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## Poultry production by the Kmhmu' <sup>1</sup>

### Raising chickens

Raising chickens and ducks is something the Kmhmu' have always done, ever since people can remember. Raising chickens, however, has been more important than raising ducks. This is mostly because the Kmhmu' live in the higher mountains where big rivers are few. Therefore, raising ducks that like to find their food in and around water is not so easy. Furthermore, we think that ducks eat a lot but don't know how to look for food as easily as chickens do.

We Kmhmu' usually raise only a few varieties of chickens: the country chickens (*h'iar laat*), and the Lao chickens (*h'iar Laav*). These smaller-size birds have very tasty and aromatic meat.

Both these domestic animals play an important role in the social life of the Kmhmu'. They are not raised just to have something to eat. They also have their function in customs and rituals, and serve as sacrificial animals to feed the spirits of the living (*hmmaal*) and the dead (*hrôôy*). Furthermore, they can be used in exchange for money or other goods. We raise them ... to kill them for a big meal at times when we need the community members' help for a big work-project, or in the construction of a house.

### How the Kmhmu' raise chickens

The Kmhmu' normally make a chicken coop (*hlôk h'iar*) and raise their chickens in the village, or at the fields where a few field-houses are clustered together.

We like to put the chicken coop under the house, or sometimes at the side of the house. One used to say: 'Attach' the chicken coop. If we put the chicken coop too far from the house, we are afraid people might steal the chickens, or a civet might attack and kill them. Each household has its own, separate chicken coop. The number of chickens raised varies from family to family, some raise many and some raise only a few.

At night the adult and young chickens are put together, while the small chickens and chicks are put in a tubular or round chicken-basket with a lid. In this way the bigger birds won't trample the chicks. In the morning we let the chickens out, take some rice or broken rice and strew it for them to peck. When we are going to feed (*pk-tôk*) the chickens, we first take a broom and sweep an area on the ground clean and only then do we let the chickens out and throw out the chicken feed of rice and broken rice for them to eat. Most people only feed the chickens in the morning. However, if they are industrious (*jo*) people, they will feed them again in the evening. If they are lazy (*graan*), they won't.

Usually it's the mother of a household that looks after the chickens. When she goes to feed them she will see which hen is about to start laying eggs. She holds the hen and feels (*hmwap*) to see if there is an egg soon to come. If she can feel an egg, she puts the hen on the nest and covers it, so the hen will get used to laying eggs in a nest. If we don't train the hen like that it doesn't know where it is supposed to lay its eggs and it may go to someone else's nests and lay there.

. The Kmhmu' are a very numerous Mon Khmer ethnic group of Northern Laos in Southeast Asia.

## Poultry production by the Kmhmu' Continued

The nest for the hens to lay their eggs in is often placed on top of the chicken coop or else somewhere above floor-level on one side of the house. It is most important that the nest be in an elevated place, where neither dogs nor cats will be able to climb up and eat the eggs.

If the nest is attached in this way, away from the heat of the sun and from the rain, the eggs will not be rotten or infertile and thus unable to hatch. When the hen has laid (*kdông*), one feeds it well so that it will lay many more eggs. Usually when a chicken has lain between ten and twenty eggs, it will want to sit on them and brood (*gom kdông*) them.

After the hen has been sitting on the eggs for over ten days, we lift the brooding hen away from her nest to examine the eggs. We take each one of them and shake them a little to see if there is a gurgling sound. If this is the case the egg won't hatch because it is not fertilized and so has become foul. Such eggs we separate out, and keep only the ones that have no defect. When the hen has been sitting on her eggs around twenty to twenty-two days the eggs will crack and the chicks hatch. Close to the time of hatching, the chicks start making little chirping noises inside the eggs and the mother will cluck softly. About two days after hatching we take the mother-hen and her chicks and put them inside a tubular chicken-basket. We feed them separately until they are grown enough to be put together with the adult chickens in the chicken coop.

### How best to raise chickens

Nowadays, there are many varieties [sic] of chickens all over the world and also many ways to raise them. If we want to raise chickens well, we have to change from old ways and study new ways.

First of all, we should raise several types of chickens, such as free-range chicken (*h'iar laat*), battery-meat-chicken (*h'iar phan*), laying hens (*h'iar kdông*), and also chickens for meat consumption. The only problem is that for the villagers in the mountains, the raising of battery-chickens is difficult because these chickens need to have a light on and eat special chicken feed. It is really best if the villagers raise the free-range chickens, but there are new breeds one could also raise.



**Chicken nest in  
Xieng Khuang  
Province,  
Northern Lao  
PDR. (Photo:  
Robyn Alders)**

One should choose a robust variety [sic] that doesn't catch diseases easily. Furthermore, one should keep them in spacious, well elevated chicken coops that are built at a little distance from the family house. One should feed the chickens enough so that they don't go hungry. It is also good to vaccinate them once or twice a year. And finally, chickens should be protected from the claws of eagles, and one should watch that civets can't get at them.

If we raise many chickens we also have food to eat ourselves. We Kmhmu' do like to both raise chickens and eat chicken meat.

#### Extract from:

*'Kmhmu' livelihood: Farming the forest'* by Suksavang Simana, Institute for Cultural Research, Ministry of Information and Culture, Lao PDR. 2003. Translated by Elisabeth Preisig.

#### Acknowledgement:

Thanks to Dr Leena Kirjavainen (FAO Representative to Lao PDR) for bringing this excellent book to our attention.

### International Network for Family Poultry Development

The INFPD is a Global Working Group of the World's Poultry Science Association (WPSA, [www.wpsa.com](http://www.wpsa.com))

Visit the INFPD website:

[www.fao.org/ag/againfo/subjects/en/infpd/home.html](http://www.fao.org/ag/againfo/subjects/en/infpd/home.html)

Articles for publication in our rural poultry e-Newsletter can be sent to:  
[ruralpoultry@kyeemafoundation.org](mailto:ruralpoultry@kyeemafoundation.org)

Visit our website: [www.kyeemafoundation.org](http://www.kyeemafoundation.org)

## A glimpse of rural chicken production in Ethiopia

Agriculture is the mainstay of the Ethiopian economy employing about 85% of the total population, contributing about 45% to GDP, 90% of export earnings and 70% of the raw materials used by the agro-industrial sector. Smallholder farmers generate more than 95% of the overall national agricultural output.

The production of indigenous chickens has been a feature of Ethiopian life for centuries. It is characterized by a low input, low output system that is very cost efficient. Ninety five per cent of the approximately 43 million poultry is reported to involve indigenous chickens raised in rural areas. Consumer preference is overwhelming for indigenous chickens and eggs. Traders tend to specialise in either live birds or eggs. In Addis Ababa it is also possible to buy frozen indigenous chickens in supermarkets.

**The farmer who eats his chickens as well as all their eggs will have a bleak future.**  
*Tigrayan proverb*

**Figure 2:** Mrs Hawa received 50 White Leg Horn day old chicks in the past. She managed to raise 37 birds to full size and decided to sell them all as they needed more feed than was available. Mrs Hawa currently raises indigenous birds (one hen and two cocks). She plans to sell one cock when it reaches a good weight. Three pullets were killed by cars recently. She keeps her birds in a basket inside the family home overnight.



**Figure 1:** Mrs Abebu Ali raises chickens and sells eggs in Dessie. She has three Rhode Island Red (RIR) hens, three indigenous hens and one RIR cockerel. Mrs Abebu says that the RIR hens lay well when they are able to eat well but they do not go broody. Mrs Ali uses the local hens to hatch new chicks. This combination of RIR and indigenous hens is ideal for peri-urban settings.



**Figure 3:** Dessie City has a number of egg traders. These traders buy eggs from farmers, package them in homemade crates and transport them to Addis Ababa for sale. The eggs are packed using straw but, despite this precaution, some eggs are broken in transit.

## A glimpse of rural chicken production in Ethiopia – *Continued*

Newcastle disease (ND), called *Fengil* in Ethiopia, is reported to be the most important cause of economic loss in poultry production. The recent false alarm about an avian flu outbreak also caused huge economic loss to the producers of both commercial and indigenous birds.



**Figure 4:** A good example of niche marketing was found in the Dessie Monday Market. This poultry trader had bought white chickens from farmers to resell at the market. In May, many people in the area perform a traditional ceremony that involves circling a white bird around their head and then slaughtering it. It is believed that this practice will pass illness and bad luck to the bird so that the people will have a good year ahead. (This same trader lost approximately ETB 4,000 around Easter time because of people refusing to eat chickens because of the avian flu scare. He also said that many farmers killed their '*ferengi*' birds [i.e. the RIR birds] because they were scared that they carried avian flu. The sale of birds was improving but the price remains lower than before the avian flu scare.)

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### **Acknowledgements:**

Many thanks go to my colleague, Ato Medhin, for facilitating my visit to Ethiopia. His insights into the local situation and assistance with translation were much appreciated. This work forms part of the report on the Poultry Component of the Ethiopian Livestock Master Plan Study currently being implemented by GRM International in cooperation with the Livestock and Fisheries Resource Department, Ministry of Agriculture and Rural Development, Ethiopia.

**Don't talk about Newcastle disease in front of the chicken.**  
*Ethiopian proverb*

## 'Modelling the impact of interventions in village poultry systems.'

A collaborative study between Mekelle University College and Wageningen University developed a model for *ex ante* evaluation of interventions in village poultry systems. The dynamic deterministic computer model considered mortality, egg production, reproduction, off take and their interrelationships. The model was used to explore how Newcastle disease (ND) vaccination, daytime housing, supplementary feeding and control of broodiness influence village poultry dynamics. Over a simulated period of three years, crossbreeding had a highly negative effect on bird off take, egg production, egg off take and flock size. The other four interventions increased the output from the simulated flock. Cost-benefit calculations for the Tigray region in Ethiopia indicated that ND vaccinations were economically most effective

*Udo, J.M.J., Asgedom, A.H. and Viets, T.C. 2001. Modelling the impact of interventions in village poultry systems. Paper presented at the 10<sup>th</sup> International Conference of the Association of Institutions for Tropical Veterinary Medicine. 20-23 August 2001, Copenhagen*

## Excerpt from 'Indigenous chickens in Ethiopia: genetic potential and attempts at improvement.'

The village poultry population can be pictured as a pool of genes under pressure from many directions, principally disease, predation, lack of food [sic] and drinking water of high quality, and poor housing. What therefore happens when a few 'high egg number' genes are introduced into the pool? Their negative correlation with low broodiness will ensure their rejection when they try to multiply and establish themselves.

Even before this happens, the association of high egg numbers with a lack of alertness to predators, poor colour camouflage, and short legs which compromise the ability to run fast will, in all likelihood, cause their presence in the gene pool to be reduced quickly. It should not be assumed that village farmers do not understand the concept that the genotypes developed for commercial poultry production lay many eggs but have poor 'mothering' traits. This results from the well known negative genetic correlation between egg number and broodiness.

### Excerpt from 'Indigenous chickens in Ethiopia: genetic potential and attempts at improvement.' – Continued

Farmers quickly realize that these foreign 'laying machines' are not able to look after themselves very effectively, but will produce many eggs if they are fed and cared for properly. Farmers are usually only too aware of the risks involved in losing, from their hens, the abilities to mother (brood) and survive in order to produce more eggs. Thus it can be cogently argued that concerns about losing local genetic attributes have some justification.

Research and development on poultry in Ethiopia started in the early 1950s with the establishment of higher learning agricultural institutes. The activities of these institutions mainly focused on the introduction of exotic breeds into the country and the distribution of these genotypes to farmers, with recommendations on the appropriate feeding, housing, health care and other husbandry practices to be followed. This was expected to have a considerable positive influence on the expansion of large scale commercial poultry farms in the country. However, after 40 years of effort the contribution of exotic birds to the production of eggs and meat is less than 2%. A number of factors are responsible for this very low rate of adoption. Firstly, it needs to be more widely recognized that poultry, particularly exotic birds, are food converters, rather than food producers. The foodstuffs used in the diets of 'commercial' chickens are often of qualities that could be fed directly to humans. Thus, in grain-deficient countries such as Ethiopia, the adoption and development of a westernized intensive poultry industry will be frustrated by severe shortages of grain. Unless grain production can be improved substantially, such systems will never be economically sustainable or be considered socially acceptable by the local population. Secondly, any poultry production system which relies on semi-scavenging maximizes the utilization of resources that cannot otherwise be used for human consumption and this benefits the whole population.

From past experience it seems that there is more than breed manipulation to improving rural poultry production; equal attention should be paid to the many other husbandry practices that affect productivity.

Tadelle, D., Alemu, Y. and Peters, K.J. 2000. *Indigenous chickens in Ethiopia: genetic potential and attempts at improvement.* *World's Poultry Science Journal* 56:45-54

### Doro Wat

This is a traditional Ethiopian stew made using a village chicken.



*Doro Wat* is traditionally served with *injera* which is a spongy, sour flatbread used to scoop up meat and vegetable stews. *Injera* also lines the tray on which the stews are served, soaking up their juices as the meal progresses. *Injera* is made with *teff*, a tiny, round grain that flourishes in the highlands of Ethiopia.

1 whole village chicken, skinned and cut into parts  
 6 cups red onions, chopped  
 1 cup berbere (recipe below)  
 2 cups spiced butter (recipe page 6)  
 1/4 tsp. cardamom  
 1/4 tsp. black pepper  
 1/4 tsp. garlic powder  
 1/2 tsp ground ginger  
 salt to taste  
 1/2 cup red wine  
 4 cups water (add more if necessary)  
 6 hard boiled eggs  
 1 medium lime

- Soak the chicken in a bowl with the lime cut into quarters.
- Brown the onions in a pan without grease.
- Add spiced butter (see below).
- Add red pepper and mix well.
- Add 1/2 cup water and stir.
- Add wine.
- Add all spices and blend well.
- Add village chicken and cook for about 2 to 3 hours (cook for 30 to 40 minutes if using a broiler chicken). Add more water and stir gently.
- Add salt and stir.
- When the sauce begins to thicken sprinkle with black pepper.
- Add hard-boiled eggs to the sauce.

## Ethiopian Berbere

**Berberé is a hot pepper seasoning essential for most Ethiopian dishes.**

**Makes 1 cup.**

2 tsp cumin seeds  
4 whole cloves  
6 cardamon pods  
1/2 tsp. whole black pepper  
1/4 tsp. whole allspice  
1 tsp. whole fenugreek seeds  
1/2 cup dried shallots  
3 oz. long red dried chillies  
3-6 small, dried hot chilli peppers  
1/2 tsp. ground ginger  
1/4 tsp. turmeric  
2 tsp. salt

- In a small frying pan, combine cumin seeds, cloves, cardamon pods, black pepper, allspice and fenugreek.
- Cook for about 1 minute over medium heat, until lightly toasted.
- Put mixture in a blender (or pass through a sieve) and add shallots.
- Grind finely.
- Discard the stems and seeds from the chillies.
- Break up the pods and process until ground.
- Combine with the toasted mixture and the rest of the spices.

### Spiced butter

Most Ethiopian dishes in Exotic Ethiopian Cooking call for spiced ghee.

1 kg butter  
1 piece of ginger, chopped  
2 cloves of garlic, chopped  
2 slices of onion, chopped  
1/2 tsp fenugreek seeds  
1/3 tsp white cumin  
1/2 tsp cardamon seeds  
1/2 tsp oregano  
a dash of turmeric

- Mix the chopped ginger, garlic and onion.
- Melt all the butter in a pot over low heat. Skim the foam of the top of the butter as it melts, until it's pretty much clarified.
- Add onion mixture and spices, stirring gently for about 15 minutes. Remove from the heat and let stand until the spices settle.
- Strain and use as needed

## A colony cage for family poultry

### Introduction

Smallholder poultry are reared under conditions that expose them to the incursion of diseases including avian influenza, Newcastle disease and infectious bursal disease. The current outbreak of highly pathogenic H5N1 avian influenza throughout Asia, Europe and Africa is a particularly serious case. It can spread into and between smallholder chickens. They are exposed to direct infection from infected wild birds or poultry and indirectly from contaminated drinking water, equipment or poultry products (meat, eggs and manure). They also commonly suffer from poor nutrition, disease, and predation and are exposed to climatic hazards.

The implications of H5N1 for smallholder poultry farmers and the details of possible improvements in smallholder chicken husbandry have been prepared (Gilchrist 2005a, 2005b).

If HPAI strikes, authorities will apply a policy of standstill, slaughter, disposal, clean up and restocking – with or without compensation. The official methods of control of H5N1 avian influenza are based on accepted principles of disease control including preventive measures and eradication procedures (AAHC 2005). The current outbreak of this virus has led to the development of special worldwide approaches to control, as specified in two FAO documents (FAO 2005, FAO 2006). This policy will apply to poultry in high biosecurity commercial farms as well as smallholder scavenging operations.

An outbreak of avian influenza in a geographical area may vary in extent and rapidity of spread or in severity of symptoms, but advance planning must cater for a worst case scenario. An initial, limited outbreak may respond to a classical standstill and slaughter approach. However, once any significant spread occurs it may become necessary to rely on active cooperation of the owners.

### FeathersCanada.Org

A new Association is being formed to protect the rights of the small scale poultry enthusiast. Hoping to contribute to the preservation of rare breeds and also traditional rearing methods.

Feathers Canada will be a registered society and will initiate a membership and fund-raising drive.

Any help, advice and guidance is welcome. If interested in this initiative and would like to learn more, please contact:  
Wayne Osborne, [bcbreeder@lycos.com](mailto:bcbreeder@lycos.com)

## A colony cage for family poultry - *continued*

While there are many species of poultry used in smallholder production, this example is based on laying hens as these chickens are the most common species involved and they are more suited to the husbandry improvements proposed. As well, the proposed husbandry improvements offer the most direct means to improve income following depopulation.

Full paper of this extract can be obtained from the author:

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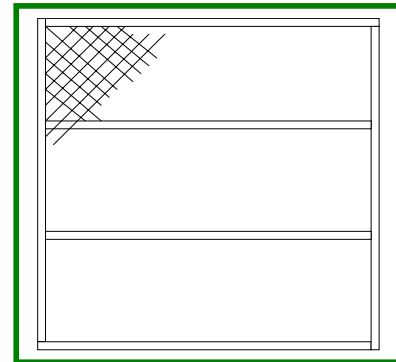
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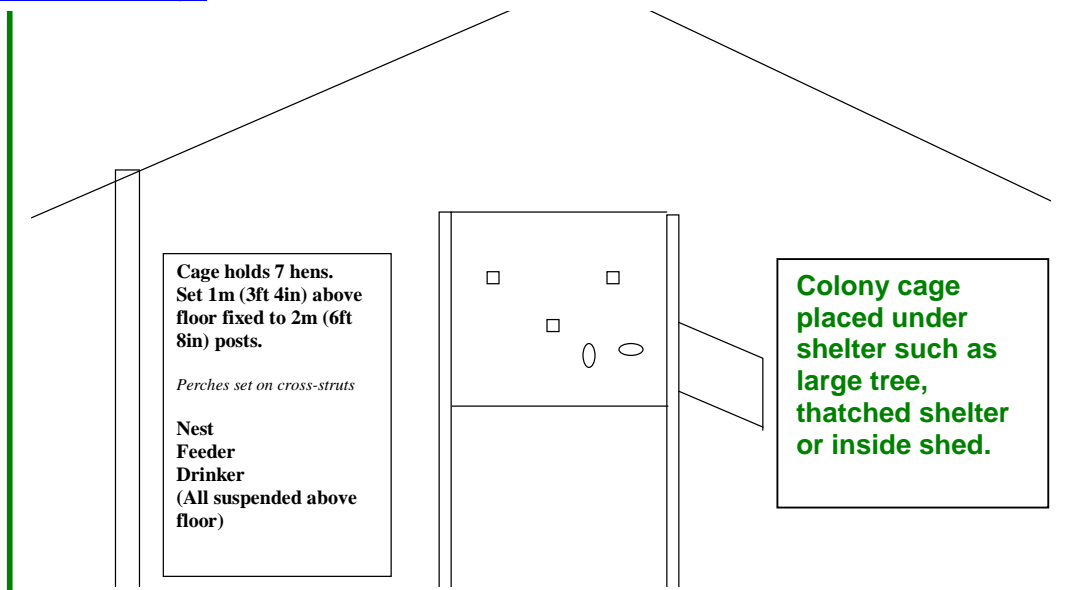
Gilchrist, P. (2005a). Husbandry improvements and a training program for Smallholder Chicken producers. (In Press). Proceedings AusAID Southern Africa Newcastle Disease Control Project in collaboration with the FAO, Dar es Salaam, Tanzania. 5-7 October 2005 (Pre-print available from the author at [warraba@nobbys.net.au](mailto:warraba@nobbys.net.au))

Gilchrist, P. (2005b). Avian influenza in smallholder chicken flocks. (In Press). Proceedings AusAID Southern Africa Newcastle Disease Control Project in collaboration with the FAO, Dar es Salaam, Tanzania. 5-7 October 2005. Download available at Kyeema Foundation website -

[http://www.kyeemafoundation.org/rural\\_poultry/content/publications/AvianInfluenza\\_Gilchrist-HPAI\\_Oct2005.pdf](http://www.kyeemafoundation.org/rural_poultry/content/publications/AvianInfluenza_Gilchrist-HPAI_Oct2005.pdf)



- The roof, floor and 4 sides are made from six panels, each 1m (3ft, 4in) square.
- 12mm (0.5in) mesh covering each panel.
- Wire on inside of cage for floor.
- Wire on outside for sides and roof.
- Two cross-struts on each panel.
- One panel to have a door inserted in lower 1/3 of panel.
- Top covered to prevent wild bird's droppings from entering.
- West side shaded from setting sun.



**Association of Institutions for Tropical Veterinary Medicine  
AITVM 12<sup>th</sup> International Conference  
August 20 – 23, 2007**

The Conference Organizing Committee cordially invites participants to present papers, to sponsor events or to be involved in the activities of the 12th International Conference of the Association of Institutions for tropical Veterinary Medicine (AITVM) which

**will be held in Montpellier (France)  
from August 20<sup>th</sup> to 23<sup>rd</sup>, 2007**

The objectives of the conference are:

- To share and exchange knowledge and experiences in various aspects of tropical animal health and production.
- To provide a forum for exchange and dissemination of information in the various fields of veterinary science and related professions and to formulate recommendations.
- To establish and strengthen relationships in professional development, education and research through networking and collaboration of members and participants.

Conference participants will include veterinarians, animal scientists, private practitioners, academics, food technologists, agronomists, policy makers, government regulators, livestock producers, students and others from various veterinary-related professions from all parts of the world. The theme of the conference will be :

**"Does control of animal infectious risks offer a new international perspective?"**

The scientific programme will focus in particular on:

- Risk analysis
- New vaccine and consequences of vaccination
- Adoption of food safety standards
- Aquaculture in the South
- Education and continuous professional development
- Veterinary Services under a globalised scenario

Free communications on Veterinary Medicine, Animal nutrition, Wildlife diseases and Management are welcome.

The organizing committee invites participants to present oral papers and/or posters in the abovementioned areas.

Deadline for the Abstracts:	November 1 <sup>st</sup> 2006
Deadline for the Full paper:	May 1 <sup>st</sup> 2007

Abstract and paper prescription, conference registration, hotel arrangements and all the other information are available on:

<http://aitvm2007.cirad.fr>

For further information on the Conference, please contact :

**12th AITVM Conference Secretariat**  
(Attn : Denise BASTRON)  
**CIRAD-Emvt - TA30/B**  
**34398 Montpellier cedex 5 - France**  
**Tel: 33 467 593 904**  
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### Chicken restocking activities in Sussundenga, Manica Province, Mozambique

The restocking of chickens to child-headed and female-headed households in Sussundenga recommenced in April of this year. The folk at Kubatsirana decided to delay the distribution until after the latest Newcastle disease (ND) vaccination campaign to minimise the risk of an ND outbreak during the distribution process. Improved poultry husbandry and ND control activities are implemented by the International Rural Poultry Centre (IRPC) in collaboration with Kubatsirana and the Provincial Livestock Services with funding from FAO.

With the funds remaining from the initial transfer, 15 child-headed families benefited from the distribution of one rooster and three hens per family in April.

A previous article on chicken restocking in association with HIV/AIDS mitigation activities can be read in page 5 of our 8<sup>th</sup> eNewsletter published in April 2006

### Chicken restocking activities in Dondo, Sofala Province, Mozambique

Chicken restocking has been underway in Dondo for almost a year now and so it was time to do a preliminary assessment of the activity. A survey of chicken numbers in all families that have benefited from the distribution was done to determine how many households had managed to keep raising chickens (Table 1).

### Chicken restocking activities in Dondo, Sofala Province, Mozambique - *continued*

The outcome of the survey is encouraging as, despite the severe drought suffered by Mozambique in 2005, the majority of families have managed to continue to raise some poultry. It is well-known that village chickens are an important source of petty cash for families and are a key element of drought mitigation strategies in rural areas.

The distribution of chickens to new families continues. Most of the distributed chickens have been purchased with funds provided by individual donors in Australia and Dubai, however, in addition, two families that received chickens last year have returned birds for distribution to other families. Its great to see the activity being taken seriously by the community. The Municipal Council is also very pleased with the restocking program and has encouraged ASVIMO to expand the program to areas beyond the peri-urban areas of Dondo.

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**Table 1:** Summary of chicken restocking in Dondo, Sofala Province, as of April 2006.

Suburb	No. of female-headed HHs (i.e. widows)	No. of grandparent-headed HHs	No. of child-headed HHs	Total No. of HHs	Total No. of children	No. of roosters	No. of hens	No. of chicks	Percentage of HHs raising chickens as of April '06
Consito	17	7	1	25	99	19	33	59	64%
Macharote	13	5	0	18	66	13	118	14	63%
Nhamaiabwe	5	6	2	13	41	10	14	30	62%
Mandruze	4	6	0	10	41	7	7	9	60%
Mafarinha	10	1	0	11	39	5	6	0	55%
Nhamainga	14	2	2	18	68	13	18	14	67%
Samora Machel	0	2	1	3	10	2	3	13	33%*
<b>Total</b>	<b>63</b>	<b>29</b>	<b>6</b>	<b>98</b>	<b>364</b>	<b>69</b>	<b>199</b>	<b>139</b>	<b>58%</b>

HH = households

\*The family raising chickens is the child-headed household of Lourenço José Jorge that was mentioned in our 8<sup>th</sup> eNewsletter.

**During my visit to ASVIMO in Dondo in May 2006, I visited some families who had benefited from the restocking program:**



**Senhora Albertina Valentim:** She received four chickens and now has a total of eight. She is pleased with the project and likes the idea of returning some chickens to ASVIMO so that other families can benefit.



**Senhora Isabel Gaspar:** She received one rooster and three hens in 2005. As of May 2006, she had one rooster, one hen and nine chicks. Two of her hens disappeared in 2005 and hawks have stolen some of her chicks. Her poultry sleep in one room of the family house at night – a frequent practice where the theft of birds is commonplace



**Senhora Fania Lampião:** After starting with four chickens last year, Senhora Fania now has six adult birds and one of her hens is sitting on 11 eggs. On advice from the project, she has built a special cage using branches from a thorn bush to try and protect her chicks after losing too many to hawks.



**Senhora Lavonece Vovo:** She is a grandmother who has always raised chickens. She lost her previous chickens during an outbreak of Newcastle disease. According to Senhora Lavonece, she is eagerly waiting for her new hens (received in March 2006) to hatch some chicks so that she will be able to buy some kerosene and new clothes.



**Senhora Jossefa Charles:** Her family received a total of four chickens last year and they now have one rooster, three hens and three chicks. She was very pleased that the family was able to enjoy one rooster for Christmas dinner last year.

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