# UNIVERSITY OF GUAM

COLLEGE OF AGRICULTURE & LIFE SCIENCES

(Land-Grant Program)

# **SERVES YOU**



through

# RESEARCH

# **EXTENSION**



## UNIVERSITY OF GUAM Territory of Guam

Dr. Antonio C. Yamashita, President of the University

Dr. Wilfred P. Leon Guerrero, Dean/Director, College of Agriculture and Life Sciences

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MESSAGE

The University of Guam acquired its Land-Grant status in June 1972. Since then, people have been inquiring as to what the new status will mean to the University and the Territory. It is hoped that this publication will answer some of these queries.

The total Land-Grant activity is jointly financed by the Federal Government under its Land-Grant college programs and the University of Guam under territorial appropriation. The major thrust of this activity will be carried out by the newly established College of Agriculture and Life Sciences (CALS). Much of CALS' activities will be aimed at bringing the teaching and research resources of the University into the communities of our island in an effort to help people improve themselves.

To this extent, we welcome and encourage your input and ideas in the development of programs that will help serve the community better. Working together we can improve the quality of life on our island.

Wilfred P. Leon Guerrero, Dean/Director

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# UNIVERSITY OF GUAM COLLEGE OF AGRICULTURE AND LIFE SCIENCES

## BACKGROUND

President Abraham Lincoln in 1862 signed the "Morrill Land-Grant Act" which gave birth to the nation's land-grant universities. Under the provisions of this law, grants of federal land were offered to each state which would agree to establish at least one college with an emphasis on agriculture, home economics and the mechanical arts. It was the nation's first attempt to provide higher educational opportunities for all citizens. Today, there is at least one land-grant college or university in each of the 50 states, the District of Columbia, Puerto Rico, the Virgin Islands and Guam.

The University of Guam became a member of these landgrant institutions in June 23, 1972 with the passage of the Education Amendments Act of 1972 - P. L. 92-318. The Federal Government contributed a \$3,000,000 endowment to the University of Guam, instead of granting land to Guam, to initiate it as a land-grant institution.



Meeting of College of Agriculture and Life Sciences faculty members.

The University of Guam appointed its first Dean/Director Dr. Wilfred P. Leon Guerrero to head its land-grant program in November, 1973. On March 6, 1974, the Board of Regents of the University approved a resolution creating the College of Agriculture and Life Sciences which embraces the main features of the land-grant program at the University of Guam. Its goal is to serve the agricultural sector of the economy, as well as other related disciplines through resident instruction, research and extension in the Territory of Guam and the surrounding Pacific regions. The new additional resources that will become more available as this land-grant program matures in Guam will greatly supplement the ongoing programs of the University and the various departments of the Government of Guam. Within the University, these fresh resources have already found willing cooperators among deans of other colleges, as well as from the Marine Laboratory. Additional instructional courses have already been added by some of the Colleges at the University and new research programs can also be funded which will contribute greatly to the welfare of the people of Guam.



The new College of Agriculture and Life Sciences (CALS) will also enhance and bring about a closer working relationship of the University with other departments of the government. The Departments of Agriculture, Land Management and Commerce are three departments which will especially have a close liaison relationship with the land-grant program. Research projects and extension programs of the University need to be closely related to the economic goals and policy guidelines of all the departments of the Government of Guam, and cooperation and coordination of activities and programs will be essential to make best use of these additional resources. The programs of the College of Agriculture and Life Sciences of the University of Guam consist of three interdependent and coordinated activities in agriculture and human resources development to help enhance the quality of family and community life in Guam. The three programs are:

Research	-	To search for and develop new knowledge in agriculture and for the improvement of family life.
Extension	-	To disseminate, define and motivate the use of new and existing knowledge.
Teaching	-	To educate college students to direct our economic, social and technological resources.



## PRESENT SITUATION

The Territory of Guam produces 25–30% of the fruits and vegetables consumed by the civilian market, approximately 7% of the beef, 20% of the pork and 5% of the poultry meat today. Only in egg production, where approximately 90-95% is produced locally, is Guam close to being self-supporting. Total local agricultural marketing value has been averaging \$2,300,000 annually during the past three years, while imports have averaged about \$4.400.000. These figures do not include military imports to Guam. About 400 full time and part time farmers cultivate less than 1,000 acres and agricultural land prices are increasing drastically.









Though problems relating to water development and distribution, labor shortages, capital needs and high costs of transportation are pressing concerns to the agricultural producer, the need for agricultural research and education is most critical to further enhance agricultural development in Guam.

#### RESEARCH

It is estimated that Guam has the capability to offset imports by at least 50% and also develop an export market for specialized, exotic tropical fruits, flowers and vegetables. Research will be the key to realizing these goals. One of the most pressing needs is to expand and accelerate research in the area of crop production to achieve greater yield per acre. Research in livestock production (especially hog production) is an area which needs greater emphasis. Soil fertility research must also be initiated. There is need for marketing research in quality control, storage, distribution, product promotion and processing. Additionally, nutrition and consumer oriented research will be stressed.

Each research proposal will be reviewed for its relevance, appropriateness and significance to the economic and social wellbeing of the Territory of Guam. The new knowledge and information we seek must have direct bearing to problems of the farmers and the agricultural community.

The Government of Guam has already made two parcels of land – ten acres each – at Inarajan and Yigo available to the College of Agriculture and Life Sciences for the express purpose of conducting these vitally essential agricultural research projects.



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## **COOPERATIVE EXTENSION SERVICE**

The University of Guam Cooperative Extension Service will concentrate its efforts in the areas of agriculture, family living, home economics, 4-H and youth, community development and related subjects. Our goals will be to provide educational leadership, consultation and service to enhance Guam's social and economic level of living to:



Extension staff members evaluating field test

- 1. Increase efficiency in agricultural production, management and conservation of natural resources.
- 2. Increase efficiency in marketing, distribution and utilization of agricultural products.



- 3. Improve family living, nutrition, health and consumer satisfaction.
- 4. Assist with community improvements, resource development and public affairs information.
- 5. Develop 4-H and other youth programs.



#### TEACHING

Supplemental federal funds can be used to teach agriculture, home economics, mechanical arts, English language, mathematical sciences, natural and physical sciences, economic studies and special preparation of teachers. Resident instruction of the College of Agriculture and Life Sciences of the University of Guam will definitely include a very strong emphasis in agriculture and home economics. In order to strengthen the instructional program, many of the faculty members will have joint appointments in research and instruction to maximize the effectiveness of the available By utilizing researchers to instruct college courses and talents. by permitting extension specialists to conduct applied research a very cohesive relationship and understanding can be projects. developed within the organization. This will add greatly to the contribution that the College of Agriculture and Life Sciences can make to the students, as well as to the community.



### **COMMUNITY DEVELOPMENT**

The key concept of the College of Agriculture and Life Sciences is the "grass-roots approach." The intent and purpose of the Land-Grant Acts are quite clear. America was and still is attempting to insure that all of her citizens have access to the resources of higher education. "Implicit in this mission," Dr. Leon Guerrero comments, "is that people must be reached where they are — at their present background of education and level of interest and understanding."

Hence, in order for the UOG - College of Agriculture and Life Sciences to become an effective and viable force on the island, the assistance of the people of Guam will be most welcomed to help shape the direction and to improve the quality of the program.





#### Cooperation with other agencies

Wilfred P. Leon Guerrero, Dean/Director College of Agriculture and Life Sciences