



Animals Role in sustainability

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Abstract

Sustainability refers to ability to meet human development goals and enabling natural systems to provide necessary natural resources and ecosystems. The livestock farming serves the people in different ways to make them sustainable. The farming of livestock such as beef, cattle, swine, goat, sheep and fish play an important role providing a subsidiary income source for many families'. The agricultural and husbandry sector has been a boon of our country for a long time. The livestock farming helps people to provide empowerment and maintain sustainability.

Keywords: Sustainability, livestock, farming, production

Introduction

Livestock is the integral part of agricultural system and also a major entrepreneurial entity in the form of commercial specialized farming systems. The modernization and precision livestock farming system have succeeded to increase production and profitability. Sustainable development practices play an important role for the country's growth in various ways. It will in turn help to protect important natural resources for future generations. In India's society sustainable development is to promote the wellbeing of citizens by providing them with access to education, health care, food production, housing and other basic needs. Animal role is important in the context of sustainable development. Conserving wildlife and their habitats is crucial to achieving the sustainable development growth and improving human well-being (IFAW). The development of society is based on the existence of food resources. The FAO predicted a higher increase of the consumption of foods of animal origin by 2050 (Giuseppe, 2014). Growth in agricultural production and productivity is needed to raise rural incomes to support the increasing numbers dependent on the industry and to meet the food and raw material needs of the faster growing urban populations (Martin, 2004).

In animal farming systems of developing countries have an integral role and the full range of animal products are utilized. Animals also provide a strategic source of cash and help to alleviate poverty and increase household food security. FAO has attached the highest priority to sustainable development of both plants and animals in its programmes (FAO 1998). Farming of animals that are raised for meat, fibers, milk or other products plays an important role in the economic sustainability of civilians. Livestock has played an indispensable role in the Indian economy. Animal husbandry is culturally and economically integrated into the society (Shanmathy et al., 2020). Animal husbandry has its role in empowering society and financial independence and sustainability.

Sheep and Goat production

Sheep and goat production includes the raising of animals for meat, fleece, milk, pets. Farming needs systems have intense management while others have little to no management. Sheep and goats play an important role in the Indian economy and sources of livelihood and employment



to millions of rural households. Sheep and goats in India are mostly maintained on natural vegetation on common grazing lands, wastelands and uncultivated lands, stubbles of cultivated crops and top feeds (Shivakumara et al., 2020). In India for farmers, sheep and goats are an insurance against crop failure and provide an alternate source of livelihood round the year. It provides a dependable source of income to 40 percent of the rural population below the poverty line. Mainly, sheep and goats are reared for wool, meat and milk. Skin and manure constitute important sources of earning. Porwal (2007) findings show that the socioeconomic characteristics of the sample farmers indicate the majority of the sheep and goat rearing are important for their sustainability. Sheep and goats are particularly very useful and hardy animals and can be productive in the environmental conditions (Promod & Basanta, 2021). Studies have shown that the distribution of goat and sheep varies between economically developed and developing countries. Sheep is almost equally distributed throughout the world. Particularly, goat production fulfills important social and economic functions in arid and semi-arid areas of the lower central and upper southern regions of the world.

Beef Cattle Production

From the ancient period, beef cattle production was done within a system that includes grazing on large amounts of land for farming. They were fed high-calorie food for a few months in large numbers and immediately prior to slaughter. These animals have long gestation and growth periods so that animals are sold. Texas (US) had the most cattle in 2023, followed by Nebraska and Kansas. The United States is the largest producer of beef in the world, followed by Brazil, European Union, China and India. The livestock of beef and cattle plays an important role in the Indian economy. Studies have shown that 20.5 million people depend upon livestock for their livelihood. It contributes about 16 percent to the income for small farm households and an average of 14 percent for rural households. Three elements that always interact in household activity are production, income and consumption. The process of production, consumption, income and labor utilization of beef cattle farmers is influenced by government regulation. Cattle farmers have to work hard in order to increase their income and production. India has a significant role in the livestock sector. Rural population as it employs a major section of the country's labor force and also provides a large share of draft power being used to farm crop land. India's livestock sector, holding 11.6 percent of world livestock population, contributes GDP of 4.1 to 0.8 percent respectively (Islam et al., 2016).

Poultry Production

Poultry farming, primarily for meat and eggs, also for feathers. The mass production of chicken meat and eggs began in the early 20th century through small and specialized types of industrial producers. Today, the market for chicken has grown worldwide, reaching nearly about 13.8 million tons (Britannica). It generates employment for the world and increases the income level of the people and eradicates poverty. It provides meat and eggs to the world population, which is a rich source of vitamins and proteins, which play a great role in health development. It is a short-cut business for the farming communities (Naushad et al., 2021). Poultry farming in India, in spite of several constraints, has progressed considerably during the last decade.



(vetrivel,2013). In India poultry refers to village /unorganized poultry production because this enterprise operates in a low scale,using less capital and traditional technology. The unit volume of production is low due to the above constraints. All over the world poultry farming is a significant source of revenue generation for small in developing countries.It plays a vital role in fulfilling the dally protein requirements of humans through meat and eggs consumption.

Swine Production

Swineor Pig farming consists of raising and breeding of domestic pigs mostly for food and for their skin purpose. Pigs are able to recycle most materials and help farmers to reduce most feeding costs and waste. In comparison to other livestock rearing, the advantages of pig farming are extremely high. Pigs are the most prolific breeders with a high fecundity rate. The smallholders play an important role in securing the livelihoods of rural communities and their sustainability through pig farming.Countries like ESA and other developing countries such as India ,Vietnam and China are doing well in pig production (Cheng et al ,2011).Pig production plays an important role in the Socio-economic circumstances and sustainability of pig farmers.

Aqua Organisms Production

Aqua farming is the controlled cultivation of aquatic organisms such as fish,crustaceans ,mollusks,algae and aquatic weeds in all types of waters under controlledand semi natural conditions.Sustainable development of fisheries and aquaculture that would meet the the growing demand of food andnutritional needs of worlds teeming masses .Fish and fisheries play a vital role in the socio-economic development of the country by fulfilling the animal protein demand, creating employment opportunity, alleviating poverty of the large population and earning foreign currency. Fisheries and aquaculture contribute significantly to food security and livelihoods. Fish provides essential nutrition for nearly 3 billion people and at least 50% of animal protein and minerals to 400 million people from the poorest countries. Over 500 million people in developing countries depend, directly or indirectly on fisheries and aquaculture for their livelihoods (Nirmal Singh et al, 2019).The farmers along with fishermen community whose livelihood depends on only fish and fisheries. In India the importance of the fisheries sector in the socioeconomic development and as a source of livelihood for around 2.8 crore number of fishers,fish farmers,fish workers and fish vendors at the primary level several croresalong the value chain.The sector also contributed rupees 46,663 crores through exports during 2019-20 (Ministry of Fisheries ,Govt. of India).

The livestock serve the poor/Farmers in various ways.It is a source of subsidiary income for many families in our country, especially the resource poor who maintain few heads of animals.

Conclusion

Overall impact of animal welfare is very positive to the mankind. It is to be done by the people, for the livestock and ultimately for the benefit of people. It is mutually beneficial for the human and animal. The animal welfare is reciprocal and not unidirectional. After all existence of healthy livestock as a part of living beings is equally needed for a sustainable ecosystem. Momentum increase in production should be avoided; rather sustainable system of



production is the need for a perpetual environment. We ought to engage with nonhuman animals in best way possible keeping in mind for the wellbeing of animal, environment and the people. It is will be wise to view animal welfare from the ethical point of view. Necessarily the best way one engage with nonhuman animals is called ethics. The animal welfare and ethics are essentially important in the natural, organic, integrated and backyard farming systems to sustain a regular long term benefits.

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