

The BV-300 rises to the challenge of table egg production in India

In India an important animal protein component in the human diet is eggs and Indians prefer white shelled eggs.

Venkateshwara Hatcheries Pvt Ltd with their breeder flocks and hatcheries throughout India that supply the BV-300 layer is the major supplier of table egg birds in the country. The BV-300 was originally a Babcock layer which, over the years, has become Indianised in Venkateshwara Hatcheries Pvt Ltd's breeding programme.

To get a first hand insight into the Indian table egg sector International Poultry Production visited a table egg layer farm belonging to Yojana Poultry Pvt Ltd that was about an hour's drive from Pune.



An open-sided layer house.

Financially attractive

The company has 300,000 layers and another 60,000 birds in rear and some 50% of the eggs they produce are sold through their own outlets thereby giving them the middlemen's profits and making the business more financially attractive than the norm.

The layers are housed in houses of 20,000 layers at three per cage with three rows of cages or 25,000 layers at five per cage with four rows.

The latter are preferred because although the houses contain more birds they are significantly shorter and these houses are easier to work and to supervise.

Typically, pullets come on to the multi-age laying farm at 15-16 weeks and are usually

depopulated at 72-73 weeks of age having produced 315-320 eggs.

As this is a multi-age site and because certain diseases are present in India the flocks are subjected to a robust vaccination programme. By two weeks of age birds have received Marek's disease, and two Newcastle (La sota and inactivated) and two Gumboro disease (standard and plus) vaccinations. This is followed up by a third Gumboro vaccination at 21 days and a second Newcastle inactivated and pigeon pox vaccine on day 30. Five days later they receive their first dose of infectious bronchitis and a second dose of La sota vaccines.

On day 75 a La sota booster dose is given

and the infectious bronchitis is boosted nine days later. If the coryza threat is high, a coryza vaccination is given on day 90 and on day 98 another Newcastle booster is given along with a fowl pox vaccine. To maximise immunity in lay a very velogenic Newcastle disease vaccine is given on the 105th day.

Throughout lay Newcastle disease La sota and infectious bronchitis vaccines are given via the drinking water.

Birds are bled monthly or bi-monthly so that their vaccinal titres can be checked in the veterinary laboratory.

The layers are fed a corn/soya based diet that includes some fish meal and in the hot

Continued on page 8

Young flocks (left) and old flocks (right).





Left, looking down the full length of a layer house and, right, the houses are on stilts. The gap between the top of the steps and the house keeps rats out.

Continued from page 7

weather additional calcium is given. It is a common practice on larger table egg farms to use a phytase in the diet to improve phosphorus availability and utilisation.

Typically FCR is 124g of feed per egg.

A four phase feeding programme is used in which the crude protein levels are 17.0, 16.0, 15.0 and 13.0-14.5% at 1-7, 8-16, 17-28, 29-49, 50-64 and 64-73 weeks respectively with energy at or close to 2,500kcal per kg feed (or 2,700 kcal per kg of feed in the cold months). In the cold months additional calcium, phosphorus and amino acids are formulated into the feed as it is preferred to give these by this route rather than by top dressing the feed.

To counteract the hot temperatures in the summer months the house roofs receive a temporary covering of thatch and their internal environments are cooled by misting/fogging cool water. To counter the colder, 'winter' temperatures the curtains on the sides of the houses are raised.

Typically first or pullet eggs are under 50g and eggs reach 58g in late lay. All eggs over 50g are sold as eggs. Eggs fetch 260 Rupees per 100 wholesale and 350 Rupees per 100 at retail.

The Indian market has several religious festivals, including a long one in August. In these festivals the Indians adhere to a strictly vegetarian diet, which means a great drop in egg consumption.

To some extent this can be overcome by cold storing eggs, but this is not usually very beneficial because available egg numbers on the market immediately after the religious festival increases and this can depress prices. In addition, the National Egg Coordination Committee also plays a role in stabilisation of egg prices.

As was previously said, the farm we visited is able to minimise this effect by selling many of the eggs it produces directly to the consumer.

It also produces speciality eggs that attract premium prices such as selenium and vitamin E or omega-3 enriched eggs. These can fetch 500-600 Rupees per 100!

Egg quality in India tends to be based on yolk colour and eggshell cleanliness.



A pack of selenium and vitamin E enriched eggs and, right, eggs about to be shipped from the farm.

All procedures for the farm are documented in SOPs (Standard Operating Procedures) and each houseman has a note book in which he notes everything that has happened in the house.

Relevant data from these books are transferred daily into the flock records which are retained in the offices. It was interesting to see that these books contain a label off the bottles used for every vaccination – this is a very simple and effective way to retain all the information about the vaccines used!

What really helps the farmers is the relationship that exists between them and Venkateshwara Hatcheries Pvt Ltd that can be most easily described as a type of franchise arrangement.

Under this arrangement Venkateshwara supplies the day olds, feed (or in the case of home mixers the ingredients) and vaccines and on top of this provides access to all the different in house expertises, such as those associated with nutrition, veterinary and management matters.

Although there are many adversities in India, experience has shown that good nutrition coupled to good management and a comprehensive vaccination programme should enable the BV300 to deliver to potential. ■

The page in the record book showing vaccination history.

