

## CASE STUDY CONCEPT: LINEAR FEEDING TECHNOLOGY.



*Dr. Victoria Sandilands,*  
*Senior scientist, University. of Edinburgh*  
*Avian science Research Centre, SRUC*



*Dr. Kate Barger-Weather*  
*Director of world animal welfare,*  
*Cobb- Vantress*



*VPP. David Ainebyona*  
*PSA. Coordinator- Uganda*  
*St. Uni. of Edinburgh.*

This study review was carried in Uganda, East Africa (**2022 March – 2023 March VPP. David Ainebyona. et al**) under partnership with Poultry science Association and The University of Edinburgh and other support Organization to met the understanding of rural and peri-urban poultry about the relevancy of the technology in sector.

### About PSA.

The Poultry Science Association (PSA) is a professional organization consisting of approximately 1,800 educators, scientists, extension specialists, industry researchers, administrators, producers, and college students who are committed to advancing the poultry industry.

### FEEDING AND FEED MANAGEMENT IN POULTRY FARMERS.

There have been high concerns raised by numerous poultry farmers across the regions about better ways on how feeding and feed management can be managed to minimize cases resulting from poor management, “David said. Such cases include majorly the;

Feed wastage control measures,

Estimating the ratio of feeders and drinkers in the poultry house,

Uniform growth of birds during feeding,

Accidents control during feeding birds, and Measure chicken behavior and welfare.

All these have been linked up in the innovation of introduction of **linear feeding system technology** to be used by commercial and breeding farmers of both rural and urban settings.

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### what is linear feeding system technology as concept?

Under this arrangement poultry farmers are able to; regulate the feeds/ drinker ratio in poultry house, Establish the right number of birds per feeder on drinker, Maintain the growth rate uniformity of birds, avoid unnecessary accidents while feeding the birds (feeds and water), minimize cases of feed wastage enhanced by (accidents while feeding, overcrowding feeding points by the birds), and measure chicken behaviors and welfare.

This is a concept developed to regulate issues arising from poultry farmers about feeding and feed management in a poultry unit in relation to growth and disease management. Which increase the costs of production (feeds, accident mortalities and nutritional disease etc.) in sector regionally.

This technology should incorporated in the management guides aids of poultry farmers at different stages of services providers (Extension workers, veterinary sector, poultry distributors etc.) in the sector. The practical relevancy of concept is explained below in the context

### Estimating of clear ratio of feeders: drinkers per birds.



*Picture.1 by; Erick: evidencing clear set up that ease estimation in a brooder.*

With linear feeding technology, it's easy for poultry farmers to observe or identify that ascertain number of birds are not engaged/ feeding once feeds and water are supplied in the pen, this allows voluntary action, addition of necessary number of drinkers or feeders.

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### Control of wastage.



*Picture.2 by; Loste: showing better way of setting.*

There are high case of feed/water spillage during feeding of birds due to overcrowding at the feeding points. And feed remains the hist cost in poultry sector (60-70%) of production.

With linear feeding technology, feeders and drinkers are set up in manner that it is easy for the poultry farmers to regulate number of birds on each feeder or drinkers and lacking ones reasonably.

### Accidents during feeding.



*Picture 3 by; David: poor arrangement that may enhance accidents in a brooder.*

Undefined arrangement of feeders and drinkers in the poultry house (*Picture.4*) increase chances of accidents from chicken attendants.

Linear feeding technology minimizes un necessary accidents during feeding in such that, farmers are able to move freely within the poultry house.

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### Uniformity growth of birds.



*Picture.4 by; Tomas: showing birds that grow uniformly.*

Ideally there is a basic difference between accessibility and availability of feeds/drinkers of birds to feeds and drinkers.

This effect is usually seen at selling age where, buyers tend to grade birds according to size, giving them different prices. Or sometimes reject small birds that later calls for extra feeding that enhance extra costs to farmers.

With linear feeding technology, birds easily access the available feeds and water once they are supplied in poultry house, which enhance growth of birds at the level.

### Chicken welfare and Control disease outbreak related to poor feed management.



*Picture 5. By; Gil ever: Showing birds under good behavior and welfare.*

Keeping in mind that, birds naturally like scratching. Feed or water spillage in the litter, in poultry house there are high chances of disease outbreak as birds resume to scratching and feeding on the spilled feeds in the litter which is wetted by the spilled water making a favorable ground for development disease pathogens, causing diseases like coccidiosis, avian infectious coryza.

With linear feeding technology, it's easy for poultry farmers to manage these possible causes of outbreak, and able to measure chicken behaviors and welfare in the poultry unit.

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