CHICKENS IN AFR

Above and below: Chickens in Democratic Republic of Congo. Photos courtesy of Dr. Nassim Moula.

By Luuk Hans (NL)

My two elder daughters stayed in Africa, in all, for more than a year and a half in Mozambique, Sierra Leone, South Africa and Uganda. Although no poultry fanciers themselves, they know their way around chickens. They both took photos of poultry because they know I am a fanatic poultry breeder.

This opportunity has been an additional reason for me also to look into African chicken breeds. This article is a combination of my research - together with Elly Vogelaar, editor of Aviculture Europe - and the experiences of my two daughters. I realise that Africa is a big continent; according to DAGRIS Domestic Animal Genetic Resources Information System, there are 90 local chicken breeds! Of course we could not cover all breeds!



Indigenous poultry

Africa does not have many - if at all -'standardized' poultry breeds. Chickens, held in rural villages, have been here for ages and are adapted to the local environment and conditions. They are being kept and bred for traits such as hardiness, but are not standardized according to their 'looks'. Nevertheless, poultry farming is very important in most rural areas of Africa.

Now what exactly are indigenous chickens? Here in Africa, these are chickens that have been bred from local

species, originally from higher up the continent, and they spread downwards in the years before colonisation. The basic domestication of the chickens is centuries old, and as the local populations moved around the Sub-Saharan areas of the continent, so too did the chickens. The terminology used to describe these chickens is sometimes confusing, as they are referred to as 'indigenous', 'native', 'local' or 'traditional'. Although these terms all have their specific definition, they will be used arbitrary in this article.



The local chickens in Africa exhibited a wide phenotypic variability in plumage, shank, eye, earlobe, comb, skin, feather distribution and body size. They are hardy, often have a high degree of disease resistance, do not need much feed (in other words: excellent feed conversion rate) and have utility use (eggs and meat).

Left: Democratic Republic of Congo. Notice the small size of this local hen, compared to the chair. Photo: Dr. Nassim Moula.

On the other hand they take long to reach sexual maturity, have a small mature carcass weight and the hens

produce only few eggs per year; about 2-4 clutches, each of about 10 – 12 eggs. However, they hatch their own eggs and brood the chicks hence ensuring that the farmer has a continuous supply of replacement stock. Traits of local breeds include hardiness to inclement weather conditions, resistance to some local poultry diseases, and multi-purpose use in the free-range production system.

Fortunately we are starting to realize that these local chickens are valuable reservoirs of genes, and even though there is still little or no information on their genetic makeup, indigenous poultry needs to be maintained for the purpose of conserving the wide gene pool that these breeds represent.

The birds we see in villages are often a mixture of (hybrid) breeds. Obviously, the way they look is less important than their economic performance!

In spite of that: naked necked and frizzled poultry is popular, but not just for their looks; this is also a consequence of the weather conditions. Naked necks and frizzled poultry have less feathers and stand hot weather better than birds with normal feathers.

Right: Frizzled hen in Mozambique. Photo: Rosalie Hans.



Right: Naked Neck in Uganda. Photo: Marissa Hans.

There is a lack of information on the local breeds. What is known is that the rural poultry population in most African countries accounts for more than 60 percent of the total national poultry population; village poultry is more widely spread in rural Africa than any other livestock species.

Also known is that poultry plays an important role in rituals. In Uganda for example, local poultry are often used in ceremonies, rituals, sacrifices and gifts. Indeed, for most socialcultural and religious purposes, the required and colours of the chickens sex are prescribed. For example, in Buganda, a cock with spotless white plumage is used as an offer to Mukasa - god of waters. Eggs of local chickens play a major role in the Luo tradition and culture, where they can be used to cleanse or to complete a ritual, like eggs being used in the last funeral rites ceremonies.



In Uganda, again as an example, most of the birds end up being consumed, even the commercial egg type chicken. Eggs and meat of the local chickens are often the only source of animal protein for the resource-poor households. Chickens are also sold at the market to meet unforeseen expenses.

Below: Chickens for selling at the market, Congo. Photo: Dr. Nassim Moula.



The birds usually sold from the village flock are surplus males, pullets and nonproductive hens, large sized birds, old hens and even sick birds.

The market price for free range birds is usually stable due to traditional taste values. Local chicken meat is considered tastier and stronger flavoured than commercial broiler meat.



Left: Commercial breeding in Sierra Leone. Photo: Rosalie Hans. Right: Commercial breeding in Uganda. Photo: Marissa Hans.

On average, poultry farming is very important in Africa. In many African countries rural poultry accounts for a high percentage of the national production of poultry eggs and meat. Poultry keeping is mostly the women's job. Countries must have a certain level of prosperity to raise rare local breeds. Certainly in less developed countries there must be an economic reason in doing so. The driving force for the breeding of Game Fowl is not eggs or meat, but the money, which could and still can be made in the pit. In Africa there are three Game breeds: Reunion Game, Madagascar Naked Neck and Natal Game. In one of our coming issues we will publish more on South African Game Fowl.

Right: Rural chickens in South Africa. Photo: Marissa Hans.

Back to the rare, indigenous poultry breeds.

African breeds

The African poultry 'breeds' are hardly known in the West. Still there many are of them indigenous chickens or locally developed breeds - the more so since chicken meat is very popular in Africa. Often there is no distinct identification of the local chicken types; identification is made on the



basis of plumage structure (frizzle, naked neck) or plumage colour.

South Africa has three 'native chicken breeds' that are standardised: the Venda, Ovambo and the Potchefstroom Cuckoo.

The Potchefstroom Koekoek (Cuckoo)

is а South African chicken breed developed the 1960's in at the Potchefstroom Agricultural College, in the city of Potchefstroom, by Professor Chris Marais. The breed was intended as an excellent dual purpose, free ranging bird with excellent laying capabilities as well as a good meat production.

Pure Koekoeks have an exclusively blackand-white barred (= Koekoek/Cuckoo) appearance.

The Potchefstroom Koekoek is the only South African chicken breed that is briefly described in the Western Hemisphere (Germany). This breed is a cross between black Australorp, white Leghorn and barred Plymouth Rock. One could argue that most African breeds are crosses, but many breeds, in the Western Hemisphere as well, were created in the 20th century by crossing other breeds.





Potchefstroom chickens. Photos courtesy of Wickedfood Earth®

The chickens of 'the Potch' (as it is also called) are sex-linked. In other words: you can tell on day one the males from the females, judging by their colour.

These native chickens are well adapted to the South African climate. It is a hardy breed which produce will eggs consistently without consuming excessive amounts of feed. This makes it quite a popular breed especially when considering that it is a good table fowl too. The egg laying gualities of the Koekoek have led to its use in

small scale egg production. The Potchefstroom Koekoek looks a bit like a cuckoo Leghorn or Noord Holland Blue. The weight is 3.5 to 4 kg for the males and 2.5 to 3 kg for the females.

Potchefstroom is a city in the North West Province of South Africa. It is situated on the banks of the Mooirivier, roughly 120 km (75 mi) west-southwest of Johannesburg. In 2007 the local municipality was changed from Potchefstroom Municipality to Tlokwe Municipality. Tlokwe is also the name that is proposed to replace the town's name.



In 1979, a veterinarian, Dr Naas Coetzee, noticed a distinctive new breed in Venda, a region in the North of South Africa, and named it after the region. Similar poultry was later seen in the southern Cape and in Qua-Qua. Rosecombs and five-toed feet are not uncommon. In contrast to other indigenous breeds, the Venda is fairly large and lays



tinted eggs of a large size, on average. The

hens are broody easily and are very good mothers. Little is known about this breed which is presently being collected and evaluated.

Obviously they originated from a cross between the different varieties of domestic fowl traded and introduced during the interaction of early settlers and pioneers in the area and have adapted and evolved into the present form. Phenotypic characteristics like crests, beards and even a fifth toe still make an appearance amongst progeny, now and then, in testimony to their diverse genetic heritage. The breed is very popular with show breeders and subsistence farmers and is also being exported to Mozambique to augment the numbers of village chickens lost to floods and disease.

The **Ovambo** fowl originated in the northern part of Namibia and Ovamboland. Unlike the Venda chicken where white feathers occur, the Ovambo is dark coloured. It is also smaller in,



The Venda (Also known as: Lebowa-Venda) is a mottled bird - the basic colours of the Venda are similar to the indigenous cattle and goats, white namely black, and brown, with white and black as the predominant colours. It has a single comb and weighs roughly 3 kg (cock) and 2.5 kg (hen).

Left: A Venda cock. Photo: Marissa Hans.

Below: A Venda pullet at the Show. Photo courtesy of Poultry Club South Africa.





The Boschveld Chicken is a cross between three indigenous chicken breeds from Africa: the Venda, Matabele and Ovambo. They are known for their incredible colours and beautiful looks, as well as for being able to produce eggs thanks to a little bit of supplement feed added to

and it is these two differences which help to camouflage the bird and protect it from raptors. The Ovambo is very aggressive and agile. It has been known to catch and eat mice and young rats. [Although, my Barnevelder Fowl, when I had them, ate mice and young birds also.] This breed can fly and roosts in the top of trees to avoid predators. The Ovambo fowl comes in many colours, also due to the fact that they are crossbred with other poultry.

Left: Ovambo hens.

Below and former page: Ovambo rooster. Photos courtesy of Wickedfood Earth®



what they can forage outside. They are very hardy and – according to the people of Boschveld Eggs, they lay very tasty eggs with a yolk that reminds you of an African sunset.

Right: A Boschveld cock. Below: In the shade. Photos courtesy of Boschveld Eggs.







Note: Except for the statement that they are 'big and burley', we could not find anv information on the mentioned Matabele chicken, not even one picture. The Matabele (or Ndebele) people are from the province once called Eastern Transvaal (now Mpumalanga)so that would suggest that the chicken may have originated in eastern South Africa.



Above and right: Boschveld hens. Photos courtesy of Boschveld Eggs.

Naked Necks

There is also the Naked Neck (*Kaalnekke*), which is considered a local South African breed.

According to archaeologists, the Naked Neck breed originated in Malaysia from where it spread all over the world. It is therefore possible that the Dutch East India Company introduced Naked Necks in the 17th century. When Jan van Riebeeck arrived at the Cape, around the middle of the 17th century, the inhabitants already owned chickens. Very little is known about the different varieties that they bred. Records of Naked Neck chickens have been found in areas as far apart as Eastern Europe to Malaysia. The South African Naked Necks are thought to have originated in Malaysia and are now found mainly in the rural areas, around the huts of the local population. These chickens have a variety of colour patterns. There are two types of Naked Necks, one of which is purebred and has a completely naked neck and the other, which is not purebred, has a tassel on the front part of the neck.

Naked necked chickens are very popular in SA and also seen in many other African countries, e.g. Kenya, Uganda, Ethiopia, Cameroon and Burkina Faso (local name here is Cou nu, Joub-kole) sometimes they are also frizzled. Naked Necks are thermo-resistant and have resistance to some diseases.

All of breeds mentioned above have in common that they are adjusted to the African climate, can roam around and need only modest feeding. They also are reasonable layers and offer good meat.

Naked Neck poultry has 30% fewer feathers than fully feathered birds.

Chickens in other African countries

The native chicken breed of **Algeria** is called Kabyle. This breed was already described in Chasse et Pêche 1927. They come in various colours, only 4% naked



In **Ethiopia** there are five different local chicken breeds, Tilili, Horro, Chefe, Jarso and Tepi, from the five ecological regions. They can be distinguished by plumage colour: Gebsima doro (grayish); Netch doro (white); Tikur doro (black) and Kei doro (red).

Right: Tilili chickens. Below, right: Tepi chickens. Photos: Dagris.

Nigeria also has its native chickens: the Fulani chicken and Yoruba chicken. (Both named after an ethnic group of people spread over many African countries.) The Fulani chicken is one of the bestpreserved local chickens in Nigeria because of the cultural lifestyle of the Fulani-keepers. Compared to the Yoruba chicken, the Fulani is superior in bodyweight and fleshing.

The **Kenya** native chicken breed is called the Molo Mushunu; a naked neck type of chicken, perceived as a native breed, also recognized by the Slow Food Movement. They are reared by the Kikuyu community in the Turi region, Molo district. They necked.

Kabyle hen and rooster. Photos: Courtesy of Dr. Nassim Moula.















are large birds weighing about 3 to 4 kg. Their plumage colour varies from black, to white, red or blue. The eggs are small with a bright brown shell.

Ghana has three types of local chickens: naked neck, frizzle, and peacomb. They are known for their resistance to diseases.

Tanzania has eight local chicken breeds, named Ching'wekwe (very short and compact chickens), Mbeya (Originated from Itumba, Mbeya region), Morogoromedium (frizzled), N'zenzegere (frizzled), Singamagazi (originated from Shinyanga region), Pemba (small sized), Tanga and Unguja (small sized). The plumage is multicoloured and they have mixed comb types.

There is also a chicken named Kuchi, originating from Mwanza region, known to be heavier than other local types and to have developed a higher level of resistance to diseases.

The indigenous fowl in **Cameroon** include: The Dzaye with white feathers, the Dongwe with black feathers, the meat-type Tsabatha with mixed coloured feathers (grey, black and white) and a layer strain called Zarwa. Also a foot feathered chicken called Poule Brahman, weight max. 2 kg., different from the Brahma we know, although that has been imported there in the 60's.

In **Burkina Faso** two types of local chickens are described: the 'African

chicken' and the 'Kondé chicken'. The African chicken comes in 3 various types, probably no true 'breed', but merely phenotypic descriptions: the Fulani chicken, with white feathers resembling the Leghorn, the Djeligodji chicken, also called Dori chicken, with multicoloured feathers (grey, tawny or black) and the 'chicken of the centre' or 'grey chicken' which is the most widespread strain with local names in different languages (i.e. 'kolocissai' in Dioula language and 'no liguidi'

in Mooré language). The 'Kondé chicken' probably originated from Zabré and Tenkodogo in Burkina Faso, the Atacora region in Benin and the Tchaoudja in Togo. It is a squat bird (1.8 kg live weight) with robust legs, ash grey feathers, a well developed single comb and vividly orange-coloured eyes.

Left side of the page: All sorts of local Bas-Congo chickens. Photos courtesy of Dr. Nassim Moula.

The indigenous chickens of the **Democratic Republic** of Congo are small birds; weight varies from 1680 g to 720 g (males) and from 1380 to 620 g (females). They come in various colours, mainly normal feathered. Only few have a crest or feathered feet and only 6 % have a naked neck. Mostly the comb is a single comb, or seldom a peacomb. 5 to 10 % have comb and wattles pigmented with black. The leg colour varies, mainly white, also yellow or black, with only a few green or grey legged birds. Some local chicken have colourations typical of the Belgian breed Ardennes, result of the introduction of foreign strains (Belgian breeds) in the province of Bas-Congo in the past.

Left and below: More local chickens in Bas-Congo. Photos courtesy of Dr. Nassim Moula.





The local chicken of **Gambia** is a dual purpose chicken with variable characteristics, such as black skin, silky feathering, feathered shanks, crested heads. It is suggested that various show breeds and even Old English bantam game have contributed to their gene pool.

In **Burundi**, the indigenous chickens have a high variability from farm to farm and phenotypical differences are seen on the same farm. They differ in plumage colour and in size. The smallest chickens are called Sekaganda and

the biggest are called Imangubo or Injogori.

Mali has small native chickens but also two local 'breeds': the Wassa-Ché –

A layer type created from crossing the Rhode Island Red and the local chicken Koko-Ché, and a plump type of broiler called Semba- Ché.

Right: Broody with chickens in Uganda. Photo: Marissa Hans.

We have found only very little information on local chickens in the following countries; there ARE local chickens, but they are often just referred to as 'chicken' in the specific language of the country – also



the name 'Inkhukhu' (Swasiland) means 'chicken' and 'Beldi' (Morocco) means 'native'.

Botswana: the Tswana, indigenous chicken.

Chad: the Djided Baladi (peacomb) and the Karmout (crested).

Guinea: Local chickens, their name is based on the feather colour.

Lesotho: the Basotho (peacomb - Resistance to internal parasites).

Mauritania: Most of the local chickens are the result of many years of crossing with exotic breeds and arbitrary selection within the flock.

Morocco: the Moroccan Beldi, characterized by a wide genetic variability.

Niger: A native breed called Kolonto, from the West of Niger. It is a large chicken that comes in various plumage colours.

Rwanda: Rwandese local chicken.

Senegal: Small indigenous chickens in various colours, some naked neck, frizzle or foot feathered.

Sudan: the Large Sudanese Baladi.

Swaziland: the Inkhukhu (naked neck).

Togo: Many local chickens are crossbreds, also naked necks and frizzles.

Uganda: the Ugandan indigenous chicken.



Above: Local chickens in Bas-Congo. Photos courtesy of Dr. Nassim Moula.

Egypt

Better known are the chickens from Egypt; they have been 'in the picture' in Aviculture Europe before. They are small, but active birds, domesticated since many centuries and are mostly kept as egg-layers. These breeds are also known for their excellent resistance to diseases.

The **Fayoumi** is known worldwide (also in the USA) and is exported to many African and Asian countries, where it is used in rural poultry production systems. It is thought to be a very old breed, existing before the Roman times, and bred for egg production. It is also known as *Biggawi* or *Ramadi*.

They are hardy, very precocious, early maturing, also having excellent flying abilities; their wild nature makes them hard to catch and they scream when captured. The colour and marking are comparable to those of the Campine or Frisian Fowl, thus technically a pencilled breed - not barred - coming in gold or silver. The Fayoumi breed is well adapted to the African rural poultry system and climate. The egg has unique features; it is low in cholesterol, and has a very strong eggshell. It is a medium-size breed; a cock weighs about 2 kg; a hen about 1,6 kg. (See also our former article in the December issue of 2011)

Below: Fayoumi cock. Photo: B. Driessen. Right: Fayoumi cock with two hens. Photo: T. Goossen.



Another standardized Egyptian breed is the **Dandarawi**. We have paid attention to this breed before too; see the April issue of 2010, the article on Buttercup Breeds. Dandarawis are standardized with a single comb as well as with a buttercup comb. This poultry is found in Upper Egypt.



The males are black with white hackle and saddle and some white on the body and wings. Females are wheaten-looking, reddish-brown, or grey, with a small, backward facing crest (mostly). They have a doublebladed single comb. Males weigh 1.3-1.5 kg and females 1.1-1.2 kg. Even though they weigh less than the Fayoumi, they are still used as table chickens as well.

They are quite resistant to diseases and can take heat stress up to 40° C.

The Dandarawi is an autosexing breed. The female chicks have a dark spot on the head.

Left: Dandarawi cock. Photos: Avicultura Archives. Right: Dandarawi hen. Photo: Avicultura Archives.

Other Egyptian chicken breeds:

Baladi Beheri: They originated in the northern region and the Delta of Egypt. This breed is reported to be resistant to leucosis and intestinal spirochetosis.

Sina: They are thought to be the result of natural crossing between unknown native chickens and some foreign breeds since earlier time. A fertility of more than 95% is reported for these birds.



In conclusion

African breeds are barely known in the West; only some Egyptian breeds are known and are kept by a few breeders. Most African breeds are unknown and have never been seen in other continents. That has also to do with the way poultry is kept in Africa; mostly in rural areas, for economic purposes: eggs, meat and resistance to diseases. The chickens are predominantly owned by women and children, and women and children are also the ones who take care of them and "manage" the small flocks. In the whole African continent local chickens are often descended from disorderly crossings of local and exotic strains. There is no systematic breeding system. The concept of 'breed' is therefore not correct. Although, after more than five decades of introducing 'exotic' genes, the presence of local chickens in most countries is striking. Currently an interest which consists on considering local chicken as historical and cultural patrimony to be preserved, is more and more noted in several countries. It would be good to learn more about these local African breeds, so we welcome further information and photos.

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Photo: Boschveld Eggs.

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