

Attention to detail pays dividends for leading Indian breeder

One of India's largest and best respected poultry operations is the Suguna Group, based at Coimbatore in the south of the country. When it comes to day old broiler chick production the Group proudly claims to be in the world's top 10 companies with some eight to nine million being produced each week.

To find out more about this dynamic Group International Hatchery Practice recently visited Suguna and spent a day looking at its parent breeders and one of its hatcheries.

Own grandparents

The company actually operates its own Ross 308 grandparents and these are sourced from Aviagen's great grandparent operation in India that supplies Ross, Indian River and Arbor Acres parent stock day old into the Indian region.

Suguna receive their Ross 308 parent stock on an exclusive basis and, of the resulting day old broiler chicks, over seven million are placed with their own operation and a million or so are sold as day olds on the open market. This relationship with Aviagen is now into its second decade.

The Indian market place for poultry meat is an interesting one with some 95% of pro-



Inside a broiler breeder house. Inset, details of feed allocations per bird for each tier.

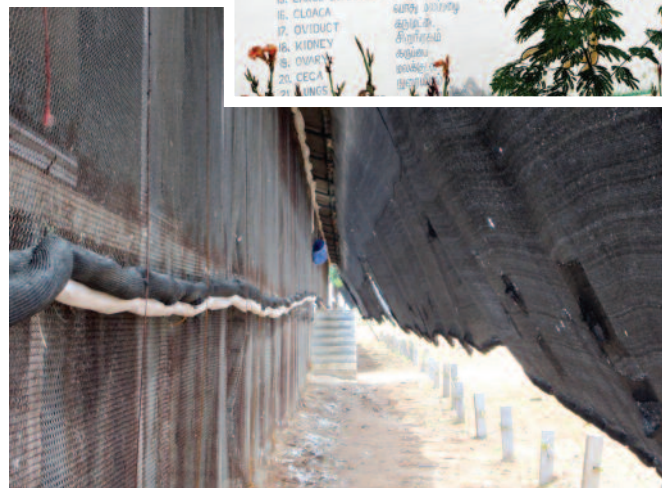
AGE	1	2	3	4
Line	17	18	19	20
ACI	1351	1243	1308	1354
FCI		57	59	64

duction being distributed via wet market outlets. At these the customer selects a live bird and then waits for it to be killed, scalded, defeathered (and often skinned), eviscerated and then portioned if required.

Continued on page 9



Browning out a broiler breeder rearing house. Right, this mural was painted on a building wall and is used in staff training.





Left, a grandparent farm and, right, staff accommodation on a commercial breeding farm.

Continued from page 7

This is the ultimate way to supply the consumer with fresh poultry meat. However, this is slowly changing and Suguna now processes broilers through their own plants to supply the rapidly developing taste for fast food chicken products.

This currently accounts for a million or so birds a month but is shortly expected to increase.

Tight controls

At the commercial breeding level, the Group has some 4.5 million Ross 308 parent stock on the ground at any one time on some 250 farms with approximately two thirds of these birds being in lay.

Half of the parent stock is in Tamil Nadu and half further south in the area around Bangalore. Some 60% is housed on their owned or leased farms and managed by the company and the remaining 40% is with contract breeding farmers.

The company has tight control over these, supplying virtually all their inputs and keeps a close eye on these flocks through its technical support team.

Traditional laying accommodation and, right, the disinfection spray tunnel through which everyone entering the farm must pass.



Although the breeding operation is concentrated in these two areas, the hatching eggs are then shipped to hatcheries across India in 13 provinces.

These eggs are sent to five company owned hatcheries – three of which set 1.8 million eggs a week and two of which set just under one million eggs a week – and some 25 small contract hatcheries located around the country.

Longer hauls are by road or rail. These small hatcheries are located in pockets of poultry production.

The five large hatcheries operate on a single stage basis and two contain Petersime machines and the others are using Pas Reform, whereas all the small contracting hatcheries contain locally manufactured multi-stage machines. The large hatcheries need the European machines because they carry far more eggs per m² of hatchery space.

These ultimately supply some 15,000 broiler farmers in 8,000 or so villages with, as was previously said, many of these being dependent on the wet market. An increasing proportion of end product is sold through Suguna's wet market, fresh products and fast food retail outlets.

Needless to say, all these birds require feed and this comes from some 30 feed mills, the largest of which can produce 2,000 tonnes a day on 24 hour production.

This, in turn, necessitates their own soya plant which processes some 1,000 tonnes a day producing 50% Hi-pro soya and 200

Continued on page 11



Egg stores on farm, above left, and at the hatchery, above right. Right, the identification methods for trolleys and eggs.

Continued from page 9
tonnes of oil which mainly goes for the human market.

The grandparent farm, which has no visitors, has closed houses but at the commercial breeding level the vast majority of houses are open sided. Of the commercial breeder farms 90%, including most of the contract breeder farms, are of the deep litter type with most of these using rice hulls and some coconut waste for bedding material.

All reared in cages

We visited the Maruthur Rearing Farm – a one or two hour drive (depending on the Indian traffic) outside Coimbatore – which houses 94,000 pullets. The cockerels are reared on a separate farm.

The pullets are reared in cages at five birds per cage. These are fed to weight and each week the feed requirements for the following week are calculated. A scoop is accurately marked up at the level that contains enough feed for five birds and this feed is



placed in the trough at a mid-point on the front of the cage. This food is only consumed by the birds it is intended for. The end result is very good uniformity with 85% or over being regularly achieved.

Obviously, the high labour requirement for this is not an issue in India but the company foresees more automation coming on stream as this can provide options that can improve performance such as feeding a whole house of breeders simultaneously.

If a bird dies in a cage it is replaced, but this does not happen that much as bird livability is very good.

The rearing houses are 'browned out' not 'blackened out'. In this process the material used for closing down the sides of the house does not exclude all light and, in effect,

reduces the intensity of the light coming into the house.

No anticoccidials or coccidiosis vaccines are used in cage rearing except for the last few weeks of rear in flocks destined to deep litter laying houses. Coccidiosis vaccines are used in deep litter reared flocks. The cockerels are reared on deep litter. Birds are beak trimmed at 10 days of age and then 'touched' as required.

A comprehensive vaccination programme is followed and flocks are regularly bled to confirm immunity status.

The contract breeder laying farm is a traditional deep litter broiler breeder farm but interestingly has a tiled roof. In this part of India the summers can be hot so there are

Continued on page 12

Hatchery SOPs are clearly available for staff to read and, right, some of the AirStreamer setters.



Continued from page 11

sprinklers on the roof and misting sprays and fans inside the house.

Cockerels are used at a 1:10 ratio. Feeding is undertaken using winch feeders. When not in use these are raised. They can then be filled and lowered to feed the whole flock at the same time.

Egg production is good and on the farm we visited the flock had achieved >80% for 14 consecutive weeks.

Certificate of Recognition

The company is very people focused and the breeder farm we visited had been awarded the company's Certificate of Recognition as a star performer.

In addition, the company operates a comprehensive scheme for employee feedback on how to make improvements in farming practices.

This uses both traditional suggestion boxes and the company's intranet. Successful ideas are adopted and given a high profile in the company's in house magazine 'Suguna Expressions'.

Eggs are collected seven or eight times a day and subjected to primary grading, cleaning and sanitisation and fumigation on farm where they are held at 16-18°C at 70-75% RH for up to three days in purpose built egg stores before being shipped to the hatchery.



Above is the regularly presented best hatchery award, which is a great motivator.

If the farm is supplying the local hatchery eggs are shipped on trays, but if eggs are going to a distant hatchery they are packed in cartons on Keyes trays for onwards shipment by road or rail.

Usually eggs produced between 35 and 55 weeks are shipped to the distant hatcheries and those which are <35 or >55 days go to the local hatchery.

We visited a local 15 year old hatchery that had recently been re-equipped with Petersime AirStreamer incubators to pro-

duce some 1.5 million chicks a week. The hatchery also contains 48 AirStreamer setters, each of which hold 115,200 eggs.

In total the company produces some eight million day old broiler chicks a week, of which some seven million go to the company's 16,000 broiler farms and one million are sold on the open market.

There are six hatches a week at the hatchery we visited.

Batching by flock age

The eggs within any one AirStreamer are from flocks that are 10 weeks or less.

Interestingly, the company does not find much of a difference between the modern single age machines and the traditional multi-stage machines, but it does see a real difference in terms of chick quality with the modern machines producing the better quality chicks.

The company does not think in terms of percentage hatchability but rather in terms of saleable chicks. The figure for these is 77-86% depending on breeder flock age.

All chicks are vaccinated before dispatch with a half dose of killed Newcastle disease vaccine and some, depending on the area they are being placed in, also receive eye drop infectious bronchitis vaccination.

Despatch of chicks from the hatcheries is via the company's large fleet of vehicles. ■