

THE PHENOMENAL GROWTH OF THE POULTRY LAYER INDUSTRY IN NAMAKKAL

A case study developed from a key informant interview with the first poultry layer farmer of Namakkal region, Tamil Nadu state, India.

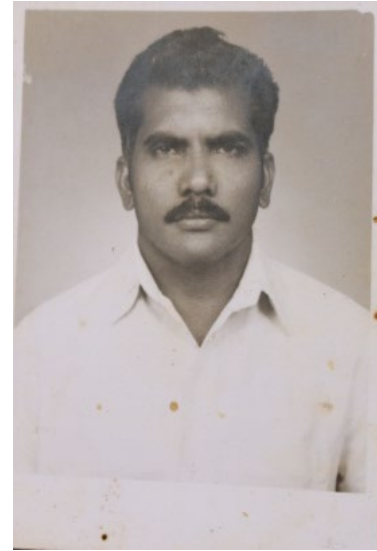
*Authors: Prof. P. Kumaravel, Dr N. Vimal Rajkumar and Dr V. Gowthaman
Tamil Nadu Veterinary and Animal Sciences University (TANUVAS), India*



Pioneer poultry layer farmer Mr V. Vellappan being interviewed by TANUVAS researchers

THE EVOLUTION of the poultry layer industry in Namakkal, a district of Tamil Nadu with low levels of agricultural activities, dates back to 1969, when Dr N. Nandagopal, then Veterinary Assistant Surgeon at the Veterinary Hospital, Namakkal, started treating desi (indigenous) chickens based on his Poultry Development Corporation (TAPCO) farm experience. It was then that a farmer named Mr V. Vellappan, the branch postmaster from Maniyampudur village, Vallipuram Post near Namakkal, brought his desi chicken (six red fowls) for treatment to the hospital.

Dr Nandagopal advised the farmer to start rearing hybrid strain birds rather than raising desi chickens, saying it would bring him more eggs, more manure for his agricultural farm and enhance his income. Dr Nandagopal suggested that male members of Mr Vellappan's family could continue performing their agricultural activities, while female family members could maintain the poultry farm. Mr Vellappan immediately agreed to this suggestion and so began his ventures into poultry farming activities.



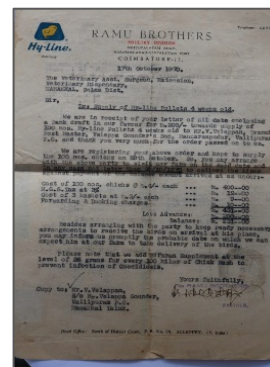
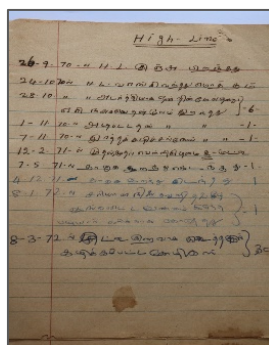
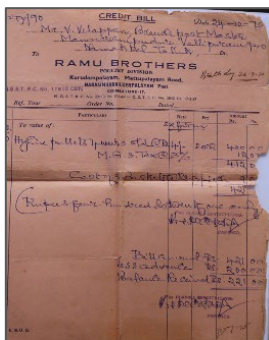
Dr Nandagopal decided that before procuring chicks for the farmer he should be taught about the deep litter *Poultry farmer Mr V. Vellappan* method of poultry management so he went to the farmer's field and supervised the construction of a small thatched shed. During the 1970s, poultry layer chicks were available only at Coimbatore and he took Mr Vellappan along with three other farmers by car to Ramu Brothers, a poultry firm at (poultry division) Coimbatore in 1970 and bought a total of 400 Hyline chicks at the rate of Rs.4 for each four-week-old chick and Rs.3 for each three-week-old chick. Mr Vellappan and the three other farmers started rearing 100 layer chicks each in small thatched sheds using the deep litter system under the guidance of Dr Nandagopal.

Dr Nandagopal came all the way from Namakkal to make regular morning visits to these farmers' sheds to check the status of the chicks, provide vaccinations and offer advice on the litter and feeding management of the poultry, all free of cost. He advised the farmers on how to use groundnut kernels or rice husk as litter material in the sheds, and he emphasised the importance of maintaining records, recommending that the farmers note daily expenditure and other details in a notebook. Mr Vellappan initially obtained poultry feed from T. Stanes & Company, Coimbatore, but subsequently as per the suggestion of the Dr. Nandagopal he soon began sourcing feed ingredients – sorghum, bajra, rice bran and groundnut cake – locally for preparation of his own poultry feed.

The farmers' faith in the veterinarian grew, and in time farmers from nearby villages started visiting these small layer units, revealing a keen interest in them to also venture into layer poultry farming. Subsequently, farmers began procuring layer chicks regularly from Coimbatore, hiring a vehicle specially to do so, and they started raising the chicks in both thatched and tiled roof sheds. The veterinarian advised the new entrants to poultry farming to concentrate on feed management by procuring quality poultry feed from reputable companies and he advocated the culling of weak birds. He procured vaccines from the Institute of Veterinary Preventive Medicine (IVPM) in Ranipet, Tamil Nadu, and he vaccinated the layer birds – which as a result were raised safely with no Ranikhet (Newcastle) disease incidence. The birds were raised until 20 weeks old, the only challenge faced by the poultry farmers being interrupted power supply.

However, once the birds started laying, the next challenge was marketing the eggs. The reason: consumers and restaurant owners preferred only desi chicken eggs. Dr Nandagopal suggested that one of the poultry farmers should collect the eggs and market them, describing their good qualities to selected customers. He also advised the farmers to form a small poultry farm club, collecting all the eggs from the members and selling them either locally or in Chennai city. As a result, the eggs were transported to Chennai by train from Trichy railway station and sold at Rs.0.22 per egg. The eggs were also sold locally at Namakkal and Salem supermarkets at Rs.0.25 per egg.

A steady demand for the eggs was observed over the following years, and the number of layer poultry farms mushroomed in the area. During this period, several more farmers in and around Maniyampudur and Vallipuram established poultry units and Dr Nandagopal continued to visit these poultry farms daily. The veterinarian also visited several other villages and advised on site selection, shed construction and other management practices for establishing poultry units.



Old records maintained by Mr. V. Vellappan

The seeds sown by Dr Nandagopal – along with the initiative taken by Mr Vellappan and the subsequent nurturing of the poultry sector by the veterinarians of the Animal Husbandry Department in Namakkal – resulted in a phenomenal growth in the layer industry in Namakkal. The poultry population, which was in the range of three lakhs (300,000) in 1975-76, increased to 12 lakhs (1.2 million) in 1978-79, 30 lakhs (3 million) in 1982-83 and 75 lakhs (7.5 million) in 1985. In 1979-80, three large-scale hatchery units were established in Namakkal region and the demand for poultry chicks was met locally. In addition, farmers sourced chicks from Bangalore, Coimbatore and Chennai.

Until 1979, the farmers had relied on poultry feed from reputable companies from outside Namakkal but later, due to the efforts of the Animal Husbandry Department which advised on feed composition and procurement and mixing of raw materials, the feed cost reduced drastically to Rs.10-15. From 1975-85, several nationalised banks offered financial support to the farmers of Namakkal and Rasipuram region. During 1985, respiratory disease was reported on poultry farms and farmers incurred considerable losses, but from 1986 onwards the situation was managed by veterinary intervention and the egg rate and the price for culled birds started increasing. The farmers were now able to manage the poultry layer units with considerable profit.

Mr Vellappan, the first layer farmer in Namakkal district currently has four acres of land exclusively for his layer farm and an additional five acres for agricultural activities, having expanded his land by obtaining a loan from UCO bank and Canara bank (now repaid). He is currently maintaining 75,000 layer birds in asbestos sheeted and tiled sheds. He procures Babcock chicks from Southern hatcheries, Selvam hatcheries and Jayadevi hatcheries from Namakkal itself.

The poultry feed is prepared in his own feed mill, which has a capacity of 3-4 tonnes per hour, and he buys ingredients from the next-door states of Karnataka and Andhra Pradesh through traders. The maize, with appropriate moisture (minimum 12%), is sourced and analysed at Feed Analytical Lab, Namakkal, for aflatoxin content.

Four labourers are currently employed on the farm and the present hen-housed egg production is 90%. The traders from the local market regularly buy 22,000 eggs a day (700-730 trays) at the rate of Rs.4.20, deducting 10-20 paise from the rates for each egg fixed by the National Egg Coordination Committee. The poultry manure (20-30 tonnes) generated is transported to Kerala state for tea plantations at Rs.1,200 per tonne, as well as being used on his own agricultural farm. Dead birds are burned in an incineration pit at the far end of the farm.

The poultry production in Namakkal region has grown in leaps and bounds and has attained the status of an organised industry. As a result, the poultry industry in Tamil Nadu is the most dynamic segment of the livestock sector. The strength of layer birds in the Namakkal zone in 2011 stood at 45 million, and the production of eggs had reached an average of 300 eggs per bird. In the year 2013-14, the cost of feed was high and the average cost of eggs was low, resulting in heavy losses to the farmer. On average, a farmer lost Rs.4-5 per bird per month. However, in 2016-17, the feed ingredient prices consolidated and farmers were able to make an additional profit of Rs.7 per bird per month. On average, a farmer with 1 lakh (100,000) birds made a net profit of Rs.700,000 per month. To get to break-even, a farmer has to raise a minimum of 30,000-50,000 layers and currently, some farms are having a carrying capacity of 8.0 lakh (800,000) birds.

At present, the Namakkal zone of the National Egg Coordination committee accounts for about 1,100 poultry farmers who own more than 45 million layer birds. On average, 3.5 crore (30.50 million) eggs per day are produced in Namakkal zone of which 50 lakhs (5 million) is for consumption in Tamil Nadu. The remainder is supplied to the neighbouring states of Kerala and Karnataka as well as north Indian states.

Tamil Nadu is at the forefront of poultry production in the country, with a poultry population of about 11.73 crore (11.73 million). Automation is the order of the day and newer technologies such as computerised and automated feeding, automated watering and automated egg collection are being adopted. Tamil Nadu witnessed cumulative growth of 23.5% in egg production and 30.53% in poultry meat production during 2013-14 to 2017-18. Tamil Nadu has India's second-highest layer population after Andhra Pradesh's (at 44 million), and now produces 10.8 billion eggs.

Exports too are taking off. Table egg exports from Namakkal started 25 years ago in a small way to Kuwait and have since expanded to 17 countries in the Middle East and West Africa. Of the 30.8 million eggs produced every day in Namakkal zone, around 1-3 million eggs per day are now exported to Middle East countries.

In Tamil Nadu, Namakkal continues to take the limelight in terms of layer farms, egg production and egg exports. This trend is likely to continue in forthcoming years.



Department of Veterinary and Animal Husbandry Extension Education
Madras Veterinary College
Tamil Nadu Veterinary and Animal Sciences University

Chennai – 600 007

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