

National Agricultural Research Institute

Keeping Village Chickens: An introduction



Building climate resilient agricultural communities in Papua New Guinea



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Vitamins are mainly found in green leaves

It is very important to give chickens plenty of clean water because chickens eat well when water is available.

One hen can drink 1/4 liter of water a day. If you have 20 hens, you would need 5 litres of water a day or more if the weather is hot as the chickens will drink more. Put the water in drinking containers and place them in the shed near the feeding troughs so that chickens can eat and drink in comfort.

Never let the drinking containers get empty and water must always be clean. Always remember that energy feeds and protein feeds are not well used by the chickens unless minerals, vitamins and clean water are given at the samt time. Village chickens eating quality feed supplied by farmer



Protein feeds from animal sources include: Blood meal Fish meal Insects such as grasshoppers and termites Maggots and worms Meat meal

If you give chickens two kilograms of feed containing proteins, there should be 1.5 kilograms of plant proteins and 0.5 kilograms of animal proteins. Protein feeds make up at least 30% of the diet but you should not give chickens too much protein. It costs a lot more if you give too much.

Feeds that provide minerals and vitamins are also very important for chicken health.

Minerals are present in bone meals, snail shells, and eggshells.

Introduction

Village chickens range freely in the household compound and find much of their own food, getting supplementary amounts from the householder.

It is the smallest livestock investment a family in rural communities can afford.

Village poultry can be defined as a small flock of less than 100 birds, of unimproved or improved breed, raised in either extensive or intensive farming systems managed by individual farm families in order to obtain.

Food security High quality household food Employment for women and children Cultural satisfaction

However, village poultry production is very low because of: Poor feed and nutrition

Poor feed and nutrition Poor care and management Poor housing High levels of predation and stealing

The demand for poultry eggs and meat has created an opportunity to improve production.

Village poultry has the potential to satisfy at least part of this demand through increased productivity.

Improving village chicken production

Most of the time farmers do not pay much attention to ensuring that their chickens are well looked after.

Improvement to village chicken production can be made through having good breeding stock, good management and care of young chicks and adult chickens, proper housing, better health care and good quality food.

Good breeding stock and improved breeds

Most farmers keep either native village chickens or Australorp chickens. Others keep both of these breeds.

Native village chickens:

Are good free rangers—but since they are not kept in a house they can be eaten by predators (dogs, snakes and birds) or stolen

Are not given balanced food—they are left to find their own food which is not enough

Spend most of their time and energy finding food rather than laying eggs.

Good quality food and clean water

Like all other animals, chickens need high energy food to grow strong and healthy. Examples of energy feeds are:

Maize (Corn)

Coconut Banana Rice Sweet potato Cassava Sorghum

Energy feeds are the major part of diets for chickens. Energy feeds should be about 60% of the diet in order to provide enough energy for the chickens.

Another important component of a good quality food is protein. Proteins are needed for growing meat and producing eggs.

Chickens need proteins that come from animals and also proteins that come from plants. Protein feed from plant sources include:

Soybean meal

Leaf meal (bean legumes, legume trees, cassava leaves, etc)

Copra meal

Palm kernel meal

Rice bran

Grains such as sorghum and rice will also provide enough protein when fed to chickens while copra meal will also provide enough energy and protein for chickens.

Better health care

You can save many chickens from dying if you pay more attention to hygiene and cleanliness. Production can be improved when your chickens are healthy.

Better health care means having healthy chickens that can grow fast, have more meat and produce good numbers of eggs.

Poor health of village chickens can be due to poor quality foods and poor management such as no housing.

It is better to prevent chickens from having poor health that may cause high losses because of parasites and diseases.

Good health care also requires good supply of quality foods and a clean house with good ventilation.

Village chicken foraging for food



Australorp chickens:

Are dual purpose birds that have good egg and meat production

Can be raised in village conditions Can survive on local feeds and kitchen scraps Strong and healthy hen for breeding

Strong and healthy rooster for breed-



Dual purpose Australorp chickens



Raised night houses should be built under a shade and high enough for the chickens to fly up and roost in the night. This will protect them from predators like dogs, cats and snakes.

Raised night houses are more airy and provide the best conditions for hens to lay eggs.

Raised houses are best for farmers who have small flock sizes between 5 to 10 birds.

 \Box Low built house are built on the ground and should be spacious for the chickens to move about.

Space needs are shown below:

| Age (wks) | Floor space (birds/ m2) |
|-----------|----------------------------|
| 1 - 4 | 20 |
| 5 - 9 | 10 |
| 10 - 20 | 5 |

Night house should be roomy, clean and airy.

Interior of chicken night house



Housing may be either raised or low built on the ground. Or it may be fixed or moveable.



A typical raised night house for chickens under village conditions

A typical low nigh house for chickens under village conditions



You can use dual purpose birds like Australorp chickens and cross them with village chickens. Generally, the rooster of a good exotic breed is mated with a hen of a local breed to produce improved chicks.

Exotic breeds of chickens usually grow very fast, have more meat and produce many big eggs.

A local breed often grows slowly, has less meat and produce less numbers of smaller sized eggs. But they are resistant to humidity, heat, and even to certain diseases.

Through the mating of dual purpose birds like Australorps with local birds the production will improve in the offspring.

You can get more meat and earn more money by raising chickens of improved breeds than from a local breed of chickens.

You can obtain these chickens and maintain them too. To maintain good breeding stock, it is better to change your roster every two years or have a rooster distribution scheme in the village where farmers exchange their roosters. If you do not change your roosters this will result in inbreeding which can produce slow growth of chickens and less egg and meat production.

To have good breeding stock, chickens must be selected for desired characteristics and maintained. If you are selecting breeding stock, look for chickens with the following characteristics:

Chickens that are not too fat or too thin Chickens that lay plenty of big eggs Chickens that look strong and very healthy Chickens that eat well and gain good weight Chickens that are from other parents or from other farmers

Good quality Australorp rooster



Good quality village hen



Good care and properhousing

Good care and proper housing are very important aspects of successful chicken production in villages. Good care such as having a family member to look after them while they scavenge around the home, or housing them at nigh in a secure and protected shelter.

Good care and management of village chickens means less mortality of young baby chicks, more eggs laid and hatched, less disease problems and more meat and eggs for households.

Housing is very important to protect the chickens from extreme weather conditions such as during hot sun or heavy rain.

Housing must protect chickens from predators and thieves, especially at night.

Night houses for chickens can be built in villages using bush materials which does not require money.

Constructing chicken house with local materials

