American Samoa Community College 1 ACNR Monthly Report – October 2020

Section 1: Report Header - The Report Header provides an overview of the reporting Division's mission, divisional outcomes and outcomes status, and a matrix alignment to the College's Institutional Priorities. Information indicated in the Report Header was extracted from the Agriculture, Community and Natural Resources Divisional FY 2018 Outcome Plan to aid in the division's monitoring and reporting of outcomes.

ACNR Mission Statement:

"While honoring the *Fa'a-Samoa* (the Samoan Way), we will serve American Samoa's diverse community by providing research, extension and educational programs in agriculture, natural resources and wellness to enhance the quality of life and to preserve our fragile ecosystem."

FY 2020 ACNR Outcome Statements:	Outcome Status:	Aligned College Priorities:
Outcome 1: Strive to effectively provide quality and relevant Research Programs to the community	ACNR Ongoing Outcome	 ☑ Maintenance ☑ Reclassification ☑ Professional Development ☑ Community Outreach, Extension, and Research
Outcome 2: Strive to effectively provide quality and relevant Extension Programs to the community.	ACNR Ongoing Outcome	⊠Maintenance ⊠Reclassification ⊠Professional Development ⊠Community Outreach, Extension, and Research
Outcome 3: Strive to effectively provide quality Instructional Program to the community.	ACNR Ongoing Outcome	Maintenance ⊠Reclassification ⊠Professional Development ⊠Community Outreach, Extension, and Research

Section 2: Divisional Report - The Divisional Report section allows a Division to report outcome updates through services offered, activities, or performance indicators that occurred during the previous month. The template also includes a section for input on data that support the outcomes of the reporting division not limited to challenges and recommendations for outcome monitoring purposes.

Annual Outcomes:

- Number of farmers growing improved varieties of taro and sweet potatoes
- Number of farmers/clients growing improved vegetable cultivars.
- Number of pig farmers upgrading their stock.
- Number of pesticide applicators trained and certified.
- Number of farmers growing improved genetic stocks of tilapia.
- Number of farmers making their own tilapia feeds.
- Number of participants trained on Farm Safety
- Number of new aquaculture farmers
- Percent of participants who acquired knowledge and followed safe food handling guidelines

Objectives:

- To increase farm production and returns, and the well-being of rural farm life, while improving sustainability and protecting the environment and human health.
- To improve crop quality/crop security through pest and disease monitoring and genetic diversity.
- To increase production and marketing of livestock and farmed fish.
- To improve public understanding of agriculture, aquaculture, and marine science, including their impacts on the land and sea

Activities:	Challenges:	Recommendations:	Plans:
 Distributed 1391 different vegetable seedlings to 47 interested farmers Staff distributed 100 taro tops (<i>tiapula</i>) to a total of 2 farmers/clients Staff conducted 14 farm visitations and provided recommendations on improved farm practices and to follow up on proper planting of materials released. Staff distributed 4 disease-resistant banana varieties to 1 farmer Staff assisted 15 clients who called in for assistance (<i>request for planting materials, pests & diseases control, improved farming practices</i>) and other agricultural related issues. AEPM (Agriculture Extension Program Manager) accommodated 2 AGR-152 students- presented on Agriculture Extension's mission of serving the Farming community. Also provided a practical hands-on exercise on how to transplant vegetable seedlings. Staff issued 12 sweet-pepper seedlings to Research staff for research purposes. Sold five (5) vegetable seed packages to 3 clients/farmers who requested seeds for vegetable gardens, family consumption/business purposes. 	Topsoil on Island is declining	Continue to seek alternatives for topsoil.	 Continue to raise vegetable seedlings to accommodate the need to encourage vegetable production in the community Continue to assist with livestock breeding Continue to assist with educational tours and visits to Agriculture Field Continue to serve clients'/farmers' and recommend best agriculture practices. Continue to assist Tilapia Farmers with tilapia-breeding programs. Continue to conduct Pesticide Applicator Certification.

banana, and vegetable seedlings to be		
distributed to interested clients,		
encouraging the community to grow their		
own food for food security.		
• Staff continued to manage on-station plots.		
• AEPM attended a ZOOM meeting with the		
Pacific Islands Pesticide Safety Education		
Fund Management Program (PSEFMP)		
Project. Discussed how to amend the 2020		
Deliverables as proposed in the Grant		
Budget because of the impact of the		
COVID-19 Coronavirus pandemic.		
• AEPM is in the process of putting together		
the Pesticide Safety Education Fund grant		
application for 2021.		
Agriculture Extension Program assisted in		
support of Extension Services Program		
Civil Rights Desktop Audit Review.		
Livestock Program: Piggery Unit		
Piggery Inventory: 10 animals on hand		
• Livestock Staff visited 2 pig farmers and conducted piglet castration field		
work/demonstration.		
The Livestock staff continued to manage		
the pig demonstration unit including the		

	1		
daily feeding of animals twice, pest &			
disease control and other management			
practices.			
 Staff continued the breeding program- 			
mated brown boar with sow in pen #7			
• The Pig-demonstration unit continues to			
serve as a living laboratory for ASCC			
students interested in Agriculture.			
• Performed castration demonstration for			
ANS 150A class (Animal Nutrient			
Management & Pest Disease control) on			
one male weaner tag#140			
• Livestock staff started using the new wash-			
down system after the new septic tank was			
built.			
• Livestock Program assisted in support of			
Extension Services Program Civil Rights			
Desktop Audit Review.			
Deskop Audit Review.			
CSIAA Program: Aquaculture/Aquaponic			
Continued tilapia-breeding program:			
Communed mapha breeding program.			
• 52.5 lbs. tilapia feed produced at CSIAA			
feed lab			
6 walk-in visitors			
CSIAA Program assisted in support of			
Extension Services Program Civil Rights			
Desktop Audit Review.			
–F			
Achievements: Please utilize the rows/spaces provided below	to list down any achievement(s)	Divisional Outcomes: Please indicate the Divisional	Institutional Priorities: Please
or accomplishment(s) made during this month. Please provide	•	Outcome(s) that pertain to the achievement(s) listed below.	indicate the Institutional Priorities to
	-		

American Samoa Community College5ACNR Monthly Report – October 2020

achievement.	Please check mark all that apply.	which the achievement(s) listed below. Please check mark all that apply.
Achievement 1: Distributed 1391 different vegetable seedlings to 47 interested farmers and 100 taro tops (<i>tiapula</i>) to a total of 2 farmers/clients. Farmers learned about the benefits and importance of planting their own food & crops. Farmers reported that it is always a good feeling to harvest fresh produce from their own backyard and that it saves them money. The Extension office also continues to sell seeds of improved vegetable varieties at an affordable price to the public to encourage vegetable farming. Farmers acquired knowledge and developed skills in vegetable and traditional crops production. As a result, families used vegetables from their gardens to prepare nutritious and balanced meals. Moreover, excess harvest is sold to generate revenues for the families. Families reported that they saved money from growing and selling their own vegetables.	□ ACNR Outcome 1 ⊠ ACNR Outcome 2 □ ACNR Outcome 3	Maintenance Reclassification Professional Development Community Outreach, Extension, and Research Not Applicable
Achievement 2: The Livestock staff and Animal Specialist continued to serve pig farmers who seek immediate attention and assistance with swine health issues due to poor diets and pen management. Pig farm owners are pleased with the assistance provided by ACNR on the control of pests and diseases of pigs and general pig health and management/care. Achievement 3: Tilapia fish farmers saved money by producing their fish feed at the ASCC-ACNR feed lab free of charge.		

	ACNR (2): EXTENSION <u>4H Youth Program:</u>			
A	nnual Outcomes:	Oł	ojectives:	
•	Number of youths who increase knowledge of life skills concepts and practices.	٠	To empower the youth of American Samoa by providing training on life skills through	
•	• Number of youths who were able to acquire knowledge for positive self-development Outreach and community workshops.		Outreach and community workshops.	
•	Number of participants who developed new life skills due to all the Program activities.	٠	To educate the public, organizations, and parents about the 4-H program.	

Number of program participants who have impr through educational and recreational activities.	oved parent and children relationship	 To identify and provide life skills, citizenship and tra American Samoa through Outreach workshops and c agencies. Empower and enhance youth development through the demonstrations & hands on activities 	ollaboration with partners and other
Activities:	Challenges:	Recommendations:	Plans:
 4-H staff continued to recruit In- School Clubs through the Family Consumer Classes. Staff presented 10 Sewing machines to 30 students of the FCS Poly-Tech High School. 4-H Program assisted in support of Extension Services Program Civil Rights Desktop Audit Review. 			 Continue to educate and increase community awareness on the 4-H youth programs, and how workshops and activities can empower youths in the community. Work on reviving the 4-H Foundation to help support and assist the 4-H clubs financially. Continue creating networks of people, organizations, and other resources to help support the 4-H programs in the community. Continue recruiting parents and volunteers
Achievements: Please utilize the rows/spaces provide achievement(s) or accomplishment(s) made during the of each achievement.	-	Divisional Outcomes: Please indicate the Divisional Outcome(s) that pertain to the achievement(s) listed below. Please check mark all that apply.	Institutional Priorities: Please indicate the Institutional Priorities to which the achievement(s) listed below. Please check mark all that apply.

Achievement 1:		
• 4-H staff presented 10 sewing machines to 30 4-H FCS In-School Club and Fashion Instructor of Poly Technical High School. 4-H FCS Poly Tech In- School Club members and instructor were appreciative of the 4-H contribution especially the planned program projects and activities. Club members developed a sense of belonging and motivation to learn new skills and developed projects that will generate revenues for the club and school. As a result of the ten (10) sewing machines presented to Poly Technical High School FCS/4-H club, 30 students now have the opportunities to acquire knowledge and develop skills in basic sewing and related projects.	 □ ACNR Outcome 1 ⊠ ACNR Outcome 2 □ ACNR Outcome 3 	 ☐Maintenance ☐Reclassification ☐Professional Development ☑Community Outreach, Extension, and Research ☐Not Applicable

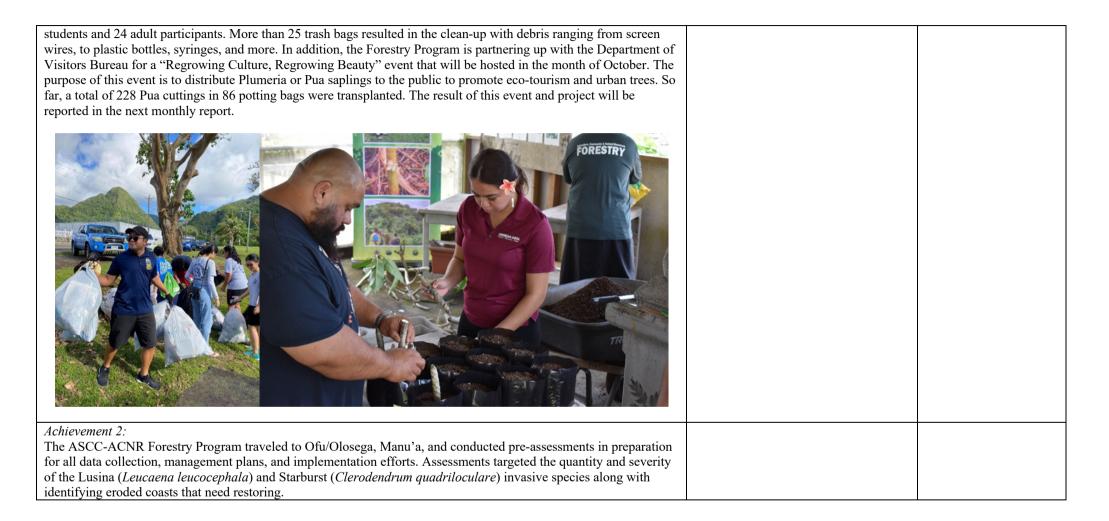
ACNR (3): EXTENSION Family and Consumer Sciences (EFNEP):				
 Annual Outcomes: Percent of participants who acquired knowledge and followed safe food handling guidelines Number of participants that prepared healthier foods utilizing locally grown & harvested food Number of participants that increased participation in physical activities and exercises Number of participants who acquired knowledge and skills through program lessons 		 Objectives: To provide Family Consumer Science (FCS) Education for Home-makers To provide Sewing Lessons for community groups To provide Basic Nutrition, Food Safety and Food cooking lessons and demonstrations for limited-resourced families and youth. 		
Activities:	Challenges:	Recommendations:	Plans:	
 Family Consumer Science Agents recruited and conducted basic sewing fundamental workshops to 2 District (Tualauta & Alataua) participants. A total of 50 participants are enrolled. Hands on trainings are in session, utilizing sewing machines, and other skills are included in these workshops. EFNEP paraprofessionals conducted Nutrition, Food Safety Outreach-Food Cooking demonstration of "Turkey Stew" to 111 DHSS -ASNAP Food Stamp 		 Have 5' x 6' health communication posters hung up in the Wellness Center Exercise Lab Have health survey' questionnaires completed by employees at both Territorial Bank of American Samoa locations. 	 Follow-up with one of ACNRs handymen to hang health communication on of the walls in the Wellness Center Exercise Lab. Follow-up with community partner at the Territorial Bank of American Samoa regarding the questionnaire 	

American Samoa Community College9ACNR Monthly Report – October 2020

Achievements: Please utilize the rows/spaces provided below to list down any achievement(s) or accomplishment(s) made during this month. Please provide a description of each achievement.	Divisional Outcomes: Please indicate the Divisional Outcome(s) that pertain to the achievement(s) listed below. Please check mark all that apply.	Institutional Priorities: Please indicate the Institutional Priorities to which the achievement(s) listed below. Please check mark all that apply.
Achievement 1: EFNEP/FCS Agents served a total of 272 food stamp recipients, students, Sewing groups and outreach participants . As a result, they acquired knowledge in healthy food choices, food groups, food budgeting, saving money on sewing materials, and planning nutritious & balanced meals. Also, students participated in preparing and sampling healthy snacks.	 □ ACNR Outcome 1 ☑ ACNR Outcome 2 ☑ ACNR Outcome 3 	 Maintenance Reclassification Professional Development ⊠ Community Outreach, Extension, and Research Not Applicable
Achievement 2: After receiving a nutrition lesson about mindful eating by ACNR's Community Nutritionist, some of the students enrolled in one of ASCC's BIO 181 courses, stand in line to dish up a sample of bitter melon made with eggs, onions, and garlic. Students then practiced some of the mindful eating principles that they learned. This was the first time for most of the students to try this vegetable. Some of the students enjoyed this new vegetable but some were a bit overwhelmed by the bitter taste of the bitter- melon.		

ASCC students pictured here trying o	out a new recipe								
ACNR (4): EXTENSION Forestry Program: Annual Outcomes: Objectives:									
 Number Improved watersheds and coastal areas Number of Forest Stewardship Plans Propagation and distribution of fruit trees Number of Invasive plant management plans 	 Collaborate with other Forestry Progr conservation education activities, site efforts and recommendations for FSP Plant more trees to lessen the impact improve the sustainability of energy f being. Increase and conduct more tree preser demonstrations to help educate the co- conserve, and protect forests and other potential forest threats such as climated development, forest fire, insects, pest plant and animal species, water qualit Support local community with the pla implementation of community beauti- stabilization, traditional forestry pract of natural resources. Provides the leadership in forestry ed forests and tree resources, with respec- environment of American Samoa. 	visits, implementation landowners of climate change and to for the community's well- ntations and ommunity to identify, er open spaces from e change, urban and diseases, invasive ty and energy. unning and fication, costal tices, and sustainable use ucation, management of							
Activities:	Recommendations:	Plans:							
 Continued collaborating with the Visitors Bureau in propagating planting materials for Pua (plumeria) project. Maintained all Forestry Plots such as the Vetiver Grass Plot, Rain Garden Plot, Nature Trail, Forestry Greenhouse, and more. Continued to connect with the leaders and residents from Ofu and 		 Need to hire Forest Health Technician Need to hire Forestry Researcher Need to repair Forestry Greenhouse Need to purchase more 	Continue to meet with partnered agencies for Forestry events and activities.						

 Olosega to prepare for the upcoming LSR project. Forestry Program assisted in support of Extension Services Program Civil Rights Desktop Audit Review. <u>FHP Data</u> Controlled 439 Pulumaoe seedlings, 292 saplings, and 98 trees at the Malota site <u>UCF Data</u> Connected with an urban landowner and distributed 5 Tava, 5 Ifilele, 5 Talie, and 5 Leva saplings for beautification and conservation purposes <u>Greenhouse Data</u> Collected 120 Koko Samoa seeds Propagated 32 Ava Samoa, 59 Ifilele, and 120 Koko Samoa seeds Transplanted 12 Tauanave, 5 Ifilele, 11 Pua, and 9 Ava Samoa seedlings Assisted a total of 3 Greenhouse clients and distributed 10 Tava, 5 Milo, 4 Ifilele, 2 Ava Samoa, 8 Koko Samoa, 6 Poumuli, 4 Ifiifi, 4 Seasea, 2 Nonu, and 4 Talie. 		supplies/tools	 Continue to conduct assessments in streams, soils, and forests for control, management, and conservation purposes. Continue to serve Greenhouse clients and landowners in agroforestry projects or tree planting activities by distributing trees and supplies.
Achievements: Please utilize the rows/spaces provided below to list down ade during this month. Please provide a description of each achievement <i>Achievement 1</i> :	• • • • • • • • • • • • • • • • • • • •	Divisional Outcomes: Please indicate the Divisional Outcome(s) that pertain to the achievement(s) listed below. Please check mark all that apply.	Institutional Priorities: Please indicate the Institutional Priorities to which the achievement(s) listed below. Please check mark all that apply.
The ASCC-ACNR Forestry Program partnered with the Finafinau NGO cleanup at the Lyons Park in Nu'uuli. The clean-up was hosted on Satur			





ACNR (5): <u>Instruction</u>:

Notes:

	Activities:		Challenges:	Recommendations:	Plans:
• Preparation and	teaching of 10 co	urses in Agriculture,			Continue:
Community & N	atural Resources	(ACNR) & Science:			a. Fall 2020 - ACNR
Ionatana	Dr. Otto	Pauline			Instruction begins teaching
Fasavalu	Hansell	McFall			total of 9 courses. Face to
AGR 197	AGR 100 I	Staff			Face and Online session.
BIO 155 & Lab NRS 180 & Lab	AGR 152 ANS 150 A ANS 150 B	Professional Development PhD Nutrition			 b. Administering and management of USDA NIFA Grant (RIIA & DEG) –

	BIO 181	at University			under guidelines of grant
		of Hawaii,			objectives
		Manoa.			·
		1,141104		с.	ACNR Fall 2020 Internship
Travis					Program - ACNR Computer
					Lab, Fruits for Life
Flemington					Greenhouse and Piggery
NUT 150					System
 Administering, m Internship progra 		pervision of Fall 20 adents)	020	d.	Student advising and
 Evielym 	n Fetuao, Sofia M	Iafua, Elisha			mentoring
-	a, Sapoelatu Pale			e.	Maintenance & General
Catalog Review f	for 2020-2022				Nursery of Fruits for Life
• USDA NIFA Gra	unts (RIIA & DE))			Greenhouse; facilitating
	. ,				tours and greenhouse visits,
		stration of Resider ance Education (D			outreach
grants				f.	Planning, implementation of
• Prepare	check request for	r staff developmen	ıt		revised schedule/work from
and sum	mer programs				home/changes in work hours
• Fruits for Life Gr	eenhouse				in response to Coronavirus
by Ionat	ance & General I ana Fasavalu and ian – Eirenei Tes		n		Pandemic preparations
o School,	Community & cl	lient visits			

Conduct maintenance & general nursery of Fruits for		
Life Greenhouse.		
• General supervision of interns in the general		
management of Piggery Unit by Otto Hansell.		

ACNR (6): <u>Research Programs:</u>

Research Program 1: Horticulture

	Activities:		Challenges:	Recommendations:		Plans:
٠	Taro improvement project. Completed taste test of new varieties. Planted out 3	٠	Need more field space on station for trials		•	Continue vegetable
	varieties for field propagation. Weeded, mulched and fertilized plots.					variety trials.
•	Vegetable variety trials. Completed sweet basil trial. Harvested Thai basil trial.				•	Continue taro
•	Assisted with little fire ant control work.					project.
•	Assisted 8 students with science symposium/fair projects.				•	Assist entomology with LFA
•	Presented lecture to Poly-Tech High School and visited greenhouse to offer					assessment/treatme
	advice. "Growing vegetables in American Samoa."					nt.
•	Presented lecture for AGR 152 class. "Career opportunities in Agriculture."				•	Work on
•	Prepared presentation for UH Cohort class. "Food security, climate change and					greenhouse
	place-based agriculture."					assembly.
•	Produced and submitted information to Am. Samoa Nutrient Management				•	Work on food
	Committee on fertilizer application recommendations.					safety assignment.
•	Planted tomato variety demonstration.				•	Work on Nutrient
•	Assisted DOC with mixing of new hydroponic fertilizer for their hydroponic					management plan for Fertilizer ban
	demonstration.					committee.
•	Visited community member's garden (Vailoa) to give advice on fruit trees.				•	Assist students
						with science fair
						projects

Achievements: Please utilize the rows/spaces provided below to list down any achievement(s) or accomplishment(s) made during this month. Please provide a description of each achievement.	Divisional Outcomes: Please indicate the Divisional Outcome(s) that pertain to the achievement(s) listed below. Please check mark all that apply.	Institutional Priorities: Please indicate the Institutional Priorities to which the achievement(s) listed below. Please check mark all that apply.
Achievement 1: Completed one taste test comparing eating quality of new taro varieties developed at ACNR. Results of the test and agronomic assessments used to select three of the varieties for further propagation.	ACNR Outcome 1	☐ Maintenance ☐ Reclassification ☐ Professional Development ☑ Community Outreach, Extension, and Research ☐ Not Applicable



ACNR staff with Nu'uuli Poly Tech High School agriculture students. Poly Tech instructor, Ms. Lirio Aguilar, completed an internship with the ACNR Horticulture program this past

summer.
Research Program 2: Entomology
Activities:

Activities:
Challenges:
Recommendations:
Plans:

 Frequent rains during October prevented any applications of insecticidal baits to the little fire ant infested areas. An assessment of efficacy of control in the Pago Pago infestation was completed showing a reduction of little fire ant prevalence in the treated area from 77% in January to 3% in October. Treatments will continue in this and the other infested areas. Surveys were conducted at two locations where the public had reported possible new little fire ant infestations. In both cases—one in Pava'ia'i and one in Mapusagafou—no little fire ants were found—only tropical fire ants and other ant species. Continued maintaining colony of Pulvinaria scale insects for Pulvinaria biocontrol research project for Rose Atoll. ACNR is assisting US Fish and Wildlife Service to assess status of massive infestation of pisonia trees (<i>pu'a vai</i>) by an invasive scale insect there and investigate options for control of the invader. Assisted one client with controlling an infestation of honey bees inside a church building. Presented results of ACNR research to assess prevalence of the parasite causing lymphatic filariasis in the American Samoa mosquito populations and to further improve the mosquito trapping system used to do so. Presentation was part of international meeting (via zoom conference) of the Coalition for Operational Research on Neglected Tropical Diseases attended by scientists from Asia, Africa, Europe, the U.S., and Central and South America. One Entomology staff attended the OSHA 30-hour Construction training taught at the ASCC Trade and Technical Department 		 Continue little fire ant detection, prevention, and control Analysis of filariasis xenomonitoring data Report results of June insect survey of Rose Island Process samples from trapping and collections to investigate fungus gnat outbreak on Tutuila
Achievements: Please utilize the rows/spaces provided below to list down any achievement(s) or accommonth. Please provide a description of each achievement.	plishment(s) made during this plishment(s) made during this plishment(s) made during this please indicate the Divisional Outcome(s) that pertain to the achievement(s) listed below. Please check ma all that apply.	Institutional Priorities: Please indicate the Institutional Priorities to which the achievement(s) listed tk below. Please check mark all that apply.
Achievement 1: Data analysis of 2018 lymphatic filariasis mosquito xenomonitoring study revea transmission on Tutuila Island, supporting the decision by DOH to proceed with renewed filari supported continuing to use our locally adapted mosquito trapping system over systems used efficient and less sensitive for detection of the lymphatic filariasis parasite in mosquitoes in Americ	asis elimination effort. Data also n other countries which are less ACNR Outcome 2	☐ Maintenance ☐ Reclassification ☐ Professional Development ⊠ Community Outreach, Extension, and Research

	ACNR Outcome 3	□Not Applicable

The BG Sentinel mosquito trap (right) proved more sensitive and more efficient than the CDC Gravid Trap as a system for monitoring prevalence of the parasite that causes lymphatic filariasis in American Samoa.