

Hanalei Community Resilience Research & Planning Project
Summary Report of Findings for Community, Terminology & Survey Needs Assessment Results
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Background

Impetus for Research: UH project funded through NOAA to engage in community-based research and planning to reduce risk to natural hazards and climate change in Hawai'i

Community interests: Desire to understand current dynamics of community and increase resilience to disasters and climate change

Purpose

Collaborative Goals of Research Project

Understand, measure, and increase disaster resilience and adaptive capacity of people and the environment of Hanalei, by:

- 1) Identifying vulnerable and resilient populations & areas in Hanalei
- 2) Conducting a Gap Analysis between resources and needs, in order to create a community-based long-term Resilience Plan to reduce social, economic & ecological vulnerabilities to hazards
- 3) Incorporating this information into governmental drought & multi-hazard plans & other community resilience plans

Objectives of Hanalei survey

- 1) Understand current demographic profile
- 2) Understand livelihood profile (including current, possible & supplemental/ alternative livelihoods)
- 3) Understand communities' awareness & perceptions of planning and preparedness for climate-related hazards (household, community & govt/institutional)
- 4) Understand perceptions of/experience with risk/vulnerability to climate-related hazards
- 5) Identify community-led efforts/groups (volunteer, NGOs, not-for-profits, etc) with defined roles & responsibilities of planning and preparedness for climate-related hazards
- 6) Identify County/State/Federal govt-based efforts with defined roles & responsibilities of planning & preparedness climate-related risk reduction
- 7) Understand communities' perceptions of "community," (e.g. residents vs. rentals vs. vacation rentals vs. temporary residents) their expectations & willingness to help themselves each other (& whom)
- 8) Understand community coping & recovery capacity to climate-related impacts (TEK?)

People—Collaborators, Stakeholders & Contributors

- The people of Hanalei & surrounding communities
- Hazards, Climate & Environment Program, Social Science Research Institute, UH Manoa
- Hanalei Watershed Hui
- Ha'ena to Hanalei Community Association
- Harold KL Castle Foundation
- Hawai'i Drought Council
- Hawai'i Ag Alliance through Sustain Hawai'i
- Hawai'i Community Foundation
- MAPping Change, LLC
- NOAA SARP NIDIS (National Oceanic & Atmospheric Administration, Sector Applications Research Program, U.S. National Integrated Drought Information System)
- The National Drought Mitigation Center (NDMC) at the University of Nebraska in Lincoln (UNL)
- E Ala Pu
- DLNR (Department of Land & Natural Resources, State of Hawai'i)

Place: Located in the middle of the Pacific ocean, the community of Hanalei regularly faces many of these natural and climate change-induced hazards. In addition, Hanalei is geographically isolated, sitting at sea level in a valley surrounded by sharp mountains where the only exits are one-lane bridges which are closed in event of flood, tsunami & hurricanes, making expeditious evacuation difficult.

Hazard Risk & Local Adaptation Strategies: Pacific Island communities have always been prone to many natural hazards, and are at heightened risk of hazards associated with climate change. In Hawai'i, for example, climate change is predicted to increase the frequency and intensity of natural disasters such as droughts, floods and possibly hurricanes. The traditional land management system called ahupua'a ensured that resources were managed sustainably, utilizing an understanding of place and connectedness. Hawaiians were connected to their wisdom, connected to their history and connected to the future. In Pacific cultures and communities, hazards have been mitigated in the past by risk management strategies that endowed communities with the adaptive capacity to weather disasters, including: place-based traditional ecological knowledge systems; socio-cultural practices and institutions for resource management; intergenerational sharing of knowledge and experiences with disasters and adaptation strategies; embedded social learning processes that maintain tight linkages between healthy ecosystems and communities. In rural communities, many of these practices have been preserved. There is much concern that while contributing in part to the local economy, these vacationers are ill prepared for natural hazard events and will thus be a burden on local people and resources in the event of a disaster or common flood. In addition, the question remains: Has Hanalei changed too much to retrieve its historical resilience or can we renew and retain our traditional knowledge and experience and be the example of "can do independence" once again?

Approach

- Community Disaster Resilience Approach
- Interdisciplinary
- Intersectoral
- Community-based participatory research
- Collaborative goals

Methods

- Household surveys**
- Key informant interviews
- Collect environmental, hazard, economic & social data
- Fishing community assessment

Key Findings (see also Needs Assessment)

Vulnerable Populations: Tourists, Elderly and disabled, Some long-term residents without experience/knowledge of disasters

Resilient populations: Locals & long-term residents

- High levels of material preparedness (access to farmland & gardens, water resources, stocked food supplies, generators, emergency kits & family plans, cars)
- High coping capacity (high levels of disaster experience & knowledge, high access to social networks and community resource sharing, acceptance of natural hazards)
- High adaptive capacity (high levels of survival skills, traditional ecological knowledge, gardening/farming, raising livestock, hunting, emergency preparedness, traditional medicine, construction)

Potential Next Steps: Use data to make a Community-based Resilience Plan

- Community Resilience Workshops
- Meetings with organizations, groups, individuals integrating
- Additional analysis of survey and other data
- Map vulnerable areas

Feedback Survey