



## Occurrence of suspected egg drop syndrome in a commercial layers farm in Kenya

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### ABSTRACT

Commercial poultry farming is a major economic activity in many parts of Kenya. Farmers keep layers or broilers depending on expertise, season of the year and financial resources available. For both types of chicken, chicks are obtained from any one of several commercial hatchery operators that exist in the country. Farmers obtain the one-day-old chicks and are responsible for the delicate management that is necessary to ensure survival and growth of the chicken to laying or slaughter age. The cost of raising chicken to laying or slaughter age is a major component of the total recurrent enterprise cost.

In November 2009, a commercial layers farm with 540 chickens located in Limuru, Kenya reported an unusual development in the laying pattern of the chicken. The birds commenced laying at the expected at 4 months and 2 weeks. The growth from hatching to laying had been normal with minimal mortality losses. Laying reached a maximum 65% at 28 weeks age, which was significantly less than the expected 90% lay. Thereafter laying percentage dropped gradually to 45% by 33 weeks. Attempts to nutritionally boost the birds with dicalcium phosphate, vitamins, fishmeal supplementation and



regular deworming did not reverse the downward trend in egg lay. As the number of eggs dropped the characteristics of eggs appeared to change with the egg shell weakening and turning from brown to whitish coloration. Egg size also reduced substantially. After further investigation, and as reported in various publications, it was noted that the 35% chicken that did not lay at all had dull (white- pinkish) combs in contrast to the bright red combs of the laying chicken. Upon examination of the pubic bone, only one finger could fit, and the vents were small and dry. About 65 % had started to lay but later stopped laying. Two chickens were slaughtered and postmortem analysis of one bird showed no egg formation in the ovaries while the uterus was very small indicating that no egg had passed through. The other bird had a shriveled but larger uterus, while the ovary showed small eggs that were not developing at all. This indicated cessation of egg development in the ovary.

With the drastically reduced egg laying rate, it was not viable to maintain the birds until the expected laying lifespan. The entire flock was therefore disposed for slaughter at 33 weeks. Informal enquiries within the farming community indicated that a substantial number of other farms in the region had experienced similar drops in laying rate at about the same period. A common factor amongst these farms was that they had obtained their chicks from the same hatchery (name withheld). These reports reinforce the need for regulatory authorities to more closely monitor hatchery operators to ensure compliance with set standards and thereby protect farmers from losses whose origin lies with unscrupulous hatchery operators.

**Key words:** Egg drop, layers, hatchery operators, standards.