Advance Innovative, Profitable, and Sustainable Agricultural Production Systems

- Increase plant and animal productivity through new technologies, cutting-edge research, and Extension programs.
- Improve and conserve soil health and water quality to sustain farms through the generations.
- Contribute to the success of agricultural businesses.
- Provide educational opportunities to create the next generation of agricultural leaders.
- Address measures to manage the changing climate and its impact on agricultural production in Maryland.

OVERVIEW
Maryland agriculture is diversified and includes a variety of crops and livestock on 2 million acres and 12,400 farms. The market value in 2017 exceeded $2.4 billion, and agriculture has remained Maryland’s number one industry. The University of Maryland (UMD) College of Agriculture and Natural Resources (AGNR) will advance innovative, profitable, and sustainable agriculture production systems through integrated teaching, research, and Extension. AGNR education and outreach will increase the productivity of plant and animal systems while improving soil health, water quality, and the changing climate. Programs will launch students into successful careers in agriculture, expand the boundaries of agricultural science, and empower agricultural businesses to apply the latest research to improve not only their bottom line, but also their community well-being and environmental stewardship.

AREAS OF FOCUS
This strategic initiative reflects the heart of AGNR through our agriculture production programs that support Maryland and beyond. There is a strong traditional agriculture base in Maryland with grain crops, dairy, and poultry, while vegetables, fruits, aquaculture, urban agriculture, and the green industry have added to the economy. AGNR programs in cover crops, nutrient management, poultry, animal nutrition and health, IPM, and aquaculture are highly regarded nationally. This team will focus on teaching, research, and Extension in the areas of production agriculture with an emphasis on soil health, water quality, and a changing climate. Business success, profitability, and training the next generation of farmers, researchers, and agricultural professionals are key areas of focus. AGNR programs in formal and non-formal education will provide youth, students, entrepreneurs, and beginning farmers with opportunities, skills, and network development.
There are two major areas of focus:

1. Center for Excellence in Crop and Animal Production (CECAP) to address plant and animal productivity and improve and conserve soil health and water quality in a changing climate.

2. Agriculture Careers and Entrepreneurship (ACE) to prepare the next generation for careers in agriculture and contribute to the success of agricultural businesses.

ACCOMPLISHMENTS

As a team, we have developed common goals and activities that will move this initiative forward. Monthly meetings, hiring student workers, and clear objectives have led to the team's accomplishments. The team is working on two areas of focus:

Crop and Animal Production

The first goal is focused on agricultural production systems. Data from the United States Department of Agriculture (USDA) census is being collected and analyzed in order to share the importance of the agricultural industry and its economic impact. This goal is also focused on UMD research center projects. Field research projects are being digitized and catalogued in order to share the extent and scope of applied research in the state.

Careers and Entrepreneurship

The second goal is to inventory and construct a forward-facing website that includes agricultural career opportunity listings, academic and professional resources, and virtual space to host trainings and career/entrepreneurship events. The Agricultural Careers and Entrepreneurship (ACE) site will be a resource for those aspiring to study agriculture, farming, or to pursue a career in the agriculture profession. The ACE site is now live at go.umd.edu/5xW.

TAKING ACTION

The team is committed to managing and growing ACE and other databases, and updating resources as communication efforts at the college level are brought online. We have also begun discussing possibilities for outside support. One of those opportunities is to submit an education center proposal to the USDA National Institute of Food and Agriculture (NIFA).

Moving forward, the team will continue to work toward goals and activities that will enhance agriculture production systems in Maryland.