Final Report

The Zuni Sawmill Enterprise:
Tribal Economic Development and Sovereignty

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As a Research Fellow at Zuni Pueblo in 1998, I helped the Zuni Department of Natural Resources (ZDNR) to initiate a small sawmill enterprise. The core objective was to facilitate home-building on the Reservation – a deceptively simple task that has offered ZDNR plenty of financial and political challenges. The project has continued to grow and has enabled the Tribe to expand its forestry efforts in quite innovative and sometimes controversial directions. The current strategy focuses on collaboration with Cibola National Forest through a stewardship contract, utilization of small-diameter timber, and pursuing Tribal sovereignty through access to off-Reservation resources. Since 1998 I have been involved as a consultant to ZDNR.

**Progress in 1998: problems encountered and lessons learned**

In the early 1990s, in settlement of litigation against the U.S. Government for land damages, the Zuni Tribe initiated its Conservation Project (now ZDNR), with programs in watershed restoration, hydrology, sustainable agriculture, range conservation, wildlife management, and geographic information systems. Zuni forests, including about 12,000 acres of ponderosa pine-mixed conifer timberlands and over 200,000 acres of pinyon-juniper woodlands, are managed by the Bureau of Indian Affairs - Zuni Agency, which administers timber sales and manages Zuni fire crews, a seedling greenhouse and other projects. While ZDNR managers had been discussing community forestry for some time, and were concerned with the sustainable use of pinyon and juniper, the sawmill enterprise was ZDNR’s first substantive initiative in forestry – a project that seemed assured of broad support, while the prospect of restrictions on firewood use was far more controversial. The sawmill also offered ZDNR the opportunity to extend its control over Zuni forests – in collaboration or if necessary in competition with BIA – and to integrate with the existing Zuni Furniture Enterprise, which was producing painted furniture using off-Reservation lumber. Most immediately, Zunis who purchased lumber off-Reservation for their projects were somewhat indignant to see timber leaving the Reservation in sales to outside companies. A sawmill in Zuni would provide a local, and potentially discounted, source for lumber for construction, renovation, and the Shalako houses – family homes built each year as part of the Shalako religious holiday.

ZDNR had a Wood-Mizer portable sawmill, purchased with grant funding from the U.S. Forest Service Rural Community Assistance program, but no one to turn it into an operating sawmill. This became my concern. The multitude of details involved made me feel less like an academic than an aspiring entrepreneur (warned by his business planning books to expect twelve-hour days and so on). There was mechanical troubleshooting; research into mill layout and efficiency and lumber drying; market research; the hiring of two sawmill operators; arranging visits to other small sawmills and training days at Zuni; designing a record-keeping system for production and sales; convening a Zuni Sawmill Steering Committee for expert advice and community input. Most challenging was coordinating the roles of ZDNR personnel, BIA foresters, and other Tribal departments in identifying areas for timber harvest, obtaining environmental and cultural resource clearances, finding the equipment and personnel for an extremely low-budget, improvised but reasonably safe logging operation.

Lest this appear merely the exciting *montage* section of my report, I should emphasize that political obstacles at each step made it often unclear that the sawmill would ever cut its first board. These are too complex to describe here, but turned on who would exercise effective authority over Reservation forests – ZDNR, with its federal mandate, external support and inertia in community forestry; BIA, with jurisdictional authority and the trust responsibility to manage the forests for the greatest Tribal benefit; or other federal and Tribal departments in a position to hold up the whole process by their control over archeological and Traditional Cultural Properties.
review. These turf battles were difficult to resolve in the context of a Tribe that seemed chronically reluctant to specify its forest objectives, economic or otherwise, and of cultural resource authorities being re-negotiated at the federal and Tribal levels. The self-determination strategies of the Tribe in the areas of forestry and of cultural resources did not necessarily move in concert or in ways conducive to getting an enterprise up and running – ZDNR’s and my concern, perhaps, but not of overriding importance to those concerned with political precedents and larger questions of federal and Tribal authority.

Yet through gentle pressure and cajoling the enterprise did move forward. Four harvest operations, between November 1998 and August 1999, brought a total of about 40 MBF net scale to the mill. Initially all harvests were designed for the eradication of dwarf mistletoe; as harvest continues, the objectives will include reduction in basal area per acre in some areas to improve regeneration. Sawyers have cut mostly framing lumber (2x4s, 2x6s etc. in various lengths) at an overrun of about 37%. Monthly production levels continually increased from about 2,000 BF in December to 9,000 in July.\(^1\) Sales of framing lumber have been mostly to individuals for home construction and renovation, with slabs for corral-building also a popular product. A number of homes and additions in Zuni now contain Zuni lumber. Due to harvest delays, the sawmill provided only a little lumber to the Shalako homebuilders in 1998, but in 1999 these builders appear to be relying heavily on the mill, which cuts their lumber and travel costs. Their needs alone are significant relative to the small scale of the mill. Additional sales have been made to Tribal housing and rental programs and other departments.

One of the key decisions, made by ZDNR and the Sawmill Steering Committee, was to sell lumber at highly discounted prices. Lumber has been sold at about $0.35-0.45 per board foot, and revenues in most months have fallen short of production costs. While ZDNR has received a series of U.S. Forest Service grants for equipment and training, ZDNR itself is covering labor and some materials costs both at the mill and for the harvests, and these costs exceed revenues at current prices.\(^2\) Naturally, this has been among the most hotly contested issues, calling into question the sustainability of the mill without subsidies and managers’ future ability to defend those subsidies to Tribal government. It would be easy to cast the Zuni Sawmill into the heap of loss-making Tribal enterprises and jobs programs, but the situation is in fact more complex. At issue is the balancing of Tribal economic, local development and cultural objectives: how far the Tribe is willing to go in subsidizing the mill and sacrificing timber revenues in order to address local housing shortages, and how much weight cultural uses -- Shalako houses and restoration of kivas, in the interest of groups with a strong political voice in Zuni -- should be given. Thus far ZDNR managers have chosen a service rather than an enterprise model and have made sales almost exclusively on Reservation. This explains the loss, but it is a fragile balance. As the mill moves beyond the initiation and learning stage, a strategy of profitable off-Reservation sales of higher value-added products, subsidizing discounted on-Reservation sales, offers a potential way out. Meanwhile, using the mill to enhance access to off-Reservation resources may turn out to be a money-making or money-losing proposition, but it is certainly not primarily driven by revenue considerations.

Lessons from collaborative research

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\(^1\) These low production levels are attributable to short staffing (with production stopping when sawyers interact with customers), time spent by sawyers attending trainings and making yard improvements, low scaled yield from mostly small-diameter material, and holdups in timber supply.

\(^2\) This does not include timber costs, since timber has been allocated to the mill by the Tribe.
This sort of collaborative research project tends to foster a complex of multiple personalities on the part of the researcher, a feeling no doubt familiar to other Ford Foundation fellows. When in Zuni I am occupied with the details of starting the project and trying to move it forward. I move between the roles of forester, accountant, grantwriter, meeting facilitator, technical adviser, and lumber salesman. To some of these tasks I bring specific skills but mostly they are borrowed roles – just-in-time skill development for problems that arise. In any case there is little time or reason for academic theorizing. The project continually changes and problems that come up change my understanding of what are the interesting or most central issues. The case study is firmly in the driver’s seat, theory behind or indeed struggling to catch up -- as opposed to the frequent approach of interpreting or choosing case studies to validate a strong, internally coherent or nicely elegant theory. Aside from questions of an equal exchange of benefits between researcher and host community, this encourages a sort of flexibility and humility that researchers and theorists should be forced to deal with.

Back in Berkeley I have looked for a theoretical framework within which I can sensibly organize the important variables and look for more general lessons about Indian development. I have tried and discarded several. My current thinking focuses on alternative approaches to the study of institutions and states and their outcomes for economic development, drawing on New Institutional Economics, moral economy and political economy. The objective is to theorize the sort of political and distributional conflicts that have arisen in the case study, attempting to glean from the case and from theory some elements of – what is clearly a much larger project – a political economy of Tribal governments and development. The consultant/theorist balance remains difficult for me, however. The theoretical project is of course of little interest or usefulness in Zuni; naturally, no one likes to be theorized and any on-the-ground project (and life in general) is far more complex and refractory than the most nuanced theory. Key questions for the collaborative research approach are: once the researcher has paid her dues to a local community, delivered skills and results, how much freedom has she earned to pursue an independent intellectual project, not driven by benefit to the partner community and inevitably entailing some re-interpretation and de-emphasis of locally important concerns? Is it her responsibility to present the community positively, even if that means not pursuing intellectual trajectories that are either personally interesting or valued in the academic context; or is it enough to be faithful to the complexity of the local situation?

A second interesting research lesson is that, in the politically charged context of natural resource management in Zuni, my role as an apparently neutral and compliant go-between was at least as important in moving the project forward as the more instrumental roles. That is, the process, of which the endpoint was a sawmill enterprise open for business, depended not just on putting time into a multitude of tasks but on calling frequent meetings, applying gentle pressure and reminders to coordinate the roles of ZDNR, BIA and other Tribal departments. While agreeing that the sawmill was a good idea, key personnel had divergent ideas about how it should be done, naturally did not separate the sawmill from their larger conflicts, histories and political relationships, and were more accustomed to working around and behind each other than together. For the researcher, this means patience and frequent tongue-biting will be required; on the other hand, the researcher must know whom he represents, will be called upon to represent that interest and must be willing to do so.

The third methodological/ethical issue should be obvious by this point: there is the potential for the researcher to effect significant changes in the host community. Not of so much interest here is the abstract question of objectivity, an illusion that has been abandoned in most disciplines. Rather the question is: how much and what kind of change is one willing to effect? Zuni crews are now cutting trees on the Reservation and people are buying lumber to put in their
houses. To ZDNR managers, to the mill laborers who got jobs, and to the purchasers of cheap lumber this is a good thing. Others object to one decision or another, and there has been no systematic attempt to elicit a majority opinion on whether and how the project should be done. Moreover, the sawmill cannot be separated from its effects on rearranging political relationships and redistributing resources among Tribal and federal departments, social groups within Zuni and the general population of potential lumber-buyers and forest users. I think this dilemma will take diverse forms for future community forestry Fellows.

New directions in 1999

Building on my work as a Ford Foundation fellow, I have had continued involvement with ZDNR’s sawmill project. With on-Reservation issues less than completely resolved, ZDNR nonetheless wanted to move off-Reservation, building on its strong relationship with U.S. Forest Service – Cibola National Forest. We wrote and received a grant from the Four Corners Sustainable Forestry Initiative as a demonstration project in the increasingly popular realm of small-diameter utilization / forest stewardship / rural development initiatives. Zuni crews will be harvesting timber on Cibola lands under a long-term stewardship contract, in which Zuni will receive small-diameter timber for processing and marketing through the Zuni Sawmill and the National Forest will accomplish thinning treatments desired for fire and disease risk-reduction. Negotiating this exchange without transfer of funds will enable it to move forward in a way that would not be possible, from either Zuni’s or Cibola’s perspective, using more conventional timber sale or service contract mechanisms. Cibola staff see substantial mutual benefits and are committed to overcoming certain budget obstacles (e.g., National Forest budgets tied to volume sold rather than acres treated), with a view toward laying the groundwork for longer-term collaboration and possible landscape-scale forest stewardship projects. I spent the summer of 1999 as a consultant to ZDNR, researching local utilization and marketing options for small-diameter timber and planning the upcoming harvest.

This strategy will soon bring Zuni into regional and national political controversies over National Forest management. The sort of harvest treatments planned should be acceptable to Southwest forest activist groups, and Zuni may be able to place itself strategically in the consensus around small-scale forest management / local development that is slowly emerging from earlier industry – environmental polarization. Environmentalists are still highly suspicious, as perhaps they should be, of such deals, and Cibola staff expect an appeal of the environmental assessment of which Zuni’s stewardship contract is a part. In their general political orientation, environmentalists may be reluctant to face off against a Native American tribe with development and sovereignty interests, though they should probably not be. At the level of national forest policy debates, policy makers and environmentalists are justifiably suspicious that the sort of “flexibility” and “innovation” so badly needed to move projects forward can be parlayed into loopholes by no means in the forest user’s or taxpayer’s interest. For the environmentalist, zero-cut is the safest position; for the taxpayer, competitive bidding was put in place for a reason. On the other hand, it is easy to understand forest-dependent communities’ resentment of the control over their lives and livelihoods exercised by the urban environmentalist, occasional or hypothetical forest visitor. Cutting across forest politics is federal-Tribal politics. While

\[\text{In an earlier appeal of a timber sale for the same area, environmentalists allied themselves with Zuni against the National Forest, with Zuni contending that the Cibola staff had inadequately consulted} \] with Zuni on Traditional Cultural Properties (TCP) concerns. Now, and perhaps to the environmentalists’ chagrin, Zuni has an interest in timber harvest and a partnership with Cibola, including TCP review. Environmentalists perhaps also assumed that Zunis would be generally opposed to logging; this seems not to be the case, but to be fair there has been no systematic test of that hypothesis.
justifying its stewardship contract in the language of environment and development, Zuni is simultaneously asserting sovereignty and its cultural interests in forest lands that have been recognized as part of Zuni’s aboriginal territory. In an era of presidential decrees to improve Tribal-federal cooperation but also frequent backlashes against sovereignty at the national and state level, this is at least as tricky a dance as the forest management / local development one.