

Name of Project	ADAP/SPC/USP Distance Learning ParaVeterinary Training
Coordination Team:	ADAP Project Manager and Regional Coordinators
Funding Amount:	Year 16 \$0 Year 17 \$0 Year 18 \$0

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.

PARAVET UPDATE

Singeru Singeo of the <u>College of</u> <u>Micronesia</u> attended a meeting of the Pacific Heads of Veterinary and Animal Production Services to learn more about activities being conducted across the Pacific region and represent the interests of the ADAP project. Please review his attached trip report.

As you recall, on February 7th, 2005, Jim Hollyer met with the directors of the Humane Society International, Humane Society of the United States, Heifer International, the USDA and the Department of the interior - Office of Insular Affairs. Outcomes of this meeting include an invitation to present a description of the ParaVet program at the American Veterinary Medical Association Meeting, July 14, 2006 -July 20, 2006. Additionally, Jim will be meeting with a representative from Global Initiatives in Veterinary Education Program, Association of American Veterinary Medical Colleges. We look forward to using these opportunities to seek out additional funding, and national and international collaborators.

ParaVeterinary Training Level 1 Graduates	
Country / Island (training dates)	ParaVet Graduates
American Samoa (2004)	4
Cook Islands & Tuvalu Islands (2005)	27
CNMI (2004)	
Saipan:	5
Tinian:	3
Rota:	3
FSM (2004)	
Chuuk:	1
Kosrae:	1
Pohnpei:	1
Yap:	6
Marshall Islands (2004)	2
Palau (2004)	4
Samoa (2004)	12
Solomon Islands (2005)	23
Total	92

December 13, 2005

MEMORANDUM

TO : Directors, ADAP

FROM : Singeru Singeo, ADAP Director - COM

SUBJECT : Meeting report: HOVAPS, Nadi, Fiji

This is a short trip report regarding my assignment in representing ADAP to attend the meeting of the Pacific Heads of Veterinary and Animal Production Services (PHOVAPS) in Nadi, Fiji from Nov. 28-Dec. 2, 2005.

The meeting was attended by officials representing most the Secretariat of the Pacific Countries (SPC) member states, both in the South Pacific and the North Pacific (see list below). Here is a summary of my observations:

- a. There is, like other parts of the world, a growing concern from the SPC member countries about the Avian Influenza and other diseases that could pose problems to this part of the Pacific region;
- b. Different governments are taking different steps to address their national concerns depending on their policies and proximity to the problems;
- c. Most of the countries, except the French-affiliated island nations, do not have services of Doctors of Veterinary Medicine;
- d. Most of these countries that lack Veterinarians expressed great appreciation for the training as made available thru the "paravet" project;
- e. Most of these countries expressed hope that additional paravet training would be provided in the future; especially to those countries which have not participated in the previous paravet training programs;
- f. There continues to be difficulty in recruiting students to attend the Veterinary Schools in Australia, New Zealand and others—primarily due to high costs;
- g. Without certified Veterinarian(s) available on many of the island nations, any program with animal health, production, and disease prevention programs do leave much to be desired;
- h. As human population on the various islands grow; and as demand for animal meat for protein increase; and as the likelihood of introduction of new animal diseases to the region increase, human health is increasingly at risk;
- i. I was given an opportunity to speak about ADAP so I explained to the Group that I was there to look for opportunities for collaboration and partnership in the future similar to the "paravet" project. I made sure that I did not promise anything but I also let the Group know that ADAP members do treasure a good collaborative working relationship with SPC and would like to see more of it in the future;
- j. During my presentation, I also suggested that efforts be made by the SPC countries to look into the possibility of establishing a formal veterinary services position that may be

equivalent to a "medical nurse" or a "Medex"—a position to be called a "Veterinary Technician" or "Veterinary Service Officer" or something similar.

- k. If such a position was formally established with an appropriate salary level in the various the island nations, then, we will have a justification (targeted number of graduates) to establish a formal training for people to be hired for such positions. A formal training/education program could be linked with the University of the South Pacific (USP), for a limited duration of time, so that the graduates of such a program could be hired to provide much needed veterinary services—not full veterinary services but almost. The current "paravet" program and teaching modules could be structured to lead to this formal training program. Community colleges and other institutions in the various countries could be tapped to provide the basic sciences and other required courses as appropriate. It seems there are interests in this kind of formal training program but no decision was made on it. I believe ADAP should look into this regional need to determine whether it should be involved in it in the future.
- 1. I also learned that there are many different types of expertise in the SPC region; and which are located in the various institutions including USP. Many of the projects and activities that are being undertaken by the SPC program people focus on the same kinds of problems we're dealing with in the North Pacific: nutrition, community development, education problems, invasive species, economic development issues, animal health, crop and plant protection, etc., etc.;
- m. I came out of this meeting convinced that there are many different things that we (ADAP and SPC) can share and do together in the future in a collaborative manner.

Conclusion: I would recommend that we (ADAP) continue to be in contact with SPC and our colleagues in the South Pacific island countries for a couple of reasons: 1) Many of the US affiliated countries, which ADAP represents, are already members of SPC; 2) SPC countries, organizations and institutions do have extensive experience and expertise in the various program/fields which we can learn and adopt from; 3) By sharing knowledge and experience between the North Pacific and the South Pacific countries, we (ADAP and SPC) will be able to undertake future projects with more efficiency, effectiveness and relevance to our peoples.

NOTES:

1. Countries attending the meeting: American Samoa, CNMI, Cook Islands, FSM, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, Wallis & Futuna.

2. Agenda included: Zoonosis Project; Paravet Project; Sustainable Ag project; Animal Waste Project; Biosecurity & Trade Facilitation; Commonwealth Veterinary Services; Animal Welfare; Avian Influenza and Emergency Response Planning; ADAP; Invasive Species; and others.

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2005

Northern Marianas College (NMC)

Allan Castro Sabaldica, DVM, writes:

"The NMC-CREES PARAVET program recently produced eleven (11) paravets in the Commonwealth of the Northern Mariana Islands (CNMI). After the graduation last February 2005, the paravets started their public service in their respective islands under the supervision of the CNMI veterinarian. They are assisting local farmers/ranchers in the areas of animal health and animal production by providing advice and services for free in livestock sector. Some of the community services that they offer are helping farmers recognized signs of disease in animals, treat sick animals, advise farmers on correct livestock management practices and ensuring that animals are slaughtered in a hygienic and humane manner. In Tinian alone, we have received more than 100 job request with the Animal Health Program with the DLNR.

"The five graduates from Saipan are Joe Randy Tudela from NMC-CREES, Richard Maratita from the Mayor's Office, Joanne Moses and Jeffrey Castro both from the Division of Agriculture (DOA) and Joaquin DL Guerrero, a farmer. Two paravets from the DOA are now in the U.S. for the Meat Inspection Program. The three graduates from Tinian are Fabros Muna and Aniceto Mendiola both from the DLNR and John Santos from The Ports Police while the other three paravets from Rota are Wayne Aldan and Manases Barcinas both from DLNR and Michael Ogo, a retiree. All requests for paravet service must be addressed to DLNR.

"The paravets are now waiting for the upcoming of the second phase that will deal with Meat Management by the first quarter of 2006. This is very timely that each island is focusing to have a certified USDA slaughterhouse to be able to market their local produce and venture to business and at the end be able to stay away from meat importation. The ultimate goal of the Paravet Program is in line with the goal of the DLNR and the NMC Livestock Improvement Program to have an independent and sustainable livestock industry. The paravets are also looking for possible professional certification in the Commonwealth.

Name of Project	Bioresidue Resources Assessment
Principal Investigator: Co-PI:	Dr. Charles Kinoshita (UH) Dr. Lee Yudin (UOG)
Funding Amount:	Year 18 \$35,610 + \$6871

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.

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.

REFERENCES

Kinoshita, C.M., S.Q. Turn, J. Tantlinger, and M. Kaya, "Potential for Biomass Electricity in Four Asian Countries," *Proceedings of the 32nd Intersociety Energy Conversion Engineering Conference*, Vol. 3, pp. 1779-1784, 1997.

Ishimura, D.M., C.M. Kinoshita, S.Q. Turn, M.H. Kaya, J. Tantlinger, and J.P. Dorian, "Review of Asia/Pacific Rim Renewable Energy Market Assessments by the State of Hawaii," *Proceedings of the Fourth Biomass Conference of the Americas*, pp. 1611-1617, 1999.

RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2005 TO DECEMBER 2005

In October 2005, Scott Turn participated in the Pacific Islands Networking Meeting organized by the ADAP's UH office by making a short presentation on the Bioresidue Resource Assessment Project. Contacts were made with other meeting participants that are anticipated to prove useful in collecting information useful to the project.

In November 2005, Charles Kinoshita met with Dr. Lee Yudin (University of Guam, CTAHR's partner in this project) and with Dr. Carol Lewis and Dr. Robert Wheeler, University of Alaska, Fairbanks, to plan the assessment for the U.S. affiliated Pacific island nations and to discuss possible approaches in gathering bioresource data relevant to Alaska.

Dr. Yudin felt that December 2005/January 2006 would not be a good time of the year to conduct information gathering visits in the Pacific; rather he recommended that we use the upcoming CariPac meeting (January 17-19, 2006), which will involve all ADAP member institutions, to plan and schedule visits to the various Pacific island nations.

Dr. Carol Lewis felt that the methodology proposed for estimating bioresidue resources in Alaska might not work well in that state, and questioned the validity of the preliminary data compiled by the Clean and Diversified Energy Advisory Committee of the Western Governors Association (for which Scott Turn serves on a biomass task force).

GOALS FOR THE PROJECT FOR THE NEXT SIX MONTHS: JANUARY 2006 TO JUNE 2006

- January 2006: Meet with ADAP representatives to plan and schedule visits to Pacific island nations.
- March 2006: Conduct visits.
- June 2006: Complete assessment report for Pacific island nations.
- Future Plans for Alaska: Under negotiation with University of Alaska representatives.

Name of Project	Healthy Living in the Pacific Islands
Principal Investigator: Project Administrator:	Dr. Rachel Novotny (University of Hawai'i) Nicola Davison (University of Hawai'i)
Co-PI's:	Ansina Kony (College of Micronesia-FSM/Chuuk, Cooperative Research & Extension), Julie Timothy (College of Micronesia-Kosrae, Cooperative Research & Extension), Janet Nemra (Ministry of Health and Environment, Majuro, RMI) & Nelly Lakabung (College of the Marshall Islands), Josepha Tutii (Palau Community College, Cooperative Research & Extension), Pat Coleman (Northern Marianas College, CNMI Cooperative Research, Extension & Education Service), Peter Barcinas (University of Guam, College of Agriculture & Life Sciences), Eric Enos (Learning Center at Ka`ala Farms).
Funding Amount:	Year 16 \$0 Year 17 \$25,000 + \$20,000 Year 18 \$9,775

The HLPI Project is working to reduce the disparity in prevalence of chronic (lifestyle) diseases in Pacific Island communities. Specific objectives are: to increase production and consumption of local foods, to increase physical activity and to increase local food production capacity.

HLPI implements programs tailored to the unique environment of each island. These programs also build the capacity of our local partners. Initiatives for monitoring and surveillance of health, particularly in the child population, provide baseline data for designing programs and interventions.

HLPI received \$340,300 as start up funds through the Agricultural Development in the American Pacific (ADAP) (2000-2005). These funds were instrumental in leveraging \$70,000 from Centers for Disease Control and Prevention and \$52,000 from University of Uniformed Services for nutritional assessment work (2003). A recent \$1 million USDA National Research Initiative (NRI) grant (2004-2008) partners HLPI with the Cancer Research Center of Hawaii, Johns Hopkins Bloomberg School of Public Health, Wai'anae Coast Comprehensive Health Center (Hawai'i) and Waimanalo Health Center.

Early funding from ADAP allowed each country to implement their own programs, within the three specific HLPI objectives. Current USDA-NRI funding ties each island's programs to NRI grant objectives – a Pacific diet tracker computer program ('PacTrac') and a food system intervention to increase healthy food availability

During Year 17, we focused on two key activities: follow up to nutritional assessment work, and staff professional development. Following the work done on nutritional assessment in American Samoa and CNMI, the information needed to be more widely distributed and communicated to various sectors of the community. HLPI personnel made site visits to American Samoa (Feb 2005) and CNMI (Dec 2005) to make presentations to community leaders/legislators, healthcare professionals, educators, and communities members. By sharing the information collected by the HLPI project, the island communities will become more aware of the problems associated with sub-optimal nutrition in their children, offering an opportunity to make changes at many levels (legislative, institutional, community and individual). We continue to work with these communities to ensure the information is available for targeted project activities and program planning in the future. In our efforts to increase staff development, awards of up to \$1,000 each were made to HLPI co-PI's for staff development and capacity building. During the 2005 HLPI workshop we were able to offer co-PI's the opportunity to receive training in MS Excel, MS Powerpoint and grant writing. The MS Excel will help staff when preparing budgets, the Microsoft PowerPoint will enable staff to prepare educational materials to enhance communication with the community and clientele). The grant writing workshop will be used as the basis for a participatory grant writing process, to take place in early 2006, with the goal of submitting a jointly written and submitted proposal to the Robert Wood Johnson Foundation for a physical activity grant. This will address our goal of capacity building within the institution and region, for longer term project sustainability.

During the January 2005 Board Meeting, an additional \$20,000 (Year 17) was allocated to HLPI. The additional ADAP HLPI funds have enabled the sites to build on previous HLPI activities which are not related to the NRI grant. Most of the activities involve educational programs which are targeted towards increasing knowledge among the local communities, using locally adapted and culturally appropriate materials.

Year 18, HLPI proposed the inclusion of Kosrae as a second community outreach and research center in the Federated States of Micronesia. Funding support from ADAP for one year has allowed the co-PI from Kosrae to attend the October 2005, HLPI meeting and will allow Kosrae to implement HLPI project activities in 2005-2006.

RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2005 TO DECEMBER 2005

American Samoa Community College (ASCC)

College of Micronesia (COM)

- ADAP funding for Yr 18 enabled Kosrae to join the HLPI 2005 workshop and will fund project activities in 2005-2006
- All four cooperators from Palau, Chuuk, Kosrae, and the Marshall Islands attended the annual meeting of this project in November of this year and provided updates on their ongoing projects and presented their plans of work for next year.

Northern Marianas College (NMC)

• A child nutrition assessment (2005) resulted in collection of baseline data. Preliminary results were shared with community leaders (Dec 2005)

University of Guam (UOG)

Update on School Meal Initiative Project - The pilot project started in July 2005 wherein placemats were provided to two pilot Guam public schools to use in their cafeterias to promote healthy eating and exercise to elementary and middle school students. Currently, about 500 placemats have been distributed to more elementary and middle school on island with the goal being to distribute the placements to all the schools on Guam.

University of Hawaii (UH)

- Worked with Ka'ala Farms to provide a pre-school taro growing project, which reinforces cultural values and introduces children to a local healthy food choice.
- Hosted the HLPI meeting at the University of Hawaii. Provided training to the HLPI co-PIs on grant writing, and publication development.

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2005

American Samoa

- Training for local staff involved in surveys of 10-18 year olds (Hatch-funded) & 2-10 year olds (2003) resulted in collection of baseline data.
- Travel funding then enabled results of nutrition survey to be shared with the community (2005)

Commonwealth of the Northern Marianas Islands

- An 'obesity' campaign running PSA's increased awareness of healthy lifestyle choices for children
- A child nutrition assessment (2005) resulted in collection of baseline data. Preliminary results were shared with community leaders (Dec 2005)

Federated States of Micronesia

• A health survey in the islands of Chuuk State provided information for program planning

Guam

• Development of a Typhoon Preparation manual and food service placemat made information, including nutrition and health, available to a wider audience

Hawaii

 A pre-school taro growing project, reinforces cultural values and introduces children to a local healthy food choice

Palau

• Translation of Secretariat of the Pacific Community (SPC) nutrition education materials increased the accessibility of information on healthy local food choices

Republic of the Marshall Islands

 Physical activity training for school teachers increased school-based physical activity for school children

Kosrae

• ADAP funding for Yr 18 enabled Kosrae to join the HLPI 2005 workshop and will fund project activities in 2005-2006

SUPPLEMENT TO RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JANUARY 2005 TO JUNE 2005

- Site visit to American Samoa February 2005 to report back on findings of nutritional assessment. Made presentations to village leaders (pulenu'u), DOE staff, LBJ hospital doctors, ASCC nursing students. Three evening presentations were made in villages (Malaloa, Mapusaga Fou and masefau). Met with key personnel at LBJ Hospital, Dept. Public Health and American Samoa Community College.
- Nutrition survey CNMI June 20 –July 8 2005. Funding primarily from USDA NRI grant but additional ADAP HLPI funding provided support for a series of pre-survey workshops and equipment. One set of equipment donated to NMC and Dept Public Health.
- CNMI see above (nutrition survey)
- American Samoa visited Manu'a Islands to present nutrition assessment results and offer assistance and nutrition education post-typhoon (Olaf). Purchase of monitoring equipment for use with clients during regular EFNEP programs (height/weight/blood pressure).
- Guam developing food service place mats and posters to be distributed to public elementary schools. Workshop on nutrition education for low income parents
- Palau funding the printing of Palauan versions of the SPC lifestyle health posters.
- RMI food preservation workshops which use material from booklet developed with last year ADAP funds. Three workshops to bring the SPARK physical activity curriculum to high school and community.
- Hawaii 105 pre-school children learned about ahuapua'a and cultural significance of taro, ate poi and received taro planting materials.
- Chuuk no specific plans to date. Co-PI was unable to travel to CNMI to be part of the survey team because of current problems at Chuuk campus COM-FSM.



Child receiving dental screening during survey



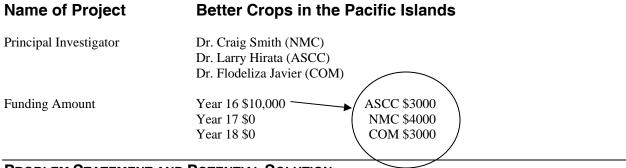
Measurement of arm circumference during survey



The survey team with training completion certificates

Goals for the Project for the Next Six Months: January 2006 to June 2006

- Co-PI's will continue implement activities in support of the NRI grant; this will mainly involve collecting recipe information to build on the PacTrac database and/or starting to collect preliminary information about the availability of healthy foods in local stores for the Healthy Foods project.
- In addition, we expect to start a participatory grant writing process with the group, with the goal of submitting a physical activity grant to Robert Wood Johnson Foundation later in the year.
- We have been given \$5,000 towards the costs of producing a Pacific Islands physical activity video, in collaboration with SPC. We hope to match the SPC funds with some unused HLPI ADAP (Year 17) funds to complete this project by June 2006.



Many people in the Pacific Insular areas have stopped raising vegetables because it has become too difficult for vegetable farming to remain a viable occupation. Because of pests and diseases, multiple harvest crops such as beans, cucumbers, bitter gourd, and tomatoes grow for a few months before prematurely succumbing to disease and dying. The situation is not as bad for crops where harvesting is able to begin early, such as cucumbers and bitter gourd in American Samoa. However, other crops are not able to begin a harvest before the plants begin to die, such as beans and tomatoes in American Samoa. Premature crop failure has kept many Pacific Islanders from continuing to grow vegetables. Sources of locally available seeds are usually retail packets from the major seed companies with older versions of non-hybrid varieties bred for cold regions. These low-cost seeds usually do not perform well in the tropics. Consequently, to keep a supply of fresh vegetables, wholesalers and retail stores usually import their own supplies because the local producers are not reliable in quality and quantity. As a result, a larger share of the family food dollar goes to pay for the imported vegetables. More locally-grown vegetables are needed to help decrease the rise of diet-related diseases in the Pacific Islands, such as diabetes, obesity and gout.

Our Project intends to identify better varieties of local favorite commodities than currently available in the areas served by American Samoa Community College (ASCC), the College of Micronesia (COM) and the Northern Marianas College (NMC). Focus will be on nutrient-dense vegetables that produce greater yields under current conditions of disease, pests, rainfall. humidity and temperature. Once concluded, information on the better performing varieties and better farming practices will be distributed to local communities. To increase the likelihood that these better quality seeds will be available within the communities, testing results will be made available to international seed companies. Elsewhere in the world, successful commercial growers have adopted hybrid vegetable seed because of greater yields, adaptation to local growing conditions, and multiple-disease resistance. Worldwide, the most successful vegetable growers use hybrids. For the past 10 - 20 years, Asian seed companies such as Takii and Sakata seed companies in Japan, Known-You Seed Company in Taiwan, China Tai Seed Company in Thailand, and organizations such as the Asian Vegetable Research and Development Center (AVRDC) in Taiwan, have done remarkable work in developing vegetable seed hybrids for the hot, humid wet tropics. Tropical areas have a 12-month growing season for both the crop, and the attacking pests and diseases. Many retail US seed companies appear to be content with their market share of selling non-hybrid varieties that were adapted to temperate countries decades ago. To serve the immigrant market, some US seed companies are now reselling hybrids developed and grown by Asian companies for tropical climes.

RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2005 TO DECEMBER 2005

American Samoa Community College (ASCC)

From Larry Hirata (Nov. 2005): "The project has begun with the ordering of seeds and supplies. Seedling trays and flats have been ordered in addition to fertilizers and potting soil. Because of the lack of updated seed catalogs, limited seeds have been ordered from 3 vendors, Known You Seed Company, Sakata Seed Company and University of Hawaii. (Online catalogs are incomplete as they do not include all the varieties in the printed catalogs). Complimentary seeds are being sent from Chia Tai Seed Company in Thailand. It is anticipated that the first of the seeds will arrive in late December, early January and trials will begin then and continue for 4 months (summer/autumn).

"A second round of orders will go out (in January 06) selecting varieties from the new seed catalogs received with the shipments and will include additional disease-resistant, heat tolerant varieties of won bok, tomatoes, peppers and spinach.

"The ambitious plan is to conduct a second set of trials to include the second round of orders of seed during the autumn/winter months and a third set during our spring/summer months with projected end date of December 2006."

College of Micronesia (COM)

COM designated Dr. Flodeliza Javier, an agronomist researcher, as the Co-PI representing Micronesia. Amendment to the contract has been approved and recently received. Search and identification of appropriate tropical seed varieties will proceed in earnest.

Northern Marianas College (NMC)

From Dr. Craig Smith (Nov. 2005): "Seeds and supplies have begun to be ordered. Soil, fertilizer and related supplies are being ordered from the local garden shop supplier, Ace Hardware. Special inputs, plastic trays, have been requested from an off-island supplier, Hummert.com.

"Seeds are being ordered for sweet corn, papaya, and the melon family. The funds will have all been obligated by the end of December 2005. Arrival of seeds are expected in February 2006. Planting is expected to begin March 2006. The latter will include canteloupe, watermelon, squash and Mexican species. One crop has been especially requested, but a supplier has not been located. It is "Yakon", a member of the sunflower family (Smallanthus sonchifolius) grown in the Andes Mountains

(www.cipotato.org/market/ARTChermann/yacon.pdf).

"Field trials are expected to be established at the new experiment station on Saipan known as the "As Perdido Farm". Currently the farm does not have electricity, water or fencing. However, the soil is of very high quality although the land floods. If crops are grown on ridges then the farm should be very productive. Planting is expected to begin in March 2006."

GOALS FOR THE PROJECT FOR THE NEXT SIX MONTHS: JANUARY 2006 TO JUNE 2006

Plant crops, collect data, and report results to farmers.

Name of Project	Distance Education Opportunities Project
Coordination Team:	Dr. Lee Yudin, Annie Santos (University of Guam), and Regional Coordinators
Funding Amount:	Year 16 \$15,000 Year 17 \$0 Year 18 \$0

Distance Education is a powerful tool in providing learning opportunities for individuals living in distant or isolated communities. This project is designed to explore and evaluate different models for providing learning opportunities to Pacific Island people.

RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2005 TO DECEMBER 2005

Report for ADAP "Mediation of Instruction for Learning at a Distance" Prepared by Lucyann Kerry, 11/30/05:

The equipment that has been purchased will be used to mediate courses and generate instructional materials. It consists of a full shooting unit with lights for location shooting such as classrooms or in the field, it has a separate digital audio recording capacity for easy reformatting to other media, and it has a Final Cut Studio editor that gives added capacity for adding other visual material and other audio with shot material or building compilations of still image or laying multiple audio tracks with picture. The equipment package also includes studio mikes and mixer for higher quality voice recordings that can be used with radio or audio tapes or edited in with picture. The Final Cut Studio also bundles a audio editing software.

The equipment base now provides for recording on both mediation in video and audio of the instruction of course lectures, demonstrations, or specific tasks for learning the operations or procedures with equipment and labs.

The recordings can be both of the classroom or in the field; they can then be edited and condensed or new material can be added to them such as still photos, illustrations and graphics.

After recording and editing, the content can be reformatted as audio tapes, video tapes, CDs & DVDs or converted to computer files or used with a videoconferenced extended classroom as a multimedia extension. The edited and reformatted material can be linked or attached to webpages and online courses. It can also be "bicycled" as distributed material with multiple copies for individual student use as the tapes or CD's. These material can also be distributed via cable channels and broadcast channels depending on the local systems.

Using the equipment, general course content can be individualized or modulated for self pacing. Because the material will be generated in digital formats it will be more compatible with computer and internet use. Also, by producing this material tropical content, Island/atoll content or specific local needs can be used that may not be included in general course materials from the states. Some of the course areas that may lend themselves to easy adaptation and mediation at UOG for use at other institutions in the Pacific are: Scientific Principles of Food Preparation, Nutrition and Health, Human Nutrition for Health Professionals, Insect World, Consumer Economics, Plant Pathology, Principles of Animal Sciences, Principles of Soil Science, Lab techniques and Math & English Fundamentals

Other informational material can be generated such as a recruitment video for Agriculture Education or archival material for use over a greater time span as research material.

GOALS FOR THE PROJECT FOR THE NEXT SIX MONTHS: JANUARY 2006 TO JUNE 2006

<u>University of Guam</u> plans to set up a pilot project so we can initiate the use of the audiovisual equipment purchased with funds under this project. A needs survey or assessment should be conducted to establish what or how the other ADAP institutions would like to utilize this equipment in developing their distance education needs.

UPDATE ON STATUS OF NORTHERN MARIANAS COLLEGE'S DISTANCE EDUCATION PROGRAM:

The information shared with me by Ms. Mary Ann Campo, Acting Director of the School of Education Technology Center is that Distance Education is very limited today at the Northern Marianas College. NMC does not have the necessary tools to create a successful Distance Learning program. In order to further develop NMC's Distance Education course offerings, it is necessary to add a web-based technology, such as one that enables online collaboration, communication and learning to enhance our present course management system.

Presently, NMC uses *Moodle*, an open-source software that provides our faculty with an online method of communicating with the students in their courses. This CMS extends learning beyond the classroom walls by providing an optional method for students to learn other than in a face-to-face classroom setting. NMC current CMS, Moodle, allows students to access their coursework, handouts, syllabus and quizzes and hold discussion forums online. By adding a new technology available today that allows for real-time meeting of faculty and students via the Internet, NMC will be able to add the "Virtual Classroom" component to its Distance Education Program and will greatly enhance its program for students in the CNMI.

There are currently many technology options that offer the Virtual Classroom. And many have the most technologically advanced and sophisticated features, including:

*Voice

*Video *Collaboration Tools

These options would allow faculty the opportunity to meet with students in real-time for lectures or class meetings, offer hands-on classes and engage the students in their learning. Products such as Web Ex, Centra, Elluminate Live, and Marcomedia Breeze offer an interactive method to easily collaborate in online meetings, show PowerPoint presentations to students who are not in the same location and offer trainings, workshops and courses over the Internet.

ADAP Project Progress Reports 01/2006

Pricing ranges from \$9,750 and upwards for packages offering this technology. NMC would investigate other options and choose the appropriate software and hardware necessary at a reasonable cost.

<u>NMC's Goal for the Next 6 Months</u>: Training faculty to teach in the online environment and to redesign their courses to be successful online is an essential component of Distance Education. Travels to the neighboring islands to conduct an assessment of the Distance Education facilities and equipment is necessary. We plan to instruct faculty in the new methodology and the new delivery of their courses and workshop offerings. We plan to be ready to offer these courses and workshops on Tinian and Rota no later than Fall 2006.

Name of Project	Pacific Emergency Management Preparedness and Response Information Network and Training Services (Pacific EMPRINTS)
Principal Investigator	Ann Sakaguchi, MPH, PhD
ADAP Coordination Team:	ADAP Project Manager and Regional Coordinators
Funding Amount	Sub-award from HRSA, \$76,000

The U.S. Health and Human Services Health Resources and Services Administration (HRSA) awarded the grant to Dr. Ann Sakaguchi. The purpose of the grant is to fund the development of a health care workforce with knowledge, skills, abilities, and core competencies to recognize indications of terrorist attack; meet acute care needs of patients; participate in coordinated, multidisciplinary response to health events and to rapidly and effectively alert the public health system and local communities of such an event. The proposed project work will take place during the period from September 1, 2005 through August 31, 2008.

The subaward in the grant was written in as follows: "ADAP/Paravet Program at CTAHR - A subaward will be made to the UH- CTAHR ADAP/Paravet Program to fund three U.S.-Affiliated Pacific Islands (USAPI) projects in efforts to expand knowledge in bioterrorism and other public health threats.

- 1. Animal Health First Identifier and Response Project Training (includes travel to/from Hawaii from/to American Samoa, Majuro, Pohnpei, Guam, Saipan and Palau); travel costs of participants from other islands to one of these aforementioned workshops;
- 2. GPS training in USAPI;
- 3. GIS mapping of animal and plant farms in USAPI.

BUDGET

\$24300	GIS instructor (Part time salary + fringe)
\$5000	20 GPS units
\$34000	domestic travel
\$700	publications
\$5000	On-island transportation
\$7000	Indirect costs for first \$25K (approx.)
\$76000	Total

Name of Project	Management Services
Coordination Team:	ADAP Project Manager and Regional Coordinators
Funding Amount:	Year 16 \$229,642 Year 17 \$213,536 Year 18 \$211,956

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 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 2005 TO DECEMBER 2005

American Samoa Community College (ASCC)

- Coordinated ongoing ASCC ADAP projects and expenditures.
- Provided administrative support to ASCC ADAP students.
- Assisted ADAP Home Office with ADAP Board of Director's winter meeting arrangements in American Samoa.

College of Micronesia (COM)

- Completion of strategic plans for COM-FSM campuses of Yap, Chuuk, Pohnpei and Kosrae
- Completion of a draft for review of the FY 2005 Annual Report of Accomplishments and Results to CSREES-USDA

• Completion and dissemination of a draft paper on the commercialization phase of the Pohnpei Pearl Industry for comments.

Northern Marianas College (NMC)

- Margarita D. Tudela replaced Edgar Crocker as the ADAP Director in early December 2005.
- Ms. Esther retired on December 9, 2005. Ms. Bonnie Tudela-Royal replaced her as the ADAP Coordinator.

University of Guam (UOG)

- Worked closely with CNAS accountant in monitoring ADAP funds and preparing the Balance Summary and Reimbursement Request Reports to be submitted to the ADAP Home Office for processing.
- Dr. Lee Yudin attended the 2005 Sun Grant Technical Committee Meeting held in Portland, Oregon. The primary mission of the meeting was to build an RFP that would encompass a broad range of goals and objectives that would meet the basic criteria of the grant and funds that will support either biofuels of bioproducts projects.
- Dr. Lee Yudin and Annie Santos attended the 2005 Joint Summer Western Directors Meeting and the Summer 2005 ADAP Board of Directors Meeting held in Santa Fe, New Mexico.

University of Hawaii (UH)

- Completing the Pacific Islands Land Grant Database Project Accountability and Reporting System (PARS) for tracking all projects and all funding in the 5 Pacific Land Grants. The site will be a public relations portal for clients to access information on what is being accomplished within the Pacific Land Grants. It will also track, for Land Grant administrators, progress and impact on projects from all funding sources. <u>http://www.pacificlandgrants.org/</u>
- Jim Hollyer facilitated four strategic plans for the Federate States of Micronesia Land Grant offices in Yap, Kosrae, Chuuk, and Pohnpei. These plans were made with full participation of the community and map out work for the next 5 years.
- ADAP hosted a unique Pacific Islands Networking Meeting (October 18th) at East-West Center, to bring together, for the first time, a variety of research and outreach personnel from health, education, agriculture, aquaculture, law enforcement, environment, etc., who are engaged in Pacific island work. Approximately 100 people attended the conference. Over the course of the day, 55 participants presented short program descriptions. Participants shared program brochures, and business cards. After the conference, ADAP developed a website to allow participants to opportunities for further networking at <u>http://www2.ctahr.hawaii.edu/adap2/Pacific_Initiative/index.htm</u>. In addition to contact information, the website contains many of the PowerPoint presentations that were presented at the meeting. Comments and responses from the participants are online at

http://www2.ctahr.hawaii.edu/adap2/Pacific Initiative/Survey Results.htm Responses included: "I [Mark Merlin] networked with Eileen Herring of UH Library and upon request

will be donating some more of my Micronesian environmental education texts to Hamilton Library." When asked whether the participant would pursue funding opportunities learned of during the meeting, one respondent commented, "No, but I have had three of the attendees request grant funds from the EDA [Economic Development Association] program." Additionally, an email contact list for all of the participants, and invitees, was complied. Individual email addresses are available online and a complete distribution list is available upon request. Total expenses for the Pacific Networking Meeting, \$1535, were covered by the University of Hawaii, Facilitating Account.

- Dennis Miyahara provided technical video services to the TSTAR project so that it could bring the impact of their research efforts to a larger audience.
 <u>http://www2.ctahr.hawaii.edu/t-star/TSTARHilitePage.htm</u>. To date, three TSTAR Video Impact Reports have been completed and three are in the initial planning stages.
- Dennis Miyahara has been working with HLPI to complete five posters; two posters and a brochure are in progress. Dennis has assisted the College of Micronesia to complete and print an informational brochure.

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2005

American Samoa Community College (ASCC)

• Management Services project provided administrative support and dissemination of information of ASCC ADAP projects.

College of Micronesia (COM)

- Updated ADAP project expenditures reports and ADAP inventory report
- Successful completion of staff development training programs and participation of HLPI project cooperators at annual meeting.
- Dissemination of appropriate and useful information on ADAP projects on a timely basis to sites within and outside Micronesia.

Northern Marianas College (NMC)

University of Guam (UOG)

• Closely monitor the expenditure of funds under the different core projects and assure that they are spent for the purposes that are allocated, and that there is accountability towards funds expended.

University of Hawaii (UH)

• The Pacific Islands Land Grant Database – Project Accountability and Reporting System (PARS) will significantly improve research and extension services in the Pacific region. Also, the PARS system will facilitate collaboration between institutions by providing a searchable database of professional interests, and expertise.

• The Pacific Islands Networking meeting was a success. Although there weren't any immediate outcomes for ADAP, many participants have forged valuable collaborative relationships.

GOALS FOR THE PROJECT FOR THE NEXT SIX MONTHS: JANUARY 2006 TO JUNE 2006

American Samoa Community College (ASCC)

- Continue to provide administrative support to ASCC ADAP scholars.
- Recruit new students for the ADAP HRCB program.
- Continue to work with ASCC ADAP Accountant to keep ASCC ADAP accounts current.

College of Micronesia (COM)

- Reinstate the high school research/extension summer apprenticeship program
- Continue scholarship support for Mr. Mark Kostka's last year at UH-Hilo and assist the enrollment of others majoring in agriculture/home economics at same institution or someplace else.
- Continue facilitation/support for ADAP project cooperators in the implementation of their respective projects

Northern Marianas College (NMC)

University of Guam (UOG)

- Submit Balance Summary and Reimbursement Request Reports in a timely manner.
- Reorganize ADAP files utilizing full-time employee hired under ADAP Management Services.
- Reprioritize Human Resources & Capacity Building funds

University of Hawaii (UH)

- Maintain project's financial accounts, and update subcontracts.
- Update and expand ADAP's website to improve usability.
- Prepare ADAP Year 19 Proposal.
- Dennis Miyahara will be working with HLPI and SPC to complete an exercise video. Approximate date of completion: May 31, 2006.

Name of Project	Leadership Development in the 21 st Century
Coordination Team:	ADAP Project Manager and Regional Coordinators
Funding Amount:	Year 16 \$34,000 Year 17 \$34,000 Year 18 \$78,075

The establishment of the Pacific Land Grants, especially American Samoa Community College, College of Micronesia, Northern Marianas College, and the University of Guam, has been critically important to these small but growing regions of the Pacific. One of the areas that are often overlooked in building such an institution from the ground-up is the consistent development of leadership qualities within the staff. Without such skills, these institutions, including the College of Tropical Agriculture and Human Resources at the University of Hawai'i, will not make the organizational strides required by their clients.

ADAP will send one representative from each ADAP institution to the ESCOP/ACOP leadership Development program as often as funding is available.

In the ADAP Year 18 proposal, additional funds were provided to each institution to cover the increased program costs, increased registration costs, and increased travel costs. For the current candidates to the LEAD21 (2005-2006), funds in Year 16 and Year 17 should be completely expended, before requesting additional funds. Should any institution require additional funds for 2005-2006 candidates, please forward a request to the Home Office. Year 18 funds will become available in September for the Leadership candidates beginning their programs in June 2006 (application deadline April 2006).

CANDIDATES FOR LEAD 21, CLASS 2005 - 2006

ASCC:	Eseta Su'a-Kalio
UOG:	David Crisostomo
UH:	J. Kenneth Grace

CANDIDATES FOR LEAD 21 CLASS 2006-2007

ASCC:	Dr. Daniel Aga, Dean & Director, Community & Natural Resources Programs
COM:	
NMC:	
UOG:	Dr. James McConnell, professor in Ornamental Horticulture, CNAS/AES
UH:	Dr. Halina Zaleski, HFNAS

COMMENTS FROM PARTICAPANTS:

American Samoa Community College (ASCC)

From Eseta Su'a-Kalio:

"Phase II of the Leadership Development Program was held in Kansas City, Missouri on October 10-13, 2005. Phase II of the Lead 21 leadership program was attended by seventyseven participants from various Land Grant Institutions. The class was divided into three groups/trips. I was assigned to trip 1, which took me and the other twenty-four members of my group to Lincoln University in Jefferson City, Missouri.

"Lincoln University is an 1890 institution, which was established to provide equal educational opportunities for African American students. They offer academic services and programs designed to serve and support rural communities. In fact, I was glad that I was assigned to go to Lincoln University because of my personal interest to find out the leadership challenges and cultural diversity (if any) in 1890 institutions. I predicted that Lincoln University would NOT have the same challenges as 1862 institution like ASCC.

"After my trip to Lincoln University, I learned many similarities between Lincoln University and ASCC. There weren't that many cultural and gender differences in leadership styles and practice at Lincoln University when I compared it to ASCC. Both Lincoln and ASCC Leaders are females. Lincoln University serves a mix population of students similar to ASCC. Political and funding challenges were also similar when looking for the appropriate political support to help assure the security of local/state funding for matching. In addition, I learned some of the ways the leaders in Lincoln University work within the "system" especially in bridging organizational political boundaries.

"During my peer coaching activities, I was given an assessment and results of some of the challenging areas in leadership style such as; appreciate opinions different from my own, ensures that unit is ready to change, spends time with individuals angry or anxious about change, practice being an extrovert instead of being an introvert at ALL the time (it might bring out ideas in the open that may be of interest to the success of the institution and the program)."

University of Guam (UOG)

David P. Crisostomo UOG Participant LEAD21

LEAD 21 - Session I: Indianapolis, Indiana

First few days were spent on understanding the ratings made on the personality and leadership profile instruments that were completed by the participants and other individuals (co-workers, supervisors, etc.) within their workplace. Understanding your strengths and using it effectively is the core of successful leadership. The Academic Leadership Competency Inventory (ALCI) provided insight into my individual and group values towards leadership in an academic setting. This provided a snapshot of perceived strengths and weaknesses in leadership from the various raters' perspective and from myself. In one exercise, participants were placed in 5 small groups of 6-8 and were submitted to a simulation to carry out an exercise in group dynamics. Each group was video taped, and then the session was evaluated by another group and presented to the larger group. It offered many different interactions that can occur with groups.

In lieu of a project, as has been required in past trainings; this year's training incorporates an additional training session and expects participants to develop a personal "leadership development plan". I have started to develop mine and have discussed it in part with the Dean of CNAS. Future discussions with the Dean and Vice President of UCE will take place.

LEAD 21 - Session II: Kansas City, Missouri

The focus of this session was leadership with minority groups and underserved populations. The participants, which totaled about 80, were divided into three groups and assigned to one of three travel sessions. I participated in the session at the Prairie Band Potawantami Indian reservation, which included the Haskell Indian Nation University, a 1994 Land Grant institution. Our group met with University officials, including the President and her staff, as well as a panel of three students and 2 faculties. We also met with community leaders from the Tribal Council, who are responsible for the leadership of the entire reservation. The following day our group discussed our travel to the Potawatami reservation and prepared a presentation.

The trip presented insight into other populations and their leadership styles. Others views of diversity can be very different than ours. The Haskell Indian University considered themselves diverse because their student population represented 150 tribes, but all were Native American Indians.

University of Hawaii (UH)

From Dr. Kenneth Grace:

"I have really appreciated the opportunity to participate in LEAD21 this year, and I'm grateful to ADAP for supporting it. The classes have focused progressively on (1) developing, assessing, and improving individual leadership skills; (2) applying those skills in institutional and community settings to serve the diverse clientele groups of the landgrant system; and (3) the role of landgrant leadership in formulating national policy. The first sessions emphasized assessing personal strengths and areas for improvement, and learning and modeling practical tools for self-improvement in each of the participant's leadership roles. In the second session, we visited several very different mid-western communities (urban hispanics, a small farm community, and a Native American nation) with distinct and different concerns, and analyzed how landgrant leadership in those communities was attempting to meet these different needs. The final session in February 2006 focuses on the role of landgrant leadership in national policy formulation in Washington DC.

"LEAD21 has been an extremely worthwhile training program for me. It has given me practical tools for personal and professional development, increased my understanding of the landgrant university system and of different leadership styles, and expanded my network of national contacts. I think the participants from Guam and from American Samoa would join me in this assessment. Depending upon your background, certainly some parts of the program may be more relevant than others, but there is really a lot of content in this program. I would recommend it for anyone involved in programmatic or institutional leadership."

Name of Project	Enrichment Opportunity Project
Coordination Team:	ADAP Project Manager and Regional Coordinators
Funding Amount:	Year 16 \$35,000 Year 17 \$35,000 Year 18 \$35,000

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 2005 TO DECEMBER 2005

American Samoa Community College (ASCC)

Supported continuation of ADAP scholars' degree program for Summer & Fall '05 semesters at ASCC.

College of Micronesia (COM)

Funds were used to support strategic planning meetings at the four COM-FSM campuses of Yap, Chuuk, Pohnpei and Kosrae to develop programs and capacity of staff at these sites.

Northern Marianas College (NMC)

University of Guam (UOG)

Monies under this project were once again used to fund the Summer Research Apprenticeship Program involving high school students from the various public and private high schools in Guam. We were able to recruit five students to participate in the program this past summer. They were selected on the basis of their academic grades, with emphasis in science and math, and their response in the form of a short essay to a couple of key questions. Faculty involved in this summer's program were able to offer the students work experience in the fields of food science, soil science, entomology, aquaculture, model farm, and cancer research.

University of Hawaii (UH)

• Jim Hollyer attended the "Analytic Hierarchy Processes" Workshop.

- Dennis Miyahara and Vanessa Troegner attended Adobe InDesign classes. Abode InDesign is a layout and design program that creates digital or print brochures, posters, and fliers.
- Vanessa Troegner and Sharee Pepper attended the "Learning to Lead Collaboratively" Workshop. This workshop focused on meeting facilitation and meeting planning.
- ADAP provided funding for Dr. Novotny's research group, Nutritional Assessment of Populations (NAP) to work with Lee Ann Del Carpio of Inner Power International on Team Building and Strategic Planning. NAP is a collection of research projects led by Dr. Novotny, (which includes the Healthy Living in the Pacific Initiative, HLPI) which has experienced rapid growth in the number of projects and size of the team. Thus, Dr. Novotny contracted with Inner Power International for Team Building and Strategic Planning sessions to develop and clarify processes and roles, and to examine methods and styles of communication and organization. As part of this process, each NAP staff member, including Dr. Novotny, examined their own communication and work style then shared it with the group. This allowed appreciation of diverse strengths within the group and opportunities to align jobs to maximize effectiveness and satisfaction. It also enabled the team to recognize and understand its weaknesses and utilize tools to improve communication and teamwork.

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2005

American Samoa Community College (ASCC)

ASCC ADAP Scholars completed summer and fall '05 semester. Scholars continue degree program, spring '05 semester.

College of Micronesia (COM)

Completion of the strategic plans for the four sites that will help in more focus on critical issues and also help in the organization and development of the next five years USDA mandated Plan of Work. Other impacts were the increased in collaboration among land-grant program, governmental organizations, and NGOs and other stakeholders on projects/programs implementation.

Northern Marianas College (NMC)

University of Guam (UOG)

Students who participate in the apprenticeship program come away with greater understanding and appreciation of the field of scientific research. They are exposed to handson training in an actual laboratory environment working along side their assigned scientist and research assistants. They collect and analyze data, learn to operate various lab equipment, accompany research assistants to conduct fieldwork, etc. The experience gained during their 4to 5-week program will hopefully provide a positive influence in their future educational endeavors. Our goal is to entice these students to possibly pursue a field in agricultural research.

University of Hawaii (UH)

With this additional training, Dennis Miyahara has expanded his design and print expertise. All ADAP institutions benefit from his experience and assistance with informational or educational posters, brochures, and print layout and design. ADAP's in-house team can produce high quality and high impact items without the high expense.

Jim Hollyer, Vanessa Troegner, and Sharee Pepper learned how to better prepare and facilitate a meeting, how to facilitate group decision making, and alternative methods for group decision making.

Team Building and Strategic Planning process for Nutritional Assessment of Populations, which includes HLPI, has enhanced our sense of team, clarified processes and roles, and enhanced the work environment.

GOALS FOR THE PROJECT FOR THE NEXT SIX MONTHS: JANUARY 2006 TO JUNE 2006

American Samoa Community College (ASCC)

Two ASCC ADAP Scholars are potential graduates for the Spring '05 ASCC graduation.

College of Micronesia (COM)

Continue to announce the availability of enrichment opportunities funds and prioritization of areas of staff development needs.

Northern Marianas College (NMC)

University of Guam (UOG)

Plan and prepare for this summer's research apprenticeship program and possibly increase the number of students participating in the program.

University of Hawaii (UH)

UH will continue to focus on staff development, specifically in computer graphics and web design skills. Additionally, by keeping up with technology and software advances, we hope to continue to improve the quality and accessibility of the ADAP website.

Name of Project	Human Resources & Capacity Building Project
Coordination Team:	ADAP Project Manager and Regional Coordinators
Funding Amount:	Year 16 \$60,000 Year 17 \$60,000 Year 18 \$60,000

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 its 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:

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.

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.

Financial Assistance for an Advanced Degree Studies 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 2005 TO DECEMBER 2005

American Samoa Community College (ASCC)

Two ASCC ADAP scholars completed Summer and Fall '05 semesters.

College of Micronesia (COM)

Financial support to staff who are attending 2-4 years colleges and universities with support provided to Mr. Mark Kostka who is currently attending the UH-Hilo campus.

Northern Marianas College (NMC)

The complete set of four core Natural Resources Management (NRM) classes was taught for the first time since the degree program's inception in 2003. In addition to students within the major, the courses were opened up to the entire student body as elective science alternatives for other majors. Course enrollment increased incrementally each semester, as did the number of students declaring NRM as their major program of study. Currently, ten students are declared NRM majors, up from four in 2003, an increase of over 120%. Student recruitment was expanded within the high schools by participation in NMC's Recruitment Committee, as well as presentations and meetings conducted for various sister agencies with responsibilities for natural resources conservation and management.

This reporting period also saw the successful recruitment of four field research scientists serving as adjunct instructors in the areas of forestry, marine science, and wildlife biology from the sister agencies of the Division of Agriculture, Dept. of Environmental Quality, and the Coral Reef Management Office. Scientist-instructors, sharing their academic expertise and working experience in their respective fields, are integral components of the NRM degree program providing on-going "real world" learning enhancement and "applied" management situations for our students to develop their skills and knowledge.

Meetings in Hawaii (Summer 2004) continued the efforts toward the full articulation of the NRM coursework and degree program with the University of Hawaii's B.S. degree in Environmental & Natural Resource Management. The four core courses have been developed to fit into the UH-Manoa and UH-Hilo programs with full articulation and no loss of credits to NMC students. Work continues toward this goal.

Students majoring in NRM are eligible for ADAP Scholarship under the Human Resources & Capacity Building (Year 16 & 17). ADAP awarded one individual pursuing a doctorial degree, one who is pursuing a Masters Degree in Education and the rest of the recipients are NMC students majoring in NRM-Associate Degree. NMC-CREES also used part of the available funds and hired 18 high school students who had shown strong desired in pursuing in the field of agriculture and life sciences.

University of Guam (UOG)

We continue to use funds under this project to provide financial assistance to five fulltime employees at the University who are pursuing their bachelor's degree.

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2005

American Samoa Community College (ASCC)

HRCB project promoted Agriculture and Life Sciences degree programs at ASCC.

College of Micronesia (COM)

Mr. Kostka's completion of the first year at UH-Hilo and enrollment for the second year to complete requirements for BA degree in tropical agriculture. In addition, the successful completion of strategic plans for the COM-FSM campuses.

Northern Marianas College (NMC)

The Educational Financial Assistance made available through the Human Resources & Capacity Building Project had resulted to an increased enrollment in NRM courses each semester, as did the number of students declaring NRM as their major program of study. Currently, ten students are declared NRM majors, up from four in 2003, an increase of over 120%.

University of Guam (UOG)

Upon completion of their respective degree programs, these individuals stand to benefit greatly from the knowledge they've attained by applying such knowledge to their work situation and perhaps even resulting in job advancement. Three of these individuals work within the college and upon graduating with their bachelor's degrees can better serve the college in their capacity as administrative officer, administrative assistant, and biologist, as well as promote our agriculture and consumer and family sciences academic programs.

GOALS FOR THE PROJECT FOR THE NEXT SIX MONTHS: JANUARY 2006 TO JUNE 2006

American Samoa Community College (ASCC)

- Recruit new scholars for apprenticeship program, 2-4 year college and advanced degree.
- Revise student agreement to reflect ongoing and future program goals and objectives.
- Continue ASCC ADAP HRCB awareness campaign.

College of Micronesia (COM)

- Provide enticement for additional staff who would be interested to continue their education either through on-campus program or on-line.
- Search for regional and international programs to support human resource development needs of current staff.
- Provide financial support to college students who are majoring in agriculture, home economics, and related fields.

Northern Marianas College (NMC)

• I would like to see NRM courses offered online/distance education so that NMC students on the neighboring islands of Rota and Tinian will also get the opportunity since at the present time NRM courses are only offered on Saipan NMC campus.

University of Guam (UOG)

• Two of the employees under this program should be completing their degree programs and graduating by Spring '06 semester.

- Evaluate academic record of each remaining individual receiving financial assistance to determine how far along they are in their respective degree programs and push them towards their graduation goals.
- Reprioritize Human Resources & Capacity Building funds.

Name of Project:	Communications, Information and Publications Services (CIPS)
Coordination Team:	ADAP Project Manager and Coordinators, Eileen Herring (UH Hamilton Library), UOG Librarian
Funding Amount:	Year 16 \$63,030 Year 17 \$63,190 Year 18 \$20,730

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 2005 TO DECEMBER 2005

American Samoa Community College (ASCC)

• Provided Internet access to all ASCC CNR staff and faculty.

College of Micronesia (COM)

- Purchase of necessary equipment such as printers, digital cameras, and supplies for the operation of the COM Central Office and the support offices in Palau, COM-FSM, and CMI.
- Maintenance of current Internet connectivity capability at the COM Central Office with the 3 colleges and six campuses and elsewhere.

Northern Marianas College (NMC)

• No activity to report.

University of Guam (UOG)

• No activity to report.

FYI:

PREL (Pacific Resourcess for Education and Learning) offers free online access to EBSCO databases to all residents of the U.S.-affiliated Pacific, including teachers, students, parents, educational administrators, health professionals, and researchers. EBSCO databases index the articles in more than 7,500 of the world's leading magazines and journals in education, health, social issues, business, and student services.

More information including how to long in is available at:

http://www.pacificresources.info/ebsco.asp

Check it out!

University of Hawaii (UH)

			Book		
Location	Searches	Articles	Loans	Hours	Value
ASCC	19	22	2	17.0	\$914.40
COM-FSM					
Pohnpei	0	0	0	0.0	0
Yap	0	2	0	1.0	\$30.00
CMI	0	0	0	0.0	0
NMC					
Saipan	4	4	0	6.5	\$368.00
Tinian	5	0	0	3.5	\$210.00
PCC	3	0	0	1.0	\$45.00
UOG	2	8	0	5.0	\$265.50
SPC-Fiji	0	7	0	2.0	\$107.50
Total	33	43	2	36	\$1,940.40

ADAP CIPS 07/01/05 – 12/31/05 Library Services Statistics

(The figures given in the "Value" column are based on the current rate schedule of the University of Hawaii at Manoa Library's External Services Program. (ESP). ESP provides library services for non-UH Manoa patrons. ESP charges fees on a cost-recovery basis.)

In addition to the services outlined in the table, Eileen Herring made two trips on ADAP's behalf this year. Ms. Herring attended the annual Agriculture Network Information Center (AgNIC) Technology Update and Annual Meeting in Potomac, Maryland from 9 March through 11 March. Attendance at this meeting is mandatory for the continued inclusion of the Traditional Pacific Island Crops Web site in the NAL's AgNIC program. To view website, please go to http://libweb.hawaii.edu/libdept/scitech/agnic/

In November, Ms. Herring attended the annual Pacific Islands Association of Libraries and Archives (PIALA) meeting in Kosrae and made a presentation in which I shared information about FAO Web-based resources appropriate for the region's libraries. Additionally, during her trip, she stopped on Majuro and Kosrae. During her layovers, she held two workshops in which she explained and promoted the use of the ADAP supported library services. The Web training workshop in Majuro (November 4th) involved ten participants from the College of the Marshall Islands and the Majuro EPA. The Web training workshop in Kosrae (November 8th) involved eight participants from the College and the Kosrae Department of Agriculture. The Web Training workshop included literature searching to improve grant proposal preparation and networking with Pacific Island librarians in support of agricultural information dissemination in the region.

Additionally, the Home Office purchased software upgrades, and software tutorial texts with funds from this project for UH. Also, the Home Office staff purchased software from the University of Hawaii Bookstore at the discounted educational rate for our collaborators across the Pacific.

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2005

American Samoa Community College (ASCC)

Strengthen dissemination of information at ASCC CNR.

College of Micronesia (COM)

- Accessibility and delivery of useful scientific and extension materials through the ADAP search and delivery project.
- Increase the capability of some sites in their publication efforts through the purchase of digital cameras and color laser printers.
- Increase the capability of some sites in documenting and sharing of program activities through the purchase of digital cameras

University of Hawaii (UH)

With increased access to research and extension information through the Agricultural Document Delivery Service, ADAP institutions are better able to serve their communities and their clients.

GOALS FOR THE PROJECT FOR THE NEXT SIX MONTHS: JANUARY 2006 TO JUNE 2006

American Samoa Community College (ASCC)

Publish extension, research and academic ADAP brochures/videos.

College of Micronesia (COM)

Continue to assess the needs at the 3 colleges for communication, information and publications.

Northern Marianas College (NMC)

Continue to use the rest of available funds for more brochures and supplies.

University of Guam (UOG)

Brainstorm for projects or activities we can undertake to utilize the funds under this project.

University of Hawaii (UH)

Distribute three agricultural textbooks to each of the nine Land Grant college libraries of the Pacific (ASCC, NMC, UOG, CMI, PCC, COM-Yap, COM-Chuuk, COM-Kosrae, COM-FSM). Each library will given a list of twenty titles from which to pick their three. Continue to provide Agricultural Document Retrieval Services.

Name of Project	Grant Coaching Services
Coordination Team:	Dr. Sharee Pepper, ADAP Project Manager and Regional Coordinators
Funding Amount:	Part of the CIPS budget

Grant Development and Capacity Building Project – The American Pacific Land Grant institutions and government agencies would like to increase the level of funding for their research, education and extension projects. Increasing the amount of funding from competitive grants is increasingly important and capacity building to facilitate professional development is essential to compete successfully.

RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JUNE 2005 TO DECEMBER 2005

University of Hawaii (UH): Dr. Sharee Pepper's Activities

- Attended a USDA grants workshop in Idaho, September 28 and 29th on grantsmanship,
- Presentation of half day tutorial on Grant writing for the HLPI (Healthy Living in the Pacific Islands) Oct 13 annual meeting,
- Presented materials and assisted with the ASCC Grants workshop, held in American Samoa, October 24 to 28, 2005,
- Reviewed/edited the proposal for the EMPRINTS project. The project was awarded a grant of \$4.4 million. ADAP/ParaVet Project was awarded a subgrant of \$76,000.
- Attended two-day CTAHR workshop on Learning to Lead Collaboratively from Dec 5-6.
- Compile and e-mail a newsletter describing currently available funding opportunities of interest to Pacific Land Grant staff and faculty every few weeks as the information becomes available,
- Assistance with all aspects of grant development and submission are provided to those requesting support.

At the <u>American Samoa Community College</u> grant information was disseminated to all of CNR appropriate personnel's for the information and records. At <u>College of Micronesia</u> the Grant Coaching services has increased awareness of research and extension staff on currently available funding opportunities. At the <u>University of Guam</u>, grant opportunities information received from Dr. Pepper via email are forwarded to CNAS faculty. We have not received any feedback from faculty, although if they do see something of interest they would just click on the sight provided in Dr. Pepper's emails.

ESTIMATED IMPACT OF THE PROJECT TO DECEMBER 2005

• Contributing to capacity building in the Pacific Island Land Grant institutions and the UH CTAHR staff and faculty by providing training on how to write successful grants and identifying possible funding sources,

- Increasing the resources and funding for education, research, and extension programs and projects by supporting the writing and submission of grants to the UH and Pacific Land Grant institutions,
- Supporting the goals and accomplishments of the UH Agribusiness Education, Training and Incubator Project by compiling and submitting the required annual reports for this USDA grant composed of a consortium of nine Hawaii college campuses.

IMPROVEMENTS AND RECOMMENDATIONS:

University of Guam (UOG)

Need to evaluate the use and effectiveness of the Grant Coaching Services.

Name of Project	Pacific Islands Distance Diagnostic and Recommendation System (http://www.dddi.org/pacific/)
Principal investigator:	Mark G. Wright (University of Hawai'i)
Funding Amount:	Year 16 \$25,000 Year 17 \$25,000 Year 18 \$0

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.

RESULTS AND ACCOMPLISHMENTS FOR THE PERIOD: JULY 2005 TO DECEMBER 2005

From the <u>University of Hawaii</u>, a Distance Diagnostic workstation was distributed to Yap (9/2005). Additionally, UH hired a contractor, Dr. Michael B. Thomas, an ethnobotanist and web designer, to provide updates on weed identification and management for the PIDDRS website. Work includes compiling text for the recommendation database, uploading digital images of weed species, developing hyperlinks between the PIDDRS database and the UH Department of Botany's Herbarium digital image collection of plants, reviewing and updating online materials for inaccuracies or discrepancies, and answering database questions and concerns.

<u>UH</u> signed a one-year contract extension with the University of Georgia, Center for Internet Imaging and Database Systems, for continued support of the PIDDRS website (September 2005 to September 2006).

At the <u>College of Micronesia</u>, in September, the PIDDRS system was received in Yap and soon thereafter, it has been used for the identification of six specimens and one case of a fruit disorder on sweet peppers.

At the <u>University of Guam</u>, during this year we submitted 5 requests for diagnostic help: 2 insects (#284, #250), 1 plant disease (#254), and 2 weeds (#217, #270). One or more digital images were submitted with each request.

GOALS FOR THE PROJECT FOR THE NEXT SIX MONTHS: JANUARY 2006 TO JUNE 2006

- Continue to maintain and update the PIDDRS website and database
- Provide microscope cleaning kits for each workstation

Name of Project	Productivity Project (DBA High Technology Development Corporation)
Coordination Team:	Bill Wiedmann and Marty Parisien, ADAP Project Manager and Regional Coordinators
Funding Amount:	Year 16 \$40,000 Year 17 \$0 Year 18 \$0

High Technology Development Corporation (HTDC) is part of a nationwide network of business and manufacturing specialists whose sole purpose if to provide small and mediumsized businesses with the help and solution they need to succeed. There are Centers in all 50 states, linked together through the Department of Commerce's National Institute of Standards and Technology (NIST). This makes it possible for even the smallest firms to have access to more than 2,000 manufacturing and business specialists including the staff of High Technology Development Corporation and their specialized knowledge about doing business. These are people with experience in both the manufacturing and service industries.

To stimulate agribusiness in the community grow a business perspective within the American region, the ADAP Board of Directors approved to fund the initiative by arranging 1-2 week visits of the HTDC group to each ADAP site (American Samoa, Guam, Micronesia, and Saipan). Each institution will be responsible for arranging their clients to attend a Lean Manufacturing Workshop and present their products and services where HTDC group will offer suggestions for improvement.

PRODUCTIVITY PROJECT FINAL FOLLOW-UP

ADAP Mentoring Project – One Year Follow-up Report January 2006

Submitted by Bill Wiedmann and Marty Parisien

Narrative

It has been one year since we traveled to assist small business people in Guam, Rota, Saipan, Pohnpei, and American Samoa on behalf of ADAP. Over the past month, we have worked at contacting the people that we worked with on a one-on-one basis to see if there was a measurable impact on their businesses. We also conducted seminars in Saipan, Guam, American Samoa, and Pohnpei. However, we did not attempt to contact people who only attended seminars due to the inherent difficulty of asking people to attribute impacts to the more general information that is typically presented in a seminar. We therefore focused our efforts on those individuals and companies that we were able to offer specific advice to in the one-on-one sessions. We developed a survey based on the one used by the National Institute of Standards and Technology's Manufacturing Extension Partnership (NIST-MEP) Program. This survey is designed to capture and measure desired impacts such as revenue & profit improvement, job creation & retention, capital investment and overall satisfaction with the services received. The survey used is attached to this report.

Survey Results

American Samoa

Review – In American Samoa we had 4 one-on-one meetings with companies/individuals and conducted a business workshop for 14 participants.

Follow-up – All four of the one-on-one parties were contacted by telephone to discuss the impact of the initial meeting. Three surveys were completed and one individual declined to answer the survey but indicated that additional assistance of this type would be appreciated. The results of the completed surveys are summarized below.

Note: The following results were self-reported by the individuals we met with as being a direct result of the advice received during the one-on-one sessions.

% Reporting that advice resulted in taking action	100%
% Reporting improved market knowledge/understanding	66%
% Reporting improved profit margin	100%
% Reporting increased cash flow	100%
% Reporting increased sales	66%*
# of jobs created	1
# of jobs retained	5
Amount of cost savings	\$20,000⊥
Amount of equipment investment (one response)	\$5,000
Amount of unnecessary investment avoided (one response)	\$40,000 - \$50,000
Satisfaction score	4.3 out of 5**

*The two responses on sales increases indicated a 5% and a 50% improvement.

 \perp Two responses indicated a cost savings. One response indicated a \$20,000 savings; the other did not quantity the amount.

** This indicates that all survey respondents were either "Satisfied" or "Very Satisfied" with the advice received.

Rota and Saipan

Review - The planned meetings in Rota did not materialize at the time of the trip so there was no follow-up. A seminar was held in Saipan with good attendance. Met for two days with Jesus "Jess" Castro.

Follow-up – All attempts to contact Jess failed. We did talk to family members. Jess is in Seattle, Washington but we were unable to extract a Seattle contact number for him.

Guam

Review – Held a "Listening to Your Business" seminar then met with participants one-on-one in the days following our trip to Pohnpei.

Follow-up -

Ernest Wusstig – He says that he appreciated our time with him but he did not implement any of the advice that he was so excited about at the time of our meeting. His overall survey answers would indicate that he did not gain much from our service but admits that it is because he did not take advantage of our time well. He wishes that he could meet us again and indicated that he was "satisfied" with the advice that he was given. We spent most of our phone call time discussing his current corn farming operation and issues facing him at this time.

Frank Cruz- We were disappointed that we were unable to contact Frank because of the unique situation we were able to help him with. He was trying to close down a frozen taro business because he thought that he was losing money. We were able to demonstrate to him that he was actually doing quite well and at the time of our meeting he seemed genuinely pleased with our advice. Perhaps Dr. Yudin knows something of his current situation.

San Nicolas Family – We met with their entire family and discussed all facets of their operations. We were unable to reach any of the family members at any of their phone numbers. We also have contact info for one family member that we met with that lives in Oregon only a few miles from Marty and were unable to reach her. We were unable to survey this group.

Felix Quon-Felix is a coconut farmer. Even with help from Dr. Yudin's staff we were unable to contact him for survey.

Pohnpei

Review - We worked directly for Dr. Singeo at two events: A banana conference and a meeting with stakeholders in the black pearl business. It was left that we remain ready and willing to help with any follow-up if Dr. Singeo felt that it was needed. We also remain ready to assist in locating importers for the black pearls when they are ready for market. We also met with a few local business people but the nature of the meetings were about opening markets for their products in North America, not a mentoring type of meeting and were therefore not surveyed.

Follow-up - Dr. Singeo is best placed to evaluate any progress as a result of our visit with banana farmers and black pearl project. We were unable to reach him by e-mail in November or phone more recently, but since he can express our project's impact to the ADAP members more thoroughly in person we were not too concerned about getting an actual survey completed by him.

Herman Semes- We met with Herman not in a mentoring capacity but (at his request) to help him export banana into North America. At the time of our first report on this trip we had been unable to reach him regarding several contacts that we made for him in the baby food and fruit juice industry. However, we have since been in contact with him and continue to explore opportunities for him. He needs the capacity to make banana puree before the juice companies will consider his product.

Dr. Lois Engleberger- We met with Lois about possible markets for the Karat Banana in North America and Asia. We have remained in contact with Lois regarding progress on Karat production and we have identified several potential buyers for a dry powder or puree in North America and Japan.

Summary

Although very few of the people that we conducted one-on-one meetings with contacted us for follow-up assistance, we were pleased to discover that many of the people we recently spoke with are doing well and are truly appreciative of the assistance we were able to offer. The surveys and interviews we were able to complete indicate good, quantifiable impacts in several key areas of business health.

SURVEY USED FOR FOLLOW-UP INTERVIEWS

Did the advice you received lead you to:

1. Take actions you would not otherwise have taken?

- 1. Yes 3. Don't Know
- 2. No 4. Not Applicable
- 2. Take actions more quickly?
 - 1. Yes3. Don't Know2. No4. Not Applicable

3. Take actions at a lower cost?

1. Yes	3. Don't Know
2. No	4. Not Applicable

As a result of the advice you received, has your business experienced any of the following: 4. Improved understanding of customers, markets or competitors

1. Yes3. Don't Know2. No4. Not Applicable

5. Improved customer development or retention

1. Yes	3. Don't Know
2. No	4. Not Applicable

6. Entry into new or better markets

1. Yes	3. Don't Know
2. No	4. Not Applicable

7. Improved profit margin

1. Yes	3. Don't Know
2. No	4. Not Applicable

8. Increased revenue of cash flow

- 1. Yes3. Don't Know
- 2. No 4. Not Applicable

9. Improved customer satisfaction

1. Yes	3. Don't Know
2. No	4. Not Applicable

10. Increased market share

1. Yes	3. Don't Know
2. No	4. Not Applicable

- 11. Did the services you received lead to an increase in sales?
 - 1. YesHow much? \$______2. No3. Don't Know4. Not Applicable

SURVEY USED FOR FOLLOW-UP INTERVIEWS (page 2)

12. Did the advice you received lead you to create any jobs?

- 1. Yes How many?
- 2. No 3. Don't Know 4. Not Applicable

13. Did the advice you received lead you to retain sales that otherwise would have been lost?

- 1. Yes How much? \$____
- 2. No 3. Don't Know 4. Not Applicable

14. Did the advice you received lead you to retain any jobs?

- 1. Yes How many?
- 2. No 3. Don't Know 4. Not Applicable

15. Did the advice you received result in cost savings labor, material, overhead or other areas?

- 1. Yes How much? \$_____
- 2. No 3. Don't Know 4. Not Applicable

16. Did the advice you received lead you to invest in equipment?

- 1. Yes How much? \$____
- 2. No 3. Don't Know 4. Not Applicable

17. Did the advice you received lead you to invest in employee training?

- 1. Yes How much? \$____
- 2. No 3. Don't Know 4. Not Applicable

18. Did the advice you received enable to avoid any unnecessary investments?

- 1. Yes How much? \$_____
- 2. No 3. Don't Know 4. Not Applicable

19. Is your business more competitive as a result of the advice you received?

- 1. Yes 3. Don't Know
- 2. No 4. Not Applicable
- 20. Did the advice you received have any other effects on your business?
 - 1. Yes Describe them _
 - 2. No 3. Don't Know 4. Not Applicable
- 21. Are you satisfied with the advice you received?
 - 5 Very satisfied
 - 4 Satisfied
 - 3 Neutral
 - 2 Dissatisfied
 - 1 Very Dissatisfied