Community based promotion of rural poultry diversity, management, utilisation and research in Malawi

By
TN Gondwe, CBA Wollny, MGG Chagunda, ACL Safalaoh and FC Chilera

Department of Animal Science, Bunda College of Agriculture, University of Malawi

Project on Management of FAnGR in SADC Funded by SADC/UNDP/FAO (RAF97/032)

Malawi

Total area	118,000 km^2 (one third water)
Arable land	34 % of total land
Human population	9.8 m

Background situation

- Malawi's rural population 86 %
- Majority food insecure 60 %
- Decreasing human animal protein consumption (<6.0kg per capita)
- Most children malnourished > 50 %
- Custodian of livestock 80 %
- Poultry is widespread
- Chickens dominate 83 %
- Mostly indigenous except BA in chickens

- Potential of poultry utilisation not exploited
- Govt previous efforts (SPIP) seem failing

Efforts were taken

- To initiate an integrated improvement program in rural poultry
- Build on their diversity
- The role they play to the society
- The prevailing farming and rearing systems, and constraints

- So that it becomes community based
- And contribute to food self – sufficiency
- While at the same time managing their diversity

Project area

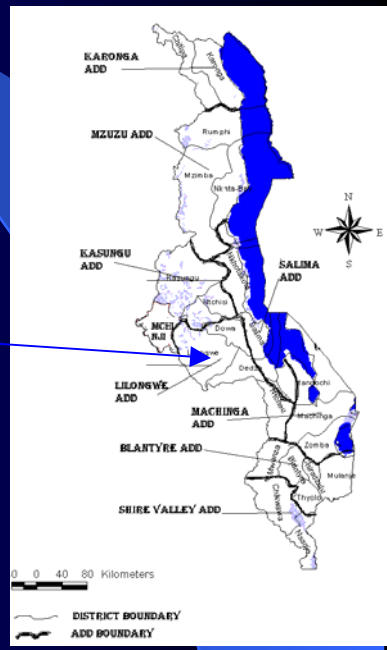
- Lilongwe, Central Region, Malawi
- In Villages of Lilongwe East and West RDPs, respectively

Initial studies conducted on

- Poultry diversity
- On-farm and on-station characterisation
- Species and flock monitoring

- Current situation and constraints known

Bunda



Preliminary findings

Table 1. Catalogue of local names in Chichewa

Species	Name	Phenotype	Basis
Chicken	Kachibudu	Without tail feathers	Physical
	Kameta	Naked neck	
	Simboti	Dwarf	
	Kansilanga	Freezled	
	Kawangi	Black / white spots	Colour
Pigeons	Boli	Zebra type	Colour
	Chimwendo mphako	Big size with feathers on legs	Physical

Phenotypes relatively few in numbers

- Chickens

Kansilanga	0.3 %
Tsumba	0.2 %
Kameta	0.3 %

- Ducks

Kawangi	5.4 %

Also ducks and pigeons few in number

Some phenotypes

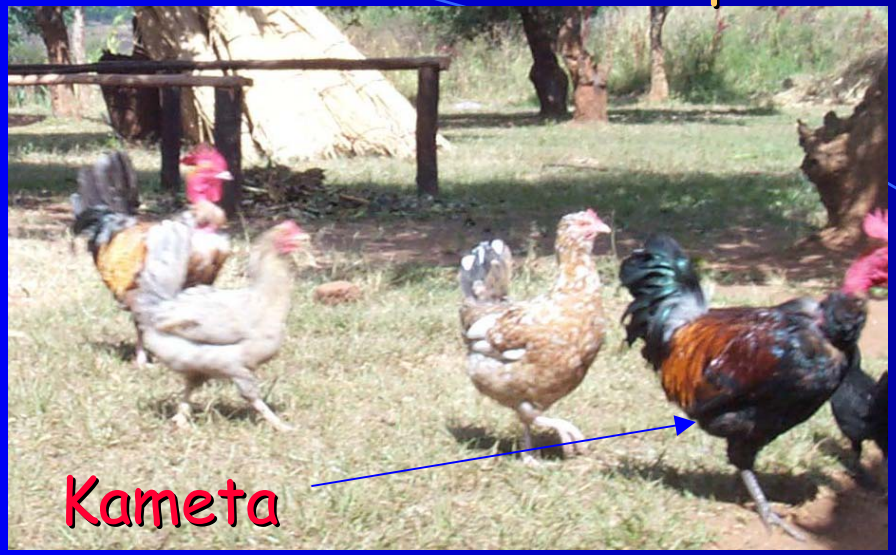
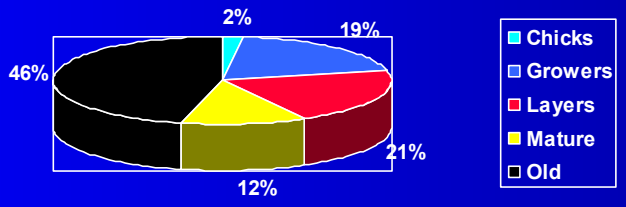
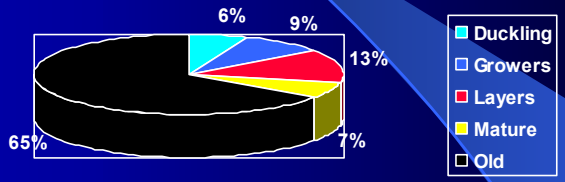


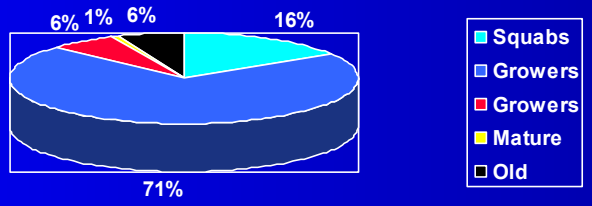
Figure 1. Household flock distribution by age group



Chickens



Ducks

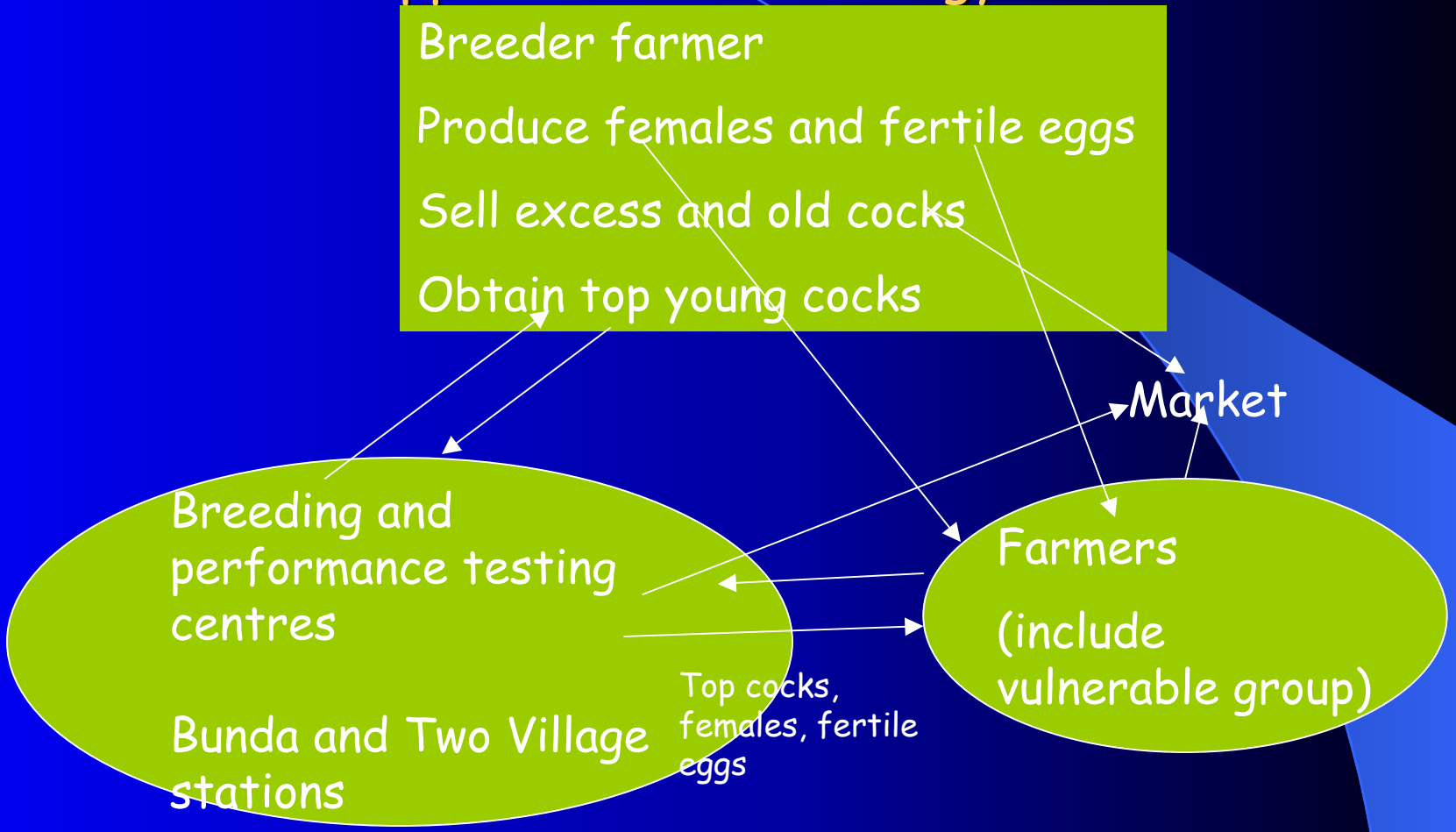


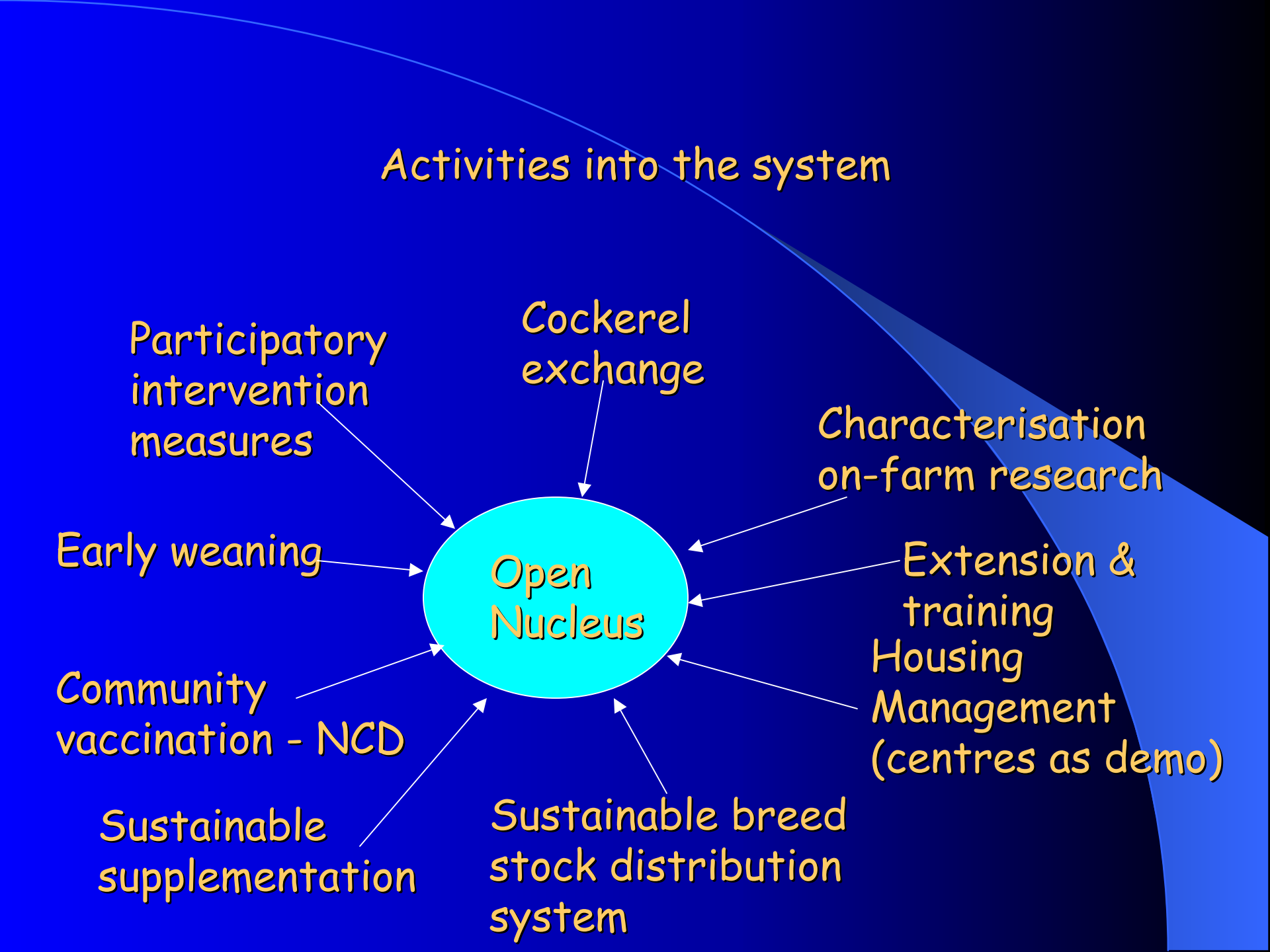
Pigeons

Major constraints

- Newcastle Disease (September – December)
- Predators (Young chicks and pigeons)
- Poor housing
- Prolonged weaning
- Haphazard breed stock sharing and breeding system

Approach / Methodology




Activities into the system
Participatory intervention measures
Cockerel exchange
Characterisation on-farm research
Early weaning
Open Nucleus
Extension & training
Housing Management (centres as demo)
Community vaccination - NCD
Sustainable supplementation
Sustainable breed stock distribution system

Principle

- Full farmer participation (participate in construction and makes full decision on vaccination program)
- No change to existing farming (rearing) systems
- Work with indigenous species
- Farmers club take control of the breeding centres
- Collaboration

Expected output

- Different poultry species multiplied and seed stock available
- Improved village poultry production and diversity
- Increased integration in rural poultry
- Increased animal protein in smallholder farmers
- Contribution to food security from poultry
- Improved well being of old, female headed households
- More applied technologies developed and farmers equipped
- Sustainable conservation, management and utilisation of poultry genetic resources
- Intensified farmer – researcher – extension collaboration

Integration

Increased integration and diversity at household level

Sustainability

Project at village level

Other stakeholder involvement

Active farmer participation

Using existing species

Community decision

Sustainability

Contributory vaccination

Fitting within farming system

Exploiting traditional stock sharing systems

Actual status

- 37 Villages vaccinated their birds against NCD by July
- Vaccination had spinoff effects
- No news of NCD outbreak
- Impact to be confirmed through monitoring studies

- Breeding centres operational and running by farmers
- Recording system in place

Traditional Structures

Meat preference and consumer acceptability tests in Chatenga Village

Meat type	Rank	Freq. of farmers (%)
Duck (10 wks old)	1	40.6
Chicken (20 wks old)	2	23.4
Duck (20 wks old)	3	17.2
Broiler (8 wks old)	4	14.1
Chicken (10 wks old)	5	4.7