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# Availability and Accessibility of Nutritious Food, the Concept of *Right to Life* and Human Rights – Role of Livestock

Botuku Ramesh Babu<sup>1\*</sup>, Prof V Vijay Lakshmi<sup>2</sup>, and Lanke Haritha<sup>3</sup>

<sup>1</sup>PhD Scholar, Dr B R Ambedkar College of Law, Andhra University, Visakhapatnam, Andhra Pradesh State, India (Email: rbbotuku1970@gmail.com, botuku1970@gmail.com), Corresponding Author.

<sup>2</sup>Professor & Guide and Principal, Dr B R Ambedkar College of Law, Andhra University, Visakhapatnam, Andhra Pradesh State, India (Email: vandrangivl@yahoo.co.in, aulawprincipal@andhrauniversity.edu.in), Co-Author.

<sup>3</sup>PhD Scholar, Dr B R Ambedkar College of Law, Andhra University, Visakhapatnam, Andhra Pradesh State, India (Email: haritha.lanke@gmail.com), Co-Author.

**\*Corresponding Author:** Botuku Ramesh Babu

<sup>1</sup>PhD Scholar, Dr B R Ambedkar College of Law, Andhra University, Visakhapatnam, Andhra Pradesh State, India (Email: rbbotuku1970@gmail.com, botuku1970@gmail.com).

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### ABSTARCT

Vulnerability of nutritious food would leave the victim of any age to sickness and untimely bereavement. In view of this, the human's fitness, health, and evolution are depending more on livestock since it gives nutritious food that improves immune system largely, and lowers jeopardy levels of chronic illness *in turn* enhances work capacity and productivity. Though the significance of availability and accessibility of nutritious food are universally recognized, malnutrition and under-nutrition still exists in Indian society. Even the emissions of livestock impacts environment protection, there is an extensive scope for improving livestock segment to make it lesser risky, more viable, and more equitable to human health. The doctrinal research conducted in this study concludes that conservation of livestock is a necessity since *nutritious food* is fundamental for '*right to life*' in which '*right to food*' is an integral part, and also is the basis for other human rights. It also improves employment opportunities leading to enhancement of nation's economy. The State is therefore to focus more to secure availability and accessibility of nutritious food to every citizen – in fulfilling of its constitutional obligations of enhancing nutritional levels, securing a decent life for citizens, and accomplishing economic progress of the country.

**Keywords:** Livestock, Malnutrition, Right to Food, Right to Life, Right to Nutritious Food, Under-nutrition.

## I. Introduction

The Indian Constitution, being the supreme law of the welfare State, aims at enhancing nutritional levels, and guarantees securing livelihood and health to every citizen. It also promises to every child that he/she is grown healthily in an environment which is pollution-free. In view of this, the livestock (also sometimes called as farm animals or domesticated animals for the purpose of this

study) which contain potential nutritional content in milk, meat and egg occupies important place in human's life. Therefore, conservation of livestock has become a necessity for better health, employment, human evolution socially and economically, and can be linked with human rights more predominantly the *Right to Life* in which the *Rights to Livelihood* and *Health* of humans are integral part.

'Livestock' is the animals that are raised for human utilization or happiness<sup>[1]</sup>. It is the domesticated animal developed in a farm for providing work and generates various products like milk, meat, egg, skin and hair, for use. It encompasses to agricultural animals exempting poultry<sup>[2]</sup>. It includes horse, cattle, sheep and such flora and fauna developed on a ranch for utilization<sup>[3]</sup>. It can be said that they are domesticated and earthily raised for providing diversified commodities and services like milk, mutton, egg, fibre and feather<sup>[4]</sup>. *Pig, ass, poultry, duck, pigeon, rabbit, guinea fowl, turkey, poultry* and *beehive* are also considered as livestock in many countries, and are raised for use by humans<sup>[5]</sup>.

Milk is proven as priceless and inimitable fluid because of its containing proteins and giving invaluable benefits to humans. It absorbs *calcium* and easily digestive. 1 liter of cow milk consumption gives 700 calories, and is essential for humans, more particularly for kids for development of their skeleton and structure<sup>[6]</sup>. Milk of sheep, horse, and donkey contains *vitamin C*. Milk of *buffalo, sheep, camelus bactrianus*, and goat are the high sources of riboflavin. *Buffalo* milk contains *vitamin B6*. *Buffalo* and *camelus bactrianus* and goat milks are also considered as the sources of *vitamin A*. Further the milk of *camelus bactrianus* gives *vitamin D*<sup>[7]</sup>.

Human body requires nutrients inclusive of protein, stout and carbohydrate for sustenance of life and augmentation. It requires a large quantity of macronutrients wherein meat which is a source of *vitamins A* and *B*, *protein, iron, zinc, selenium* and *phosphorous*, is considered as most nutritious food. It is a crucial constituent of a potential balanced diet. It gives around 23% of proteins on an average which is varied from high to low value as per the source of meat. Though consumption of meat heavily produces fatty acid, its judicious usage will help leading a healthy life<sup>[8]</sup>.

Egg is considered as so nutritious, and is mostly used for nature's multivitamin. It contains matchless antioxidants and potential nutrients for development of brain that most of the humans are deficient. It is proven that egg contains *vitamins B12, B2, A, B5* and *selenium*, each 9%, 15%, 6%, 7%, and 22% respectively of the recommended dietary allowance (RDA). It also contains minerals like *calcium, iron, potassium, zinc, manganese, vitamin E*, and *folate* that are essential for development of a human body. It gives 6 gm of potential protein and 5 gm of carbohydrates<sup>[9]</sup>. Various studies prove that one egg provides 40 to 86 µg of *folates*<sup>[10]</sup>.

The Indian Government in 1993 has recognized that insufficient intake of nutritional food worsens corporeal enlargement and healthiness. Food and nutrients play a vital role for physical fitness, good health and enhanced work levels as socially indispensable. Under-nutrition weakens the physical fitness amongst adults; and enhances mortality and morbidity amongst children, women and old aged persons. Such deteriorated efficiency turns to condensing earning capability leading to poverty<sup>[11]</sup>. Various studies indicate that regular nutritional care would make even adulthood person physically potential to get recovered in case of chronic health challenges whereas its vulnerability would leave the victim of any age to sickness, medicinal complication, hospitalization, nursing, and lead to untimely bereavement<sup>[12,13]</sup>.

Further, farm animals play an imperative role in predicament of biodiversity because of their direct or indirect contribution to other biological materials. They contribute largely to weather change

that *in turn* modifies impact on ecosystems and species. Modification of the land for production of the farm animals destroys environment for given species<sup>[14]</sup>. Moreover, the waste delivered at the livestock shelters out of the nourishment of the farm animals, *ammonia* (NH<sub>3</sub>) discharged from its urine and feces, and *hydrogen sulfide* (H<sub>2</sub>S) released from dung pits rise risk levels posing challenge to the environment protection<sup>[15]</sup>. Besides, the domestic animal farm workers regularly breathe in perilous levels of particulate matters as well as NH<sub>3</sub> and H<sub>2</sub>S gases (Hribar, 2021). Every constituent of these particulates individually is competent for causing chronic health problems, and collectively are more harmful to life (Schultz, Amy A. et al, 2019)<sup>[16]</sup>. In view of these conditions, the wellbeing of the livestock workers through regulation of their work conditions ensuring workplace safety, protection against occupational hazards, social protection, and standard living wages apart from preventive measures for protection of environment shall be regularized while conserving the livestock production. It is pertinent that they are to be covered by labor laws being the workers, as well as to be protected by the fundamental rights assured by the Constitution being the citizens of India.

## II. Need of the study

Inspite of the Constitutional objectives and Government's recognition of adequate nutritional food for every individual, it is regrettable that a huge sector of people is still suffering from malnutrition. The Indian Government reports<sup>[17]</sup> that the malnourishment level in children below 5 years of age is 35.5% in case of stunting, 19.3% in case of wasting and 32.1% in case of underweight. It is estimated that 18.7% of women fallen between 15 and 49 years of old are the victims of malnutrition during 2021–22. The United Nations Report 2023 on Food Security and Nutrition states that India has a 16.6% of undernourished population between 2020 and 2022<sup>[18]</sup>, and almost 74.1% of the total population consisting 1043 million people, are not in a position to pay and to have access for energetic diet in 2021<sup>[19]</sup>. Moreover, the Covid–19 plague increased the demand for nutritional food leading to hike of prices<sup>[20]</sup> which is unaffordable to the economically weaker sections.

On the other hand, the demand for nutritional food through animal products led to the livestock farmers and traders to resort to adulteration, colossal production and heavy accumulation of livestock leading to release of a large amount of wastes posing various challenges in managing cost, environmental protection and biodiversity without detriment to food security, natural resources and health<sup>[21]</sup>. Studies also report that 65% of *nitrous oxide* discharge is arising from the livestock agriculture that seriously affects global warm nearly 300 times more than that *carbon dioxide* affects. Enhancing livestock production for more utilization generates around 15% of world's conservatory gas discharge that is more than that the entire transport emissions. Furthermore, it requires 70% of farm land leading to decrease of forests, loss of biodiversity and contagion of water<sup>[22]</sup>. The waste emanated from the emission of animals contains nutrients like *nitrogen, phosphorus, potassium, salts, bacteria, and dregs*. Though nutrients are valuable for harvesting, their impact on water quality is adverse due to their having oxygen-demanding uniqueness<sup>[23]</sup>.

While the situation is as above, the production of livestock is considered as one of the major providers of livelihood for a huge part of poor, and became a vital part in the economy of rural areas of rising nations (Godfray et al., 2010, McDermott et al., 2010)<sup>[24]</sup>. The India is also said to be having 60 to 70% of its population living in rural areas depend solely on the economy out of the production of livestock<sup>[25]</sup>. But unfortunately, this sector is facing various difficulties that include

shortage of food, skin infection, poor extensions and unorganized trade markets, and it is indeed leading to unemployment and exploitation.

Therefore, this study is required to underscore the significance of ensuring fodder security for achieving availability, accessibility and sustainability of the livestock in the lines of food security guaranteed to the humans<sup>[26]</sup>. This study is also required to focus on conservation of livestock holistically for improved employment and productivity without any disadvantage to the environmental protection and biodiversity, which is of prime importance for sustenance and development of humans.

### III. Aims of the study

Considering the above, this doctrinal study is intended primarily to understand and enlighten this serious social concern to arrive at possible solutions with a hope that the State may review and frame policies suitably for effective conservation of animal husbandry to make nutritional food adequately available and accessible to all citizens at affordable prices so that they will not be deprived of their *right to life* for want of nutritional food. It aspires to outline that the *right to life* of humans is inclusive of *right to food* that *in turn* is inclusive of *right to adequate nutritional food*.

At the same time, this study also has given much priority wherein it aims that conservation of biodiversity and environmental protection are important equally as that of conservation of livestock so that the future generation will grow up in a healthy nature.

The goals of this study are also inclusive of accentuating the significance of the fodder security for the sustainability of the livestock as well as *right to wellbeing* of the livestock laborers who are also called as domesticated animal farm workers.

### IV. Methodology of the Study

The researchers preferred doctrinal study to carry out this research work by collecting and collating relevant information available in various publications, print media articles, principles generated by the judiciary, above and beyond national and international legislative norms and policies.

### V. Review of Literature

Apart from considering findings of various researchers specific to the issues, these researchers further reviewed literature that is available online which is inclusive but not limited to the Indian Constitution, food security legislations, Indian national schemes towards promotion of livestock production, statutory laws safeguarding biodiversity and environmental conservation, labor laws requiring wellbeing of unorganized and organized sectors, social protection laws safeguarding the interests of laborers, decisions of judiciary, international covenants, ILO, FAO, UN policies, that are more outstanding as discussed elsewhere in this study.

### VI. Findings

#### VI(i) Importance of Conservation of Livestock

Livestock plays a key role in endeavoring nutritional security of humans and is integrated into agriculture<sup>[27]</sup>. In order to cater to the nutritional food demands of growing population and to ensure achievement of the constitutional goal of a decent standard of living for every citizen, it is important for this democratic, secular and welfare country to assure sustainability, health and

wellbeing of livestock production in such a way balancing that it does not harm the nature and biodiversity<sup>[28]</sup>.

While expressing concern that the future generation would lose hereditarily rich and diversified livestock if not preserved now, the Food and Agricultural Organization (FAO) of the United Nations (UN) acknowledged the importance of protection of the domesticated species, and endorsed that the conservation of breeds of mammal hereditary resources is essential for future use, economic necessities and cultural interests<sup>[29]</sup>.

The role of the livestock segment is also crucial for improving nation's economic status. It is reported that livestock contribution mounted from the financial year 2012 and reached to 8 trillion INR in the financial year 2021<sup>[30]</sup>. The Government statistics show that its contribution in agriculture and allied sector has increased Gross Value Added from 24.38% in 2014–15 to 30.19% in 2021–22<sup>[31]</sup>. If this segment is further given more priority for conservation and production, it will generate ample employment opportunities, reduce employment rate, improve productivity, and enhance the economy.

#### **VI(ii) Nutritional Food Security: A Human Right**

The World Food Summit 1996 organized by the FAO, UN confirms that '*Food Security*' is considered as a Human Right, and that this right is implied that everyone is to have physically, socially and economically access for an adequate, protected and nutritional food for meeting their diet requirements to lead an active and healthiest life. The ILO views that the food security encompasses the capacity of laborers and their dependent family members to build a sustainable livelihood through a decent work of such laborer<sup>[32]</sup>. The International Covenant on Economic, Social and Cultural Rights (ICESCR) directs every State to secure access to every individual to have sufficient basic food which is safe and adequate nutritionally, and to ensure that the individual is free from deterioration of physical fitness<sup>[33]</sup>.

The *right to food* is linked with entitlement of *right to free from undernourishment* which is inclusive versatile entitlements not only for food, but also to safe nutrition, uncontaminated water, etc.<sup>[34]</sup>. The Indian Legislature passed *The Prevention of Food Adulteration Act 1954* requiring supply of unadulterated foodstuffs including livestock products.

The India's Apex Court in *People's Union for Civil Liberties v. Union of India & Others*<sup>[35]</sup> declared that the *right to food* is integrated in it a basic *right to nutritional food*<sup>[36]</sup>, and underscored that the children and pregnant women shall be provided with adequate nutritious food<sup>[37]</sup>.

#### **VI(iii) Constitutional Provisions requiring the State for providing Nutritional Food & Conservation of Environment**

The Constitution of India has imposed a duty on the State to endeavor improved standard of living, enhanced nutritional levels, and better health for every individual<sup>[38]</sup>, and to ensure crucial sustainability of human life. It requires the State to endeavor environment protection<sup>[39]</sup>, and structure farming and mammal husbandry on contemporary and advanced lines. It shall conserve and enhance breeds, and prohibit killing of cows, calves and such other milk and draught farm animals. It also puts an obligation on every Indian to conserve environment<sup>[40]</sup>.

The fundamental rights, directive principles and entries enlisted in various schedules of the Indian Constitution require the Central, State and UT Governments to enact regulations effectively for supply and delivery of food. Therefore, the basis for the *right to food* can be said as originated

from the rights to – life and liberty, employment, health, freedom from malnourishment, sustenance, sufficient nutrition, public wellbeing, comfortable living, live with human dignity, minimum wages, etc.<sup>[41]</sup>.

#### **VI(iv) Contribution of the Indian Government towards Livestock Conservation**

Keeping in view the significance of the nutritious food for individual's wellbeing, the Indian Government through various policies, few of which are reviewed hereunder, has been striving towards conservation and production of livestock.

##### ***VI(iv)(a) National Policy for Farmers 2007***

This policy aims to enhance income and financial viability of farmers' through various reforms in relation to land, water, livestock, fisheries and bio-resources. Among various facilities such as extension of financial support at affordable interest rates, establishment of farm schools and food grain banks to invigorate farming expansion, extending social protection schemes to farmers, and rural employment for agricultural households, this policy provides for supplying preeminent disease-free seeds and integrates pest management system<sup>[42]</sup>.

##### ***VI(iv)(b) National Livestock Policy 2013***

Striving towards improved production of livestock, the Government of India framed this policy aiming the overall development of livestock sector by prioritizing livestock production in an imperishable way while conserving the milieu, animal biological variability, bio-security and livelihood of farmers. It has focused on increasing the output and income through extension of institutional support besides measures to mitigate risks. It mandates inter-state harmonization on making the feed and fodder accessible, controlling animal diseases, regulating export and import activities, and preserving aboriginal breeds apart from conservation of biodiversity<sup>[43]</sup>.

##### ***VI(iv)(c) The National Food Security (NFS) Act 2013***

Though the Indian Constitution does not have any explicit provision guaranteeing a *right to food* and other essential needs, this right is deemed to have been incorporated in the *right to life* beneath Art. 21 in which the *right to live with human dignity* is an integral part. Therefore, this law that effective from Sep.10, 2013 was enacted outlining the food security concept essential for active life<sup>[44]</sup>, as a right based approach<sup>[45]</sup>. It provides nutritional protection to everyone by making adequate quantitative and qualitative nutritional food available at affordable cost to every citizen to lead a human dignified life<sup>[46]</sup>. The *right to food* is considered to be implied the *right to food* at apposite nutritional levels, and shall secure realistically without remaining as a theoretical approach<sup>[47]</sup>.

##### ***VI(iv)(d) Rashtriya Gokul Mission 2014***

This scheme of the Government of India is significant because it strives to enhance milk production and bovine productivity to cater to the increasing demand as well as more profitable to the farmers. It was brought under the umbrella of the *Rashtriya Pashudhan Vikas Yojna* since 2021 with Rs.2400 crores budget to extend financial support to small scale and marginal scale cattle and buffaloes farmers to be implemented during 2021–2026. This is expected to immensely benefit to 70% of the Indian rural women who are mostly involved in domestic animal farming<sup>[48]</sup>.

**VI(iv)(e) National Livestock Mission 2014**

This 2014 launched scheme has focused on mounting of feed and fodder, upgrading of breeds pertaining to domestic animals like pullets, sheep, goats and pigs, and development of entrepreneurship through three sub-missions, one is for development of breed of livestock and poultry, the second one is development of feed and fodder, and the third one is extension and innovation across India. The main objectives of this mission is creation of employment opportunities, enhancement of mammal production and improving of nutritional food productivity like meat, milk and egg, in addition to the products like wool and fodder<sup>[49]</sup>.

**VI(iv)(f) Livestock Health and Disease Control**

This mission intends at improving health of the livestock and poultry through *prophylactic* vaccination against diseases. This will enhance capacity building, disease observation and intensification of veterinary equipment to prevent, control and finally eradicate diseases of the livestock. This will make the veterinary services accessed to target higher productivity from livestock and poultry, and to further boost up trade for enhancing socioeconomic status of the farmers. This scheme empowers the Government to extend financial assistance to the States for – controlling diseases of the animals, implementing the *Peste des Petits Ruminants (PPR) Eradication Program* which is known as sheep and goat plague, creating and or advancing veterinary hospitals, running of movable veterinary clinics, and executive classical *swine fever control program*. In addition, this scheme enables the States and UTs to set up Call Centres to render veterinary services<sup>[50]</sup>.

**VI(iv)(g) National Program for Dairy Development**

This scheme aims for enhancing quality of milk and milk products in two components, one is to focus towards creation or strengthen state-of-art facilities for quality test and crucial frightening services, and the other component is to arrange a financial support from Japan International Cooperation Agency<sup>[51]</sup>. This scheme has been allocated<sup>[51]</sup> a budget of Rs.1790 crores for implementation between 2021–22 and 2025–26.

**VI(iv)(h) Animal Husbandry Statistics**

This scheme aims to conduct livestock census for every 5 years, and integrated sample survey every year to publish basic statistics of animal husbandry population, more particularly belonging to four major products like milk, meat, egg and wool during 2021–22 to 2025–26 with an aim to improve livestock rearing as it is one of the major economic sources of rural India that supplements the family income on agriculture<sup>[52]</sup>.

**VI(iv)(i) National Animal Disease Control Program**

This scheme is launched in Sep.2019 with a financial plan of Rs.13343 crores for 2019–20 to 2023–24 phase, aiming to cure *Foot and Mouth Disease (FMD)*<sup>[53]</sup> and *Brucellosis*<sup>[54]</sup> through inoculation of whole domestic animals<sup>[55]</sup>.

**VI(iv)(j) Dairy Processing & Infrastructure Development Fund**

A fund of Rs.8004 crores is made available for 2017–2023 phase in the National Bank for Agriculture and Rural Development (NABARD) with an aim to build modern and effective milk processing system. The milk producers are given loans at lower interest rates to replace their old milk processing equipment with advanced infrastructure. The period for clearing the loan is prolonged upto 2030–31 with spillover facility till 1<sup>st</sup> quarter of financial year 2031–32<sup>[56]</sup>.

***VI(iv)(k) Animal Husbandry Infrastructure Development Fund***

This fund is made available with Rs.15000 crores for incentivizing funds to establish modern milk, meat and feed processing units. The intent of this fund is to encourage private entrepreneurs and non-profit organizations towards establishment of livestock production and processing units with advanced infrastructure aiming realization of the price for the producer as well as to improve availability of livestock products to every consumer at affordable prices. This fund will also focus on making available the qualitative food to the livestock, promotion of exports of livestock products, and generation of employment opportunities<sup>[57]</sup>.

***VI(iv)(l) Supporting Dairy Cooperatives and Farmer Producer Organizations***

This scheme was launched during Dec. 2021 for providing financial support to State Dairy Cooperative Federations to enable them to make timely payments to the livestock farmers, and to ensure stable market access to dairy farmers<sup>[58]</sup>.

***VI(iv)(m) Mid Day Meals Scheme for Children***

This scheme was launched on Aug. 15, 1985 with the name of National Program of Nutritional Support to Primary Education (NP-NSPE), the name of which has been changed several times, and presently called as Pradhan Mantri Poshan Shakti Nirman (PM Poshan)<sup>[59]</sup>. It is now being implemented under Rules 2015 beneath the provisions of National Food Security Act to provide nutritional meal to the school going kids. The primary school children are provided with 450 calorie and 12 gm protein contained nutritional food daily, whereas it is 700 and 20 gm daily in case of upper primary school children<sup>[60]</sup>.

***VI(iv)(n) Poshan Abhiyan & Such other Welfare Programs***

This Poshan Abhiyan scheme has been implemented since 2018 for providing nutritious food to children, carrying-women and milk-giving mothers to reduce malnutrition, under-nutrition, anemia and low-birth weight. There are several such other welfare schemes but the main aim of which is common to support children and women especially rural vulnerable sections in improving their nutritional levels by providing nutritious food to them. Some schemes are: National Food Security Mission, Integrated Child Development Services, Pradhan Mantri Matru Vandana Yojana, National Rural Livelihood Mission, and Janani Suraksha Yojana<sup>[61]</sup>.

***VI(iv)(o) Social Protection in case of Livestock Laborers and Farm Workers***

The livestock laborers play vital role in improving livestock production. They usually work for farmers in raising cattle, fowl, birds and plants. They would carry out feeding and tending, maintaining health and propagation programs, processing mammal products, repairing farm equipment and facilities, milk animals manually or with machine, etc.<sup>[62]</sup>.

The Farm Workers in India are accountable for taking care of both livestock as well as the whole harvest progression, but it is reported that they are the most vulnerable section as are treated as unskilled and uneducated workforce, and are not deserved for any benefits<sup>[63]</sup>. There is no specific law seeking their welfare except the Social Security Act 2008 that provides social protection benefits to other agricultural laborers, covers these laborers to some extent by treating them as the unorganized sector workers<sup>[64]</sup>.

**VI(v) Contribution of the Indian Government towards Conservation of Environment**

The Indian Government recognized that enhancement of livestock production impacts adversely on global warming and environment. It has identified that vulnerable management of dung and urine is leading to congestion finally contaminates water. The clogged drain is a source for generation of mosquitoes causing harm to health and odor nuisance. The dung generates *carbon dioxide*, *ammonia*, *hydrogen sulphide*, and *methane* that are released into the atmosphere and pollute environment<sup>[65]</sup>. Therefore, it has created guidelines-202 for management of animal farm houses in such a way to prevent and control hazards detriment to human health and environment, and to make livestock more sustainable. It is also pleasing that researchers developed successful nutritious food strategies by reducing 30% of greenhouse gas emanations (Gerber et al., 2013) and is hoped increase in future. Several nutritional, hereditary, health and administrative plans are already in place reducing livestock's impact on environment, and making it more beneficial for human livelihood<sup>[66]</sup>.

In addition to the 2021 guidelines, the Government enacted various laws imposing liability not only on the domestic animal farmers but also every stakeholder, some of which prominent are Wildlife (Protection) Act 1972, Water (Prevention and Control of Pollution) Act 1974, Forest (Conservation) Act 1980, Air (Prevention and control of Pollution) Act 1981, Environmental (Protection) Act 1986, National Environment Tribunal Act 1995, Biological Diversity Act 2002, Hazardous Wastes (Management and Handling) Amendment Rules 2003, and National Green Tribunal Act 2020, aiming preventing, controlling and abating environmental protection, but it has been criticized that there are plenty of laws on environmental conservation but enforcement is poor<sup>[67]</sup>. If they are effectively executed, the environment pollution can be prevented and or controlled.

#### VI(vi) Contribution of the Indian Judiciary towards Conservation of Environment

The Judiciary played a vital role in upholding environment protection because of which the government was forced to enact suitable polices for balancing the livestock conservation for nutritious food as well as for protection of environment for compliance across the nation. It has pointed out that the livestock is one of the major factors that making India severe sufferer of *methane* and that it is potential to cause exterior temperature. The Judiciary has further keenly observed statistics of *methane* and *enteric methane* emissions and noted that during 2012, around 153 lakh tonnes of *methane* were emitted by livestock leading to emission of 15.1% of global enteric fermentation. It has remarked that the livestock sector can cause facade heat to rush up to 0.69 millikelvin over two decades which is estimated as 14% of total surface temperature caused by global livestock segment<sup>[68]</sup>.

#### VII. Discussion & Conclusion

On a keen observation of the literature and findings thereon, it can be viewed that the India is facing serious social concern in meeting adequate nutritional food requirements of its citizens to cater to its growing population. This is evident from witnessing statistics of the malnutrition and under-nutrition victims. It continues to be prevalent as a common risk factor for illness in Indian society combined with obesity and overweight due to lack of constant intrusion, strict compliance of policies across life cycle, and sub-national diversifications<sup>[69]</sup>.

Though undernourishment does not cause death directly among children whose age is below 5 years who are considered to be India's major demographic dividend and economic source (human resources) that any other country has, it can reduce their resistance power which severely subjects them to infections, leading to more illness and deaths<sup>[70]</sup>. Lacking of nutritional food makes a

pregnant woman to be affected by *anemia*, *preeclampsia*, *hemorrhage* and death. It may also cause to miscarriage, death of infant babies in mother wombs, born of babies with low weight, as well as wasting and progression delays among children<sup>[71]</sup>.

Furthermore, due to its grave consequences on health, under-nutrition seriously affects the fitness of the adults, their work capacity and productivity, as well as economic progress of the nation. Besides, it will also enhance medicinal expenses (The World Bank, 2006)<sup>[72]</sup>.

On the other side, there is no specific law in India controlling the work conditions and wellbeing of the domesticated farm laborers which is posing them to work at risk, affecting them to grave exploitation, and leading to deprivation of their fundamental rights.

The literature reveals that most of the schemes are of temporary in nature. Constant effort for securing food and fodder, promotion of livestock conservation and production is lacking. The insufficient supply of nutritional foodstuff to citizens especially to the growing kids and women would impact on their health, and hence it shall be a complete denial of their basic right to lead a human dignified life with good health to which the Constitution of India guarantees to them under Article 21<sup>[73]</sup>.

The literature further reveals that the pollution of environment can be effectively controlled with sincere execution of settled laws which are meant for prevention of food adulteration and controlling of pollution. Undoubtedly, livestock segment is one of the pillars of agricultural growth, food security and major contributor for eradication of poverty. As per the FAO reports, it contributes more than 40% of universal value of farming output and help providing nutritious food to many people. There is an extensive scope for improving livestock segment to make it lesser risky, more viable and equitable to human health<sup>[74]</sup>.

Finally, it can be concluded that though it cause some harm to environment conservation which can be prevented or reduced through advanced and judicious approach, 'Livestock' is the source for multifaceted benefits like providing Nutritious food, creating employment, and generating revenue that are essentially required for human growth. Its role in human's life is priceless, and no supplement to it benefits in such a way that it benefits at any cost. Hence, it is a necessity that it shall be conserved, promoted and made available to every citizen for a healthy and decent life. As the famous Telugu Poet Sri Gurajada Apparao, a way back in his writings '*Desamunu Preminchumanna*' (Love Your Nation) underscores that, "nation is not soil, it is the people, people means those who are having flesh, flesh comes when there is food, nation will not be able to progress with weakness or illness people, so we should always strive to overflow the dairy crops for creation of food". Therefore, it is always important for any nation to remember these invaluable words and to constantly strive towards conservation of livestock for dairy crops, etc., to uphold human sustenance, dignity and development for consistence and progress of nation.

### VIII. Suggestions

The State in order fulfilling of its constitutional compulsion shall have to strive for securing availability and accessibility for nutritional food for every citizen. It should promote research towards finding out effective strategic measures for progression of livestock development that yield more sustainable nutritious food without detriment to the environmental protection, for human evolution and economic progress of the country.

The role of the State shall not be limited to documentation of laws, but also to be extended to strict execution with adequate financial resources and efficient mechanism based on nature of the regions and extent of the problems.

The wellbeing of farmers and laborers connected to the livestock production and maintenance is to be meted efficiently. It is not to be neglected because of their pivotal role in upholding the nutritional–potential–food for next generations. Their fundamental human rights as entitled to being the citizens of India, and the workers' rights being the workers, shall be safeguarded.

The acquaintance of legitimate requirements concerning livestock conservation, ecological learning and milieu fortification among public would fetch better community contribution<sup>[75]</sup>.

The State shall recognize and consider amendment of Art. 21 of the Indian Constitution to integrate *right to adequate nutritional food* in the *right to food* which is an integral part of *right to life* as it is the basis to gain capacity to work and live, and to other human rights.

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## X. References

1. Merriam Webster dictionary
2. Britannica, <https://www.britannica.com/animal/livestock> (visited on: Jun. 30, 2024).
3. Dictionary.com
4. FAO, <https://www.fao.org/livestock-systems/en/> (visited on: Jun. 30, 2024).
5. FAO, <https://www.fao.org/economic/the-statistics-division-ess/methodology/methodology-systems/livestock-statistics-concepts-definitions-and-classifications/en/> (visited on Jun. 30, 2024).
6. K Lambrini, et al. (2021) Milk Nutritional Composition and Its Role in Human Health, *JPAP*, 9: 10–15 doi: 10.17265/2328-2150/2021.01.002
7. FAO, [https://www.fao.org/fileadmin/user\\_upload/newsroom/docs/Milk%20and%20Dairy%20Q&A.pdf](https://www.fao.org/fileadmin/user_upload/newsroom/docs/Milk%20and%20Dairy%20Q&A.pdf) (visited on: June 30, 2024).
8. RS Ahmad, et al. (2018) Nutritional Composition of Meat, doi: 10.5772/intechopen.77045
9. G Kris, *Healthline* (Jul. 27, 2023).
10. Marta Czarnowska-Kujawska (2021) Folate Content and Yolk Color of Hen Eggs from Different Farming Systems, *Molecules* 26(4): 1034, doi: 10.3390/molecules26041034
11. National Nutrition Policy (1993), Govt. of India.
12. Kathryn N. Porter Starr, et al. (2015) Nutritional Vulnerability in Older Adults: A Continuum of concerns, *CNR*, 4 (2):176–184.
13. Nutritional status and vulnerability, The spectrum of malnutrition, FAO
14. Livestock's impact on biodiversity, <https://www.fao.org/4/a0701e/a0701e05.pdf> (visited on: Jun. 27, 2024).
15. Livestock confinement dusts and gases %f collection; Farm and Operator Safety (1992), [https://nasdonline.org/static\\_content/documents/1620/d001501.pdf](https://nasdonline.org/static_content/documents/1620/d001501.pdf) (visited on: Jun. 27, 2024).

16. Editor (Jan. 2022) Animal Agricultural Workers, Food Empowerment Project
17. PIB Malnutrition-Free India, MoWCD (Dec. 15, 2021).
18. The Wire Staff, Over 74% Indians Unable to Afford Healthy Diet: UN Report, *The Wire* (Dec. 5, 2023).
19. GS Mudur, Scale of hunger in India: Three of four Indians underfed, says United Nations, *The Telegraph online* (Dec. 15, 2023).
20. Yan Bai, et al. (2022) Retail prices of nutritious food rose more in countries with higher COVID-19 case counts, *Nature Food*, 3: 325-330.
21. IP Ogbuewu, et al. (2012) Livestock waste and its impact on the environment, *Scientific Journal of Review*, 1(2): 17-32.
22. Karlie Conzachi, It may be uncomfortable, but we need to talk about it: the animal agriculture industry and zero waste, *Environmental Center* (Mar. 15, 2022).
23. Claudia Copeland, Animal Waste Management and the Environment: Background for Current Issues (Apr. 26, 2019), *CRS Report for Congress*.
24. K Sakadevan and ML Nguyen (2017) Chapter Four – Livestock Production and its impact on Nutrient Pollution and Greenhouse Gas Emissions, *Advances in Agronomy*, 141, 147-184.
25. Vasu Jalari (2017) Impact of livestock sector for rural poverty alleviation in Chittoor District, *Asian Journal for Poverty Studies*, 3(1): 24 -29.
26. <https://www.drishtiiias.com/pdf/1665234412.pdf> (visited on: Jun. 26, 2024).
27. P Chandra Shekara, Foreword: Time to Think Beyond Treatment and Breed Improvement, Shahaji Phand, et al., *MANAGE Knowledge Series*, No.2/2021.
28. <https://rpsvetcollege.org/nutrition.aspx> (visited on: Jun. 24, 2024).
29. The Need for Conservation,  
<https://www.fao.org/4/T0559E/T0559E03.htm#:~:text=There%20is%20concern%2C%20howev er%2C%20that,take%20action%20to%20conserve%20them> (visited on: Jun. 26, 2024).
30. K Sandhya, Gross value added from the livestock industry India FY 2012-2021, *Statista* (Mar. 14, 2024),
31. Year End Review 2023: Achievement of the Department of Animal Husbandry and Dairying (Ministry of Fisheries, Animal Husbandry and Dairying), PIB, MoFAHD.
32. Decent Work for Food Security An ILO Sectoral Programme,  
[https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed\\_dialogue/@sector/documents/publication/wcms\\_161946.pdf](https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_dialogue/@sector/documents/publication/wcms_161946.pdf) (visited on: Jun. 26, 2024).
33. Gomati Desai Onskar, "The right to adequate food: International and Indian scenario, *VMS College of Law*.
34. Right to Food and Right to Shelter, NHRC,  
<https://thrc.tripura.gov.in/sites/default/files/2023-10/Right%20to%20food.pdf> (visited on: Jun. 28, 2024).
35. AIR 2003 SC 2363.
36. AA John, NUALS, Critical Analysis: *PUCL v. Union of India*, *academike* (Dec. 08, 2014).
37. R Ramya and Bhommana Reddy, The Right to Food as a Human Right: An overview of public understanding of the right to safe and nutritious food, *CMR University*.
38. The Constitution of India, Art. 47.
39. The Constitution of India, Art. 48-A.
40. The Constitution of India, Art. 51-A (g).
41. Justice MB Shah, The Indian Supreme Court acknowledged the Right to Food as Human Right, *agriculture & rural development* 2/2006.
42. National Policy for Farmers Welfare, MoAFW, PIB (Mar. 20, 2015).

43. Sharad Pawar, Forward, National Livestock Policy, 2013, <https://dahd.nic.in/sites/default/files/NLP%202013%20Final11.pdf> (visited on: Jun. 26, 2024).
44. <https://nfsa.gov.in/portal/nfsa-act> (visited on: Jun. 26, 2024).
45. *Arun Dhawan & Others v. Union of India & Others*, SC, decided on Feb. 22, 2024 (2024 INSC 136).
46. The National Food Security Act 2013.
47. NHRC, <https://nhrc.nic.in/press-release/right-food-fundamental-right> (visited on: Jun. 26, 2024).
48. Operational Guidelines for implementation of Rashtriya Gokul Mission issued vide N/2/2021–DADF–Dept., dated Oct. 10, 2022 by the MoFAHD, <https://dahd.nic.in/sites/default/files/RevisedGuidelinesRGM.pdf> (visited on: Jun. 27, 2024).
49. Operational Guidelines for National Livestock Mission, MoEF, <https://dahd.nic.in/sites/default/files/NLM%20Guidelines%20Final%20approved%20by%20EC%20.pdf> (visited on: Jun. 27, 2024).
50. Operational Guidelines for the implementation of Livestock Health & Disease Control Scheme 2021–2022, MoFAHD, [https://dahd.nic.in/sites/default/files/2853-LHDC-10-08-2022-F-E\\_.pdf](https://dahd.nic.in/sites/default/files/2853-LHDC-10-08-2022-F-E_.pdf) (visited on: Jun. 27, 2024).
51. Operational Guidelines of National Programme for Dairy Development (July 2021), MoFAHD, [https://dahd.nic.in/sites/default/files/enclosure\\_NPDD%2Bguidelines\\_compressed.pdf](https://dahd.nic.in/sites/default/files/enclosure_NPDD%2Bguidelines_compressed.pdf) (visited on: Jun. 27, 2024).
52. <https://dahd.nic.in/schemes/programmes/animal-husbandry-statistics>, (visited on: Jun. 27, 2024).
53. FMD is a highly contagious viral vascular disease of cloven-hoofed animals such as cattle, buffaloes, sheep, goat and pigs leading to reduction in milk yield, decrease in growth rate, infertility, and reduce working capacity in bullocks.
54. *Brucellosis* is a reproductive disease of cattle and buffaloes caused by bacterium *Brucella abortus* leading to inducing abortion, infertility, delayed heat, interrupted lactation resulting in loss of calves, loss in production of meat and milk.
55. <https://dahd.nic.in/schemes/programmes/nadcp> (visited on: Jun. 27, 2024).
56. <https://dahd.nic.in/schemes/programmes/didf> (visited on: Jun. 27, 2024).
57. <https://dahd.nic.in/schemes/programmes/ahidf> (visited on: Jun. 27, 2024).
58. <https://dahd.nic.in/schemes/programmes/sdcfpo> (visited on: Jun. 27, 2024).
59. <https://byjus.com/free-ias-prep/mdms-mid-day-meal-scheme/> (visited on: Jun. 30, 2024).
60. <https://pib.gov.in/newsite/PrintRelease.aspx?relid=148353> (visited on: Jun. 30, 2024).
61. A Khetarpal and G Kochar, Health and Well-Being of Rural Women, *SM Sehgal Foundation*
62. Livestock Labourers, Labour Market Information, Newfoundland Labrador, Canada.
63. Editor, Career as Farm worker, *Allegiance educare*, <https://allegiance-educare.in/career/farm-worker> (visited on: Jun. 26, 2024).
64. Policy on Agricultural Labourers, PIB, MoLE (Dec. 14, 2016), <https://pib.gov.in/newsite/PrintRelease.aspx?relid=155354> (visited on: Jun. 26, 2024).
65. Guidelines for Environmental Management of Dairy Farms and Gaushalas (2020), Central Pollution Control Board.
66. V Padmakumar (2019) Sustainable livestock systems to improve human health, nutrition, and economic status, *Anim Front*, 9(4): 39–50, doi: 10.1093/af/vfz041

67. Ashish Verma (2021) Law of environment in India: Problems and Challenges in its Enforcement, *Research Ambition*, 6 (2) 17–26, 2021, doi: <https://doi.org/10.53724/ambition/v6n2.04>
68. *Nuggehalli Jayasimha v. Government of NCT of Delhi* (OA No. 47/2018), National Green Tribunal.
69. D Lalit (2019) The burden of child and maternal malnutrition and trends in its indicators in the states of India: the Global Burden of Disease Study 1990–2017", *Lancet Child Adolescent Health*, 3(12): 855–870.
70. Deaths due to Malnutrition, PIB, MoWCD (Jul. 26, 2019).
71. Maternal Nutrition, Preventing malnutrition in pregnant and breastfeeding women, UNICEF.
72. Vinicius JB Martins (2011) Long-Lasting Effects of Undernutrition", *IJERPH*, 8(6): 1817–1846.
73. I Sharma, Right to Nutrition is fundamental to right to life, *Outlook Planet* (Jan. 03, 2023).
74. World Bank, Moving Towards Sustainability: The Livestock Sector and the World Bank (Oct. 18, 2021, updated on Feb. 22, 2022).
75. PP Vardhan, Environment Protection under constitutional Framework of India, *PIB* (Jun. 4, 2014), <https://pib.gov.in/newsite/printrelease.aspx?relid=105411> (accessed on: Jun. 27, 2024).