



Reclaiming Native Food Systems

Part II: Indigenous Knowledge and Innovation for Supporting Senior Health and Wellness





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I. INTRODUCTION

For more than 30 years, First Nations Development Institute (First Nations) has worked with Native nations and Native organizations to restore Native American control and culturally compatible stewardship of the assets they own – be they land, human potential, cultural heritage or natural resources – and also to establish new assets, thereby ensuring the long-term vitality of Native communities. Native food systems are an important asset of Native nations. However, like most Native assets, Native foods systems have been altered, colonized and, in some cases, destroyed. At First Nations, we strongly believe that reclaiming control over local foods systems is an important step toward ensuring the long-lasting health of Native people and communities. Therefore, much of our work in the arena of Native food systems has been aimed at assisting Native nations with reclaiming control of traditional food systems to eliminate food insecurity, build the health of communities and community members, and serve as a mechanism for entrepreneurship and economic development of Native nations. Briefly stated – we believe that Native food-system control helps promote healthy Native nations, economies and people.



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Historically, Native nations have had their own food systems in place that relied upon traditional knowledge for planting, harvesting and consuming locally-harvested foods. Additionally, food systems provided the backbone of trade and exchange between nations. In the past 200 years, however, federal Indian policy has disrupted and, in some cases, destroyed these traditional practices – either through deliberate policies to remove Indians from territories known for their rich agricultural land and natural resources, or else through deliberate attempts to starve Indians into submission. These policies and practices were deliberate, calculated and meant to disrupt traditional Native food systems and related agricultural land practices. George Washington, for example, torched hundreds of thousands of bushels of Iroquois corn to deliberately starve Iroquois men, women and children during the American Revolution. Similarly, the Navajo, Apache and Pueblo were also subjected to the willful destruction of their orchards and fields.¹ These incidences emphasize that altering Native food systems was – and continues to be – a part of Native colonization.

Today, accessing healthy food remains a challenge for many Native American children, families and communities. Not only do Native people suffer from high instances of food insecurity and hunger, but according to the USDA's food desert locator, almost every Indian reservation is classified as a "food desert," meaning that access to affordable and quality healthy food is extremely difficult. Often, accessing healthy food is even more challenging for tribal elders who tend to face more linguistic, cultural, geographic and

¹ Colin G. Calloway. *The American Revolution in Indian Country: Crisis and Diversity in Native American Communities*. New York: Cambridge University Press, 1995. Iverson, Peter, *Diné: A History of the Navajos*. Albuquerque, NM: University of New Mexico Press, 2002.



economic barriers than Native American youth and young adults (John and Baldrige, 1996; Ludtke and McDonald, 2005). As a result of this food insecurity, tribal elders now suffer from higher rates of congestive heart failure, high blood pressure, stroke and diabetes than the general population age 55 and older.² The table below provides additional information and statistics regarding tribal elders and details some of their most common health problems:

Food insecurity is defined as having a limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

TABLE 1: RECENT HEALTH TRENDS AMONG TRIBAL ELDERSS³

As of 2012, there are approximately 410,000 tribal elders aged 65 and older.

This number is expected to nearly triple between 2010 and 2050.

Cardiovascular disease is the leading cause of death among tribal elders.

Tribal elders tend to suffer strokes at rates higher than the general population. Native American adults are 60 percent more likely to have a stroke than white adults.

As many as 80 percent of tribal elders live with diabetes. In general, Native American adults are 2.6 times as likely to be diagnosed with diabetes as white adults.

Approximately 58 percent of tribal elders have hypertension.

Many tribal elders in rural and reservation-based Native communities live in poverty. The Center for Rural Health estimates that nearly 60 percent of Native American seniors age 55 and older have an annual income between \$5,000 and \$10,000.

Approximately 68 percent of tribal elders have three or more chronic conditions.

The overall life expectancy of Native Americans is 71.1 years old compared to 77.4 for all other races. Healthcare providers and researchers theorize that lower life expectancy rates can be attributed to higher rates of poverty and diet-related illnesses such as cardiovascular disease and diabetes.

Many of the health and well-being trends documented in Table 1 are diet-related illnesses – meaning that many of these diseases can be dramatically reduced and even reversed with increased access to healthy and culturally-appropriate food. In fact, the Center for Rural Health has found that some of these dire health

2 Moulton, Patricia and Leander McDonald, et al. (2005) “Prevalence of Chronic Disease among American Indian and Alaska Native Elders.” Center for Rural Health.

3 The statistics included in this table were compiled from three sources, including: Ritter, Lois A. (2010). “American Indian and Alaska Native Populations.” Multicultural Health. Sudbury, Massachusetts: Jones and Bartlett Publishers; Goins, R. T., & Pilkerton, C. S. (2010). “Comorbidity among Older American Indians: The Native Elder Care Study.” *Journal of Cross-Cultural Gerontology*, 25(4), 343-354; and McDonald, Leander. Ludtke, Richard L., Alan Allery. (2012). “Long Term Care and Health Needs of America’s Native Population.” National Resource Center on Native American Aging.



statistics are substantially lower (up to 45% lower) among tribal elders who garden.⁴ Therefore, it is not a great leap to assume that tribal elders who grow – and consume – healthy, locally-produced foods lead healthier, longer and more productive lives.

Recent studies also indicate that tribal elders – and Native Americans in general – tend to lead healthier, longer and more productive lives when they have access to traditional, home-grown foods (Berino and Rourke 2003, Satterfield and Volansky 2003, Ludtke, and McDonald 2005). This realization has compelled many tribes and Native organizations to implement various wellness programs and food sovereignty initiatives to improve the quality of life for tribal elders as well as for the rest of their families and communities. Often, these initiatives are guided by the wisdom of tribal elders who possess the knowledge and experience needed to revitalize traditional farming methods so that members of their communities can start to plant, grow, harvest and consume healthy and culturally-appropriate foods.

The experience, knowledge and wisdom of tribal elders have the potential to improve the long-term health and well-being of tribal communities. For instance, the knowledge, experience and wisdom of tribal elders can be communicated and transferred to younger generations who can then use this knowledge to grow healthy and traditional foods which, in turn, can be used to improve the overall health and diet of tribal elders. The following report highlights four community developed projects funded by AARP Foundation aimed at developing sustainable solutions to combating Native senior hunger.

In 2012, First Nations received a grant in the amount of \$187,660 from AARP Foundation to support sustainable solutions to end hunger for seniors in Indian Country. However, the ripple effects of this grant extend far beyond simply finding a sustainable solution to senior hunger. This grant has helped build strong, sustainable communities that will continue to thrive for generations. With the generous support of AARP Foundation, First Nations awarded four grants to the following tribes and Native organizations:

- Ponca Tribe of Oklahoma
- Pueblo of Nambe
- Santo Domingo Pueblo
- Sipaulovi Development Corporation

Together, these four organizations have planted, harvested and donated more than a half-ton of fresh fruits, vegetables and spices to senior citizens in their tribal communities. Additionally, the Ponca Tribe of Oklahoma bred, processed and distributed more than 2,000 pounds of healthy, chemical-free pork to help improve the health and well-being of their tribal elders.

First Nations believes that sharing information and models is an effective yet underutilized tool in Indian Country. In 2012, we kicked off a new series of reports that attempts to explore various approaches to reclaiming Native food systems. This report is the second in that series. The purpose of this report is to identify and interpret best practices that will assist tribes and Native organizations interested in launching

⁴ Moulton.



successful senior wellness programs and food sovereignty initiatives based on traditional Native lifeways. The grantees highlighted in this report have designed and implemented innovative, successful projects that contribute to eliminating senior hunger and revitalizing traditional farming methods. The information shared in this report has been compiled from quarterly grantee reports and interviews. We hope the information contained in this report will help increase access to healthy and culturally-appropriate foods and improve the overall health and well-being of tribal elders.

II. TRIBAL ELDERS AND THE INDIAN HEALTH SERVICE

For the most part, elder health and geriatric care is absent from the Indian Health Service (IHS) infrastructure. In 1996, IHS leadership announced their intentions to establish an elder health care program.⁵ In 2006, approximately a decade later, IHS leadership admitted in their online journal, *The IHS Primary Care Provider*, that: “Nowhere does the acute care design of the current health system fail so spectacularly as with the elderly” (Volume 31: Number 5, 110).



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In an attempt to address these failures, IHS leadership adapted the Chronic Disease Management Initiative (CDMI) to both treat and prevent chronic diseases afflicting the elderly population. IHS also established an annual grant program for long-term geriatric healthcare.

However, despite these efforts, multiple organizations committed to senior healthcare in rural and reservation-based Native communities are still calling for long-term senior and preventive programs, including: the Center for Rural Health (CRH) and the National Indian Council on Aging (NICOA). As recently as 2012, NICOA continued to voice concerns regarding the lack of long-term, federally funded senior programs in their report: “Health and Long-Term Care for Indian Elders.” As a result of these concerns, they issued the following recommendations to IHS:

- 1.) Address the complicated jurisdiction for services across states;
- 2.) Develop more IHS training and workforce development programs;
- 3.) Shift IHS from a reactive system to a preventive system; and
- 4.) Renew and strengthen partnerships with tribes.

⁵ John, Robert and Dave Baldrige. “NICOA REPORT: Health and Long-Term Care for Indian Elders.” National Indian Council on Aging.



To date, these recommendations have not been fully explored or implemented in any meaningful way. For example, in 2013, the U.S. Department of Health and Human Services (HHS) ranked elder health as number nine on their list of the 10 ranked health priorities in rural and reservation-based Native communities. Although HHS requested \$621,330 in 2013 to support and expand their existing healthcare programs, many of these programs only address senior health and wellness indirectly – such as those programs geared toward chronic diseases. None of these programs, however, target elder health or geriatric care directly.⁶

This omission suggests that elder health and geriatric care is still largely absent from the IHS infrastructure and priorities. Therefore, it is critical for tribes and Native organizations to establish community-based programs to protect and honor their tribal elders – many of whom have lived in their communities their entire lives or have chosen to return home to the reservation as they grew older.

The four grantees profiled in this report have established innovative projects to demonstrate their respect and appreciation for their tribal elders. In addition to honoring their elders, these four grantees have also attempted to harness and preserve their tribal elders' wisdom for future generations.



III. TRADITIONAL FOOD SYSTEMS

Tribal communities have the potential to honor their elders and improve their physical well-being by finding sustainable solutions to senior hunger in rural and reservation-based Native communities. Traditional food systems offer a potential solution to this problem. In fact, this realization compelled three of the grantees to launch innovative senior health and wellness programs based upon traditional agriculture and farming practices.

Traditionally, Pueblo communities of New Mexico are farming communities. However, due to various reasons – such as federal policies like urban relocation and water-diversion projects – farming is now a traditional practice that many communities are struggling to preserve. Last year, two Pueblo communities funded by AARP Foundation attempted to address these struggles by developing innovative programs that acknowledged that Native American seniors possess vast knowledge when it comes to the retention and revitalization of traditional farming practices. In effect, these two Pueblos used this knowledge to reclaim and revitalize traditional farming methods.

⁶ U.S Department of Health and Human Service, “National Tribal Budget Recommendations for the Indian Health Services Fiscal Year 2013 Budget.”



PUEBLO OF NAMBE ENVIRONMENTAL DEPARTMENT GRANT AWARD AMOUNT: \$25,000

Tribal Background:

The Pueblo of Nambe, one of eight Tewa-speaking tribes in northern New Mexico, was settled in the early fourteenth century and has been known historically for its strong agriculture, traditional textiles and pottery production. Of the 19 existing Pueblo tribes in New Mexico, Nambe is the smallest in terms of population and land base. Situated 20 miles north of Santa Fe, the Pueblo is almost completely surrounded by non-Indian towns, and is home to approximately 400 members. The Pueblo encompasses nearly 20,000 acres consisting of towering cottonwood, juniper, scrub oak and sandstone trees. The Rio Nambe flows through the Pueblo and eventually feeds into the Rio Grande. While all signs point to this area being an agricultural paradise, the Pueblo is plagued by more barren agricultural fields than bountiful food forests, thereby resulting in food insecurity.

Program Outcomes:

- Conducted a food excess analysis that identified \$4,000 worth of excess food in 2012 and \$6,000 worth of excess food in 2013 that has since been redistributed to seniors and other families throughout the community.
- The local greenhouse and community garden produced nearly 200 pounds of fresh fruits, vegetables and spices that were distributed for consumption at the local senior center and throughout the community through a local food-delivery program.
- An additional 50 pounds of fresh fruits, vegetables and spices were also donated to the tribe for their annual harvest party to honor tribal elders for their lifelong commitment to the tribe.
- Hosted six canning workshops in the summer and two community meetings in the winter to allow tribal elders to share their memories of their traditional cooking and farming practices with the goal of revitalizing farming in the Pueblo.



The Pueblo of Nambe designed a two-part program to help eliminate senior hunger in their community. The first part of the program is a simple inventory surplus database that allows project organizers to track surplus fruits and vegetables grown in home gardens throughout the community and redistribute this fresh produce to tribal members throughout the reservation. These efforts helped ensure that fresh fruits and vegetables did not go to waste. In the summer, these fruits and vegetables were distributed at local food stands, for free, to tribal elders and their families. Additionally, project organizers froze numerous fruits and vegetables that were used throughout the year in approximately half a dozen canning classes. At the end of class, participants were allowed to take their canned jams, jellies and salsas home with them.

The second part of the program is a large community farm built on two acres of land donated by a community elder who wanted to see traditional farming efforts revived in the community. Tribal elders helped determine which foods would be planted in the garden as well as how the food would be grown and harvested. During the first year in operation, the community farm produced more than \$4,000 worth of food to eliminate senior hunger on the reservation. Many of the fruits and vegetables planted in the community garden were grown and harvested by tribal youth under the guidance and supervision of their elders, who wished to pass their cultural knowledge and wisdom on to the next generation. Honoring the farming tradition of Pueblo culture, Nambe seniors worked with Nambe youth in the community garden during the summer of 2012 to teach them the language as well as traditional rituals, storytelling practices and farming methods.

Beyond traditional farming practices, the Pueblo of Nambe also purchased a hoop house that will allow the Pueblo to grow fresh produce year round. All harvested fruits and vegetables from the community garden and hoop house were donated to the senior center and made into hot, nutritious meals for tribal elders. These meals were distributed at the local senior center and delivered to elders who were homebound because of illness, incapacity or disability. Additionally, in the fall, the Pueblo of Nambe hosted a large harvest party to honor their elders with a traditional feast that included fresh bison along with fruits and vegetables.

In 2013, the Pueblo of Nambe applied for a second NAFSI grant to build upon the success of this community-wide initiative. The Pueblo intended to use the second grant to lease additional land and hire more hands to cultivate the community garden. To date, they have harvested \$6,000 worth of food through this expanded community farm. They intend to use the second grant to continue tackling food insecurity on the reservation; sell surplus fruits and vegetables to stores and restaurants off the reservation; and stimulate tribal economic growth and development by hiring community members to assist in these efforts.

Lesson Learned: Survey community assets and include community members in community programs. Asset surveys should include examining assets possessed by the tribe and individual members of the community. These asset surveys may produce valuable information about resources that can be used cooperatively or donated to develop local food-system control. The food surplus program initiated by Nambe was a survey of the existing individual farm plots within the Pueblo. Moreover, the land

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donated for the community farm was owned by an individual land owner within the Pueblo. These asset surveys yielded not only land for their community farm but also hundreds of pounds of fresh produce that went to community elders, all donated from individual tribal members.

Lesson Learned: Elders are initiators of community change. This project was initiated by tribal elders looking to reinvigorate farming practices within the Pueblo that had gone underutilized in recent history. Tribal seniors and elders possess vast knowledge that empowers communities to create strong and healthy Native nations.

Lesson Learned: Small community-based projects, based upon traditional farming practices, can be expanded to larger business ventures that have the potential to create jobs and stimulate the economy.

SANTO DOMINGO PUEBLO SENIOR CENTER GRANT AWARD AMOUNT: \$25,000

Tribal Background:

The Santo Domingo Pueblo is located near the ancient Cerrillos turquoise mines, roughly 30 miles north of Albuquerque, New Mexico. Agriculture has long been a central part of Pueblo life. Farming shaped local culture and economy. The indigenous religious system of Santo Domingo Pueblo stresses agricultural rhythms and products. The local belief system strives for balance not only between people, but also between people and nature. Group ritual knowledge and ceremonies are integral to achieving this balance. Santo Domingo people have closely guarded their ceremonies and place great emphasis on their ancient religious structures and societies. The Santo Domingo Pueblo would like to ensure that these ceremonies and traditions are passed down from tribal elders to tribal youth.

Program Outcomes:

- Built a greenhouse that produced more than 9,000 seedlings that were sold or transplanted to the community garden.
- The greenhouse and community garden produced nearly 800 pounds of fresh fruits, vegetables and tobacco.
- Approximately 600 pounds of fresh fruits and vegetables were distributed to tribal elders at the local senior center.
- Nearly 60 tribal elders participated in a weekly community farming program where they taught 40 tribal youth traditional farming and cooking methods as well as traditional songs, prayers and practices.
- In the process of developing and finalizing a traditional farming curriculum for the spring, summer and fall seasons.



The Santo Domingo Pueblo designed a tribal elder-youth mentorship program to help preserve traditional farming methods and develop a sustainable solution to senior hunger. Under this program, the Santo Domingo Senior Center purchased a greenhouse and gardening equipment to start a garden at the Senior Center. In the summer of 2012, seniors started planting fruits and vegetables in the greenhouse and garden with the help of tribal youth for the purpose of intergenerational learning related to farming.

Approximately 60 tribal elders and 80 tribal youth met weekly to participate in a variety of one-hour classes and workshops focused upon agriculture, language and traditional songs and ceremonies. Together, tribal elders and youth planted, harvested and cooked more than 800 pounds of fresh fruits and vegetables that were eventually turned into 150 hot, nutritious meals and distributed to tribal elders at the senior center and through the community's meals on wheels program for homebound seniors.

As demonstrated by the other grantees, recruiting and retaining tribal youth is always a challenge for any program. The Santo Domingo Pueblo overcame this challenge by offering small incentives, organizing field trips, and collaborating with other tribal programs to recruit more youth. Also, they learned that tribal youth are effective recruiters themselves – word-of-mouth recommendations encouraged more and more tribal youth to participate in activities each week.

In addition to the senior center garden, seniors in the community were offered resources and assistance to create home gardens and encouraged to begin farm-to-table efforts for individual wellness. Finally, the senior center also built an entrepreneurial aspect into their program. Given that the senior center experienced major budget cuts, taking away funding for extracurricular activities and field trips for seniors, seniors began efforts to create business models to sell transplanted plants to local community members at an affordable cost. Interviews with project organizers noted that, in actuality, the income generated from selling was minimal given that seniors wanted to give plants away rather than sell them, but these giveaways were still deemed a success in that it was an effective way for seniors to give back to community farmers.

The success of this project inspired the Santo Domingo Pueblo to continue holding weekly mentorship meetings even after their grant expired. Additionally, strong interest in the program compelled project organizers to design their own curriculum so that these efforts can be replicated in the future. The curriculum, which is tailored to specifically meet the needs of the Santo Domingo Pueblo, is still in the process of being finalized.

Lesson Learned: Tribal youth have the potential to play a significant role in building strong, sustainable tribal communities. Tribal elder-youth mentorship programs are a great way to harness, preserve and pass on traditional knowledge. This intergenerational learning not only helps pass on traditional knowledge but reduces the isolation of Native seniors and puts them at the center of educating and empowering local youth.

Lesson Learned: Senior centers in Native communities are vibrant venues for action and socializing for Native seniors. Not only are they important service providers in Native communities, but they have the potential to become focal centers for asset development and preservation among Native seniors.



THE SIPAULOVİ DEVELOPMENT CORPORATION GRANT AWARD AMOUNT: \$25,000

Tribal Background:

The Hopi population on Hopi land is just under 10,000, occupying 2,439 square miles. There are approximately 7,000 more Hopi people living elsewhere around the world. The Hopi have 12 villages located in three regions: First Mesa, Second Mesa and Third Mesa. While language, customs and traditions are similar, each village conducts its own ceremonies and has features that are unique.

Sipaulovi is an autonomous, self-governing Hopi village founded in the early 1700s and located on Second Mesa. They have approximately 1,200 enrolled members, of which 700 reside in the village year-round. The Sipaulovi Development Corporation (SDC) is an IRS 7871 organization chartered under Sipaulovi, an autonomous village of the Hopi Tribe. SDC has targeted a number of different community and economic development tasks including development of the Sipaulovi Village Marketplace and other culturally-relevant community development efforts, to expand enterprise and entrepreneurship opportunities in their community.

Program Outcomes:

- Inventoried, assessed and documented approximately 300 fruit trees on 80 acres of land.
- Restored flow to Sipaulovi's ceremonial spring with assistance from 80 volunteers.
- Hosted four field trips for tribal elders and youth to teach them about reclaiming traditional food systems.
- Hosted four workshops for tribal elders on canning and seed saving.
- Hosted a large farmer's market attended by 150 tribal members.

The **Sipaulovi Development Corporation** developed an innovative social program to enhance senior mobility and keep tribal elders active, healthy and connected to the community. Program organizers attempted to engage seniors with several activities and field trips related to traditional Native food systems. For example, tribal elders and youth helped project organizers inventory more than 300 ailing fruit trees across 80 acres of land. This activity encouraged tribal elders to take daily walks and hikes to reacquaint themselves with the community. According to project organizers, this type of activity is not only good for physical health, but brain health as well. This activity provided seniors with an opportunity to share traditional stories and personal memories with one another and volunteers who accompanied them.

Tribal elders also helped project organizers identify and collect heirloom seeds that have been planted in the community garden. Tribal elders and youth worked together to plant and harvest traditional fruits and vegetables, which were distributed to more than 75 tribal elders. In addition to providing seniors with



access to healthy food, project organizers also noticed that gardening is a great way to keep tribal active and improve their mood.

Another innovative activity that project organizers designed to keep tribal elders active is a series of canning workshops, which encouraged tribal elders to share their knowledge and wisdom with the rest of the community. For example, tribal elders helped teach two canning workshops, where they showed tribal members how to make jelly with Hopi grapes and pickle traditional vegetables. This activity inspired project organizers to host a farmer's market where tribal elders distributed their canned goods and local farmer's sold their produce. More than 150 tribal members attended the farmer's market

Lesson Learned: Design activities to remind tribal elders that they are still important members of our community. They possess the knowledge, wisdom and experience needed to help tribal members reclaim and restore traditional food systems.

Lesson learned: Simple activities such as gardening, crafts, and other hobbies help enhance senior mobility and improve senior health and mood.

The purpose of these three grant programs is to design a sustainable solution to senior hunger. These three projects also demonstrate that tribal elders have the potential to mentor and positively influence the next generation. There are many benefits to senior health and wellness programs – they offer an innovative way to harness and preserve traditional knowledge and also help teach future generations important cultural values, such as hard work, perseverance, sharing and the importance of honoring our elders.

IV. ALTERNATIVE SOLUTIONS: THE PONCA TRIBE OF OKLAHOMA

In addition to traditional knowledge systems, many tribes and Native organizations also have discovered alternative solutions to senior hunger. **The Ponca Tribe of Oklahoma** established the Healthy Pork Project to breed, process and distribute healthy, chemical-free pork in order to improve the diet, nutrition and overall health of tribal elders. As part of these efforts, project organizers distributed nearly 2,000 pounds of pork to approximately 1,200 tribal elders and their families via the local senior center and food distribution center.

The Healthy Pork Project is the brainchild of tribal member Amos Hinton, who recognized that many Ponca elders were struggling to feed themselves and their families. This realization compelled Hinton to research sustainable solutions to senior hunger. Eventually, his research led him to the idea of a natural animal farm, which is a healthy alternative to an industrial pig farm. Industrial pig farms often use growth hormones and other potentially dangerous chemicals to breed and process pigs.

A local community member donated the small tract of land needed to establish the pig farm. Hinton borrowed an old computer and sat down to write his very first grant proposal. Within a month, he received word from First Nations that his grant proposal had been accepted. He immediately began purchasing the animals and equipment needed to launch the Healthy Pork Project. Once the pigs had been processed, he began distributing healthy, chemical-free pork to Ponca elders at the local senior center.

Project organizers distributed nearly 2,000 pounds of pork to approximately 1,200 tribal elders and their families via the local senior center and food distribution center.



THE PONCA TRIBE OF OKLAHOMA GRANT AWARD AMOUNT: \$25,000



Tribal Background:

The Ponca Tribe of Oklahoma is a non-reservation based, federally-recognized tribe located in Ponca, Oklahoma. The tribe is governed by a seven member Ponca Tribal Business Committee that oversees a number of programs ranging from youth and educational programs and social rehabilitative programs to job training and health and child welfare programs. In the early nineties, the tribe conducted a comprehensive study to determine the needs of elders in their community. They used the information gathered from this survey to develop the Ponca Tribe Senior Citizen Program, which provides a caregiver program, food home delivery program and home health services as well as financial and legal assistance.

Program Outcomes

- Produced more than 2,000 pounds of healthy, chemical-free pork that was distributed to approximately 1,200 Ponca elders and their families.
- In addition to providing healthy pork to tribal elders, project organizers plan to expand this program into a commercial venture that will also sell healthy, chemical-free pork to local restaurants and grocery stores.



The tremendous success of this first project has encouraged Hinton to expand his efforts to commercial agriculture. He has started to sell this lean, healthy meat to local stores and restaurants. However, he will continue to donate half of the pork he produces to Ponca elders. Additionally, he has also helped cultivate 100 acres of farmland to provide goods to the local diabetes program, which services a large number of tribal elders.

The Healthy Pork Project demonstrates that small, community-driven efforts are powerful and capable of effecting great change. Hinton's advice for other tribes and Native organizations interested in developing a sustainable solution to senior hunger? "Start. Don't wait for others to find these solutions for you. We need to know where our food is coming from and we need to know that it is healthy for our communities."

"The primary purpose of senior health and wellness programs is to improve our tribal elders' quality of life. There are many solutions to senior hunger rooted in both tradition and change. Be creative and search for



innovative ways to combine important cultural values (i.e., respect for tribal elders) with modern practices (i.e. current agriculture and farming techniques).”

Lesson Learned: There are many solutions to senior hunger. Be creative and find a solution that works for your specific tribal community. While not a project based in traditional agriculture, this project demonstrates that local context can produce focused ideas to target senior hunger and increase local food-system control.

V. CONCLUSION

Tribal elders are important keepers of cultural knowledge and tradition. The four grantees highlighted in this report have developed innovative wellness programs and food sovereignty initiatives to help preserve and protect that knowledge for future generations. The innovative programs described in this report – which consisted of various mentorship programs, classes, workshops, and community activities – allowed tribal elders to share their knowledge and wisdom with future generations. More importantly, these programs encouraged tribes to show their respect and appreciation for their tribal elders and their lifelong commitment to their communities. These four communities demonstrated their respect and appreciation for their tribal elders by planting, harvesting and donating more than a half-ton of fresh fruits and vegetables – as well as 2,000 pounds of meat – to Native seniors. Without a doubt, increased access to all of these healthy and nutritious foods will significantly help eliminate senior hunger in rural and reservation-based Native communities.

The pioneering programs in this report reveal innovative strategies and policies that are eliminating senior hunger, increasing access to healthy foods, creating jobs and income opportunities and sparking community pride and revitalization. Their work reveals that local food systems can be enhanced, redeveloped and sustained for community empowerment and development. At First Nations, we are encouraged by the many findings concerning Native food sovereignty contained in this report. They show that Indian Country is filled with innovation, ingenuity and resiliency when it comes to food-system control and food sovereignty.

We would like to commend the four tribes and Native organizations highlighted in this report for their commitment and dedication to eliminating senior hunger in rural and reservation-based Native communities. However, we know that they are just a snapshot of the larger food sovereignty movement that is growing in Indian country. We hope the contents and recommendations included in this report will serve as a resource in Indian Country that will encourage other tribes and Native organizations to begin looking to one another to share ideas, models and best practices for Native food system control.



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VI. APPENDIX A: GRANTEE PROJECT DESCRIPTIONS

First Nations launched the Native Agriculture and Food Systems Initiative in 2001 to enhance the overall health and well-being of Native American communities. Through this initiative, we have awarded more than 100 food security and agricultural grants across the United States to various tribal communities. In 2012, with the generous support of AARP Foundation, First Nations awarded an additional four grants to tribes and other Native organizations dedicated to eliminating senior hunger in Indian Country. We invite you to read more about our grantees below:

Organization Name	Project Description	Grant
The Pueblo of Nambe	The Pueblo of Nambe Community Farm Project seeks to address food insecurity, especially among the elderly population. In an effort to eliminate senior hunger, project organizers developed a surplus program that encourages tribal members to donate excess food from their home gardens to tribal elders. Additionally, they planted additional fruits and vegetables in a community garden that were also donated to the local senior center and used to host a harvest party intended to honor tribal elders. The tremendous success of this program encouraged project organizers to expand their efforts and increase the size of their community garden. In 2013, they intend to continue donating fresh fruits and vegetables to tribal elders and also sell them to local stores and restaurants, consequently generating more revenue for the community.	\$25,000
The Ponca Tribe of Oklahoma	The Ponca Tribe of Oklahoma’s Healthy Pork Project seeks to establish and develop a natural animal farm as opposed to an industrial pig farm. Industrial pig farms now dominate the pork industry, but they often produce unhealthy pork. Instead, the Ponca Tribe of Oklahoma intends to develop a natural pig farm that produces healthy, chemically-free pork. Once the pork has been raised and processed at the natural animal farm, the pork will be distributed to tribal elders at the local senior citizens center and to tribal youth at schools and the local food distribution center. Through this program, the Ponca Tribe of Oklahoma intends to distribute healthy pork to all 217 of the tribal elders living in their community.	\$25,000



<p>The Santo Domingo Pueblo</p>	<p>The Santo Domingo Senior Center Project seeks to increase healthy food access for Santo Domingo elders by building a greenhouse and developing a business model to sell transplants to local community members at an affordable cost. Some of the seedlings will be transplanted to the community farm. The elders will work closely with the youth on planting, cultivating and harvesting the community farm. The farm will be used as a venue for the weekly classes for seniors and youth to teach traditional farming and associated cultural practices. Additionally, produce generated from the greenhouse and community farm will be sold at both the Santo Domingo Farmers Market and local convenience stores who have agreed to provide shelving and refrigeration space. Revenue generated from the sales of the seedlings and produce will be carefully tracked and reinvested in the following year's program to expand and create other revenue-generating arms.</p>	<p>\$25,000</p>
<p>The Sipaulovi Development Corporation</p>	<p>The Sipaulovi Development Corporation's Wuwukmuy Natwan Tuvaavoum Project seeks to expand an earlier tribal youth-elder mentorship program that resulted in a small community garden. The purpose of this project is to increase the size of that garden and restore a local orchard. They accomplished this goal with the help of tribal elders who helped project organizers identify traditional seeds and revive community farming and gardening practices. In addition to helping project organizers initiate this project, tribal elders also benefitted from this program nutritionally as well. The community garden and orchard is a reliable source of healthy food that the elders enjoy. Hopi seeds, water and land are the source of food security for elders of this generation and those to come.</p>	<p>\$25,000</p>
	<p>Total</p>	<p>\$100,000</p>



VII. APPENDIX B: RESOURCES

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