

Restoration as Innovation









Step One: Restating our Value
From Hawaiian Culture to
Ancestral Sciences and
Technologies of Integrated
Bio-systems Management

Hana: Systems Level
OUR
ECOLOGY
AS
ECONOMY



Ohana: Family

Level:

Our FAMILY UNIT
was
EMPLOYER,
TEACHER,
SPIRITUAL CENTER



KEY POINT TO UNDERSTAND

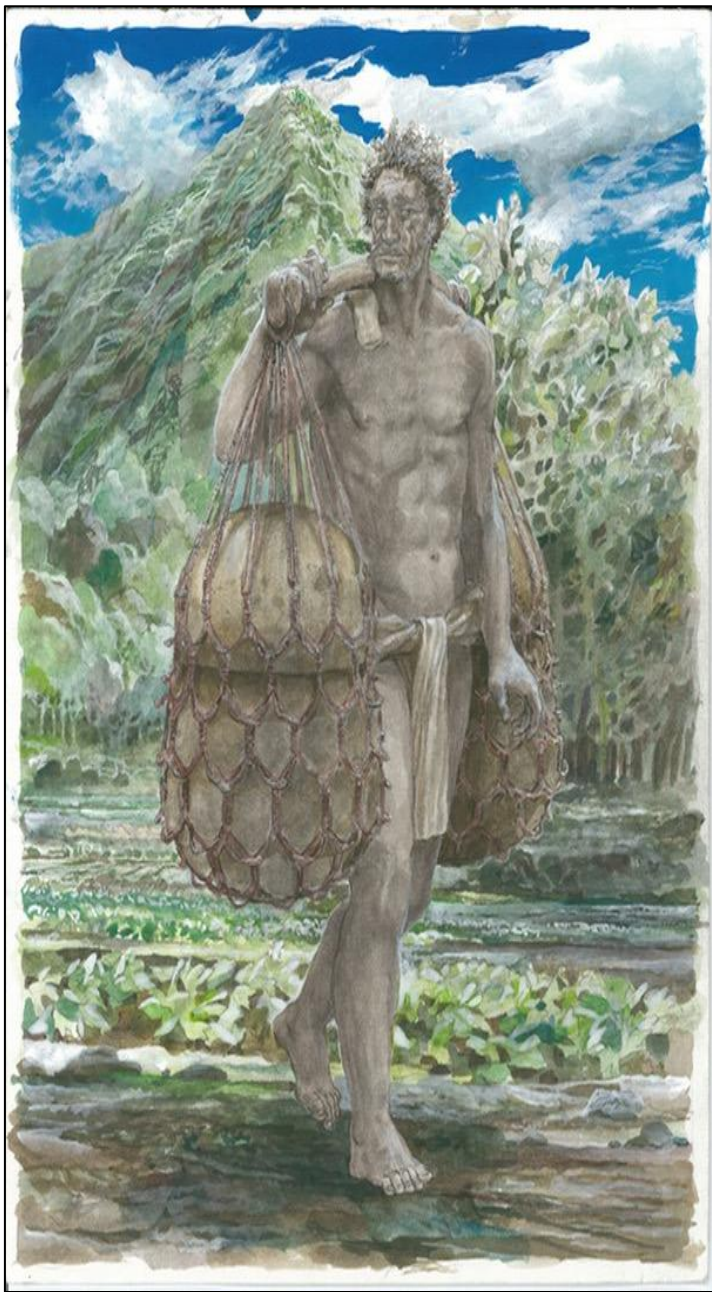
POVERTY in our
community
is
RECENT and
LEARNED BEHAVIOR
incepted and held by external
structures

So

Our RESTORATION
is the
INTERVENTION



Step Two: Reframing Our Work:
From Decolonization to
Indigenization



Triple Piko Analysis

Piko O:
Aligns with
Ancestral
Prerogatives



Triple Piko Analysis

Piko I:
Empowers
Contemporary
Generations



Triple Piko Analysis

Piko A:
Provides
Foundation For
Future
Abundance

Step Three: Re-Entering Into Contemporary

Practices:

From Grants and Business plans

to

‘Auwai Articulations

and

Makahiki Metrics

SOCIAL ENTERPRISE THAT PRODUCES CONTEMPORARY & ANCESTRAL OUTCOMES

ELDERS

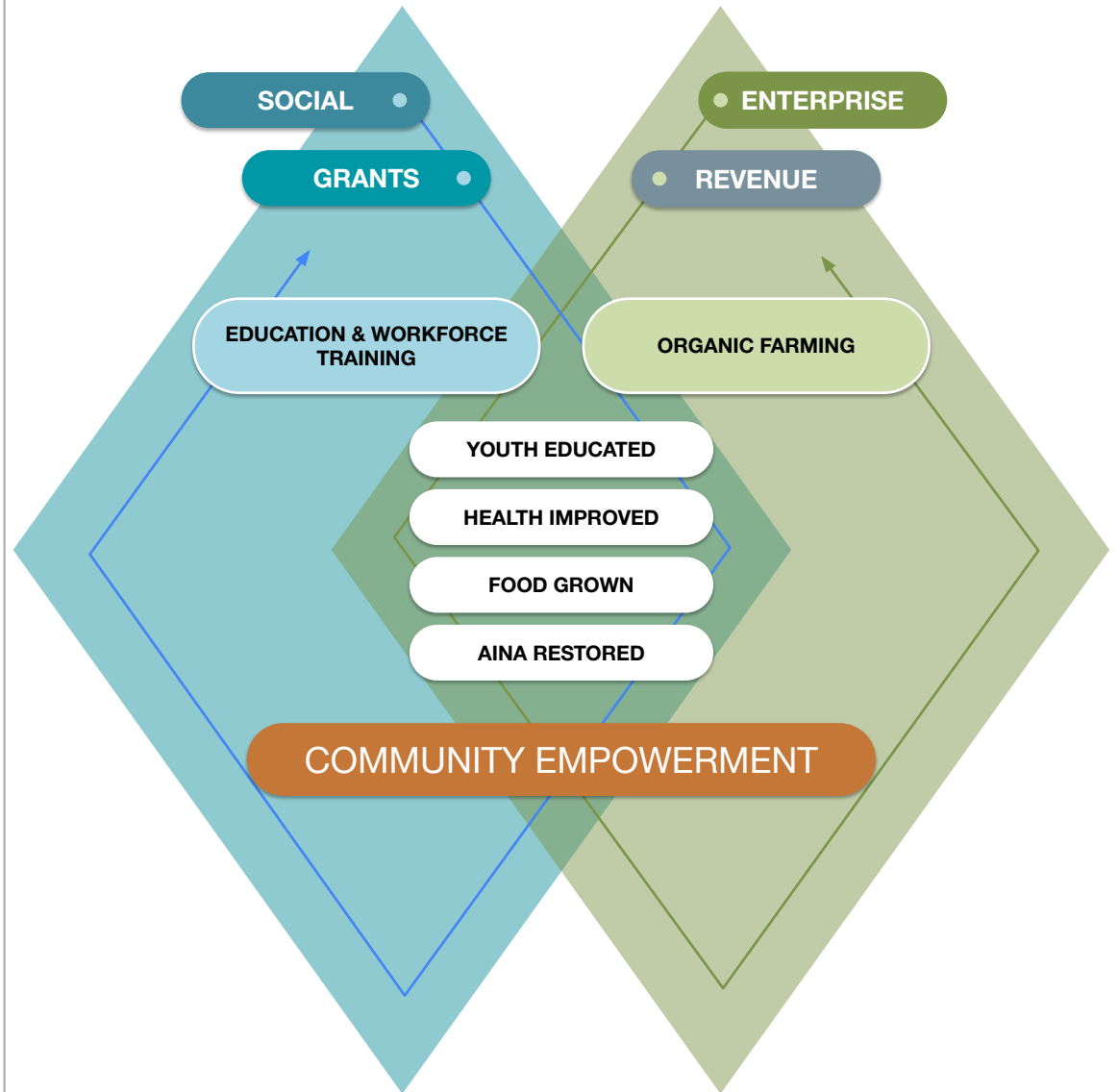
Generate revenue via **Enterprise** while being empowered by **Social** mission

PROGRAMMERS

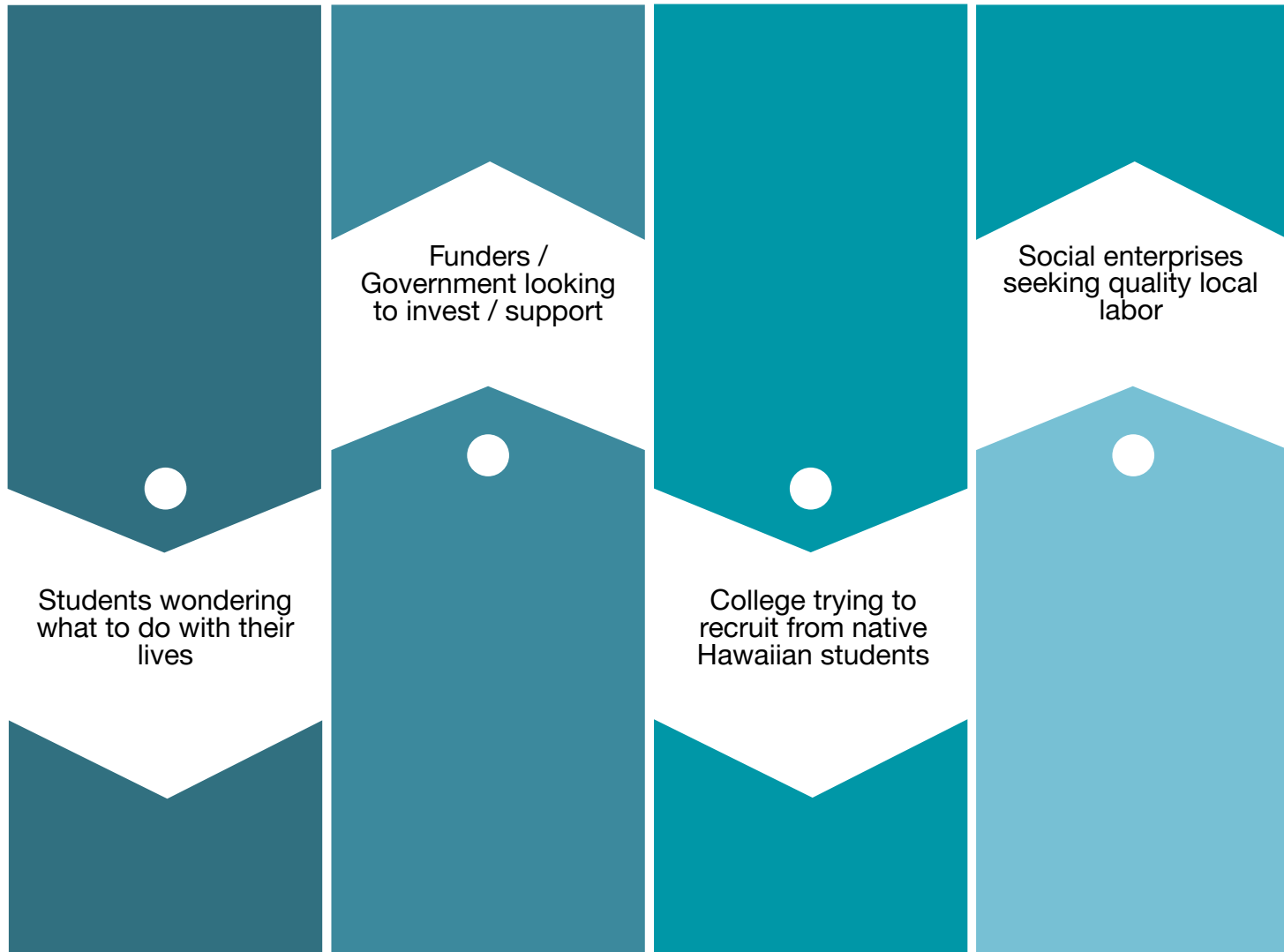
Generate revenue via **Enterprise** while being empowered by **Social** mission

SWEAT EQUITY SCHOLARS

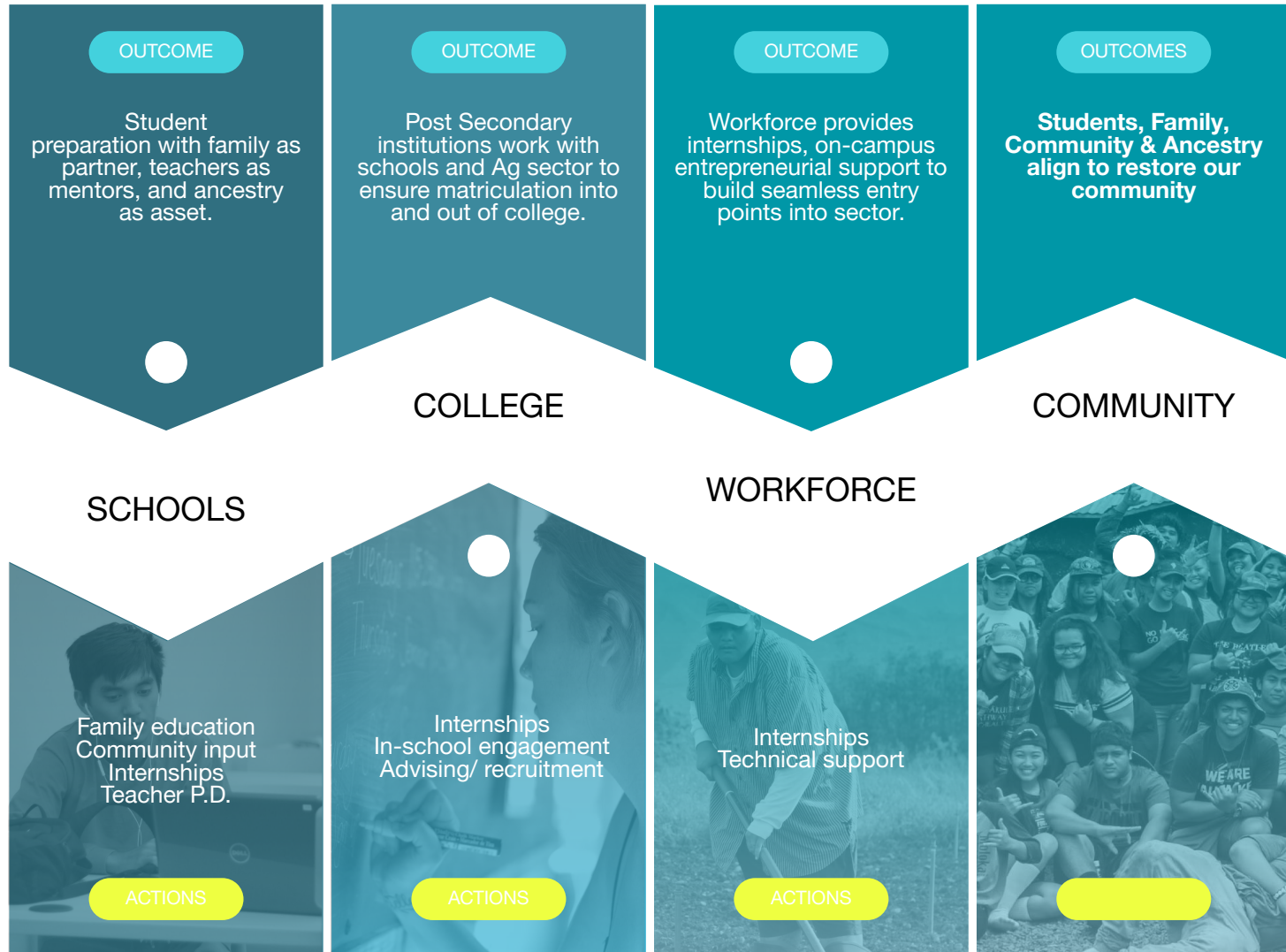
Generate revenue via **Enterprise** while being empowered by **Social** mission



OUR ALIGNMENT: FROM SILOED...



OUR ALIGNMENT: ...TO ALIGNED



Framework Four: Re-establish our Agency:

Hitting their metrics using our model.

Presenting community derived metrics of
agency/resilience/abundance

YOUTH OUTCOMES

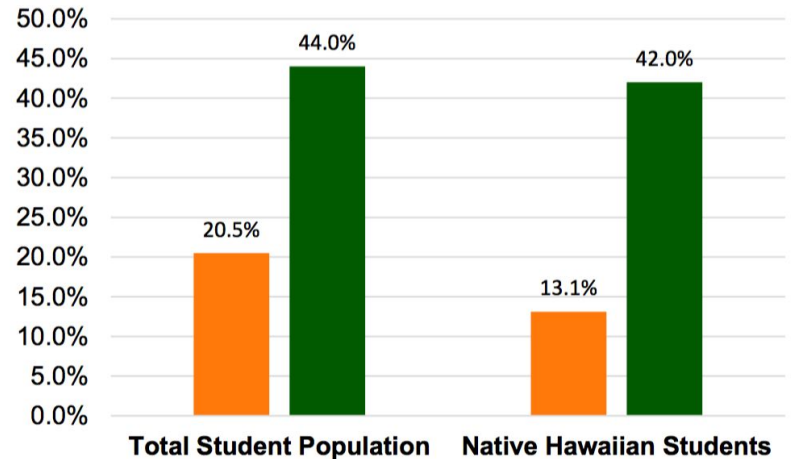
MA'O Intern College Degree Attainment

MA'O interns graduate at more than double the rate of their peers at Leeward Community College, while Native Hawaiian interns triple their chances of achieving their degree.



Degrees attained by MA'O interns during and after their participation in the Youth Leadership Training (YLT) program.

Associate Degree Graduation Rate



Leeward Community College 2015

MA'O Youth Leadership Training (YLT) interns - cumulative

HEALTH OUTCOMES



Mauli Ola Study

Investigating the Gut Microbiome in Social Networks

- Addressing increased prevalence of chronic diseases among Hawai'i's unique populations, including Native Hawaiians and Pacific Islanders.
- Examining how social and economic networks influence individuals' choices and behaviors, leading to (un)healthy lifestyles.
- Exploring how MA'O, a community program not specifically designed around health, impacts the health of individuals, especially in the reduction of obesity and other cardiometabolic disorders.

120

Participants in first study cohort, all interns in MA'O Youth Leadership Training (YLT) program. Future study cohorts include additional interns and members of interns' social networks.

70%

Study cohort of Native Hawaiian ancestry

26

Median age of study cohort

50%

Reduction in lifetime risk of contracting T2 diabetes; measured after one year participation in the MA'O YLT internship program.

\$ 15.K.

Reduced annual health care costs associated with diabetes alone, per individual who avoids contracting T2 diabetes.



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LOHELOHE I HONUA

Culturally-engaged, community-focused tech makers

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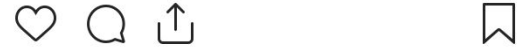


thepurpleprize • Follow
University of Hawaii - West Oahu

thepurpleprize #Repost @purple_maia
with @get_repost

Startup Category:
Innovative I'a Kilo Practices for the
Contemporary Kia'i Loko –1st place

A cost-effective tool to document and
quantify fish at mākāhā (sluice gates) over
tidal, mahina (lunar) and seasonal cycles
using underwater cameras and machine
learning for better management and



2 likes

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WEST OAHU



BACHELOR OF APPLIED SCIENCE
Sustainable Community
Food Systems (SCFS)



Ka'ōnohi Farms

Hawaiian Cultural Practices Thriving
in an Urban Ahupua'a



PLAN 661: Collaboration Between Sectors
Kamuela Enos & Anne Smoke

The Stakeholders





Community Labor/Hands On Opportunities

- INPUTS**
- KS LAND
 - Water (From Spring)
 - Personal Investment
 - Species Diversity
 - Teaching + Passing on of Knowledge

Ka' Ono'hi Farms

- Thermal Pollution Reduction
- Water Recharge
- Native Plants Planted
- Native Fauna Habitat
- Food Production
- \$ From Food Sales
- Clean Water Output
- Area Restored/Invasives Removed
- Ahupua'a Connection
- Spiritual Connection
- Variety of Traditional Foods Grown

OUTPUTS

Office of Indigenous Innovation UH System

21st Century Citizens

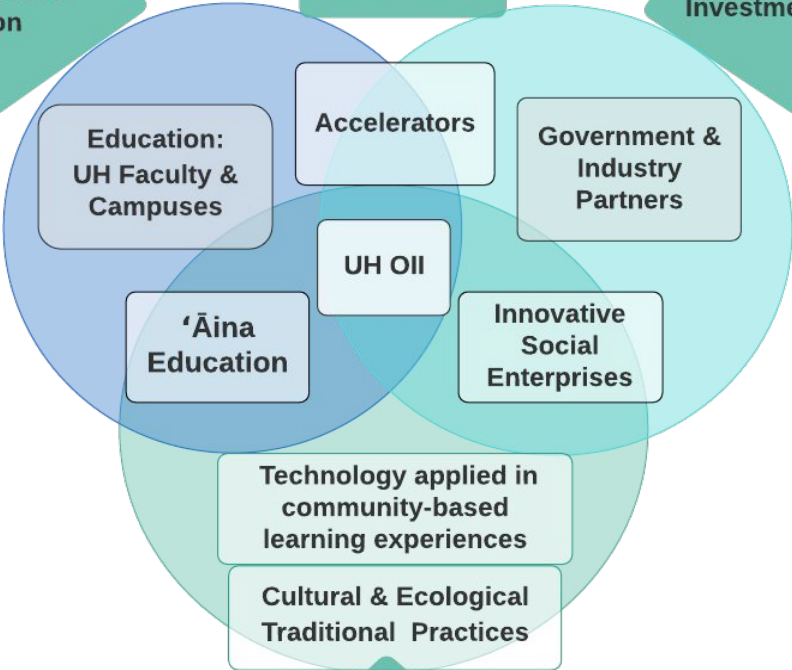
Normalizing Indigenous Systems as a means to resilience and abundance

21st Century Spaces of Employment

Metrics:
Degree Attainment;
Graduation Rates;
Research;
Expanded "value" definition

Metrics:
Application across sectors; Research;
Expanded definition of "value"

Metrics:
Jobs; Worker Retention;
Businesses & Industry growth;
Investment; Revenue



Regional Students

Pewa Framework:

how we approach
our work

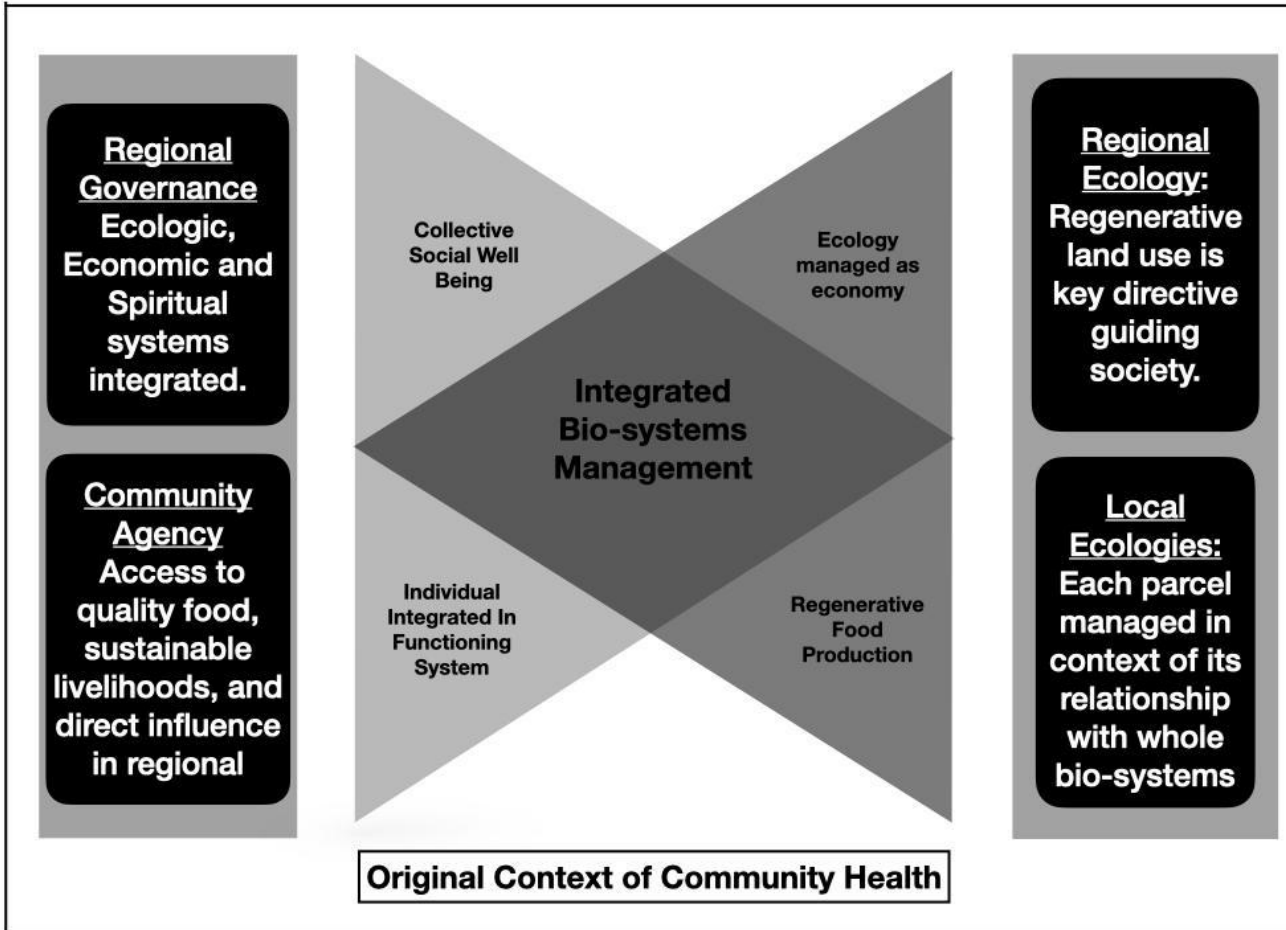


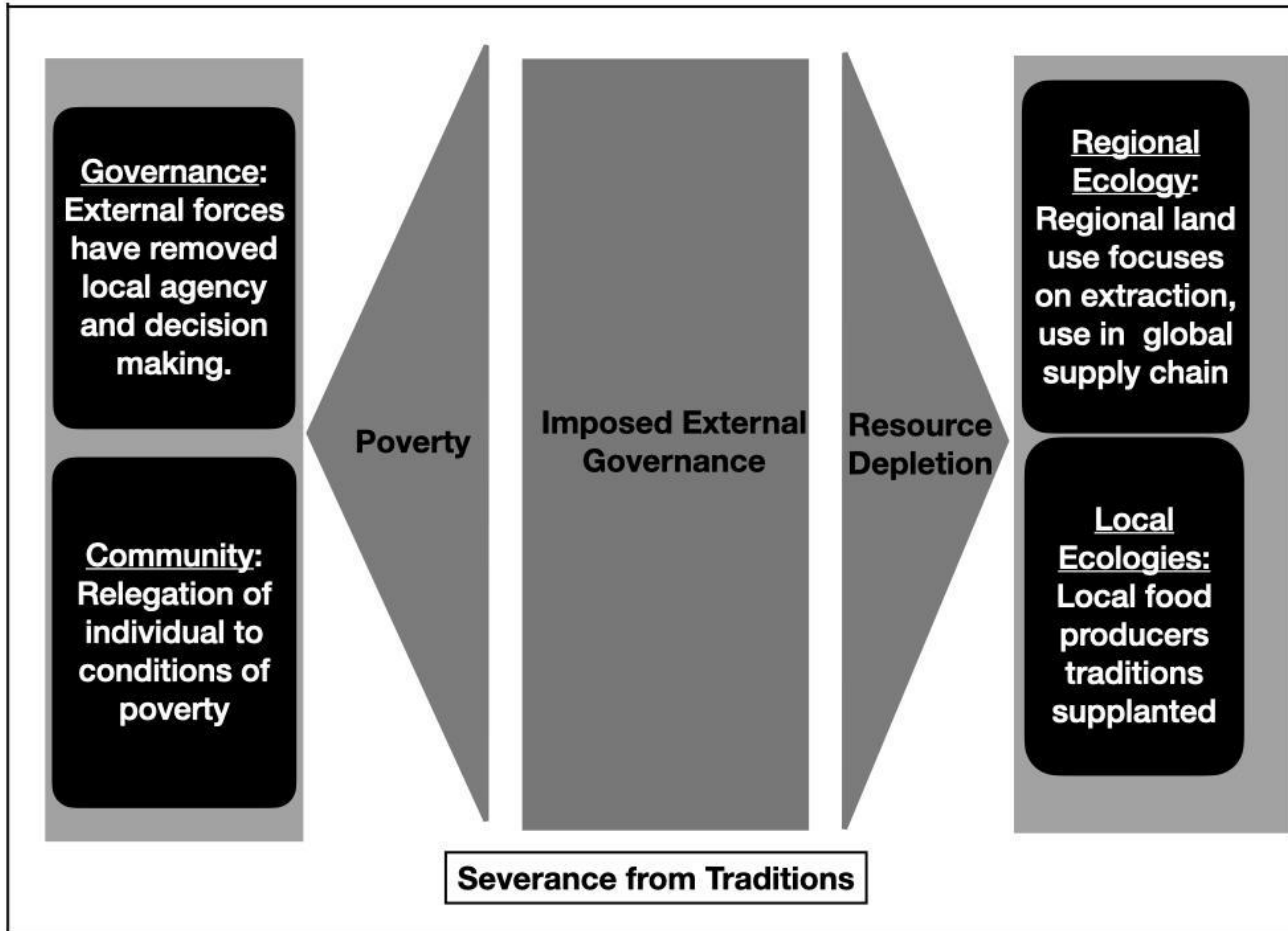
Equity: *A willingness to understanding the nature of the fracture: A willingness to acknowledge the history of dispossession, and a willingness to affirm the value of what was lost*

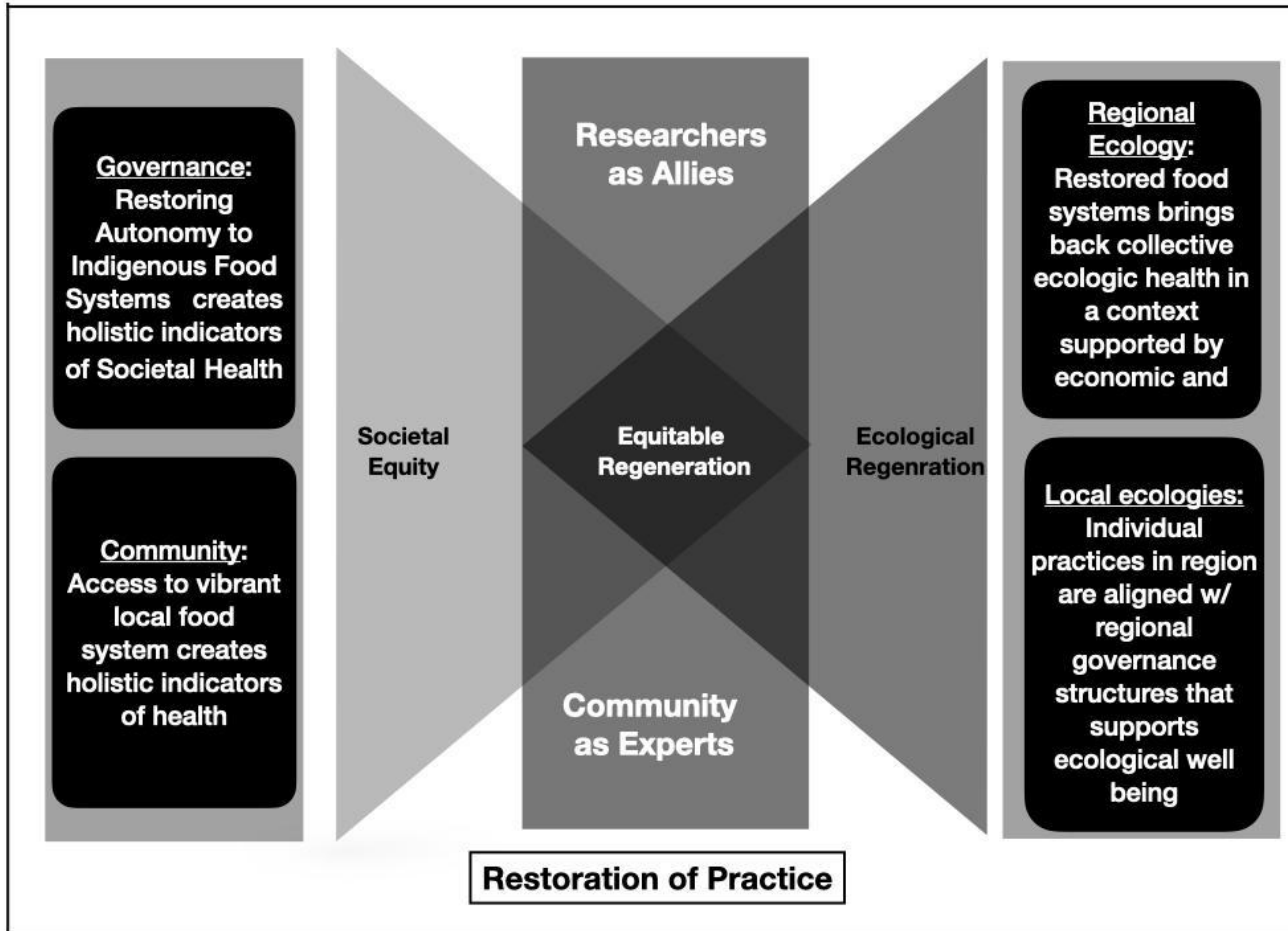
Reciprocity: *A willingness build interventions that address the reason for the fracture, and are built to hold each side equally strong: to ID interventions that recognize historical injustice **and** ancestral efficacy and then create approaches that work on investments into restorative interventions.*

Transparency: *the willingness to be clear and honest in intent, and to operate in a transparent way: Pewa are emphasized on the 'umeke, not hidden. They show that the carrier is now strong. We do not hide the fact that there was a fracture, but honor our work to mend it. And now we can have abundance*

Pewa - *n. rectangular patch or wedge used for mending bowls, perhaps so called because of a resemblance to a fishtail.*







Current Oil Initiatives



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UH Center for Indigenous Innovation and Health Equity (CIHE)



UNIVERSITY of HAWAI'I NEWS

Search

Academic Research People Community Athletics Administrative By Campus

\$1M for UH center to advance Indigenous innovation to improve NHPI health

UH News » Community » \$1M for UH center...

September 23, 2021 UH News



U.S. SENATOR FOR HAWAII
BRIAN SCHATZ

ABOUT SERVICES NEWS CONTACT HOW CAN WE HELP?

News • Press Releases

09.22.2021

Following Provision Authored By Schatz, University Of Hawai'i Set To Receive \$1 Million For Indigenous Health Center To Research, Support Native Hawaiian Health

UH Manoa Will Also Receive \$1 Million In Grant Funding For Cancer Research

WASHINGTON – Today, U.S. Senator Brian Schatz (D-Hawai'i), Chairman of the Senate Committee on Indian Affairs, announced that the University of Hawai'i will receive \$2,104,808 in federal funding from the U.S. Department of Health and Human Services (HHS) to implement a Center for Indigenous Innovation and Health Equity and to support cancer prevention research. Senator Schatz led efforts to establish and fund a Center for Indigenous Innovation and Health Equity at the HHS Office of Minority Health in the December 2020 spending bill.

"This new funding will help UH partner with HHS on its new Indigenous health center, giving researchers and policymakers more resources to better understand and directly address the health disparities the Native Hawaiian and Pacific Islander communities face," said Senator Schatz.

› Kap'olani CC

› Kauai' CC



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CENTER FOR INDIGENOUS HEALTH RESEARCH AND POLICY



CENTER FOR INDIGENOUS HEALTH RESEARCH AND POLICY

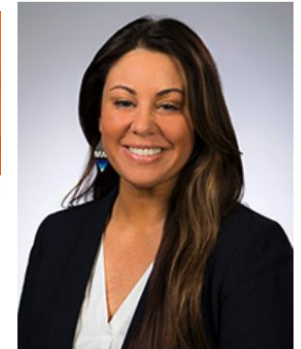
OSU Center for Health Sciences

The Center for Indigenous Health Research and Policy brings together scientific collaborators, Indigenous knowledge holders, and community leaders to eliminate health disparities and cultivate health and wellness with Indigenous communities. These efforts are grounded in the principles of community-based participatory research and traditional Indigenous worldviews that emphasize equity, co-learning, and the interconnected and holistic nature of the health.

SEE RESEARCH

The Center builds upon and extends the mission of Oklahoma State University to improve the health of Oklahoma's most underserved populations. The Center efforts are focused in three primary areas:

1. **Reconnection** – the recognition and strengthening of Indigenous knowledge and practices that foster wellness
2. **Education** – the provision of pipeline programs that are culturally-grounded as well as scientifically rigorous to develop the next generation of health sciences professionals working with Indigenous communities
3. **Training** – the development of cross-cultural and equitable learning opportunities that bring university and community partners together to address training needs within both settings so as to foster long-term, collaborative and co-learning relationships between Indigenous Nations and Oklahoma State University



**Valarie Blue Bird
Jernigan**

Professor, Rural Health Executive
Director, Center for Indigenous
Health Research and Policy



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<https://medicine.okstate.edu/cihrp/index.html>

FY21 Omnibus Appropriations Bill

Office of Minority Health (OMH)

Center for Indigenous Innovation and Health Equity.—The agreement includes \$2,000,000 for the Office of Minority Health to create a Center for Indigenous Innovation and Health Equity to support efforts including research, education, service, and policy development related to advancing Indigenous solutions. The agreement urges HHS to consider partnering with universities with a focus on Indigenous health research and policy among Native Americans and Alaska Natives, as well as universities with a focus on Indigenous health policy and innovation among Native Hawaiians/Pacific Islanders. Potential partnerships should include Indigenous leaders and engage Indigenous community partners in both innovation and health disparities focus areas, as well as aligned goals and priorities. The Center should disseminate best practices and lessons learned to other Indigenous communities, including through Indigenous digital storytelling. The agreement requests a report within 120 days of enactment of this Act outlining the Department's plans for a Center for Indigenous Innovation and Health Equity.

Hula

- Joseph Keawe‘aimoku Kaholokula, PhD (UH JABSOM) and team
- Examined the effects of a 6-month behavioral intervention (cultural dance program based on hula) to improve blood pressure and cardiovascular disease risk among Native Hawaiians with uncontrolled hypertension.
- Randomized controlled trial (263 participants)
- **Significant reductions in hypertension and CVD risk among intervention group compared to control group**



<https://www.civilbeat.org/2019/09/fighting-heart-disease-with-hula/>

Kaholokula JK, Look M, Mabellos T, Ahn HJ, Choi SY, Sinclair KA, Wills TA, Seto TB, de Silva M. A Cultural Dance Program Improves Hypertension Control and Cardiovascular Disease Risk in Native Hawaiians: A Randomized Controlled Trial. Ann Behav Med. 2021 Mar 2:kaaa127. doi: 10.1093/abm/kaaa127. Epub ahead of print. PMID: 33677520



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GRANTS.GOV > *View Opportunity*

VIEW GRANT OPPORTUNITY



MP-CPI-21-007

**Center for Indigenous Innovation and Health Equity
Department of Health and Human Services
Office of the Assistant Secretary for Health**



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Onboarding UH CIIHE Staff Members



Johnny Tudela Aldan, Jr.
Data & Policy Analyst

B.S. Biology (Chaminade University)
MPH (Eastern Washington University)

Chamorro, Pohnpeian

Research, public health

Shanda Delos Reyes
Project Administrator

BA in Political Science (UH Mānoa)

Kampampangan, Ilokano

Government, admin, policy



Sharde Freitas
Data & Policy Analyst

BA in Biology (University of Redlands)
MPH (UH Mānoa)
JD (William S. Richardson School of Law)

Kanaka 'Ōiwi

Public health, law, advocacy, policy, research

Ikaika Ramones
'Āina-Based Org Liaison

BA in Anthropology (Harvard University)
MPhil and CAGS in Anthropology (NYU)
PhD candidate in Anthropology (NYU)

Kanaka 'Ōiwi, Ilokano

Social anthropology, political economy



CIIHE's Indigenous Framework - Work-to-Date

Pewa Framework



Equity: *A willingness to understanding the nature of the fracture*

Reciprocity: *A willingness to build interventions that address the reason for the fracture, and are built to hold each side equally strong*

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CIIHE's Indigenous Framework - Work-to-Date, cont.

- Papakū Makawalu process
 - Two-day workshop guided by the Edith Kanaka'ole Foundation
 - Developing kapu and kānāwai for our shared work
- 'Aelike
 - Formal agreement (submitted to federal government) representing our shared values and framework



CIHE Landscape Analysis Survey

- Co-designed in content and structure with CIHE core partners and community network partners
- Key Questions
 - What types of Indigenous innovations are there and where are they occurring?
 - What are the preliminary/hypothesized health impacts?
 - *Gaps Analysis*: What are the barriers that limit these practices from advancing (i.e., policy, research, funding, education)?



Landscape Analysis Workshops

- **USAPI Information Session**
 - Held on June 8, 2022
 - Introducing Pacific Islander community-based organizations to CIHE and encouraging their participation in the Landscape Analysis Workshops
- **Landscape Analysis Workshops**
 - Co-designed with core network partners as a series of two-hour collaborative sessions co-presented with partners:
 - June 14, 2022 (Hau'oli Mau Loa Foundation)
 - June 22, 2022 (Hawai'i People's Fund)
 - July 15, 2022 (Kua'āina Ulu 'Auamo)

CIIHE Landscape Data Analysis & Synthesis

- Completed Summer 2022
 - **49 survey respondents** across Hawai'i and the USAPI participated (largely 'āina-based organizations).
- Themes undergoing analysis:
 - Traditional Agriculture/Aquaculture
 - Traditional Medicine
 - Sailing and Navigation
 - Traditional Languages

By Organization	Percentage
Non-USAPI	65%
USAPI	35%
Total	100%
Location of community-based organizations participating in CIIHE's landscape analysis	
Hawai'i	
Northern Mariana Islands	
Guam	
Marshall Islands	
Oregon	

***Advance community-centered
ancestral and cultural practices
as the intervention
to improve holistic health for NHPI populations
through research initiatives,
policy strategies, and
economic development initiatives
that are all co-produced with community.***

Research Initiatives

- Ongoing Landscape Analysis
 - Finishing data synthesis and analysis with member checking
 - Dissemination Workshops
- Literature review
 - Traditional medicines, Native languages, Organic farming/traditional foods
- “Deep Dives” with core community partners
 - In-depth ethnographic studies examining two key community partners and their health innovations
 - Interviews, participant observation, semiotic analysis, and visual anthropology methods



Research Incubator

- Building on the Landscape Analysis to invest in pilot projects
- Matching community-based organizations that desire a research partner with community-centered researchers
- Approximately 2-6 projects/year, mix of NH and PI
- Investments in UH faculty to partner with community-based organizations
 - Share funding and data
 - Follow Pewa Framework



Our “How Will We Know” if this initiative is working?

- At the Community Level: *Investment* is being driven to community organizations.
- At the University Level: *Research* is co-designed with community and supports ancestral practices done in contemporary application.
- At the Government Level: Indigenous communities are *repositioned* as spaces of innovation and their practices and people are thriving.





Established Program to Stimulate Competitive Research

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Climate & Data Science

Change Hawai'i

Change Hawai'i is a project managed by Hawai'i EPSCoR. Harnessing the data revolution for island resilience.

[LEARN MORE ABOUT THE PROJECT](#)



Emerging Areas and Seed Funding

“Every brilliant experiment, like every great work of art, starts with an act of imagination.”

– Jonah Lehre

Change HI's emerging areas and seed funding activities respond to two priorities identified in **Hawai'i's Statewide Science and Technology Plan: Data science innovation and technology transfer** and **Native Hawaiian and Pacific Islander inclusion and equity in the Hawai'i data science endeavor**.

An abstract geometric logo consisting of several overlapping, semi-transparent shapes in shades of purple, blue, and red, resembling a stylized arrow or a cluster of triangles.

Create(x)

Create(x) is a living laboratory for students to showcase their works at the intersection of creative media, computation, culture, art and science at the University of Hawai'i at West O'ahu.

