

## Village Chickens Housing System in Kaffa and Benchmaji Zone, Ethiopia

*Kibreab Yosefe, Zelalem Abate and Kassa Tarekegn*

Southern Agricultural Research Institute, Bonga Research Center, P.O.Box 309, Bonga, Ethiopia

**Abstract:** This study was conducted to identify village chicken housing system of Adeyo, chena, Gimbo and Guraferda districts of kaffa and benchmaji zone, south west Ethiopia. Study was conducted by using semi structured questionnaire, field visit and interview from 150 randomly selected respondents. Housing system of village chickens at study area was 41% perch in the house and 11% separate shelter. This particular study shows that village chicken housing trend of using at less than half percent at separate shelter need improvement.

**Key words:** Village chicken • Housing • Kaffa and benchmaji zone

### INTRODUCTION

Ethiopia has large population of chickens estimated about to be 51 million, South nation nationalities and peoples region contributes 10 million, from which 14% is from kaffa and benchmaji zone [2]. Poultry of all types require housing that will protect them from the predator, wind and rain, as well as the effects of rapid changes in temperature. The house should be dry at all times and provide good ventilation while being free from draughts. Village chicken housing system in Ethiopia is mostly perch in the house, perch in the kitchen, perch in the veranda and separate shelter [4, 5].

Adeyo, chena, Gimbo and Guraferda are districts of kaffa and Benchmaji zone in which chicken production is practiced under smallholder which provide people benefits in good security (meat and egg) and for source of income. Even if the population is high, the farmers do not benefited the sector, for this the contribution of poor poultry housing system has its own role. Therefore this study was designed to assess village chicken housing system in the study area.

### MATERIALS AND METHODS

**Description of the Study Area:** The study was conducted at south nation nationality and peoples region, kaffa and Benchmaji zone, Adeyo, Chana, Gimbo and Guraferda districts. The study area was selected considering agro-

ecology, socio economic significance of chicken production and population of indigenous chickens.

**Sampling Method and Sample Size:** A Multi-stage sampling procedure (purposive and random) was applied for the study, hence the study area was divided in to three agro-ecologies based on altitude as; highland (>2500masl), mid-altitude (1500-2500masl) and low-land (<1500masl). Then two farmer kebeles (the lowest administrative structure in the country) (boka and butta of adiyoo district at kaffa zone) from the highland, two farmer kebeles from low-land (biftu03 and kujja of guraferda district at benchmaji zone) and two farmer kebeles from mid-altitude (beyamo of gimbo district, waretta of chena district at Kaffa zone) were selected purposively. Therefore a total of six representative kebeles were selected. Agro ecology representation and chicken production potential were the main criterion considered in the selection of study sites.

A simple random sampling technique was applied to choose 25 village chicken owner respondents in each of the selected kebeles of highland, mid-land and low-land which is 50 respondents from each agro-ecology which is a total of 150 respondents (chicken owner households) were interviewed using a pre-tested structured questionnaire for this study.

**Data Analysis:** The data was analyzed by using [8] statistical software through simple descriptive statistics of average and percentage.

Table 1: Description of the study area

No	Measurements	Adeyo	Chena	Gimbo	Guraferda
1	Altitude	1800-2800	1851-1900	800-1800	750-1800
2	Main soil Type	Clay, loam, sandy	Clay, loam, clay loam	sandy clay loam	Sandy, sandy clay, clay
3	Mean annual rainfall	1150	1190	1170	1145
4	Mean annual Temperature	19.5	21.5	18.5	30.5
5	Average land size	2.75	1.8	1.7	2.1
6	Latitude (NS):	07°17.316	07°21.69	07°26.71	06° 48.663
7	Longitude (EW):	36°22.243	036°23.32	036°20.54	035° 14.96

Table 2: Housing system of village Chickens

Housing system	Kaffa zone			Bench maji zone			Mean	SD	%
	Adeyo	Chena	Gimbo	Guraferda	Mean	SD			
Perch in the house	21	9	11	21	21	2	41		
Perch in the kitchen	15	9	10	17	17	2	34		
Perch in the veranda	8	3	3	6	7	0	14		
Separate shelter	6	3	2	6	6	1	11		
Total	50		50	50	50	0	100%		

## RESULTS AND DISCUSSION

**Housing System of Village Chickens:** The majority of farmers were housed their chickens by sharing the same room with perch i.e. 41%. The rest 34%, 14% and 11% respondents were used Perch in the kitchen, Perch in the veranda and separate shelter respectively. Even if, the farmers were used the same room with perch to housed chickens, they can produce low amount of products. However, they were constructed chicken houses to protect chickens from predators, rain and wind during night time. These agree with report of [3, 4, 6, 7] who indicated that majority of chicken producers housed chickens by sharing the same room with people



Fig. 2: Perch for ≤ 5 Chicken when closed.



Fig. 1: Perch for ≤ 5 chicken.



Fig. 3: village Cock in front of village house.

particularly overnight time than day time in Ethiopia. In Botswana 35.8% of the indigenous chicken farmers provided housing of some kind [1].

### **CONCLUSIONS**

The chickens share the same perch room with the family house was (41%) which show focus should be given on housing system for making separate shelter for better poultry production system. However, for the long-term change in housing system, the researchers, agricultural office and producers should work in collaborating way to increase independent poultry house construction.

### **ACKNOWLEDGMENTS**

Southern Agricultural Research Institute (SARI), to which we are grateful. We thank also interviewed village chicken owners and other participants who helped us to carry out every activity of this work.

### **REFERENCES**

1. Badubi, S.S., M. Rakereng and M. Marumo, 2006. Morphological Characteristics and Feed Resources Available for Indigenous Chickens in Botswana. *Livestock Research for Rural Development*, 18(1).
2. Central Statistical Authority, 2014. Federal Democratic Republic of Ethiopia Central Statistical Agency, Report on Livestock and Livestock Characteristics Agricultural sample survey, Addis Ababa, Ethiopia, 2: 70-79.
3. Kitaly, A.J., 1998. village chicken production system in Africa, pp: 29.
4. Melkamu Bezabih Yitbarek and Wube Atalel, 2013. Constraints and opportunities of cillage Chicken production in Debsan TiKara Keble at Gonder Zuria Woreda, North Gonder, Ethiopia. *Intern. J. Sci. and Res. Publ.*, 3(9): 1-8.
5. Melkamu Bezabih Yitbarek and Solomon Tesfaye Gurumu, 2013. Production and Marketing of Chicken At Kimbabit Woreda In North Shoa Zone, Oromiya Region, Ethiopia.
6. Meseret, M.B., 2010. Characterization Of Village Chicken Production and Marketing System In Gomma Woreda, Jimma Zone, Ethiopia, Msc Thesis, Jimma University, Ethiopia.
7. Samson Leta and Endalew Bekana, 2010. Survey on Village Based Chicken Production and Utilization System in Mid Rift Valley of Oromia, Ethiopia.
8. SPSS., 2003. Statistical Package for Social Sciences. SPSS 12.0 for Windows. Chicago, SPSS Inc.