

Barriers to PES programs in Indigenous communities: a lesson in land tenure from the Hopi Indian Reservation.

By

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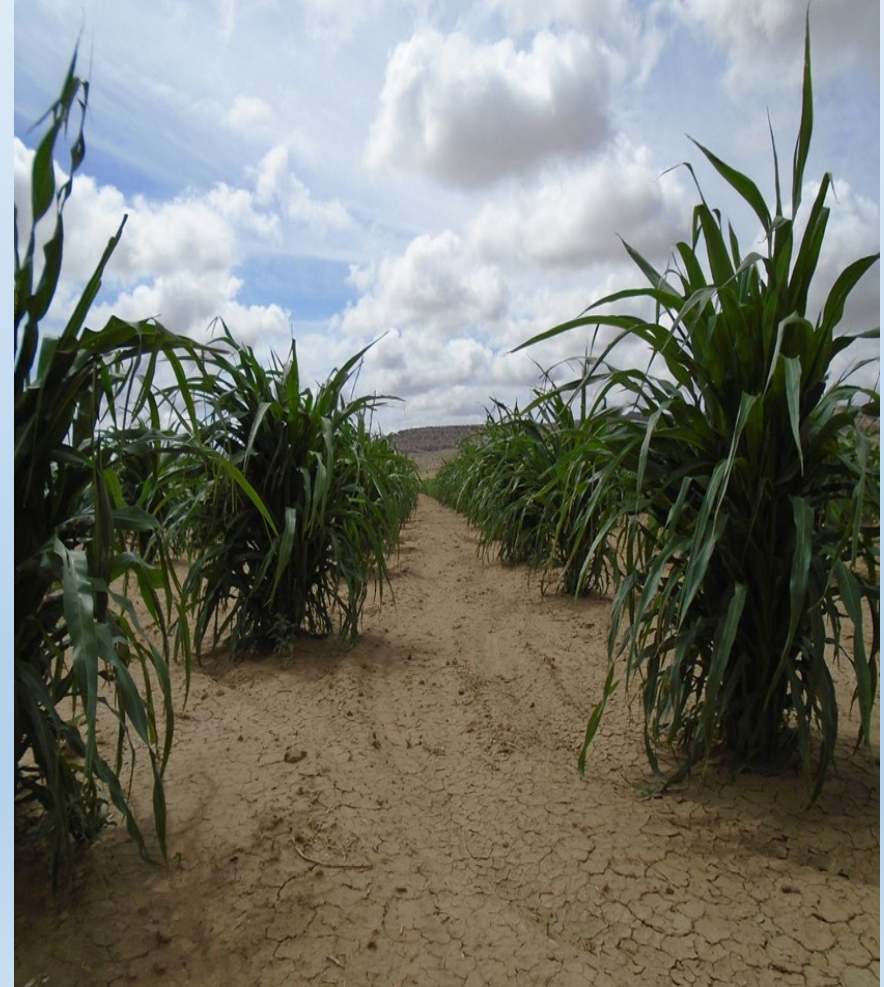


Environmental Quality Incentives Program (EQIP)

- **NRCS's EQIP program was created in 1996.**
- **Goal is to address farmers and ranchers' natural resource concerns by providing technical and financial assistance.**
- **Cost share requires up front capital**
- **Requires private property ownership**
- **Only 771 EQIP contracts in Indian Country for 58,475 Indian operated farms.**

Failure of EQIP on Hopi

- In 1999 sixty-nine EQIP contracts issued
- By 2004 all but one was cancelled

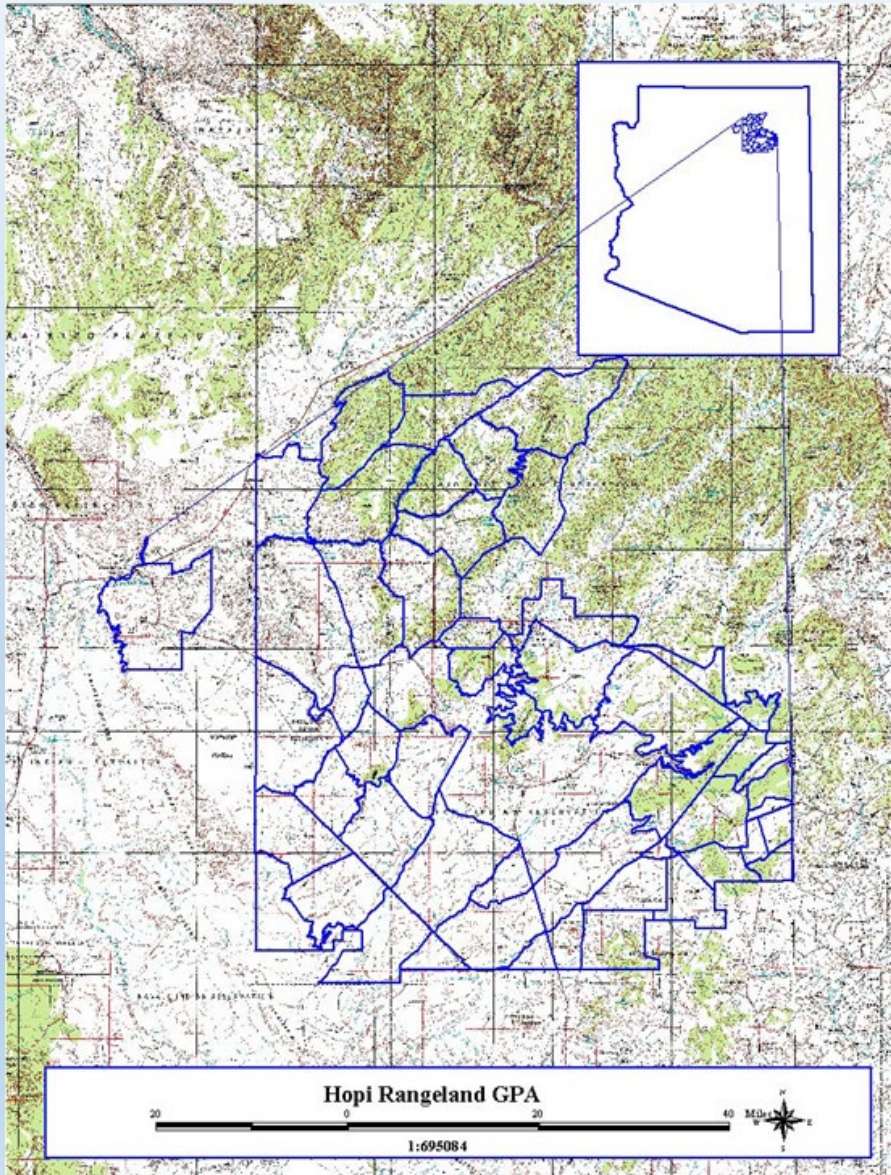


Purpose of the Study

- Only three studies have considered PES in Indigenous communities in developed countries.
- Evaluate the barriers to PES programs in Indian Country in the U.S.
 - Identify barriers preventing Hopi ranchers and farmers from participating in NRCS incentive-based programs.
 - Determine what institutional changes are necessary for successful participation in NRCS programs by Hopi farmers and ranchers.



Quick Facts about the Hopi Indian Reservations



- **Located in Northern Arizona-
1.6 Million Acres** (Ashley, 2016)
- **Multiple Layered Land Tenure
Regimes**
- **14,127 Total Hopi Population-
7,803 Reside on Hopi** (Ashley, 2016)
- **66% Unemployment Rate** (2010
U.S. DOI)
- **Median Household Income
\$15,875** (2005 U.S. Census)

American Indian Land Tenure Classification

Land-Tenure Class	Definition
Tribal Trust Land	Land held in trust by the federal government for the entire tribe
Allotted Land	Land held in trust by the federal government for the benefit of an individual Indian
Fee Land	Land that is held in fee simple and not in trust
Clan Land	Land controlled by the different religious societies for customary use.
Village Land	Land controlled by the village

Methods

- **Document review (13 total-annual reviews, cancellation letters and project meeting notes).**
- **Key informant interviews (14 total-USDA, BIA, BLM, Hopi Tribal Officials and HCD Board Chairman).**
- **Inductive coding (Determination of Thematic Barriers).**



Results: Four Major Barriers to EQIP on Hopi

- **Multi-Layered Land Tenure**
- **Lack of Capital**
- **Lack of Communication**
- **Institutional Design Flaws**



Land Tenure Issues

- **Jurisdictional Issues**
- **Written Permission**
- **Multiple Signatory Issues**



Lack of Capital

- **Lack of Monetary Funds**
- **Burden of Taxes**
- **Top Down View of Capital**



Lack of Communication

- **Participants not Understanding the Contract**
- **Untimely Project Delays**
- **Mistrust**



Institutional Design Flaws

- **Lack of Interagency Cooperation**
- **Lack of Oversight**
- **Passing the Burden**





Why did EQIP fail on Hopi?



Land tenure insecurity and culturally inappropriate institutional mismatches between tribal governance and PES causes unsuccessful implementation.

Suggested Solutions

- **Lower upfront capital requirements for cost-share programs.**
- **Educate PES program proponents about tribal lands to improve administration and communications.**
- **Create extension programs to provide Indigenous communities with information about PES programs.**

Additional Research

- **Hopi approach to agriculture is holistic, NRCS's approach is not.**
- **Studies needed to demonstrate the efficacy of Indigenous methods of conservation in agriculture.**
- **Examine the resiliency of Indigenous knowledge in the areas of biodiversity, conservation, and climate adaptation.**

Outreach

- **Illustrated Exhibit on Hopi Agriculture**
- **Initiation of Indigenous Conservation Knowledge (Pilot Studies)**
- **Establishment of Tribal Youth Initiatives**



Thank You!



Johnson, M. K., Lien, A. M., Sherman, N. R., & López-Hoffman, L. (2018). Barriers to PES programs in Indigenous communities: A lesson in land tenure insecurity from the Hopi Indian reservation. *Ecosystem Services*, 32, 62–69. <https://doi.org/10.1016/j.ecoser.2018.05.009>