REVIEW OF LITERATURE.

1. **Anonymous (2012)** India has 56.7 % of world’s buffaloes, 12.5 % cattle, 20.4 % small ruminants, 2.4 % camel, 1.4 % equine, 1.5 % pigs and 3.1 % poultry, India is one of the largest livestock sector in the world. India has 2.4 % and 4.2 % of world’s land and water, 17 and 11 per cent of global human and livestock population. Observed that the livestock significantly contribute to the National Economy and socio economic development. Livestock provide 60 percent of draught power for the rural communities. It is estimated that animal power accounts for 66 percent of total energy utilized in India as against 14 percent from other conventional sources such as coal and fossil fuel. Further livestock provide gainful employment all-around the year to over 16 million people of which 70 percent are women. In 2010-11, livestock generated outputs worth Rs. 2075 billion, which comprises 4 percent of the GDP and 26 percent of the agricultural GDP. The cattle dung has fuel value equivalent to 35 million tons of coal or 68 million tons of wood. The available energy from animal power is estimated at 60,000 million kilo watt hour and valued between Rs.60, 000/- to Rs.100, 000/- million.

India is the largest milk producer for several years in a row.-17 mt in 1950 to 137.4 mt in 2013-14. Milk group has highest contribution to livestock output (68.22%). Cattle provides draft power, fuel, manure skin, hides and fiber besides providing employment to 22.45 million people in principal and subsidiary status.

2. **Anonymous (2013)** Karnataka State has a total bovine (cattle and buffaloes) population of 129.86 lakh, which shows negative growth of 14.24 % over the previous quinquennial census year. Coverage of breedable cattle and buffalo under AI has reached 75 % by 2013-14. The state ranks eleventh among Indian states in milk production, which was 612 million MT during 2014-15 showing marginal increase of 2.10 % over previous year’s production. 47 % of milk was contributed by Crossbred cows, 28 % by buffaloes and 23 % by indigenous cows. The per capita daily availability of milk during 2014-15 was 271 gm as against 266 gm during 2013-14 in the state. Fodder production is gaining greater importance in the State due to frequent occurrence of natural calamities like drought. There is a gap of 150 lakh MT of green fodder while dry fodder is in excess. There are 13082 functioning Dairy Cooperative Societies in 14 milk unions with a total membership of 23.20 lakh as on 30 Nov. 2015. (Annonomus2012).
Further the Poultry population of the State of Karnataka has recorded a growth of 23.93% over the previous census. The total layer population estimated during 2014-15 was 207.71 lakh out of which 149.58 lakh (139.11 lakh in 2013-14) were improved layers and 58.13 lakh (59.87 lakh in 2013-14) were desi birds. There are more than 40 hatcheries in Karnataka producing about 400 lakh broiler chicks and 96 lakh layer chicks per year. Day old chicks needs of the commercial farms are mainly met by the private sector. Broiler farming is mostly through contract farming by the companies like Suguna, VHL, Godrej, Komarla, CP farms, Shanti Poultry etc. Broiler marketing is through contract route.

The broiler meat production during 2014-15 was 82615 tonnes as against 81828 tonnes produced during the year 2013-14 indicating a marginal increase of 0.96% over previous year. Broiler meat comprises 45% of total meat produced in the State. There are 76 licensed poultry feed manufacturers with 25.66 lact and 29 licensed feed dealers in Karnataka.

3. **Praduman Kumar (2006)** reported that sustainable rural livelihood is a multifaceted concept and refers to maintenance or enhancement of access of rural families to food and income-generating activities on a long term basis. Further it was observed that promotion of livestock based integrated farming system and efficient self help groups are key to make farming profitable and less risky sustaining rural livelihoods and reduce regional inequalities.

4. **Poonam Kalash et.al (2009)** observed cattle and buffalo rearing is extremely livelihood intensive for rural women and this leads to rural prosperity. It is reported that women had medium level of adoption about improved cattle and buffalo and low level of use of dung for gobar gas plant and minimum level of improved package of practices for higher level of production and productivity.

5. **Mozumdar et.al (2009)** reported that broiler farming plays an important role in improving livelihood, food security and poverty alleviation in rural areas and semi urban communities in developing countries including Bangladesh. The annual income and expenditure of the farms increased by 6100 TK and 3064 TK and cash in hand and Bank raised by 143% and 202%. The consumption of meat, eggs and fruits per household increased by 94%, 35% and 56% respectively. The number of school going children, household assets and health status of family improved. So small scale broiler farming has positive and significant impact for the development of socio economic status of the farmers as well as the improvement of rural livelihood.
6. **Pica-Ciamarra, et.al (2009)** reported that in India poultry sector growth fulfills employment generation along the value chain fully or partially besides contributes for nutrition and poverty reduction. Large scale poultry integrators are playing a pivotal role in triggering growth of the sector benefiting both small scale producers as well as urban consumers because of competitive price advantage. Further it is reported improved nutrition is anticipated to enhanced labour productivity and also expected to contribute for lower real wages. Policies to target growth of backyard poultry development may support livelihoods and significantly contribute for economic growth.

7. **Shyamalie and Saini (2010)** reported that food security, which is one of the important component of livelihood security, scored a value slightly above midpoint of the index scale of one to five points, suggesting that women in both Kangra district of Himachal Pradesh and Nuwara Eliya district of Sri lanka study areas were relatively better food secured. Further results suggested low vulnerability of women to habitat security as compared to the other aspects of livelihood security in both Tea growing districts of the study.

8. **Sultana et.al (2011)** reported that in Bangladesh, Char (area land surrounded by water) women performance in sustainable livelihood varied to a large extent. The women involved in different money earning activities such as rear poultry, livestock, and bees, sell seed, fertilizer and packaging products, sew clothes, make baskets etc.. It was concluded that income generating activities, training for increasing agricultural knowledge and innovativeness and encouraging their involvement in social and organizational participation,

9. **Susmita Mukharjy (2011).** Observed that Information Communication Technology has played play a prominent role in accelerating the process of rural development, strongly believed that it can fill the gaps between the educationally and technologically backward and forward sections of the society. It will speed up process of knowledge of rural development organizations in India, about the available infrastructure, services, markets, technological innovations, training facilities, skill development centers, experiences and success stories etc. It will also facilitate social awareness, health, and hygiene and promote economic prosperity in rural area. Thus it will play a revolutionary role in socio economic development of India.

10. **RoshanLal and Ashok Khurana(2011).** Women play a multi-dimensional role in agricultural, allied activities and domestic activities as laborers, cultivators and
managers. But they do not own land, animals and machinery. They are resource poor, ignorant of their rights, poor knowledge and education and are poorly paid for their job, work and role. It was suggested that government should formulate policies to enhance their role in agriculture and count for economic indicators.

11. **Mani (2011)** opened that milk is playing an important nutritional component in Indian diets since Vedic period and will continue to play same in years to come. The supply chain of milk has been studied at KMF. During handling of milk hygienic practices are followed and processing is found under automation. The consumer satisfaction has improved due to the quality management System and controls deployed at every stage.

12. **Basavarajappa and Chinnappa (2012).** Reported that India is largest producer of milk and milk products in the world. Karnataka state ranks third in milk production in the country. This has become possible due to continued efforts to develop dairy enterprise scientifically to increase production and productivity through proper feeding, breeding and management so that farmers are able to get remunerative returns for the milk they produce. Marketing is an important component of the dairy business so that producer gets better share in the consumer rupee. The major constraints are low price, delayed payments and high cost of crossbred cows and inadequate credit facility.

13. **Mohanraj and Manivannn (2012).** Reported that poultry farm owners who were old age, were found satisfied to a maximum extent with the poultry business they have advocated in their life compared to other business in the Namakkal district of Tamil nadu. A close relation between experience and satisfaction was observed. No relation between income and satisfaction was reported. Non availability of continuous power supply and high power cost were reported as major constraints besides lack of market intelligence survey.

14. **Senthilkumar and Muralidhar (2013) reported that in developing countries, culture plays a crucial role in determining food patterns. As Indians are controlled by the traditions and customs, the dietary habit is significantly influenced by local culture and taboos especially meat consumption to a great extent in rural societies. In Indian context, culture, traditions and taboos influence meat consumption to a great extent especially in rural societies. The factors influencing the meat buying behavior of the consumer depends on taste, texture, freshness, colour, odour, flavor, shopping
environment, availability, price, nutritive value, and food safety and quality factor of meat.

15. Sridharan and Sarvanan (2013) reported in the event of rain failure or unremunerative prices for agriculture produce, farmers had very little to do, except borrow heavily, pledging their marginal lands, thus remaining bonded labourers, throughout their lifetime. Thus, the alternate livelihood, lesser dependence on monsoon, healthy and continuous working conditions made the Indian poultry industry a big success story. From a backyard venture, it has made a quantum leap to emerge as a dynamic industry over the last three decades. In the current decade broiler industry is poised to exploit value added products and explore global trade.

16. Karthikeyan and Nedunchezhiyan et al. (2013) reported that the Indian poultry meat industry has been growing at a very rapid rate in recent decades, by transforming gradually from unorganized, small scale backyard farming into large scale organized farming. The poultry industry is one of the fastest growing sectors in India with the growth rate of 20 per cent per annum with ever increasing population. The initiatives taken by the major poultry players (integrators) in the industry with reference to Indian market conditions. The integration of poultry production in a vertical manner and appropriate marketing methodology has lowered costs of production, marketing margins, and consumer prices of poultry meat. This shift in process of traditional poultry supply chain to vertical integration has paved way to better value creation of poultry products utility factors of meat.

17. Porchezhiyan and Devi (2013). While studying livelihood profiles of dairy entrepreneurs in Tamil Nadu observed that most of respondents were in middle age group followed by old age groups belonging to small and marginal farmers 66% which indicates that the dairying was not preferred by younger age group who may not be interested in dairying and moved out of village for making their economic fortune. So it is necessary to make the younger generation aware about the commercial viability and profitability of dairy enterprise.

18. Duncan et al. (2013) reported that small holder dairy production represents a promising income generating activity for poor farmers in the developing world. The study conducted in villages in India and Ethiopia showed cross-bred animals were generally more prominent in India than Ethiopia. In Ethiopia first constraint to intensification of dairy production is genetic quality of the herd. There is considerable scope for narrowing yield gaps. In India through improved feed use and supply and
well developed markets with good procurement arrangements are the key factors to 65% marginal and small scale farmers get their income from dairying surpassing crop production in terms of profits for sustainable dairy intensification.

19. **Nargunde (2013)** reported that millions of small holder families dominate dairy industry in India, contributing nearly 62 percent of total milk produced in the country by utilizing agricultural crop residues and open grazing as feed resource and use of dung as manure for increasing production and productivity of crops. During past decades, dairying has transformed into a well organized dynamic business, prosperity and socio economic change in rural areas in the country.

20. **Ithika et.al (2013)** reported that the package of practices adopted as a set of scientific practices for broiler farming in five districts of Haryana state, indicated that small flock holders are poor adopters of technology, where as medium level adopted minimum level and large holders adopted high level of technology. The blanket level of approach is not suitable for adoption of technological practices which needs modification at root level for effective farmer support programmes.

21. **Ghasura et.al (2013)** observed in their study in Bansakantha Gujarat state, that the establishment of poultry co-operative societies, mobile lab diagnostics available in 24 hours, and at reasonable interest rates awareness in scientific poultry farming practices, suitable policy measures to overcome constraints, will create better livelihood opportunities and income generation from poultry farming, providing nutritional and food security for the rural household.

22. **Nagaratna et.al (2013)** observed that livestock will continue to play an important role in rural family farming system and it has great future. The contribution of livestock system to the livelihood of farmers of Western Maharashtra, who keep livestock for commercial purpose to sell milk, eggs, birds, animals, wool and manure. Milk is found most regular income generator and also found greatly contributing to family income. Manure contributed to sustainable and eco-friendly crop farming to the rural households. Livestock generated annual employment of 140 man days for women and 95 man days for adult men, 63 % said livestock farming is a symbol of social status contribution to family nutrition through milk and its products, eggs, meat was found high and employment generation is found very significant.

23. **Seema et.al (2013)** found that farmers are interested not only in Natural Resource Management but also health, occupational satisfaction, social activities, and water
resources. It was found more relevant that sustaining livelihood of small farmers and NRM policy for small farmers should be ecologically friendly and socially acceptable.

24. **Argade et.al (2013)** observed that, integrated approach for farming is most suited for medium size land owners as a sustainable alternative to commercial farming system. For sustainable livelihood integrated farming is beneficial for, productivity enhancement, profitability, sustainability, balanced food, environment safety, income round the year , adoption of new technology , saving energy, employment generation, development of agro-industries.

25. **Rakesh Singh et.al(2014)** reported that in traditional markets voluntary discloser has been reported to exist for a long period. The mandatory disclosure is important for credence attributes of the animal and thereby efficient functioning of markets. The efficiency of livestock markets depends on the regulatory policy along with infrastructure development.

26. **Wani et.al(2014)** observed that value chain of milk, mutton, wool and pashmina fibre vendors dominate the market and farmers do not get remunerative price. There is institutional failures in livestock product markets. There is need to develop integrated value chain for livestock products so that livestock stakeholders (producers) get benefits of fast expanding consumer market for livestock products.

27. **Reshma and Sachinandra Babu (2014)** reported that the analysis of the house hold demand for milk in the year 2021 reveals that Karnataka which has a marginal surplus of milk in 2010 - 11 may fall short by 2016 and 2021 with total consumption increasing to 54.04 lakh tones and 81.29 lakh tonnes respectively. The corresponding increase in production in the state will be 50.4 lakh tonnes and 52.4 lakh tonnes respectively due to slow growth of out put of milk in relation to consumption growth.

28. **Thyagarajan et.al (2014)** observed that the Poultry industry in India is making major forward changes in productivity enhancement, industry expansion, research, development changes and marketing network. Poultry industry having 8 percent and 12 percent growth rate in broiler and layer industry which needs plan for quality production of poultry meat products and by products. Post harvest technology for pickled egg, salted chicken egg, albumin rings, egg roll, egg crepe and egg powder. Overall poultry products marketing mainly depend on organized marketing net work, creation of processing infrastructure facilities Quality and safety compliance in food chain from production to consumption.
29. **Harilal and Padma (2014)**. Reported that knowledge is an important component, which significantly influences the adoption of new technology. Extension agencies, commercial poultry supply agencies need to focus on the improvement of knowledge level of medium category. It is good trend that farmers had medium knowledge on poultry which was mainly due to the fact that all farmers were literates, had high scientific orientation, medium to high information seeking behavior and high risk orientation and experience.

30. **Manjunath et.al (2014)** opined that the Integrated Farming System (IFS) with major focus on livestock production assumes greater importance for sound management of farm resources to enhance the farm productivity and reduce the environmental degradation, improve quality of life of resource 80 % of poor marginal and small farmers and maintain sustainability. The productivity improvement will be 30-35 % depending on the kind of IFS and their management.

31. **Padhi (2014)** observed that in early nineties on set of market driven economy has given, competitive environment in all sphere of life. Liberalization, privatization and globalization have brought foremost development in the dairy sector in the country. Dairy sector because of its potential to supplement the protein diet of the vegetarian, has contributed extensively for rural employment, also to the family income and empowerment of women and eradication of poverty among weaker sections.

32. **Debabrata Das (2014)** reported that less importance has been given for marketing systems to promote rural development. Rural producers are not aware of market information and always get lower income from their activity. Unemployment issues can be addressed if farmers focus on marketing of their produce besides production. Assam as well as north eastern states are not linked with national market economy. There is necessity of more and more intervention of government in growth spectrum of the state through value chain and market linkage for rural development. Due to lower returns on agriculture produce younger generation is shifting from rural activities which can be strengthened by the strong and sustainable market linkages.

33. **Awasti et.al (2015)** observed that the back yard poultry farming is a social phenomenon rather than an economic proposition. It is popular among the communities who have no inhibition against keeping birds, eating egg and meat produced. An estimation of imputed values of feed and labour, the value of eggs and meat has shown the backyard poultry is economically viable, socially acceptable of subsistence level of family needs devoid of business norms.
34. **Srivasrao (2015)** observed Poultry farming is natural practice of rearing birds for domestic and commercial purpose which in recent years is the fastest growing sector of agriculture in the country. Chicken is the most widely accepted meat in India. The high cost of feed, disease outbreaks, high level of use of antibiotics, poultry safety, environmental issues, inadequate investments, limited access to core markets and high cost of water and electricity have been the major constraining factors and issues of the industry. There is need to collaborate with foreign research and development agencies to find higher export of poultry and its products besides inclusions technological innovations to boost quality of the products.

35. **Bhagyashree and Sanjay Patnker (2015)** reported the current scenario of Dairy Industry in India and issues of the stakeholders of the industry. 14 out of 24 research papers were based on primary data collected from dairy farmers. The majority related to input supplies and technological awareness. The common findings were small herd size, dairy farming not commercialized, feed and fodder form highest proportion of total costs, co-operatives have positive impact on milk production and income generation, there is shift to crossbred cattle from local cows and buffaloes and per cost of milk of milk decreases with increase in herd size.

36. **Nandan and Devegoda (2015)** reported that the STEP( Support to Training and Employment Program me) aims to make significant impact by upgrading skills and providing employment to women was launched by the Ministry of Women and Child Development, Government of India as one of the measures to ensure well being of women in the traditional informal sector in the year 1986. The STEP advocated a package of inputs to women entrepreneur development in an integrated approach to thrive on a self sustaining basis in the market place with minimal support and intervention of Government support after the completion of project period.

37. **Saha and Gour Krishna (2015)** studied dairying as a component of mixed farming system in Assam State. Milk and its products provide nutritional needs of family members and excess production will find market to have regular cash flow. With increase in population and decreasing land holding dairying is slowly becoming alternate source of employment in North Eastern Region. It was suggested to have self help groups to create awareness and motivation of milk producers.

38. **Anju Bala and Chugh Namita (2015)** reported study that women play an important and pivotal role in dairy development in India. As a feature of patriarchal society women contribution to developmental activities in rural areas has been not properly
acknowledged. The analysis of data from dairy cooperatives in Alwar district of Rajasthan indicated 83 percent of women were married and 13 percent are widowed and had education not above primary level. In women dairy cooperative Society women found themselves empowered but not in the household where husband played more powered role.

39. **Vedmurthy et.al (2015)** reported that rising income and population has given rise to market growth of dairy activities. The study focused development of dairy through credit in Shimoga milk zone of Karnataka and indicated need for higher credit to dairy sector and monitoring of credit for better utilization which led to better recovery. Dairying is considered as better credit proposal by banking sector as there is regular cash flow and better loan recovery. Only 36 percent of credit was used for purchasing animals and rest was diverted for unproductive purpose. Therefore there is need for better monitoring of credit for utilization and better recovery.

40. **Jon Hellin et.al (2015)** observed that poultry business and trade has immensely grown in the last two decades for achieving considerable export of poultry produce and related plant and machinery especially to middle east. Economic growth and consumer demand for high value poultry products has resulted into sizeable faster growth of the poultry industry. The poultry revolution has resulted into nutritional security besides employment generation and also poverty reduction in India. But the poultry growth has been confined to only southern states of the country. It is reported that poultry sector employs 3.0 million people 80 percent of which is directly by farmers and rest by feed manufacturers, pharmaceuticals and equipment manufactures. India is taking more active role in global poultry trade especially with respect to export. High cost of feed is the main the major constraints of the poultry sector and hearts the poultry farmers badly.

41. **Philip K.Thornton (2016)** reported that the livestock sector is one of the fastest growing agriculture subsectors in developing countries. Its share of agriculture is 33 percent and is quickly increasing. The livestock sector is increasingly organized in long market chains that employ at least 1.3 billion people globally and directly support the livelihood of 600 million poor small holder farmers in the developing world are a significant asset value at least $1.4 trillion. This growth is attributed to increasing demand for livestock products, rapid urbanization and increasing buying power by middle class society in developing countries.