

Taking into consideration their varied scopes and organizational differences, it can be concluded that the STAR School operates the most effective food sovereignty program of the four organizations. The STAR School is committed to preserving Diné cultural through their sustainability efforts and through their farm to school program, which receives food from local farmers and encourages students to tend to the school gardens. STAR School not only ensures that students are exposed to safe, nutritionally adequate, and cultural appropriate foods, but they also find creative ways to convince students to make the switch to healthy. In addition, the STAR School has an ambitious, but practical, plan for the future. They plan to expand build a larger greenhouse where they can grow a larger variety of foods for their students and they are developing a manual that will help other rural schools implement a farm to school program. Through their programs and curriculum, the STAR School inspires students to be proud of their heritage and to be mindful of their environment.

## Chapter 5

### Navajo Agricultural Products Industry

The following section is a separate case study on the Navajo Agricultural Products Industry (NAPI), an agricultural enterprise on the Navajo Nation. Although NAPI operates 75,000 acres of farmland to grow corn, flour, potatoes, and beans, only a small fraction of their products return to Navajoland to feed the Navajo people. NAPI does not advocate for food sovereignty, but it offers an approach to enhancing economic development on the Navajo Nation as a way to promote self-determination. NAPI is included in this report to highlight its successful agricultural business and to demonstrate its potential to become a food sovereignty project that can improve the Navajo Nation's food system.

#### *Navajo Agricultural Product Industry (NAPI)*

Navajo Agricultural Products Industry (NAPI), an enterprise of the Navajo Nation formed in 1970, operates 75,000 acres of farmland in the northern part of the Navajo Nation, near Farmington, New Mexico.<sup>164</sup> Operating one of the largest tracts of contiguous farmland in the U.S., NAPI's mission is to manage a self-sustaining, profitable, culturally and environmentally sensitive farming and agricultural business that benefits the Navajo Nation, the Navajo workforce, and the regional and national economics.<sup>165</sup> NAPI strives to produce superior quality "Navajo Pride" trademark products to ensure that their Navajo Pride brand is globally recognized for excellent customer service, technology, environmentally friendly practices, and product quality. To increase and maintain profitability, NAPI grows markets and distributes agricultural products to a number of customers throughout the United States, Mexico, and other international markets, including customers as small as a nearby restaurant to large customers like

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<sup>164</sup> This section is based on an interview with NAPI CEO, Tsosie Lewis, Farmington, NM, 4 January 2013.

<sup>165</sup> Tsosie Lewis, Interview, Farmington, NM, 15 March 2013.

Walmart. NAPI aims to be an engine of economic development on the Navajo Nation, especially as a profit making industry.

In Article VI of the 1868 Navajo Nation Treaty, the United States government promised to promote the enhancement of Navajo self-sufficiency through agriculture. As a way to uphold that promise, the United States Congress authorized the Secretary of the Interior, under Public Law 87-483 (1964 Act) to construct, operate, and maintain the Navajo Indian Irrigation Project (NIIP) in 1962. NIIP provided a water delivery system from the Navajo Dam Reservoir, in northeastern New Mexico about 34 miles east of Farmington, to the Navajo Nation. NIIP was formed in exchange for the Navajo Nation's agreement to allow water from the San Juan River to be transported for use in the Rio Grande Basin via the San Juan-Chama Diversion Project. With the San Juan-Chama Diversion Project agreement, the Navajo pursued the development of a 508,000 acre-feet, 110,630-acre Navajo Indian Irrigation Project (NIIP). In 1970, the Navajo Nation Council approved the development of the Navajo Agricultural Products Industry (NAPI) as an enterprise overseeing the operation for NIIP. The Navajo Nation Council established NAPI to use the Navajo Nation's agricultural resources for profitable commercial enterprises, Navajo job and training opportunities, and market expansion for NAPI products within and outside the Navajo boundaries.<sup>166</sup>

#### *NAPI By the Numbers*

Today, NAPI operates 75,000 acres of the project's 110,630 total planned acreage, but their goal is to expand to 110,000 acres. Prior to 2002, NAPI's production was not succeeding and from 1998-2001, NAPI's net loss was an average of \$3,000,000 each fiscal year.<sup>167</sup> With

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<sup>166</sup> Navajo Agricultural Products Industry: History, Navajo Agricultural Project Industry, <http://www.navajoprize.com/NAPI.html>.

<sup>167</sup> NAPI (2013). Annual Progress Report [PowerPoint slides]. Retrieved from Navajo Agricultural Products Industry Headquarters. 15 March 2013.



new management in 2002, NAPI's net income steadily increased from 2002-2009, but they experienced a slight drop in net income from 2009-2011.<sup>168</sup> "By soliciting large companies, building large storage, improving their business unit, stabilizing their market, replacing their workforce, and creating contracts and strategic plans, we were able to make a profit-making business," CEO Tsosie Lewis states.<sup>169</sup> Last fiscal year, in 2012, NAPI's net income reached about \$10,000,000.<sup>170</sup> In order to maintain a successful net income each fiscal year, NAPI must sustain their global market to remain competitively priced, they must continue their relationship with the Navajo Nation, and the federal government and the U.S. Congress need to continue to support and fulfill the 1962 Act (the Bureau of Indian Affairs oversees NAPI).<sup>171</sup> NAPI current five strategic goals include: 1) Increase acreage to full AG land capacity, 2) Develop & retain knowledgeable workforce to produce a quality agricultural product for consumer, 3) Continue expanding renovating redeveloping existing infrastructure to sustain profitability, 4) Secure funds and water rights collaboratively, and 5) Strategically market NAPI products and services to maximize its resources.

### *Decision Makers*

Although the Bureau of Indian Affairs (BIA) and the Bureau of Reclamation (BOR) is responsible for the continuing operation of NIIP, NAPI is managed by the Chief Executive Officer (Tsosie Lewis), Chief Operations Officer (Leonard Scott), Chief Financial Officer (Darryl Multine), and the NAPI Board of Directors, all of whom are appointed by the President of the Navajo Nation and confirmed by the Navajo Nation Economic Development Committee. The Board of Directors, all of whom have experience in agribusiness, includes: Edward T.

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<sup>168</sup> Tsosie Lewis, Interview, Farmington, NM, 15 March 2013.

<sup>169</sup> Ibid.

<sup>170</sup> NAPI (2013). Annual Progress Report [PowerPoint slides]. Retrieved from Navajo Agricultural Products Industry Headquarters, 15 March 2013.

<sup>171</sup> Tsosie, Lewis Interview, Farmington, NM, 15 March 2013.

Begay, Elfonzo Nephew, Lyndon Chee, Jeannie Y. Benally, and Ervin Chavez. Under the Board of Governors and the Chief Officers, several managers operate the crops, farm, irrigation, trading, purchasing, IT, safety, and quality assurance labs. NAPI employs a total of 295 employees, and a majority of the employees are Navajo.<sup>172</sup>

### *What They Grow*

On the 75,000 acres of farmland, NAPI grows a variety of crops to match the demands from Navajo and non-Navajo customers. NAPI's crop products include: pinto beans, black beans, potatoes (russets, golds, and reds), flour (general purpose flour, bread flour, tortilla flour, flour mixes, and cattle feed), alfalfa, corn, popcorn, pumpkin, grain (barely, oats, grazing), feed (whole & cracked corn, winter wheat, wheat bran, and livestock combinations), and traditional Navajo plants (blue corn and sumac). Currently, NAPI's largest crops are: alfalfa (16,600 acres), corn (17,500 acres), wheat (10,000 acres), pinto beans (7,500 acres), and popcorn (4,500 acres).<sup>173</sup> The Navajo customers in the area rely on the feed and hay to nourish their livestock. If local customers want to purchase any of the main products (potatoes, flour, pinto beans, popcorn, and corn), they can visit two stores located on the farmland and purchase their products at prices that match nearby markets. Some stores around the Farmington, NM area also offer NAPI products. Most of the products produced at NAPI are distributed to the off-the-Navajo Nation customer base, mainly in the western United States. To increase their Value Added Processing<sup>174</sup> in contrast to primarily wholesale, NAPI established 5 Limited Liability Companies (LLC's), which purchase raw commodities from NAPI through operating contracts. NAPI's top domestic

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<sup>172</sup> NAPI (2013). Annual Progress Report [PowerPoint slides]. Retrieved from Navajo Agricultural Products Industry Headquarters. 15 March 2013.

<sup>173</sup> Ibid.

<sup>174</sup> When a produce is changed or transformed from its original state to a more valuable state.

Boland, Mike, "What is value-added agriculture," AgMRC: Agricultural Marketing Resource Center Website, August 2009, [http://www.agmrc.org/business\\_development/getting\\_prepared/valueadded\\_agriculture/articles/](http://www.agmrc.org/business_development/getting_prepared/valueadded_agriculture/articles/).



LLC customers include, among others, Economy-Cardenas, Pro's Ranch, Kroger, Wal-Mart, 99¢ Store, Economy Cash & Carry, California Grain & Spice, United Melon Distributing, Inc., Del Monte, and Fruit Distributing Corp.<sup>175</sup> The purpose of the LLC partnerships is to increase profit and benefit NAPI. Interestingly, NAPI's biggest customers are international, with tons of pinto beans shipped to Mexico and tons of popcorn shipped to Asia, Middle East, and South America on a yearly basis. NAPI hopes to develop more profit with their newly opened flourmill (August 2012), especially in the local area, where there is a high demand for flour.<sup>176</sup>

### *Operation and Maintenance*

NAPI's unique irrigation system and their advanced state-of-the-art agriculture technology enable them to produce efficiently, without wasting precious resources. NAPI obtains all of its water from the Navajo Lake, a storage reservoir approximately 508,000 acre-feet of annual water to irrigate the 11 blocks of farm, with each being about 10,000 acres. Each spring, the water at Navajo Dam is turned on and pumped at Kutz Pumping Plant to fill the Coury Canal. From the canal, water flows into the center pivot (sprinklers) irrigation system and is released to the farm. To avoid having several workers drive their trucks to each block to turn on the pivots several times a day, NAPI recently installed the complex Supervisory Control & Data Acquisition (SCADA) system and Remote Terminal Units (RTU) system, to be more sustainable.<sup>177</sup> The SCADA system controls the water flow from the main office of NAPI through a computer monitoring system, where NAPI's Operation and Maintenance Department is in constant communication with the crop managers. Despite the very dry, windy climate area

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<sup>175</sup> NAPI (2013). Annual Progress Report [PowerPoint slides]. Retrieved from Navajo Agricultural Products Industry Headquarters. 15 March 2013.

<sup>176</sup> Tsosie Lewis, Interview, Farmington, NM, 15 March 2013.

<sup>177</sup> Ibid.

with limited precipitation during the year, NAPI's irrigation system, with 300 fully operated radio control systems, allows the farm to nurture its crops efficiently.

To maintain the "Navajo Pride" brand and the commitment to quality, NAPI conducts on-site laboratory testing of their products and equipment, and they also have a USDA inspector frequently testing the products. NAPI's Agricultural Testing and Research Laboratory (ATRL) performs scheduled analyses using analytical equipment on chemical constituents of soil, plant tissue, water, fertilizer, and feed. These services provide information on plant damage, crop fertility recommendation, and fertilizer program management. In addition, NAPI hires USDA inspectors to monitor products at each plant during production. To follow USDA regulations, NAPI documents every process (from planting to harvest) to make sure that their products can be sold domestically and internationally. Making products that meet NAPI and USDA standards is a priority to the company and ensures customer satisfaction.

#### *More for Profit*

Although NAPI is owned and operated by Navajos and is located on the Navajo Nation, Navajo people only make up a small percentage of the consumer base, and traditional Navajo foods only make up a small percentage of the NAPI crops. As stated before, the main product that local Navajo purchase is the hay for their livestock. However, local Navajos are not committed to purchasing other NAPI products and NAPI does not distribute to supermarkets across the Navajo Nation. Only a few markets in Farmington, NM and the surrounding area carry NAPI products, and the products are not advertised, so the Navajo people do not know that it exists.<sup>178</sup> According to CEO Tsosie Lewis, the main reason why NAPI does not feed more Navajo people is because the Navajo Nation does not have food manufacturing facility for raw

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<sup>178</sup> Personal observation.



products. “The raw products have to leave the Navajo Nation to go to food manufacturing sites, then those food products come back to the reservation stores, so the Navajo people can buy them—if Navajos owned stores and business, then we could work with them” Lewis adds. “Our intent is to feed the Navajo Nation, but we have to make a profit as well.” In addition, when asked about growing traditional Navajo foods and using traditional Native seeds to grow those foods, Mr. Lewis stated that it is difficult for NAPI to maintain. Stating that the traditional lifestyle is disappearing across the Navajo Nation, Lewis mentions that it is difficult to expand their traditional food growing without a strong customer base.<sup>179</sup> Since their top customers are off the Navajo Nation, NAPI uses industry seeds, instead of Native seeds.<sup>180</sup> The seeds used for the corn and other crop productions are GMO seeds, but the beans are not.<sup>181</sup> Lewis also states that another reason why Native seeds are not used at NAPI is because Native seeds, especially Navajo seeds, are drought-tolerant. With NAPI’s state-of-the-art irrigation system, they have full access to water and “seeds that are modified to withstand drought conditions do not produce as well.”<sup>182</sup> NAPI does utilize Native seeds to grow blue corn and sumac, two traditional foods of the Navajo. Currently, NAPI is looking to hire a Native Plants Technician to research Native plants (site preparation, plant growth, harvest, water/nutrient usage) and execute and maintain trial fields.<sup>183</sup> Farming in the Southwest for over 600 years, Navajos at NAPI continue to produce goods using modern day technologies.

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<sup>179</sup> Tsosie Lewis, Interview, Farmington, NM, 15 March 2013.

<sup>180</sup> Ibid.

<sup>181</sup> Ibid.

<sup>182</sup> Ibid.

<sup>183</sup> Navajo Agricultural Products Industry: Human Resources, Navajo Agricultural Project Industry, <http://www.navajopride.com/NAPI.html>.



### *Analyzing NAPI*

From an outside perspective, it would seem that Navajo Agricultural Products Industry is the Navajo Nation's answer to its food security problem, for it successfully owns and operates a 75,000-acre farm. However, Navajo customers and feeding the Navajo people, specifically, is not the mission of NAPI. Instead, NAPI's focus is to make profit and provide jobs and expand economic development for the Navajo Nation. While the Navajo people are facing a devastating epidemic of diet-related diseases caused by the lack of access to healthy foods, NAPI is harvesting and shipping quality products off the reservation to feed people in other parts of the country and internationally. Although it can be argued that NAPI is helping with the food access issue by providing jobs for the Navajo people, so they can afford to purchase groceries, and by increasing Navajo Nation economic development by profiting millions from exported goods, but they are ignoring a direct opportunity to help improve the Navajo Nation's food system.

NAPI has the capacity and infrastructure to support traditional agricultural techniques and provide more outlets for Navajo people to access NAPI products. Since NAPI distributes to local restaurants and a few local grocery stores, they should expand their distribution to deliver to other parts of the Navajo Nation. Since Bashas' is the main grocery store provider on the Navajo Nation, NAPI could negotiate a contact to distribute flour, corn, potatoes, and beans to the seven grocery store locations throughout the Navajo Nation. Perhaps in the future, NAPI and the Navajo Nation can develop more grocery stores on the Navajo Nation that will stock not only NAPI products, but also other local produce from Navajo farmers. NAPI CEO Lewis claimed that one of the main reasons why NAPI products are not going to the Navajo people is because NAPI produces mostly raw products. The Navajo Nation could develop a food manufacturing industry near or on NAPI property to produce food products. This could further their economic development goals by making a profit through sales on and off the reservation and becoming an

additional employer for more Navajo workers. In addition, NAPI could also collaborate with federal food assistance programs and offer NAPI products as an option to use food stamps or WIC vouchers for such products. Working with USDA Food Distribution on Indian Reservations, NAPI could add their beans, flour, and potato packages to the distribution boxes. NAPI could also develop a Community Supported Agriculture (CSA) program, which is when consumers purchase a share (or membership) and receive a box of seasonal produce each week directly from the farmer, throughout the farming season.<sup>184</sup>

Since NAPI currently only utilizes 75,000 of its 110,630 total planned acreage, they could designate more blocks to only grow traditional Navajo foods. With NAPI's profits and other state-of-the-art technology, they could invest in other advanced agriculture technology systems that would allow them to produce a greater variety of foods. NAPI could install hydroponic and aquaponic systems or build large greenhouses with the latest green technology. Since NAPI's employees are experts in agriculture, they could also partner with other Navajo agencies and departments to conduct educational workshops for other Navajo farmers who operate their own farm on other parts of the Navajo Nation or workshops to teach community members to grow their own foods.

Instead of purchasing seeds from Native seed banks or using traditional Navajo seeds to grow crops, NAPI uses GMO (genetically modified organism) seeds. Studies and reports on GMO foods show conflicting evidence about the value of GMO technologies. Regardless of this controversial topic, NAPI should utilize Native seeds to on their farm to support their "Native Pride" brand that advertises that their products are "of the highest quality on the market today"

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<sup>184</sup> Local Harvest, Community Supported Agriculture, <http://www.localharvest.org/csa/>.



and are developed through “culturally and environmentally sensitive farming.”<sup>185</sup> Although CEO Tsosie Lewis stated that “drought resistant” Native seeds would not flourish on NAPI fields due to NAPI’s advanced irrigation system, NAPI could modify *their* system to support Native seeds, instead of the other way around. Since the drought resistant seeds will not use as much water as other seeds, NAPI could save water and therefore be more sustainable. In addition, NAPI could make a stronger commitment to growing more Native foods with Native seeds on their farm, as a way to contribute to Navajo culture preservation.

It is important to note that NAPI “Native Pride” brand and logo is not something that Navajos in the area are used to. Even though all NAPI products display the “Navajo Pride” logo, a lot of Navajos are not familiar with NAPI or the product. Unless they live near NAPI, the typical Navajo Nation resident has no idea that the Navajo Nation owns and operates 75,000 acres of farmland. There are not billboards or other advertisements that publicize NAPI facilities or the Navajo Pride brand. Some people are just used to buying familiar brands and it’s not enough for NAPI to distribute their products and expect Navajo people to purchase it. For example, most Navajo families make frybread or tortillas daily so they frequently purchase flour, particularly Blue Bird Flour brand. The Blue Bird brand, produced at Cortez Milling Co., began producing flour in the 1960s and has been selling on the Navajo Nation since. Navajos are committed to this brand because it is what they are used too. If a Navajo shopper saw a bag of Blue Bird flour next to a Navajo Pride flour bag, the shopper would most likely pick up the Blue Bird bag. If asked why they did not buy the Navajo Pride flour, they would probably state simply “because Blue Bird is the best.”<sup>186</sup> Navajos would be surprised to learn that this past year, the Cortez Milling Co. began purchasing their flour from NAPI Navajo Pride Flour Mill. NAPI

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<sup>185</sup> Ibid.

<sup>186</sup> Statement made based on personal experience.

needs to improve their product advertisement on the Navajo Nation to improve the sales on the Navajo Nation. The Navajo Nation Department of Economic Development (DED) organizes a “Buy Navajo” campaign that encourages Navajo people to purchase retail from Navajo owned businesses or business on the Navajo Nation (so the tax can go back to the Navajo). Navajo Nation DED should include NAPI in this initiative. NAPI is an impressive operation but with a better commitment to contribute to the efforts in improving the Navajo Nation food system for the betterment of the Navajo people, NAPI could be a food sovereignty leader in the Indigenous community. NAPI could expand their services to other tribes and maybe even consider an extreme commitment, like only supplying to domestic and international indigenous communities, instead of contributing to the markets and corporations that dominate the global food system.



## **Chapter 6**

### **Next Steps: Policy Recommendations**

Based on information from the research and the case studies, this section presents recommendations for how the Navajo Nation can better implement food sovereignty to restore the health of the Navajo people. This recommends that the Navajo Nation government should implement a nation-wide food policy plan to ensure better food access across the whole reservation. It also advocates for better communication between all of the organizations that address food insecurity issues, so they can work together in the food sovereignty movement. The Navajo Nation also should help improve federal food assistance programs. More ambitiously, the Navajo Nation should replicate the STAR School model to other parts of the reservation to influence more youth to be conscious individuals. The Navajo Nation can accomplish these policies by reallocating funds and increasing their sales tax.

#### **Approval of Navajo Nation Food Policy**

The Western Navajo Food Policy Council drafted an all-inclusion food policy that was initiated to discuss and examine all components involved with improving the Navajo food and agriculture systems. Safety, nutrition, health, fair trade, culturally appropriate food, issues of production, distribution, consumption, and education are areas considered in the policy. The goals clearly identify all of the key holders and states how they all need to come together in order to implement a nation-wide change. The Navajo Nation President needs to approve and sign this policy and make a formal commitment to improving the food systems and livelihood of the Navajo people. The Navajo Nation would one of the few tribes to implement a formal food policy.

It is very important to note that upon signing the policy proposal, the Navajo Nation would be agreeing to assist and support organizations (e.g. with funding and other resources) that

are already addressing food insecurity issues. Signing the proposal does not mean that the Navajo Nation Executive Office will take over the decisions or leadership of the organizations. It is clear that the overall leader of the Navajo Nation Food Sovereignty Movement should not be directly associated with the Navajo Nation government. The proposal states that the Navajo Nation Food Policy Council should consist of a Governing Board who will manage and direct the Policy Council. The first time this proposal was submitted to the Navajo Nation Executive Office, it was assigned to the Navajo Nation Vice-President to handle, who then assisted Navajo Nation Division of Health to “look into it.” After a year, nothing further was decided and the food policy proposal remained unsigned. The Navajo Nation Executive Office needs to meet again with the Western Navajo Food Policy Council, and with Diné Policy Institute, to update the document and identify the members of the Policy Council and the Governing Board. Once the document is updated, the Navajo Nation President should sign it to immediately instate the Navajo Nation Food Policy Council and a nation-wide food policy plan. The Food Policy Council could also help organizations and Navajo farmers with USDA policies and regulations, to ensure that they are producing safe foods. The Food Policy Council could also start developing Navajo Nation specific food regulations and rules to regulate their own food system, but that would be a difficult process since the Navajo Nation is still under the United States government.

### **Collaborating and Communication**

The need for improved communication and collaboration between the organizations was clear while conducting my research. All of the organizations were conducting similar, interesting projects, but none of them knew about each. With the establishment of the Navajo Nation Food Policy Council, all organizations can seek assistance (if needed) from the council, but more



importantly, they can inform the council about their work and programs. This way, the organizations can help assist one another and share resources. For example, the Navajo Nation Department of Agriculture should be collaborating with the Sunrise School for Ecological Living because they are in the same area and minutes apart from one another. The Sunrise School employees could help run the workshops that NNDA is hosting across the Navajo Nation. Another collaboration could be with the Sunrise School and the STAR School; the STAR School could share their curriculum with Sunrise School. BMWC and NNDA should also work together because they both help Navajo farmers apply for federal permits.

Other systematic programs could be created once organizations start working together. By identifying Navajo farms (through a survey like the one BMWC is conducting) and working with organizations that run community gardening programs, including NAPI, the Navajo Nation could implement an internal, nation-wide food distribution program. This way, NAPI and other farmers and growers will be able to sell their food to the Navajo Nation, or the Navajo Nation could pay them as employees, so they can distribute the foods to the 110 chapters. The chapters could then create food boxes with local produce that they can deliver to families in need (especially elders) and sell to families at an affordable price. This would also create jobs for the Navajo people. The Navajo Nation could pay tribal members to maintain farms and community gardens at the 110 chapters, similar to what the Tohono O'odham Community Action program. In addition, the Navajo Nation could set up farmer's markets at selected chapters that operate once a week. This way, Navajo people will have another alternative to obtain foods, instead of relying on convenience stores or driving several miles to the nearest grocery stores.

## **Improvements Right Now**

Despite the work of these organizations and other food access advocacy groups across the Navajo Nation, the Navajo Nation people still depend on federal food assistance programs and they will be until major changes occur. It could take several years to decrease the number of families who receive assistance (through food sovereignty work) and implement significant food sovereignty changes, but until then, the Navajo Nation needs to address the current food state. Since the Navajo Nation needs the support from for federal food assistance programs, they should work with USDA to nutritionally improve the programs. As mentioned before, the Navajo Nation could utilize NAPI's products and facilities to assist with USDA's Food Distribution Program on Indian Reservations. That way, the food boxes provided by the program will be filled with locally grown foods, instead of just canned items. Another way to improve federal food assistance programs is to work with WIC and SNAP to allow recipients to use their vouchers at local farmer's markets.

The Navajo Nation Division of Economic Development should start regulating the 75 convenience stores across the Navajo Nation. With majority of the foods and beverages offered at gas stations and convenience stores are processed, high in calories, and low in nutritional value, the Navajo Nation should require the stores to offer healthier options, such as fruit bowls, sandwiches, etc. In addition, they should require the stores to place the healthier options near the entrance, so the people see it as soon as they walk into the door. This will provide Navajo people with healthier, accessible options and encourage them to purchase these foods, instead of the bad foods.



## **STAR School Replications**

In an effort to create more education on healthy eating and sustainable living and to inspire more of the younger generation, the Navajo Nation should make a commitment to develop more charter schools using the STAR School as a model. Since the STAR School is already working on a manual with instructions on how to implement a farm to school program and operate only on solar and sun energy. This organization maintains the most effective food sovereignty program of the researched organizations, because the director and the staff are devoted to preserving the Navajo traditional culture. Implementing more schools like the STAR School would allow the Navajo Nation to maintain their Navajo enrichment programs that teach students about Navajo culture, history, government, and language. Influencing youth is the most important approach to maintain the Navajo culture and the Navajo Nation's future. By teaching Navajo youth about the importance of maintain their culture and traditional lifestyle, the Navajo Nation can ensure a successful future.

## **Making Change Possible**

All of the mentioned policies would enhance the Navajo Nation's food system but without additional funding, they would not be possible. To address this issue, the Navajo Nation should reallocate funds to focus on improving food access. Instead of building additional convenience stores the Navajo Nation should use that money for improving the food system. In addition, since 2008, the Navajo Nation has built four casinos across the Navajo Nation: Fire Rock Navajo Casino, Flowing Water Navajo Casino, Northern Edge Navajo Casino, and the new Twin Arrows Navajo Casino Resort. These casinos have created hundreds of jobs and increased the Navajo Nation's gaming revenue. The casinos are expected to bring in major revenue of the Navajo Nation. Some of that revenue generated from the casinos should be used to implement

the recommended policies above. In addition, if the casino earnings could be used for the food system, the Navajo Nation could impose a sales tax increase by ½ cent. The current sales tax on the Navajo Nation is 5 percent (increased in January 2013 from 4 percent to provide funds for scholarships, education development, and judicial and public safety). By increasing the sales tax to 5.5 percent, the ½ cent could be used for food policy. These funding strategies ensure that the Navajo Nation remains self-sufficient.

## **Chapter 7**

### **Conclusion**

Prior to the Long Walk in 1864, the Navajo survived in the Southwestern United States by living off the land. Once they were forced to abandon their dependence on traditional agriculture and their traditional lifestyle, their health began to decline and Western diseases began to emerge. Today, the Navajo have one of the highest rates of diabetes in the country. With the entire reservation considered a food desert, the need to improve the Navajo Nation's food system is obvious.

In order to combat food access issues and improve the health of the Navajo people, the Navajo people are revitalizing their traditional agriculture and lifestyles. Instead of depending on federal food assistance programs, fast food restaurants, and convenience stores to make up for the lack of grocery stores, organizations across the Navajo Nation are implementing food sovereignty projects to address food insecurity on the Navajo Nation. The Western Food Policy Council is working to implement a formal Navajo Nation Food Policy. Other organizations, Black Mesa Water Coalition, the Navajo Nation Department of Agriculture, the Sunrise School for Ecological Living, and the STAR School operate programs that incorporate successful food sovereignty principles and strategies. However, the Navajo Nation needs to support these operations and stop ignoring the food insecurity issue. They must regain control of their food



system through food production and distribution and education, so they can further their self-determination and limit their reliance on the federal government. As the largest Native American reservation, the Navajo Nation could become a leader of food sovereignty and they help inspire other tribes to improve their food systems and change their futures.

# Glossary

## *Terms used in this report*

**Aquaponics:** A sustainable food production system that combines a traditional aquaculture (raising fish in tanks) with hydroponics in a symbiotic environment.

**Farm Bill:** A comprehensive piece of legislation that guides national agriculture, nutrition, conservation, food, and forestry policy, that is passed by the United States Congress every five years.

**Food Deserts:** A district or area with limited or no access to a large grocery store that offers a variety of fresh and affordable foods needed to maintain a healthy diet.

**Food Sovereignty:** The right to food and to produce food, which means that all people have the right to safe, nutritious and culturally appropriate food and food-producing resources, in order to sustain their societies.

**Food Distribution Program on Indian Reservations (FDPIR):** A federal program that provides USDA foods to low-income households, including the elderly, living on Indian reservations, and to Native American families residing in designated areas near reservations and in the State of Oklahoma.

**Hydroponics:** A branch of agriculture where plants are grown without the use of soil.

**Supplemental Nutrition Assistance Program (SNAP aka Food Stamps):** A federal program that offers nutrition assistance to millions of eligible, low-income individuals and families.

**Upstream factors:** When housing, neighborhood conditions, and increased socioeconomic statuses are considered when measuring health status.

**Western Diet:** Food developed after the Industrial Revolution, including dairy products, cereals, refined sugars, refined vegetable oils, and alcohol.

**Western Diseases:** Diet and lifestyle related diseases associated with Western and industrial populations, includes obesity, Type II diabetes, varicose veins, diverticulosis, appendicitis, kidney stones, and some forms of cancer.

**Women, Infants and Children Program (WIC):** A federally funded health and nutrition program for women, infants, and children who are at nutritional risk.



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## **Appendix 1-5**

Appendix 1: Organization Contact Information

Appendix 2: Pictures of the organizations

Appendix 3: Interview Questions

Appendix 4: Proposed Food Policy Drafted by Western Navajo Food Policy Council

Appendix 5: List of food provided through Food Distribution Program for Indian Res.

Appendix 6: List of convenience stores/gas stations on the Navajo Nation



## Appendix 1: Organization Contact Information

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