An Ecological Model of Native Hawaiian Well-being

Abstract: Native Hawaiian well-being and quality of life can be understood and supported in the distinct arenas in which we live, work and interact. At one level, Native Hawaiian well-being is integrally linked to the vitality and abundance of natural resources relied upon for subsistence and cultural practices. At another level the Native Hawaiian family and `ohana is the core social unit within which the individual lives and interacts. Historically, there are also socially distinct communities and community organizations within which Native Hawaiians function and work to sustain their well being. The historical Native Hawaiian nation and its recognition and re-establishment within the framework of U.S and international law is another important aspect of Native Hawaiian well-being. This article examines each of these arenas in relation to achieving and sustaining Native Hawaiian well-being. (Pacific Health Dialog 2003, Vol. 10 (2); Pg 106-128)

Davianna Pomaikal McGregor*
Paula T. Morelli**
Jon K. Matsuoka***
Rona Rodenhurst***
Noella Kong****
Michael S. Spencer*****

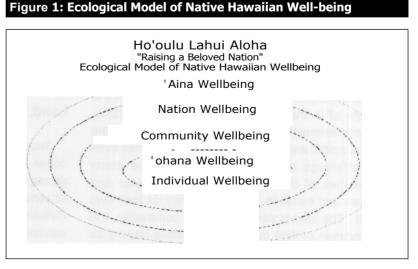
Introduction

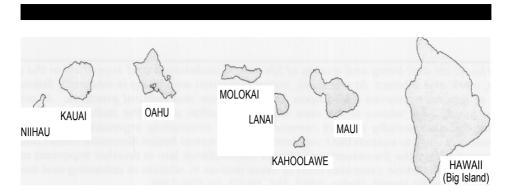
The Ecological Model of Native Hawaiian well-being was developed to assist in planning and assessing programs and services to improve the lives of the Native Hawaiian people. The model, as shown below in Figure 1, illustrates four systemic relationships that contribute to Native Hawaiian well-being — 'aina or land and natural resources, nation, community, and `ohana or extended

family. Each system comprises a key layer where advocacy and intervention services and programs can be provided to enhance the well-being of the Native Hawaiian people. The key elements which comprise each system are identified and described below.

The model is predicated on the assumption that the basic social units of the Native Hawaiian nation are Native Hawaiian 'ohana or extended families. It further acknowledges that many Native Hawaiian 'ohana continue to live on ancestral lands in Native Hawaiian communities primarily located in rural areas of the islands as well as on Hawaiian Homelands in both urban and rural settings. In turn, healthy and functional 'ohana form the foundation for economically stable communities which, in turn, contribute to the development of a strong nation. The ecological dimension of the model assumes that Native Hawaiian systems, ranging from the national to the community and family levels are interdependent upon the 'aina or the lands and resources of Hawai'i for health (physical, mental and emotional) and social wellbeing.

*Davianna McGregor, Ph.D., Professor of Ethnic studies at the University of Hawai '1, Manoa, Email: davianna@hawaii.edu; Website: http:// www.2.soc.hawaii.edu/css/es/; **Paula T. Tanemura Morelli, Ph.D., Associate Professor in the School of Social Work, University of Hawaii, Manoa, Email: morelli@hawaii.edu; ***Jon K. Matsuoka, Ph.D, Interim Dean and Professor at the School of Social Work, University of Hawai'i, Manoa. Email: <u>jmatsuok@hawaii.edu</u> __Website: <u>http://</u> www.hawaii.edu/sswork/,- ****Rona D. Roscoe Rodenhurst, M.Ed., Planning director at the Office of Hawaiian Affairs; ****Noella Kanoelehua Kong, M.A. Data and research manager at the Office of Hawaiian Affairs; *****Michael S. Spencer, Ph.D., Associate Professor in the School of Social Work, Michigan University.





The 'aina is comprised of the land and natural resources of Hawai'i Pae 'Aina or Hawaiian archipelago. as illustrated in Figure 2. The 'aina is the foundation of traditional Native Hawaiian cultural and spiritual custom, belief, and practice. Land and all of nature are alive, respected, treasured, praised and honored. Throughout the islands, many Native Hawaiian 'ohana in rural communities continue to practice subsistence cultivation, gathering, fishing, and hunting as part of their livelihood. Rural Hawaiians conduct subsistence activities in accordance with cultural and spiritual values and responsibilities taught to them by ancestors who nurtured both physical and spiritual relationships with their ancestral lands. 'Aina is 'one hanau, sands of birth, and Kula iwi, resting place of ancestral bones. The land has provided for generations of Native Hawaiians and will provide for those yet to come.

At the core of traditional Native Hawaiian spirituality is the belief that the land lives as do the 'uhane, or spirits of family ancestors who cared for the ancestral lands in their lifetime. The land has provided for generations of Hawaiians, and will provide for those yet to come. In communities where Native Hawaiians live on and work the land, they become knowledgeable of the life of the land. In daily activities, they develop a partnership with the land so as to know when to plant, fish, or heal the mind and body according to the ever changing weather, seasons and moons. Native Hawaiian subsistence practitioners speak of their cultural and spiritual relation to the lands of their ancestors and their commitment to take care of it and protect it for future generations. Hawaiians acknowledge the 'aumakua and akua, the ancestral spirits and gods of special areas. They even make offerings to them. They learn the many personalities of the land, its form, character and resources and name its features as they do their own children. The land is not viewed as a commodity; it is the foundation of their cultural and spiritual identity as Hawaiians. They trace their lineage to the lands in the region as being originally settled by their ancestors. The land is a part of their `ohana and they care for it as they do the other living members of their families.

There are five basic principles of Hawaiian stewardship and use of natural and cultural resources, which are relevant to sustaining Native Hawaiian well-being. These principles identify the principal elements which must be protected in order to sustain the well-being of the 'aina.

First, the ahupua'a is the basic unit of Hawaiian cultural resource management. An ahupua'a runs from the sea to the mountains and contains a sea fishery and beach, a stretch of kula or open cultivable land and higher up, the forest. The court of the Hawaiian Kingdom described the ahupua'a principle of land use in the case In Re Boundaries of Pulehunui, 4 Haw. 239, 241 (1879) as follows:

A principle very largely obtaining in these divisions of territory [ahupua'a] was that a land should run from the sea to the mountains, thus affording to the chief and his people a fishery residence at the warm seaside, together with products of the high lands, such as fuel, canoe timber, mountain birds, and the right of way to the same, and all the varied products of the intermediate land as might be suitable to the soil and climate of the different altitudes from sea soil to mountainside or top.

Second, the natural elements – land, air, water, and ocean – are interconnected and interdependent. The atmosphere affects the lands, which in turn affect running streams, the watertable and the beaches and ocean. Cultural land management must take all aspects of the natural environment into account. Hawaiians consider the land and ocean to be integrally united and that these

land sections also include the shoreline as well as inshore and offshore ocean areas such as fishponds, reefs, channels, and deep sea fishing grounds. Coastal shrines called fishing ko'a were constructed and maintained as markers for the offshore fishing grounds that were part of that ahupua'a.

Wai or Fresh Water

Third, of all the natural elements, wai or fresh water is the most important for life and needs to be considered in every aspect of land use and planning. The Hawaiian word for water is wai and the Hawaiian word for wealth is waiwai, indicating that water is the source of well-being and wealth.

Acknowledgement of Ancestral Knowledge

Fourth, Hawaiians ancestors studied the land and the natural elements and became very familiar with its features and assets. Ancestral knowledge of the land was recorded and passed down through place names, chants which name the winds, rains, and features of a particular district, and legends. Hawaiians applied their expert knowledge of the natural

environment in constructing their homes, temples, cultivation and irrigation networks. Hawaiian place names, chants, legends inform Hawaiians and others who know the traditions of the natural and cultural resources of a particular district. Insights about the natural and cultural resources inform those who use the land about how to locate and construct structures and infrastructure so as to have the least negative impact upon the land. This ancestral knowledge about the land and its resources is reinforced through continued subsistence practices.

Malama `Aina or Conservation and Lokahi or Balance Of Humans With Nature

Fifth, an inherent aspect of Hawaiian stewardship and use of cultural and natural resources is the practice of malama 'aina or conservation to ensure the sustainability

of natural resources for present and future generations. These rules of behavior are tied to cultural beliefs and values regarding respect of the 'aina, the virtue of sharing and not taking too much, and a holistic perspective of organisms and ecosystems that emphasizes balance and coexistence. The Hawaiian outlook, which shapes these customs and practices, is lokahi or maintaining spiritual, cultural, and natural balance with the elemental life forces of nature. Hawaiian families who rely upon subsistence for a primary part of their diet respect and care for their surrounding natural resources. They only use and take what is needed in order to allow the natural resources to reproduce. They share what is gathered with family and neighbors. Through understanding the life cycle of the various natural resources, how changes in the moon phase and the wet and dry seasons affect the abundance and distribution of the resources, the subsistence practitioners are able to plan and adjust their activities and keep the resources healthy. Such

> knowledge has been passed down from generation to generation through working side-by-side with their kupuna or elders.

> Throughout the islands of Hawai'i, subsistence ivelihoods (and well-being) thrive in particular rural communities (Matsuoka, J., McGregor, D., & Minerbi, L.

(1997). Native Hawaiian ethnographic study for the Hawai'i Geothermal Project proposed for Puna and Southeast Maui. Oak Ridge National Laboratory, Oak Ridge, TN.)(Matsuoka, J., McGregor, D., and Minerbi, L. (1994). Governor's Moloka'i Subsistence Task Force, Final Report. Department of Business, Economic Development, and Tourism. Honolulu, HI.) Surrounding these communities are pristine and abundant natural resources in the ocean, the streams, and the forest. This is largely due to the continued practices of aloha 'aina/ kai (cherish the land and ocean) and malama 'aina/kai (care for the land and ocean). These rural communities were bypassed by mainstream economic, political, and social development (Matsuoka, McGregor, & Minerbi, (1997). Hawaiians living in these communities continued, as their ancestors before them, to practice subsistence cultivation, gathering, fishing and hunting for survival. Thus, we find in these areas that the natural resources sustained a subsistence lifestyle and a subsistence lifestyle, in return, sustained the natural resources.

Through understanding the life cycle of the various natural resources, how changes in the moon phase and the wet and dry seasons affect the abundance and distribution of the resources, the subsistence practitioners are able to plan and adjust their activities and keep the resources healthy.

Figure 3: Nation Well-being

Nation Wellbeing Ho'oulu Lahui Aloha

Ho'oula Lahui Aloha Political Self: Governance Sovereignty: rights, laws, status

Political Sovereignty Historically Language, culture and Economic life National land governance Hawaiian rights, constituted stable spirituality access rights community Land rights Education Banking, finance, National land base, Hawaiian rights: Genealogical records National treasury taxes, Parks, forestry, Marine Access rights, Social service system. Land rights schools resources, ceded public Health care system fees, royalties, reserves, Education, social Natural resources. land trust, DHHL, justice system foundations, Trusts, Chiefly land trusts, Ancestral/ family lands Corporate entities

Components of a Nation

Native Hawaiian 'Ohana and communities all function within the framework of a sovereign nation. A nation is a historically constituted stable community with a shared unique language, culture including spirituality, ancestral national lands, economic life and governance structure. Figure 3 shows how these six components of a nation contribute to the raising of a beloved nation, wherein language, culture and spirituality are combined in one box.

Historically Constituted Stable Community

At each critical juncture of Hawaii's history, Native Hawaiians were challenged by changes that would undermine their traditional culture. Some Native Hawaiians chose to accept those changes and passively adjust to the Western society. Many Native Hawaiians actively assimilated and participated in Western political, social and economic activities. However, through the years, a significant minority, primarily those living in rural communities, chose to stand firm, reject, and resist change - actively or by quietly remaining withdrawn from mainstream economic and political activities.

Of singular importance to the perpetuation of a distinct Native Hawaiian culture, traditions and language were Native Hawaiians who continued to live in isolated and undeveloped rural communities. These communities were historically bypassed by the mainstream of social and economic development. Hawaiians in these rural areas did not fully assimilate into the changing social

system. Instead, they pursued traditional subsistence livelihoods in which they applied cultural customs beliefs, and practices. They also sustained extended family networks through sharing and exchange of food, work, and services. Rural Hawaiians have been stubbornly independent, felt a strong attachment to their land and have continued to practice traditional cultural customs in their daily lives as discussed below. They have often demonstrated a disdain and mistrust of external influences.

In the 1930's, two respected University of Hawaii social scientists who studied ethnic relations in territorial Hawai'i noted the significance of these districts for the continuity of the Hawaiian people and their cultural beliefs and practices. Referring to the 17 districts where Hawaiians were still predominant in the 1930 census, Andrew Lind, in his book An Island Community: Ecological Succession in Hawaii, wrote:

These racial havens - small -population islands still relatively secure from the strong currents which have swept the archipelago as a whole into the world-complex of trade - are strikingly similar to those which appear in the census of 1853. The dry and rocky portions of Kau, Puna and the Kona coast, the deep valley of Waipio, the wild sections of Hana, Maui, portions of lonely Lanai and Molokai where industrial methods of agriculture have not succeeded, the leper settlement, and Niihau, the island of mystery - these are the places of refuge for some 4,400 or nearly one-fifth, of the native Polynesians.

The old fish and poi company, with its accompaniment of tutelary deities, taboos, religion, and magic, still persists in modified form within many of these isolated communities. A small plot of taro and access to the sea and the mountains are apparently all that is required for the satisfaction of their material wants. The wage from an occasional day's work on the government road enables them to purchase the necessary supplies which the old economy cannot now provide. .. The natives themselves have found these rural havens where the economy of life to which they are best adapted can survive (Lind, 1938, 1968, pp.102-103).

Bernard Hormann also made a special note of these communities as the last retreats of Hawaiian civilization: One may go to the so-called isolated Hawaiian communities, such as Hana and Kahakuloa on Maui, or Milopii [sic.Milolii] on Hawaii, or Haena on Kauai, or villages on Molokai, and find a population with a large Hawaiian admixture. These are not vital vibrant folk communities. . . . To be sure, aspects of the old way of life survive. Fishing and taro-growing provide an important part of the diet. Traces of the Hawaiian family and kinship system can be seen (Hormann, 1951).

Recent studies affirm that distinct Native Hawaiian communities still flourish on the island of Moloka'i; on the island of Maui in the districts of Hana and Kahakuloa; on the island of Hawai'i in the Puna district.

fishing communities in South Kona, such as Miloli'i, in Waipi'o Valley, portions of Ka'u, and King's Landing; on O'ahu in Kahana, Waiahole, Waikane, Hakipu'u and along the Wai'anae Coast; on Kaua'i in Kekaha and Anahola; and on the island of Ni'ihau (see reference list).

An analogy which conveys a sense of the significance of these areas can be found in the natural phenomenon in the volcanic rainforest. Botanists who study the volcanic rainforest have observed that eruptions which destroy large areas of forest land, leave oases of native trees and plants which are called kipuka. From these natural kipuka come the seeds and spores for the eventual regeneration of the native flora upon the fresh lava. Rural Hawaiian communities are cultural kipuka from which Native Hawaiian culture can be regenerated and revitalized in the contemporary setting. As discussed below, Native Hawaiian kupuna and makua from the island of Moloka'i, Ke'anae on Maui and rural communities on the island of Hawai'i were instrumental in starting and shaping the Native Hawaiian cultural renaissance of the 1970's.

Subsistence as a Unique Native Hawaiian Economic Activity

Native Hawaiians in rural communities still rely substantially upon subsistence activities to provide the basic needs of their families. For example, the "Governor's Moloka'i Subsistence Task Force Report." completed in 1993 showed that on Moloka'i 38% of the diet of all of the Native Hawaiian families on the island come from subsistence activities. The "Native Hawaiian Ethnographic Study for the Hawaii Geothermal Project Environmental Impact Study," documented the continuity of subsistence gathering, hunting and fishing among Native Hawaiian families living in lower Puna. "Kalo Kanu O Ka `Aina: A Cultural Landscape Study of Ke'anae and Wailuanui, Island of Maui," documented the long history of taro cultivation of the landscape by generations of Native Hawaiian families who continue to live in the district.

In conducting subsistence activities, rural Native Hawaiians employ traditional knowledge and practices passed down to them from their kupuna. For example, family knowledge about prime fishing grounds and the

types of fish which seasonally frequent the ocean in their district usually assure Hawaiian fishermen of successful fishing expeditions. They have continued to cultivate fish in ponds and the open ocean by regularly feeding the fish in

conjunction with making offerings at the ku'ula shrines that marked their ocean fishing grounds. Taro and other domestic crops are planted by the moon phase to assure excellent growth. These families take advantage of seasonal fruits and marine life for their regular diet. Native plants are still utilized for healing of illness by traditional methods which involved both physical and spiritual cleansing and dedication.

Cultural knowledge attached to the traditional names of places, winds and rains of their district informed rural Hawaiians about the affect of the dynamic forces of nature upon the ocean and the land in their area. Legends and chants inform them about how their ancestors coped with such elements. Hawaiian custom, belief, and practice continue to be a practical part of every day life, not only for the old people, but also for the middle aged and the young in these areas.

Native Hawaiian Culture and Spirituality

Beginning in the 1970's Native Hawaiians engaged in a cultural renaissance which reaffirmed the consciousness, pride in, and practice of Hawaiian cultural

Cultural knowledge attached to the

traditional names of places, winds

and rains of their district informed

rural Hawaiians about the affect of

the dynamic forces of nature upon

the ocean and the land in their area.

and spiritual customs and beliefs. In rallying around protection of the island of Kaho'olawe from bombing by the U.S. military, the traditional practice of aloha 'aina gained prominence and Hawaiian religious practices, such as the Makahiki were revived on the island. Traditional navigational arts and skills were revived with the transpacific voyages of the Polynesian Voyaging Society on the Hokule'a, the Hawaii Loa, and the Makali'i. Halau hula, the schools which teach traditional Hawaiian dance and chant, increased and flourished. La'au Lapa'u, traditional herbal and spiritual healing practices were recognized as valid holistic medicinal practices. Hawaiian studies from the elementary to university level was established as part of the regular curricula. Hawaiian music evolved into new forms of expression and gained greater popularity.

Rural Hawaiian communities threatened with development organized to protect their subsistence ivelihoods, ancestral landholdings and natural resources in their districts from the assault of proposed tourist, commercial and industrial development.

On the island of Hawai'i, Ka'u Hawaiians formed the Ka 'Ohana O Ka Lae to protect the natural and cultural resources of their district from a planned spaceport to launch missiles. Malama Ka 'Aina Hana Ka

'Aina are Hawaiians who settled on Hawaiian Home Lands at King's Landing, outside of Hilo, Hawai'i. They eventually acquired long term leases for a subsistence homestead area from the Department of Hawaiian Home Lands. The Pele Defense Fund formed to protect the volcano deity, Pele from the development of geothermal energy and electric plants. The organization of indigenous Hawaiians protected the unique Puna rainforest and the subsistence livelihoods of Puna Hawaiians in the rainforest from the negative impact of geothermal energy development.

On Moloka'i, the Hui Ala Loa, Ka Leo 0 Mana'e, and Hui Ho'opakela `Aina are community groups which formed to protect the natural and cultural resources of Moloka'i for farming and fishing rather than for tourist resort development.

On the island of Maui, the Hui Ala Nui 0 Makena organized to keep access to the ocean open for traditional fishing and gathering as well as recreation; Hana Pohaku developed community-based economic development projects on their kuleana lands in Kipahulu; and the Ke'anae Community Association worked to keep

the water flowing to their taro patches rather than being diverted for development in Kula and Kihei or for hydroelectric plants.

On Kaua'i island, the Hawaiian Farmers of Hanalei initiated community-based projects at Waipa and Ka Wai Ola organized to protect the shoreline of Hanalei from ruin by numerous tour boat operations.

On O'ahu, community based economic development projects were pursued on the Wai'anae Coast by Ka'ala Farms, the Opelu Project and Na Hoa'aina O Makaha. Malama I Na Kupuna O Hawai'i Nei, a statewide group, formed to protect and provide proper treatment of traditional Native Hawaiian burials.

Perhaps the most remarkable development was the rejuvenation of the Hawaiian language. In 1987 there were only 2,000 native speakers of Hawaiian. Most were in their 60's and 70's. Only 30 were under 5 years old. Extinction of the language was imminent, because of America's colonial policy which banned English as a medium of instruction in the schools while Hawaii was

a territory. In the 1980's, Hawaiian language professors and students of the University of Hawai'i visited Aotearoa (New Zealand) and were inspired with the efforts of the Maori people to rescue their language through Maori language immersion

preschools. In 1985, they began Punana Leo Hawaiian language immersion preschools in Hawai'i and went on to establish Hawaiian language immersion classes in state schools throughout the islands. During the 1999-2000 school-year, 1,750 students were enrolled in 18 Hawaiian language immersion public schools.

Throughout history, the Hawaiian people have maintained a deep abiding faith in the land and its power of providing physical sustenance, spiritual strength, and political empowerment. Family genealogies trace the ineage of contemporary Hawaiians to astronomers, navigators, planters, fishermen, engineers, healers, and artisans who settled Hawai'i and constructed great walled fishponds, irrigated taro terraces, dryland agricultural systems, heiau (temples), and 'ohana or extended family settlements. Beyond these forbearers, genealogical chants trace Hawaiian origins to Papahanaumoku - the earth; Wakea - the sky; Kane - springs and streams; Lono – winter rains; Kanaloa - the ocean; Pele - the volcano. In the Kumulipo genealogy chant of the

Kalakaua dynasty, Hawaiian origins are traced back to the first spark of light out of deep darkness. Hawaiians, therefore consider themselves to be inseparable from the land and lineal descendants of the earth, sea, sky and natural life forces. This is reflected in the practice of naming children after deities or the elements and features of earth, sea, and sky.

Eras of Native Hawaiian Settlement and Stewardship

Research by archaeologists, anthropologists, and ethnographers over the past thirty years suggest that the pre-contact period may be looked at in five distinct eras. (Kirch, 1985; Kirch, 1992) Prior to 600 A.D., the Hawaiian islands were originally settled through Polynesian migrations most likely from central East Polynesia and the Marquesas Islands.

Between 600 and 1100 A.D., descendants of the earliest settlers in the Hawaiian islands developed a highly organized, self-sufficient, subsistence social system based on communal stewardship and tenure of the families of 'ohana over the lands of Hawai'i. A Hawaiian language, culture, and religion, unique to the Hawaiian islands and distinct from that brought by the original Polynesian inhabitants gradually evolved. Initially, sovereignty over the Hawaiian archipelago was exercised by these 'ohana.

This social system continued to evolve throughout the third period from 1100 A.D. through 1400 A.D., an era of rapid expansion of the various 'ohana and of religious and political innovation introduced through migrations of Tahitian priests and chiefs to Hawai'i. Agriculture and aquaculture production intensified. Settlement and cultivation by the various 'ohana extended to the leeward and marginal areas of the islands. At the end of this period and throughout the fourth period from 1400 to 1600, sovereignty over the indigenous 'ohana of farmers and fishers and the lands of Hawaii began to be exercised by an emerging class of sacred ali'i or ruling chiefs and priests. Voyaging between Hawaii and Tahiti ended. As a combined result of innovations introduced by the Tahitian priests and chiefs and internal developments related to the geometric growth of the population, sophisticated innovations in cultivation, irrigation, aquaculture and fishing were developed to feed the expanding 'ohana of farmers and fishers and hierarchy of ali'i, and priests. In the already settled windward valleys, sophisticated irrigation works were built to cultivate taro in flooded pond fields. Stone-walled fishponds were constructed along reef lined shores near stream outlets. Oral traditions relate stories of warring chiefs, battles, and conquests which resulted in the emergence of great ruling chiefs who control entire islands rather than portions of islands. For example, 'Umi-A-Liloa constructed taro terraces, irrigation systems, and heiau throughout Hawaii island, including Ahu a 'Umi on Hualalai. Kiha- A-Pi'ilani oversaw the construction of the Ala Nui around the entire island of Maui and Ke Ala a ka Pupu on nearby Moloka'i. Throughout these centuries, the 'ohana of farmers and fishers endured as the stable social unit of the Hawaiian society. Their stewardship responsibility and tenure over ancestral lands remained stable and continued to be honored and recognized by the ruling chiefs.

From 1600 through the battle of Nu'uanu in 1795, the ali'i class of ruling chiefs exercised sovereignty over the Hawaiian Islands. Individual high chiefs continuously competed to extend their control over increasingly more districts and islands through marriage alliances, religious ritual and military conquest. In 1795, a series of military campaigns launched by High Chief Kamehameha Paiea from Hawai'i to O'ahu culminated with a decisive victory over the Maui and O'ahu chiefs at Nu'uanu, O'ahu. High Chief Kamehameha Paiea exerted control over all of the islands except Kaua'i and Ni'ihau. In 1810, with the submission of Kaua'i High Chief Kaumuali'i as a tribute chief to High Chief Kamehameha Paiea, he founded an absolute monarchy as a central government which established sovereign rule over all of the Hawaiian islands (Desha, 2000).

Establishment of A Hawaiian System of Private Property Perpetuating `Ohana Rights As Hoa'aina Rights

In 1846, Kamehameha III, heir of Kamehameha Paiea and ruling monarch of the Hawaiian Islands initiated a process to establish private property in the Hawaiian islands in response to the irrepressible demands of European and American settlers and their respective governments. The king and the legislature adopted "An Act To Organize The Executive Departments Of The Hawaiian Islands" which established a Board of Commissioners To Quiet Land Titles. This act also included the "Principles Adopted by the Board of Commissioners to Quiet Land Titles in Their Adjudication of Claims Presented To Them." These principles served to guide the establishment of a system of private property in Hawai'i.

The introduction to the principles, reviewed the nature of the rights of the king, the chiefs, and the 'ohana of commoners in the land. From the time of High Chief Kamehameha Paiea and up until the creation of a system of private property, the king and the chiefs held all land as a sacred trust and the indigenous 'ohana continued their stewardship responsibility and tenure over the lands of their ancestors. In this law, members of the `ohana were now called hoa'aina or tenants of the land (literally

translated the term means "friend of the land"). The introduction to these principles stated that the rights of the hoa'aina upon the land were not to be affected, even by the new system of leasing or purchasing lands. It stated:

The same rights which the King possessed over the superior landlords and all under them the several grades of landlords possessed over their inferiors, so that there was a joint ownership of the land; the King really owning the allodium, and the person in whose hands he placed the land, holding it in trust

It seems natural then, and obviously just, that the king, in disposing of the allodium, should offer it first to the superior lord, that is to the person who originally received the land in trust from the King; since by doing so, no

injury is inflicted on any of the inferior lords or tenants, they being protected by law in their rights as before; and most obviously the King could not dispose of the allodium to any other person without infringing on the rights of the superior lord. But even when such lord

shall have received an allodial title from the King by purchase or otherwise, the rights of the tenants and subtenants must still remain unaffected, for no purchase, even from the sovereign himself, can vitiate the rights of third parties. The lord, therefore, who purchase the allodium, can no more seize upon the rights of the tenants and dispossess them (Office of the Commissioner of Public Lands, 1929).

The establishment of a private property system in Hawai'i transformed the relationships and mutual responsibilities between the ali'i and the 'ohana who remained as hoa'aina or tenants under the ali'i. The rights and claims of the ali'i were addressed through Ka Mahele under which 245 ali'i were granted a combined total of 1.6 million acres. (Office of Commissioner of Public Lands, 1929; Chinen, 1978).

The rights of the `ohana as hoa'aina were twofold. First, through February 14, 1848, they had the right to file a claim against the lands apportioned to the chiefs and konohiki, for those lands which they cultivated and upon which they lived. When the final land grants were made under the Kuleana Act of 1850, 8,205 hoa'aina received 28,600 acres or .8% of all of the lands of Hawai'i. All of the land granted to the hoa'aina could have fit into the island of Kaho'olawe, which has 28,800 acres. Although all of the 29,221 adult males in Hawai'i in 1850 were eligible to make land claims only 29% received land while 71% remained landless (Kelly, 1975).

The second category of rights of the hoa'aina were provided by the King and the legislature in Section 7 of the Kuleana Act. The `ohana, as hoa'aina were granted traditional gathering rights; rights to drinking water and running water; and the right of way, provided that permission was obtained from the landlords. Thereafter, in 1851, the legislature amended Section 7 of the Kuleana Act, deleted the requirement that the hoa'aina obtain the permission of the landlords in order to exercise their traditional rights. Since 1851, the law has read as it now does in Chapter 7 - 1 of the Hawai'i Revised Statutes (HRS):

Where the landlords have obtained, or may hereafter obtain, allodial titles to their lands, the people on each of their lands shall not be deprived of the right to take firewood, house-timber, aho cord, thatch, or ki leaf, from

the land on which they live, for their own private use, but they shall not have a right to take such articles to sell for profit. The people shall also have a right to drinking water, and running water, and the right of way. The springs of water, running water, and roads shall

be free to all, on all lands granted in fee simple; provided that this shall not be applicable to wells and watercourses, which individuals have made for their own use.

These Hoa'aina rights were reaffirmed in 1978 when a constitutional convention included Article XII. Section 7, in the state constitution:

The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupua'a tenants who are descendants of native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights (Hawai'i State Constitution, Article XII Section 7).

The constitutional amendment did not create new rights for Native Hawaiians. It placed within the constitution those traditional and customary Native Hawaiian rights which the laws of the Kingdom of Hawai'i, the Republic of Hawai'i, the Territory of Hawai'i and the State of Hawai'i had acknowledged and included since 1850.

Ka Mahele of 1848 also created two other classes of lands – the Government and the Crown Lands of the

Kingdom of Hawai'i. The Crown lands were to be held in trust by the monarchy of the Kingdom of Hawai'i for the benefit of the hoa'aina and the monarchy.(Kalanianaole, 1921) The Government Lands were held in trust by the monarchy for the Kingdom of Hawai'i and its citizens. Together, the Crown and Government lands of the Kingdom of Hawai'i make up the corpus of Hawaiian national lands. Under the Kingdom of Hawai'i, approximately 524,000 acres of Crown and Government lands were reclassified as private lands through government auctions and homesteading laws. In 1893-1894 the Provisional Government and Republic of Hawai'i assumed control of these Hawaiian national lands after the overthrow of the Hawaiian monarchy on January 17, 1893. Under the Republic of Hawai'i, an additional 97,273 acres were opened for private homesteading by citizens of the Republic. In 1898, the Republic of Hawai'i ceded the remaining corpus of Hawaiian national lands to the U.S. federal government (Brown, 1899).

These former Hawaiian national lands were managed by the U.S. federal government and are known today as the ceded public lands trust. In 1921, the U.S. Congress

set aside 200,000 acres of these "ceded public lands" to create **the Hawaiian** Homelands trust for native Hawaiians of at least half Hawaiian ancestry. In 1959, as a condition of statehood, the

Native Hawaiians have not had a common governance structure through which to exercise sovereignty since the overthrow of the Hawaiian monarchy in 1893.

U.S. Congress mandated the State of Hawaii to manage the Hawaiian Home Lands trust. It also mandated the state of Hawai'i to manage what remained of the ceded public lands trust for five purposes, including the betterment of the conditions of native Hawaiians as defined by the Hawaiian Home Commission Act. In 1980 the people of Hawaii amended the Hawai'i State Constitution to clarify that there are two beneficiaries for the "ceded public lands trust," Native Hawaiians of at least half-Hawaiian ancestry and the general public (Hawai'i State Constitution, Article XII, Section 4).

Vested Native Hawaiian Rights of Inheritance

Contemporary claims of Native Hawaiian entitlements to hoa'aina gathering rights and to the national lands of the Kingdom of Hawai'i, now called the ceded public lands trust, are based upon vested rights of inheritance from genealogical ancestors. It is not a matter of "blood" "blood quantum," or "race" but a matter of lineal inheritance which can be traced through genealogy to the original indigenous inhabitants and stewards of the lands of Hawai'i. The genealogical ancestors of Native Hawaiians were the original stewards of the lands of Hawai'i. These rights were recognized and affirmed

when King Kamehameha III agreed to establish a system of private property in Hawai'i and were reaffirmed by the U.S. Congress in the establishment of the Hawaiian Home Lands in 1921 and in the 1959 Admissions Act. In the sections of the Apology Resolution, Public Law 103-150, the U.S. Congress acknowledged that Native Hawaiians persist as a distinct people. The Apology Resolution further stated that the indigenous Hawaiian people never directly relinquished their claims to their inherent sovereignty as a people or over their national lands. The persistence of Native Hawaiians as a unique and distinct people, as described in the first part of this article, naturally leads to the conclusion that the claims and entitlements of the Native Hawaiians to these national lands have also persisted.

Hawaiian Sovereignty and Governance Structure

Native Hawaiians have not had a common governance structure through which to exercise sovereignty since the overthrow of the Hawaiian monarchy in 1893. Nevertheless, the United States Congress passed an Apology Resolution in November 1993 (Public Law 103-

150, 107 Stat. 1510) which explicitly acknowledged that the inherent sovereignty of the Native Hawaiian people at the time of the overthrow of the Hawaiian Kingdom was never relinguished.

In the Apology Resolution, the unique and distinct status of Native Hawaiians was also recognized by the U.S. Congress. The findings section of the resolution stated, "the Native Hawaiian people are determined to preserve, develop and transmit to future generations their ancestral territory, and their cultural identity in accordance with their own spiritual and traditional beliefs, customs, practices, language, and social institutions."

The quest to restore Hawaiian sovereignty began over 100 years ago with Queen Lili'uokalani herself appealing to the U.S. Congress and American people to restore the monarchy. (Lili'uokalani, 1977) Succeeding generations of Hawaiians sought sovereign control over the lands and resources of their nation weathering many storms as Hawaiii's governance structure changed many ti mes over. Continuing efforts are underway to reconstitute a government for a sovereign Hawaiian nation and there are many organizations who are involved at different levels in the process, including the Office of Hawaiian Affairs. In the absence of a national government, 'ohana (extended family) networks survive as a primary traditional social unit of organization, particularly in rural Hawaiian communities. There are

many Hawaiian organizations working for Native Hawaiian self-governance and self-determination such as Ka Lahui Hawai'i, The State Council of Hawaiian Homes Associations and The Hawaiian Civic Clubs.

In 2000 and 2001, Hawai'i's congressional delegation introduced legislation for the formal recognition of the right of Native Hawaiian self-governance and self-determination by the U.S. Congress. When passed, the bill would formally and directly extend the federal policy of self-determination and self-governance to Native Hawaiians, as Hawai'i's indigenous native people. The legislation provides a process for the recognition by the United States, under the Secretary of the Department of Interior, of a Native Hawaiian governing entity.

Key aspects of maintaining the well-being of the Native Hawaiian nation are programs, services and advocacy at various levels which sustains a stable community; Hawaiian language, culture and spirituality; unique Hawaiian economic activities; a national land base, and Native Hawaiian rights and sovereignty.

With regard to sustaining a stable community, maintaining genealogical records and access to such information can enable the establishment of a membership roll for a Native Hawaiian nation as part of the recognition process under the U.S. federal government. In addition, advocacy for and support of social services, health care, education and social justice programs that serve the entire community of Native

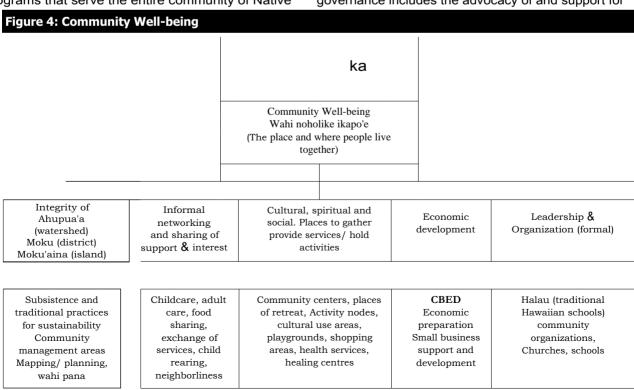
Hawaiians are also part of sustaining a stable community.

Advocacy for and support of programs that support the perpetuation of Hawaiian language and cultural and spiritual customs and practices through the public education system and private schools, including traditional halau or schools of training are integral to sustaining the national language and culture of Native Hawaiians.

Sustaining a Native Hawaiian economy would include advocacy of and support for protection of natural resources utilized for subsistence by Native Hawaiian rural communities; sustainable programs of community-based economic development; sustainable management of natural resources and revenues from the rent, lease or development of such resources; banking and loan programs for Native Hawaiian enterprises; and partnering with other Native Hawaiian trusts.

Sustaining the national land base for Native Hawaiians includes advocacy of and support for programs which protect the national lands and the natural resources on the national lands of Native Hawaiians including the ceded public lands trust, the Department of Hawaiian Homelands, and the ali'i land trusts as well as the ancestral kuleana lands of Native Hawaiian 'ohana.

National well-being is reflected in the exercise of indigenous rights which would include rights customarily and traditionally exercised for subsistence, cultural, and religious purposes such as access rights, fishing rights, and water rights. Sustaining Native Hawaiian governance includes the advocacy of and support for



these Native Hawaiian rights and the protection of the lands and natural resources where these rights are exercised. In addition, advocacy and support of Native Hawaiian recognition at the national level by the U.S. Congress and at the international level by the United Nations is an essential and critical component of the well-being of the Native Hawaiian nation.

Community well - being

This model was developed to understand and document rural Hawaiian communities with long histories of continuous residence upon their ancestral lands. It is also applicable to Hawaiian Homestead communities in rural settings. The integrity of their communities has depended upon sustainable relations with their surrounding ancestral lands. As Hawaiians moved into urban settings they developed non-traditional community formations which function to sustain and reinforce Native Hawaiian cultural identity. These include Hawaiian institutions such as Kamahameha Schools; Queen Liliuokalani Children's Centers; Lunalilo Home; and halau of training, such as for hula, lua, and la'au lapa'au.

Community organizations such as Hawaiian civic clubs, Protest Kaho'olawe Ohana; educational programs such as Punana Leo, Kula Kaiapuni, Hawaiian Studies, the Kupuna/Makua Department of Education Program; and canoe clubs, serve to reinforce Native Hawaiian cultural identity. The complex dynamics of these social formations needs to be further explored, particularly in communities on Oahu, and can inform the Office of Hawaiian Affairs about how to provide services to this large segment of the Native Hawaiian people.

Sense of Place and Integrity of Ahupua'a

Traditional Hawaiian communities can be conceptualized as aggregates of family or 'ohana systems which have a long history of residing in one locale. The term wahi noholike I ka po'e is a Hawaiian term for community that translates into "the place where people live together". The term suggests that social and environmental factors have shaped the character and values of residents over a long evolutionary course. Further, communal and cultural identity is formed by lengthy exposure to a set of physical attributes and the transmission of place-based behaviors and mores. A sense of place, which has spiritual and psychological meaning, is derived over time from a reliance on the natural resources within a prescribed locale. Social structures and systems emerged from the local economy, and cultural beliefs and spirituality supported and promoted human well-being. Communities are habitats that have critical effects on human behavior. Native Hawaiian communities are not merely places for coexistence, they are places for social interaction, organizational activity, and the development of a collective identity (See Figure 4).

Traditionally, Native Hawaiians were the caretakers of resources and ecosystems that lie within or adjacent to their communities. They practiced a system referred to as kapu which carried highly proscriptive norms related to resource management. For example, fish and limu (seaweed) were harvested seasonally and not during spawning season. When it was deemed that resource levels were declining, areas were designated off-limits to fishers and harvesters. Violators were severely punished. Many of the historic sentiments and practices related to resource management and kapu remain today. The long-time residents of an area assume caretaking responsibility for resource management within their geographic domain and dissuade outsiders from coming in - especially those who are inclined to misuse or overharvest resources for commercial purposes.

Places to Gather Socially, Community Centers

Native Hawaiians and other Pacific peoples place a premium on gathering places where formal and informal social, cultural, and political activities take place. Today's gathering places may be of historic and spiritual importance where forebears engaged in similar events in earlier times. The mana or spiritual energy from these places bolster contemporary practice and connect people with their past. The significance of gathering places that have historic meaning comes from a continuity that brings together ancestral legacies and modern, often restorative activities,

Physical settings are critical in shaping and guiding human behavior. Qualities emitted from the environment serve to condition behaviors and act as determinants of future behaviors. Some gathering places serve to elicit formal behavioral protocols associated with traditional events and spiritual beliefs. They may be places of worship where chants, prayers, and gift-giving are a way to pay homage to deities. Ceremonies carry with them prescriptive and proscriptive norms related to social hierarchies, styles of dress, and inappropriate behaviors. In Hawaiian culture, there is also the notion of pu'uhonua or place of refuge. They are historic places where individuals under threat can find respite and safety.

Gathering places. such as recreational facilities and community centers, and places associated with certain activities, such as schools and churches, promote prosocial behaviors. The opportunity to regularly engage in structured activities is inversely related to involvement in anti-social activities often attributed to a lack of

structure and adult supervision. Physical facilities are the focal point or node of activity for community and family events and youth activities. Social functions such as luau that celebrate the first anniversary of the birth of a child, or a high school graduation, are often held at community centers and social halls. They serve the critical function of bringing together residents in celebration which enhances social bonds and community cohesiveness.

Communities that have places for social gathering have the ability to offer programs and services to meet the desires and needs of residents and to influence the socialization of children and support senior citizens. Community gathering places also include less formal and physically nondescript settings. They may be at the beach, the park, a playground, restaurants and shopping areas. They are places where people; drawn together by common interests and schedules, gather to converse and find mutual social support. Informal gathering places are especially critical to more vulnerable age cohorts such as the elderly and youth.

Opportunities to engage in prosocial cultural activities are not always associated with a community center or physical structure. Hawaiian youth are often mentored in various cultural activities that occur in natural environs. The development or restoration of a lo'i kalo (taro patch) and fishponds, gathering medicinal plants and learning their uses, learning traditional fishing and gathering methods, canoe

paddling, and the maintenance of sacred areas are examples of traditional activities that are the basis for a cultural resurgence.

In some communities, critical habitats have the designation of Community Management Areas. That is, community residents are authorized to manage and patrol particular resource areas. There are strict controls placed on when, amounts, species/types, and methods used in acquiring resources.

Many communities have been involved in initiatives to empower themselves through community-based planning processes. They have engaged multiple constituencies in a dialogue to develop a vision for the community. Mapping techniques are often used to identify services, resources, and other qualities that lie within the community. It is a means to assess deficits and

strengths as a basis for developing a strategic plan. Community Development Corporations are also becoming a common approach to promoting a range of community-based activities related to programs and services, economic and technical innovations, resource protection and sustainability, and cultural preservation.

Many Hawaiian communities have been economically deprived and marginalized by a western market economy. Economic development and formal jobs are not analogous to human well-being. In fact, they often detract from traditional and customary practices by diminishing vital natural resources, depriving access to traditional grounds, and lead to environmental and cultural degradation. Many community-based economic initiatives in Hawaiian communities reflect a set of values and principles that emphasize empowerment and self-sufficiency, cultural preservation and resource conservation and protection.

Subsistence economies in rural Hawaiian communities need to be recognized as viable alternatives to western economic models. The protection of natural resources and habitats, access routes, and associated customs and practices will ensure the continuation of indigenous economies that are the foundation to Hawaiian culture and well-being.

It is critical to revamp notions and biases related to formalized work, employment rates, gross domestic product and other economic indicators, when assessing economic vitality related to Native Hawaiians and other indigenous communities. The benefits derived from subsistence economies are not adequately valued because they can not be enumerated. Subsistence provides a regimen of physical activity that binds practitioners to the 'aina, enhances a nature-based spirituality, produces healthy food products for family consumption, cultivates social cohesion in the community through the sharing and exchange of resources, and promotes social welfare as younger practitioners share resources with older, less ambulatory residents. A regimen of subsistence-related activities reduces the likelihood of less healthy behaviors (e.g., listlessness leading to obesity, substance abuse) that are often associated with having too much discretionary time.

Informal Networking and Sharing, Community-Based Economic Development

An economic system that is based on sharing and exchange involves other activities beyond the transfer of goods. Child care, adult care, and a variety of other service exchange (e.g., hula lessons, rock wall building) represent aspects of an indigenous economic system where skills are a commodity. Small, community-based businesses that serve to keep money in the community and employ family members and local residents can be encouraged through business development programs and low-interest start-up loans. Job training programs teach skills to youth and young adults and help to orient the previously unemployed or unemployable to work roles.

Relatively recent innovations such as Individual Development Accounts serve to orient residents to saving and managing money. This occurs through reinforcing 'saving behavior' by providing matching funds and developing purchasing goals. Some residents are able to save the down payment to buy new homes with their savings. Other programs focus on subsidizing home developments through collective efforts in home

construction or 'sweat equity'. That is, participants commit themselves to learning carpentry and construction skills, spend consecutive weekends with other families constructing homes, and ultimately are awarded a home when the project is completed.

Strategic planning for communities is a community-wide process involving the major constituent or stakeholder groups. The process involves creating a vision for the future of the community and then developing strategies on how to implement the vision. Enhancing social capital is a critical precursor to community building. This involves stimulating resident interest in community affairs, higher levels of civic participation, and a movement towards building social bonds in order to form collaborative non-political associations.

Leadership and Organization

Many community-based organizations move towards non-profit, tax exempt status as a step in the pursuit of funds and to build their organizational capacity. The community-building process focuses on building organizational capacity through participation and

Figure 5: Family Well-being

Family Wellbeing 'Ohana Wellbeing

FOUNDATIONS OF OHANA WELLBEING TRIPLE PIKO

Piko `aumakua "Ancestors"

Aina (sense of place), Ancestral lands and Genealogy Piko `iewe "Immediate family-

Support and maintenance of family system and Resiliency Piko `iwi kuamo'o "Future

Transmissio of culture, language, values, ways of knowing and being

Physical and emotional health, security, educational and spiritual

Fulfillment of subsistence practices & Economics

leadership development. The process begins with support for recognized community leaders who are able to garner the support and participation of residents as they move towards developing and implementing a set of community-based goals and objectives. Building capacity requires an organizational structure and process, resources, training and staff development, and people qualified to perform specialized activities. Leadership development is critical to the longevity of an organization as leaders retire from civic duty and young leaders are needed to continue the mission.

Ohana well-being

Understanding the essence of Native Hawaiian wellbeing begins with knowledge about the 'ohana (family). Everything that is related to Native Hawaiians originates, "within the matrix of 'ohana: an individual alone is unthinkable.

in the context of Hawaiian relationship(s)" (Handy and Pukui, 1998). The word 'ohana is derived form 'oha, which means the root of the taro plant (na meaning plural or many). Taro is the staple of the Native Hawaiian diet, and a vital concept in the origin of the Hawaiian people. "Members of the `ohana, like taro shoots, are all from the same root" (Pukui, 1972, 166).

'Ohana represents a "sense of unity, shared involvement and shared responsibility. It is mutual interdependence and mutual help. It is emotional support, given and received. It is solidarity and cohesiveness. It is love - often; it is loyalty - always. It is all this, encompassed by the joined links of blood relationship" (Pukui, 1972, 171). 'Ohana extends beyond the immediate family to include extended family, distant cousins and keiki hbnai (adopted children). 'Ohana ties "were closest to but not limited to the living or to those born into blood relationship" (Pukui, 1972, 167). This deep sense of relatedness is at the core of Native Hawaiian values, beliefs, ways of knowing and being, and Hawaiians' relationship with the 'aina (earth, land). Thus, in order to understand the basis of Native Hawaiian well-being one must begin with understanding the nature of relationships, values, beliefs, interactions, processes, and traditions that form the foundation of harmonious 'ohana life.

As members of various 'ohana, Native Hawaiians are inked to a long line of progenitors, descendants and

unborn future generations in a manner that transcends time. This connection between past, present and future is embodied in the concept of triple piko, which refers to shared spiritual and emotional bonds (piko has many meanings: umbilical cord, genital organs, crown of the head, or relationship with one's ancestors and descendants) (Pukui, 1972, 182). To begin with, Native Hawaiians are symbolically connected to their ancestors via the po'o (head), where the family aumakua (ancestor gods; the god spirits of those who were in life forebears of those now living) hover and his own 'uhane (spirit) resides (Pukui, 1972, 35,188). In the 'Ghana Well-being (see Figure 2) segment of the Model of Native Hawaiian Well-being (MNHW), we refer to this connection as the piko aumakua, the link to one's ancestors or heritage. Second, a Native Hawaiian's connection to her/his immediate family and the present is represented by piko

'iewe (placenta) as in the bond between mother and infant. Finally, the connection to future generations is represented by piko'iwi kuamo'o (genitals).

This traditional understanding of the connection between Native Hawaiians and piko amumakua, piko iewe and piko iwi kuamo'o, ancestral heritage, the immediate family and future generations, is a central concept in revitalizing, sustaining and fostering ohana well-being. Figure 5 depicts the key elements of the triple piko concept: values, beliefs, processes, knowledge, resources, and practices that support ohana well-being. Equally important, the Itikahi (balance or harmony) of the triple piko processes in relation to the individual and his ohana must be examined in the assessment of well-being among Native Hawaiians (Blaisdell and Mokuau, 1991).

The Model hypothesizes that 'ohana well-being is enhanced when:

- (1) Native Hawaiians malama 'aina (care for the land, earth) reaffirming their sense of place and their relationship to the ancestral lands and genealogy, the piko amumakua;
- (2) The activities, processes and resources that support and enhance the immediate or present family which includes the extended family (piko 'iewe) are maintained; and
- (3) The transmission of culture, language, values and Native Hawaiian ways of knowing and being are sustained and carried forward for future generations (piko 'iwi kuamo'o).

The triple piko conceptualization 'ohana well-being finds support in systems-based research on healthy family processes (Werner & Smith, 1982, 1992; Olson, McCubbin, et al., 1989; Beavers & Hampson, 1993; Epstein et al., 1993; Olson, 1993 all in Walsh, 1998), which has identified key processes that contribute to family resilience and well-being. These processes within three domains include: 1) Family belief systems: Utilizing relationally-based strengths, making meaning of adversity, positive outlook, transcendence and spirituality; 2) Organizational patterns: Flexibility, connectedness, mutual support, and social and economic resources; 3) Communication processes: Clarity, open emotional expression, collaborative problem solving (Walsh, 1998, 24). These family strengthening and resiliency processes are essential to 'ohana wellbeing and are included in the Model of Native Hawaiian Well-being.

Another essential piece to understanding the nature

of well-being among Native Hawaiians is the distinction between the relational and inear worldviews. The relational perspective recognizes the intuitive, spiritual, non-temporal, fluid nature of collective cultures in their search for balance and harmony in all relationships between humans, nature, earth

and the universe as well as the events of life (Cross, 1998). In contrast, the linear worldview, the dominant perspective of western science, holds that cause always precedes effect. This temporal view has enabled the development of narrowly defined, sophisticated measurement techniques, which have facilitated new knowledge, theories and interventions (Cross, 1998) to be performed by sanctioned experts. However, the linear perspective may obscure our view of people's processes within their cultural, geopolitical and historic contexts. For example, the focus of treatment for mental illness among indigenous people living in a western society is most often the individual, not adjustments to the social systems or environmental circumstances. Nor do treatments take into account the indigenous group's

The distinction between relational and linear worldviews is a critical prerequisite to developing funding policies that support the well-being of indigenous people such as Native Hawaiians. For example, an indigenous family seeking help for issues around emotional wellbeing that utilizes the public health system or medical insurance is usually limited to western psychiatric treatment services. The option of using a culturally-based

worldview, which limits the potential for healing that could

include cultural practices and family support networks.

practice such as, ho'oponopono, a well-defined healing process in Native Hawaiian culture, is not a recognized treatment option. The relational-linear distinction can also serve as an aid in recognizing the limitations of conducting social impact assessments that exclusively utilize quantitative indicators and methods. For example, the effectiveness of a social policy designed to get Native Hawaiian families off welfare and back to work with the help of a time-limited structure of resources cannot be simply measured by the number of individuals that find employment. A realistic evaluation will need to examine suitability of job options for the individual, training methods that accommodate cultural nuisances, a family's beliefs regarding employment, for example, gender appropriate work, and socio-cultural norms about productivity and work.

Unfortunately, within the context of western society, Native Hawaiian practices and family processes that maintain lekahi within the 'ohana may be a source of

> conflict to the individual and not always serve Native Hawaiians' survival in the mainstream society. For example, when the transmission of culture (or lack of culture transmission) which is critical to Native Hawaiians' sense of self contributes to

discord with the mainstream

society it may affect the individual's outlook on life, be a source of stress, and contribute to depression or loss of meaningfulness in life. Depression in one 'ohana member may affect other members, leaving them physically, emotionally, economically and spiritually vulnerable (Crabbe, 1998). Thus, an assessment of Native Hawaiian family and individual functioning requires a comprehensive examination of the multilevel processes that support `ohana well-being.

Applications of the Native Hawaiian Well-being Model

The Ecological Model of Native Hawaiian Well-being is particularly suited to determining appropriate advocacy and intervention relative to environmental, social and cultural impact assessments. In this section, potential impacts upon the systems of Native Hawaiian Well-being at each level are identified.

`Aina

A comprehensive environmental, social or cultural impact study would assess impacts upon natural and cultural resources utilized for subsistence, cultural, and

The relational perspective

recognizes the intuitive, spiritual,

non-temporal, fluid nature of

collective cultures in their search for

balance and harmony in all

relationships between humans,

nature, earth and the universe as

well as the events of life

spiritual purposes by Native Hawaiians. Such resources include:

streams, ponds, springs, irrigation networks, cultivation areas, caves, trails, sacred places, bridges, trails, salt ponds, shrines, shrines and temples, historic sites, burials and burial grounds, cultural use areas, places to experience spiritual visions and messages, cliff jumping spots, places where souls wander or cross into the next world, domains of ancestral deities, indigenous plant habitats, places of refuge, sporting sites, surfing sites, sandy shorelines, reefs, fishing areas, dunes, landings for canoes and boats.

Impacts to assess include changes in condition, integrity, use, access to, boundaries of, ownership of, and quality of experience with natural and cultural resources.

Nation well-being is reflected in the exercise of indigenous rights which would

indigenous rights which would include rights customarily and traditionally exercised for subsistence, cultural, and religious purposes such as access rights, fishing rights, and water rights. Impacts on Hawaiian Rights would include any change, which would affect the exercise of the Hawaiian rights and responsibilities outlined above. Changes that would affect the quality, integrity, use of, and access to

the natural and cultural resources would constitute an impact upon the rights of Native Hawaiians. Development projects and infrastructure can affect the present and future access to, condition and use of natural resources.

The national land base of the Native Hawaiian people include lands now under the U.S. federal and state governments which were originally the Crown and Government lands of the Kingdom of Hawai'i and lands which are part of charitable trusts endowed by the Hawaiian chiefs for their people, including the trust lands of The Kamehameha Schools, the Queen Emma Foundation, the Queen Lili'uokalani Children's Center, and the Lunalilo Home. Development projects can affect future uses of the lands, the value of the lands, and revenues generated from the leases, rents, royalties, and use fees.

The following types of impacts might be considered when examining Native Hawaiian and indigenous communities in the conduct of an environmental, social or cultural impact study:

- Change in multicultural balance/percent leading to greater cultural homogeneity and decreased diversity
- Alteration or loss of social/cultural activity nodes/ interchange
- Change in adequacy of social/cultural infrastructure to accommodate community needs related to quality of life
- Change in population size, distribution/nodes, in relation to multiculturalism
- Change in demographic characteristics of a community which correlates with changing values
- Disruption in the natural course of community development, continuity, and family permanence
- Change in activities and attributes that constitute lifestyle/life ways
 - Increase in rate, type, and severity of crimes with indigenous perpetrators
 - Increase in rate of substance abuse and type of substance; its influence on behavior and related problems (e.g., crime)
 - Change in rate, patterns and severity of domestic violence; family and community response
 - 'Change in educational achievement and aptitude;

delinquency (e.g. substance abuse, crime, status offenses); socio-emotional issues/family supports; educational, employment, and recreational opportunities

- Change in social cohesion; degree of social/racial integration or conflict; vandalism and property crime
- Change in number and types of events/activities, participation rates, relevance to traditional and contemporary conditions, decision-making power
- Change in levels of community/cultural identity, personal sense of connection and pride tied to a locale; related to genealogical and intergenerational ties

Changes that cause disruption and imbalance may impact 'ohana stability and well-being in multiple ways. The family's structure, ability to maintain its economic means of survival, organizational patterns, communication processes and belief system may be impacted by:

- Changes in the 'ohana family system (e.g. increase in nuclear families rather than the traditional extended family, and single parent families)
- Changes in marital status (e.g. increase in divorce, widowhood, and isolation of individuals)
- Household composition, change in the number of families per household
- Imbalanced age distribution (e.g. more children under 18 or more adults per household, isolation of the elderly)
- Increased employment, unemployment or underemployment
- Changes in employment status (e.g. increased dependency on public assistance, decline in subsistence resources)
- Changes in amount of gross family income and or subsistence resources
- Changes in types and levels of socio-emotional support: food, resource sharing, advice sharing, child-care rearing, elderly care, kokua labor (shared labor), hanai children

(family ■ adoption)

- Changes in number of relatives living within close proximity and kinship patterns
- Intergenerational conflicts (e.g. differential acculturation), change in quality of relational

exchange between children, parents and grandparents

- Departure/retention of youth, increased retention or out-migration of youth
- Housing situation, increased home ownership, renting or homelessness
- Increased rates of domestic violence, incest/child sexual abuse
- · Changes in teen pregnancy rate
- Youth psychosocial problems, change in rate of mental health and delinquency among youth
- Changes in general patterns and practices related to child-rearing which ultimately lead to changing values and personality, land dispossession and loss of burial family grounds/sites
- Changes from a collective/family orientation to an individualistic identity.

Conclusions

The Ecolog cal Model of Native Hawaiian well-being was developed to identify: 1) priorities for intervention services and programs at various levels of the Native Hawaiian nation; 2) to recognize the wealth of existing cultural and ecological resources as well as the strengths of traditional practices that perpetuate the Hawaiian culture; and 3) how and where research can be best utilized. As an overarching framework, the model may

guide research efforts that will strengthen Native Hawaiian 'ohana, community and nation well-being. For example, research at the individual, family, community and governance levels can be focused on understanding how practices, programs and policies can optimize Native Hawaiian family functioning, rather than why they are ineffective.

In principle, the Model affirms significant elements of the Hawaiian culture and is a lightening rod to create research methodologies that accurately assess Native Hawaiian needs and encourage the development of a body of Native Hawaiian-centered research.

These two developments would be vital contributors in the complex processes of reestablishing Native Hawaiian control over their own cultural well-being, and identifying and giving voice to Native Hawaiian concerns, needs, hopes, and desires. An equally stalwart commitment is required to address these long-standing, critical questions about paradigms of knowledge production,

dissemination and legitimacy:

 How can indigenous ways of knowing and knowledge be established as legitimate sources of knowledge development and evidence?

- research at the individual, family, community and governance levels can be focused on understanding how practices, programs and policies can optimize Native Hawaiian family functioning, rather than why they are ineffective.
 - How can indigenous and ethnic cultures impact organizational configurations and social science knowledge production to address their well-being and needs?
 - What research methods/models best capture the social, emotional, spiritual and holistic nature of indigenous and ethnic cultures?
 - How can the use and creation of culturally relevant research methods/models become mainstream practice rather than marginalized?

Reference

Barrere, Dorothy. (1961). Cosmogonic Genealogies of Hawai'i. *Journal of the Polynesian Society*, Vol. 7, No. 4, Wellington: The Polynesian Society.

Beckwith, Martha W. (1970). *Hawaiian Mythology*, Honolulu: UH Press.

Blaisdell, K. & Mokuau, N. (1991). Kanaka Maoli: Indigenous Hawaiians. In N. Mokuau (Ed.), *Handbook of Social Services for Asian and Pacific Islanders* (pp. 131-154). New York: Greenwood Press.

Brown, J.F, Report as Agent of Public Lands for the Republic of Hawai'i, December 12, 1899, in Senate Document No. 72, 56th Congress, 1st session and included in House Report 305, 56th Congress 1 st Session.

Chinen, J.J. (1978). *The Great Mahele: Hawaii's Land Division of 1848*. Honolulu: UH Press.

Crabbe, K. 0. M. (1998). Etiology of Depression Among Native Hawaiians. *Pacific Health Dialog*, *5*(2), 341-345.

Cross, T. L. (1998). Understanding Family Resiliency From a Relational World View. In H. I. McCubbin, E. A. Thompson, A. I. Thompson, & J. E. Fromer (Eds.), *Resiliency in Native American and Immigrant Families* (pp. 143-158). Thousand Oaks: Sage.

Desha, Reverend Stephen L., translated by Frances N. Frazier, Kamehameha and His Warrior Kekuhaupi'o. 2000, Honolulu: Kamehameha Schools Press.

Fornander Collection of Hawaiian Antiquities and Folklore, "A Wakea Creation Chant" by Kalai-kuahulu,Volume 6:360-63, 1916-1920 and Ka Mele A Paku'i, Volume IV, part I, pp. 13-16.

Group 70 Inc., Cultural Surveys
Hawaii, Inc., Davianna
McGregor, "Kalo Kanu 0 Ka 'Aina: A Cultural Landscape
Study of Ke'anae and Wailuanui, Island of Maui," for the
County of Maui Planning Department and the Maui
County Cultural Resources Commission, May 1995.

Hawaii Revised Statutes, Section 7-1, 1985.

Hawaii State Constitution, Article XII.

Handy, E. S. C. & Pukui, M. K. (1999). *The Polynesian Family System in Ka`u, Hawaii*. Honolulu: Mutual Publishing.

Handy, E.S. Craighill, Elizabeth Green Handy with Mary Kawena *Pukui,_Native Planters in Old Hawaii, Their Life Lore and Environment,* Honolulu: Bishop Museum Press, 1972.

Johnson, Rubellite Kawena, *Kumulipo*, Honolulu: Topgallant Press, 1981.

Kalakaua, David, King of Hawaii, The Legends and Myths of Hawaii: The Fables and Folklore of a Strange

People. Tokyo & Rutland: Charles E. Tuttle, 1973.

Kalanianaole, Prince Kuhio in an article in the *Mid-Pacific Magazine*, 21 (February 1921).

Kamakau, Samuel, *Ka Po'e Kahiko: The People of Old.* BPBM Spec. Publ. 51., 1964;

Kamakau, Samuel, *Ruling Chiefs of Hawaii*. Honolulu: Kamehameha Schools Press, 1961.

Kamakau, Samuel Manaiakalani, translated from the Newspapers Ka Nupepe Kuokoa and Ke Au Okoa by Mary Kawena Pukui and Edited by Dorothy Barrerer, *Tales and Traditions of the People of Old: Na* Mo'olelo *a ka Po'e Kahiko.* Honolulu: Bishop Museum Press, 1991, p. 125.

Kamakau, Samuel, The *Works of the People of Old.* BPBM Spec. Publ. 61, 1976.

Kanahele, Edward, in Van James, *Ancient Sites of O'ahu*, Honolulu: UH Press.

Kelly, Marion, cited in Levy. "Native Hawaiian Land Rights" in *California Law Review*, Vol. 63, No.4, July 1975

Kirch, Patrick V. (1985). Feathered Gods and Fishooks:

An Introduction to Hawaiian Archaeology and Prehistory. Honolulu: UH Press.

Kirch, Patrick V. and Marshall Sahlins, *Anahulu: The Anthropology of History in the Kingdom of Hawaii, Volume* One *Historical Ethnography and Volume Two The Archaeology of History,* The University of Chicago, 1992.

Lili'uokalani, *Hawaii's Story By Hawaii's Queen*, Boston: 1898, reprinted Tokyo: Tuttle, 1977.

Lind, Andrew, _An Island Community: Ecological Succession In Hawaii (Chicago: The University of Chicago Press, 1938; reprint New York: Greenwood Press, 1968), Hormann, 1951. Hormann saw these areas as retreats for those who could not compete in the broader society, like slums in the city. While he acknowledged their function as providing Hawaiians with a continuity to their cultural past, he considered the way of life in these areas to be "tragic".

Malama Ka 'Aina, Hana Ka 'Aina Community Association, Subsistence Homesteads: A Community Management Plan for Department of Hawaiian Home Lands, Keaukaha Tract II. Honolulu: Palapala Ink, 1987.

Malo, David, *Hawaiian Antiquities: Moolelo Hawaii,* translated by Dr. Nathaniel B. Emerson, 1898. Honolulu: Bernice P. Bishop Museum Special Publication 2, reprinted 1971.

Matsuoka, Jon and Davianna McGregor, "Sociocultural Impact Assessment" in the Environmental Impact Statement for the Commerical Satellite Launching Facility, Palima Point, Ka'u, Hawaii, 1991.

Matsuoka, Jon, Davianna McGregor, Luciano Minerbi, "Native Hawaiian Ethnographic

Study for the Hawai'i Geothermal Project Environmental Impact Study," for the Oakridge National Laboratories

Environmental Impact Study for the U.S. Department of Energy, 1993.

Matsuoka, Jon, Davianna McGregor, Luciano Minerbi, Malia Akutagawa, "Governor's

Moloka'i Subsistence Task Force Report," Moloka'i Department of Business, Economic Development, and Tourism, 1993.

McGregor, Davianna, "Pele vs. Geothermal: A Clash of Cultures," in *Bearing Dreams, Shaping Visions: Asian Pacific Americans Facing the 90's*, Seattle: Washington State University Press, 1993.

McGregor, Davianna, "Traditional Hawaiian Cultural, Spiritual, and Subsistence Beliefs, Customs, and Practices and Waiahole, Waikane, Hakipu'u, and Kahana," for the Native Hawaiian Advisory Council and the Office of Hawaiian Affairs, September 1995.

McGregor, Davianna. "An Introduction to the Hoa'aina and Their Rights," *The Hawaiian Journal of History*, Vol. 30, 1996.

Office of the Commissioner of Public Lands of the Territory of Hawaii, *Indices of Awards Made by the Board of Commissioners to Quiet Land Titles in the Hawaiian Islands,* (Honolulu: Star-Bulletin Press, 1929).

Proceedings of the Constitutional Convention of Hawaii of 1978 Volume 1 638 - 640, Volume 2 433 - 437

Public Law 103-150, 107 Stat. 1510

Pukui, M. K., Haertig, E. W. & Lee, C. A. (1972). *Nana I Ke Kumu Volume I.* (Vol. I). Honolulu: Queen Liliuokalani Children's Center.

Smith, L. T. (1999). *Decolonizing Methodologies:* Research and Indigenous Peoples. Dunedin: University of Otago Press.

Walsh, F. (1998). Strengthening Family Resilience. New York: The Guilford Press.

Additional References of materials used but not quoted

Aiu, P., & Miike, L. (1992). *Native Hawaiian health data book.* Honolulu, HI: Papa Ola Lokahi.

2. Aluli, N. E. (1991). Prevalence of obesity in a Native Hawaiian population. *American Journal of Clinical Nutrition*, 53, 1556-1560.

3.Andrade, N. N., Johnson, R. C., Edman, J., et al.(1994). Non-traditional and traditional treatment of Hawaiian and non-Hawaiian adolescents. *Hawaii Medical Journal*, 53, 344-347.

- Banner, R, Gotay, C. C., Enos, R., Matsunaga, D. S., et al. (1999). Effects of a culturally tailored intervention to increase breast and cervical cancer screening in native Hawaiians. In C. S. Glover & F.S. Hodge (Eds.), Native outreach: A report to American Indian, Alaska native, and native Hawaiian communities (pp. 45-55). National Cancer Institute. (NIH Publication 98-4341)
- Braun, K. L. (1998). Do Hawaii residents support physician-assisted death? A comparison of five ethnic groups. *Hawaii Medical Journal*, 57, 529-534.
- Braun, K. L., Mokuau, N., & Tsark, J. U. (1997). Cultural themes in health, illness, and rehabilitation among Native Hawaiians. *Topics in Geriatric Rehabilitation*, 12, 19-37.
- Braun, K. L., Takamura, J. C., Forman, S., et al. (1995). Developing and testing outreach materials on Alzheimer's disease for Asian and Pacific Islander Americans, *Gerontologist*, 35, 122-126.
- Baguet, C. R. (1996). Native Americans' cancer rates in comparison with other peoples of color. <u>Cancer</u>, 78, 1538-1544.
- 9. Bird, M.E. (2001). Running toward holistic health and well-being. The *Nation's Health*, *31(2)*, 3.

How can indigenous and ethnic

cultures impact organizational

configurations and social

science knowledge production to

address their well-being and needs?

- Blaisdell, R. K. (1993). The health status of Kanaka Maoli (Indigenous Hawaiians). Asian American and Pacific Islander Journal of Health, 1, 117-157.
- Blaisdell, R. K., & Mokuau, N. (1991). Kanaka Maoli: Indegenous Hawaiians. In N. Mokuau (Ed.), Handbook of social services for Asian and Pacific Islanders (pp. 131-154). Westport, CT: Greenwood Press.
- 12. Braun, K. L., & Browne, C. V. (1998). Perceptions of dementia, caregiving, and help seeking among Asian and Pacific Islander Americans. *Health and Social Work, 23(4), 262-274*.
- 13. Braun, K. L., Look, M. A., Yang, H., et al. (1996). Native Hawaiian mortality, 1980-1990. *American Journal of Public Health*, *86*, 888-889.
- Braun, K. L., Tanji, V. M., & Heck, R. (2001). Support for physician-assisted suicide: Exploring the impact of ethnicity and attitudes toward planning for death. *The Gerontologist*, 41(1), 51-60.
- Braun, K. L., Yang, H.,
 Onaka, A. T., & Horiuchi, B.
 Y. (1997). Asian and Pacific Islander mortality differences in Hawaii. Social Biology, 44, 213-226.
- Brinson, J., & Fisher, T. A. (1999). The ho'oponopono group: A conflict resolution model for school counselors. *Journal for Specialists in Group Work, 24(4), 369-382.*
- 17. Browne, C., Fong, R., & Mokuau, N. (1994). The mental health of Asian and Pacific Island elders: mplications for research and mental health administration. *Journal of Mental Health Administration*, 21, 52-59.
- 18. Bushnell, O. A. (1993). *The gifts of civilization: Germs and genocide in Hawai'i.* Honolulu, HI: University of Hawaii Press.
- Center for Youth Research University of Hawaii at Manoa and Research and Evaluation Unit ALU LIKE. (1998, November). Hawaiian youth in the juvenile justice system. Honolulu, HI: ALU LIKE, Inc.
- Chang, H. K., Grandinetti, A., Chen, R., et al. (1998). Insulin resistence and beta-cell function among Native Hawaiians: A HOMA model analysis.

- Diabetes, 47 (1S), 153.
- 21. Curb, J. D., Aluli, N. E., Huang, B. J., et al. (1996). Hypertension in elderly Japanese Americans and adult native Hawaiians. *Public Health Reports*, *111*(2), 53-55.
- 22. Curb, J. D., Aluli, N. E., Kautz, J. A., et al. (1991). Cardiovascular risk factor levels in ethnic Hawaiians. *American Journal of Public Health, 81,* 164-167.
- 23. Ewalt, P. L., & Mokuau, N. (1995). Self-determination from a Pacific perspective. *Social Work*, *40*(2), 168.
- Fong, R., & Mokuau, N. (1994). Not simply "Asian American": Periodical literature review of Asians and pacific Islanders. Social Work, 39, 298-305.
- Fu, X., & Heaton, T. B. (2000). Status exchange in intermarriage among Hawaiian, Japanese, Filipinos and Caucasians in Hawaii: 1983-1994.
 Journal of Comparative Family Studies, 31, 45-61.

26. Goebert, D., & Birnie, K. K. (1998). Injury and disability among Native Hawaiians.

Pacific Health Dialog, 5, 253-259.

- Goebert, D., Nahulu, L., Hishinuma, E., et al. (2000). Cumulative effect of family environment on psychiatric symptomatology among multiethnic adolescents. *Journal of Adolescent Health*, 27 34 -42.
- 28. Grandinetti, A., Chang, H. K., Mau, M. K., et al. (1998). Prevalence of glucose intolerance among native Hawaiians in two rural communities. *Diabetes* Care, *21(4)*, 549-556.
- 29. Grandinetti, A., Kaholokula, J. K., Crabbe, K. M., et al. (2000). Relationship between depressive symptoms and diabetes among native Hawaiians. *Psychoneuroendocrinology*, 25, 239-246.
- Hammond, 0. W. (1988). Needs assessment and policy development: Native Hawaiians as Native Americans. American Psychologist, 43, 383-387.
- Nankin, J. H., Wilkens, L. R., Kolonel, L. N., Yoshizawa, C. N. (1991). Validation of a quantitative diet history method in Hawaii. *American Journal of Epidemiology*, 133, 616-628.

- 32. Hawaii Health Survey. (2000). Retrieved December 3, 2001, from http://hawaii.bov/health/stats/surveys/hhs.html
- Hayashi, C. T. (1996). Achievement motivation among Anglo-American and Hawaiian male physical activity participants: Individual differences and social contextual factors. *Journal of Sport and Exercise Psychology*, 18, 194-215.
- 34. Health Trends in Hawaii. (n.d.). Retrieved December 3, 2001, from http://hhic.org/healthtrends/index.asp
- Hishinuma, E. S., Andrade, N. N., Johnson, R. C., et al. (2000). Psychometric properties of the Hawaiian Culture Scale-Adolescent Version. Psychological Assessment, 12, 140-157.
- 36. Hishinuma, E. S., Miyamoto, R. H., Nishimura, S. T., et al. (2000). Psychometric properties of the State-Trait Anxiety Inventory for Asian/Pacific islander adolescents. *Assessment*, 7, 17-36.
- 37. Hishinuma, E. S., Nishimura, S. T., Miyamoto, R. H., & Johnson, R. C. (2000). Alcohol use in Hawaii. Hawaii Medical Journal, 59, 329-335.
- 38. Hughes, C. K. (1998). Culturally appropriate health intervention program for Native Hawaiians, *Asian American Pacific Islander Journal of Health*, 6. 174-179.
- 39. Hughes, C. K., & Aluli, N. E. (1991). A culturally sensitive approach to health education for Native Hawaiians. *Journal of Health Education*, *22*, 387 390.
- Hughes, C. K., Tsark, J. U., Kenui, C. K., & Alexander, G. A. (2000). Cancer research studies in native Hawaiians and Pacific Islanders. *Annals* of *Epidemiology*, 10(S8), S49-S60.
- 41. Hughes, C. K., Tsark, J. U., & Mokuau, N. K. (1996). Diet-related cancer in native Hawaiians. *Cancer*, *78*, 1558-1563.
- 42, Johnson, D. B., Oyama, N. & Le Marchand, L. (1998). Papa Ola Lokahi Hawaiian health update: Mortality, morbidity and behavioral risk. *Pacific Health Dialog*, 5, 297-314.
- 43. Johnson, R. C., Danko, G. P., Andrade, N. N., & Markoff, R. A. (1997). Intergroup similarities in judgments of psychiatric symptom severity. *Cultural Diversity and Mental Health*, *3*, 61-68.

- 44. Kame'eleihi'a, L. (1992). Native land and foreign desires: How shall we live in harmony? Ko Hawai'i `eina a me na koi pu'umake a ka po'e Haole: Pehea la e pono ai? Honolulu, HI: Bernice P. Bishop Museum Press.
- 45. Kawakami, A. J. (1999). Sense of place, community, and identity. *Education and Urban Society*, 32, 18-40.
- Kim, B. S. K., Omizo, M. M., & D'Andrea, M. J. (1998). The effects of culturally consonant group counseling on the self-esteem and internal locus of control orientation among Native American adolescents. *Journal for Specialists in Group Work*, 23(2),_145-163.
- 47. Klingle, R. (2000). The 2000 Hawaii student alcohol, tobacco, and other drug use study: Adolescent prevention and treatment needs assessment (Contract No. 277-98-6019). Manoa, HI: State of Hawaii Department of Health.
- 48. Koseki, L. K. (1996). A study of utilization and satisfaction: Implications for cultural concepts and design in aging services. *Journal of Aging and Social Policy*, *8*(1), 59-75.
- Lin-Fu, J. S. (1993). Asian and Pacific Islander Americans: An overview of demographic characteristics and health care issues. Asian American Pacific Islander Journal of Health, 1, 20-36.
- 50. Makini Jr., G. K., Andrade, N. N., Nahulu, L. B., et al. (1996). Psychiatric symptoms of Hawaiian adolescents. *Cultural Diversity and Mental Health*, 2, 183-191.
- Makini Jr., G. K., Hishinuma, E. S., Kim, S. P., et al. (2001). Risk and protective factors related to native Hawaiian adolescent alcohol use. *Alcohol* and *Alcoholism*, 36(3), 235-242.
- 52. Mansfield, H. (1997). Hawaii's Hana Like Home Visitor Program, A Healthy Start Program. *Journal of Psychohistory*, *24*, 332-338.
- 53. Matsunaga, D. S., Enos, R., Gotay, C. C., et al. (1996). Participatory research in a native Hawaiian community: The Wai'anae cancer research project. *Cancer*, 78, 1582-1586.
- 54. Matsuoka, J., & Kelly, T. The environmental, economic, and social impacts of resort

- development and tourism on Native Hawaiians. Journal of Sociology and Social Weffare 29-44.
- 55. Mau, M. K., Glanz, K., Severino, R., et al. (2001). Mediators of lifestyle behavior change in native Hawaiians: Initial findings from the Native Hawaiian Diabetes Intervention Program. *Diabetes Care*, 24, 1770-1775.
- Mau, M. K., Grandinetti, A., Arakaki, R. F., & Chang, H. K. (1997). The insulin resistance syndrome in native Hawaiians. *Diabetes Care, 20(9),* 1376-1383.
- 57. Mau, M. K., Grandinetti, A., Arakaki, R. F., et al. (1997). Association of behavioral risk factors and glucose intolerance in native Hawaiians. *Diabetes*, *46.142*.
- 58. McArdle, J. J., Johnson, R. C., Hishinuma, E. S., et al. (2001). Structural equation modeling of group differences in CES-D ratings of Native Hawaiian and non-Native Hawaiian high school students. *Journal of Adolescent Research, 16,* 108-149.
- McCubbin, H. I., Thompson, M. S., Thompson, A. I., et al. (1993). Culture, ethnicity, and the family: Critical factors in childhood chronic illnesses and disabilities. *Pediatrics*, *91*, 1063-1070.
- McPherson, M. M. (1991). Trustees of Hawaiian affairs v. Yamasaki and the native Hawaiian claim: Too much of nothing. *Environmental Law*, 21, 453-497.
- 61. Meyer, M. (1998). Native Hawaiian epistemology: Sites of empowerment and resistance. *Equity and Excellence in Education*, *31*, 22-28.
- Miyamoto, R. H., Hishinuma, E. S., Nishimura, S. T., et al. (2000). Variation in self-esteem among adolescents in an Asian/Pacific-Islander sample. Personality and Individual Differences, 29, 13-25.
- 63. Mokuau, N. (1990). The impoverishment of native Hawaiians and the social work challenge. <u>Health and Social Work, 15, 2</u>35-242.
- 64. Mokuau, N. (1990). A family-centered approach in Native Hawaiian culture. *The Journal of Contemporary Human Services*, 607-613.
- Mokuau, N., & Browne, C. (1994). Life themes of Native Hawaiian female elders: Resources for cultural preservation. Social Work, 39(1), 43-49.

- 66. Mokuau, N., Hughes, C. K., & Tsark, J. U. (1995). Heart disease and associated risk factors among Hawaiians: Culturally responsive strategies. *Health and Social Work, 20(1), 46-53.*
- 67. Mokuau, N. & Matsuoka, J. (1995). Turbulence among a native people: Social work practice with Hawaiians. *Social Work*, *40*(*4*), 465.
- 68. Mokuau, N. & Shimizu, D. (1991). Conceptual framework for social services for Asian and Pacific Islander Americans. In N. Mokuau (Ed.), *Handbook of social services for Asian and Pacific Islanders* (pp.21-36). New York: Greenwood Press.
- 69. Mokuau, N., & Tauili'ili, P. (1992). Families with Native Hawaiian and Pacific Island roots. In E. W. Lynch & M. J. Hanson (Eds.), Developing crosscultural competence (pp. 301-318). Baltimore: Paul H. Brookes.
- Morelli, P. T., & Fong, R. (2000). The Role of Hawaiian Elders in Substance Abuse Treatment Among Asian/Pacific Islander Women. *Journal of Family Social Work*, 4(4), 33-44.
- Morelli, P., Fong, R., & Oliveira, J. (2001). Culturally Competent Substance Abuse Treatment for Asian Pacific Islander Women. *Journal of Human Behavior in the Social Environment*, 3(3/4), 263-280.
- 72. Nahulu, L. B., Andrade, N. N., Makini, G. K., et al. (1996). Psychosocial risk and protective influences in Hawaiian adolescent psychopathology. *Cultural Diversity & Mental Health*, *2*, 107-114.
- 73. Native Hawaiian Data Book 1998. (1998). Retrieved November 20, 2001, from http://www.oha.org/databook/
- Prescott, C. A., McArdle, J. J., Hishinuma, E. S., et al. (1998). Prediction of major depression and dysthymia from CES-D scores among ethnic minority adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37, 495-503.
- 75. Rezentes, W. C. (1993). Na mea Hawaii: A Hawaiian acculturation scale. <u>Psychological Reports</u>, 73, 383-393.
- 76. Rezentes, W. C. III (1996). *Ka lama kukui, Hawaiian psychology: An introduction.* Honolulu, HI: 'A'ali'l Books.

- 77. Serxner, S. & Chung, C. S. (1992). Trend analysis of social and economic indicators of mammography use in Hawaii. *Journal of Preventive Medicine*, *8*, 303-308.
- Shintani, T. Hughes, C., Beckham, S., & O'Connor, H. (1991). Obesity and cardiovascular risk intervention through the ad libitum feeding of traditional Hawaiian diet. *American Journal of Clinical Nutrition*, *53*, 1647S-1651S.
- Singh, G. K., & Yu, S. M. (1996). U. S. child mortality, 1950-1993: Trends and socioeconomic differentials. *American Journal of Public Health*, 86, 505-512.
- 80. Srinivasan, S., & Guillermo, T. (2000). Toward improved health: Disaggregating Asian American and native Hawaiian/Pacific Islander data. *American Journal of Public Health, 90(11),* 1731-1734.
- 81. The State of Hawaii Data Book 2000. (2000). Retrieved December 3, 2001, from http://www.state.hi.us/dbedt/
- 82. State of Hawaii Department of Health. (1994). *Vital statistics supplement 1991-1992*. Honolulu, HI: Office of Health Status Monitoring.
- State of Hawaii, Department of Health. (1996, January). Health surveillance survey: Report for years 1989-1992 (R&S Report Issue No. 62). Honolulu, HI: Office of Health Status Monitoring.
- 84. State of Hawai'i Department of Health, Office of Health Status Monitoring Preliminary Vital Statistics Data 2000. (2000). Retrieved December 3, 2001, from http://www.hawaii.qov/health/stats/vs.prelm/vs.pre00.html
- 85. The Status of Native Hawaiian Civil Rights Five Years After the Passage of the Apology Bill. (n.d.).
 Retrieved December 11, 2001, from http://www.moolelo.com/uscrc.html
- 86. Streltzer, J., Rezentes, W. C., & Arakaki, M. (1996). Does acculturation influence psychosocial adaptation and well-being in native Hawaiians? The International Journal of Social Psychiatry, 42(1), 28-35.
- 87. Takeuchi, D. T., Mokuau, N., & Chun, C. (1992). Mental health services for Asian Americans and Pacific Islanders. *Journal of Mental Health Administration*, 19, 237-245.

- 88. Trask, H. K. (1999). From a native daughter: Colonialism and sovereignty in Hawaii. Honolulu, HI: University of Hawaii Press.
- 89. Trask, H. K. (2000). Native social capital: The case of Hawaiian sovereignty and Ka Lahui Hawaii. *Policy Sciences*, 33, 375-385.
- 90. Tsark, J. U., Blaisdell, R. K., Aluli, N. E. (1998). The health of Native Hawaiians. *Pacific Health Dialog*, *5* (2).
- 91. Tsark, J. U. (1998). Cancer in Native Hawaiians. *Pacific Health Dialog*, 5, 315-327.
- 92. Werner, E., & Smith, R. (1992). Overcoming the odds: High risk children from birth to adulthood. Ithaca, NY: Cornell University Press.
- Wilcox, G. N., & Armstrong, L. J. (1996). Identifying family violence: A community prototype incorporating Native Hawaiian values and practices. *Hawaii Medical Journal*, 55, 169-170.
- 94. Wood, D. W. (1999). Substance abuse and treatment needs: Survey estimates for Hawai'i (1998) executive summary. Kapolei, HI: Hawaii Department of Health.
- Yuen, N. Y. C., Andrade, N., Nahulu, L., & Makini, G. (1996). The rate and characteristics of suicide attempters in the native Hawaiian adolescent population. Suicide & Life - Threatening Behavior, 26(1), 27-36.
- Yuen, N. Y. C., Nahulu, L. B., & Hishinuma, E. S. (2000). Cultural identification and attempted suicide in Native Hawaiian adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39, 360-367.
- 97. Yuen, N. Y. C., Nahulu, L. B., Hishinuma, E. S., & Miyamoto, R. H. (in press). Cultural conflict and suicide in Native Hawaiian adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*.
- 98. Tsark, J. U. (1998). Cancer in Native Hawaiians. *Pacific Health Dialog*, 5, 315-327.
- Werner, E., & Smith, R. (1992). Overcoming the odds: High risk children from birth to adulthood. Ithaca, NY: Cornell University Press