Agricultural Development in the American Pacific (ADAP) Project

YEAR 18
PLAN OF WORK

September 1, 2005 – August 31, 2006

USDA – CSREES Grant Number: 2004-38826-02201, Amendment #1
A publication of the Land Grant institutions of the Pacific: American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam, and the University of Hawaii, through the Agricultural Development in the American Pacific (ADAP) Project.

The ADAP Project is a research, extension and instructional program of the U.S. Department of Agriculture, Cooperative State Research, Education and Extension Service under Grant Number: 2004-38826-02201, Amendment #1.

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ADAP PROJECT
YEAR 18
PLAN OF WORK

September 1, 2005 – August 31, 2006
ADAP Project Summary Sheet

Project Title
Agricultural Development in the American Pacific (ADAP) Project

Grant Number
Year 18 Funding: USDA 2004-38826-02201, Amendment #1

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Introduction

This Plan of Work represents our vision of the upcoming year. As the project reaches its 18th year, we continue to build on our accomplishments and to expand our services within the Pacific region. Our grant from USDA/CSREES Federal Administration Grants Program is composed of a number of tasks with the goal of improving agricultural development across the Pacific. ADAP is a unique project that was started to facilitate collaboration among the five Land Grant programs of the American Pacific. Collaborative project proposals involving and benefiting a minimum of two institutions were submitted to the Land Grant directors for selection and approval in January 2005. Approved projects or tasks make up the body of this proposal.

Each newly approved ADAP task is described and includes goals, objectives, procedures, justification, literature review, current research, timetable, budget and personnel support. Continuing ADAP task descriptions include progress reports from the past year, problems and proposed solutions; and budgets for activities in the upcoming year. Background information regarding the ADAP institutions, the Pacific Island region and ADAP’s strategic plan is included in this introduction to provide an understanding of the ADAP project.

The ADAP project has become the primary means for the research, extension, and instruction programs of the Pacific Land Grant institutions to collaborate and cooperate in order to enhance their impact on agriculture and communities. Issues addressed are often unique to the Pacific region, having to do with tropical/subtropical island agriculture and cultural practices. Because of the special natural and human resource base of the Pacific region, it is seldom appropriate to transfer results from temperate zone agriculture research or to use U.S. mainland materials for extension and teaching. Applied research must be done in the region, and effective extension and teaching materials created. This is particularly challenging since three of the Land Grant programs are relatively young, and all have limited personnel and experience to address the range of problems confronting their clientele.

The ADAP project provides a means for the institutions to strengthen existing Land Grant programs by sharing and focusing resources on priority areas of common concern and interest. Since many of the problems, issues, and challenges are common to the various entities in the region, it is more efficient to address them on a regionally coordinated basis. Solving one problem in one part of the region offers full or nearly full solutions to other parts of the region.

A. ADAP INSTITUTIONS

The Agricultural Development in the American Pacific (ADAP) project is a coalition of the five Land Grant institutions in the American-affiliated Pacific Basin: American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam, and University of Hawaii. Each of these institutions receives USDA support for fulfilling its Land Grant mission of teaching, research and extension in agriculture.
American Samoa Community College (ASCC) serves the US territory of American Samoa. Its campus is located near Pago-Pago, on Tutuila. This two-year school offers certificates, Associate of Arts, Associate of Science, and Bachelor of Education degrees, in a program coordinated through the University Of Hawaii College Of Education. Last year, approximately 3,204 students were enrolled in the Spring, Summer and Fall 2002 semesters. Certificate and Associate of Science degrees are offered in agriculture with options in Agricultural Science, Natural Resource Management and Agricultural Business.

The Treaty among the governments of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau, signed on April 1, 1993 has made the College of Micronesia (COM) an independent public corporation of the three government entities, which comprised of the three main college campuses in each of the three nations and the four mini-campuses in the four FSM States of Kosrae, Pohnpei, Chuuk, and Yap. A three-member Board of Regents, one member representing each of the three respective governments, governs the COM. At the COM Central Office, an Executive Director, serves as the Resident Instruction (RI) Director, the Director of Cooperative Extension Service (CES), and the Director of the Agriculture Experiment Station (AES). COM has three main campuses: College of Micronesia – FSM (COM-FSM), located in Kolonia, Pohnpei; Palau Community College (PCC), located in Koror, Palau; and the College of the Marshall Islands (CMI), located in Majuro, Marshall Islands. Each is administered separately by a President and governed by a local Board of Regents/Trustee. Resident instruction enrollment is about 3,000 students for the Fall, Spring and Summer 2002 semesters, including both full-time and part-time students at the three main campuses and student taking courses at the four mini-campuses in the FSM. All three main campuses are offering Certificates of Achievement and Associate of Science and Associate of Arts degree programs.

Northern Marianas College is the only accredited post-secondary educational institution in the Commonwealth of the Northern Mariana Islands or the CNMI, the newest addition to the American political family. Northern Marianas College was legally established first by executive order in 1981, then by statute in 1983, and finally by constitutional amendment in 1985. Today, the college provides academic and agricultural extension services on all three main islands of the commonwealth: Saipan, Tinian, and Rota. NMC is proud to offer the only bachelor's degree program, in elementary education, by a community college in its accrediting region. NMC offers a variety of classes to support student goals of: obtaining transfer credits to four year institutions, completing two year degrees in the arts and applied sciences, pursuing careers in nursing and elementary education, as well as providing adult, community, and continuing education opportunities for the entire community. NMC enrollment grew to 1725 in 2004.

The University of Guam (UOG) campus is located in Mangilao in the US territory of Guam. It serves the island of Guam and other islands in the Western Pacific region. The University has a faculty of nearly 200, an on-campus enrollment of 3,180 and more than 1,000 additional students in outreach programs throughout the region. The Colleges of Natural and Applied Sciences, Liberal Arts and Social Sciences, and Professional Studies offers both baccalaureate and masters degrees.
The University of Hawaii (UH) state system has nine campuses on four islands, with approximately 50,000 students enrolled. It offers certificates, Associate, Bachelor, Masters and Doctoral degrees. Almost half of the students are at the main campus, Manoa in Honolulu, which includes the College of Tropical Agriculture and Human Resources with approximately 600 students and 220 faculty members.

B. PACIFIC ISLAND REGION

The American-affiliated Pacific Basin region spans an area larger than that of the continental United States, with tremendous variances in temperature, rainfall, and soil type. The region is characterized by relatively sparse and culturally diverse populations, with island economies based primarily on year-round small-scale agriculture. The few and dispersed population centers result in pocket markets and transportation difficulties for agricultural products. Western-style development has severely disrupted traditional community structure. The region is currently struggling with rapid social change. Within this context, the Land Grant institutions are working to empower individuals, families and communities in strengthening their agriculture and communities through informed decision-making.

C. THE ADAP PROJECT

ADAP was formally organized by the five directors of the Land Grant institutions in the American-affiliated Pacific the Project in 1988, with the deans/directors of the Land Grant institutions serving as the board of directors. The purpose of ADAP is to strengthen existing Land Grant programs by sharing and focusing resources on priority areas of common concern and interest. Priority areas are often unique to the Pacific region, having to do with tropical/subtropical island agriculture and cultural practices. Due to the special natural and human resource base of the Pacific island agro-ecosystems, it is often not possible or appropriate to transfer results from temperate zone agricultural research, and materials for extension and teaching used by US mainland Land Grant programs. ADAP supports applied research within the region, and the development of effective extension materials that are culturally appropriate. With these goals in mind, ADAP strives toward excellence:

ADAP Vision: ADAP enables sustainable environments, diverse economies, and strong communities.

ADAP Mission: ADAP advances the viability and security of Pacific Island agriculture and communities through collaborative programs that are culturally appropriate, socially acceptable, and economically viable and environmentally sustainable.

The new Strategic Plan 2002-2007 is on the following two pages. ADAP will continue to focus on projects that build cooperation within the 22 US countries in the Pacific, both US-affiliate and non-affiliate. The ADAP directors see the issue of longer-term food, health and nutrition in the region to be a top priority for our efforts. Additionally, always, the only way to improve the teaching and science at an institution
is to increase the abilities and competency of the Land Grant faculties, thus we continue with our faculty education programs.

D. THE ADAP ORGANIZATION

The Directors of the five Pacific Land Grant programs serve as the board of directors of the ADAP Project. As a group, they make decisions on policy, program direction, and budgeting for ADAP. Directors communicate regularly with the ADAP home office and each other throughout the year. Directors, coordinators and the project manager meet as a group in January/February and June/July for formal business meetings. Supplemental directors' meetings are called via satellite, if needed. Each director authorizes the ADAP activities in his/her institution. As with other Land Grant activities, each director is responsible for administrative arrangements within his/her institution, which are necessary to support the implementation and management of ADAP-sponsored programs.

The ADAP Program Manager provides overall coordination and implementation of activities that are described in the ADAP Plan of Work and also additional tasks given by the directors. An ADAP Coordinator at each institution assists the Land Grant director with the management and coordination of ADAP activities. The coordinator serves as the primary contact at his/her institution for the project manager, other coordinators, and investigators and cooperators for that institution. The coordinator and director establish protocols and make arrangements so that both are kept informed on ADAP matters. Coordinators communicate regularly with the ADAP home office for project administration and to coordinate activities. Additionally, the coordinators monitor and facilitate the activities of the PIs and cooperators. He/she helps PIs and cooperators understand how to access and use resources available through ADAP (information, communication networks, fiscal resources, etc.), and their responsibilities to ADAP.

Principal Investigators and Cooperators are Land Grant staff and other professionals in the region who implement the tasks funded by ADAP. A cooperator is responsible for carrying out and coordinating work within his/her own institution, and coordinating that with the project PI and other cooperators. Each Land Grant program participating in a project must have at least one designated cooperator. PIs and cooperators work closely with the ADAP coordinator and director to plan, implement, evaluate and document the ADAP activities.

The ADAP Home Office, located at the College of Tropical Agriculture and Human Resources at the University of Hawaii at Manoa, is responsible for organizing and providing overall support services to ADAP. The home office maintains a fiscal accounting system; assists investigators, cooperators and directors, with procurement, travel, communication, program planning and organization, as needed. Office staff also prepares technical and administrative reports, coordinates directors’ meetings, and prepares and distributes the call for proposals, fiscal and other reports as required.

The Research Corporation of the University of Hawaii (RCUH) is the entity that provides administrative services for the UH for extramurally funded projects such as the ADAP project. The ADAP grant is "service-ordered" to RCUH, who acts as the agent to disburse funds and as a contracting party. RCUH enters into sub-grant
agreements with the ADAP institutions (ASCC, COM, NMC, and UOG) as a way to extend credit to them and process reimbursement checks upon receiving invoices. Each year, the sub-grant agreements with each institution are revised to account for a change in funding according to the new or revised ADAP plan of work.

1. Responsibilities
   a. RCUH is responsible for providing administrative services for the ADAP project. As the contracting party for the ADAP sub-grants, they process and disburse reimbursement checks to the ADAP institutions and ensure that proper documentation is available.
   b. RCUH also handles the personnel and staffing for the ADAP project Home Office at UH. The Home Office staff is hired as RCUH employees.
Name of Project  | Bioresidue Resources Assessment
--- | ---
Project Status  | New Initiative
Principal Investigator  | Dr. Charles Kinoshita (University of Hawai‘i)
Co-PI:  | Dr. Lee Yudin (University of Guam)
Project Administrator  | Vanessa Troegner (University of Hawai‘i)
Funding Amount Requested  | $35,610

**Problem Statement and Potential Solution**

In tropical and sub-tropical regions having abundant solar insolation but lacking fossil fuel resources, biomass-based energy systems can reduce dependence on imported petroleum and coal, and improve balance of payments. Biomass production and conversion activities stimulate local economies by providing new employment opportunities for the local work force, and product and market opportunities for agribusinesses. Having relatively low sulfur content and being carbon-dioxide neutral, biomass offers environmental advantages over many fossil fuels. Also, using biomass wastes for energy can provide cost-effective alternatives to certain practices that are gaining disfavor by the public such as open-field-burning of crop residues or land-filling of wastes. These attributes — end-use versatility, favorable feedstock qualities, environmental advantages, and economic and social benefits — make biomass an attractive, sustainable resource.

Biomass can be especially competitive with fossil fuels in those instances where the costs of collecting and/or transporting biomass to a central location are fully or partially defrayed as activities associated with the processing requirements of a primary product, e.g., with rice, palm, or wood products. Not only do such circumstances present the most favorable economic conditions for harnessing biomass energy in the near term, they could provide significant supplies of biomass feedstocks, which can contribute to the local energy mix.

Information on bioresidue resources has already been collected for selected large Southeast Asian countries (Kinoshita et al., 1997; Ishimura et al., 1999). It does not appear that comparable information has been collected for the American-affiliated Pacific Island countries of Guam, American Samoa, Micronesia, and the Commonwealth of the Northern Marianas. It is thus proposed that an inventory be prepared of biomass/bioresidue resources and utilization, and potential energy-related end uses of these resources in the American-affiliated Pacific Island countries. The information in the inventory would help identify opportunities for better utilizing biomass resources and expanding markets for agriculture in this region.

**Scope of Work**

The following information will be compiled for each island nation listed above:

1. Locations, types, amounts, and present uses of bioresidues.
2. Potential energy-related end-uses for bioresidues and other potential end uses.
3. Best combinations of bioresidues and end-uses.
4. Government policies and regulations relating to energy production and utilization.
This investigation will build upon institutional structures and activities already existing in the island nations and on data collected previously by CTAHR and others. In order to validate information already collected and to be obtained from the literature and from collaborators, and in order to gather additional information needed for assessing bioresidue resources, energy-related end uses and policies, project personnel will visit each of the aforementioned island nations and confer with ADAP representatives, government officials, and members of the agricultural sector. The information gathered will be compiled in a database and reported to ADAP members for review and comment. Additionally, the database will be made available for subsequent retrieval and analysis by researchers, government agencies, and businesses.

**Proposed Activities for Year 18**

The schedule for the proposed work, including major tasks and milestones, is shown below.

<table>
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<th>Schedule (months after start of project)</th>
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<tr>
<td>Review existing data</td>
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<td>Review literature</td>
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<td>Collect data from collaborators</td>
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<td>Visit targeted island nations</td>
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**Submit report**

**References**


**Bioresidue Resources Assessment Budget**

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**Problem Statement and Potential Solution**

The Healthy Living in the Pacific Islands (HLPI) project strives to balance the universal values of our common Pacific Islander ancestors with modern influences. When an imbalance occurs, we see increased mortality, excess health care costs to treat disease, increased non-communicable diseases (chronic diseases), poor living conditions and a decrease in food security. These problems are expressed in individuals but must be solved by working with communities and societies. In spite of the efforts of a variety of government and community-based programs to address these problems, many of them are worsening. Our strategy is to increase collaboration and community-based strategic planning to better utilize scarce resources and promote self-sufficiency. The goal of HLPI is to create healthy people living in healthy communities. Our objectives are to 1) increase self-sufficiency 2) collaborate with stakeholders 3) build local capacity and 4) transfer knowledge. We view this as a long-term initiative, no shorter than five years, seeking long-term sustainable change.

As a result of the Planning Meeting in Aug 2002 the objectives of HLPI were revised by the PI/Co-PI group as follows:

Three main objectives.

1. To increase production and consumption of healthy locally-produced food
2. To increase knowledge about health and nutrition
3. To increase physical activity

With the following strategies used initially to promote these objectives:

1. Health Communication
2. Community-based intervention and facilitation
3. Institutional/Food System/Health

**Results and Accomplishments for the Period: July 2004 to December 2004**

At American Samoa Community College, Ms. Eseineiaso Tauai, ASCC CNR Nutrition Agent, attended the 4th annual
Healthy Living in the Pacific Islands meeting in Guam, June 17–19, 2004. Upon returning from the Healthy Living in the Pacific Islands meeting, Ms. Tauai shared the information from the meeting with Ms. Siaunofo Logologo, ASCC CNR Acting Families, 4-H and Nutrition Program Manager and staff to further improve the nutrition programs in American Samoa. Moreover, Ms. Logologo, Ms. Tauai and Mr. Areta used the information from HLPI meeting and recommendations from Mrs. Nicola Davison (HLPI Project Coordinator) to develop the HLPI plan of work for American Samoa. Additionally, ASCC recently hired a new Nutritionist, Ms. Maggie Rosaine on November 2004. Ms. Rosaine is currently working on the implementation planning for upcoming year with Ms. Logologo and Ms. Tauai. The Dean and Director of ASCC CNR, Dr. Dan Aga, assigned Ms. Logologo to be the Co-PI of the ASCC HLPI project and Ms. Tauai to be her Assistant.

At the College of Micronesia, the project funded the travel for three cooperating researchers from COM to attend the HLPI annual meeting in Guam and continued to assist with the purchase of necessary supplies for the implementation of community projects.

At the Northern Marianas College, project collaborators collected 24-hour recalls and local recipes for the Healthy Pacific Child Project and for a future HLPI publication.

At the University of Guam, the project funded the development of health and nutrition brochures dealing with such topics as teen obesity, exercise, diet, teens and tobacco, and caring for your heart. Publication final drafts are completed and going through the approval phase prior to printing. Additionally, the Healthy Living Disaster Preparedness Resource packet, “Typhoon Preparation Tips – Before the Storm,” was also developed and will serve as the first series of localized disaster readiness materials. Other related HLPI activities included conducting several Needs Assessment sessions with the Department of Education and the Department of Labor Workforce Summit and the Tobacco Advisory Group Conference.

At the University of Hawaii, project staff supported research, community outreach, and development of educational pamphlets and brochures.

**Estimated Impact of the Project to December 2004**

Support to HLPI sites for implementation of HPCP project has provided an opportunity for sites to be involved in the development of a nutrition database focused on Pacific foods and recipes. All project activities have resulted in strengthened collaborations and links with a number of communities and agencies: Wai‘anae Coast Comprehensive Health Center, Cancer Research Center of Hawaii, and the communities of North Kohala, Wai‘anae and Ka‘u.

Project collaborators at NMC report that the HLPI project has fostered stronger collaboration between the ADAP institutions and the studies conducted under the HLPI Project are helping to improve health in the community.

**Proposed Activities for Year 18**

During Year 18, HLPI proposes the inclusion of Pohnpei as a second community outreach, and research center in the Federated States of Micronesia. The addition of a second site will allow better service to both Pohnpei, and the many islands in the region. To date the HLPI project has worked mainly with the Land Grant Colleges, with the exception of Hawaii, where our partner is a Non-Governmental Organization (NGO). Pohnpei has a recently founded NGO working in the area of local food and nutrition, which involves many local agencies and individuals. Funding support for one year – for project activities and for one person to attend a September 2005, HLPI meeting, will allow HLPI an opportunity to explore whether this NGO/multi-agency arrangement offers a
viable additional delivery mechanism for HLPI programs. Additionally, in Year 17, a request was made for funding to share results of a survey in Commonwealth of the Northern Marianas Islands (CNMI). However, due to a delay in the survey implementation, the Year 17 funding was re-directed to support of the survey itself. We are therefore requesting funds to return to CNMI after the survey completion, to share results with the agencies and communities of CNMI.

HEALTHY LIVING IN THE PACIFIC ISLANDS BUDGET

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### Name of Project  | Management Services
---|---
Project Status | Core Project
Home Office Staff | James Hollyer (Project Manager), Vanessa Troegner (Project Coordinator), Dennis Miyahara (Educational Specialist)
Regional Coordinators | Eseta Sua-Kalio (ASCC), Robert Jackson (COM), Esther Kapileo (NMC), Annie Santos (UOG)
Funding Amount Requested | $211,956

**PROBLEM STATEMENT AND POTENTIAL SOLUTION**

Administrative services and program support are essential for planning and implementing ADAP activities for the five Land Grant institutions to collaborate on research, extension and training activities. Management Services is the primary means of collaboration for the ADAP Project. Management Services includes the home office staff (project manager, coordinator and educational specialist) based at the University of Hawai‘i and the regional coordinators from each ADAP institution. The home office staff is responsible for organizing, planning, coordinating and providing overall support services for the ADAP project. They administer the USDA grant through the Research Corporation of the University of Hawai‘i (RCUH). Funds are allocated to the ADAP institutions in accordance with the plans of work, but distributed on a cost-reimbursement basis. The home office maintains a fiscal system consistent with the needs of participating fiscal institutions, RCUH and USDA. They also prepare technical and administrative reports that promote the functions and accomplishments of ADAP. The home office oversees the functions of the Communication, Information, and Publication Service (CIPS). The regional coordinators are the link for the home office to communicate with the ADAP directors and project personnel throughout the region. They also provide support services to the project principal investigators and cooperators.

Management services is responsible for organizing the semi-annual ADAP board of directors meetings, at which the ADAP directors, project manager and coordinators plan, organize and make policy decisions for the project. They also maintain collaborative ties with other agencies.

**RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2004 TO DECEMBER 2004**

**American Samoa Community College** coordinated and provided assistance to ASCC ADAP recipients of the Human Resources Capacity Building Project and the ESCOP/ACOP Leadership Development Program as well as other ADAP activities with ASCC. Mr. James Hollyer provided software (FileMaker Pro) training for ASCC personnel from the Human Resources Office, Business Office, Administration Office and Research & Extension Offices. The ASCC ADAP Director and Project Coordinator prepared core project progress report and monitored project expenditures.

At the **College of Micronesia**, the ADAP Director and Project Coordinator managed the coordination of the successful completion of the ParaVet training programs in Yap and Palau for trainees from the many different islands in Micronesia. Additionally, project staff oversaw the fiscal reporting of project expenditures, maintained the ADAP equipment inventory, and purchased necessary equipment and supplies (3 HP Deskjet color printers and one scanner) for...
COM-FSM Cooperative Research and Extension for distribution to the different sites. This equipment was necessary to maintain lines of communication between project staff, community leaders, and college administrators.

Project staff at the Northern Marianas College, assisted and coordinated day-to-day ADAP activities and managed ADAP funds. Additionally, the Project Coordinator coordinated the travel plans of many of the ParaVet trainees, coordinated the ParaVet meetings, and purchased supplies for the hands-on training sessions for the Saipan training sessions. Additionally, Mr. Tony Benavente and Mr. Tony Deleon Guerrero attended the 2004 Asian Association of Agricultural Colleges and Universities conference in Nagoya, Japan, under the ADAP - AAACU project.

At the University of Guam, Dr. Lee Yudin attended the 15th Biennial Convention of the Asian Association of Agricultural Colleges and Universities (AAACU), September 28-30, 2004, in Nagoya, Japan. The theme of the convention was “Development of e-Learning System as a Tool for distance Education in Agriculture and Bio-Industry in Asia”.

At the University of Hawaii, home office personnel maintained the project’s financial bookkeeping system and managed the subcontracts that join the five institutions. In September, Jim Hollyer went to American Samoa to present a workshop on building databases, developing websites, and using Adobe Acrobat. In December, Jim Hollyer assisted Ms. Diane Myazoe in conducting a Strategic Planning session in Majuro for the College of the Marshall Islands (CMI), as part of the requirements for her ESCOP/ACOP Leadership program. The workshop was a great success and Jim will continue to provide guidance and assistance to CMI. Additionally, Jim Hollyer acted as one of five facilitators for USDA-CSREES OMB Administrative Reviews, held in Washington, DC, during November. He returned to Washington, DC, in February and March to assist in the portfolio reviews of the “Management of Soil, Air, and Water to Enhance the Environment” and “Animal Protection.”

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2004

The Management Services team of directors and coordinators facilitate the activities of many of the ADAP sponsored projects. By centralizing the financial and managerial responsibilities of the ADAP project to one or two individuals at each institution, the project lowers the manpower and funding requirements for the sub-projects. For instance, the recently concluded Pacific Islands Distance Diagnostic and Recommendation System (PIDDRS) project required no funding for administrative assistance. Similarly, the Human Resources and Capacity Building project, the Enrichment Opportunities project, and the ParaVeterinary project require no additional funds for administrative support. By consolidating the administrative responsibility and expertise, the project is better managed both regionally and globally. The lines of communication between the five Pacific Island Land Grants are open and accessible to researchers, scientists, collaborators, and administrators at all levels. Additionally, Management Services funds go toward maintaining the communication network by consistently upgrading software, and equipment at each regional location. Finally, the home office retains the services of an educational media specialist. Many pamphlets, brochures and posters for the region are edited and formatted at the home office. These services ensure that the items distributed within the region are of the best quality and will have the highest impact on the reader. Each of these factors greatly improves the overall impact of the ADAP project.

PROPOSED ACTIVITIES FOR YEAR 18

During Year 18, the Management Services team will continue to provide financial and managerial services in support
of the ADAP project. The home office team at the University of Hawaii will administer the USDA grant award for Year 17 in accordance with application laws and regulations and in compliance with USDA requirements. The home office will complete all fiscal actions necessary to run the project, to include: assisting PI’s, Co-PI’s, and Cooperators with submission of progress, fiscal, and inventory reports, maintaining each institution’s sub-grant agreements, and closing-out the Year 16 grant.

With the recent discussions of possibly including the University of Alaska, project staff will begin to strengthen our lines of communication and foster collaboration between similar research and community outreach projects. The home office team will continue to build bridges between governmental, non-profit, and international organizations in support of our projects, particularly with the ParaVeterinary project. The strength of the ADAP project lies in its ability to bring together motivated, like-minded individuals, and institutions, together to share ideas and resources for the benefit of the many peoples of the Pacific Islands.

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Name of Project | Human Resources & Capacity Building (HRCB) Project
---|---
Project Status | Core Project
Responsible Party | ADAP Directors and Management Services Team
Home Office Staff | James Hollyer (Project Manager), Vanessa Troegner (Project Coordinator), Dennis Miyahara (Educational Specialist)
Regional Coordinators | Eseta Sua-Kalio (ASCC), Robert Jackson (COM), Esther Kapileo (NMC), Annie Santos (UOG)
Funding Amount Requested | $70,000

PROBLEM STATEMENT AND POTENTIAL SOLUTION
The American Pacific Land Grant institutions and government agencies want to increase their levels of trained and competent staff in order to enhance the institution and government services and to advance local agricultural development (or allied fields). One way to help increase the number of qualified employees is to provide high school and college students, i.e. potential future employees, and current government or ADAP institution employees, with the opportunity to compete for educational scholarships. ADAP has developed programs targeted at different stages of educational development. The funds are available to all Pacific Land Grants except University of Hawaii. The titles of the three educational scholarship programs are:

1. Financial Assistance for an Extension/ Research High School Apprenticeship Program
   Justification: Low enrollment in agriculture and home economics classes in ADAP region high schools continues to deprive ADAP countries of future employees who are knowledgeable in these areas. A cursory survey of students reveals a lack of awareness of the educational opportunities and careers available in agriculture, home economics, and related fields.

2. Financial Assistance for attending a 2- or 4-Year College or an Accredited Virtual University Program
   Justification: Local college scholarships are limited and awards are typically based on prioritized field of studies. At the present time, agriculture and home economics are not priority fields in most ADAP countries. Financial assistance can be used for U.S. or foreign institutions, but students going to Land Grant colleges are given preference. On-line or virtual degree programs are also considered for this assistance.

3. Financial Assistance for an Advanced Degree Studies Assistance Program
   Justification: Land Grant staff is limited in the ability to expand or strengthen programs and to advance professionally. ADAP scholarships for advanced degrees are made available to meet this need. Financial assistance can be used for U.S. or foreign institutions, but students going to Land Grant colleges are given preference. On-line or virtual degree programs are also considered for this assistance.

RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2004 TO DECEMBER 2004
At the American Samoa Community College, the Advanced Degree
Studies Assistance Program recipient; Mr. Aufa’i Ropeti Areta, received his Masters of Agriculture in Agricultural Extension Education in the Spring 2004 semester at the Colorado State University. Mr. Aufa’i reported to work on August 16, 2004, as a full-time employee of ASCC, Department of Community and Natural Resources (CRN), after two years on educational leave. Mr. Areta appeared on local television series (Land Grant 1/2 hour monthly show) “Matagaluega o Laufanua ma Atinae” and talked about the results and findings of his thesis, “The Attitudes of American Samoa’s Farmers’ Towards the Logic-Model”. Mr. Areta further discussed his thesis with community members, farmers, ASCC CNR faculty and staff, and clients, during a general meeting on September 30, 2004. A hard copy and a CD copy of his thesis are on file at the ADAP home office in Hawaii. Additionally, hardbound copies of Aufa’i’s thesis were donated to the UH-Manoa Hamilton Library, ASCC Library, ASCC President’s Office, and ASCC CNR Dean & Director’s Office, and CNR Agricultural Extension Office.

During this period, the College of Micronesia awarded financial support to Mr. Mark Kostka, an Extension Agent in Agriculture with Cooperative Research & Extension Department at COM-FSM. Mr. Kostka will be attending the University of Hawaii, Hilo campus, Spring 2005 to work on a baccalaureate degree in Tropical Agriculture.

At the Northern Marianas College, three continuing students under the Natural Resource Management Program at NMC were granted financial assistance during the Fall 2004 semester. Additionally, the NMC conducted its summer Apprenticeship Program which included 18 high school students from Saipan. During the apprenticeship, students were taught nutrition, aquaculture, pest detection and collection techniques, food processing, noni and da’ok oil production, and nursery management.

Within the HRCB project at the University of Guam, an additional employee has been added to the four employees currently receiving financial support under this program: Mr. Frank Alig, a Biologist III, employed at the Guam Aquaculture Development and Training Center, Fadian Hatchery, began work towards a Masters Degree in Marine Biology. Mr. Jesse Rosario, Administrative Officer, has nearly completed his Bachelor’s degree in Public Administration program. Ms. Jane Mendiola, Administrative Assistant, and Ms. June Calvo, Secretary II, continue their work towards degrees in Public Administration, and Consumer and Family Sciences, respectively.

**Estimated Impact of the Project to December 2004**

Within the American Samoa Community College, the Human Resources and Capacity Building (HRCB) project is given the highest priority due to the lack of local staff with advanced degrees at Department of Community and Natural Resource (CNR). Currently, CNR relies exclusively on contract and temporary workers from off-island with graduate credentials for positions within the research, extension and instructional programs. Through the HRCB program, Mr. Areta was able to receive the necessary training to become qualified for a leadership position within CNR. To better run the CNR, ASCC needs to have educated, motivated, local employees at the helm to lend the program stamina and stability. Mr. Areta will serve as a mentor and role model in his new position. The ASCC staff are very proud of his accomplishments and look forward to sponsoring many more individuals for graduate degrees.

The success of Northern Marianas College’s High School Apprenticeship program is measured in the number of requests for the continuation. Each student who finished the program reported a new perspective on agriculture and food sciences and would participate again.

At the University of Guam, the college will stand to benefit as these
individuals receiving financial support for tuition and books begin to apply their new knowledge and skills towards the enhancement of their performance in their current position.

**PROPOSED ACTIVITIES FOR YEAR 18**

Each of the four participating institutions, American Samoa Community College, College of Micronesia, Northern Marianas College, and the University of Guam look forward to continuing their support of the HRCB candidates currently involved in their programs.

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Name of Project: Leadership Development in the 21st Century Project (formerly ESCOP/ACOP Leadership Development)

Project Status: Core Project

Responsible Party: ADAP Directors and Management Services Team

Home Office Staff: James Hollyer (Project Manager), Vanessa Troegner (Project Coordinator)

Regional Coordinators: Eseta Sua-Kalio (ASCC), Robert Jackson (COM), Esther Kapileo (NMC), Annie Santos (UOG)

Funding Amount Requested: $78,075

PROBLEM STATEMENT AND POTENTIAL SOLUTION

The growth and development of the Pacific Land Grant colleges is closely tied to the growth and development of the small island communities they serve. By supporting the development of strong leadership qualities within the staff of the American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam, and the University of Hawaii, we can give the colleges the best chance to make the organizational strides required by their clients and the communities the best chance at success.

The Leadership Development in the 21st Century conference is a nationally recognized program focused predominately on the highest administrators within the Land Grant Colleges. This nine-month educational program consists of a conference, a mentorship period, and a graduation. The program begins in June and ends in February of the next year. Each year, ADAP sponsors one individual from each of the five institutions to the program.

RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2004 TO DECEMBER 2004

During this period, administrators from American Samoa Community College, College of Micronesia, University of Guam and University of Hawaii participated in the leadership development classes: Ms. Laura Laumatia, Formerly with ASCC, CNR Instructional Program Coordinator/Acting Agriculture Extension Program Manager/Agriculture Extension Agent III; Ms. Diane Myazoe, Dean of Cooperative Research and Extension at the College of the Marshall Islands; Mr. Peter R. Barcinas, UOG, Extension Agent III; and Dr. Harold Keyser, UH, Maui County Administrator.

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2004

In American Samoa Community College, Ms. Laumatia’s phase I internship focused on strengthening her leadership skills. Ms. Laumatia exposed herself to a diversity of ideas, worked with role models; participated in extension programming and research projects; met and communicated with “key” USDA officials. She worked closely with the Interim Dean and Director of CNR, Dr. Donald Vargo, to observe leadership and management of CNR research, extension and instructional programs. She observed and interacted with the ASCC leadership team including Deans and Directors, Chief Financial Officer and other division heads. Ms. Laumatia learned the different management styles and gained a better understanding of the institutional decision-making hierarchy.

At the College of Micronesia, Ms. Diane Myazoe focused on developing a strategic plan for Cooperative Research and
Extension (CRE) program. During the WASC accreditation process, one recommendation was to have both an overall Master Plan and individual strategic plans for the various departments/programs. Previously, the CRE program was using the COM Plan of Work to guide them as they conduct their annual programs. The development of the strategic plan has provided the CRE staff more focus and a guideline for conducting their programs.

At the University of Guam, Mr. Peter Barcinas focused on developing a University Solutions Center through the initializing Data for Economic and Community Solutions (DECS). Extension work is expected to provide clientele and stakeholders with access to information or programs specific to Guam. The University Solutions Center promotes public issues and community development agendas based on scientifically derived national initiatives. By localizing national programs, local collaborators gain access the extension’s programs base and expertise.

At the University of Hawaii, Dr. Harold Keyser worked on Personnel, Fiscal and Programmatic Guidelines for County-Based Faculty and Staff. The reorganization of CTAHR in 1999 included the assignment of all BOR appointees (faculty & APTs) into one of the six academic departments. An initial task force and a subsequent committee (2002) addressed the new procedures regarding personnel, fiscal and programming as a result of the change in location of supervisory responsibility for county-based faculty and staff. Some off campus faculty have expressed the concern that there are still challenges and barriers to overcome to complete the effective transfer and incorporation of faculty and staff into departments. This objective of this project was to identify the remaining issues in question and provide clear guidelines for their solution, with the goal of having an operational document on personnel, fiscal and programmatic guidelines for county-based staff. Input included the task force recommendations, preliminary guidelines from 2002, and interviews with faculty and department chairs. Anticipated completion date is end of March, 2005. The benefits will be clear guidelines on important operational issues that facilitate full incorporation of all faculty into departments.

**PROPOSED ACTIVITIES FOR YEAR 18**

During Year 18, the following administrators from American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam and University of Hawaii will be participating in the leadership development classes: Dr. Daniel Aga, ASCC, Dean & Director, Department of Community & Natural Resources; Mr. Thomas Taro, Interim Vice President of CRE at Palau Community; Mr. Edgar Cocker, NMC, Associate Director for CREES program; Dr. David Crisostomo, UOG, Extension Agent IV/Associate Professor; Dr. Ken Grace, UH, Department Chair.

**LEADERSHIP DEVELOPMENT IN THE 21ST CENTURY PROJECT BUDGET**

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**Problem Statement and Potential Solution**

The ADAP Enrichment Opportunity Project fills the need to increase institutional and governmental capability and credibility for regional agricultural development. Oftentimes, new initiatives must be implemented which usually require new guidelines and new regulations. There is a continuing need to provide staff development or training opportunities to enhance the productivity and efficiency of appropriate institutional and governmental employees. The successful transfer and adoption of knowledge will enhance the productivity and efficiency of those employees. To strengthen, improve and increase their skills, the land grant directors need discretionary training funds to expand ADAP-sponsored activities or have staff and government employees partake in professional development or training activities.

**Results and Accomplishments for the Period: July 2004 to December 2004**

**American Samoa Community College** provided financial assistance to three ASCC Agriculture and Life Sciences degree program students: Miss Marella Moe (Family & Consumer Science Major), Mr. Saitumua Frost (Natural Resources Major) and Ms. Visa Vaivai (Natural Resources Major). The three students were added to the ASCC ADAP scholars program during summer and fall '04 semesters. All three scholars maintained very good academic standing throughout the previous two semesters.

**College of Micronesia** sponsored two staff members to attend training on a new protocol for tissue culture of kava during first week of February 2005 in Suva, Fiji.

**Northern Marianas College** held a CREES Retreat for staff members in July which included a grant writing workshop. Also, NMC held a meeting with stakeholders, faculty and staff to identify issues in the CNMI.

At the **University of Guam**, project funds supported the 2004 Summer Research Apprenticeship Program. The program ran for four weeks, July 12 – August 6, 2004. Four high school students were selected from a field of about 20 applicants. The students, Andrew Aube, Qian Nan Jiang, Jose Olivares, and Jun Park, were assigned to work side-by-side with one of our program professors. The students were involved in research work which included: 1) ‘Basic Determination of the Colorant Capabilities of Purple Sweet Potatoes’ under the supervision of our Professor of Food Science; 2) ‘Speciation Study of Arsenic in Guam Waters’ under the supervision of our Professor of Chemistry; 3) ‘Vetiver Technology’ under the supervision of our Professor of Soil Science; and 4) ‘Extension Activities’—4-H DYA Summer Youth Program, attended a couple of workshops dealing with ‘Water Quality and Waste Management’ and ‘Betterment of
Community Life’, and ‘Pig Manure Project’ under the supervision of our Animal Science Professor. At the conclusion of the program, each student participated in a presentation of their research experience and provided personal insights into the program. Each student received a Certificate of Completion.

Additionally, at the University of Guam, project funding supported the travel expenses for a UOG Agriculture major, Miss Kristen Cruz, to attend the American Society for Horticultural Science Annual International Conference 2004 in Austin, Texas. This conference included oral and poster presentations on crop production, post-harvest physiology, food quality and safety in relation to human health, and many other topics related to food and agricultural sciences. The student had the opportunity to interact with professionals and experts. The value to the student of such interaction is the opportunity to explore her future academic opportunities as well as realize their important role as future leaders in food and agricultural industry and academia for Guam and Micronesia as well as for the United States.

Healthy Living in the Pacific Islands (HLPI) project staff at the University of Hawaii attended the workshop “Enhancing Team Performance through Understanding Yourself and Others”. The workshop addressed how to communicate effectively with others (how to be heard and understand others) based on the personality types of both parties.

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2004

At the American Samoa Community College, the additional three ASCC ADAP scholars majoring in Agriculture and Life Science degree programs increased the enrollment of students in agricultural degree programs at ASCC.

At the Northern Marianas College, faculty and staff received training in grants writing. Additionally, NMC staff members reported a morale improvement because of team building exercises conducted during the retreat. Faculty and staff gained first-hand knowledge information on the current issues facing CNMI stakeholders.

High school students who participated in the University of Guam research apprenticeship program gained knowledge and experience in the field of scientific research, while working alongside research faculty from the college. Most of these students expressed an interest in the field of science and exposure to an actual laboratory environment provided a positive influence as to their future educational pursuits.

Healthy Living in the Pacific Islands (HLPI) project staff at the University of Hawaii attended a workshop, which focused communication skills through discussion of personality types, work styles and cultural expectations. The workshop developed the team into a more efficient and more productive unit by teaching each member cultural and communication differences in both staff/staff interactions, and staff/client interactions.

PROPOSED ACTIVITIES FOR YEAR 18

At the American Samoa Community College, for Year 18, project funds will continue to support scholars until the completion of their Agriculture and Life Science, 2-year degree program. ASCC will continue to recruit students from local high schools to increase youth interest in agriculture and thus, increase enrollment in ASCC Agricultural degree programs. Additionally, project funds will support staff training to enhance skills and knowledge and become more effective and efficient in performing duties, and serving clients, students, faculty and staff.

At the other institutions, project funding will continue to support staff development. At the College of Micronesia, project funds will support the continued work to reinstate the High School Research/Extension Apprenticeship Program and to support college students.
enrolling in agricultural programs. Project funds at Northern Marianas College will sponsor faculty/staff to attend the Food Safety Workshop on Guam and develop a plan with UOG or UH that will bring in scientists to train faculty/staff as professional development. Project funding for University of Guam will continue to support the high school Summer Research Apprenticeship program. Funding at the University of Hawaii, will support website design refresher classes for Vanessa Troegner, Dennis Miyahara, and Sharee Pepper and a FileMaker 7.0 classes for Jim Hollyer.

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### ENRICHMENT OPPORTUNITIES BUDGET

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Name of Project: Communications, Information and Publications Services (CIPS)

Project Status: Core Project

Coordination Team: ADAP Project Manager and Coordinators, and Eileen Herring (UH Hamilton Library)

Cooperators: Pacific Human Res. Development Council, Kris Anderson (UH Hamilton Library/PRAISE), Secretariat of the Pacific Community

Funding Amount Requested: $20,730

**Problem Statement and Potential Solution**

The ADAP Communications, Information and Publications Service (CIPS) project was created to coordinate and address the information needs of the ADAP institutions, communities and clientele on a regional basis. This project will help provide and make accessible, appropriate information and materials that will benefit the American Pacific region and encourage economic and agricultural sustainability. As a result of more open and immediate access to information, duplication of work in the region will be reduced, leading to more efficient use of fiscal and human resources. The increased utilization of electronic communication capabilities can greatly reduce travel costs for various meetings, training, and workshops.

**Results and Accomplishments for the Period: July 2004 to December 2004**

At the American Samoa Community College, project funding provided Internet excess for all CNR personnel and purchased computer programs and software’s (FileMaker Pro) to support research, extension and instructional programs. At the College of Micronesia, project funding purchase of necessary equipment and supplies for COM-FSM Cooperative Research and Extension Department.

At the University of Hawaii, project funding supported the document retrieval and delivery services provided by Ms. Eileen Herring; the figures are presented below:

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Additionally, at the University of Hawai‘i, Ms. Eileen Herring, distributed PEOPLE project CD’s, and the “RMI Food Preservation” publication to Land Grant librarians across the Pacific, and collected agricultural publications to add to the Hamilton Library. Ms. Eileen Herring attended the SPC/FAO Training Workshop on Production and Management of Electronic Documents, and received training on the Greenstone Digital Library software. Ms. Herring also continued collecting and updating the information presented on our AgNIC Web site covering 12 traditional Pacific Island crops (http://libweb.hawaii.edu/libdept/scitech/agnic/). The traditional Pacific island crops listed on the website are Bananas and Plantains (Musa sp.), Betel Nut (Areca catechu), Breadfruit (Artocarpus altilis), Cassava (Manihot esculenta), Coconut (Cocos nucifera), Kava (Piper methysticum), Noni (Morinda citrifolia), Pandanus (Pandanus sp.), Sugarcane (Saccharum officinarum), Sweet Potato (Ipomoea batatas), Taro (Colocasia esculenta) and other Edible Aroids, Yam (Dioscorea sp.).

At the home office, CIPS funds supported the hiring of a Grant Writing Coach, Dr. Sharee Pepper, who began work on January 5th, 2005. Dr. Pepper will focus her efforts on assisting faculty, staff and researchers across the American Pacific Islands to improve their writing abilities through one-on-one tutoring, and review sessions. Dr. Pepper will also assist with matching researchers to funding opportunities.

**Estimated Impact of the Project to December 2004**

The exchange of information between the University of Hawai‘i and the Land Grant libraries is vital to the Pacific. American Samoa Community College, College of Micronesia, and Northern Marianas College all report an increase in productivity due to the accessibility to publications, software, and electronic communications. These services help accomplish the work of researchers, extension agents, farmers, students, faculty and staff of the colleges and communities. At the University of Hawai‘i, Ms. Herring distributes publications, and helps build Pacific-wide library collections, while at the same time building the Hamilton Library collection and centralizing and organizing the information. With the new computer technologies, Ms. Herring will be able to compile and manage vast quantities of agricultural information, specifically focused on the Pacific crops, pests, and farming techniques. By centralizing the information, the information is not only made it more accessible to communities and extension agents, but also help to ensure that research is not duplicated.

**Proposed Activities for Year 18**

At the American Samoa Community College and the University of Guam, project funding will continue to keep ADAP staff and collaborators up-to-date with current communication technology, especially to maintain project coordination in a timely manner across the ADAP affiliated institutions.

Project funding at College of Micronesia will assist with the publication of two color plates in the *Journal of Nematology* on the nematode problem in swamp taro in some parts of Micronesia.

At the Northern Marianas College, proposed work includes the improvement of the teleconference system between Saipan, Tinian and Rota, reprinting NMC Directory of Programs for distribution to farmers and other stakeholders, and the distribution of PEOPLE CDs to faculty and staff.

At the University of Hawai‘i, Ms. Herring will attend the annual AgNIC Coordinating Committee meeting in DC, scheduled for March 9-11, 2005, as a requirement of ADAP’s involvement in the AgNIC crop database project. Over the year, Ms. Herring will continue to build her electronic, agricultural collections and hire a student employee to assist with scanning and archiving.
Ms. Herring will also attend the Pacific Islands Archivists and Librarians Associations (PIALA) meeting. During this meeting, Ms. Herring has the opportunity to meet and exchange agricultural literature with community and college librarians from across the Pacific. Additionally, at the University of Hawaii, Jim Hollyer will attend the Ag. Communicators in Education (ACE) workshop.

**COMMUNICATIONS, INFORMATION AND PUBLICATIONS SERVICES PROJECT BUDGET**

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**Concluding Projects**

**Name of Project**: ADAP Distance Learning ParaVeterinary Training

**Project Status**: Concluded

**Principal Investigator**: Larry C. Rawson, DMV (University of Hawai’i, Hawai’i State Department of Agriculture)

**Cooperators**: Peter Saville (Secretariat of the Pacific Community), Steven Nusbaum (Guam Dept. of Agriculture), Talitua Uele (American Samoa Dept. of Agriculture), Clinton Balok (Crown Point Institute of Technology), Diana Greenough, (Northern Marianas College), Jim Currie (Northern Marianas College-Tinian), Ignasio Dela Cruz and Richard Maratita (Northern Marianas Dept. of Land & Natural Resources), Engly Ioanis (College of Micronesia), Tavita Elisara (American Samoa Community College), Joseph Kitzman (USDA)

**Curriculum Development**: Luisa Castro (ADAP-UH)

**Funding Amount Requested**: $0

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**PROBLEM STATEMENT AND POTENTIAL SOLUTION**

Diseases and poor management of livestock have been recognized as major limitations to animal production in the Pacific Islands. As significant as public health and food security are to these countries, there is also an urgent need for in-country, in-service training for animal industry and extension workers, farmers and the community, to meet basic veterinary service requirements in rural areas. Our continuing effort is to develop and distribute effective distance learning ParaVeterinary training materials to provide a basic level of animal health and husbandry education to local extension personnel and to community leaders. Eventually regional in-country trainers will sustain this effort.

**RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2004 TO DECEMBER 2004**

During the last six months, 26 students from the islands of Saipan, Tinian, Rota, Pohnpei, Kosrae, Chuuk, Palua, Yap, and Majuro, have graduated from the ParaVet program. The PV model has evolved from the model tested in Samoa and American Samoa to include a mentorship component and hands-on training workshops. Graduating ParaVets were also presented with a small number of veterinary supplies – a “starter kit”. It is not our intention to continue supplying veterinary equipment to the region; the ParaVets were given information about how to reach suppliers on the mainland for their future needs.

Additionally, ADAP funded a ParaVet student from Majuro, Ms. Caryl Jade, interested in helping the companion animals (dogs and cats) on the island, to train with the Hawaiian Humane Society, in Honolulu. After her training, she developed an “Understanding Wild or Feral Dogs” and a “Veterinary Information and Products” fact sheet detailing online resources for the ParaVets.

Home office staff worked with the Hawaiian Humane Society (HHS) to develop a "Dog Population Management Decision Tool" to assist island communities and island governments. Home office staff met with the directors of the Humane Society International (HHI) and the Humane Society of the United States (HSUS) before their visit to the islands Guam, Saipan, Palua, and Majuro. The Home Office provided the names and contact information for the ParaVet Students to act as liaisons for the visitors, while the HHI and...
HSUS directors visited animal welfare facilities and reviewed animal welfare programs.

**Estimated Impact of the Project to December 2004**

The ParaVeterinary project has produced a text and training protocol, which has a high graduation rate. Through the ParaVet program, 42 individuals, on 11 different islands, have gained mid-wife level training on animal care and welfare. This program has raised interest in animal health and welfare issues at both a community and government levels.

**Areas for Additional Work**

With additional funding, this project could provide training to students at many other Pacific Islands that do not currently have veterinary professionals available. Additionally, with additional funding, the current ParaVeterinary training manual may be expanded to include health and safety information concerning companion animals such as cats and dogs. With regard to companion animals, many island communities do not have animal welfare services available. ADAP is currently working with the Humane Society of the United States (HSUS) to bring animal protection and animal welfare concerns to the attention of local governments. Additionally, ADAP aims to continue the education of the ParaVeterinary graduates through hands-on educational sessions with trained HSUS professionals.
**Name of Project**

Articulation Efforts between the Five Pacific Land Grant Institutions

**Project Status**

Concluded

**Responsible Party**

ADAP Directors and Management Services

**Home Office Staff**

James Hollyer (Project Manager), Vanessa Troegner (Project Coordinator)

**Regional Coordinators**

Eseta Sua-Kalio (ASCC), Robert Jackson (COM), Esther Kapileo (NMC), Annie Santos (UOG)

**Funding Amount Requested**

$0

**Problem Statement and Potential Solution**

The 2002-2007 ADAP Strategic Plan notes that increased articulation between the Pacific Land Grants is a desirable activity as it could lead to a more educated agricultural workforce in each ADAP country. To that end, here is a brief overview of current articulation agreements between the 5 Land Grants.

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<tbody>
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</tr>
<tr>
<td>College of Micronesia – FSM campus</td>
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</tr>
<tr>
<td>College of the Marshall Islands</td>
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<tr>
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<td>Northern Marianas College</td>
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These agreements would most likely be at the administrative level of the university or college, rather than just within the Land Grant or agriculture portion of the college. Overall, there are no entire programs that are directly transferable, rather individual courses would transfer, with or without credit.

**Estimated Impact of the Project to December 2004**

In February 2004, the President of the University of Guam requested, via the Senior Vice President, that the Dean of the College of Liberal Arts and Social Sciences initiate an interdisciplinary liberal studies degree program. The Dean organized a committee composed of faculty members and administrators. During the Spring, Summer, and Fall semesters, the committee conceptualized the new program and prepared the New Program Proposal forms, which entailed developing two new courses. The new courses are: a Gateway introduction to the program, and a capstone experience course. The New Program Proposal forms will be submitted to the appropriate committees for approval in January 2005. The committee decided to name the new degree program the Interdisciplinary Arts and Sciences program. We expect the program to begin in the Fall of 2005.

**Areas for Additional Work**

No additional work is required for this project.
**Name of Project**  
Pacific Islands Distance Diagnostics and Recommendation System

**Project Status**  
Concluding Project

**Principal investigator**  
Mark G. Wright (UH)

**Co-PI’s**  
Fred Brooks (ASCC), Grahame Jackson (PestNet)

**Collaborators**  
Dick Tsuda, Russell Messing, Ray Uchida, Cathy Tarutani, James Hollyer (UH), Bob Schlub (UOG), Singeru Singeo (COM), Hawai‘i Department of Agriculture-DOA, Philip Thomas (Hawaiian Ecosystems at Risk Project)

**Funding Amount**  
$0

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**PROBLEM STATEMENT AND POTENTIAL SOLUTION**

The impacts of invasive insect pests, plant pathogens, weeds and other organisms on island ecosystems are severe, not only in terms of natural ecosystems, but also agricultural production and other human activities. The islands of the Pacific have been subjected to extensive invasion by pest species, and most agricultural practices have been impacted.

The newly developed and implemented Pacific Islands Distance Diagnostics and Recommendation System (PIDDRS) has the potential to contribute significantly to improving diagnostic services throughout the Pacific, as well as providing a database system for predicting the movement of invasive organisms, training staff in isolated locations, and building the capacity of local agricultural personnel.

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**RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2004 TO DECEMBER 2004**

From American Samoa Community College, Mr. Aufa’i Ropeti Areta attended the distance diagnostics training in Honolulu, Hawaii on October 2004. Mr. Aufa’i, Dr. Fred Brooks (ASCC CNR Plant Pathologist) and Dr. Mark Schmaedick (ASCC CNR Entomologist) organized and conducted the Diagnostics Workshop (Plant identification & procedures from submitting samples) for Extension agents and Research associates in December 2004. Dr. Brooks and Dr. Schmaedick are now certified Diagnosticians from ASCC.

From the College of Micronesia, several COM researchers and research aides attended the PIDDRS and WPDN workshops in Honolulu, in July 2004. A follow up workshop was conducted by the participants from CMI with local staff from the RMI Ministry of Resources and Development, where five participants learned the PIDDRS system and practiced with field collection of plant disease and insect pest samples.

From the Northern Marianas College, Mr. Alejandro Badilles and Mr. Arnold Route attended the Distance Diagnostics training in Honolulu, in July 2004. Upon return, Mr. Badilles held a First Detection Workshop on the island Rota consisting of NMC and local quarantine and customs staff. There are nine participants who attended the workshop on Rota. All participants are now First Detectors for plant biosecurity.

From the University of Guam, Dr. Aubrey Moore attended the ADAP PDDRS/WPDN Workshop at UH Manoa in July 2004. The National Plant Diagnostic Network also certified him as a First Detector Educator/Trainer. During the last half of 2004, Dr. Moore submitted two sets of digital images to the PDDRS as part of a
request for help in identifying new pests on Guam. The first was for a weevil attacking calamansi (lemon). The second was for an invasive weed that local experts could not identify. Both submittals returned expert help in response to the requests. Linley Smith, our Plant Pathology Research Associate submitted four sets of digital images with requests for identification of plant pathogens during the same period. Additionally, an album of plant pathogens and the symptoms they cause is being compiled. Dr. Robert Schlub, Associate Professor of Plant Pathology, and Dr. Moore participate in monthly WPDN telephone conferences.

At the University of Hawaii, a Distance Diagnostics workshop was held on July 21 & 22, 2004 in conjunction with First Detector Training provided by the Western Plant Diagnostic Network. Participants included eight individuals from the Pacific region from seven different islands. A second workshop was held on October 19th, 2004, in conjunction with First Detector Training provided by the Western Plant Diagnostic Network. Fourteen participants were involved, representing extension agents the five major Hawaiian Islands. Diagnostic and computer equipment was purchased for the islands of Rota and Majuro.

**ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2004**

The PIDDRS project significantly strengthens our ability to rapidly and accurately identify new pests across the Pacific region, whether they are insects, plant diseases, or weeds, and to provide appropriate recommendations for their control. The system also documents pest occurrences and alerts diagnosticians throughout the region and beyond. This is a very effective program for sharing expertise with the region. Additionally, the PIDDRS will have a significant impact in identifying invasive plant and insect species, which can have devastating effects on local agricultural products and island economies.

Due to heightened biosecurity concerns, this project has evolved to be able to confidentially share samples across the Pacific. This feature allows local and national governments to securely handle food biosecurity threats to our nation. A potentially very significant impact of the project is the contribution to agricultural security for biological agent detection and diagnosis. PIDDRS is already considered to be a leading development in the Western Region in this regard.

**AREAS FOR ADDITIONAL WORK**

No additional work is required for this project.