

POULTRY INDUSTRY

Sunday or Monday, they won't come home to roost

A focused campaign to promote egg as a vegetarian food is necessary for boosting consumption



TARUN SHRIDHAR

Which came first, chicken or egg?

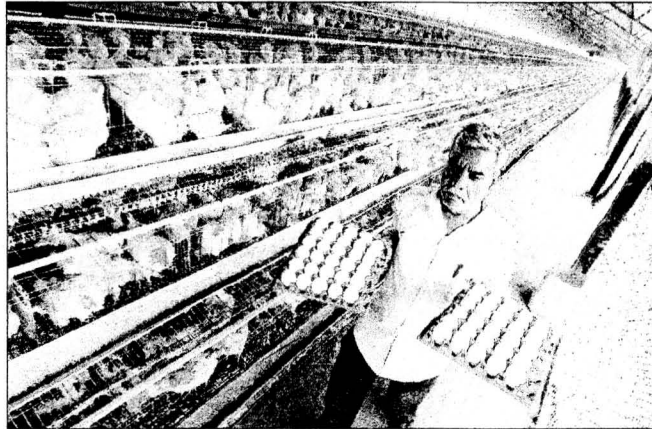
A pragmatic perspective should be put to rest this unanswerable problem. In a country where a significant section of the population is vegetarian, for whom meat is taboo, it may be a reasonable compromise to settle for eggs. Scientifically speaking, egg is as vegetarian (or not) as milk. While both are animal foods, neither is derived from flesh nor calls for slaughter. Like milk from cows, hens don't have to die to lay eggs. Table eggs are also unfertilised and carry no living embryo; the hens produce them without even seeing any cock.

Among those who recognised these facts was the man whose 150th birth year we are now celebrating. In a 1942 monograph titled Key to Health, Mahatma Gandhi wrote: "Eggs are regarded by the layman as flesh food. In reality, they are not... A sterile egg never de-

velops into a chick. Therefore, he who can take milk should have no objection to taking sterile eggs."

Rising incomes that come with sustained economic growth would mean increased demand for animal protein. Animal proteins, unlike plant proteins, are complete. They contain a balanced combination of all the nine essential amino acids, which the human body cannot synthesise and have to be supplied in one's diet. Egg can supplement milk in providing a protein-rich and high nutrient-density, yet low-calorie count, diet without undermining vegetarian commitment. There could be no better word for this than "vegetarian"!

At 103.93 billion eggs in 2018-19, India is the world's third biggest producer after China (566 billion) and the US (109 billion). From a mere 1.83 billion eggs in 1950-51, 10.06 billion in 1980-81 and 36.63 billion in 2000-01, it represents a huge jump. But our annual per capita availability of 77 eggs is still way below the 180 level prescribed by the National Institute of Nutrition, Hyderabad, or the 300-plus consumed in China. According to the EAT-Lancet Commission, a body of 37 leading global scientists that has sought to develop quantitative targets for healthy diets and sustainable food production, the desirable intake of eggs is about 13 grams/per-



At 103.93 bn eggs in 2018-19, India is third biggest producer after China, US. File

son/day or over 90 eggs in a year.

What is encouraging about India's poultry sector, spectacular growth apart, is that it has transformed a supplementary backyard activity to a highly organised farming business. Today, well over 80% of egg and poultry meat output in the country is from organised commercial farms. This is in contrast to even dairying, where hardly a quarter of the milk produced is handled by cooperatives and private corporate players. At an

average rate of Rs 4, the 100 billion-plus egg production would be worth more than Rs 40,000 crore annually, with the roughly 4 million tonnes of poultry meat at Rs 75/kg adding another Rs 30,000 crore.

But like any other good story, this one, too, has a twist.

The poultry industry's development has been highly skewed. Half of India's egg production is accounted for by just three southern states: Tamil Nadu, Andhra Pradesh and

Telangana. Secondly, despite the industry's organised character, our productivity levels remain relatively low. An average hen in the US lays some 289 eggs per year, whereas that number in India is about 108 from *desi* and 209 from improved birds. Most of our poultry farms have no proper climate control or quarantine systems, exposing the birds to diseases and abiotic stresses. To protect against these risks, the bird density has to be kept low that, in turn, reduces egg yields.

Yet, poultry's advantage over other livestock subsectors is that, being an organised industry, almost every farmer is integrated along the value chain. Also, few industries offer scope for rural entrepreneurship with relatively low investment and short gestation/payback. But sustaining even the existing growth momentum requires developing markets, both domestic and overseas.

The National Egg Coordination Committee's Sunday *hoya* Monday, *roz khao ande'* ad jingles of the 1980s gave a huge initial boost to egg consumption. What is required is a renewed and focused campaign that promotes egg as a vegetarian food. The so-called hardcore veggies are already moving towards having an occasional cake or homemade ice-cream containing egg. Just a little push, communicating egg's unique nutritional attributes and its likeness with milk as a non-flesh food, can make a huge difference.

Nutritionists term egg as a "reference protein", having to do with its high biological value and digestibility. Its biological value — the proportion of protein ingested and ab-

sorbed, that is absorbed into the body — is 93.7%, the highest for any food after whey protein concentrate.

The urban consumer should be told not only about egg's high protein efficiency ratio, but also its low calorie count. A 50-gram hardboiled egg gives just 77 calories, while packing all the essential amino acids plus Vitamin A, B2 and B12. Benjamin Franklin would have been a good brand ambassador for eggs among diehard vegetarians. As he famously said, "An egg today is better than a hen tomorrow".

There's equal scope to promote backyard poultry through organic branding. Eggs laid by free-range hens, reared in smaller flocks without being fed hormones or antibiotics, can fetch a higher value for farmers.

While domestic consumption should at least double, it is necessary to also focus on exports. India contributes to more than 6% of global egg production, but its share in exports is less than 1%. As against a close No. 3 behind the US in production, we rank a lowly 32nd or so in exports, behind even the likes of Turkey and Lithuania. In 2018-19, our export of bird eggs and powder (mainly dried yolk) amounted to a paltry Rs 618 crore. The fact that the country has only a handful of egg processing plants is testimony to the long distance even this most organised of agro-industries has to travel.

The writer is former Secretary, Union Ministry of Fisheries, Animal Husbandry & Dairying