

The Best Chicken Is Not Always the Best Layer

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Open a poultry catalogue today and you will find chickens bred to do one job exceptionally well. Commercial layers are selected to produce large numbers of eggs, while broilers are bred to grow rapidly and efficiently convert feed into meat. Under the conditions for which they were developed, these birds are remarkably productive.

But a family farm may ask something very different from a chicken. A small flock may need to provide eggs, meat, replacement chicks, and breeding birds. Chickens may spend part of the day foraging for insects, seeds, and plants. Purchased feed may be expensive or occasionally unavailable. Heat, disease, predators, and limited housing can present additional challenges. The family may also want hens capable of hatching and raising their own chicks. Under these conditions, specialization may not always be an advantage. A chicken that lays fewer eggs but also produces useful meat, forages effectively, survives local conditions, and contributes to the next generation of the flock may ultimately provide greater value.



Picture 1. For a family farm, the value of a chicken extends beyond egg production. Locally adapted birds can provide eggs, meat, replacement chicks, and reliable production under the conditions available on the farm. *Photo: Karugajk*

The better question for a family farm is therefore not simply, “Which chicken lays the most eggs?” It is “Which chicken can provide the most useful combination of eggs, meat, replacement birds, and reliability from the resources available on this farm?”

Start With What the Flock Needs to Provide

A dual-purpose chicken represents a compromise by design. It will not match a specialized commercial layer for egg production or a modern broiler for growth, but it can provide useful quantities of both eggs and meat. Some breeds and strains also retain broodiness and maternal behavior, allowing hens to hatch and raise chicks without an incubator. That versatility can have considerable value when a family keeps only a small flock.

Suppose one hen lays 280 eggs per year and another lays 200. Based on egg production alone, the first appears clearly superior. But what if the second bird obtains more of her diet through foraging, produces a useful carcass, becomes broody, hatches eight chicks, and successfully raises several cockerels that eventually provide meat? The comparison is no longer simply 280 eggs against 200 eggs. Feed makes that comparison even more important. Feed is usually the largest cost of keeping poultry, and maximizing egg production generally requires adequate quantities of a nutritionally balanced diet. For a smallholder with limited cash or irregular access to commercial feed, a bird capable of using locally available feed resources and foraging effectively may have advantages that are not reflected in eggs per hen per year. The relevant economic question then becomes:

How much food does this flock provide relative to what the family must spend to maintain it?

Eggs and meat have obvious value, but replacement chicks also matter. A flock capable of producing at least some of its own replacements can be particularly valuable where replacement pullets, hatcheries, transportation, or cash are limited. This does not mean that every traditional or dual-purpose hen will brood reliably. Broodiness varies among breeds, strains, and individual hens, so farmers interested in a self-replacing flock should determine whether the chickens available locally retain this behavior.

Different Chickens, Different Strengths

No chicken combines maximum egg production, rapid growth, low feed requirements, strong broodiness, disease resistance, and adaptation to every climate. Choosing a family-farm chicken therefore involves deciding which combination of characteristics matters most.

Traditional dual-purpose breeds illustrate the compromises that once defined the family flock. Sussex and Plymouth Rock combine useful egg production with enough body size to provide meat, while New Hampshire chickens place somewhat greater emphasis on growth and meat production. Rhode Island Reds shift the balance toward egg production while retaining considerably more utility for meat than a specialized commercial layer.

None is the best breed for every situation, nor should it be. Their value lies in providing several products from the same flock. Where adequate feed is available and climatic conditions are suitable, these traditional breeds can still make considerable sense for families wanting eggs, meat, and breeding birds rather than maximum output of a single product.

Table 1. Comparing Chicken Types for Small-Scale Farms

Type	Egg production	Meat value	Input/management level	Particularly suited to
Sussex	Good	Good	Moderate	General-purpose family flocks
Plymouth Rock	Good	Good	Moderate	Temperate family farms
New Hampshire	Good	Very good	Moderate	Farms emphasizing meat and eggs
Rhode Island Red	Very good	Good	Moderate	Flocks emphasizing eggs
Fayoumi	Moderate	Limited	Low to moderate	Hot, lower-input environments
Local chickens	Low to moderate	Variable	Low	Low-input, locally adapted systems
Kuroiler	Good	Very good	Moderate	Tropical smallholder systems
Sasso/Noiler types	Good	Very good	Moderate	Smallholder meat-and-egg production

These are broad comparisons rather than guarantees. Performance within the same breed or type can vary considerably with genetics, feed, climate, housing, disease pressure, and management.

When Adaptation Matters More

The situation changes when climate, feed availability, and disease pressure become greater constraints. European and North American dual-purpose breeds should not automatically be considered the best choices everywhere simply because their production potential is higher.

The Fayoumi breed from Egypt provides a useful example. It is a relatively small chicken and will not produce the carcass of a large Sussex or New Hampshire. Its importance lies elsewhere. Fayoumi chickens originated under hot conditions and have attracted considerable research interest in their hardiness and disease resistance. Where heat, disease challenges, and feed costs are important limitations, those characteristics may be more valuable than greater body size or maximum egg production.

Local chickens deserve similar consideration. They may lay fewer eggs and grow more slowly than a specialized chicken strain, but generations of selection under local conditions may have favored characteristics that are difficult to see in a production table. She may forage effectively, tolerate heat, cope better with locally important disease challenges, reproduce without artificial incubation, and survive periods when feed quality or availability declines. Those characteristics have economic value even though they are rarely expressed as eggs per hen per year.

This is particularly important in low-input systems. A chicken producing fewer eggs while obtaining part of its diet through scavenging and surviving with relatively little intervention may provide more value to a resource-limited household than a genetically superior layer whose potential can only be expressed with purchased feed, vaccination, controlled housing, and careful management. Local adaptation should therefore not automatically be interpreted as low productivity that needs to be replaced. It is a biological resource that can potentially be combined with improved production.

Improving Production Without Losing Adaptation

Between unimproved local chickens and highly specialized commercial poultry lies another option: improved dual-purpose birds developed specifically for smallholder production.

Kuroiler, Sasso, Noiler and similar chicken types have attracted considerable interest in parts of Africa because they intend to provide more meat and eggs than traditional local chickens while remaining suitable for less intensive production systems. They offer the possibility of improving output without moving completely toward the management requirements of specialized commercial poultry.

Research with more than 2,000 smallholder farmers in Nigeria illustrates both the potential and the limitations of this approach. In evaluations of improved dual-purpose chickens under smallholder conditions, some improved types reached approximately 1.4 to 1.5 kg by 18 weeks, while local roosters averaged around 680 g. Improved birds also demonstrated useful egg-production potential.

But the research revealed something equally important: the best-performing chicken was not necessarily the same everywhere.

Performance and survival differed among locations and chicken types, and local birds sometimes demonstrated survival advantages. A genotype that performs well under one set of environmental and management conditions may therefore rank differently somewhere else. Improved genetics can substantially increase production, but improvement does not eliminate the importance of adaptation.

For farmers and consultants, this has a practical implication. Do not choose a chicken simply because it performed well in another country, another region, or an experimental station. Ask how it has performed under conditions like those of the farm where it will live. Locally tested performance can be more informative than the reputation of the breed or strain.

Choosing the Chicken That Fits the Farm

Choosing chickens for a family farm should therefore begin with the farm rather than the poultry catalogue. How important are eggs relative to meat? Will the flock need to produce its own replacements? How much purchased feed can the family afford? Can the chickens forage safely? What are the major climatic and disease challenges? Is vaccination available? How much housing and management can the family realistically provide? And perhaps most importantly, which chickens have already demonstrated that they can survive, reproduce, and produce under local conditions?

Where feed is readily available and the climate is suitable, traditional dual-purpose breeds such as Sussex, Plymouth Rock, New Hampshire, and Rhode Island Red can provide useful combinations of eggs and meat. Where heat and limited inputs are greater concerns, Fayoumi or proven local chickens deserve serious consideration. In tropical smallholder systems, locally evaluated Kuroiler, Sasso, Noiler, or similar improved dual-purpose birds may provide an attractive balance between greater production and adaptation.

Whatever the choice, the farmer should look beyond a single production number. A commercial layer may produce more eggs, and a specialized broiler will grow much faster, but neither characteristic alone defines the value of a family flock. Eggs, meat, survival, reproduction, foraging ability, replacement birds, and the cost of producing all of them contribute to the final result.

The best chicken for a family farm is therefore not necessarily the one that lays the most eggs or grows the fastest. It is the chicken that provides the most useful combination of food, replacement birds, and reliability from the feed, environment, and management the family can realistically provide.

Further Reading

1. FAO. *Small-Scale Poultry Production*.
<https://www.fao.org/4/y5169e/y5169e00.htm>
2. Ohio State University Extension. *Breed Selections of Chickens*.
<https://u.osu.edu/poultry/2016/04/28/breed-selections-of-chickens/>
3. Bamidele et al. *Production performance and survivability of six dual-purpose breeds of chicken under smallholder farmers' management practices in Nigeria*.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC7810232/>
4. Bamidele et al. *On-station performance evaluation of improved tropically adapted chicken breeds for smallholder poultry production systems in Nigeria*.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC7314727/>