



KALRO INDIGENEOUS CHICKEN BREEDS



Introduction

KALRO has consistently improved indigenous chicken through an ongoing genetic improvement program for the last 25 years. The selection strategy for this breeding program focuses on improving flexibility, adaptability, uniformity, and hardiness across all production systems, to optimize health and productivity. This provides farmers with the potential to maximize profit and opportunities along the chicken value chain.

The breeding program focuses on selecting chicken with rapid growth, improved feather cover, and a calm temperament. Ongoing improvement efforts have enhanced the egg size, weight, and numbers, a vital factor in increasing profits for breeder farms by maximizing the output of hatching eggs and producing high-quality day-old chicks. It is noteworthy that KALRO chicken do not sit on eggs or exhibit broody behaviour under normal conditions.



KALRO indigenous chicken exhibit various feather colours, yet they possess similar crucial characteristics such as growth rate, feed consumption, behaviour, and egg production. These breeds are a convenient choice, offering significant advantages to our clients operating in diverse cultures, regions, and production systems as they provide various products to their customers. KALRO chicken creates opportunities for producers to capitalize on sales in niche markets, including organic and wet markets.


Economic benefits of KALRO indigenous chicken breeds

Since 2020, the poultry industry has experienced significant rises in the costs of feed, energy, transportation, and construction materials. During this period, there has been a growing trend in the demand for dual-purpose chicken and the associated advantages they bring. Additionally, a recurring theme has centered on food security, self-sufficiency, sustainability, and overall lowering of the cost of living.

These concerns have heightened the demand for KALRO Chicken, renowned for their dual-purpose traits, scavenging behaviour, and adaptability to extensive management systems. In response to the escalating feed costs, many alternative production systems are turning to homemade feed rations utilizing locally available resources. KALRO chicken stands out as an excellent choice for such systems, thanks to their well-established selection for feed adaptability.

The surge in energy costs has prompted a resurgence of low-impact, low-energy systems that leverage natural lighting for rearing and production.





KALRO Chicken has proven to be a successful and efficient low-tech alternative in this context. For producers targeting niche and premium markets, KALRO Chicken has demonstrated exceptional success in organic, free-range, live-bird markets, as well as high-end retail outlets.

Under political pressure from lobby groups aiming to eliminate the culling of male chicks, numerous hatcheries are turning to dual-purpose breeds that provide viable male chicks for meat production. The KALRO chicken stands out by offering a diverse range of feather colours and employing auto-sexing methods. With the expanding customer base, KALRO chicken breeds successfully sell 100% of the hatched chicks, thereby boosting profitability and negating the necessity for costly sexing infrastructure.

Types of KALRO indigeneous chicken breeds

KALRO chicken breeds are highly versatile, making them well-suited for both commercial and subsistence chicken farming. Their notable attributes include rapid growth rates, dual-purpose functionality, impressive laying performance, and favourable egg weight. These features present significant advantages for chicken breeders, producers, and consumers alike. The breeds are not only conducive to efficient commercial farming but also cater to the needs of subsistence farmers, offering a well-rounded solution for various poultry production goals. Moreover, these breeds exhibit the ability to forage for a portion of their food, resulting in a significant reduction in feeding expenses. The adaptability of these breed to a wide range of environmental conditions enhances their usefulness across diverse agro ecologies. Their ability to thrive in different settings not only contributes to cost-effectiveness but

also ensures sustainable and resilient chicken farming practices. This adaptability factor further underscores the suitability of these breeds for a variety of farming scenarios, making them a valuable choice for chicken enthusiasts seeking economic and environmentally friendly solutions.

1. KC1 Breed of chicken

These are black and white spotted chicken, often referred to as speckled or mottled chicken. Some potential advantages associated with KC1 include:

Aesthetic Appeal: Black and white speckled chickens are frequently chosen because of their visually attractive and unusual look. The distinct hue and patterns set them apart in a flock, adding to the overall aesthetics of a chicken farm.

Camouflage: In some environments, the black and white speckled pattern can provide a form of natural camouflage. This may be advantageous in certain settings where predators are present, as the chicken colours blends into the surroundings, offering some protection.

Hardiness: Exhibit traits of hardiness and adaptability. These birds can thrive in different climates and are often known for their resilience.

Dual-Purpose Breeds: KC1 is a dual-purpose bird. This means they are suitable for both meat and egg production, providing economic benefits to chicken producers.



Docility: The breed is known for their calm and friendly temperaments. This can make them easier to handle, particularly for backyard or small-scale chicken producers.

Auto-Sexing Traits: The breed exhibits auto-sexing characteristics, meaning you can distinguish between male and female chicks based on their feather colour or markings. This can be advantageous for hatcheries and poultry keepers who want to select specific genders for their flocks without relying on expensive sexing methods.



KCI chicken breed

2. KC2 Breed of chicken

KC2 chicken breed is unique and has a distinctive all-black appearance, which extends to their feathers, skin, and sometimes internal organs. Some potential advantages include:

Aesthetic Appeal: The most obvious advantage of black chicken is their striking and elegant appearance. The all-black plumage sets them apart from other poultry breeds, making them visually appealing and sought after for ornamental or exotic purposes.

Cultural and Superstitious Significance: In some cultures, black chicken is symbolic or even thought to have supernatural abilities. For example, black chicken is highly valued in the coastal region and relate to a variety of superstitions and religious beliefs.

Market Demand: Black chicken may be more popular in some countries or among specific client segments due to their distinct look and cultural importance. Certain individuals are ready to pay a premium for these uncommon and unusual breeds.

Show and Exhibition Opportunities: KC2 chicken breed can be popular choices for poultry shows and exhibitions. Breeders and enthusiasts often showcase these birds to demonstrate their adherence to breed standards or simply to highlight their unique features.

Adaptability: They are known for their adaptability to various climates. They can thrive in different environmental conditions, making them suitable for backyard or small-scale poultry keeping.



Insect Control: KC2 chicken are known for their insect-control abilities. They can help control pests and insects in the surrounding environment, contributing to a healthier ecosystem.

Resilience: The breed exhibit hardiness and resilience to diseases and environmental stressors. This can be an important factor for chicken keepers looking for breeds that require less intensive care.



KC2 chicken breed

3. KC3 Breed of chicken

The KC3 stands out as a distinctive chicken breed, showcasing an attractive plumage that appeals to both producers and consumers, particularly in live bird markets. Beyond its aesthetic appeal, this breed holds significant cultural importance and is frequently integrated into traditional ceremonies, rituals, and culinary practices.

Aesthetics: The visual appeal of brown spotted KC3 chicken patterns has become a significant factor driving consumer preferences, resulting in a notable surge in demand for chicken with this distinctive pattern, particularly in live bird markets. The inherent appeal of brown spotted patterns on the feathers of these chicken captures the attention of consumers, influencing their choices and contributing to the popularity of this breed.

Auto-Sexing Traits: The breed exhibits auto-sexing characteristics, making it easier to identify the gender of chicks based on their feather colours. This can be advantageous for breeders who want to selectively raise specific genders without resorting to expensive sexing methods.

Egg Market Differentiation: The eggs laid by KC3 breeds are characterized by a distinctive cream white shell colour. This deliberate selection of eggshell hue goes beyond a mere biological trait; it represents a calculated marketing strategy employed by producers to appeal to specific consumer segments, aligning their offerings with prevailing expectations and preferences.



Leg Colour: The chicken breed is distinguishable by its characteristic yellow leg coloration, a feature that holds significant sway in consumer perception. This distinctive trait is commonly associated with free-range or organic production systems. As consumers increasingly prioritize ethical and sustainable poultry practices, the yellow legs of KC3 chicken serve as a visual cue, suggesting a connection to more natural and humane farming environments.



KC3 chicken breed

Production characteristics of KALRO Improved chicken

- Egg numbers-250-280 per laying cycle
- Egg weight- 50-60 g
- First egg at 18 weeks
- Maturity for males- 16 weeks
- Uniformity in growth

KALRO Chicken performance characteristics

Growing period -18 weeks	
Body weight at 18 weeks-females	1.5-1.7 kg
Feed consumption per females	6.5-6.8 kg
Body weight -males	2.3-3.0 kg
Feed consumption per males	6.8-7.0 kg
Laying period up to 78 weeks	
Age at 50% lay	22-23 weeks
Number of eggs per hen	250-280 pcs
Average egg weight	50-60 g
Body weight at 78 week-female	2.2-2.3 kg

Recommended nutrient requirements

	Chicks 0-8 weeks	Growers 9-18 weeks	Layers 19-78 weeks
Crude protein %	18-19	15-16	15-17
ME Kcal/kg	2700	2600	2600
Minerals			
Calcium %	1.0-1.1	1.0-2.0	3.5-4.2
Phosphorus %	0.7	0.7	0.7
Amino Acids			
M+C %	0.7	0.6	0.6
Lysine %	1.0	0.9	0.75
Fibre			
Crude Fibre %	7.5	7.5	7.5

AVERAGE FEED CONSUMPTION AND BODY WEIGHT

Age in weeks	Average Feed Consumption		Optimum body weight in grams			
			MAXIMAL		MINIMAL	
	g/day	kg cum.	cocks	pullets	cocks	pullets
1	12	0.084	80	70	80	70
2	19	0.217	150	130	150	130
3	24	0.385	280	200	270	190
4	28	0.581	365	270	355	260
5	34	0.819	450	350	440	340
6	39	1.092	580	440	560	430
7	44	1.400	710	450	680	440
8	49	1.771	840	650	800	630
9	53	2.142	980	770	940	750
10	58	2.548	1.130	880	1.080	860
11	63	2.989	1.280	980	1.230	960
12	68	3.465	1.420	1.070	1.360	1.040
13	71	3.962	1.550	1.150	1.480	1.120
14	73	4.473	1.670	1.230	1.590	1.200
15	75	4.998	1.780	1.300	1.690	1.270
16	77	5.537	1.890	1.370	1.800	1.330
17	78	6.083	2.000	1.440	1.890	1.390
18	79	6.636	2.100	1.500	1.980	1.450

Summary:

KALRO chicken breed females demonstrate impressive egg production, yielding a varied mix of cream white, and dark brown eggs. With production figures ranging from 250 to 280 eggs per hen, a well-managed flock can achieve an average of 275 eggs at 74 weeks of production, provided optimal rearing and production conditions. These versatile hens, available as breeding stock, open unique opportunities for chicken breeders, egg producers, and hatcheries, allowing them to tap into new markets and increase profits.

The robust flexibility of all KALRO chicken breeds is noteworthy, making them adaptable to various farming methods, including organic, free-range, commercial, and industrial practices. Importantly, these breeds seamlessly integrate into existing poultry units without the need for specialized equipment or infrastructure modifications, making them an ideal choice for both new and established enterprises.



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