



Providing Nutrition solution to livestock feed millers through innovation is our goal.

4TH QUARTER EDITION

THE COMPANY IS EXPANDING!

by Maryanne Okoye

BNSL limited, is an indigenous technological company, registered under GAIN (global alliance for improved nutrition) as an approved premix facility in Nigeria. We have adopted international best practices in ensuring that all products, services and consultation offered are tailored to ensure consumer satisfaction by providing high quality food feed premix production. We attained the FSSC 2200 V4.1 via Intertek India, and we are currently registered with MUI Indonesia towards being Halal Certified. We are also listed on the approved GAIN Premix Facility (GPF) suppliers list.

BNSL has 52 highly experienced personnel management team on their payrolls, who consistently strive to exceed client's expectations. We have embarked on a nationwide expansion of our

business with the addition of 36 ambassadors in all 36 states of the federation. In providing nutritional solutions for our growing human and livestock population. The company over the years has created over 100 feed premix for

our Animal nutrition division, with the installed capacity to produce over 3000 metric tons of premixes per annum. BNSL is positioned to offer her growing and existing clientele the best in-class products with a matching technical after sales service. And we customize premixes to client's specification under strict non-disclosure policy.

The company is owned by three renowned Nigerian shareholders, with, a majority share belonging to His Royal Majesty Eze Festus Odimegwu.

The Latest Updates from Our Company

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For BNSL limited, it is critical that we achieve the perfect homogeneity for all our premixes giving clients value for money, by investing in high throughput and high efficiency blending machinery with the capability to achieve particle size homogeneity of 6 – 28 ingredients. We undergo periodic auditing by local and international regulators to put a check on our processes. They include GAIN audit team, NAFDAC, SON and INTERTEK

Did you know that?

‘Vitamin H’
Helps in the conversion of food into energy and also aids the synthesis of glucose, it also helps in the breakdown of fatty acids in the feed.

• MICRONUTRIENTS AND BROILER BREEDER PRODUCTIVITY/ HATCHABILITY

By Dr Adanna Iloegbunam

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For efficient and profitable chick breeding to occur, there must be production of fertile eggs and high hatchability must be obtained. Many factors influence the production of fertile eggs which include the quality of the parent stock and surrounding environment factors. That being said, good nutrition is paramount in the breeders to allow for transfer of balanced nutrients to the egg to ensure normal development of the embryo. Factors that influence increased hatchability include; the breeder weight, the right micronutrient premix and feed intake levels.

Obesity in breeders impacts fertility negatively. An overweight breeder will be reluctant to mate as age progresses which bring the need to monitor and control the breeder diet especially after the peak of production. This can be achieved by reviewing the feed formulation, ensuring that only the recommended and not above the metabolizable energy level is given and also ensuring controlled daily portions.

The micronutrients; vitamins and minerals play an important role in hatchability of breeder eggs. Studies show that exclusion of Vitamin B2 in the breeder diet

results in zero hatchability after seven weeks. A sign such as increase in midterm embryo death rate is a pointer to vitamin deficiencies in breeder. The presence of Zinc in the diet has an effect on reproduction, development, growth and immune function. Inadequate intake of zinc by the breeders results in low hatchability and poor chick quality. Zinc also plays a synergistic role with vitamin A to ensure good quality of chicks. Copper, another essential trace mineral plays an important role in embryo growth, formation of blood, proper nerve function and bone development. Studies also show that high concentrations of vitamin E and adequate levels of selenium in breeder diets confer better performance and increase immune response to chicks.

Vitamin deficiency symptoms can arise when quality micronutrient premixes are not added to the breeder diet and this is more likely because most vitamins are sensitive and prone to destruction and reduced potency during feed production or storage.

BIO-MIX® BREEDER Premix is a specially formulated stable and high potency vitamins and minerals blend suitable to meet the breeders need. Recommended overages for the vitamins are included to ensure adequate levels at the point of consumption by the birds.



- **AWARENESS ON AFRICAN SWINE FEVER- ASF**

By Dr Adanna Iloegbunam

African swine fever is an extremely contagious viral disease with a very high mortality index, affecting both domestic and wild pigs of all ages. Transmission occurs in pigs through direct contact between animals, contact with contaminated feed, fomites, or vectors. The virus is also highly stable and persistent in the environment, remaining infectious for 3-6 months in contaminated uncooked pork products.

ASF is currently not a direct threat to human health and therefore gives no food safety concerns, but has caused extreme production and economic losses for the pig industry. This disease has been reported in many countries in Europe, Asia, and particularly in sub-Saharan Africa. ASF is a notifiable disease by the World Organization for Animal Health (OIE) Terrestrial Animal Health Code.



Currently, there is no treatment or vaccine available for handling this disease. The only way to stop this disease is to cull all affected or exposed swine herds. Strict biosecurity measures when applied can aid in reducing the chances of introducing the disease into the farm. The common signs of ASF include high fever, decreased appetite, weakness, red blotchy skin, diarrhea, vomiting, coughing and difficulty in breathing.

In the month of February, 2020 the disease was detected in Oke Aro farm Agege, bordering Lagos and Ogun states, resulting to the culling of about 300,000 pigs. Various studies in Nigeria reveal that pig farms are still at very high risk of further ASF outbreaks. Routine surveillance for African swine fever virus antibodies in pigs in Nigeria is of necessity, which will enable a reliable reference database used to plan for the prevention of any further ASF outbreak.

At BNSL Limited, we recommend that strict biosecurity measures be put in place in addition to proper nutrition. Supplementation of pig feed with micronutrient premixes plays a role in the boosting of the immune system. Bio-Mix ranges of premixes for various stages of growth for the pigs are available to meet micronutrient needs and boost immunity.

At BNSL Limited, we encourage the use of bio-available amino acids in both feed and vet solution for all livestock.



BENEFITS OF INTRODUCING PROBIOTICS AND PREBIOTICS EARLY IN POULTRY PRODUCTION

By Dr Adanna Iloegbunam

In 2018, the National Agency for Food and Drug Administration and Control NAFDAC issued a ban against the use of antibiotics as growth promoters in livestock feed. Probiotics and prebiotics are known to enhance growth and positively impact the immune system. Newly hatched chicks are born with an immature immune system which takes about six weeks to develop and function maximally. Consequently, birds are highly susceptible to disease causing organisms in the first few weeks after hatching.

Probiotics are live microorganisms, beneficial bacteria and fungi that provide health benefits when included in animal feed. They act by protecting against pathogens, priming and stimulation of immunological response and increased feed conversion rate. Prebiotics are non-digestible food ingredients like complex carbohydrates that induce the growth or activity of probiotics. Prebiotics supply nutrients to the probiotics, bind irreversibly to pathogens denying them the chance of attaching to the intestinal mucosa.

Enteric diseases are of major economic concern to the poultry industry. These diseases are endemic and result in loss in productivity, morbidity and mortality in flocks and also potential contamination of

poultry products, which leads to human food safety concerns.

The use of antimicrobials in poultry feed has been curtailed due to concerns of bacterial antibiotic resistance and residues of antibiotics encountered in poultry products like meat and eggs.

Probiotics and prebiotics are good alternatives especially when introduced at the early stage of development of the chicks. They essentially stimulate the immune system and reduce the risk of the birds coming down with gastrointestinal infections.

BIO-PRO® is a specially formulated prebiotic supplement for inclusion in animal feed. It is a Probiotic promoter for irreversible binding of a wide range of pathogens, contributing to improved feed conversion rate and weight gain.



•THE FUTURE OF THE LIVESTOCK INDUSTRY IN NIGERIA

By Dr Adanna Iloegbunam

In 2019, the Food and Agriculture Organization of the United Nations came up with a program, “The future of livestock in Nigeria: Opportunities and challenges in the face of uncertainty”. The focus is on the cattle and poultry industries in Nigeria, presenting alternative scenarios and possible events or innovations come 2050. As uncertain as the future is and complicated by the ongoing Covid 19 pandemic, invaluable insights and recommendations were provided which should be applied today by relevant stakeholders and decision makers in order to make the cattle and poultry industries more profitable and stable.

Nigeria with a current population of 200 million is expected to double in population by 2050, with more than half of the population living in urban areas. Consequently, the demand for animal protein will increase exponentially. To be able to meet up with this increased demand, the Federal Ministry of Agriculture and Rural Development, the Federal Ministry of Health, the Federal Ministry of Environment, the FAO, the private sector, the civil society and other stakeholders convened and articulated four long term

scenarios on the future of the livestock industry in Nigeria. Two scenarios showed where the livestock industry increased in production and with a high level of the intensive production system taking place, while the other two scenarios showed low production due to limited resources and unfavorable policies with attendant significant presence of the practice of extensive production systems.

Common to the scenarios are the opportunities and challenges which are impacting and will impact the livestock industry. These include, emerging and re-emerging infectious disease, antimicrobial resistance, urbanization and emergence of middle scale- producers, livelihood and employment, natural resource depletion and climate change, negative trade balance, and developmental opportunities.

Emerging disease like the current Covid 19 pandemic, which is also a zoonotic disease has currently impacted negatively on the livestock industry. African swine fever is also a current menace leading to production loss, animal loss, closure of businesses etc. Antimicrobial resistance plan should be implemented immediately because currently some diseases that could easily be treated like tuberculosis in

animals and humans do not respond well to treatment because of resistant microbial strains. An opportunity to consider is the huge rise in demand for animal protein and products. Farmers and value chain actors should increase their capacities to meet this demand. Consequently, the Nigerian government should prioritize agricultural policies to ensure a sustainable livestock industry which will make affordable animal products available.



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