

Eggs – the uncracked potential to improve mother and child nutrition in rural Malawi

FAQs on local chicken for increased dietary diversity through egg consumption in the GIZ Food and Nutrition Security Programme (FNSP).

Why are animal source foods important for the diets of rural Malawians?


- Animal source foods (ASF) are highly nutritious, offering a rich source of essential micronutrients and proteins. They include meat, fish, eggs, and dairy products, which provide high-quality proteins with all essential amino acids, and are rich in vitamins such as B12, A, and D, as well as minerals like iron, zinc, and calcium. ASF also supply omega-3 fatty acids important for heart and brain health. Their comprehensive nutritional profile makes ASF vital for preventing deficiencies and supporting overall health, particularly in vulnerable populations.

Why is chicken the preferred livestock if you aim to improve nutrition and in particular dietary diversity?

- Chicken is small, reproduce quickly and people can benefit from their products without having to kill the animals themselves.
- Chicken is easier to manage than other livestock.
- Whereas bigger livestock are usually managed by men, chicken and in particular eggs are managed by women, giving them a certain right to determine what is to happen with the eggs.
- Eggs serve as nutritious animal source foods without having to kill the chicken.
- Whereas milk is also nutritious, it is either not consumed in Malawi and culturally not accepted if from goats or too valuable per unit to be affordable to most rural households if from cows, which makes eggs an affordable and accessible alternative.

- The bigger the animal, the more it is seen as a “living bank”. Livestock is an asset, and rural households usually sell an animal when they urgently need cash. Rarely are animals killed for consumption by the household. By promoting the rearing of small livestock at household level, access to animal-source foods can be improved. Chickens, as small animals are therefore rather used for nutrition than as an asset.

The Challenge and solution for increased egg consumption

- The chicken that can hatch from an egg is more valuable than the egg itself. Some people therefore consider it wasteful to consume “unhatched chicken”. In addition, many rural Malawians are convinced that consuming eggs will do them or their children harm. However, the main reason to perpetuate these myths is to protect the stock from reproducing. The aim is to keep the appetite for eggs small, especially among women and children who might otherwise consume all the eggs and leave none for hatching.
- It is however not reasonable to leave a large quantity of eggs to a hen for hatching as chickens with broad breast will only manage to successfully hatch up to 8 chicks while the small breast hatches up to 5 chicks. The other eggs that are left with the hen will go to waste and are lost for consumption.
- Households who were trained on these aspects quickly reduced their waste of eggs by now leaving only a few eggs for hatching and collecting all additional eggs for consumption. That way, both objectives are met: The chicken multiply, and additional eggs can be consumed.
- **Once the fear of losing out on reproduction,** most households are very happy to  the eggs of their chicken for consumption.

Why are local chickens, which have high mortality rates and are more prone to disease being promoted and distributed rather than goats, which are preferred, more disease-resistant, and have lower death rates?

- Compared to chickens, goats are a much more valuable asset, so it is not surprising most people would prefer to be given a goat for free rather than a few chickens.

- However, goats will have very little to no impact on dietary diversity and nutrition.
- Goats are roaming freely in villages for most of the year (they are sometimes tied up after maize has been planted). Goats are very effective in finding food and will eat pretty much any green leaf they come across. They are therefore one of the main reasons why people abandon the idea of maintaining backyard gardens as it is so difficult and requires a lot of effort to protect them from goats and consequently are less likely to have vegetables readily available.
- Goats are also a hindering factor for reforestation in Malawi since every tree seedling that is planted needs to be protected from goats with elaborate measures.
- High mortality rates and being prone to diseases can be averted if households follow proper livestock management practices such as proper feeds, clean water and proper housing.

Why are local chickens considered a better choice compared to hybrid chickens, despite hybrid chickens producing larger eggs?

- While chickens are comparably easy to manage, they still require care to stay healthy and be productive.
- Hybrid chickens are more delicate compared to local chicken and not suitable for those households who are not yet experienced in chicken management.
- Local chicken **adapts** better to a non-ideal environment in terms of housing, feed, disease, and parasite control. Local chickens are more widely accepted compared to hybrid chickens as they offer a big range of breed selection in terms of meat flavor, meat production, egg production and flavor as well as mothering ability.
- Most households are already keeping local chicken, the project is building on what is already existing.
- While some people involved in the activity were skeptical about local chicken, others embraced the idea and are now convinced about the approach as they have access to eggs and consume meat at least twice a month. We know that some of the field officers of our implementing partners have ventured into the production of local chicken themselves.

How many chicken – hens and cocks – does a household need to start its production?



*Figure 1:
FNISP distributes 3 hens and 1 cock informed
by the livestock study.*

- The Ministry of Agriculture recommends 1 cock and 10 hens per household. However, having a sudden high influx of chicken in a community can lead to scarcity of food as well as inadequate housing.
- Livestock can also do harm to humans, e.g. when small children get in contact with their feces. Fewer animals at the homestead make it easier for households to manage these risks.
- Seeing the quick reproduction of chicken and the available housing space most households will need not more than 3 hens to satisfy their immediate demand for eggs at household level.
- It is easier to start small and increase the number of chickens over time as household members increase their knowledge about chicken and improve their livestock management skills.
- One of the most critical management aspects of the local chicken is housing as this determines the multiplication and survival of the chickens. Ideal housing for the local chicken needs to have the following aspects: adequate ventilation, floor space, lighting, solid flooring to minimize parasites and diseases, and big enough for an adult person to be able to clean.