

# Improving Environmental and Social Conditions: Navajo Flexcrete



Image Source: <http://www.kstrom.net/isk/maps/az/navhopi.html>

The Navajo are the largest group of Native Americans in the United States of America today. Their region, the focus of this case study, is located in four states: Arizona, Colorado, New Mexico, and Utah. This area is characterized by limited natural resources, remoteness, little investment, and a high incidence of unemployment, substance abuse, and poverty. The remote location limits development and prevents external interest.

The Navajo people desire self-reliance and sustainable practices; this has caused them to reject many business proposals and development initiatives. The Navajo Housing Association (NHA) embodies self-reliance and sustainability by developing an innovative business plan to benefit many in Navajoland. The traditional Navajo belief system focused on four main aspects of life: economic (the mother), cultural (the father), environment (children), and social (visitors); these cultural tenets would become the base of the Navajo Flexcrete business philosophy. The implementation of the business plan would preserve cultural beliefs of sustainability and interactions with the environment and provide efficient housing for the people.

Collaboration between the NHA and the Navajo people led to the establishment of Navajo Flexcrete company. Navajo Flexcrete utilizes cement and fly ash, the by-product of coal, to construct an array of building and construction materials. These materials were used in the construction of many homes in the region in a cost effective manner. This development is exceptionally notable because the buildings are green structures. The materials used are recycled from a different industry and ensures little to no waste. In order to manufacture these products the business required state-of-the-art technology; incorporating this technology to preserve sustainability and tradition was seen as innovative.

To overcome the lack technology knowledge in the region a small technology firm was identified as a partner. Together they developed strategies, such as using certain chemicals and baking the cement, which lowered production costs and lowered energy consumption. This made a sustainable initiative a successful business which generated investment and interest from national and international actors. Navajo Flexcrete's products are regularly used within the region but also transported to surrounding areas. The unique combination of culture, sustainability, and technology makes Navajo Flexcrete a novel and innovative business. Not only does Navajo Flexcrete generate employment it provides environmentally friendly housing materials for the nation to utilize and allows that Navajo to gain self-reliance and sustainable production.

One notable aspect of Flexcrete is the value that can be gained from successful partnerships. The Navajo benefitted from a partnership with the NHA and further enhanced their benefits with the introduction of the technology firm. Another aspect is the value of technology and its incorporation into regular practices. By introducing new technology and processes, Navajo Flexcrete was able to make a sustainable business highly profitable and culturally beneficial.

A final notable aspect is the importance of a connection to one's place. Attachment to an area served to motivate residents to take action that improved their home. Because the Navajo had a strong connection to their land they only permitted a green business venture to operate in collaboration with them. Furthermore, by incorporating traditional beliefs into a modern business Navajo Flexcrete managed to enhance profits.

What the Navajo case best exemplifies is that limited resources and remote location are not determinants of development once collaboration, teamwork, and technology are introduced. Therefore seeking external help to see cultural ambitions come to fruition is a strategic method for bettering a region and preserving culture (O'Neill et al., 2009).

## References

O'Neill, G., Hershauer, J., & Golden, J. (2009). The Cultural Context of Sustainability Entrepreneurship. *Greener Management International* 55: 33-46.

Prepared by Kyle White  
17 June 2013

**Canadian Regional  
Development**  
A Critical Review of Theory,  
Practice, and Potentials



**Développement régional  
canadien**  
Un examen critique des théories,  
des pratiques et des potentiels

This vignette was created as part of a multi-year research initiative focused on regional development in Canada. For more information about the project visit:

<http://cdnregdev.ruralresilience.ca>.