide rural milk producers with greater access to the organised milk-processing sector
- These objectives would be pursued through adoption of focused scientific and systematic processes in provision of technical inputs supported by appropriate policy and regulatory measures."(24)

National Livestock Mission

"The focus of the scheme is on entrepreneurship development and breed improvement in poultry, sheep, goat and piggery including feed and fodder development. The scheme is implemented with the following three Sub-Missions:

- Sub-Mission on Breed Development of Livestock & Poultry
- Sub-Mission on Feed and Fodder development
- Sub-Mission on Extension and Innovation"(25)

National Programme for Dairy Development (NPDD)

"The NPDD scheme aims to enhance quality of milk and milk products and increase share of organized milk procurement. The scheme has two components:

Under NPDD, Fund sharing Pattern of Centre & State is as under:

Component 'A' focuses towards creating/strengthening of infrastructure for quality milk testing equipment as well as primary chilling facilities for State Cooperative Dairy Federations/ District Cooperative Milk Producers' Union/SHG run private dairy/Milk Producer Companies/Farmer Producer Organisations.

Component 'B' (Dairying Through Cooperatives) provides financial assistance from Japan International Cooperation Agency (JICA) as per project agreement already signed with them."(26)(27)

Livestock Health and Disease Control

"The overall aim of the Livestock Health & Disease Control scheme is to improve the animal health sector by way of implementation of prophylactic vaccination programmes against various diseases of livestock and poultry, capacity building, disease surveillance and strengthening of veterinary infrastructure.

The objectives of the scheme are:

- To implement Critical Animal disease control programme to eradicate PPR by 2030 by vaccinating all sheep and goats and to control Classical Swine Fever (CSF) by vaccinating the entire pig population
- To provide veterinary services at the farmers' doorstep through Mobile Veterinary Units (MVUs)
- To assist States/UTs for Control of Animal Disease (ASCAD) by prevention & control of important livestock and poultry diseases prevalent in different States / UTs as per the State /UT's priorities."(28)

National Animal Disease Control Programme (NADCP)

"National Animal Disease Control Programme (NADCP) is a flagship scheme launched by Hon'ble Prime Minister in September, 2019 for control of Foot & Mouth Disease and Brucellosis by vaccinating 100% cattle, buffalo, sheep, goat and pig population for FMD and 100% bovine female calves of 4-8 months of age for brucellosis.

Objectives of the Programme

The overall aim of the National Animal Disease Control Programme for FMD and Brucellosis (NADCP) is to control FMD by 2025 with vaccination and its eventual eradication by 2030. This will result in increased domestic production and ultimately in increased exports of milk and livestock products. Intensive Brucellosis Control programme in animals is envisaged for controlling Brucellosis which will result in effective management of the disease, in both animals and in humans.

National Animal Disease Control Programme for FMD and Brucellosis (NADCP) is a Central Sector Scheme where 100% of funds shall be provided by the Central Government to the States / UTs."(29)

Dairy Processing and Infrastructure Development Fund (DIDF)

"The project focuses on building an efficient milk procurement system by setting up of processing and chilling infrastructure & installation of electronic milk adulteration testing equipment at village level.

Objectives of the DIDF scheme

To modernize the milk processing plants and machinery and to create additional infrastructure for processing more milk."(30)

Animal Husbandry Statistics (AHS)

"The Animal Husbandry Statistics (AHS) Division of Department of Animal Husbandry & Dairying (DAHD) is entrusted with the generation of Animal Husbandry Statistics through the Centrally Sponsored Scheme "Livestock Census and Integrated Sample Survey"under the development programmes category with two components, (i) Livestock Census (LC)& (ii) Integrated Sample Survey (ISS).The scheme is being implemented by the Department of Animal Husbandry and Dairying through State Animal Husbandry Departments.

Division's Mandate:

- Conducting quinquennial Livestock Census (LC).
- Conducting annual sample survey namely Integrated Sample Survey (ISS).
- Publishing All India Livestock Report consisting of livestock population of major species at National and States/UT level by use, sex and age.

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- Publishing Breed-wise report based on the latest Livestock Census consisting of detail breed-wise livestock population at aggregate as well as segregated level.
- Publishing of annual publication title Basic Animal Husbandry Statistics to release the production estimates of four major livestock products like milk, meat, egg and wool..”(31)

Animal Husbandry Infrastructure Development Fund

“The Animal Husbandry Infrastructure Development (AHIDF) has been approved for incentivizing investments by individual entrepreneurs, private companies, MSME, Farmers Producers Organizations (FPOs) and Section 8 companies to establish the dairy processing and value addition infrastructure, meat processing and value addition infrastructure and Animal Feed Plant.

OBJECTIVES

- To help increasing of milk and meat processing capacity and product diversification thereby providing greater access for unorganized rural milk and meat producers to organized milk and meat market.
- To make available increased price realization for the producer.
- To make available quality milk and meat products for the domestic consumer.
- To fulfill the objective of protein enriched quality food requirement of the growing population of the country and prevent malnutrition in one of the highest malnourished children population in the world.
- Develop enterpreneurship and generate employment.
- To promote exports and increase the export contribution in the milk and meat sector.
- To make available quality concentrated animals feed to the cattle, buffalo, sheep, goat, pig and poultry to provide balanced ration at affordable prices.”(32)

Supporting Dairy Cooperatives & Farmer Producer Organizations (SDCFPO)

“A Scheme named “Supporting Dairy Cooperatives and Farmer Producer Organizations engaged in dairy activities” was approved to provide working capital loan to State Cooperatives and Federations.

Objectives:-

- To assist the State Dairy Cooperative Federations by providing soft working capital loan to tide over the crisis on account severely adverse market conditions or natural calamities.
- To provide stable market access to the dairy farmers.
- To enable State Cooperative Dairy Federations to continue to make timely payments of dues to the farmers.
- To enable the cooperatives to procure milk at a remunerative price from the farmers, even during the flush season.”(33)

DAIRY DEVELOPMENT

After independence India was a milk deficit nation which dependent on imports and annual production growth was negative for several years. With the implementation of Anand Pattern all over India by NDDB gave massive progress in dairying. (34)(35)

Milk Production Scenario

Milk production in 1950-51 stood at merely 17 Million Tonnes (MT). In 1968-69, prior to the launch of Operation Flood, milk production was only 21.2 MT which increased to 30.4 MT by 1979-80 and 51.4 MT by 1989-90. Now it has increased to 230.6 million tonnes in 2022-23.The milk production is gradually increasing. (34)(36)

Per-Capita Availability of Milk

Per-capita availability of milk is nothing but the availability of milk per head per day which is commonly measured as grams per day. The per-capita availability of milk is in decreasing scenario till 1970 and later it started to increase. Now it has increased to 459 gm/day in 2022-23. (34)(36)

Cattle Population

The least cattle population is in the year 1951 with 155.3 million and the highest cattle population is in the year 1992 with 204.6 million. The minimum adult female cattle population is in the year 1961 with 51 million and the maximum adult female cattle population is in the year 2019 with 81.4 million.(37)(38)

Buffalo Population

The least buffalo population is in the year 1951 with 43.4 million, with consistent increase the highest buffalo population is in the year 2019 with 109.85 million. The adult female buffalo population is lowest in the year 1951 with 21 million and highest in the year 2012 with 56.6 million. (37)(38)

CONCLUSION

This is evident that dairying is one of the earliest forms of livelihood in India that played a prominent role in socio-economic and cultural aspects of people. The historical excavations of Indus valley civilization were considered as the proof of earliest practice of dairying followed by the mentions of animal rearing in the epics of Indian culture namely The Ramayana and The Mahabharata. From historical evidences of Kingdoms, Empires and The British represent the growth of dairying in the form of animal health-care, importance to some breed types, cross breeding, artificial insemination and drug development. The numerical data on total milk production, per-capita availability of milk, cattle and buffalo population states the visual evidence of development of dairying in India.

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