Contribution of Research on Improving the Health and Productivity of the rural Chicken in Africa in Poverty Alleviation and Economic Empowerment of rural Women and Youth.

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ABSTRACT

Most rural and sub-urban households in Kenya, Tanzania and Uganda keep poultry under traditional scavenging conditions of management. The birds fend for themselves and may be supplemented with food left-overs and commercial feeds for a few farmers. There is very little disease control undertaken, neither are productivity parameters known. There is no information on the chicken ecotypes present in the various regions in the of East Africa. Studies in Tanzania identified five distinct ecotypes for local scavenging chickens, e.g. Chingamagazi, Kuchi, Morogoro Medium, Chikwekwe. Feed consumption studies showed that scavenged feed obtained by local birds was low in protein, energy and other nutrients. On site feed trials are ongoing to test effects of supplementation on the different ecotypes with different combinations of energy and protein levels.

Marketing in Tanzania was very well organised through specific bus roots using special buskets, called “Matanga” with all routes converging in Dar Es Salaam. Results from Newcastle work showed presence of velogenic, mesogenic and lentogenic isolates recovered from chickens, ducks, turkeys pigeons and doves in Tanzania and Kenya. Molecular biology study of the fusion protein for velogenic isolates showed evidence for pathogenic viruses while study of lentogenic viruses showed potential for change to virulence. In Kenya, studies on Pasteurella multocida pathogenesis seem to the bacteria affect 12 week old local birds more than ages 4, 8, and 16 weeks. Carrier status for Pasteurella multocida and Listeria, coliforms, streptococcus species, staphylococcus species and other bacteria were also recovered. In the farms bacteria resistant to disinfectants were noted. In chicken marketing and consumption studies, traders seemed to specialise in selling chickens only. The sold the birds because they were preferred by customers and were easily available; they bought the birds from middlemen more than from farmers direct. When buying birds, they put most emphasis on the health of birds followed by the weight of birds. They expressed competition, lack of markets, disease in birds when they arrive at the shops as their biggest problems. Birds were available to sell January to July after which they become scarce due to disease, food scarcity and agricultural practices. Birds were sold to obtain school fees in the months of January and February.

Buyers and consumers in Kenya liked to buy birds from the sellers more than from farmers because the birds were easily available. Broiler, beef and fish meat seemed to compete as substitutes for local chickens. Prices were low in January to, rose slowly in June and then rose and stayed the same for September to December.

Vaccines were available for poultry diseases, either manufactured locally or imported, but they all needed a cold chain which was the greatest constraint in the distribution to the