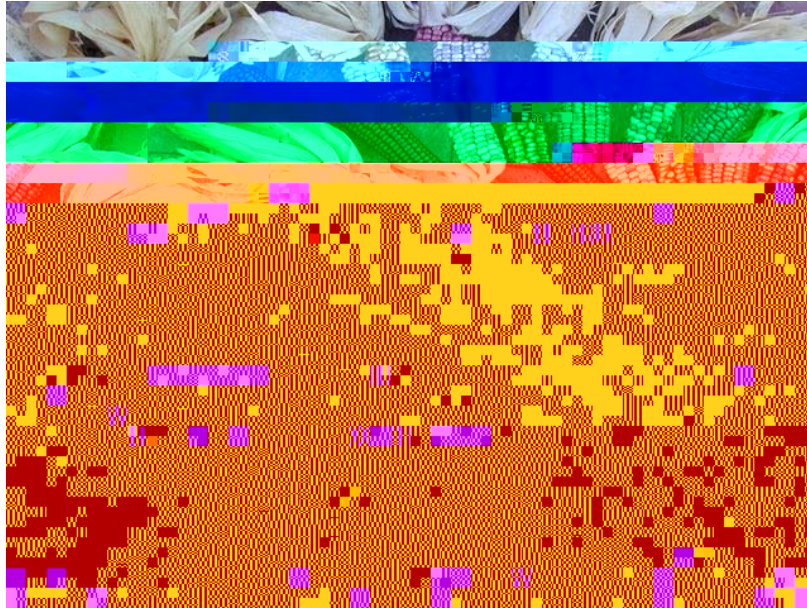


HUNGRY FOR CHANGE:



The Struggle for the Tohono O'odham Native Food System

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My FMHN house.506TT01Tf0.0001Tc0.225>Tjp4LTd(support)Tj/C2_01Tf0Tc<0003>Tj/TT01Tf0.0003

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Chapter One:

Food disparity affects people all over the

neighborhoods “are generally stocked with alcohol, tobacco, and prepackaged foods that are high in fat, salt and sugar. There is an emerging literature that documents the relationships between food access, quality of nutrient intake, and health outcomes.”²

Statistically speaking, studies show that in 2002 there was one grocery store per 18, 649

people in Los Angeles County. In 2006, there were 225,025 people in Los Angeles, one

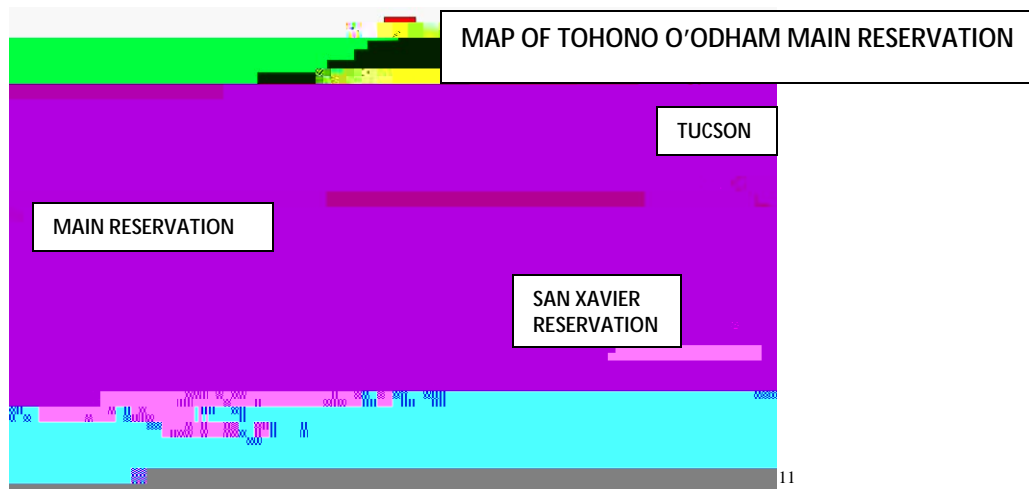
fruit and vegetables. "Native Americans are also four times more likely to report not having enough to eat than other U.S. households."⁶ Due to their poor diet and practices, severe health consequences result for Native Americans. Heart disease, diabetes and obesity are all consequences that majority of

educating them about healthy diets and lifestyles. The Tohono O'odham Community Action (TOCA) is a local grassroots organization based on the main section of the Tohono O'odham Reservation. Their work is dedicated to creating cultural revitalization, community health and sustainable development through community participation and education. Native Seeds/SEARCH is non profit organization located in Tucson, Arizona that works to protect the native seeds that are slowly working towards extinction. Groups, such as these two, are dedicated to the fight to save the native food system, as well as combat other enormous problems that the Tohono O'odham Native Americans face, including diabetes and lost farming practices.

Methodology and Limitations [ctices.

BACKGROUND

The Tohono O’odham (formerly known as Papago) Nation is a large southwestern tribe located in the heart of the Sonoran Desert. Their name literally means “People of the Desert”, which is true to their original and current establishment among the dry and arid land with wide valleys and huge mountain ranges. Comparable to the size of the state of Connecticut, it totals around 2.8 million acres.⁹ The Nation is broken up into four sections, the largest located in Sells, Arizona, approximately sixty miles west of Tucson. Around 18,000 of the tribe’s approximately 24,000 members live in this section, whose boundaries stretch over 90 miles, beginning in Casa Grande, encompassing some of Pinal and Pima Counties, and ending in Mexico. The second largest is located on the San Xavier Mission, known as the “White Dove of the Desert”, housing around 2,000 tribal members. The other two sites, San Lucy District and Florence Village, only hold 304 and 54 members, respectively.¹⁰



⁹ Inter Tribal Council of Arizona, Inc. “Tohono O’odham Nation.” 2003. 2 February 2008. <http://www.itcaonline.com/tribes_tohono.html>

¹⁰ U.S. Census Bureau. “Census 2000 Profile Highlights: Tohono O’odham.” 2 February 2008. <<http://factfinder.census.gov/>>

¹¹ “Tohono O’odham.” NativeWiki. 18 April 2008. <www.nativewiki.org/Tohono_O'odham>

The Tohono O'odham Nation faces many challenges that are typical of any low income, minority community. According to the 2000 US Census, the per capita income on the entire reservation is around \$3,113 (compared with \$14,000 nationally), which is also the lowest of all reservations in the United States. Approximately 65% are below the poverty line, with an unemployment rate of 62%. The majority of the tribe's income comes from the three casinos on their land, which has just recently been enacted over the past decade. However, this money cannot cover all the basic needs for the tribal members, resulting in huge numbers of people without working plumbing, telephones or automobiles. They also experience a high drop out rate for high school, at around 50%. They claim the highest rate of adult onset diabetes in the world, at more than half of the entire adult population.¹² Due to these extraordinary circumstances, the Nation is experiencing a desperate need for a reestablishment of their traditions and rich culture that is being threatened with extinction.

Culture and Traditions

The culture of the Nation is extremely important for the survival of the tribe. There are many traditions that are still very important, and others that have long been extinct. Their native language, called O'odham, is a strand of an Uto Aztecan language and is still spoken today. However, the majority of tribal members are fluent in English, and the native tongue is slowly being lost. "The language is not good today. I hear a lot of English with the adults and children. I do not think we realize what is happening – the loss of our language. Even though some of us are still trying

teaching and trying to wake people up... it is not an easy job," says Tohono O'odham tribal elder Danny Lopez.¹³

Basket weaving is another of the most important traditions for the Tohono O'odham, and can be used as a source of income. The women who still partake in basket weaving are very proud of their trade, and continue to pass it down to the younger generations. "Every basket is unique. You cannot compare it to others," [Delphine] Saraficio tells her students who use tools including an awl, a knife, nail clippers, a rock and a hammer, and a bowl with water to soak the grasses."¹⁴ There are also many ceremonies that are performed during various times of the year. For example, the sacred Saguaro Wine Ceremony is an annual event that is struggling to survive. Meant to literally "sing down the rain", this saguaro harvest and wine ceremony helped mark the beginning of a new year. Yet, today, hardly any of the Tohono O'odham members participate in this rite. Lopez, explains that this is due to the assimilation into the "dominant culture", which emphasizes

waters from the rainy monsoon season at the end of the summer to farm crops that are nutritious and adapted to the hot and short growing season. Then, throughout the entire year, the tribe will harvest the wild foods to be eaten, such as the fruit from cacti, mesquite bean pods, and acorns. Finally, hunting was used as a as

Native Americans living on reservations would receive monthly food packages to supplement their inability to produce or buy their own food. However, there was never any concern through the program to address the specific dietary needs of the Native Americans, and therefore the food was especially bad for them.¹⁹

Water is another major cause for the declining food system. Besides the global environmental issues surrounding water, the government's attempt to control floods led to an eventual lack of water sources near the reservation.²⁰ Historically, the Tohono O'odham Native Americans had developed highly strong coping skills for the absence of abundant water. Due to the fact that drought was a common occurrence, flexibility was essential to their survival. When their large varieties of crops would fail due to lack of sufficient rainfall, the entire tribe would pack up and move to the areas with flowing rivers. Then, once the drought had passed, the Tohono O'odham could move back to their desert dwellings and replant their seeds.²¹ This pseudo nomadic activity led the tribe to be known as the "no village" or "two village" people. The proximity of the Gila River and the Santa Cruz River were the two most ideal spots for the tribe's refuge during the drought seasons.²² However, the introduction of modernized cultures in the twentieth century brought about new challenges, as the Tohono O'odham were confined to the space of the reservation and had to change their traditional ways of living.

¹⁹ Economic Research Service/U.S. Department of Agriculture. "Food Distribution Program on Indian Reservations." 297-303. <http://www.ers.usda.gov/publications/fanrr19_3/fanrr19_3m.pdf>

²⁰ Tohono O'odham Community Action. "O'odham Ha'icu Ha Hugic Duakog: Tohono O'odham Food, Fitness & Wellness Initiative Planning Phase Proposal to the W.K. Kellogg Foundation."

²¹ Brown, F. Lee and Helen M. Ingram. Water and Poverty in the Southwest. The University of Arizona Press: Tucson. 1987.

²² Brown, F. Lee and Helen M. Ingram. Water and Poverty in the Southwest.

As a way to appease the Sonoran Desert Native American tribes forced to live on their reservations, the Bureau of Indian Affairs (then known as the Indian Service) constructed some federal programs to aid in the times of water shortage. Wells were dug throughout the reservations, in order to take advantage of the “abundant” groundwater.²³ However, when the surrounding counties’ populations grew and jeopardized the majority of the Tohono O’odham’s groundwater, the federal department turned to import water from the Gila River. The best example of this program was in the San Xavier Reservation, as it set up a pattern for water policy that is still followed today. The Santa Cruz River surfaced in certain pockets which formed springs. One was in the San Xavier Reservation, called Punta de Aqua.²⁴ The Indian Service decided to utilize these pockets of water, and carved acequias (ditches) into the river channel to “intercept the shallow water table and thus provide a regular water supply in an area where surface supplies were unpredictable and normally inadequate”.²⁵ While the intentions of this act were good, there was not enough planning or follow up which lead to several consequences. There was no attempt to protect the ditches from erosion, and therefore they “wreaked havoc on the landscape when the river swelled”.²⁶ These channels also affected the underground water supply, as the water table dropped to the deeply eroded level of the channel, which subsequently stopped all water flow to the other springs. Finally, the ditches also accelerated river runoff, resulting in less water infiltrating the underlying aquifer. “By

²³ Brown, F. Lee and Helen M. Ingram. [Water and Poverty in the Southwest.](#)

²⁴ Brown, F. Lee and Helen M. Ingram. [Water and Poverty in the Southwest.](#)

²⁵ Brown, F. Lee and Helen M. Ingram. [Water and Poverty in the Southwest.](#)

²⁶ Brown, F. Lee and Helen M. Ingram. [Water and Poverty in the Southwest.](#)

1912, neither the ephemeral surface flow nor the subterranean stream of the Santa Cruz provided sufficient water to irrigate fields of the growing town of Tucson".²⁷ However, when the non Native American citizens of Tucson realized this, they were able to monopolize the aquifer by digging multiple wells. The Tohono O'odham were forced to turn to the Indian Service for help with wells because they had insufficient funds, but there were not enough dug and were poorly maintained.²⁸ The water policies that were enacted to help aid the Native American groups and surrounding towns during times of drought actually backfired in the end. By forcing the Tohono O'odham to stay secluded on their reservation land and change their way of life, they had to find water elsewhere. When the channels and ditches were dug to dominate the low amount of stream and ground water, the subsequent erosion of the landscape and flow of the river created severe consequences to the native crops and natural systems of water. The many hindrances and restrictions that were placed upon the Native Americans at the turn of the century are still problematic today. For example, the water issue and policies alone have greatly affected the larger webbing of the Tohono O'odham's native culture, such that major health consequences (diabetes) and a loss of the nomadic traditions are now the prevalent ways of life.

Current Work on the Depleting Food System and Diabetes

All of the above reasons are huge factors regarding the decline of native traditions and food culture, which is beginning to be taken seriously by various groups.

At a "Principles of Food Sovereignty Forum" [http://www.4rg82_01y9bruar040Td<0003>Tj/TT03d\(which\)TTj/TT01Tf](#)

thinner and thinner, and the public is unaware and unconcerned. Must we wait for disaster to be real before we are heard? Will people listen only after it is too late?"³²

The health consequences that Native Americans face today, due in large part to the lack of a native food system, results in severe problems. Diabetes is the main outcome for tribal members, leading to devastating problems, including amputation (four times higher rate for Native Americans than the general population), blindness (six times higher rate), kidney and heart disease, and premature death. Diabetes is a degenerative disease that affects many organs and bodily systems. Mainly, it is a disease that "affects the body's ability to produce or respond to insulin, a hormone that allows blood glucose (sugar) to enter the cells of the body and be used for energy...It is a chronic disease that has no cure."³³ Type 2 diabetes (also known as adult onset diabetes) is developed due to a family history of the disease, obesity, high blood pressure or cholesterol levels, low physical activity, or belonging to an ethnic group such as American Indians or Alaska Natives. Native Americans are 2.2 times more likely to develop diabetes than non Hispanic whites.³⁴ According to the National Institute for Diabetes and Digestive and Kidney Diseases, the "thrifty gene" theory explains why certain ethnic groups, such as Native Americans, are more prone to diabetes. This theory, proposed by geneticist James Neel in 1962, suggests that these groups inherited a gene from their ancestors to use food more effectively during "feast and famine"

³² Hammond, Chef Robert. "Saving Seed – A Gift That Keeps on Giving." Chef's Corner: Celebrating America's Food Traditions. 11 March 2008. <<http://chefroberthammond.blogspot.com/2008/03/saving-seed-gift>

susceptible people and show them how important healthy lifestyles can be. The method of utilizing real life testimonials from those who have made lifestyle changes to prevent diabetes is used to encourage others to take the steps and realize that diabetes does not have to be a reality. Dr. Elias Zerhouni, Director of the National Institutes of Health (NIH) comments on the importance of campaigns such as this: "If we are going to make a difference, we need to reach people where they live, work, and play, with information that is consumer friendly and practical based on the proven science of diabetes prevention".³⁸ This is an important point because grassroots campaigns and organizing is a vital tool to reach out to the millions of Native Americans who are unaware of the fact that diabetes can be prevented, and it is not something they have to learn to live with. Other national campaigns work with community groups as well to educate the masses and push them to make healthy changes in their lives.

There have been many scientific studies done on the prevalence of diabetes among Native American groups. These studies are vital to those groups and government entities that work toward the future prevention of diabetes for Native Americans throughout the country. One such study, "Effects of Traditional and Western Environments on Prevalence of Type 2 Diabetes in Pima Indians in Mexico and the U.S.", was conducted in 2006. The research methods involved applying oral glucose tolerance tests to adult Pima Indians and non Pima groups in the Sierra Madre mountains of Mexico, as well as looking at their obesity, physical activity and other risk factor levels. These same methods were used on adult Pima Indians living in Arizona, and the results

³⁸ Berry, TaWanna. "Millions of American Indians and Alaska Natives at Increased Risk for Type 2 Diabetes." National Diabetes Education Program. 10 August 2004. <<http://www.ndep.nih.gov>>

from the different countries were compared. What was found was that the prevalence of type 2 diabetes in Mexican Pima Indians (6.9%) was less than one fifth that in the U.S. Pima Indians (38%). Also, Mexican Pima Indians had a similar percentage to that of the non Pima population in Mexico (2.6%). Obesity was found to be much higher in the U.S. Pima Indians than both Mexican groups, while the physical activity levels were higher with the Mexican populations. The importance of this studies conclusions is that diabetes is largely preventable. "The much lower prevalence of type 2 diabetes and obesity in the Pima Indians in Mexico than in the U.S. indicates that even in populations genetically prone to these conditions, their development is determined mostly by environmental circumstances".³⁹ Because the Pima Indians in Mexico had a significantly lower prevalence of diabetes than their U.S. counterparts, low levels of obesity and high amounts of physical activity are proven to be preventative measures for the disease. Therefore, beneficial lifestyle changes, such as workout programs and healthy eating, by Native American groups across the country will significantly help decrease the severity of the consequences of diabetes, as well as aid in the prevention for future generations of adults.

Lifestyle intervention programs are essential for the survival of Native Americans. The onslaught of this disease

Prevention Program Research Group. The research methods consisted of assigning 3,234 nondiabetic persons with elevated fasting and post load glucose concentrations, inducing diabetes like symptoms. Then, they were introduced to either a placebo, metformin (treatment drug), or a lifestyle modification program. Over a period of almost three years, the results of the study were as follows: lifestyle intervention programs reduced the incidence of diabetes by 58%, while metformin only reduced diabetes by 31%. This study concluded that lifestyle changes are imperative to diabetes reduction and prevention, and are more successful than medicine treatment alone.⁴⁰

Over the past few decades, research has been conducted proving that native foods, such as mesquite beans, help regulate blood sugar naturally. However, the push to a westernized food system, mixed with the "thrifty gene", overwhelmed the native metabolism, causing obesity and higher rates of diabetes. With the results of these studies, two attributes were found in native foods to help reduce

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found in native foods

increase of diabetes among Native Americans, and the main reason for direct action and outreach is to educate tribal members to return to their old ways in a modern setting.

TOHONO O'ODHAM COMMUNITY ACTION

The Tohono O'odham Community Action (TOCA) was founded in 1996 as a community based non profit located in Sells, Arizona on the Tohono O'odham Reservation's largest section. Originally founded as a response to conventional forms of diabetes prevention and treatment, TOCA worked to redevelop a local food system based on community involvement and cultural revitalization. Instead of the federal programs that used generic prevention and treatment facilities, the group emphasized community empowerment through "the promotion of healthy traditional foods, physical fitness and cultural practices".⁴² TOCA's main goal to create a healthy, culturally vital and sustainable Tohono O'odham Nation is accomplished through the four guiding principles used for decisions on programs and strategies: O'odham Himdag (wisdom from our past creating solutions for our future), Community Assets (see our resources, not just our needs), Encourage Community Self sufficiency, and Context is Crucial (strengthening the material roots of O'odham culture).⁴³ The first principle, O'odham Himdag, translates to "Desert People's Way" and is used as a guide for TOCA to focus on cultural heritage and traditions when developing solutions for the problems in the community. The second principle, Community Assets, encourages them to look at the good aspects of the community that are already there, instead of just focusing on the issues and importing solutions from outside the reservation. The third, Self Sufficiency, attempts to return to a time before outside social programs created the dependent

⁴² Tohono O'odham Community Action. "O'odham Ha'icu Ha Hugic Duakog: Tohono O'odham Food, Fitness & Wellness Initiative Planning Phase Proposal to the W.K. Kellogg Foundation."

⁴³ Tohono O'odham Community Action. "O'odham Ha'icu Ha Hugic Duakog: Tohono O'odham Food, Fitness & Wellness Initiative Planning Phase Proposal to the W.K. Kellogg Foundation."

\$475,000 grant, TOCA has been able to expand their production and consumption of native foods.

From their mission to develop culturally significant solutions to the problems facing their community, TOCA has four key program areas: Basketweavers Organization (TOBO), Community Arts and Culture Program, Youth/Elder Outreach Program, and Community Food System. Furthermore, TOCA's recent collaborations with other organizations has led to other various projects, including the Water is Sacred Campaign, School and Elderly Gardens, Traditional Food Harvest Camps, and Traditional Games Festival.

Traditional Singing and Dance Group, Traditional Storytelling Events, and the Culture and Leadership Camp for Youth. TOCA feels that the youth are the most important group to reach out to, because they are key in the cultural revitalization of the tribe. Due to the many outside, modern influences and a lack of solid traditions of the tribe, many of the children and teenagers are unsure of what they stand for or what their identity is.

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NATIVE SEEDS/SEARCH

Native Seeds/SEARCH (Southwestern Endangered Aridland Resources Clearing House) was founded in 1983 by Barney Burns, Mahina Drees, Gary Nabhan and Karen Reichhardt. Their original mission, which remains the same today, is "to conserve, distribute, and document the adapted and diverse varieties of agricultural seeds, their wild relatives, and the role these seeds play in cultures of the American Southwest and Northwest Mexico".⁴⁸ Located in Tucson, Arizona, Native Seeds/SEARCH (NS/S) is a local non profit organization that sells their seeds and crafts worldwide. Over the past 25 years, the organization has grown exponentially. They started out with 47 seeds in their seed bank, which was gathered by the four founders travelling to various indigenous villages looking for the native and was native & Tucson

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continues to support traditional farming practices of the Tarahumara Indians in Northern Mexico. NS/S works with this group to ensure that they can continue their cultural practices, even in light of drought or economic problems. Through seed money, terracing of mountainous landscape to prevent soil erosion, and installation of water harvesting systems, NS/S has worked with five villages to protect their native ways.⁵⁷

The events that are put on by NS/S can be on a large scale and bring a lot of publicity and support to the organization. Flavors of the Desert is one of the most important events of the year for NS/S, as it brings in guests and sponsors to donate money for the continued support of seed conservation. Held annually in

both for the genetic value for plant breeders globally, but also for their value to communities that utilize them. Their success has been widespread and they are providing seeds to growers worldwide. However, founder Gary Nabhan thinks the value goes farther than that. 🌐 Nabhan

ANALYSIS OF TOCA AND NS/S

The two organizations, Tohono O'odham Community Action and Native Seeds/SEARCH, are both integral to the fight for saving the native food system and culture of Native Americans in the Southwest. While TOCA works for their tribe alone, all of their work has the potential to be useful for other native groups nationwide. NS/S is not affiliated with a particular Native American tribe, but work with the seeds and culture of the native food system, which is applicable on a large scale level. Each organization has their own successes and challenges which are unique to their individual missions and goals. Yet, there is a definite overlap in their goals for the betterment of the native food system, which could lead to a strong working relationship or coalition building. As of today, however, their relationship is weak and competitive which only hinders their capability to make real change.

At the Food Sovereignty Forum,

include exercise and better eating.⁶²

Obstacles

Each organization also has their own challenges to overcome and improvements to make. There is one apparent area for improvement with NS/S, and that is community outreach. While they are not affiliated with any one particular Native American tribe, their wor

“ NS/S ID: i40Bed503>

their strong suits. Nelson, on the other hand, defends NS/S by stating that they support local organizations doing the hands on work in communities through the gift of seeds. "We always try to work with local entities, but we're limited in what we can do, both from a lack of staffing and from not being a part of their community".⁶⁸ She goes on further to describe the divide between the two as being derived from the fact that TOCA sees NS/S as a group of "outsiders", who are trying to take over their work. However, Nelson states that NS/S is not in a position to lead the fight against diabetes, but will support the efforts through their unique work of conserving seeds. "We can certainly support other efforts by producing and making available the seeds and foods that help combat diabetes...but the reality is that this work has to come from the inside; it has to come from the communities or tribes themselves".⁶⁹ As NS/S is not equipped to lead the fight for a sustainable food system through community organizing, and TOCA

differences and work together for the common good.⁷¹ Both TOCA and NS/S approach the problem from a different angle, and through a combination of their efforts, stronger and more visible changes are bound to occur.

⁷¹ Lopez, Danny. Phone Interview.

spends almost twice as much per person for health care for federal prisoners as we do for First Americans," comments Dorgan.⁷³

The key provisions of the legislation cover a lot of ground and variety of needs for Native Americans. Due to the passage of this bill there will be a continuation of

scholarship programs, evening.00447c0.2250 (re)0.2250 (we)j/C2_04-1070-033-0003>T/T acjit

Representatives, this is a positive step forward for everyone concerned for the health of Native Americans.

Public Campaigns

Public awareness of the increasing loss of the native food system is integral for forward movement and action. Proper media attention has the potential to be an enormous boost for public action. A recent documentary, "Bad Sugar", is a great example of reaching out to a large audience. Shown on PBS this past March under the "Unnatural Causes: Is Inequity Making Us Sick?" series, the film explores the environmental and political issues that surround type 2 diabetes among the Tohono O'odham, while also looking at the historical facts that led to the onslaught of this disease.⁷⁶ This documentary is an important asset to the attention this issue gets. By not only focusing specifically on the plight of the Tohono O'odham problems, Jim Fortier, director and producer, also chose to bring up other social issues of inequity, such as neighborhood improvement projects and the living wage. "Things didn't happen by chance...These things are based on decisions that somebody else made and they are now having horrible consequences on Indian people," says Fortier.⁷⁷ This documentary showcases to the public what many organizations, such as TOCA and NS/S, have been working against for years. However, with a mass broadcast on PBS, documentaries such as "Bad Sugar" can only aid in the effort to revert back to the traditional food system and work towards future prevention of diabetes. This documentary could be the start of

⁷⁶ Staff Reports. "Documentary to Explore Issues Behind High Diabetes Rates Among Tohono O'odham." *Indian Country Today*. 19 March 2008. <<http://www.indiancountry.com>>

⁷⁷ Staff Reports. "Documentary to Explore Issues Behind High Diabetes Rates Among Tohono O'odham."

be allowed to receive coupons through the Farmers Market Program, as it is under the WIC umbrella.⁷⁹ The distribution of fresh foods through this program would be an immense improvement to the food system on the reservation. While it does not incorporate the traditional food aspect of the declining native food system, it does allow for

could then support this endeavor by providing the space for these workshops and publicize such events to the people of the reservation. From there, a program could be established between the two groups that allows for this relationship to happen, as well as ensure the implementation of the planting and farming. The Patagonia farm that NS/S owns could also be a part of this program, used primarily as a teaching tool for the Tohono O'odham. TOCA could bring interested patrons to the farm, and the NS/S staff could show firsthand the proper, and traditional, farming techniques required for the planting of the native seeds. If the relationship between TOCA and NS/S could be improved, the Tohono O'odham could learn a great deal about their own food system, as well as improve their own health conditions.

Federal policies and direct action on a local level are vital for the survival of the Tohono O'odham's native food system and culture. A combination of fresh h20Tc<0003>Tj/o1Tc32125244

Native communities".⁸⁰ While the socioeconomic conditions of Native Americans require a much bigger change in public policy, the basic survival of the food system can be a step in the right direction. The health problems which lead to diabetes must be something that is changed immediately, and is something that can be accomplished when the right factors and groups combine together.

⁸⁰ National Diabetes Education Program. "The Diabetes Epidemic Among American

CONCLUSION

The native food system of the Tohono O'odham tribe in Arizona utilizes a variety of traditions and cultural rites. Also, it brings in healthy foods that are unique to the desert dwellers, which are able to grow even under the harshest conditions. However, due to federal programs, restrictions to live solely on reservations, water rights issues and other such public policies, the Tohono O'odham food system is depleting everyday.

The traditions are no longer practiced as much, and the foods are rarely systeme

WORKS CITED

11.) Holland, Judy. "Senate Backs Overhaul Bill That 'Will Save Lives'." Washington Bureau. 26 February 2008.

12.) Inter Tribal Council of Arizona, Inc. "Tohono O'odham Nation." 2003. 2 February 2008. http://www.itcaonline.com/tribes_tohono.html

13.) Juris, Corpis. "S.1200, Indian Health Care

26.) Sando, Alex. Email

Appendix B: NS/S Photos



Tarahumara Indian Outreach in Mexico⁸³



Jars of seeds from the Seed Bank⁸⁴

⁸³ Peel, Diana. "Native Seeds/SEARCH Founder Tribute Video." 6 April 2008.

⁸⁴ Peel, Diana. "Native Seeds/SEARCH Founder Tribute Video." 6 April 2008.

