

# **Hāmākua Agriculture Plan:**

Sustaining Rural Hāmākua  
Through Agriculture

**May 2006**

**Final**

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## **Vision Statement**

**Agriculture in the District of Hāmākua is the heart of the community, providing profitable, sustainable, repeatable, healthy opportunities in which agricultural producers, their families and the community can thrive. Numerous successful family farming and ranching enterprises of various sizes produce a wide variety of crops, livestock and value added goods that are world class, well recognized and in demand.**

**Our land use policies recognize the value of Hāmākua’s agricultural contribution and protect, preserve, and support the welfare and continuation of true agricultural uses. As a model, Hāmākua has not only set the pace for island agriculture, but it positively affects the economy, culture and social fabric of the community. As a result, Hāmākua is recognized not only for its agricultural offerings, but also for our ethnic, cultural, leadership and economic diversity. It is a place where its children and children’s children can expect to live and work surrounded by healthy, responsible and diverse agriculture.**

### **1.0 INTRODUCTION AND PURPOSE**

The Hāmākua Agriculture Plan: Sustaining Rural Hāmākua Through Agriculture (“Hāmākua Agriculture Plan” or “Plan”) is a direct reflection of the community’s desire to maintain its rural nature and create an environment of success for diversified agriculture. The Plan is a blending of issues important to the success of diversified agriculture as well as issues important to the health and well being of the entire Hāmākua community. It outlines specific actions that will lead us to the realization of our collective vision.

Through a series of public meetings, countless hours of volunteer and committee work, and ongoing outreach to the community for input, strategic issues were identified that are necessary for the continuation of our rural community and growth of diversified agriculture in the area.

The issues identified by the community and addressed in the Plan are:

- Preserving our lands for agriculture use and steering our future development through thoughtful policies on growth.
- Fostering economic success for agriculture producers.
- Honoring and utilizing the Lower Hāmākua Ditch to its full potential.
- Maintaining a safe and healthy environment.
- Insufficient affordable housing.

- Access to ocean and mountains.
- Honoring our past and passing it on to future generations.
- Implementing the Plan.

Hāmākua represents one of the last bastions of prime agricultural lands in the State of Hawai'i. The increasing demand for residential and other non-agricultural uses on our lands threatens continued agriculture production in the area, our lifestyle, and the essential character of the community.

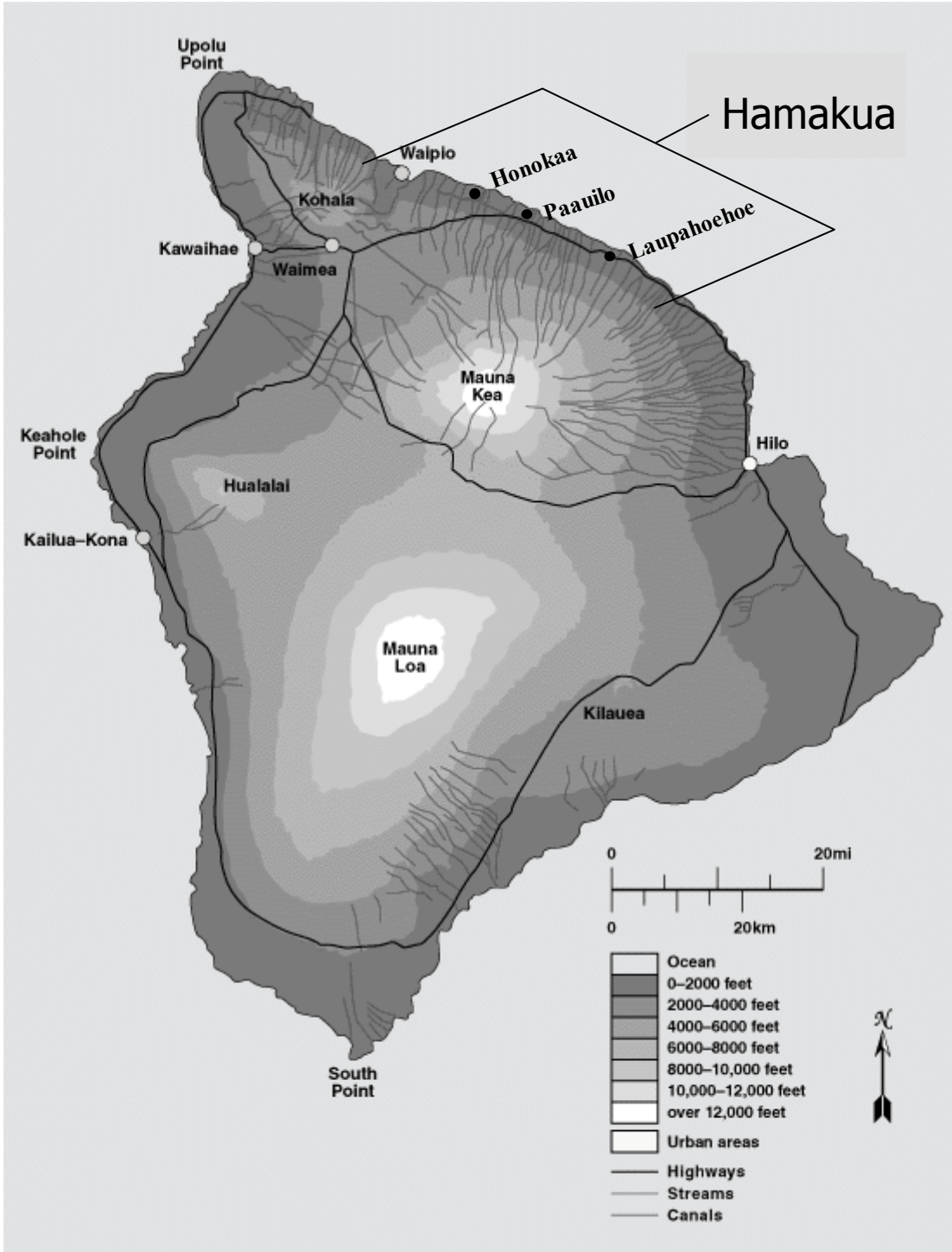
Without concerted effort by the community, private landowners, the County, and the State, agriculture in Hāmākua could be lost forever. The action steps outlined in the Plan address how each of these can contribute to the continuation of our rural community and advancement of agriculture in Hāmākua.

The General Plan passed by the Hawai'i County Council in 2005 calls for each region of the Island to develop its own Community Development Plan ("CDP"). While the Hāmākua Agriculture Plan contains some elements that will eventually be addressed by the CDP it is not all-inclusive of the many components necessary for a CDP. While the CDP effort has been initiated for the Hāmākua region, it will be years before the final plan is finalized and implemented. The Hāmākua Agriculture Plan will serve to safeguard our precious lands and lifestyle until a CDP covering Hāmākua is adopted and implemented. To the extent that the Plan focuses on agriculture and actions beyond the scope of a CDP, it will continue to reflect the community's goals and the action steps to attain them.

The agricultural based lifestyle that weaves through Hāmākua binds the diverse population into a true community while providing economic viability and income for many residents. By supporting and fostering successful diversified agriculture, we honor and maintain the agricultural based lifestyle that defines our community. We create economic opportunities for our residents and create a local food supply allowing the Hāmākua community to become more self-sustaining.

### 1.1 Description of Region covered by the Hāmākua Agriculture Plan

The Hāmākua Agriculture Plan boundary encompasses the area from Waipio Valley through Maulua Gulch.



**1.2 Classifications and Land Disbursements**

The total land area of the Island of Hawai`i is 2,577,808 acres. The Hāmākua District encompasses 400,140 acres, the largest district on the island. The district has 163,193 acres zoned agriculture that may be vulnerable to development or other competing uses.

In the Hāmākua District the State of Hawai`i holds approximately 264,750 acres and the County of Hawai`i approximately 3,000 acres. The balance of land, 132,390 acres, is made up of smaller parcels of mixed sizes that are privately owned.

**Zoning Classifications and Parcel Distribution of lands in Hāmākua <sup>1</sup>**

<u>Classification</u>	<u>Acres</u>	<u>Number of Parcels</u>
Residential	587	1,036
Residential-Ag	14	2
Residential – multi family	3	16
Resort	32	3
Commercial	37	105
Industrial	14	8
Agricultural	163, 193	2,580
Open	954	16
No Zone <sup>2</sup>	235,306	235

Kamehameha Schools is the largest private landowner with 30,500 acres. Currently, there are 6,542 acres of Kamehameha Schools lands leased to farmers and ranchers, and 23,958 acres in forestry leases.

**1.3 Brief History and Role of Community**

Hāmākua has a long history of agriculture. In ancient times it is noted that Hāmākua was known for its taro, sweet potatoes and bananas.<sup>3</sup> The influx of Europeans and Americans brought the concept of industrial farming and for over 150 years sugar plantations controlled large tracts of land and Hawai`i’s agriculture production. As a result, sugar production was the economic base for the people of Hāmākua, providing jobs and security for generations. By the mid 1970s the majority of the sugar plantations in Hāmākua were consolidated into one company, Hāmākua Sugar Corporation.

On December 18, 1992, Hāmākua Sugar announced its imminent closing. This was devastating to the community. Legislation was passed in 1993 that provided for one final harvest by Hāmākua Sugar. That final harvest preserved 400 jobs for another 18 months, and provided some time for the community to begin its transition. Various task force

1 Source: Hawai`i County Planning Department, printout dated August 24, 2005 and September 9, 2005.

2 “No-Zone” includes roadways, breakwaters, forest reserve areas, and national parks.

3 Reference: “Hamakua and Waipio: The Homeland of Hawai`i Island’s Political System” Ross Cordy, DLNR 1987.

groups were formed to address such things as housing concerns, diversified agriculture, employment training opportunities, and economic development.

As a result of these task force efforts, The Hāmākua/North Hilo Agriculture Cooperative was created in 1994, offering an opportunity for displaced sugar workers to become farmers and lease approximately 1,500 acres of state-owned agriculture land on a month-to-month basis. Diversified agriculture enterprises begin to take root on the former plantation lands.

In November 1994, Kamehameha Schools finalized its purchase of 30,500 acres of former sugar lands. Subsequently they entered into a long-term forestry lease for a majority of these lands. In addition, they made lease lands available on a short-term basis for farming and livestock production.

In March 1995, a community visioning session was held at which time it was agreed that an agriculture-based economy is the basis of a rural lifestyle and an essential part of the character of the Hāmākua community that must be maintained. The participants envisioned "a thousand points of green," representing the desire to have 1,000 successful small farms and ranches to take the place of one monolithic crop and employer.

In 1998, a much sought after long-term lease arrangement was made between the Hāmākua/North Hilo Agriculture Cooperative and the Hawai'i Department of Land and Natural Resources ("DLNR") and the Hawai'i Department of Agriculture ("DOA"). This allowed 35-year leases for approximately 950 acres of prime agriculture land.

In 1999, the Hilo-Hāmākua Community Development Corporation revisited the community visioning effort that was done in 1995, and developed a strategic plan for the continuing transition of the community. Again, the importance of maintaining a rural lifestyle and keeping diversified agriculture a significant part of the economic base was verified and validated and the community voiced its desire to preserve open space and live at a slower pace.

Small farms and ranches began to produce a wide variety of products including vanilla orchids, lettuce, coffee, papaya, watermelon, tomatoes, taro, dairy products and grass-fed beef. The agricultural community began to recover from the closing of the plantation, only to be devastated by a series catastrophic breakdowns and failings and the loss of irrigation water from the Lower Hāmākua Ditch that had fallen into disrepair. Many of the beginning farmers lost everything they had worked so hard to achieve.

In 2000, a Federal Watershed Project administered by the U.S. Department of Agriculture ("USDA") Natural Resource Conservation Service and sponsored by the Hawai'i Department of Agriculture, was authorized and brought in large amounts of capital to begin the rehabilitation and continued service of the Lower Hāmākua Ditch system in order to provide dependable water for diversified agriculture producers. The reliability of this crucial irrigation water has been increasing over the years but the repairs and upgrades are still ongoing.

In 2003, a question arose regarding the best use of agricultural lands in Hāmākua that Hawai'i County had acquired from the bankrupt sugar company in lieu of real property tax payments. In an effort to determine how this land could best serve the agricultural community, and more importantly the families who were still going through transition from the loss of jobs, a meeting was held with all of the key parties. They decided that a strategic planning process should be used to bring the various parties and the community together, to develop a plan to determine how to best assist the development of successful diversified agriculture in Hāmākua.

On August 28, 2004, the first community meeting of the Hāmākua Agriculture Plan initiative was held. Through utilization of a strategic planning process, facilitated by the Hawai'i County Research and Development Department, key issues regarding the Hāmākua community were identified and committees of volunteers were formed to create an outline for the Hāmākua Agriculture Plan. Two additional public meetings were held in 2004 and the initial plan was formally presented to the community at a public meeting held in January 2005. Almost 1,000 copies of the Plan were distributed in the following months and input was sought out and obtained from a wide range of community members and agricultural producers. All of the comments and input received were carefully considered as the final revisions to the Plan were completed.

## **2.0 EXECUTIVE SUMMARY**

Preserving Hāmākua as an agriculture-based community and preserving its agricultural lands for agriculture are at the heart of the Hāmākua Agriculture Plan. Hāmākua's rural lifestyle is threatened when agricultural land is given over to residential development or other non-agricultural use, diminishing the promise that diversified agriculture holds for Hāmākua. Thoughtful land use decisions and cooperation among government, business, and the community are essential to protect our agricultural lands and lifestyle.

Economic development is crucial to the success of any agricultural plan. Historically, agricultural producers in this area have been unable to provide a consistent supply of high quality crops at a reasonable price to the local markets and this has resulted in those markets importing products from the mainland and beyond. The Hāmākua Agriculture Plan will create avenues that bring agricultural producers together to collectively farm, ranch, process, and market their products. Working together will allow agricultural producers to provide a more consistent product, have better control of quality, afford more opportunity for the development of value-added products, reduce production costs to individuals and provide an opportunity to create multi-functional processing, storage and distribution systems and facilities.

For almost 100 years, the Lower Hāmākua Ditch has been an integral part of the economy and lifestyle of our community. Built by and for the sugar plantations, it begins in the back of Waipio Valley and ends at the Pa'auilo Reservoir with a total length of 25 miles. The deterioration of the Ditch followed the demise of the sugar industry. By the mid 1990s it was in tenuous condition and caused the demise of many fledging agricultural producers. In 2000, the Ditch system was included in the Federal Watershed Project, which facilitated large amounts of capital being brought in through the USDA

Natural Resources and Conservation Service (“NRCS”) and the Hawai`i Department of Agriculture to insure the rehabilitation and continued service of the Ditch system. The major purpose of the project is the continued viability of agriculture and the preservation of agricultural land and lifestyle in Hāmākua. The Ditch has become an integral part of the evolution from the plantation era to an era of diversified agricultural producers.

Environmental concerns are also vital to the success of diversified agriculture in Hāmākua. For diversified and sustainable agriculture to succeed in Hāmākua, precious soil and water resources must be protected from contamination and erosion. More widespread use of organic, environmentally sound and responsible practices should be encouraged and supported. Because the use of genetically modified organisms (“GMOs”) may pose risks to agriculture, the environment, and human health, the community believes it is essential to proceed thoughtfully and with caution where GMOs are concerned.

The shortage and escalating loss of affordable housing in Hāmākua presents a special problem. If people needed to manage and work on Hāmākua farms and ranches are forced to live far away, diversified agriculture may never get past the starting gate. For this reason, creation of new affordable housing to buy and rent must be a high priority.

The ability to access mountain and ocean areas has long been an essential aspect of traditional family life and rural lifestyles of Hāmākua residents. Increasingly, such accesses are being closed to public use. The reasons for the closures are many: private property rights, the need to control trespass, and theft are but a few. The solutions are complex, but reversing this trend will require the concerted efforts and cooperation of community members, farmers and ranchers, landowners, government agencies, and elected officials.

As a community, we acknowledge and honor our past as well as our responsibility to pass this history on to the future generations. As those who have come before us, we desire to self-determinedly choose and manage our future. We desire to maintain our rural lifestyle and understand that the Hāmākua community’s inherent connection to the land and our connection and interdependence with one another is what binds this community together and defines the lifestyle that we are so anxious to preserve. Creating a self-sufficient, healthy, and sustainable agricultural community that cares for one another and is driven by, and acts in accordance with, our common values is one of the goals of the Hāmākua Agriculture Plan.

The most critical element for each issue addressed in the Hāmākua Agriculture Plan is time. Without immediate action, Hāmākua faces permanent loss of not only prime agricultural lands, but also of the related family and community values. If left unchecked, the proliferation of “spec” houses, subdivisions, resorts, gated communities, and multimillion dollar homes will wipe out our community: destroying the identity, heritage, and hope of the people of Hāmākua to retain their culture and way of life. The Hāmākua Agriculture Plan provides a starting point for addressing the complex issues involved by clearly stating the voice and vision of the affected community as well as identifying a variety of action steps to accomplish its goals and objectives.

### 3.0 LAND USE

Land use is a key component in the development of any agriculture plan. The vision statement for the Hāmākua Agriculture Plan talks about land use policies that recognize the value of Hāmākua's agricultural contribution. With regard to land use, the overriding strategic issues identified by the community are:

- Preserving Hāmākua as an agricultural based community.
- Preserving Hāmākua's agricultural lands for agriculture use.

The community has again affirmed its desire to maintain its agricultural based rural lifestyle. Thoughtful land use decisions regarding future growth and maintaining our agriculture lands must be implemented in order for this to be realized.

Directing growth so that it doesn't negatively impact the community and rural lifestyle is of great importance. Clustering residential areas to prevent sprawl will safeguard our open view planes and allow us to take full advantage of existing infrastructure. Developing subdivision standards that include open spaces, parks, walking/biking paths, and ensure adequate infrastructure will help maintain the lifestyle we are trying to preserve.

There are more than 163,000 acres of agriculture-zoned lands in Hāmākua. Preserving these lands for agriculture use is of prime importance. Unclear zoning regulations, lack of consequences for non-agriculture use, and increasing demands for residential use all threaten our agriculturally zoned lands.

The State of Hawai'i and Kamehameha Schools own a large percentage of Hāmākua's agricultural lands. Realization of the full potential for diversified agriculture in Hāmākua may therefore hinge on the availability and successful use of leased land. A number of agricultural producers presently lease agricultural land from the State through two agencies, the Hawai'i Department of Agriculture and the Hawai'i Department of Land and Natural Resources mostly through sub-leases with the Hāmākua/North Hilo Agricultural Cooperative. Kamehameha Schools currently has long-term forestry leases on approximately 26,000 acres of their lands. Additionally, it offers short-term leases for grazing and farming. Because it owns so much agricultural land in Hāmākua, the decisions that Kamehameha Schools makes regarding the use of its land could have a profound impact on the ultimate success of diversified agriculture and therefore on the community itself.

### 3.1 Land Use Goals, Objectives and Implementing Actions

The Land Use goals are:

1. Identify and protect important agricultural lands and their buffer zones.<sup>4</sup>
2. Preserve agricultural lands for agricultural use.
3. Direct and manage growth.

**Goal 1:** Identify and protect important agricultural lands and their buffer zones.

#### Objectives

1. Urge Hawai'i County to identify and take steps to protect important agricultural lands in Hāmākua and their buffer zones.
2. Create buffer zones between important agricultural lands and other land uses.

#### Implementing Actions

1. Encourage the Mayor to appoint a committee to develop a system to evaluate and identify important agricultural lands in Hāmākua, as well as the entire Island of Hawai'i. The primary objective of the committee should be to develop a system to evaluate the best and most productive agriculturally zoned lands designated as Important Agricultural Lands in the County General Plan according to uniform standards and criteria that are flexible, fair, and acceptable.
2. Work with the County to define allowable uses on important agricultural lands and to require a 2/3 vote of the County Council to approve any zoning or district boundary changes on important agricultural lands and to prohibit spot zoning for residential development on important agricultural lands.
3. Encourage the County to use natural buffer zones such as gulches to separate agricultural areas from residential/urban areas.
4. Urge the County to encourage landowners to designate lands currently zoned agricultural in Hāmākua as important agricultural lands.

**Goal 2:** Preserve agricultural lands for agricultural use.

#### Objectives

1. Limit the non-agricultural use of agricultural land.
2. Preserve Hāmākua's agricultural land for diversified agriculture.

#### Implementing Actions

1. Promote the responsible use of agriculture lands in Hāmākua.

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<sup>4</sup> Important Agricultural Lands Act (Act No. 183) was passed by the State Legislature in 2005. To view this act in its entirety, see [http://www.capitol.Hawaii.gov/session2005/bills/HB1640\\_cd1\\_.htm](http://www.capitol.Hawaii.gov/session2005/bills/HB1640_cd1_.htm).

2. Request that Kamehameha Schools make long-term leases for diversified agriculture (particularly family farms and ranches) available on a substantial portion of the agricultural land it owns in Hāmākua.
3. Create a community board that will gather and provide community input to the County Planning Commission and County Council regarding special permits and agricultural tourism to ensure they will not negatively affect agricultural producers and Hāmākua’s rural lifestyle.
4. Urge the County to significantly increase taxes on agriculturally zoned properties with existing special permits and on agriculturally zoned properties obtaining special permits in the future to provide funding for enforcement of zoning laws and agriculture use.
5. Urge the County to prohibit landowners from obtaining special permits for “after the fact” illegal structures that are built on agricultural lands.

**Goal 3:** Direct and manage growth.

**Objectives**

1. Explore, identify, and implement “smart growth” strategies.
2. Create a community-based organization that will provide input to the County in regard to land use decisions involving future development, rezoning, subdivisions, and special permits.

**Implementing Actions**

1. Create a community-based action committee or board to gather community input for Hāmākua land use decisions.
2. Explore and identify “smart growth” strategies that will direct future growth in a thoughtful way with the least negative impact to Hāmākua.
3. Urge the Hawai’i County Council to not allow any change of zoning or any special permits on agricultural lands until Important Agricultural Lands have been identified and designated.
4. Participate in the Community Development Plan process. Seek input and report progress to/from the community.
5. Where zoning allows subdivision, urge the County to strictly enforce infrastructure requirements.
6. Urge the County to enforce the recently passed resolution requiring that conspicuous signage be posted along the roadside of any property that has applied for a change in use or zoning.
7. Explore creating a nonprofit “Hāmākua Agricultural Conservancy” governed by a community-based board, patterned on the highly successful Nature Conservancy, to acquire important Hāmākua agricultural land from government and private owners for preservation and availability at below-market rates for long-term agricultural leases.
8. Encourage and support other public and private means of permanently preserving Hāmākua agriculture lands through land trusts, land banks, and other methods.

## 4.0 ECONOMIC DEVELOPMENT

Economic Development addresses fostering the economic success of many diversified and sustainable family based farming and ranching enterprises in Hāmākua. One of the challenges of family based agricultural producers in this area has been the inability to supply a consistent, high-quality crop at a reasonable price to the local markets. This has resulted in local markets importing products from the mainland and beyond.

The Plan will encourage the agricultural producers to collectively farm, ranch, process, and market their crops and livestock. By doing this, we will be able to provide more opportunity and higher profit margins to the agriculture producers. Working together will allow us to provide a more consistent product, have better control of quality, afford more opportunity for the development of value-added products, reduce production costs to individual agricultural producers, and allow for the creation of multi-functional processing, storage and distribution systems and facilities.

The Economic Development goals are:

1. Support diversified, sustainable agriculture: farms, livestock production, and aquaculture.
2. Promote economic success in Hāmākua agriculture.
3. Develop a plan to promote “Hāmākua Grown” products.

### 4.1 Economic Development Goals, Objectives and Implementing Actions

**Goal 1:** Support diversified, sustainable agriculture: farms, livestock production, and aquaculture.

#### Objective

1. A system that supports diversified, sustainable agriculture in Hāmākua.

#### Implementing Actions

1. Create and maintain a database of agricultural producers, their crops, and their needs.
2. Create, maintain and make available to agricultural producers a database of resources that address the needs of the farmers and ranchers.
3. Create and promote educational opportunities for farmers and ranchers.
4. Work with the North Hawai`i Education Center in providing classes related to agriculture.
5. Keep the community informed about agriculture issues.
6. Encourage the use of the Lower Hāmākua Ditch System.

**Goal 2:** Promote economic success in Hāmākua agriculture.

**Objectives**

1. Many successful family based agriculture ventures.

**Implementing Actions**

1. Explore the development and impact of agricultural tourism.
2. Secure funding to create and implement a business and marketing plan for cooperative marketing and processing of Hāmākua grown products.
3. Identify and encourage ways that existing facilities can be fully utilized.
4. Create multi-functional processing, storage and distribution facility(ies).
5. Explore and provide opportunities for the creation of value-added products for Hāmākua grown products.
6. Support and facilitate “farm clusters” that grow similar products and have similar visions and that will help support each other.
7. Work with the University Extension Service, USDA, NRCS and others to facilitate education and economic success.
8. Research and emulate successful agricultural models and encourage local agriculture producers to share their successful practices.

**Goal 3:** Develop a plan to promote “Hāmākua Grown” Products.

**Objective**

1. Create an identity for Hāmākua-grown products.

**Implementing Actions**

1. Design and create a “Hāmākua Grown” trademark label.
2. Register the trademark with the State of Hawai`i .
3. Develop quality standards for the trademark.
4. Create and implement a plan to initiate use of the label.
5. Obtain funding to promote the development and marketing of Hāmākua Grown products.

## **5.0 LOWER HĀMĀKUA DITCH**

The Lower Hāmākua Ditch, constructed in 1910, has been the hub of sustenance in the area since that time. Originally built for the sugar plantations, its water was used for transporting the cane, for washing and processing it into sugar, and for irrigation. For half a century it was also the sole source of potable water for the communities along its path. The Hāmākua Ditch is woven into the history and culture of the local communities beyond the 25 miles of its length.

The demise of the local sugar industry in 1994 left a huge void in communities here and elsewhere. At that time, this community expressed a strong desire to retain an agricultural base and lifestyle. A movement toward growing a diversified agricultural community began with an eye on the highly desirable lower elevation lands. The Lower Hāmākua Ditch continues to be an important piece of this vision. The condition of the Ditch system closely paralleled that of the sugar industry and by the mid 1990s some of its elements were in serious disrepair.

In 2000, a Federal Watershed Project, administered by the USDA Natural Resources Conservation Service and sponsored by the Hawai'i Department of Agriculture was authorized, with the goal of providing dependable water for diversified agriculture producers through the repair and restoration of the Lower Hāmākua Ditch.

The Lower Hāmākua Ditch Working Group was formed shortly after the closing of Hāmākua Sugar and its mission has been to facilitate all of the above. This group is comprised of local farmers and ranchers, representatives from the Hāmākua Farm Bureau and Hāmākua North Hilo Agricultural Cooperative as well as representatives from the NRCS, Hawai'i Department of Agriculture, County Council members, State legislators, and Kamehameha Schools, which has leased the Ditch system to the State for an initial 35-year term.

### **5.1 Lower Hāmākua Ditch Goals, Objectives and Implementing Actions**

The Lower Hāmākua Ditch goals are:

1. Leverage all opportunities to create maximum use of the Lower Hāmākua Ditch System.
2. Maintain and preserve the Lower Hāmākua Ditch system.
3. Have the community acknowledge and honor the role the Lower Hāmākua Ditch has played in its past as well as in the present and future.

**Goal 1:** Leverage all opportunities to create maximum use of the Lower Hāmākua Ditch System.

#### **Objectives**

1. Use the water to its full potential.

#### **Implementing Actions**

1. Produce a strategic plan to identify possible uses for ranching, farming, aquaculture, hydroelectric generation, and eco-tourism.
2. Explore how water from the Ditch can be used to economically irrigate intensively grazed pastureland and farms.
3. Create a database of users and organizations to keep informed and notified about water issues.

4. Explore improving the transmission capacity of the Lower Hāmākua Ditch from Kalopa to Pa’auilo.

**Goal 2:** Maintain and preserve the Lower Hāmākua Ditch System.

### **Objectives**

1. A fully functional and reliable irrigation district.
2. Reliable, affordable agricultural water to Hāmākua.
3. Improved water delivery to all agricultural producers.

### **Implementing Actions**

1. Facilitate communication between stakeholders (users, community groups, and government entities) by holding regular meetings to discuss, address, and prioritize current and future needs, expansion, and funding issues.
2. Continue working with the State to minimize emergency situations through the use of excellent communication among all stakeholders and relevant proactive anticipation of needs and funding.
3. Support the removal of sediment from the Ditch system.
4. Explore ways to fence areas of the Ditch to prevent livestock from entering and damaging the system.

**Goal 3:** Have the Community acknowledge and honor the role the Lower Hāmākua Ditch has played in its past as well as in the present and future.

### **Objectives**

1. Raise public awareness and develop a sense of honor in the community.

### **Implementing Actions**

1. Publish and disseminate relevant information to the greater Hāmākua community.
2. Publish stories and interviews of the past and present in the media.
3. Create a video documentary on the history and future of the Lower Hāmākua Ditch System.
4. Explore ways for the community to celebrate the Lower Hāmākua Ditch.
5. Include the Lower Hāmākua Ditch in local festivals and celebrations (Ditch tours, inner-tube convoys, rubber ducky races, and so forth).

## 6.0 ENVIRONMENTAL

Every resident of Hāmākua has a right to live in a healthy and safe environment. This requires our air, water, soil, and food to be of a sufficiently high standard that individuals and communities can live healthy, fulfilling, and dignified lives. Prevention of environmental contamination is needed to protect Hāmākua’s agricultural economy, natural environment, native ecosystem, and public health.

Since it has a major impact on land use, soil, water, native eco-systems and the landscape agriculture has always been very closely associated with the environment. The community has stressed the importance of healthy and responsible agricultural practices. Stewardship practices must be implemented or enhanced to protect soil, water, air quality and wildlife habitat

Agricultural producers have a wide variety of environmental issues to address, some of which include: soil and water conservation, pest and disease control, introduction of alien species, and adherence to the many and overlapping government regulations.

By definition organic agricultural practices raise few environmental concerns. Increasing concerns about the health of the environment and food safety coupled with escalating consumer demand for healthier foods will encourage agriculture producers to transform their production, processing and marketing practices to take advantage of the market-driven opportunities for organic and “whole” foods.

Additionally there is widespread concern from community members and many farmers regarding the agricultural use of genetically modified organisms (“GMOs”). GMOs are relatively new and an impartial long-term evaluation of their effects on human health and the environment is not available. Until it is clear that GMOs do not pose unacceptable environmental, agricultural, and/or health risks, it is better to proceed with caution in their use. Moreover, legal uncertainties and risks regarding GMOs pose potential economic threats to farmers, regardless of whether they plant such crops.<sup>5</sup>

### 6.1 Environmental Goals, Objectives and Implementing Actions

The Environmental goals are:

1. Address agriculture-related environmental concerns.
2. Promote organic, healthy, and sustainable agricultural practices.
3. Determine whether GMOs have a place in Hāmākua agriculture.

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<sup>5</sup> Farmers whose GMO crops contaminate other farmers’ non-GMO crops may be legally liable for any resulting losses. Also, GMO patent holders can sue farmers whose non-GMO crops have been contaminated for patent infringement.

**Goal 1:** Address agriculture-related environmental concerns.**Objectives**

1. Protect Hāmākua’s soil and water resources from chemical and other contamination.
2. Encourage environmental protective practices in the selection and application of chemical pesticides, herbicides, and fertilizers.
3. Identify soil and water contamination on former sugar lands and pursue bio-remediation when found.
4. Provide educational opportunities to agricultural producers regarding prevention and control of alien species.
5. Provide education and informational resources to agricultural producers regarding County, State and Federal environmental regulations.
6. Encourage environmental protective and responsible stewardship practices.

**Implementing Actions**

1. Promote the use of and enrollment in soil and water conservation programs through NRCS, Hāmākua Soil & Water Conservation District, and Mauna Kea Soil & Water Conservation District.
2. Establish an educational program to help ensure the effective, efficient and safe use of pesticides, herbicides, and fertilizers and minimize their possible adverse impacts on the public and environment.
3. Establish a program with appropriate agencies or organizations to assist in identifying soil and water contamination on former sugar lands and in remediation of such contamination.
4. Make written materials and speakers available to educate agricultural producers regarding environmentally friendly alternatives to chemical agriculture products.
5. Encourage Agricultural groups such as the Farm Bureau and Hawai’i Department of Agriculture to coordinate, clearly define and make accessible, information on overlapping environmental governmental regulations and their economic impacts to agriculture producers.
6. Encourage and expand Integrated Pest and Disease Management<sup>6</sup> programs.
7. Manage present populations and prevent further introductions of destructive and harmful alien species.
8. Encourage agricultural producers to sign up for the Fruit Fly Cooperators program.
9. Promote and implement consumer and producer educational programs on agricultural stewardship.

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<sup>6</sup> “Integrated Pest Management” refers to an approach to the management of pests in which all available control options, including physical, chemical, and biological controls, are evaluated and integrated into a unified program, with an emphasis on methods that are least injurious to the environment and most specific to the particular pest. However, the use of genetically modified organisms is subject to the limitations described in Goal 3 of Section 6.1.

**Goal 2:** Promote organic, healthy, and sustainable agricultural practices.

### **Objectives**

1. Encourage farmers and ranchers to use organic and sustainable agricultural<sup>7</sup> practices.
2. Encourage agricultural producers to take advantage of the market-driven opportunity to produce crops and livestock with organic and natural added value.
3. Raise school children’s awareness of sustainable agriculture production in Hāmākua.

### **Implementing Actions**

1. Provide educational opportunities for existing and future agricultural producers to learn more about the economic and other benefits of organic and sustainable agricultural practices, possibly including classes at the North Hawai`i Education Center and through local schools.
2. Encourage the Hawai`i Department of Agriculture, the University of Hawai`i and Pacific Basin Agriculture Research Center to develop programs specific to organic and sustainable agriculture practices.
3. Promote opportunities for marketing organic produce and livestock within the Hāmākua community.
4. Create edible gardens at Hāmākua schools, with an emphasis on organic practices, to provide students with the opportunity to learn from experienced gardeners and farmers, and involve the community in the creation and maintenance of the gardens.
5. Teach students the “cycle of food,” from preparing the soil to planting, watering and nurturing, harvesting, cooking, tasting, and finally composting and returning back to the soil.
6. Promote 4-H programs in Hāmākua schools and encourage them to teach about organic and sustainable practices as well as traditional agriculture practices.
7. Encourage composting and offer composting workshops to the community.
8. Add green waste facilities at Honoka‘a and other Hāmākua transfer stations to allow community members to recycle garden cuttings and other green waste.

**Goal 3:** Determine whether GMOs have a place in Hāmākua agriculture.

### **Objectives**

1. Consider the potential risks and benefits of GMO crops before planting them in Hāmākua.
2. Avoid contamination of crops, seed supplies, public lands, and native ecosystems by GMOs.

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<sup>7</sup> Sustainable agriculture integrates three main goals--environmental health, economic profitability, and social and economic equity. See <http://www.sarep.ucdavis.edu/concept.htm>.

3. Create opportunities for education in the Hāmākua community on the pros and cons of GMOs.
4. Raise agricultural producers' awareness of their potential legal liability relating to GMOs.

### **Implementing Actions**

1. Urge the Hawai'i County Council to adopt the Precautionary Principle<sup>8</sup> in connection with the planting and cultivation of any GMO in Hāmākua agriculture (other than papayas) and require proponents to bear the burden of proof.<sup>9</sup>
2. Provide educational opportunities to agriculture producers and other community members so they can evaluate the potential risks and benefits of GMO crops before planting them in Hāmākua.
3. Hold educational meetings to inform agricultural producers of the potential legal liability they may face if they plant GMO crops or if their own crops are contaminated by GMO crops planted by others.
4. Obtain a non-biased evaluation of the economic impact of growing GMO papayas on the Big Island, both on farmers who grow GMO papayas and on those who choose to grow non-GMO papayas.
5. Form a Hāmākua community advisory committee to assess the potential health, environmental, and financial risks and benefits of GMO crops and make recommendations to the Hawai'i County Mayor and Hawai'i County Council.
6. Attract and support agricultural producers who wish to take advantage of market-driven opportunities in global and domestic markets for GMO-free agricultural products.

## **7.0 AFFORDABLE HOUSING**

Attaining the goals in the Hāmākua Agriculture Plan will also depend on ensuring that affordable housing is available in Hāmākua. Preserving agriculture land for agricultural use necessarily assumes there will be enough people living nearby to manage and work on farms and ranches. Among other things, the Plan seeks to enable Hāmākua residents to trade jobs located one to two hours away for economic self-sufficiency as agricultural producers or for farm or ranch-related jobs close to home. It is not realistic to expect

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<sup>8</sup> The Precautionary Principle, widely used in western and northern European countries for developing laws that protect human health or the environment, is quite simple: the full range of alternatives must be considered and the one that presents the least potential harm must be selected. The process in which the Precautionary Principle is applied must be open, informed and democratic and include potentially affected parties. In 2004, the Hawai'i State Senate adopted a resolution (SR86) urging State departments and agencies to implement the Precautionary Principle policy framework on environmental protection in conducting the State's affairs. See also Stand. Com. Rep. 3482 (report on 2004 House concurrent resolution stating Precautionary Principle should be considered in executing the policies and affairs of the State). The Precautionary Principle was also recognized by the Hawai'i Supreme Court in *In re Water Use Permit Applications*, 94 Haw. 97 (2000). San Francisco adopted the Precautionary Principle in 2003.

<sup>9</sup> This course of action reflects a balancing of the more extreme views of some – a total ban on GMOs on one hand and unrestricted use of GMOs on the other – in order to achieve consensus.

people to become or remain part of Hāmākua diversified agriculture if their homes are, for example, in the Puna or Ka'u districts.

The availability of affordable housing for all is a cornerstone of any stable and healthy community. There is broad consensus among people living in Hāmākua that the region needs more affordable housing, and that the problem is rapidly growing worse. People who live and work in Hāmākua, many from families that have been here for generations, are increasingly unable to find a place to live that they can afford. As house prices and rents go up, increasing numbers of people – and not just those on fixed incomes – are affected. Even those needed to provide vital services to our community, such as teachers and police officers, will increasingly be unable to do so unless they already own a home in Hāmākua. Certainly, the growing affordable housing crisis in Hāmākua will affect in a most fundamental way the ability of diversified agriculture to succeed in this region.

A special opportunity exists in connection with agricultural land that is leased from the Hawai'i Department of Agriculture, the Hawai'i Department of Land and Natural Resources, or Kamehameha Schools. Although state leases allow agricultural producers to construct buildings on the leased land with agency approval, various obstacles have prevented lessees from building dwellings for themselves or their workers. Kamehameha Schools has not yet made many long-term leases available in Hāmākua for diversified agriculture. Allowing more lessees to build homes on leased agricultural land would create some additional affordable housing where it will directly benefit Hāmākua agriculture.

## **7.1 Affordable Housing Goal, Objectives and Implementing Actions**

The Affordable Housing goal is:

1. Ensure the availability of affordable housing in Hāmākua.

**Goal 1:** Ensure the availability of affordable housing in Hāmākua.

### **Objectives**

1. Ensure the availability of affordable housing for all Hāmākua community members, including agricultural producers and farm and ranch workers.
2. Keep affordable housing affordable in the future.
3. Ensure sufficient availability of affordable rental housing for those who cannot or prefer not to own homes.
4. Discourage speculative investment in the Hāmākua residential housing market.

### **Implementing Actions**

1. Create a community-based committee to prepare a strategic plan for addressing the affordable housing shortage in Hāmākua for submission to the Hawai'i County

- Mayor, Hawai'i County Council, Governor, Hawai'i State Legislature, and other appropriate organizations and agencies.
2. Urge State and County government to do everything possible to encourage, support, and facilitate the creation of new affordable housing in Hāmākua.
  3. Urge State and County government to provide and/or acquire land for building new affordable housing, particularly land that is contiguous to existing urban or residential land areas (such as areas surrounding the town centers of Honoka'a, Pa'auilo, and Laupahoehoe).
  4. Urge Hawai'i County government not to sell County land in Hāmākua in order to preserve the option of using it to create affordable housing.
  5. Encourage the use of State and County funds to subsidize the cost of constructing affordable housing.
  6. Monitor the effects of recent amendments to the County of Hawai'i affordable housing policy (Chapter 11 of the Hawai'i County Code). Consider urging the Hawai'i County Council to: (i) eliminate the option of paying in-lieu fees instead of providing affordable housing units, (ii) require that affordable housing be built within the land that is to be developed, (iii) require that at least 30% of the total units to be developed be affordable housing units, and (iv) apply these requirements to all requests involving more than four units.
  7. Urge Hawai'i County to allow denser residential development, including smaller lots and multi-family dwelling units, in areas contiguous with land that has urban land use designation, and maintain the look and feel of existing plantation-era buildings and neighborhoods, *e.g.*, an affordable housing "village" that resembles the existing sugar worker camps in Pa'auhau and Pa'auilo.
  8. Work with Hawai'i County in developing price controls of new affordable housing (*e.g.*, with shared appreciation or buy-back controls) and permanently restrict resale or take other steps to preserve the affordable housing stock as long as possible.
  9. Urge Hawai'i County Council to increase substantially the real property tax paid by non-occupant residential land owners, subject to a lower tax rate if the property is used to provide long-term affordable rental housing, and use the extra tax collected to support the creation of new affordable housing.
  10. Explore and make maximum use of available grants, low-interest loans, and other programs intended to help create affordable housing from the Federal (particularly the U.S. Department of Agriculture and U.S. Department of Housing and Urban Development), State, and County government and from non-governmental sources.
  11. Explore and make full and creative use of tax credits, low-interest loans, and other incentives to developers willing to build affordable housing units.
  12. Identify the best locations for low-rise multi-family affordable rental buildings in Hāmākua, preferably intermixed with other residential development to help prevent creating problem districts or "slums," with housing associations and rules to help ensure proper maintenance and appearance.
  13. Maximize use in affordable housing of energy-saving measures, including solar hot water heating, to reduce occupants' utility costs, and explore grants and other incentives to achieve this goal.

14. Work with Hawai'i Department of Agriculture and the Hawai'i Department of Land and Natural Resources to identify workable ways to allow farmers who lease agricultural land under their jurisdiction to construct residences.
15. Urge Hawai'i County to allow the construction of farm dwellings on agricultural land leased from Hawai'i Department of Agriculture or the Hawai'i Department of Land and Natural Resources based on leased parcels rather than the overall tax map key, approve the use of catchment for water, and relax infrastructure requirements.
16. Urge Kamehameha Schools to make more long-term leases for diversified agriculture available on its Hāmākua agricultural land, and to permit lessees to build dwellings for themselves and their workers.

## 8.0 MAUKA AND MAKAI ACCESS

The Mauka and Makai Access Committee was formed in response to concerns expressed in the first Hāmākua Agriculture Plan community meeting, which was held in August 2004. Many attendees were troubled by the loss of accesses to mountain and ocean areas that were formerly accessible to the public. Newer residents expressed the desire for “more beach parks” while long-time residents wondered how areas that used to be accessible could be locked up, seemingly forever. Hunters and fishermen expressed dismay that the youths in their families are not learning the outdoor skills that traditionally were taught by the older generations. People fear that once an access is accepted as closed, and those who remember the access die, essentially that access will be lost forever.

A cherished aspect of the traditional, rural lifestyle in Hāmākua has been the freedom to access natural areas for gathering and other purposes (*i.e.*, fishing and hunting by all ethnic groups as well as Native Hawaiian cultural practices). However, with the closure of the sugar plantation and changes in land use and ownership, freedom of access have been and continue to be lost. Access closures are also in response to illegal and destructive activities as well as landowners' and managers' concerns over liability in the event someone should be injured or worse.

Throughout the State, thoughtless and criminal behaviors are leading to access closures, and law enforcement officers are stretched so thin that there is a lack of confidence in the ability to catch and punish the offenders. Abandoned and dumped vehicles and other trash, illegal drug use, property damage and theft (including crops), killing of livestock, leaving gates open thus enabling livestock to get loose, trespassing, noisy and damaging All Terrain Vehicle use – are all examples of the persistent problems that result in access closures. The challenges are great, but enjoyment of the outdoors (especially on public lands and in and along the ocean) by only the privileged few is in conflict with the values expressed by Hāmākua residents who feel that access to the ocean and mountains should be:

- supportive of traditional, rural, and culturally diverse lifestyles;
- responsible and protective of natural areas; and
- responsible and protective of private and public properties and owners.

## 8.1 Mauka and Makai Access Goals, Objectives and Implementing Actions

The Mauka and Makai Access goals are:

1. Assure access to Hāmākua’s ocean and mountains.
2. Protect and maintain rural lifestyles and traditional Hawaiian values that uphold respect and love of the land.
3. Promote responsible exercise of access rights and stewardship of natural areas.

**Goal 1:** Assure access to Hāmākua’s ocean and mountains.

### Objectives

1. Form a coalition of people who are interested in working together on access issues.
2. Identify specific areas of importance for public access.
3. Place priority on publicly owned lands and public rights-of-way.
4. Determine which accesses should receive priority attention and why.
5. Explore ways in which public access arrangements can alleviate landowner, land manager, and agriculture producers concerns.

### Implementing Actions

1. Gather input from residents knowledgeable about traditional access-ways.
2. Develop a method by which to evaluate which accesses should receive priority attention.
3. Research the landownership/management of each access of interest and the reasons for closure (if closed).
4. Work with the public agencies that have jurisdiction over the public lands and/or rights of way that are identified as priority.
5. Meet with landowners/managers of the priority accesses to identify their concerns and suggest public access arrangements that might address their concerns.
6. Identify ways in which existing Hawai’i laws pertaining to public access can be strengthened and obtain support of legislators and citizens to get the laws amended and/or enforced.
7. Make recommendations to the newly formed Hawai’i County Public Access, Open Space, and Natural Resources Preservation Commission<sup>10</sup> regarding Hāmākua land that should be considered for inclusion in the prioritized list of qualifying lands.

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<sup>10</sup> The Hawai’i County Public Access, Open Space and Natural Resources Preservation Commission is a newly formed commission. For more information, see [http://www.co.Hawai’i.hi.us/finance/ponc.htm](http://www.co.Hawai'i.hi.us/finance/ponc.htm).

**Goal 2:** Protect and maintain rural lifestyles and traditional Hawai’ian values that uphold respect and love of the land.

### **Objectives**

1. Promote public access arrangements that support rural lifestyles and traditional Hawai’ian values, such as *aloha`āina*<sup>11</sup> and *mālama`āina*<sup>12</sup>.
2. Promote public access arrangements that are fair, *i.e.*, not just for those who can afford high fees or know the “right” people.
3. Teach outdoor skills and stewardship of natural areas to younger generations.
4. Encourage family activities that can be conducted in the mountains and ocean.

### **Implementing Actions**

1. Reach out to residents (Native Hawaiians and others) that are knowledgeable about traditional accesses and lifestyles to become part of the coalition that is formed.
2. Participate in community events that will heighten the awareness, appreciation, and care of access-ways.

**Goal 3:** Promote responsible exercise of access rights and stewardship of natural areas.

### **Objectives**

1. Involve schools and families in outdoor activities made possible through public access.
2. Research how public access arrangements can have built-in controls (*i.e.*, use of keys and permits).
3. Form partnerships between responsible and stable public access user groups and landowners/managers to help with maintenance and monitoring of accesses.

### **Implementing Actions**

1. Conduct clean-up projects along accesses that are currently open to public use.
2. Use clean-up projects to raise awareness of the responsibilities that go along with the privileges of public access.
3. Determine the “ingredients” for successful public access arrangements through partnerships and demonstration projects.

## **9.0 COMMUNITY**

Community is at the heart of the Hāmākua Agriculture Plan. The Community came together to develop the Plan in response to its desire to maintain our rural nature and agricultural based lifestyle. The Plan reflects the collective vision of the community to attain that desire.

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11 Aloha`āina – Love of the land.

12 Mālama`āina – Care of the land.

In the context of the Plan, community is much more than a collection of individuals who happen to be living in the same general geographic location. Community becomes a product of positive relationships, there is a sense of belonging, a sense of connectedness, a sense of being interrelated – a sense of being part of something beyond ourselves. It refers to broad participation in social and political life, it implies being driven by more than material pursuits, and it calls for meeting the present needs of all while leaving equal or better opportunities for those in the future.

The desire to preserve our rural nature and agricultural based lifestyle speaks to our understanding of the importance of our connection to the land as well as our connection and interdependence to one another. We realize that we are not just sustaining agriculture we are sustaining people through agriculture. Small farms and ranches of today are not just about production and profits they are also about sustaining a desirable quality of life. Agriculture in this community can be the catalyst that brings people together in positive, productive relationships that contribute to the community's economic, ecological, and social well being.

The foundation that this community has been built on is rich in culture and tradition. The community recognizes the importance of honoring those that have come before us and actively passing down these traditions and history to the future generations. The values encompassed by the meanings of the words *aloha*, *kōkua*, *pono*, *lōkahi* and *māna*<sup>13</sup> are the unifying theme of this section and the values within which Hāmākua will prosper.

## 9.1 Community Goals, Objectives and Implementing Actions

The Community goals are:

1. A sustainable community that protects its lifestyle and quality of life.
2. A community that honors its past and actively passes it on to future generations.

**Goal 1:** A sustainable community that protects its lifestyle and quality of life.

### Objectives

1. A strong, healthy community characterized by physical, social, and economic well being, for individuals and families.
2. A community that nourishes a sense of community responsibility, of caring for others and the well being of the entire community.
3. A community that determines its own fate based on collective values, visions and common goals.

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<sup>13</sup> Aloha - Love, mercy, compassion.

Kōkua – Cooperation, to assist and support.

Pono – Goodness, honesty, excellence, uprightness, humility, balance.

Lōkahi – Unity, harmony, agreement, accord to make peace.

Māna – Divine power, honoring of the inter-relatedness of all things, reverence.

### **Implementing Actions**

1. Develop and maintain a dynamic forum for the community to come together to participate in finding solutions to community issues.
2. Explore and identify ways to have broader community participation.
3. Develop and maintain an educational system that will offer the youth and adults of the region opportunities and choices for self and community improvement.
4. Explore how to create job opportunities close to home for Hāmākua residents.
5. Promote local businesses by initiating a “Buy Local” campaign and explore ways to discourage large “chain” stores from entering the area.
6. Explore how we can expand the existing farmers market or create new opportunities for direct farmer-to-public sales.
7. Develop an education program that will foster an understanding of the importance of being good stewards of the land.

**Goal 2:** A community that honors its past and actively passes it on to future generations.

### **Objectives**

1. Create a strategic plan for preserving Hawai`ian history and culture and passing this history onto future generations.
2. Foster an awareness of the importance of the cultural resources and the history of Hāmākua and how that defines a sense of place and identity for the region.
3. Identify, preserve, enhance and use our cultural resources in an appropriate way.
4. Develop an educational program that will raise awareness and teach about traditional Hawai`ian culture.

### **Implementing Actions**

1. Seek out and engage Native Hawaiians and other interested parties who are knowledgeable about Hawai`ian history and culture in Hāmākua to develop a strategic plan that will allow for Hawai`ian history and culture to be passed on to future generations.
2. Identify, support, and promote existing initiatives that perpetuate Hawai`ian culture.
3. Identify, preserve, and protect historically, archaeologically and culturally significant areas, sites, and features within the Hāmākua District.
4. Encourage the recordation of local history.
5. Promote the development of educational and cultural programs that emphasize the perpetuation of Hawai`ian arts, crafts and cultural practices.
6. Create a cultural center that will showcase our past and provide opportunities to raise awareness and pass the culture on to future generations.

7. Create ways to celebrate our past and diversity through festivals and community events.
8. Collaborate with farmers to encourage plantings and markets for traditional crops.

## **10.0 INFORMATION, EDUCATION AND IMPLEMENTATION**

Traditionally, farm communities are under-represented because agricultural producers generally do not have sufficient time to consistently attend meetings, write letters to their representatives, or be the “squeaky wheel.” Communities on the Island of Hawai’i have formulated many plans. Few have made it through to completion without being derailed by conflicting interests, while fewer still have survived the cycle of bureaucracy to achieve implementation. Awareness, knowledge, communication, and commitment are the keys to the successful implementation of any community endeavor.

### **10.1 Information, Education and Implementation Goals, Objectives and Implementing Actions**

The Information, Education and Implementation goal is:

1. Insure Plan will be implemented.

**Goal 1:** Insure Plan will be implemented.

#### **Objectives**

1. Gain true community input to insure plan is an accurate and honest reflection of the community’s needs and desires.

#### **Implementing Actions**

1. Hold a public meeting in Honoka‘a soon after the Plan is finalized, to discuss implementation of the actions the Plan recommends to attain the stated goals and objectives and to give interested persons an opportunity to join committees that will address matters of interest to them.
2. Determine why some people do not participate and get input through as many mediums as possible.
3. Insure adequate notification to community members of Hāmākua Agriculture Plan meetings.
4. Contact other community groups for input.
5. Address language barriers and solicit culturally and ethnically diverse groups.
6. Attend Planning Council Meetings, write letters to elected officials, and develop a network for telephone, letter writing and e-mail support campaigns.

7. Follow a process that levels the playing field, giving the community the ability to identify and prioritize issues in a way that does not give advantage to louder or more eloquent speakers.
8. Continuously research and provide access to relevant information about the processes of County and State government.
9. Assist in the dissemination of information about relevant County Council and committee meetings and public hearings.
10. Establish a web site of agricultural and informational links for community use.

**11.0 Implementation**

Through the Hāmākua Agriculture Plan, the community has articulated clearly what it wants now and for future generations. But establishing goals and objectives is not enough. Throughout the process of developing the Hāmākua Agriculture Plan, community members expressed concern that the Plan could become yet another “report” that would just sit on a shelf. To avoid this result and, more importantly, to achieve the Plan’s goals, the community must actively participate in implementing the actions described in the Plan.

In the Plan itself, the implementing actions are found in the sections that address the subjects to which they relate. Appendix “A” lists all of the implementing actions that appear in the Plan, but organizes them according to categories that correspond with the entity to which the actions are primarily addressed: County government, State government, Kamehameha Schools, and others, including the community itself

Implementation of the actions that the Plan recommends will depend on the action of the community. Community members interested in attaining the stated goals and objectives need to step forward in the implementation of the action items. The first opportunity to participate will be at the next public meeting.

The Steering Committee that finalized the Plan proposes that the existing eight committees take primary responsibility for implementation of the Plan, spinning off targeted projects as necessary. Persons interested in serving on committees or getting more information are invited to contact the appropriate committee chair. The committees and chairpersons are as follows:

<u>Committee</u>	<u>Chairperson</u>	<u>Phone #</u>
Land Use	George Zweibel	775-7233
Economic Development	Lori Beach	775-8209
Lower Hāmākua Ditch	Bill Beach	775-8209
Environmental	Brenda Johnson	775-7233
Affordable Housing	George Zweibel	775-7233
Mauka and Makai Access	Karen Clarkson	775-9162
Community	Lori Beach	775-8209
Information, Education and Implementation	Connie Fay	987-8166

Certainly, not all of the recommended implementing actions will be taken and adjustments will need to be made along the way. Some actions would be ongoing (such as a community committee to evaluate and comment on proposed land use decisions) while others would be short term (like creating a “Hāmākua Grown” label). Some actions may require fundraising through grants or other sources. However, with input from the community and coordination by the committees, the most important actions are likely to be pursued. Periodic evaluation by each committee will help ensure that progress is being made in its subject area. Occasional meetings of the committee

chairpersons would help keep things on track and facilitate the sharing of resources and ideas.

Implementation of the Hāmākua Agriculture Plan will be a continuing and ongoing effort. Now that the Plan is done, it is time to focus the community's efforts on implementing it.

## 12.0 CLOSING SUMMARY

Historically, agriculture has been the economic backbone of Hāmākua. It has supported generations of families and a lifestyle that is cherished by *kama'aina*<sup>14</sup> and *malihini*<sup>15</sup> alike. Although Hāmākua Sugar is now a receding memory, growing numbers of local farmers and ranchers are producing a variety of quality agricultural products, and agriculture continues to dominate the Hāmākua economy and way of life. However, rising property values and other factors pose serious threats to agriculture's future in Hāmākua. The community's vision of a "thousand points of green" depends on preserving important agricultural land and creating an environment that encourages and supports present and future agricultural producers. The Hāmākua Agriculture Plan seeks to ensure this future through a variety of implementing actions that relate to stated goals and objectives throughout the Plan. These involve County and State government, Kamehameha Schools, and others, as well as the community itself.

Maintaining Hāmākua as an agriculture-based community and preserving its agricultural lands for agriculture are at the heart of Hāmākua Agriculture Plan. Each time agricultural land is lost to residential development, Hāmākua's agricultural/rural lifestyle is diminished and the promise that diversified agriculture holds for the region becomes a little more unattainable. Thoughtful land use decisions and cooperation among government, business, and the community are essential.

Economic development efforts will foster the success of many diversified and sustainable farming and ranching enterprises in Hāmākua. Our intent is to work cooperatively when possible to farm, ranch, process, distribute, and market our crops and agricultural products. This will help ensure consistent and quality products, both fresh and value added.

For the Lower Hāmākua Ditch to reach its full potential, we must continue to address present needs and thoughtfully plan for future needs as well. At the same time, it is important that we honor and celebrate the ways in which the Ditch has supported us and continues to help shape our future and reflect the values and vision of the Hāmākua community.

Environmental concerns affect agriculture's prospects for success as well as the health and safety of Hāmākua residents and workers. Responsible agricultural practices are

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14 Kama'aina – native born.

15 Malihini – newcomer.

necessary to protect our soil, water, air quality, and natural habitats. Increased use of organic practices should be encouraged and supported, and caution is necessary regarding the use of genetically modified organisms.

Successful implementation of the Hāmākua Agriculture Plan depends in part on whether affordable housing is available for farmers, ranchers, and their workers. This requires increasing and maintaining the Hāmākua affordable housing stock, for buyers and renters.

Hāmākua residents' access to mountain and ocean areas, an essential aspect of traditional family life and rural lifestyles, must be preserved and protected. This will require cooperation among community members, landowners, and government.

The community is at the heart of the Hāmākua Agriculture Plan. The Plan started with the community's desire to self-determinedly manage its future. It reflects the essence of the community's collective vision and is being driven by our collective values. Agriculture is the foundation of Hāmākua, it helps to define our sense of place and identity, connecting us to the land and to each other. We will all benefit by bringing agriculture and the community together.

Through the Hāmākua Agriculture Plan, the community has built a solid foundation for shaping the future that it wants. Now it is up to the community to build on that foundation by doing the work needed to implement the Plan. In other words, the community itself will determine whether the Plan just sits on a shelf.

The community wishes to acknowledge the County of Hawai'i Department of Research and Development and the Hawai'i County Council as contributors of funds relating to the Hāmākua Agriculture Plan.

## Appendix “A”

### Implementing Actions

#### County

##### Land Use

1. Encourage the Mayor to appoint a committee to develop a system to evaluate and identify important agricultural lands in Hāmākua, as well as the entire Island of Hawai’i. The primary objective of the committee will be to develop a system to evaluate the best and most productive agriculturally zoned lands designated as Important Agricultural Lands in the County General Plan according to uniform standards and criteria that are flexible, fair, and acceptable.
2. Work with the County to define allowable uses on important agricultural lands and to require a 2/3 vote of the County Council to approve any zoning or district boundary changes on important agricultural lands and to prohibit spot zoning for residential development on important agricultural lands.
3. Encourage the County to use natural buffer zones such as gulches to separate agricultural areas from residential/urban areas.
4. Urge the County to encourage landowners to designate lands currently zoned agricultural in Hāmākua as important agricultural lands.
5. Urge the County to significantly increase taxes on agriculturally-zoned properties with existing special permits and on agriculturally-zoned properties obtaining special permits in the future to provide funding for enforcement of zoning laws and agriculture use.
6. Urge the County to prohibit landowners from obtaining special permits for “after the fact” illegal structures that are built on agricultural lands.
7. Urge the Hawai’i County Council to not allow any change of zoning or any special permits on agricultural lands until Important Agricultural Lands have been identified and designated.
8. Where zoning allows subdivision, urge the County to strictly enforce infrastructure requirements.
9. Urge the County to enforce the recently passed resolution requiring that conspicuous signage be posted along the roadside of any property being considered for a change in use or zoning.

##### Environment

1. Urge the Hawai’i County Council to adopt the Precautionary Principle in connection with the planting and cultivation of any GMO in Hāmākua agriculture (other than papayas) and require proponents to bear the burden of proof.

## **Affordable Housing**

1. Urge the State and County government to do everything possible to encourage, support and facilitate the creation of new affordable housing in Hāmākua.
2. Urge State and County government to provide and/or acquire land for building new affordable housing, particularly land that is contiguous to existing urban or residential land areas (such as areas surrounding the town centers of Honoka‘a, Pa‘auilo, and Laupahoehoe).
3. Urge Hawai‘i County government not to sell County land in Hāmākua in order to preserve the option of using it to create affordable housing.
4. Urge Hawai‘i County to allow denser residential development, including smaller lots and multi-family dwelling units, in areas contiguous with land that has urban land use designation, and maintain the look and feel of existing plantation-era buildings and neighborhoods, e.g., an affordable housing “village” that resembles the existing sugar worker camps in Pa‘auhau and Pa‘auilo.
5. Work with Hawai‘i County in developing price controls of new affordable housing (e.g., with shared appreciation or buy-back controls) and permanently restrict resale or take other steps to preserve the affordable housing stock as long as possible.
6. Urge Hawai‘i County Council to increase substantially the real property tax paid by non-occupant residential land owners, subject to a lower tax rate if the property is used to provide long-term affordable rental housing, and use the extra tax collected to support the creation of new affordable housing.
7. Urge Hawai‘i County to allow the construction of farm dwellings on agricultural land leased from Hawai‘i Department of Agriculture or the Hawai‘i Department of Land and Natural Resources based on leased parcels rather than the overall tax map key, approve the use of catchment for water, and relax infrastructure requirements.

## **Access**

1. Identify ways in which existing Hawai‘i’s laws pertaining to public access can be strengthened and obtain support of legislators and citizens to get the laws amended and/or enforced.
2. Make recommendations to the newly formed Hawai‘i County Public Access, Open Space, and Natural Resources Preservation Commission regarding Hāmākua land that should be considered for inclusion in the prioritized list of qualifying lands.

## State

### **Environment**

1. Encourage Agricultural groups such as the Farm Bureau and Department of Agriculture to coordinate, clearly define and make accessible, information on overlapping environmental governmental regulations and their economic impacts to agriculture producers.
2. Encourage the State Department of Agriculture, the University of Hawai'i and Pacific Basin Agriculture Research Center to develop programs specific to organic and sustainable agriculture practices.

### **Affordable Housing**

1. Urge State and County government to do everything possible to encourage, support, and facilitate the creation of new affordable housing in Hāmākua.
2. Urge State and County government to provide and/or acquire land for building new affordable housing, particularly land that is contiguous to existing urban or residential land areas (such as areas surrounding the town centers of Honoka'a, Pa'auilo, and Laupahoehoe).
3. Work with Hawai'i Department of Agriculture and the Hawai'i Department of Land and Natural Resources to identify workable ways to allow farmers who lease agricultural land under their jurisdiction to construct residences.

### **Access**

1. Identify ways in which existing Hawai'i's laws pertaining to public access can be strengthened and obtain support of legislators and citizens to get the laws amended and/or enforced.

## Kamehameha Schools

### **Land Use**

1. Request that Kamehameha Schools make long-term leases for diversified agriculture (particularly family farms and ranches) available on a substantial portion of the agricultural land it owns in Hāmākua.

### **Affordable Housing**

1. Urge Kamehameha Schools to make more long-term leases for diversified agriculture available on its Hāmākua agricultural land, and to permit lessees to build dwellings for themselves and their workers.

## Community

### Land Use

1. Promote the responsible use of agriculture lands in Hāmākua.
2. Create a community board that will gather and provide community input to the County Planning Commission and County Council regarding special permits and agricultural tourism to ensure they will not negatively affect agricultural producers and Hāmākua’s rural lifestyle.
3. Create a community-based action committee or board to gather community input for Hāmākua land use decisions.
4. Explore and identify “smart growth” strategies that will direct future growth in a thoughtful way with the least negative impact to Hāmākua.
5. Participate in the Community Development Plan process. Seek input and report progress to/from the community.
6. Explore creating a nonprofit “Hāmākua Agricultural Conservancy” governed by a community-based board, patterned on the highly successful Nature Conservancy, to acquire important Hāmākua agricultural land from government and private owners for preservation and availability at below-market rates for long-term agricultural leases.
7. Encourage and support other public and private means of permanently preserving Hāmākua agriculture lands through land trusts, land banks, and other methods.

### Economic Development

1. Create and maintain a database of agricultural producers, their crops and their needs.
2. Create, maintain and make available to agricultural producers a database of resources that address the needs of the farmers and ranchers.
3. Create and promote educational opportunities for farmers and ranchers.
4. Work with the North Hawai`i Education Center in providing classes related to agriculture.
5. Keep the community informed about agriculture issues.
6. Encourage the use of the Lower Hāmākua Ditch System.
7. Explore the development and impact of agricultural tourism.
8. Secure funding to create and implement a business and marketing plan for cooperative marketing and processing of Hāmākua grown products.
9. Identify and encourage ways that existing facilities can be fully utilized.
10. Create multi-functional processing, storage and distribution facility(ies).
11. Explore and provide opportunities for the creation of value-added products for Hāmākua grown products.
12. Support and facilitate “farm clusters” that grow similar products and have similar visions and that will help support each other.

13. Work with the University Extension Service, USDA, NRCS and others to facilitate education and economic success.
14. Research and emulate successful agricultural models and encourage local agriculture producers to share their successful practices.
15. Design and create a Hāmākua Grown trademark label.
16. Register the trademark with the State of Hawai`i.
17. Develop quality standards for the trademark.
18. Create and implement a plan to initiate use of the label.
19. Obtain funding to promote the development and marketing of Hāmākua Grown products.

### **Lower Hāmākua Ditch**

1. Produce a strategic plan to identify possible uses for ranching, farming, aquaculture, hydroelectric generation, and eco-tourism.
2. Explore how water from the LHD can be used to economically irrigate intensively grazed pastureland and farms.
3. Create a database of users and organizations to keep informed and notified about water issues.
4. Explore improving the transmission capacity of the Lower Hāmākua Ditch from Kalopa to Pa`auilo.
5. Facilitate communication between stakeholders (users, community groups and government entities) by holding regular meetings to discuss, address and prioritize current and future needs, expansion, and funding issues.
6. Continue working with the State to minimize emergency situations through the use of excellent communication between all stakeholders and relevant proactive anticipation of needs and funding.
7. Support the removal of sediment from the ditch system.
8. Explore ways to fence areas of the ditch to prevent livestock from entering and damaging the system.
9. Publish and disseminate relevant information to the greater Hāmākua community.
10. Publish stories and interviews of the past and present in the media.
11. Create a video documentary on the history and future of the Lower Hāmākua Ditch System.
12. Explore ways for the community to celebrate the Lower Hāmākua Ditch.
13. Include the Lower Hāmākua Ditch in local festivals and celebrations (Ditch tours, inner-tube convoys, rubber ducky races, and so forth).

### **Environment**

1. Promote the use of and enrollment in soil and water conservation programs through Natural Resources Conservation Service (“NRCS”), Hāmākua Soil & Water Conservation District (“SWCD”), and Mauna Kea Soil & Water Conservation District.

2. Establish an educational program to help ensure the effective, efficient and safe use of pesticides, herbicides, and fertilizers and minimize their possible adverse impacts on the public and environment.
3. Establish a program with appropriate agencies or organizations to assist in identifying soil and water contamination on former sugar lands and in remediation of such contamination.
4. Make written materials and speakers available to educate agricultural producers regarding environmentally friendly alternatives to chemical agriculture products.
5. Encourage and expand Integrated Pest and Disease Management programs
6. Manage present populations and prevent further introductions of destructive and harmful alien species.
7. Encourage agricultural producers to sign up for the Fruit Fly Cooperators program.
8. Promote and implement consumer and producer educational programs on agricultural stewardship.
9. Provide educational opportunities for existing and future agricultural producers to learn more about the economic and other benefits of organic and sustainable agricultural practices, possibly including classes at the North Hawai'i Education Center and through local schools.
10. Promote opportunities for marketing organic produce and livestock within the Hāmākua community.
11. Create edible gardens at Hāmākua schools, with an emphasis on organic practices, to provide students with the opportunity to learn from experienced gardeners and farmers, and involve the community in the creation and maintenance of the gardens.
12. Teach students the “cycle of food,” from preparing the soil to planting, watering and nurturing, harvesting, cooking, tasting, and finally composting and returning back to the soil.
13. Promote 4-H programs in Hāmākua schools and encourage them to teach about organic and sustainable practices as well as traditional agriculture practices.
14. Encourage composting and offer composting workshops to the community.
15. Add green waste facilities at Honoka'a and other Hāmākua transfer stations to allow community members to recycle garden cuttings and other green waste.
16. Provide educational opportunities to agriculture producers and other community members so they can evaluate the potential risks and benefits of GMO crops before planting them in Hāmākua.
17. Hold educational meetings to inform agricultural producers of the potential legal liability they may face if they plant GMO crops or if their own crops are contaminated by GMO crops planted by others.
18. Obtain a non-biased evaluation of the economic impact of growing GMO papayas on the Big Island, both on farmers who grow GMO papayas and on those who choose to grow non-GMO papayas.
19. Form a Hāmākua community advisory committee to assess the potential health, environmental, and financial risks and benefits of GMO crops and

make recommendations to the Hawai'i County Mayor and Hawai'i County Council.

20. Attract and support agricultural producers who wish to take advantage of market driven opportunities in global and domestic markets for GMO-free agricultural products.

### **Affordable Housing**

1. Create a community-based committee to prepare a strategic plan for addressing the affordable housing shortage in Hāmākua for submission to the Hawai'i County Mayor, Hawai'i County Council, Governor, Hawai'i State Legislature, and other appropriate organizations and agencies.
2. Encourage the use of State and County funds to subsidize the cost of constructing affordable housing.
3. Monitor the effects of recent amendments to the County of Hawai'i affordable housing policy (Chapter 11 of the Hawai'i County Code). Consider urging the Hawai'i County Council to: (i) eliminate the option of paying in-lieu fees instead of providing affordable housing units, (ii) require that affordable housing be built within the land that is to be developed, (iii) require that at least 30% of the total units to be developed be affordable housing units, and (iv) apply these requirements to all requests involving more than four units.
4. Explore and make maximum use of available grants, low-interest loans, and other programs intended to help create affordable housing from the Federal (particularly the U.S. Department of Agriculture and U.S. Department of Housing and Urban Development), State, and County government and from non-governmental sources.
5. Explore and make full and creative use of tax credits, low-interest loans, and other incentives to developers willing to build affordable housing units.
6. Identify the best locations for low rise multi-family affordable rental buildings in Hāmākua, preferably intermixed with other residential development to help prevent creating problem districts or "slums," with housing associations and rules to help ensure proper maintenance and appearance.
7. Maximize use in affordable housing of energy-saving measures, including solar hot water heating, to reduce occupants' utility costs, and explore grants and other incentives to achieve this goal.

### **Access**

1. Gather input from residents knowledgeable about traditional access-ways.
2. Develop a method by which to evaluate which accesses should receive priority attention.
3. Research the landownership/management of each access of interest and the reasons for closure (if closed).
4. Work with the public agencies that have jurisdiction over the public lands and/or rights of way that are identified as priority.

5. Meet with landowners/managers of the priority accesses to identify their concerns and suggest public access arrangements that might address their concerns.
6. Identify ways in which existing Hawai`i's laws pertaining to public access can be strengthened and obtain support of legislators and citizens to get the laws amended and/or enforced.
7. Reach out to residents (Hawai`ians and other ethnicities) that are knowledgeable about traditional accesses and lifestyles to become part of the coalition that is formed.
8. Participate in community events that will heighten the awareness, appreciation, and care of access-ways.
9. Conduct clean-up projects along accesses that are currently open to public use.
10. Use clean-up projects to raise awareness of the responsibilities that go along with the privileges of public access.
11. Determine the “ingredients” for successful public access arrangements through partnerships and demonstration projects.

## **Community**

1. Identify, support and promote existing initiatives that perpetuate Hawai`i an culture.
2. Identify, preserve and protect historically, archaeologically and culturally significant areas, sites, and features within the Hāmākua District.
3. Encourage the recordation of local history.
4. Promote development of educational and cultural programs that emphasize the perpetuation of Hawai`ian arts, crafts and cultural practices.
5. Create a cultural center that will showcase our past and provide opportunities to pass on the culture to future generations.
6. Create ways to celebrate our past and diversity through festivals and community events.
7. Collaborate with farmers to encourage plantings and markets for traditional crops.
8. Assist in the creation of parks, trails and designated “open” areas.
9. Explore ways to discourage large “chain” stores from entering the area.
10. Develop an education program that will foster an understanding of the importance of being good stewards of the land.
11. Initiate a “Buy Local” campaign in Hāmākua.
12. Explore how we can expand the existing farmers market or create new opportunities for direct farmer to public sales.
13. Develop and maintain a dynamic forum for the community to come together to participate in finding solutions to community issues.
14. Explore and identify ways to have broader community participation.
15. Develop and maintain an educational system that will offer the youth and adults of the region opportunities and choices for self and community improvement.
16. Explore how to create job opportunities close to home for Hāmākua residents.

**Information, Education and Implementation**

1. Determine why some people do not participate and get input through as many mediums as possible.
2. Insure adequate notification to community members of Hāmākua Agriculture Plan meetings.
3. Contact other community groups for input.
4. Address language barriers and solicit culturally and ethnically diverse groups.
5. Attend Planning Council Meetings, write letters to representatives and develop network for telephone, letter writing and e-mail support campaigns.
6. Follow process that levels playing field, giving community ability to identify and prioritize issues in a way that does not give advantage to louder or more eloquent speakers.
7. Continuously research and provide access to relevant information about the processes of the County and State government.
8. Assist in the dissemination of information about relevant County Council and committee meetings and public hearings.
9. Establish web site of agricultural and informational links for community use.