Agriculture is one of the most important economic sectors of the country, particularly in the South. Unfortunately, a vast majority of farm operators are reaching retiring age (60+ years), while the number of young rural people interested in agriculture continues to decline. In contrast, the latest Agricultural Census showed an increase in the number of middle aged people who want to get into agriculture, with nearly 300,000 new farms beginning operation since the last census in 2002. Most of these new and beginning farmers and ranchers come from urban or suburban origins and have worked in a different career for several years. Few of these new farmers have the adequate training to be successful in their agricultural operations. To support the success of new and beginning farmers, timely and effective training and learning programs are greatly needed. We are creating a unique learning and production program that uses elements and strategies that are easy and inexpensive to implement and manage (poultry, small ruminants and agroforestry), while providing quick results and multiple marketing opportunities. Our specific goals are to: 1) develop a comprehensive modular outreach/training program that provides beginning farmers with relevant knowledge and tools to operate ecologically and financially sustainable farms, focused primarily on integrated poultry, livestock and agroforestry systems; 2) implement various delivery strategies for our programs including an eLearning system and farmer friendly publications; 3) offer unique experiential learning opportunities such as workshops and internships for beginning farmers at production farms; and 4) create and offer custom mentoring strategies to provide an effective support system for farmers. This dynamic program is generating specific training and learning opportunities and networking systems for new and beginning farmers and ranchers. This program is funded by the USDA-NIFA-BFRDP 2010–03143.

Key Words: educational program, beginning farmers and ranchers

Livestock production contributes significantly to greenhouse gas (GHG) emissions which have been implicated in climate change. Though the impact of poultry production is significantly less compared with other livestock species, there is need to reduce the high proportion of poultry’s share in global GHG emission which stems from the feed supply chain with the adoption of highly feed efficient and resilient strains. However, according to feedstuffs weekly newspaper report, most college students in United States of America do not grasp the scientific basis of the carbon cycle which is an essential skill in understanding the causes and consequences of climate change. A similar study was therefore carried out in Nigeria to assess the fundamental scientific knowledge of college students on the issue of climate change. About 25 students from 4 secondary schools in South western part of Nigeria which were initially assembled for an annual quiz competition program organized by the World Poultry Science Association Nigeria branch (WPSA-NB) during the African international poultry summit held in University of Abeokuta, Nigeria on 22–25 February 2011. The students were interviewed on their level of awareness of this important environmental issue using a one-on-one approach. Though, 95% of the students initially put up an impressive performance in the college quiz program on their level of understanding in the area of poultry production, their level of awareness on climate change was low since 52% of the students did not understand the process that lead to climate change. Therefore, improving students understanding of the biological principles could make them better prepared to deal with environmental issues such as global climate change. Also, the need for a new way of teaching these scientific principles cannot be overemphasized. This can be done through training the trainer program. Also, there is need to sustain a program such as the college quiz competition and even extend a training like this to local farmers. Moreover, climate change volunteers should be established in our schools and colleges.

Key Words: climate change, college students, training
Broiler production is the largest agricultural revenue generator in Maryland (MD). The University of Maryland Extension (UME) has developed several educational programs for MD poultry growers. The first program was developed to address production and environmental issues. A series of workshops were conducted quarterly in 2 MD locations. Some of the topics discussed were energy efficiency, environmental regulations, avian diseases, and manure handling. Over 250 producers have been educated by this program. Some results of this program are 55% of participants would implement one of the disaster preparation steps discussed, and 55% had a better understanding of Environmental Protection Agency (EPA) expectations regarding Concentrated Animal Feeding Operation (CAFO) inspections. A second UME program, Poultry Farm Management Training & Certification for New Growers, was developed for potential poultry growers as part of the New Source Performance Standard for EPA CAFOs. This workshop is a required component of the MD Department of Environment New Source Performance Design Criteria for Poultry Operations. All new growers in MD must attend this class before receiving their National Pollutant Discharge Elimination System CAFO permit. This workshop was designed to teach new poultry growers the various aspects of poultry production. Three workshops have certified over 70 participants. Some results of this program include 50% rated the workshop excellent and 89% had a better understanding of a broiler operation. A third program was developed for Vietnamese and Korean poultry producers. There are approximately 100 Korean and Vietnamese growers on MD’s Eastern Shore and Delaware. These growers have the potential to constitute a significant impact on MD’s poultry industry and the environment. Critical information on CAFOs, best management practice installation, and related water quality information was presented by translating workshop materials into Korean and Vietnamese. Maryland Poultry Educational programs provide farm families with educational resources to assist with management decisions as they develop and operate economically viable and environmentally responsible poultry operations.

Key Words: broiler, CAFO, environment


The growth potential of village chickens in Nigeria was evaluated by comparing their growth performance under intensive and semi-intensive systems of management. Fifty-two chicks of 8 weeks old were collected from villages in Ibadan South West local government and individually raised in cages. Hatch mates of cage-raised chicks (n = 56) remained with the farmers and were raised under semi-scavenging conditions. On-farm made grower mash (18% CP) was fed for chicks raised under intensive conditions and the birds were treated against common diseases and parasites. Data were collected on feed intake, weight gain and growth efficiency. Feed costs (FC) were calculated by multiplying total feed intake by price per kg feed. Revenue (RV) was calculated by multiplying final weight per bird by price per kg live weight of chicken. Gross margin over feed cost was calculated by subtracting FC from RV. Village and systems of management significantly (P < 0.05) influenced growth rates. The values for birds under intensive conditions were significantly (P < 0.05) higher than for birds under semi-scavenging conditions for feed intake, weight gain and growth efficiency. Economic evaluation showed a positive mean gross margin with a wide variation. Similarly, both rate of return on feed costs and bird costs showed wide variation. It is concluded that growth potential of village chicken can be enhanced by providing enough feed under semi-scavenging condition; however, it may not be economically justifiable when other costs such as labor cost are taken into consideration to improve feeding of local chicken except with farm waste.

Key Words: village chicken, semi-scavenging, feed cost, revenue, growth potential