FOOD SECURITY IN HAWAIʻI

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According to the Food and Agriculture Organization of the United Nations, "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs for an active and healthy life (FAO 2009, 8)."

Food insecurity can take many different forms. This essay explores three broad concerns for Hawaiʻi: overall food supply, disasters, and poverty. Each of these broad categories covers a variety of specific issues. For example, overall food supply is about food quantity and quality now and in the future, under various contingencies. It would include consideration of agriculture, processing, transport, infant feeding, nutrition-related health problems, genetically modified organisms, etc. under various long-term economic and climate scenarios. Disaster refers not only to tsunamis and earthquakes but also to economic collapse, terrorism, food supply crises, and other kinds of emergencies. Poverty refers to the difficulties in obtaining adequate food by low-income individuals. Food security should be recognized as multi-dimensional, raising a broad variety of concerns for which policies and planning are needed.

OVERALL FOOD SUPPLY

Before contact, Hawai‘i was self-sufficient in terms of food, by necessity, not by choice. There were periodic famines (*wī*), usually due to disruptive events such as epidemics and warfare (Schmitt 1970). After contact, Hawai‘i became involved in exporting, sometimes with serious consequences:

> Because the chiefs and commoners in large numbers went out cutting and carrying sandalwood, famine was experienced from Hawai‘i to Kauai . . . The people were forced to eat herbs and fern trunks, because there was no food to be had. When Kamehameha saw that the country was in the grip of a severe famine, he ordered the chiefs and commoners not to devote all their time to cutting sandalwood (Kuykendall, as quoted in Schmitt 1970, 113).

If the efforts used to harvest sandalwood were instead devoted to harvesting or raising food, the famine could have been averted.

Hawai‘i’s involvement in exporting food products began around the middle of the 19th century, driven primarily by investors from outside Hawai‘i. In the 1860s a new variety of rice was introduced, rapidly replacing taro. Rice production increased rapidly, not to feed the local population, but for export. Since the demand for rice production was for profit, not for local consumers, it was unlimited. Rice exports reached more than 13 million tons in 1887. As early as 1861, the concern about the rapid displacement of taro became so serious, the *Commercial Pacific Advertiser* asked, “where is our taro to come from (Haraguchi 1987, xiii, xiv)?”

Later, sugar and pineapple became the dominant export crops. A key factor in the transition was the Reciprocity Agreement between the United States and the independent nation of Hawai‘i in 1875 (Boutwell 1886; Treaty of Reciprocity 1875). Based primarily on sugar, it was negotiated by and for western businessmen living in Hawai‘i. It was highly beneficial for the businessmen, but it did little good for the indigenous people of Hawai‘i. The agreement was one of the major factors leading to the United States' overthrow of the Hawaiian leadership and the annexation of the country by the United States in 1898.

Throughout Hawai‘i's history, changes in the pattern of land use have reflected changes in the configuration of political power (Cooper and Daws 1985). Under the control of settlers, Hawai‘i became a major exporter of food products, based mainly on its sugar and pineapple plantations. Largely due to high costs of land and labor, the plantation era ended in the late 20th century. Tourism and the large U.S. military presence became the major sources of income from outside Hawai‘i. A chronology of the development of agriculture in Hawai‘i may be found at http://hdoa.hawaii.gov/wp-content/uploads/2013/01/HISTORY-OF-AGRICULTURE-IN-HAWAII.pdf

Much of Hawai‘i's food production for local consumption has now been displaced by imported foods. This has raised alarm in many quarters. In 2012 the Hawai‘i State House's self-sufficiency bill, HB2703 HD2, said Hawai‘i is dangerously dependent on imported food:

> As the most geographically isolated state in the country, Hawai‘i imports approximately ninety-two per cent of its food, according to the United States

> Department of Agriculture. Currently, Hawai‘i has a supply of fresh produce for no more than ten days. Ninety per cent of the beef, sixty-seven per cent of the fresh vegetables, sixty-five per cent of the fresh fruits, and eighty per cent of all milk purchased in the State are imported. The legislature further finds that Hawai‘i's reliance on out-of-state sources of food places residents directly at risk of food shortages in the event of natural disasters, economic disruption, and other external factors beyond the State's control (Hawai‘i State Legislature 2012).

Similar language was presented in the 2013 legislative session, in Senate Bill 937 “Relating to Hawai‘i Food Resiliency”.

Most analysts agree that Hawai‘i currently imports 85 percent or more of its food from the U.S. mainland and from other countries (Leung 2008; Page 2007, 23). Some analyses focus specifically on imports and local production of fresh fruits and vegetables (Lee and Bittenbender 2007, 87-88; Southichack 2007).

Both the 2012 and 2013 bills raised the import-replacement argument:

> The legislature further finds that each food product imported to Hawai‘i is a lost opportunity for local economic growth. The legislature notes that according to the University of Hawai‘i college of tropical agriculture and human resources, an increase in the production and sale of Hawai‘i-grown agricultural commodities would contribute to significant job creation. The research shows that replacing ten

per cent of current food imports will create a total of two thousand three hundred jobs (Hawai‘i State Legislature 2012).

However, this analysis favors the producers' perspective and does not give sufficient attention to consumers' interests. Increasing purchases of locally produced foods would benefit local farmers, but it could also mean that consumers would have to pay higher prices. The main reason Hawai‘i imports much of its food is that it cannot produce the food as cheaply as it can import it.

Many people believe Hawai‘i should produce more of its own food because the long-distance transportation of food to Hawai‘i leads to high economic and environmental costs. However, little research has been done on this. One study found that, in comparison with its foreign competitors, "Hawai‘i agricultural commodities do not have across-the-board transportation disadvantages as is generally perceived (Cai, PingSun, and Loke. 2007)." The Jones act, which requires that shipping between U.S. ports must be done on U.S.-flagged ships, increases Hawai‘i's ocean transport costs, but we don't know how much effect that has on final retail prices for the products.

The fact that food shipped to Hawai'i must travel long distances does not necessarily mean that it faces higher transport costs than places on the mainland. In ocean shipping as in many other forms of transportation, the major costs are in the handling at both ends. The amount of handling that is required may be more important than the number of miles traveled.

In terms of unit economic cost per mile, ocean transport is cheap when compared with land-based transportation. If it were not, Hawai‘i would never have become a major exporter of sugar and pineapple. Currently, New Zealand exports dairy products to much of the world. The high food prices in Hawai‘i’s retail outlets may be due not so much to transport costs as to the fact that the retailers face less competition in Hawai‘i than they do on the mainland, and thus can charge higher prices. High real estate and utility costs also have to be considered.

Food security in Hawai‘i is often understood in terms of possible interruptions to food imports, but there are other possible threats as well. For example, local climate change, bee mites, and disruptions in water supply could threaten Hawai‘i’s agriculture. Local economic weaknesses of various kinds can lead to sharp reductions in local food production, as we have seen in dairy and meat production. Hawai‘i has been fortunate so far in not having had any major food safety incidents, but there are safety risks.

There is a great deal of concern about the impacts of genetic modification of food products, especially the economic impacts at the primary production end and the health impacts at the consumption end. About 6,000 acres of Hawai‘i’s agricultural land is devoted to production of and research on seeds, including seeds for genetically modified products (Conrow 2009; Gomes 2013). Many people feel that using that land to produce food for local consumption would contribute much more to the well-being of Hawai‘i’s people.

Expand Food Production?

While there is potential for increasing food production on local farms, there are huge challenges from competing uses of the land. First, there are forces that take land out of agriculture, such as encroaching housing developments and golf courses. Second, much of the agricultural land is used to produce crops other than food, such as seeds, biofuels, and ornamentals. Third, where there is food production, much of it is not basic food. Items such as coffee, macadamia nuts, and herbs would not be needed when food supplies are short. Fourth, some of the food that is produced is exported from the state. Fifth, it can be difficult for local farmers to compete with producers elsewhere who face lower land and labor costs.

Small-scale food production could be increased in Hawai‘i by making better uses of lawns, rooftops, schoolyards, and prisons. The worldwide movement to promote urban agriculture has developed many techniques that could be promoted in Hawai'i. Many are already being tested in Hawai‘i.

In some cases the promotion of agriculture is mainly about protecting the livelihoods of small farmers, not about the products they deliver. For example, in the struggle to preserve the small farms in Kamilo Nui Valley in Hawai‘i Kai, its defenders have not claimed this valley has been making an important contribution to the state’s food supply. It is important as the basis for the livelihood of the farmers who work the land there. Similarly, while the front page of the local newspaper might headline, “Blight Threatens Basil” (Nakaso 2011, A1, B1), that evokes little concern about Hawai‘i’s basic food supply. The objectives of ensuring food security and

protecting farmers' livelihoods are both important, but they should not be confused with one another.

Hawai‘i's supply of land is limited, but its supply of ocean is not. However, food production in the ocean is difficult. Natural marine fisheries around the islands have never been highly productive because of the great depth of near shore waters, and the absence of nutrient upwelling associated with continental shelves. The reef fisheries have been severely depleted, so the great majority of fish consumption in Hawai‘i is based on imports. There are attempts to revive traditional aquaculture methods, but they do not produce large volumes. Modern commercial aquaculture in Hawai‘i has a checkered business record, with highly publicized ambitious start-ups, often followed by quiet shut-downs. Some of the operations are owned and operated by businesses based outside Hawai‘i, and produce primarily for export, thus contributing little to the local food supply. There is growing interest in aquaponics as an environmentally friendly method of combining aquaculture and farming.

Hawai‘i's farm revenue set a record of $642 million in 1980. It totaled $629 million in 2009 (Gomes 2011). It was $631 million in 2011 (USDA 2013). With the steady decline of large-scale plantation agriculture, especially sugar and pineapple, average farm size declined to 149 acres in 2007. Almost 94 percent of Hawaii's farms are under 100 acres. In 2007, 65.7 percent of the farms had annual sales of under $10,000. The net farm income in 2011 was estimated at $231,241,000 (USDSA 2013), which means the 7,500 farms had an average income of $30,832. The income levels for small farms was much lower than this average.

In terms of farm receipts, the top five agricultural commodities in 2011 were sugar cane, greenhouse/nursery items, cattle and calves, macadamia nuts, and coffee (USDA 2013). Thus, much of the farm revenue was for non-food products and for exports. There are no clear data on the proportion of Hawai‘i’s farm revenue attributable to food consumed within the state, but it can be estimated as being about $400 million per year. Hawai‘i’s total food imports can be estimated as roughly $2 billion per year. On this basis, Hawai‘i farms produce roughly 20 percent of the state’s food supply, in terms of monetary value. Probably about 80 percent of the imports are from the U.S. mainland, and the remaining 20 percent from the rest of the world.

A substantial share of the food produced and consumed in Hawai‘i goes to military families and tourists. Perhaps that share should be excluded from calculations about the degree to which local agriculture contributes to local food self-sufficiency.

Some local food production operations are owned by outsiders. Their products may be sold and consumed locally, but if much of the profit goes elsewhere, and control of these operations also is based elsewhere, it is not clear that these operations really contribute to local self-sufficiency.

Many of Hawai‘i’s agriculture workers have been immigrants, and that pattern is likely to continue in the future. The significance of this for Hawai‘i’s self-sufficiency should be given some thought.

As in other high-income places, most of Hawai‘i’s food money goes to processors, not farmers. Most of it goes to processors outside Hawai‘i. Only about 7,300 people work in food processing

in Hawai‘i (Yonan 2011). There are opportunities to expand the food processing sector (Hawai‘i Food Manufacturers Association 2011), but the potential is limited because Hawai‘i’s processors must work with high costs and small volumes, and compete with large-scale processors based elsewhere.

Hawai‘i’s physical environment could support production of a wide variety of food items, but the high land and labor costs make increasing production difficult. Moreover, Hawai‘i could not produce the wide variety of products it now imports. Full self-sufficiency would be impractical, and getting close to full self-sufficiency would require radical changes in diet and lifestyle. Some people would welcome those changes, and others would not.

Self-Sufficiency and Resiliency

There is a great deal of enthusiasm for increasing local food self-sufficiency, in the state government and in the community. However, some writers have suggested the arguments for localization of food supplies everywhere might be overstated (Dean 2007; Desrochers and Shimizu 2008; DeWeert 2009; McWilliams 2009; Roberts 2009; Singer 2007). Pushing food self-sufficiency too far or in the wrong way could increase costs to consumers, and it could reduce local food security by creating overdependence on one source. If it is not managed well, it could lead to the depletion of local resources. Increasing self-sufficiency could be advantageous to certain groups, such as farmers, while being disadvantageous to others, such as the non-farming poor.

There is a need for discussion about how far and how fast localization should go. The degree of self-sufficiency is not something that should be maximized. It should be optimized, taking a broad variety of considerations into account.

It would be good for Hawai‘i to have the *capacity* to be food self-sufficient in case it was suddenly isolated from the rest of the world. But if Hawai‘i pushes for *actual* self-sufficiency long before it is needed, its people would forego the benefits that come with trade. It would be a bit like moving the family into the basement now because a storm is likely to come in the next few years. Preparing is one thing; doing it is something else.

The food self-sufficiency bill of 2012 turned into the food resiliency bill of 2013. The 2012 version said, “increasing local production will ensure that Hawai‘i's food sources will be more resilient to global supply disruptions, better able to cope with increasing global demand and shortages of commodities such as oil, and better prepared to deal with potential global food scarcities.” The 2013 version, in Senate Bill 937 had similar language. These concepts needs to be explained.

Worldwatch defines resilience as “The ability of natural or human systems to survive in the face of great change”:

> To be resilient, a system must be able to adapt to changing circumstances and develop new ways to thrive. In ecological terms, resilience has been used to

> describe the ability of natural systems to return to equilibrium after adapting to changes. In climate change, resilience can also convey the capacity and ability of society to make necessary adaptations to a changing world -- and not necessarily structures that will carry forward the status quo. In this perspective, resilience affords an opportunity to make systemic changes during adaptation, such as addressing social inequalities (Worldwatch 2009).

On this basis, resilience in a food system would mean being able to choose from a variety of alternative food sources, and being ready to jump from one to another in an agile way with changing conditions. Resiliency is different from self-sufficiency. Food security, in the sense of ensuring access to food under all conditions, comes mainly from resiliency, not self-sufficiency.

Hawai‘i should have a variety of food sources available so that if one fails or weakens, it would be possible to shift to other sources. Hawai‘i already does that on a regular basis for fresh produce, with wholesalers jumping around to different sources, opportunistically. Increasing Hawai‘i’s capacity to produce its own food would increase its resiliency to the extent that it added another source of food. However, if it displaced other sources, the result could be decreased resiliency.

Hawai‘i should not pursue food self-sufficiency to the extent that it allows its contacts with other sources of food to wither away. Just as Hawai‘i should not be overly dependent on imports, it should not be overly dependent on its own production.

DISASTERS

Hawai‘i has had a long run of good fortune, but it is not immune from disasters (Schmitt 1969; 1989). Given its huge dependence on imports, the state is especially concerned about possible disruptions in transport to the islands. In 1949, when it was still a territory of the U.S., Hawai‘i suffered through a shipping strike, and wondered aloud about what the U.S. government would do to help (Time 1949). Hawai‘i is now a state of the United States, but it is still not clear what help the U.S. government would offer if Hawai‘i, and possibly the U.S. government itself, encountered some sort of extreme situation.

Disaster is defined by the United Nations International Strategy for Disaster Reduction as:

> A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources (UNISDR 2009).

Resilience can be understood as the capacity to make adaptations to the existing food system in response to changes in the physical or economic environment. In dealing with slow and permanent changes, it is about creating a new kind of “normal”. In disaster planning, however, the concern is to find ways to prepare for quick changes, especially unanticipated quick changes. Usually disaster planning is based on the hope that the impact will be of short duration, and it

will be possible to return to the old normal, the same basic food system that had existed before the disruption. In extreme disasters that system may need to be reconfigured with great urgency.

Hawai‘i has not yet had major problems with its overall food supply, but there is a need for concern because Hawai‘i imports so much of its food. Disruptions to the import delivery system could be disastrous, especially if the disruption is sudden and Hawai‘i is unprepared.

Production

Some plans for strengthening Hawai'i's food security focus on increasing the amount of locally grown food consumed by Hawai'i residents (Office of Planning 2012). Expanding consumption of local produce would be helpful, but it would not be enough to ensure future food security in all its dimensions. To illustrate, if there were to be a sudden cutoff in imported food, and there was reason to believe that it would last a long time, we would need a rapid switchover from production of non-foods and nutritionally unimportant foods (e.g., coffee, macadamia nuts, herbs) to basic foods to ensure that everyone is well nourished. Historical wartime mobilizations elsewhere suggest the possibilities for rapidly increasing local production of basic food. Plans should be made well in advance to facilitate such a conversion if and when it should become necessary.

In extreme emergencies, national and local governments might not be able to cope. Thus, some people focus on household and local food production, taking measures that are independent of

government initiatives. For many people this is an ideological issue, based on the premise that even in good times, families and local communities ought to depend mainly on foods that they themselves produce. So-called "survivalists" are likely to prepare well in advance to produce their own food in case of disaster. In some situations, as in sudden-onset wars, people may improvise by starting gardens after the onset of the disastrous event (Helphand 2006).

Storing Food

To deal with emergencies, it is important to work not only on food production but also on food storage, at the state level, in communities, and in households. Household food storage is increasingly important because the major food sellers no longer maintain large warehouses. The "just in time" delivery system has sharply reduced the merchants' need for warehouses, so now, if shipping to the state were to be suddenly cut off, the stock of food would last no more than a few days. Many people store non-perishables and water supplies in their basements or closets as a hedge against emergencies. Groceries now sell specially designed emergency food supplies to be stored at home.

Historically, many cultures have identified particular famine foods. Sweet potatoes are especially good for this purpose, and could be grown in places that are not farmed, such as forests and meadows (Kristof 2010). In Hawai‘i, `ulu (breadfruit) played an important role in protection against disasters:

> Legend traces its origin to a time of famine when Kū, the god of building and war, buried himself in the earth near his home. He later turned into an `ulu tree so that his wife and children would not starve. Because of this, `ulu was considered "famine" food. `Ulu was one of the plants Polynesians brought in their sailing canoes when they discovered the Hawaiian Islands. It is a staple food throughout the Pacific, and in ancient Hawai‘i it was a crop of much greater nutritional, cultural, and political significance (Pukui 1983).

Seeds are easier to store than fresh foods. It might be wise for the state government to store seeds for nutritious foods that could be planted at the first signs of disruption of the food system.

Hawai‘i should prepare for many different kinds of contingencies. The state could be deeply affected by disasters locally, and also by disasters elsewhere if they interrupt the flow of food to Hawai‘i. For example, if bees stopped doing their pollination work in Hawai‘i, its agriculture system could weaken or even collapse. It would then have to import more food. If the bees quit working in some places outside Hawai‘i, it could import from other places. If the bees quit everywhere, everyone would be in trouble.

Hawai‘i should be concerned not only about actual shortages but anticipated shortages as well. If rumors build up about a possible shipping interruptions, there could be a run on all the food stores. Apparently there is no governmental plan for dealing with hoarding before, during, or after disaster events.

At the global level, speculation in food commodities can be viewed as another form of hoarding, one that could result in increased food insecurity for many people. The great global land grab, in which rich countries are gaining control over poor countries agricultural resources to ensure their own future food security, is another form of hoarding at the global level (CHR&GJ 2010). Hawai‘i is not immune from such forces. To illustrate, if Hawai‘i’s regular sources of rice suddenly diverted their production to other buyers, Hawai‘i would be in serious trouble. The state is not going to restore Waikīkī to rice production.

In prolonged emergencies there might be a need for food rationing of some sort. In extreme situations there might be a need for martial law in Hawai‘i, as there was in the 1940s (Bennett 1942). It appears that there is no plan for rationing existing stocks of food in emergencies.

As indicated above, the United Nations defines disasters as situations that are beyond the coping abilities of any particular place. This means that in disaster planning we must go beyond strengthening the capacities of individuals, families, and communities. There is a need to work out systems for assistance among different places. This could mean systems of support from one ahupua‘a to another, one island to another, or the entire state of Hawai‘i to the U.S., other nations, or the global community as a whole.

Despite Hawai‘i’s vulnerabilities, these relations have not been worked out with the clarity and foresight that is needed. If Hawai‘i had a big problem with its food supply, it might be able to get help from the outside, but there are huge uncertainties. Who would the aid come from, on what terms? Some people might assume that the U.S. government would come to Hawai‘i’s assistance

under various contingencies, but we don't know for sure. How long would the U.S. government help? In what ways? Are there commitments in writing? What if the entire U.S. faces an emergency and becomes unable to come to Hawai‘i's assistance? Where else could Hawai‘i direct its appeals for help?

Ideas on how to approach these issues are suggested by the Model Intrastate Mutual Aid Legislation, available through the Hawai‘i State Civil Defense website at http://www.scd.Hawai‘i.gov/nims.html Much work remains to be done on this.

Attention should be given to the food-related dimensions of disasters such as tsunamis and earthquakes. In all disasters there are food-related problems that begin to show up as soon as the official warnings begin, and maybe even earlier, with runs on the stores. Any sort of prolonged disaster would raise serious concerns about food. Also, while the State Civil Defense system focuses on hazards such as tsunamis and earthquakes, it does not give attention to possible food-centered disasters such as shipping interruptions or disruptions in the state's agriculture.

Plans should be made for dealing with food crises regardless of the cause of the disruption. The benefits would far outweigh its costs. However, there is currently no clear mandate for any agency of state government in Hawai'i to undertake this work.

POVERTY

The abundance of the food supply in Hawai‘i, now or in the future, is of little benefit to people who do not have the money that is needed to gain access to it. As Jean Drèze and Amartya Sen argue:

> What we can eat depends on what food we are able to acquire . . . . The set of alternative bundles of commodities over which a person can establish such command will be referred to as this person’s "entitlement.” If a group of people fail to establish their entitlement over an adequate amount of food, they have to go hungry (Drèze and Sen 1989*,* 9, 22).

Poverty-based food insecurity occurs in high-income as well as low-income countries. A great deal could be learned from the way it is addressed in other high-income countries (e.g., Sydney Food 2011). In many countries the problem of the food security of the poor is given little attention, but it occurs in some degree everywhere.

In the U.S. the federal government has been undertaking regular studies of food insecurity, focusing on the type that is associated with poverty. Adapting the U.S. Department of Agriculture’s methods, the state’s Department of Health in 2001 explored the issues more deeply. It concluded, “food insecurity was prevalent in Hawai‘i: one in six (16.4%) households and 1 in 5 (19.2%) individuals experienced either being at risk of hunger or experiencing hunger in 1999-2000. The poor, children, single adult households, and Pacific Islanders were particularly vulnerable.” In Waimanalo, Wai‘anae, Puna, Ka‘a‘awa, and Moloka‘i, more than thirty percent of the people lived in households that were not sure how they would get their food.

Because of the high cost of living, many people who are not poor officially suffer from food insecurity (HDOH 2001).

For many years the official poverty rate in Hawai‘i was estimated to hover around ten percent. However, recent studies by the U.S. Census Bureau suggest the rate may be above 17 percent, making Hawai'i the seventh poorest state in the U.S. (Vorsino 2012). Among the different ethnic groups, native Hawaiians have the lowest average family income (Kana’iaupuni et al. 2005). The impact is clear in the distribution of food insecurity in Hawai‘i.

Another study on poverty-related food insecurity in Hawai‘i was published in 2002 (Giles, Zaman, and Derrickson 2002). It used the USDA framework, but went further by sketching out a proposed Community Food Security Plan. It emphasized the need for action by the state legislature, and described several bills that were submitted to the legislature. The bills were not passed.

The share of Hawaii’s population that is food insecure has been increasing. As shown in Table 1, averaging for the years 2009-2011, 19.4 percent of Hawai‘i’s households had low or very low food security. Poverty-based food insecurity is a persistent issue in the state, and, as indicated above, the prevalence is higher among particular groups. Food insecurity in Hawai‘i has been increasing in recent years.

<Place Table 1 about here.>

The USDA has had to take into account the extraordinarily high price of food in just two states. “For residents in Alaska and Hawai‘i, the Thrifty Food Plan costs were adjusted upward by 19 percent and 63 percent, respectively, to reflect the higher cost of the Thrifty Food Plan in those States (Nord et al. 2010, 57, note 3).” Higher food prices mean greater food insecurity for much of the state’s population, not just the very poor.

While the state government has not addressed the issue of food security in a systematic way, there are many nongovernmental organizations that work on it. Small organizations serve the needy directly in various locations throughout the state. Some organizations, such as Aloha Harvest and the Hawai'i Foodbank, support these smaller organizations.

The Hawai‘i Foodbank, for example, describes itself as

> . . . the only nonprofit 501(c)3 agency in the state of Hawai‘i that collects, warehouses and distributes mass quantities of both perishable and non-perishable food to 250 member agencies as well as food banks on the Big Island, Maui and Kauai.

In one year the Hawai‘i Foodbank, through its cooperating agencies, served 183,500 different people in the state, including more than 55,000 children and more than 11,000 seniors. The Foodbank said:

- 79 percent of client households served are food insecure, meaning they do not always know where they will find their next meal.
- 43 percent of these client households are experiencing food insecurity with hunger, meaning they are sometimes completely without a source of food.
- 83 percent of client households with children served are also food insecure.
- Of the 183,500 people the Hawai‘i Foodbank network serves:
    - 79 percent of households have incomes below the federal poverty line
    - The average monthly income for client households is $850.
    - 42 percent of households have one or more adults who are working (Hawai‘i Foodbank 2010).

Each year the Foodbank organizes large-scale campaigns to collect non-perishable food products from many different donors. It then provides food at little or no cost to agencies such as the Giving Tree, the Institute for Human Services, Salvation Army, Waikīkī Health Center, River of Life Mission, Kau Kau Wagon, Harbor House, and many church pantries so that they can respond to food insecurity and related problems. The programs that hand out food to the needy do a good job of tiding people over, but many unmet needs remain.

The Foodbank periodically raises the alarm about widespread hunger in the state when it conducts its food collection drives, but historically the state government has said little about the issue. This may leave people uncertain as to whether it is really a serious problem in Hawai‘i.

The state government administers the hundred of millions of dollars that come into the state each year for federally funded nutrition programs such as school meals, the Supplemental Nutrition Assistance Program, SNAP (formerly Food Stamps), and the Special Supplemental Nutrition Program for Women, Infants, and Children, commonly known as WIC. However, apart from that, the state has not addressed the problem of poverty-based food insecurity. It has taken little notice of the data on food insecurity in Hawai‘i that are provided each year by the U.S. Department of Agriculture. The state Department of Health used to include food-security questions in its annual health survey, but it no longer does that. It has not updated its 2001 study on *Hunger and Food Insecurity in Hawai‘i*.

Poverty-based food insecurity in Hawai‘i is not high by global standards, but it exists, and it contradicts the image the state tries to portray of the quality of life in the islands. Hawai‘i does not provide a strong safety net for all its people.

State officials might feel that the coverage by federally-funded programs such as SNAP, WIC, and Temporary Assistance for Needy Families (TANF) together with the work of the nongovernmental organizations is enough to meet the needs. However, the available evidence on food insecurity, homelessness and poverty make it clear that these measures are not enough. The safety net in Hawai‘i is far too flimsy. More should be done to keep people from falling into poverty, and to protect those who do fall.

The state government has never done a systematic study of the conditions of its poor, and it does not systematically monitor those conditions. The state should systematically monitor the status of the poor.

The state's inattention to poverty-based food security may be partly due to the fear that dealing with it could be costly. However, there are many helpful things that could be done at low cost. For example, the state could do more to pursue federal grants for community nutrition, such as those available through the U.S. Department of Agriculture. The state's modest support for the local nongovernmental groups working on the issue, such as the Hawai‘i Foodbank, seems to have yielded considerable benefits for small investments.

Many people who are eligible for SNAP and WIC do not take advantage of their services. The state, working together with interested nongovernmental organizations, could encourage more eligible people to apply. Hawai‘i's legislature could learn from the ways in which other states invest a small amount of resources to help their people take full advantage of federal programs (e.g., Illinois 2004).

The challenge is not to feed people but to see to it that they live under conditions in which they can provide for themselves. Dignity comes from providing for yourself and your family, not from standing in a food pantry line. All able-bodied people should have decent opportunities to take care of themselves. Regardless of whether we draw on federal resources or charitable giving, the state government should monitor the situation and take the responsibility to ensure that no one in the state remains food insecure.

FOOD POLICY BODIES

In 2002 and early 2003, with prodding from interested citizens and a nongovernmental organization called Full Plate, the state legislature asked the Office of Planning in the state's Department of Business, Economic Development, and Tourism to convene a Food Security Task Force. Its primary task was to examine the best ways to ensure food security for Hawai‘i's people. As a result, in 2003 the legislature considered bills to create a permanent state Food Security Council. According to the conclusion of the Task Force's report:

> Hawai`i has no State, county or local food policy council to coordinate or oversee food security activities. Without State policies, objectives, or goals to guide State actions, no organization can effectively coordinate assistance programs, conduct ongoing monitoring, or spearhead integrated planning programs. With an adequate State match (funds, personnel), on an on-going basis, the State could leverage available federal dollars for food security coordination, food stamp outreach and education, and farmers markets initiatives, which can then be used to enhance food security and put food dollars into the pockets of the needy, local farmers and food retailers thereby spurring our economy from the ground up (Food Security Task Force 2003, 14).

The idea was that the council, including both government officials and private citizens, would envision a food secure Hawai‘i, and then try to figure out how to get there. The council would bring together all concerned parties to formulate a coherent strategy for identifying and addressing the issues. However, the legislature did not approve the proposal.

Given the persistent need to strengthen Hawai‘i’s food security, interested individuals and organizations gathered together in November 2010 to establish a non-governmental, community-based Hawai‘i Food Policy Council (Lukens 2010). As explained at its website (http://www.hawaiifoodpolicycouncil.org/) and its Facebook page (http://www.facebook.com/HawaiiFPC) the HFPC’s primary role is to provide a forum for exploring the major food security issues confronting the state. The HFPC has collaborated with several governmental and nongovernmental organizations in drafting and promoting legislation to improve Hawai‘i’s food system. It anticipates working closely with Kamehameha Schools and its *Strategic Agricultural Plan* (Kamehameha Schools 2012), Kanu Hawai‘i (Kanu 2012), the Ulupono Initiative (Ulupono Initiative 2012), the Feed the Hunger Foundation (Feed the Hunger Foundation 2012), and many other organizations that are concerned with improving food security in Hawai‘i.

There is a need for an inter-agency unit in the state government that would have primary responsibility for ensuring food security for all of the state’s people under all conditions. This governmental unit could work together with the community-based HFPC and related organizations, and serve as a major channel through which the government would hear the concerns of the people. Hawai‘i’s government and people need a strong organizational

framework through which they can work together to address the full range of food security issues that confront them.

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