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CHAPTER NO. 2

HISTORICAL BACKGROUND

2.1: D E F I N I T I O N :

According to Welbster's Dictionary "Farming Means "Pertaining to agriculture". And 'Agriculture' is the art of science of cultivating the land, including the production of crops and livestock on a farm. "Industry relates to that aspect of business of producing commodities especially by manufacturing, processing etc. on so large a scale that problems of labour and capital are involved."

If we go by the dictionary meaning, then poultry farming is an agricultural operation. Traditionally, popultry raising in India has been a part of mixed farming, common in the rural India where 80% of the country lives. However, it is important to differentiate between "Poultry farming" and "Poultry production." While poultry farming covers raising of birds for eggs and table purpose, poultry production' goes beyond poultry farming to encompass the production and supply of inputs and services that make possible the modern poultry production. It includes hatcheries and breeding farms for the supply of day-old chicks to the farmers, the manufacture of feed and equipment, the supply of vaccines and medicines, the processing and marketing of poultry products, feed analytical laboratories and disease diognostic factories etc.

These activities cannot by any sterty of imagination be considered as pure and simple farming operations.

There is now a growing awareness of the key role that poultry can play in various socio-economic programmes to bring about intesnive rural reconstruction and development.

So poultry industries means - which industries deal with growing of birds(fowl), then maintaining laying hence as well as growing as broilers for best quality mutton, and marketing eggs and mutton.

2.2: Poultry As an Industry:

Poultry keeping was a simple animal husbandary exercise some years ago. This was so even in western countries some fifty years ago. But to-day in countries were egg consumption recorded some at the highest figures. Poultry raising is no more a simple agricultural operation. The inputs are many and the biological machine which produce eggs is invariable supported by a wide variety of auxiliary industries. These includes a multi-million dollar feed manufacturing industry, poultry hardware industry, the sophisticated transport industry for movement of eggs and meat, the mamoth dressing plants, the well-knit marketing channels, consumer and quality conscrious pacakaging industry and finally the retail market with all the fringe consumer attraction.

All these activities are to produce and promote

the ✖ simple egg on a kilogram of meat is boosted up by a vigorous advertisement organisation which by itself runs into a multi-million dollar affair. Needless to say, there are again the multinational and giant breeding farms which strive to produce a new variety whenever a newer need is anticipated. When one considers all the above, one wonders what to call 'poultry production' except by the name "Poultry Industry."

What have been considered above revolving round the single biological mechanism we call the hen are the "egg wheels of ultra-modern mechanisations." But the central king pin of all these is a simple and tailored bird, a biological mechanism. That way, without the central figure all the industrialisation of poultry husbandry comes to a naught.

On the one hand there are the considerably huge poultry farms where a few tens of thousands of birds are maintained under very few roofs and where a fair amount of automated mechanisation is practical. On the other hand, we have the small sized poultry farms in villages and towns whose strength may not exceed 500 or 1000 and in many instandes the units are much smaller. These small units of poultry are manned by the housewife or the family children and the investment capacity of the holding is to little to support sophisticated mechanisation. Non the less the input components remain in proportion to the size and the dependence on ancilliary industry still remains large as in

the case of a giant sized farm. In fact the dependence appears much larger in proportion since a small poultry farmer buys ready. Made commercial feed while the large farmer may even venture to mix his own feed.

Viewed from many angle, poultry is a commerical proposition for it is not a way of life as growing paddy or wheat by a village family for generations whether there is a profit or not. Poultry is a business which is strongly supported by auxiliary business and which in turn supports many other enterprises.

Poultry is not an agriculture in the sense poultry is fairly immune from the vagaries of climate for poultry is housed, which apartly cuts it away from sun and rain, from floods and drought. Their effect on poultry, is, indirect in the same way man's life is affected by such climatic elements.

Poultry is an industry as more than 75% of the population is feed rations made by feed industry. Poultry uses a large quantum of pharmaceutical pre poultry Adviser 48 parations and poultry is a commercial proposition because it is essentially profit oriented. The commercial chicks which make up about 60% of all poultry population in the country is the outcome of scientifically based breeding industry.

2.3 : NUTRITIVE VALUE OF EGG OR NUTRITIONAL NECESSITY OF EGGS.

It is indeed remarkable that a hen weighing 2 kg. can produce each year eggs weighing 10-14 kg. Packaged within the shell of each eggs are a variety of nutrients. This is not surprising since in a short 3 week period, when kept warm, the embryo in the egg feeds just on these nutrients and develops rapdily into an alive and active chick. All that is necessary for quick growth must, therefore, be present.

It is an admitted fact that protein is essential for life. There are two kinds of proteins i.e. vegetable protein and animal protein and 10% animal protein. Among the different kinds of animal protein, we have fish, sheep and goat meat, pig meat, beef, poultry eggs and milk. Of all these, eggs are the cheapest source of animal protein. If we have one ton of wheat then it will give us 136 kg. of vegetable protein. The balance 136 kg. of vegetable protein we will need 13.6 kg. of animal protein, 13.6 kg. animal protein will be given by -

1) 64 kg. goat or poultry or pig meat including bones.
2) 680 kg. of milk or
3) 2450 eggs.

At todays market prices the cost of these items would be as follows:

64 kg. goat meat @ Rs.22 per kg.	Rs.1408
680 kg. milk @ of 5 per kg.	Rs.3400
2450 eggs @ of 50 paise per egg	Rs.1225
64 kg. of poultry meat @ Rs.12 per kg.	Rs. 768

Poultry has the most efficient conversion ratio i.e. with the minimum quantity of feed we produce the maximum possible amount of feed for humans. If we make input output analysis, this factor of conversion ratio is a very important one in terms of national economy. Another salient feature of poultry industry is its capacity to achieve the maximum growth in the shortest time.

The Nutritional Advisory Committee to the Planning Commission has recommended half an egg and 125 gms of milk per day per capita to be achieved by 1990. It is presumed that half an egg will yield 2.5 gms of animal protein together making 5 gms. Some people express doubts achieving this level of egg consumption, and feel ia has a largely vegetarian population and hence tion cannot reached. However, an analysis of the population, their eating habits and the preferences would would reveal that about 90% of the population is non-vegetarian and has a preference for non-vegetarian food. The only inhibiting factor is perhaps the purchasing power.

Protein is the constituent which builds body tissues during the period of rapid growth, and repairs them during normal maintenance, besides providing the building blocks from which many enzymes and hormones are constructed. Eating just 100 gms of egg contents a day provides as much as a quarter of the total protein needs of a moderately achieve adult man.

Table No.2-1:

A. Promisate Consumption:

Whole egg		Shell	White	Yolk
Wt. in gms of large egg	56	7	32	17
percentage	100	12	68	30

B. Composition of edible Portion

(gm per 100 gms.)

	Whole egg. (without shell)	White	Yolk
Water	72.9	87.2	51.8
Carbohydrates	0.1	Nil	0.3
Proteins	13.0	12.0	16.2
Fats	13.0	0.2	30.6
Minerals	1.0	0.6	1.1

2.4 : PROBLEMS AND PROSPECTUS OF POULTRY IN INDIA.

In India, some 20-25 years ago poultry farming was in a primitive stage and was largely confined to the backyards. There were no scientifically managed farms. Also this activity was not taken seriously as a money spinner. In fact, quite a few people were shy of calling themselves poultry farmers.

The process of transformation of this activity from this state to that of an organised and modern industry started in early 1960. The Government encouraged small farms as a means of generating employment in rural areas and started encouraging youth to take to poultry farming. This was the tune when modern methods of management such as scientific disease diagnosis, medication and scientific management were introduced, which enhanced the prodctivity to a great extent. Another important development was the introduction of hybrid birds.

Yet another important factor that inluenced the course of this activity was the nationalisation of banks in 1969. With this, new priorities were defined for the banks and these financial institutions which were reluctant to finance poultry farms because of the inherent risks came in a big way to provide the necessary finances. All the above factors did contribute to the development of this industry.

The Government provided that the concept of

poultry farming as a means of income, the nationalised banks provided the necessary financial resources and the modern hybrid hatcharies provided a genetically superior bird and all the technology that is required to make poultry farming a successful avocation. Research on improvements of genetic potential is a constant process. The hybrid birds which yielded on an average about 220 eggs hen housed a few days ago are now yielding 275 eggs. The mortality rate also came down appreciably as a result of better preventive measures. All these added to the profitability of the farmer and attracted more and more people towards this activity.

Another important phase of development of this industry is the introduction of pure lines. Today India produces about Rs.1000 crores worth of eggs and poultry products and about million people are dependent directly or indirectly on poultry for their livelihood. It has to be mentioned that this staggering turnover is achieved with per capita consumption of just 18 eggs where as we have set out to achieve a consumption of 180 eggs by 1990. To produce just one egg per capita in this country, we need 28 lac. birds and 10,000 families will be gainfully employed in this efforts.

In India, the last three years have seen the establishment of nearly six basic research and breeding farms. Today we are totally self-sufficient, we have pure lines for white birds, for brown birds, for tinted

birds and for broler birds. Any one of this six pure line farms can meet the entire requirement of the nation. We are in a position to sustain and support the required growth of this industry within the country as well as export to a number of neighbouring countries. We have the necessary lines, we have the necessary technology and a large pool of exports.

In this development, the role of private sector has indeed been commendable. Except for providing the concept, the Government's role has been practically minimal and the entire development of the technology and the enormous extension/ executive work is the result of years of efforts by the private sector.

After reaching this level of development the industry is faced with a major problem/ i.e. marketing. When the production and consumption were comparatively low, perhaps the marketing did not require scientific efforts. With growth in the industry, particularly production concentrating in some pockets and consumption in far flung areas, marketing needs a lot of organisation. The Government which provided the concept and nuclear for poultry farming is now called upon to provide the infrastructure for marketing too. We need to set up godowns and cold storage and we need to explore new wholesale and retail outlets. We need to find new export markets and the export effort needs assistance by

the Government by the way of higher cash incentives, freight subsidies etc.

India is in a position to export quite a lot of items i.e. export eggs, broilers, poultry feed, sophisticated poultry equipment, poultry medicines, poultry vaccines and also technical knowhow. We have not done the export of technical know-how till date in any substantial amount, but given a concerted efforts and encouragement from the Government, we will able to export technical know-how and get into collaboration agreement with countries that have the lesser developed industry than Indian poultry industry. We feel that in the whole Middle East belt and the South Eastern countries, the poultry industry in India is the most sophisticated and as such we can tap vast market potential.

2.5: PROSPECTUS OF EGG EXPORT.

In 1976 the poultry industry took its first firm step to export eggs and other poultry product. The volume of exports was small, estimated at Rs.40 lakhs and represented the visible tip of a vast, new export market in the Middle East. It is also signified organised efforts to meet the foreign demand and specifications.

Despite the limited volume of exports of eggs, its impact was felt by the farmer better prices of eggs during period of exports and conversely, depressed prices when export consignments were off loaded in the local

market due to delay in shipments or other reasons. This was mere pronounced in Bombay, the major centre of export particularly to the Middle East Market where the major export thrust is directed.

A study team, sponsored by the Processed Food Export Promotion Council, visited the Gulf countries and reported an enormous demand for poultry products. Steps have been taken by the Union Ministry of Commerce to send a team of poultry experts to the Middle East to get a better appreciation of the market requirements there.

The prospective export market to the Middle East provides both a challenge and an opportunity to the future growth of poultry industry. Some of the new factors that favour India's exports to Arab countries are -

1. Disturbed conditions in Lebanon, a major exporter to this market.

2. Drought conditions in Europe.

3. F. O. B.(Free on Board) price of the Indian egg is comparable and competitive with that of other exporting nations. Because of its geographic location and proximity to the West Asian market, India can supply fresh eggs which are preferred by the consumer their.

One major constraint in taking up egg export ventures to the Middle East countries in a big way as pointed out by all concerned, is the high air freight

charges amounting to about Rs.50 per 100 eggs. This makes the CIF(Carriage Insurance & Freight) price quite high. One alternative is the sea transportation which seems very promusing because its cost is about Rs.15 per 100 eggs. But it really does not work out in practice because of the limited refrigerated ship-hold capacity, coupled with congested ports and slow movement of goods through the dock. Although the Gulf ports are just four days away from Bombay, this advantage is in practice nullified by the delay. The next result would be that the exported eggs sent by sea would tend to loose its freshness by the time it reaches the consumer.

The Processed Foods Export Promotion Council sponsored study team to the Middle East has recommended extending air freight subsidy for export of eggs to neutralise the high transportation cost, say, an initial period of three years. It has pointed out that the air freight on the basis of special rate works out to 51 paise more than the production cost of the egg. As the demand for fresh eggs is high in the Middle East, the exported eggs need to be transported by air in order to effectively capture the local market. Exporting countries are known to subsidize their exports through concessional air freight.

For developing the Gulf Market, the existing export cash assistance can perhaps be replaced by a

transport subsidy of 50% . Another bottleneck is the limited cargo space for the perishable which can be overcome with private charter operations.

Another market for egg and poultry exports is Africa. The prevailing retail prices of eggs in Nigeria, for instance are equivalent of Rs.40(3 Nairas) per eggs dozen.

The Indian exporters are faced with stiff competition because of higher freight rates. Recently India lost to Newzearland on order for Rs.15 crores worth of eggs to be supplied to Saudi Arabia, because of lack of support from Government.

An African markets, in Middle Eastern Markets and South Eastern markets we are facing stiff competition from European and American countries and in some cases Japan also. For export we need a really strong domestic base, and that is why we will be able to export increasingly and capture bigger and bigger share of the world market, but, let us look at the market -

First of all, the Government in this country is not really very helpful as far as exports are concerned. For example, in European countries the Government there provide freight subsidies and cash subsidies and these countries like Hodland are able to sell their products in Middle East at a very cheap rate because of freight cost to the exporter is almost nil. They also have facilities like refrigerated ships that can be used for

exports where as in our country we have a shortage of export infranstructure. Availability of refrigerated cargo containers is doubtful and even the freight costs are very high and the Government is not giving sufficient incentives for exporters. This puts us in a very handicapped position as far as exports are concerned.

Another problem is that of sales efforts. The European countries that are exporting to Middle Eastern markets are established companies doing export business for a long time. Because the poultry industry in developed countries of Europe and America is a much bigger industry than ours and because those companies have been operating for a much longer time, they have much stronger financial base. For them these advantages are telling. They are able to spend much greater resources for development and expdoitation of the market potential, they are able to send salesmen more frequently to these markets for market development and market analysis.

Advantages to the home industry of the export market is that it would bring in greater consciousness of producing quality eggs and so help rise the standard of scientific poultry farming It will also create more job opportunities and contribute to a qualitative improvement in the living standard of small and marginal farmers.

Although there is lack of support from the

Government the egg production and exports of eggs are increasing.

Table No.2.2:

India's Egg Production (in millions)

No.	Year	Egg Production
1	1978	11,200
2	1979	12,000
3	1980	13,000
4	1981	11,700
5	1982	12,000
6	1983	14,000

Table No.2.3

Export of Eggs from India(figures in lakhs)

No.	Year	Eggs exported	Value Rs.
1	1976-77	21.00	8.60
2	1977-78	205.30	79.30
3	1978-79	28.30	14.00
4	1979-80	235.70	94.30
5	1980-81	686.66	343.33
6	1981-82	741.19	370.60

"Now you are dancing me on your finger, just use me, I will dance you at every moment of your life"