Chapter-1

INTRODUCTION & METHODOLOGY
The economy of India is primarily agrarian in nature. In the early stages of economic development of the country agriculture played a crucial role in providing employment to a majority of people and was a major contributor to the national income. With the rapid growth in population, the pressure on agriculture for providing income and employment has increased enormously. Agriculture being backward in most parts of the country is not in a position to meet this ever increasing pressure. Moreover, the demand for agricultural labour is largely seasonal. In view of this situation, the Government of India has been making several efforts for providing alternative sources of income and employment through the promotion of rural industries on the one hand and the animal husbandry on the other hand.

The contribution of livestock sector to the national income has indeed been great. During the year 1986-87 the livestock sector contributed to the extent of Rs. 24,193 crores accounting for 9.2 per cent of the gross national product\(^1\). In view of the complimentary relationship between agriculture and allied activities and in view of the familiarity of a majority of the people with the various activities connected with the livestock sector, this sector has been recognised as an important source of providing gainful employment and income.

Within the livestock sector, poultry farming has been considered as an important means not only to provide

supplementary income and gainful employment to a large number of people but also to obtain good quality nourishing food. For instance, the employment potential from poultry is estimated at three persons for 1,000 layers or for every 200 broilers per week. Further, the average Indian vegetarian dish is particularly deficient in proteins, vitamins and minerals, and eggs and broiler meat can be a good source to balance their diet.

On the other hand, even though 80 per cent of the people are non-vegetarians, the per capita availability of poultry products in India is very low. The per capita availability of eggs is estimated at less than 30 eggs in our country as against the average of 60-70 eggs for the developing countries as a whole and 300 eggs for the developed countries. The per capita poultry meat consumption in India is only 400 gms. per annum as compared to 2.5 kgs. for the developing countries and 15.6 kgs. for developed countries. Moreover, per capita availability of the poultry products in India is very low as against the recommended minimum intake of 180 eggs and 10.8 kgs. of broiler meat per annum.

Thus, even though India ranks as the world's fifth largest egg

producing country, in terms of per capita availability it would rank one among the lowest.

The problem of malnutrition has also added to the need for promoting poultry farming. Over 60-70 per cent of the population consume less than the minimum requirement of protein and calories. Almost 75-80 per cent of eggs and poultry meat is consumed by only one-fourth of the country's population residing in urban areas. Thus, poultry farming has a major role to play in the coming years in making available the animal protein in terms of eggs and meat for our vast populated country.

Further, poultry is the most efficient converter of feed into animal protein. For instance, 10 kgs. of feed is converted into 225 gms. of animal protein in the case of sheep and 240 gms. of animal protein through cow milk as against 450 gms. in the case of broilers and 378 gms. through eggs indicating an efficient conversion. Thus, in the Indian context, with limited resources of feed, poultry is a better alternative for the production of animal protein as compared to other animal husbandry activities.

Poultry mainly was a backyard venture rearing desi birds till 1960's from when it took off on commercial lines. The egg production of improved laying stock has shown a tremendous rise from 360 million in 1961 to 15,600 million in 1986, whereas the egg production from the desi stock decreased to 1,200 million.

in 1986 from a level of 1,980 million in 1961. Similarly, the broiler production which started off from a level of four million birds in 1971 touched a level of 100 million in 1986 registering a twenty five-fold increase within a short span of 15 years.

Till recently, poultry industry was egg oriented but now broilers have been gaining in importance due to faster rate of growth and better economics of production. While the decade of "seventies" has seen an unprecedented growth in egg production, the decade of "eighties" has seen a tremendous growth in broiler production. In fact, poultry industry has emerged as the fastest growing segment of agriculture in the "eighties". The noticeable trends are increasing flock sizes, increasing popularity of poultry meat, semi-automation in feeding, watering and processing, sale of dressed and whole or cut up broilers, processed fast foods based on poultry meat, integration of production, processing and marketing activities. Establishment of several pure line poultry breeding projects and availability of good quality chicks and technical manpower have contributed to this fast growth. However, there are certain major constraints such as high feed prices and unremunerative prices for poultry products due to lack of sound marketing infrastructure. The decade of "nineties" is expected to see the emergence of modern poultry processing as an ancillary industry.

The demand of poultry meat has outpaced supply. Due to the non-availability and high prices of goat meat/mutton, the gap in demand and supply of broiler meat is expected to widen further. Another important aspect concerning the poultry industry is that nearly 93-95 per cent of poultry farms are owned and managed by private entrepreneurs.

Thus, poultry farming continues to be an important source of income and employment and also as nutritious food to the increasing population. Further, there is large scope for faster growth of this industry in future. In this context, it is important to examine the various aspects relating to the poultry industry such as the economics of production, input availability, marketing infrastructure and linkages with other industries in order to help facilitate the rapid growth of poultry farming in the coming years.

Review of Literature

Most of the studies concerning the poultry industry are based on secondary data. Further, most of them have dealt with technical aspects of poultry farming. More so, the studies dealing with economic aspects of poultry farming are largely confined to the layers. The studies on broiler farming are rather limited.

Pothuluru\(^7\) noted that the cost of production per 100 birds decreases and gross returns increase with an increase in

\(^7\) Ch. Pothuluru, "Economics of Egg and Broiler Production in Ranga Reddy District", Unpublished M.Phil Thesis, Osmania University, Hyderabad, 1980.
the number of birds maintained. He also pointed out that the
problems relating to the size of the farm, utilization of labour,
quantity of feed consumption, rate of lay and mortality can, to a
certain extent, be solved by the producers, but to control some
extraneous problems of sharp increase in cost of inputs and mis-
marketing, government should come to the aid of the farmers.

Thus, there are very few studies which have focussed on
economic aspects of broiler farming in a comprehensive and
systematic manner.

Need for the Present Study

Andhra Pradesh ranks first in the country in terms of
both egg production and broiler production. The state produces
about one crore eggs per day and exports about 30-40 per cent of
the production to the neighbouring states. As regards broiler
production, it has taken off in the state in the late "seventies"
with almost nil production. The broiler production in Andhra
Pradesh during the year 1988-89 was 29 million accounting for
17.3 per cent of the country's broiler production or 45 per cent
of the southern region's production. The peculiarity of broiler
production is that the entire production gets locally consumed
which has led to an increase in the consumption of broiler meat
from a level of 120 gms. per capita per annum in 1985 to as high
as 550 gms. per capita per annum in 1989 in Andhra Pradesh
8. This speaks well of the potential available for this industry for
further growth in the state.

8. S. P. Gupta, op. cit., p. 36.
Since the broiler industry is growing at a rapid rate in the state, it is necessary to identify the factors that will promote/impede the growth of this industry in view of the increasing demand for broiler meat in future. Further, it is also important to systematically study the economics of broiler farming and analyse the problems being faced by the farmers with regard to the procurement of feed and other inputs and marketing of broiler meat. More so, the socio-economic background and managerial practices of the farmers need to be examined in detail, which play an important role in the successful functioning of the broiler farms. Since there are very few comprehensive and systematic studies in the state concerning these aspects at the farm level, the present study is a modest attempt to fill the research gap in this field.

Objectives

The following constitute the major objectives of the present study.

1. to study and analyse the progress of poultry farming with special reference to broiler farming in Andhra Pradesh and in the study area;
2. to examine the procurement, marketing and managerial practices to the sample broiler farmers;
3. to assess the costs and returns of broiler farming in respect of the sample broiler farmers; and
4. to suggest some measures, in the light of the findings of the study, for furtherance of broiler farming in the study area.
Methodology

The methodological aspects of the study such as the selection of the area and the sample, sources of data, tools of data collection and analysis, and chapter scheme are discussed here under.

Selection of the Area and the Sample

Since the study is undertaken by an individual scholar, it has been decided to limit the present study to one district in the state. Ranga Reddy district which is located on the peripheries of the twin cities of Hyderabad and Secunderabad having ready access to the market and which accounts for about 21 per cent of the total poultry population in the state has been specifically selected for the purpose of conducting the present study.

For the purpose of selecting the sample broiler farmers, the broiler farms in the district have been divided into three categories on the basis of size of the farm viz., small farms (up to 5,000 birds), medium farms (5,000-10,000 birds) and large farms (above 10,000 birds). From each of these three categories of farms, 30 farms have been selected as a sample for the present study on the basis of random sampling method. Thus, a total of 90 farms constitute the sample for the study.

Sources of Data

The sources of data for the study constitute both primary sources and secondary sources. The primary source of data comprises the 90 sample broiler farmers. Besides, the secondary data relating to the growth and trends in poultry population, egg
and broiler production, and other aspects of poultry industry has been collected from the Livestock Census reports of the Bureau of Economics and Statistics, Hyderabad, records of the A.P. Meat and Poultry Development Corporation, study reports of the NABARD, reports of the National Commission on Agriculture and National Egg Coordination Committee and so on.

Tools of Data Collection and Analysis

An interview schedule has been administrated to the sample respondents for the purpose of collecting information about their socio-economic background, the procurement, marketing and managerial practices, economics of broiler farming, and problems faced etc. The data collected from the respondents pertains to the bird cycle ending with December 1990. This data has been analysed with reference to the size of farm by making use of averages, percentages etc. Break Even Volume analysis has been used to determine the quantity of broilers to be produced and consequently the minimum time required to even out the fixed cost.

Limitations of the Study

Since the study is confined to one district and a sample of 90 broiler farms, generalisation of results for the state as a whole may not be appropriate and hence not attempted. Further, the interpretations relating to the various aspects of broiler farming are based on the data for one bird cycle only. Hence, no projections can be made on the basis of the findings of the present study.
Chapter Scheme

The study is presented in six chapters. In the first chapter "Introduction and Methodology", the importance and prospects of poultry industry have been examined and the need for the present study has been outlined. Further, the methodological aspects of the study are discussed. The second chapter "Poultry Industry in India with special reference to Andhra Pradesh" deals with the growth of poultry industry, particularly broiler farming in India focussing special attention on the state of Andhra Pradesh. In the third chapter "Profile of the Study Area and Sample Respondents", a brief account on the salient features of Ranga Reddy district is given, besides a general description about the socio-economic characteristics of the sample broiler farmers. The fourth chapter "Procurement and Marketing Practices of the Sample Poultry (Broiler) Farmers" analyses the existing procurement and marketing practices of the respondents and problems faced by them in this regard. In the fifth chapter "Managerial Practices and Economics of Sample Poultry (Broiler) Farmers" deals with the managerial practices of the respondents and analyses the economics of broiler production across the three categories of sample poultry (broiler) farms. The summary of findings of the study and the conclusions drawn are presented in the last chapter "Summary and Conclusions".