

pared to the present native breeds which lay only 60 eggs per annum and weigh 1 kg at 24 weeks. Though Naked neck is best amongst all 4 breeds in all the traits. Feedback from farmers revealed that each project cockerel fetched Rs. 200 as compared to Rs. 70 per broiler and their eggs Rs. 5 as compared to Rs. 2 of White Leghorn.

4.3.7

Status of rural poultry production in Tanzania

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A study to assess the status of rural poultry production was carried out in different parts of Tanzania. Data during the study were collected by interviewing farmers using formal surveys (structured questionnaire), informal surveys and on spot observations and weighing. The study revealed that the major type of management was the extensive system. The birds were housed in simple shelters at night and left to scavenge during the day. There was very little supplementation mainly composed of kitchen leftovers and few grains. The system was characterized by small flock sizes with an average number of mature birds ranging between 5-35. Chickens were the main poultry specie although a few farmers had other poultry species such as ducks and guinea fowls. The average number of clutches for chickens per year was 3 with an average of 10-15 eggs per clutch. Age at first egg ranged between 6-10 months, the weight for adult hens and cocks were about 1.5 and 2.5 kg respectively.

Crossing of local hens with exotic cocks was practiced in some areas and led to improved performance for some parameters such as eggs per clutch, egg weight and body weight were noted.

The major problems facing rural poultry production were diseases (particular New Castle disease) and parasites, poor extension services, predators with chicks being the most vulnerable, inadequate capital, poor infrastructure and marketing services. From these studies it was concluded that good management practices and use of crosses can lead to improved performance of chickens in Africa. The great variation observed in chickens in terms of body weight, egg size and other parameters can be utilized in cross breeding activities. Currently nutritional, management and disease control studies with the aim of improving rural poultry production are being undertaken in Tanzania.

4.3.11

Effect of simulated natural daylight and longest day of morocco on the performance of laying chickens and turkey breeder hens

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Poultry meat and eggs are highly desired for food and trade in Ghanaian villages. Both turkeys and chickens are photosensitive and one must ask what effect if any do the relatively short equatorial Ghanaian days have on their reproduction. Hence, research was designed to compare the effects of naturally occurring photoperiods with those supplemented with light on chicken and turkey performance. For one production year forty-five, 17 wk-old SCWL pullets were divided into three treatments based on photoperiod: (I) simulated naturally occurring daylight beginning with the shortest day (11h48min L); (II) began with the shortest photoperiod (11h48min L) and increased monthly to the longest (12h33min L) and maintained at that level thereafter; (III) the

longest day (12h33min L). Hens were individually caged in environmentally controlled rooms and fed ad libitum. Birds beginning with the shortest day required an average of six more days ($p < .05$) to lay their first egg than those maintained on the longest day. Egg production for the three groups was statistically similar. Both groups starting with the shortest day consumed significantly ($P < .05$) more feed than the longest-day group and both required significantly ($p < .05$) more feed per egg produced. Ending body weights were similar for all treatments. Twenty-four, 28-wk old Orlopp turkey breeder hens were divided into two treatments - (I) simulating average monthly photoperiods, beginning with the shortest day (11h48min L) and (II) the longest yearly day length (12h33min L). Days to first egg following lighting were similar for both treatment groups. The treatment group beginning with the shortest photoperiod and gradually progressing to the longest photoperiod produced more eggs (92 vs. 53) ($p < .05$). Average feed consumption was similar in both treatments. Naturally occurring photoperiods were as effective as the longest day in stimulating chicken egg production and more stimulatory in the production of turkey eggs.

4.3.12

A salt mix added to the organic litter associated to vaccination for coccidiosis profilaxis in poultry production

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Solvay CRG is a mineral mix used as litter pets or pets litter supplement. CRG physiochemical traits are the following: $\text{CaSO}_4=65.1\%$; $\text{Mg}(\text{OH})_2=15.4\%$, $\text{CaCO}_3=14.3\%$, $\text{NaCl}=4\%$, $\text{H}_2\text{O}=9\%$, $\text{SiO}_2=.2\%$, $\text{Ca}(\text{OH})_2=.1\%$; $\text{pH}=10$, Specific weight = .88, H_2O -Absorbency=51%; $\phi=14\%$ smaller than .5mm, $\phi=86\%$ between 6.0 and .5 mm. CRG was tested, as pure litter for growing chickens (1 through 30 days old) and, as supplement in a deep litter poultry house (.5 - 1 Kg/m^2) on a colored low-growth-rate broiler "weaned" for the rural production. Individual live weights, feed consumption and feed conversion efficiency were evaluated at 25, 33, 40 and 46 days in the deep-litter-housed broilers, according to a 2*2 factorial experimental design (presence or absence of CRG and use or not use of a live attenuated vaccine for the seven Eimeria species that parasite the domestic fowl - PARACOX® Schering-Plough S.p.A.). Dry matter content, gas production, oocysts (sporulated and not sporulated) and microbial counts were performed in the litter at the same ages; five animals per thesis were used for metabolic profile analysis then slaughtered and used for oocyst counts on the intestinal contents and histological controls. Results showed that: CRG presence in the deep litter house did not reduce the weight gain but the live weight was improved in 33 and 40 days old chicken (CRGno = 563g and 716g; CRGyes= 673g and 758g); CRG presence improved the dry matter of the litter at 40 days (CRGno = 41% and; CRGyes= 72%); CRG presence decreased the protozoa counts in litter and animals (at 40 days CRGyes = 3.12×10^4 and 2.67×10^5 ; CRGno= 3.36×10^4 and 4.04×10^5) and oocysts sporulation (mean observed during the trial, CRGno = 75.5%, CRGyes= 43.5%); the ammonia, developed by a sample of litter and the metabolic (energetic and proteic) profiles were very variables during the trial and no significant differences between thesis were observed.

Results suggest that the use of CRG in deep litter houses may be an efficacious method to improve the quality of the litter, to control coccidiosis and, consequently, animal health and welfare.

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