



# **FOOD SECURITY IN HOOPA VALLEY**

**PPD569 APPLIED INTERNATIONAL POLICY ANALYSIS AND MANAGEMENT PROJECT**

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**PRESENTED BY GROUP 4:**

**HONG-SHENG HSU(CLARK), ARAILYM KAPINA, SHAO-YU CHEN(UNA),**

**YUN WANG, PHOEBE YANG**

**DEC 14, 2022**

# MEET OUR TEAM



**YUN WANG**

TEAM LEADER AND DATA  
ANALYST  
KEEPES THE PROJECT ON  
TRACK, SUPPORTS PROJECT  
GOALS

VISITED THE HOOPA VALLEY



**PHOEBE YANG**

AMBASSADOR  
COORDINATES EMAILS/PHONE/OTHER  
COMMUNICATIONS WITH THE CLIENT  
*INTERNSHIP WITH ENERTRIBE.*



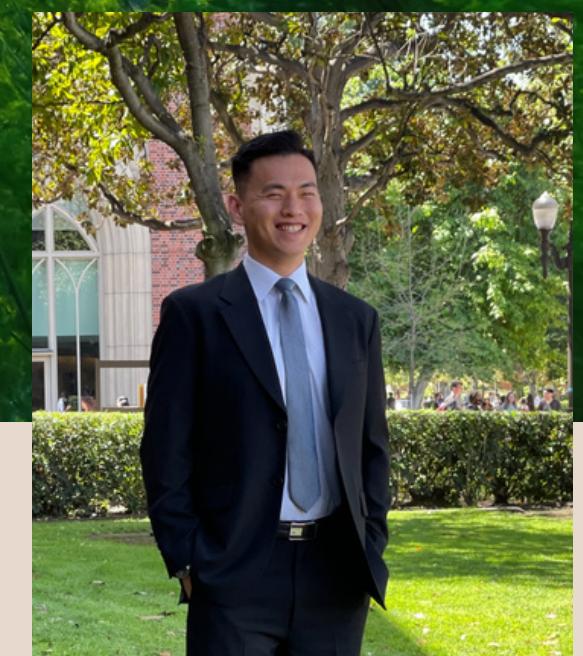
**ARAILYM KAPINA**

MEETING MANAGEMENT  
DEVELOPS AGENDAS FOR  
ALL MEETINGS, HOSTS  
MEETINGS, KEEPS AND  
DISTRIBUTES NOTES



**UNA CHEN**

COMMUNICATIONS  
OVERSEES THE  
WRITING/EDITING PPT,  
REPORTS, ETC.



**CLARK HSU**

TEAM SUPPORT  
ENSURES THAT TEAM  
MEMBERS ARE GIVING TO  
AND GETTING WHAT THEY  
WANT FROM THE PROJECT.



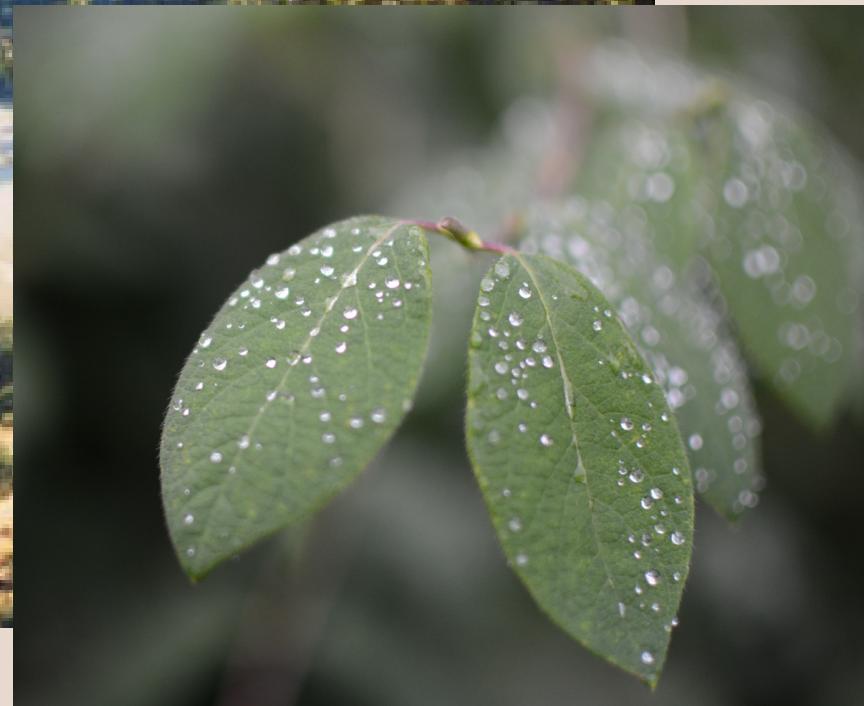
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# FOOD SECURITY IN HOOPA VALLEY



## FOOD SECURITY ISSUE

Food security is one of Hoopa Valley's top priorities to address. This problem became prevalent during the 2020 pandemic.

## CURRENT EFFORTS

Community-run grocery store, Community Garden  
Food projects  
Agricultural Conservation & Resilience Plan and a General Plan for the Hoopa Valley Tribe. (Dec. 2022)

## OUR TEAM'S ROLE

Our strategic objective is to generate original data to support the Agriculture Grant in achieving food sovereignty. The data we collected helps to understand the food security issue within the community, thus, more ways to address the issue.



# Approach: Survey

qualtrics<sup>XM</sup>

The survey adds to the agriculture development plan for the Hoopa Valley Reservation.

- Total: 29 questions
- Time frame: 4 weeks
- Total Sample: 115
- Incentives: Gift cards and canning supplies



## SOME QUESTIONS FOR REFERENCE:

- The majority of household foods
- Grocery shopping preference (ex: non-perishable or perishable)
- Agriculture practice willingness and concerns
- Food preservation preference
- Any access to food programs/projects in Hoopa Valley
- How are they concerned about the land preservation



# SURVEY DATA RESULT: PART 1



73%

**Where do you purchase the majority of your household's food? (10 miles +)**



11%

**Do you sell the foods you produce? (yes)**



72%

**Do you preserve foods (pressure can, water bath can, freezer, dehydrate, etc)? (Yes)**



79%

**Do you have more than five days of food in your house? (Yes)**

*(Based on the survey data collected from 103 tribe members)*

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# SURVEY DATA RESULT: PART 2



**What size of the land is used to grow?  
(less than 1 acre, 43% has no land)**



**Would you raise or grow food if there were more agricultural leases available? (Yes)**



**Are the cost of water and current irrigation systems a concern of yours? (Yes)**

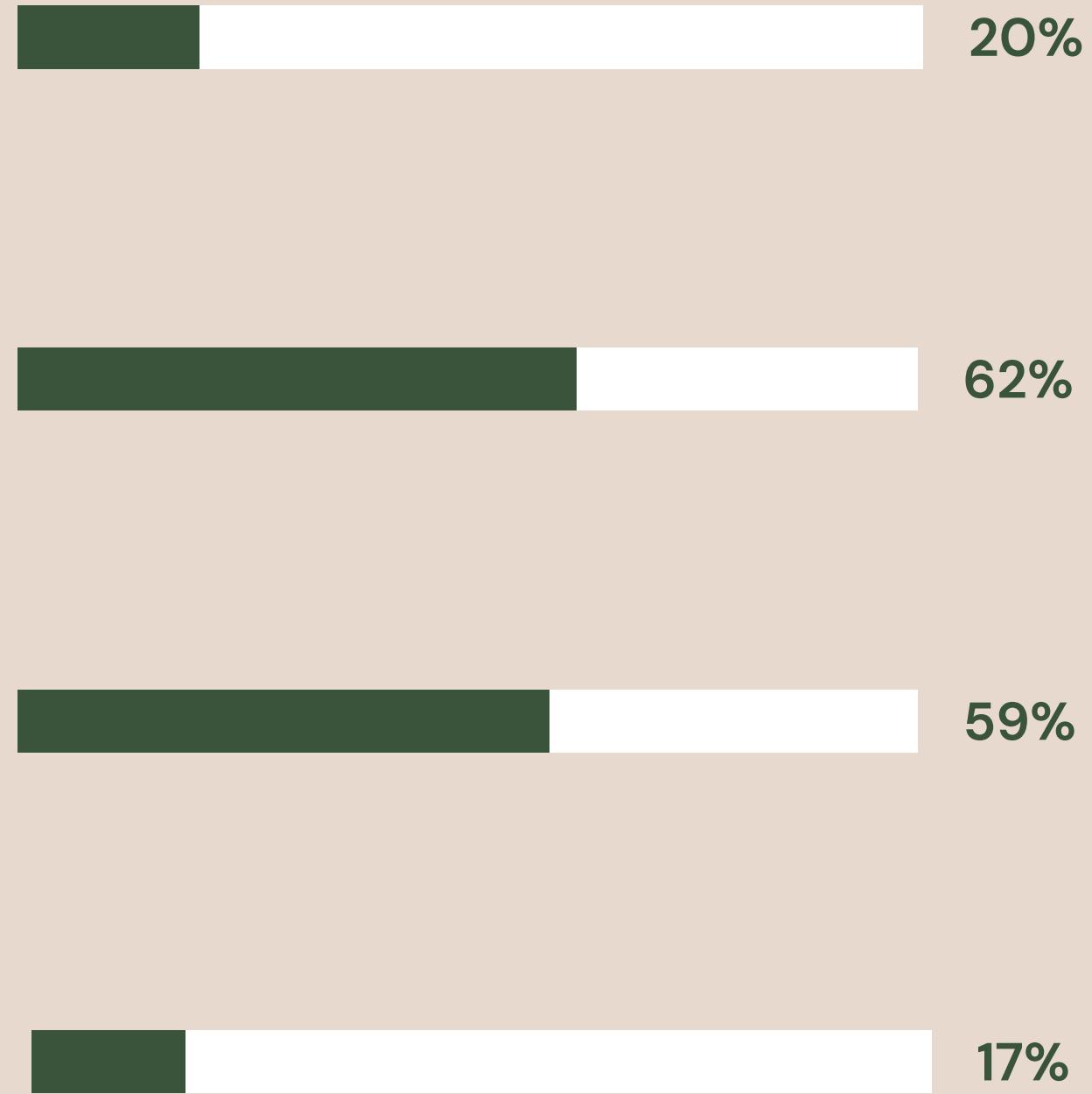
## No 1. IRRIGATION SYSTEM

**Please rank the importance of general agricultural issues.**

*(Based on the survey data collected from 103 tribe members)*



# SURVEY DATA RESULT: PART 3



**Do you receive SNAP/EBT or food commodity benefits? (Yes)**

**Do you know that there is a seasonal farmer's market in Hoopa? (Yes)**

**Are you able to access gathering sites for cultural harvesting? (Yes)**

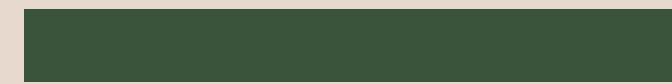
**Do you have access to the farmers market voucher program? (Yes)**

*(Based on the survey data collected from 103 tribe members)*

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# SURVEY DATA RESULT: PART 4



63%

**How concerned are you about land conservation  
on the Hoopa Valley Reservation?  
(Extremely/Very Concerned)**



85%

**Is preserving land a priority of yours? (Yes)**



82%

**If public education on sustainable/regenerative  
agricultural practices were available, would you  
participate in learning more about it? (Yes)**



84%

**Would you like to see more locally grown  
options in the Hoopa Grocery Store? (Yes)**

*(Based on the survey data collected from 103 tribe members)*

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# DATA ANALYSIS MODEL

reg days\_food age55 transportation program distance gathering\_sites education

Source	SS	df	MS	Number of obs	=	70
Model	1.26217526	6	.210362543	F(6, 63)	=	1.33
Residual	9.93782474	63	.15774325	Prob > F	=	0.2557
Total	11.2	69	.162318841	R-squared	=	0.1127

days_food	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
age55	.0192519	.1018544	0.19	0.851	-.1842878	.22279
transportation	.9524077	.4190153	2.27	0.026	.1150725	1.7897
program	.0604897	.0453489	1.33	0.187	-.0301328	.15111
distance	.1350528	.1170839	1.15	0.253	-.0989208	.36902
gathering_sites	.0300478	.0980909	0.31	0.760	-.1659713	.22606
education	-.1161169	.1287393	-0.90	0.371	-.3733818	.1411
_cons	-.2304527	.4468976	-0.52	0.608	-1.123506	.6626





# ACCORDING TO OUR DATA

## ISSUE ONE **LACK OF KNOWLEDGE**

Over half of the tribe members do not know the existing food program.  
gardening /gathering

## ISSUE THREE **WATER EDUCATION**

Almost all of the participants would like to learn more about sustainable and regenerative agricultural practice.



## ISSUE TWO **LONG-DISTANCE DRIVE**

The majority drive above 10 miles for their basic grocery needs.

## ISSUE FOUR **IRRIGATION SYSTEM**

Tribe members are concerned with the water price, water, and irrigation system.

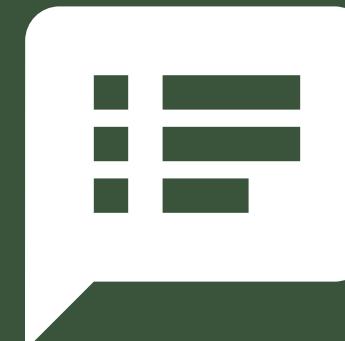
## ISSUE 1 LACK OF KNOWLEDGE ABOUT FOOD PROGRAMS/PROJECTS

### Outcome

Tribal members can access all the food programs/projects in the future

### Recommendation

Promoting existing food programs/gardening/gathering



### Implementation

Design and post flyer,  
Announce it on the radio program  
Print it on the newspaper

### Key Indicators

- increase % of people access to food programs/projects



## ISSUE 2 LONG DISTANCE DRIVING

The majority drive above 10 miles for their basic grocery needs.

### Outcome

Essential items are only 10%-20% more expensive than the outside grocery store; Each member who completes the task can be rewarded with more than 20 dollars.

### Recommendation two

Tribal Member Delivery Program, where tribe members bring in groceries from outside the reservation.



### Implementation

Tribal grocery store lists the needs (Costco, Walmart... etc.)

Distributes purchase tasks, settlement, and rewards

### Key Indicators

The number of participants, the magnitude of the price reduction, and member satisfaction rates



## ISSUE 3 WATER EDUCATION

Almost all of the participants would like to learn more about sustainable and regenerative agricultural practice

## Outcomes

Water conservation on a large scale in the future

## Recommendation

Education for Reusable Water and Water Reservation



## Implementation

- Partner with hydrogeologists and water resource engineers to find ways that the community can reserve water.
- Teaching individual households on ways to conserve and reuse water effectively.

## Key Indicators

- increase % of using water effectively
- increase % of individual households using water by themselves





## ISSUE 4

### TRIBE MEMBERS ARE CONCERNED WITH THE WATER PRICE, WATER, AND IRRIGATION SYSTEM.

## Outcomes

- 100% installation rate in areas suitable for treadle pumps
- Have a stable purchase channel
- Have a professional installation course and maintenance team



## Recommendation

Provide man-powered treadle pumps for tribe members without public irrigation system

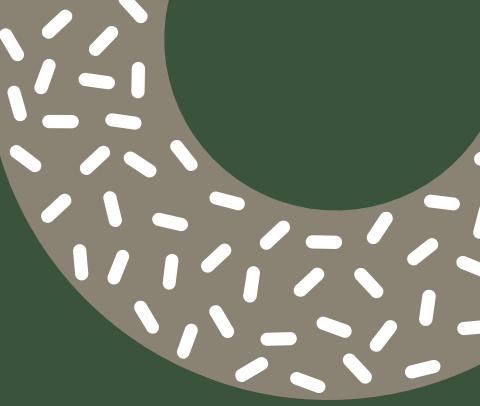
## Implementation

- Identify the purchase demand, and buy the pump collectively;
- Provide purchase subsidy (no shipping fee or 50% discount)
- Provide installation and maintenance

## Key Indicators

- The popularity of treadle pumps
- The rate of irrigation area for treadle pumps
- The percentage of water shortage



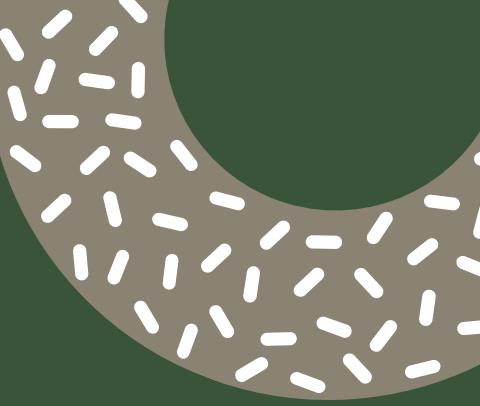


## OTHER ISSUES: FARMERS NEED MORE INFRASTRUCTURE TO PROMOTE AGRICULTURE IN HOOPA.

### Recommendation

Provide land leases to tribal producers who would like to expand their current agriculture business or start an agricultural business.





## ISSUE 4 **PROMOTE BUYING LOCAL**

### Recommendation

Advertise and promote through social media and encourage more people to grow and sell their goods.





## KIN TA TE COMMUNITY GARDEN

The Kin Ta Te Community Garden is a 4-acre lot owned by the Klamath Trinity Joint Unified School District. The KTRCD created this garden for public education. The youth learn how to seed, plant, maintain, harvest, and cook what is grown there.



## MONDAY NIGHT MARKETS

The KTRCD hosts a farmers market every summer starting in June. The market hosts 15–25 tribal and non-tribal producers/vendors. It provides a wireless EBT machine that accepts SNAP benefits. The KTRCD provides weekly vouchers for \$10 to tribal elders and SSI/SSD recipients.



## TRIBAL AND NON- TRIBAL PRODUCERS

The KTRCD aids beginning farmers and ranchers with technician assistance. In partnership with NRCS, USDA KTRCD helps producers through the conservation planning process. Once plans are completed, these producers can seek USDA grants to complete practices identified on their land.





## FREE FOOD PANTRIES

There are five food pantries (non-perishable goods and other necessities) set up across Hoopa that provide food access to rural areas of the community. They were established during covid by a grant from Humble Area Foundation.



## GATHERING AND GILL NETS EVENTS

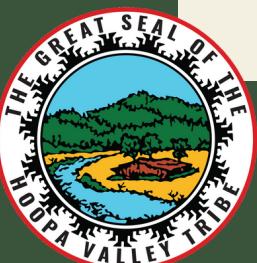
KTRCD has partnered with Louisa McCovey, Director of the Yurok Tribe Environmental Program to learn when to gather safely.

Learn about gill netting skills and protocols.



## HUPA CULTURE CLASSES

KTRCD hosts food preservation classes throughout the community and partners with several programs and schools. A Master Food Preserver educator provides these classes. Home preservation techniques include water baths, pressure canning, fermentation, dehydration, and freezing.

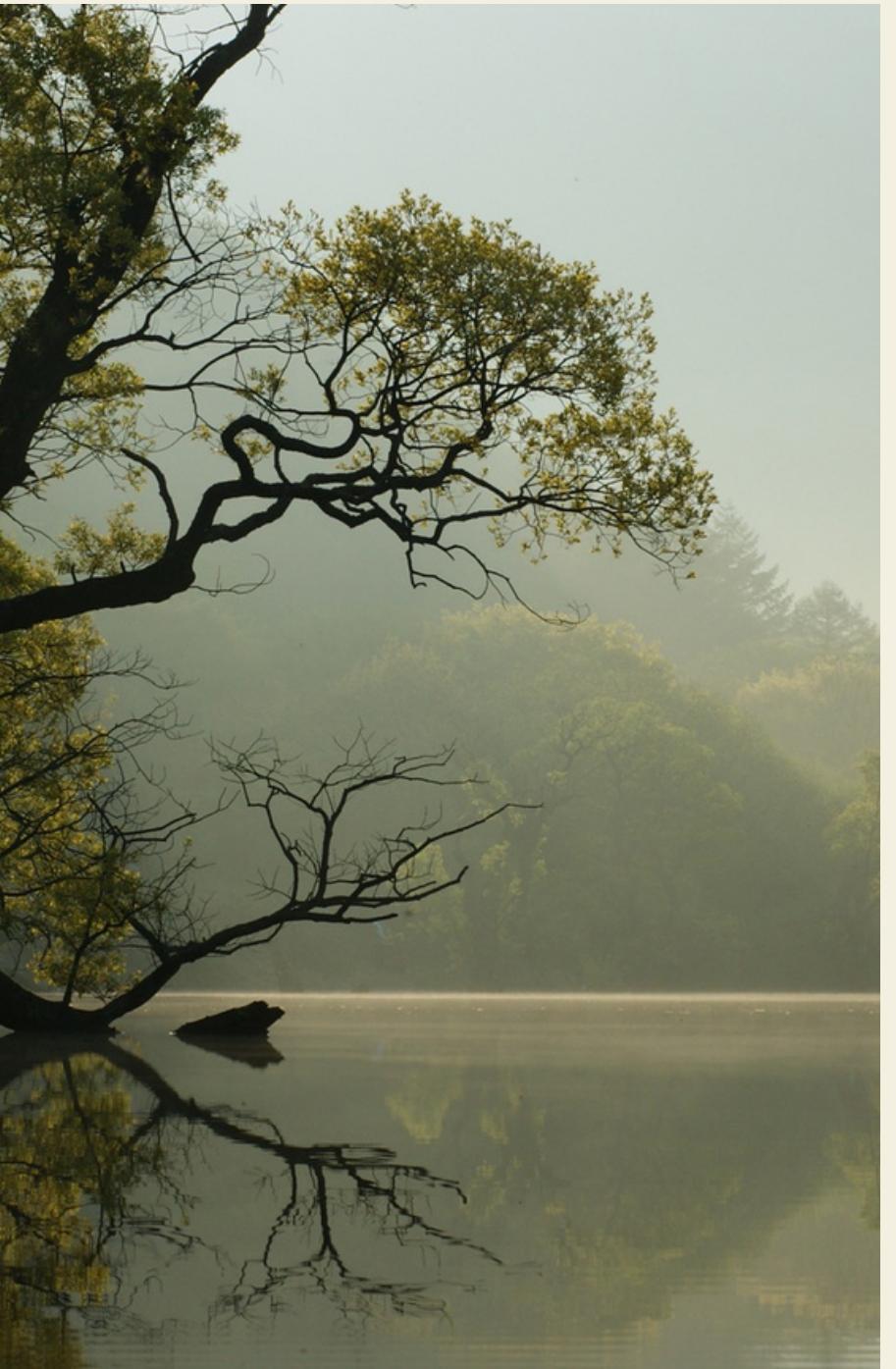




THANK YOU  
FOR  
LISTENING!

QUESTIONS?

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# SURVEY RAFFLES

PARTICIPANTS

Total of 115 participants

3 PRIZES

\$50 Amazon Gift Card +  
Canning Kits



USC Price