

Effects of Development on Native Hawaiian Communities

Understanding positive versus negative developmental types within a Native Hawaiian community

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Abstract

This paper is detailed research on a small coastal community named Keaukaha to the east of Hilo, Hawaii. The community is a largely Native Hawaiian neighborhood facing external and internal challenges against its sustainability. Native Hawaiians have had to face some of the toughest challenges socially, environmentally, and economically because they have faced generations of injustices and neglect from the government and competitive foreigners who want to live on an island. Since the Hawaiian Government has created land trusts to set aside for them, there are pockets of Native neighborhoods around the islands and they face these challenges altogether in one place. Within these neighborhoods, there are developments that are encouraged by the people, and developments that are placed there by external players. Using research collection and conducting interviews with residents and community officials, I am able to understand what developments within their community are harming them, and what is beneficial. Assessment of developments was done through three categories: social, environmental, and economic impacts. As was predicted, external developments, the Hilo Airport and the Hilo Sewage Plant that infiltrate the neighborhood cause great distress to the residents and will have long-lasting negative effects on the land and people. Yet, the developments asked by the people, the Keaukaha schools, proved to have huge positive impacts and bring the community together and make them stronger.

Introduction

Western influence has changed the native's way of life since they had contact in 1778. Since Western crews have come to the islands it has changed their economy, social dynamic, and natural environment. Hawaii for years has been seen as the perfect destination place for people all over the world because of its lush forests, warm waters, exotic wildlife, and rich culture. However, as Western influence became increasingly involved, the towns known to natives are now developed with resorts, hotels, and shopping malls, and are scattered with Vacation Rental Units along its beaches, such as Airbnb's, Vrbo, or Timeshares. Because the islands are only so big, development can only go so far. According to the Grassroot Institute of Hawaii, the state's median single-family home is over one million dollars because of land zoning and zoning restrictions, making the state the most expensive state to live in (Mason, 2022). This has caused social competition between its residents, native and foreign.

To protect sacred native land, the Hawaiian Homestead Commission Act of 1920 was passed by Congress to provide rehabilitation to Native Hawaiians, which Congress defines as at least 50% native blood, to always have a place to live on their land through land trusts with the government. The scope of my research study will be focused on a small community on the east

coastline of Hilo of the Big Island called Keaukaha. The total area of this community is 295 acres and is recognized as a part of the Hawaiian Home Land Trust, where to lease property you must be over 50% Native Hawaiian by the Department of Hawaiian Home Lands. When it comes to development, it is a fine balance of creating structures that people need versus what outsiders need from that area, which can have a large impact on the community and can alter how they function, negatively or positively.

Research Questions

1. How has development impacted the community of Keaukaha? Socially? Environmentally? Economically?
2. Which kinds of developments are beneficial/detrimental to native communities?

Literature Review

A group of graduate students and faculty members from the University of Hilo conducted a research project to figure out how climate change has impacted Hawaiian fish ponds in the Keaukaha community. Through their research, there is an understanding of how the Keaukaha coastline has changed ecologically over time. The brackish water habitats are a major food source for the community, therefore “the environmental health of these systems is closely tied to the survival of many Kanaka Maoli (Native Hawaiian) cultural practices” (Anthony, Kauahi, 2018). Keeping these fish ponds and the coastline of the community healthy is crucial to the survival of the community’s socio-economic health. Their coastal zone is very low lying and the project has required the development of management that protects production, therefore making the fish and the people more resilient and adaptable to climate change. This study found information on the relationships between water quality, hydrology, and primary productivity around different points of the coastline to develop models of adaptation. This project in particular worked extremely closely with the community’s collaboration and has renewed growth in the relationship between the natives, the land, and the sea. It is important to note that this built project would be considered a beneficial development and can be useful for maintaining the sustainability of the community. Protecting food security like this allows for the community to flourish on isolated islands. Practicing resilience in contemporary approaches to an evolving environment can also be found as lessons rooted in native Hawaiian history to continue to serve the land and its people.

A study conducted by a student at Stanford, *Paradise for Tourists, a Struggle for Natives*, found interesting impacts of visitor travel on housing affordability, which is the biggest problem when tackling homelessness. The study goes into depth, understanding that colonialism from a century ago has lasting impacts, and they argue that Neocolonialism still exists under the pretense of the

tourism industry. Using Hawaii official law organizations, they found through policies how Vacation Rental Units can exacerbate the issues of housing affordability and how it fuels the fire of the housing crisis. It was found in a case study used in San Francisco to prove that these tourist lodging businesses can cause a “withdrawal of housing from the residential market, resulting in higher housing costs.” and that the exact city is facing the same issues (Magbual, 2020). Developments such as Vacation Rental Units can be a real problem for communities for many reasons and especially inside a small native community that already does not have much accessibility to housing.

Methodology

To reiterate, the focus of this study is on the Keaukaha community, whose boundaries are east of Hilo, along the coastline above the Hilo International Airport. This particular site was chosen because it is a part of the Hawaiian Homestead Act which essentially means that all the residents within it must be over fifty-percent Native Hawaiian blood. Information was collected on three fundamental development impacts; economic, social, and environmental. To collect this information, I used resources such as the Keaukaha Community Association, the Department of Hawaiian Home Lands, Google Maps/Earth Pro, and over-the-phone interviews with the people of the community. From the Keaukaha Community Association, I was able to become in contact with the President of the organization, Pat Kahawaiolaa, who I later interviewed over Zoom.



First, we must gain a basic understanding of the site. To visualize the boundaries, which are highlighted in orange in this figure, these are the boundaries of the Keaukaha community according to the Hawaiian Home Lands Area Map. The Keaukaha Regional Plan, which was made in December of 2010, shows that this tract holds exactly 499 parcels, and the average size is 0.5 acres. Before understanding impacts, there needs to be evidence of development or change, and specifically what kind of developments have shifted within a ten-year time frame. To understand this visually, I used Google Earth street view images to collect snapshots of sites within the community to compare them from their earliest year within a ten-year time frame using the time travel feature. Because the community is quite small, I went into street-viewing mode and moved through each street to find evidence of change. Evidence was found by scrolling back and forth between the most current date to the last date closest to the ten-year mark and looking for any major landscape changes, new buildings, walkways, and streets. During this process, I was able to find that the most common type of development was the construction of new buildings, roads, parking lots, and clearing out vegetation.



(9 years apart - Constructed Education building)



(9 years apart - Constructed building/Cleared vegetation)



(9 years apart - Reconstructed land)

To access social impact, I created a list of questions to be asked in interviews with members of the community and the Keaukaha Community Association about their personal experience with certain developments within the community and what they thought was most beneficial or detrimental, and why.

For economic impact, we go through the County Assessor that gives the total average price of the homes in the area, as well as Zillow and through the Department of Hawaiian Homelands Keaukaha webpage. Interviews are used to collect information on this as well by asking our residents and association interviewees how they have been able to continue living there and if any problems restrict them or their families from living there. To find environmental impacts, there is a group called the Keaukaha Action Network, a community branch that uploads meetings on Youtube and discusses environmental issues being addressed in neighborhoods. It is important as well to have a basic understanding of how the land is being used through a GIS HawaiiCCAP Land Cover to visually show what areas are being dedicated. In personal interviews, we also get to see how they have noticed or felt any environmental impacts.

Interview Questions
<i>Can you tell me about what kind of developments have recently gone up in the area that you are aware of?</i>
<i>How do you believe your community's development has changed over the past 10 years?</i>
<i>How have recent developments impacted the community's social wellbeing?</i>
<i>Are you aware of any pressing environmental issues that have been caused by nearby developments?</i>
<i>Do you feel like certain developments have been good or bad for the local economy? If so, which ones and why?</i>
<i>What do you believe the community needs more of? Less of?</i>

Results

Using the development analysis with Google Maps, I was able to confirm multiple places within the community to show as evidence of changing landscape due to development and planned building spaces, for example, cleared vegetation for a future parking lot or buildings. Now that there is evidence of development and a basic understanding of the neighborhood's geography, house market, type of developments, rates of development, ecology, and land trust laws, we can

now assess their impacts. Starting with social impacts, the most prevalent positive developments that were found during this assessment were the Keaukaha schools that are located in the center of the neighborhood such as the Keaukaha Elementary School, Ka 'Umeke Kā'eo PCS School, Keakaha Preschool, and Ke Ana La'ahana Public Charter School. Socially this brings benefits to the community because it is seen as a hub for the community to come together. Residents would consider the schools to have a sense of community pride for the small town because it brings kids and families together to discuss learning, diversity, and heritage. Kahawaiolaa, my interviewee, mentions his daughter is a teacher at the school, which shows the close connection this development brings to the people.

On the other hand, a development that has been detrimental to social dynamics is the Hilo International Airport, which is located directly south of the neighborhood and is nearly three times the size of their land. The airport has been very detrimental in the sense of noise pollution that comes with air travel. "We're dealing with all the noise from there," mentions a resident, "and when the airport came in, it took a part of our land trusts." It is especially seen in a negative light because it was built on this open land to open up accessibility for outsiders to enter Hilo. "The airport has expanded from 1927 and today it is a full-on international airport and it's still being expanded for cargo and those kinds of things. And we now have the noise. So it's the noise we've been told. Hey, it's incompatible for you guys to be living along with the airport alone. So now my people gotta move. You know this is economic, this is the economic engine. So can you imagine how we feel we were there first?" says my interviewee.

People have viewed this for its damages to their heritage because it disrespected their right to the land trusts, especially since the people do not benefit from any of its economic perks. Generally speaking, lots of the older natives on the land felt they were losing their community's sense of heritage and "the way of their people" because of the modernization of society. The influence of more developed amenities that are nearby has created enticement for modern things, which has led the younger natives to forget traditions and cultural practices. When it comes to the neighborhood's environmental impact, the topic of toxicity was consistently mentioned and the health concerns as a result of that. Developments such as the Hilo airport, Hilo landfill, and Hilo sewage treatment plant are developed within the community that has shown detrimental side effects from their existence.

Specifically, the Hilo sewage treatment plant is being blamed for a large portion of the toxicity by the residents. The waste management facility is located between the Keaukaha neighborhood and the coastline. In my regional interview with the President of the community association, he says, "This community was fighting. The fact that this county placed a sewer plant right in the middle of our community and the sewer plant has been there since maybe 1964 if you look at two days ago, the headlines were, 'the wastewater plant may cause an environmental catastrophe'. The sewer plant, which is connected to Hilo, but is not connected to the Keaukaha

community, has documented spills and leaks of petroleum product which can cause an increase in health concerns for respiratory illnesses, and of course, has a negative effect on the plants and wildlife who live in this area.

According to an article that has recently interviewed several residents in the community, one person says “On my street alone, several houses have had at least one family member die of cancer,” (Keaukaha Action Network, 2017). After researching and documenting suspected health and environmental problems, groups from the University of Hawaii Hilo, the Keaukaha Action Network, and the Earthjustice Defense Fund found at least ten cases of staphylococcus and methycillin-resistant staphylococcus aureus infections in residents of the community (McNarie, 2018). Not only does the sewage plant's existence cause environmental damages, but the sewage plant has been reported for having multiple spills in the past, the most recent ones were in 2017 and 2021.

As for economic impacts, it is important to understand the local economy dynamic first. The residents of this community have an average median household income of roughly \$60,536, a little less than the United States average, according to the American Community Survey 5 year Census estimates (Census Reporter, 2019). Although, the Keuakaha neighborhood residents, being at least 50% native, can afford to live in this neighborhood through cheap lease deals with the Department of Hawaiian HomeLand. Being a resident in Hawaii is already enough of a toll on one's finances, but there are some developments that have made it even harder. As stated before, the Hilo Airport has planned and implemented expansions the airport, which has created problems with residents' accessibility to be able to receive federal aid to lease within the neighborhood because of zoning restrictions.

In Kahawaiolaa's interview, he expresses his personal experience of this from his daughter trying to get a loan to afford a house through the Federal Housing Administration, but cannot because federal money faces restrictions, therefore any resident that tries to gain any federal financial aid in that area will be turned down. In short, residents who need aid to acquire a home, get out of financial trouble, or fix their run-down house will not be eligible to receive aid due to the restrictions in the airport zone. If potential native residents are not able to receive funding to live in this area, they likely will have to find other places to live, which would also explain the increase in vacancies. Another explanation that I learned through my interview was that in the event that a native marries someone who has little or no native blood, often their children can end up being below 50%. After decades of this, generations will find their native blood percentage decreased, and therefore will not meet the blood-related requirement to rent or lease in the neighborhood.

This has led to an increasing number of vacant lots on the land, and unfortunately as a result, a decrease of residents will lead to a lack of local revenue and therefore decreased maintenance,

fewer updates and upgrades, and reduced quality of goods and community opportunity. On the other hand, the Keaukaha schools are seen to be a positive look on the communities economy because it brings strong property values. It provides employment opportunities and prepares a future workforce which will, in turn, increase the workers spending power.

Conclusion

To conclude my research questions through the assessment of social, environmental, and economic impacts of developments within the Keaukaha Community, there are staple establishments that should be reported for benefitting the community and some that prove detrimental. As for the most detrimental developments, the winners for this category are the Hilo International Airport and its recent expansions, and the Hilo Sewage Treatment Plant. Overall, although the airport has existed here since the 1920s, it has continued to expand over time and put pressure on the nearby residents. Economically, it was found that although this airport brings in lots of people from all over the world, the community of Keaukaha does not necessarily benefit from those who visit because they are a small town that is not necessarily catered to tourists and is typically a "passed through" town in order to get to Hilo. There are zoning laws along the area of the airport that restrict residents from getting loans or acquiring any federal money to repair existing homes because the development causes too much pollution for the area to be safe and comfortable enough for people to live close to it.

Environmentally, the airport is detrimental in the way of allocating more land to update, create and extend more runways, and taxiways, and to construct blast pads at the ends of the runways. Socially, the residents view the airport in a very negative light because it was seen as the development that impeded their land trust and is squeezing their people out through zoning restrictions. The Hilo Sewage plant has also been a detrimental development to the seaside community that affects the health of the people and the environment through sewage pollution and toxic waste that increases the land's exposure to hazardous pathogens and chemicals into the land and water. The development is also seen as an unfair establishment because it is connected to the city of Hilo to guide out their city's waste, however, no one from Keaukaha is connected to that wastewater treatment to take out their waste, and residents are upset that it was set in their backyard. As for development with the most positive impact on the native community, the four Keaukaha schools have shown enough reason to serve the residents in a beneficial matter.

The schools, central to the neighborhood, provide the community children with higher quality education with different opportunities. The children who do grow up through these schools have diverse learning environments which have led them to get high-quality paying careers that end up later benefiting the community through the better likelihood of general employment, reducing their dependency on public assistance, and offering better local tax revenue. Socially, it was

created as a hub for natives to come together and enrich their youth with their culture and educate them to create better lives for future generations. Overall, this study explored how external developments from Hilo have made the residents of Keaukaha struggle to be able to continue living in this neighborhood because of the consequences of infrastructure that does not bring them any benefits. It was also found that internal developments that are encouraged and enriched by the community increase the sustainability of the neighborhood and enhance the residents' well-being. Because of this research, this case could be seen as an example to prove that developments that are being built within a community, and especially native communities, should only be built when they are encouraged and supported by the people themselves.

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