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WHO'S GOT THE MONEY NOW? CONSERVATION-DEVELOPMENT MEETS THE *NUEVA RURALIDAD* IN SOUTHERN MEXICO

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Introduction

Since the year 2000, migration to the United States from the Mexican municipality of Calakmul has grown exponentially.¹ Observing this, I commented to one of Calakmul's 'local policy-makers' (see below) that I might examine the topic. Calakmul is home to Mexico's largest protected area for tropical ecosystems, the Calakmul Biosphere Reserve. The region ranks third in the nation for state-sponsored conservation-development funding.² On the topic of international migration, this policy-maker, a man with 20 years of experience in local conservation-development, reacted swiftly and with careful calculation: 'They're the ones with money now.'

Conservation practitioners have persistently sought ways for protected areas to financially benefit local people. In the 1990s, conservationists created 'integrated conservation development projects' (ICDPs) to raise local incomes and preserve natural resources (Campebell and Vainio-Matilla 2003). In Mexico, the idea sits at the heart of a program administered at Calakmul and other biosphere reserves, PRO-CODES or the Conservation Program for Sustainable Development. PROCODES supports projects such as habitat restoration, energy efficient stoves, and water catchment systems.³ Conservation ideals also underpin a program administered mainly by Mexico's department of agriculture, *Activos Productivos*, or Productive Assets. Both programs include a mechanism for popular participation. In these forums local residents debate what sustainable development might look like in the region and enact this vision by voting on aid projects requested by the broader Calakmul community.

The structure of ICDP and sustainable development funding in Calakmul reflects global trends, which encourage the democratization and decentralization of environmental decision-making (Alcorn et al. 2005; McCarthy 2005). Within these efforts, people regularly compare conservation with an array of economic opportunities. Because of this, understanding the economic context associated with conservation

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entails more than a grasp of the social hierarchies that can make ICDPs inaccessible to marginalized groups (Gibson and Agrawal 2001; Igoe and Fortwangler 2007). It requires understanding the variety of economic opportunities available in given places, why different groups prefer some opportunities over others, and how certain economic activities become constructed, discursively, as appropriate objects of conservation.

Taking as a case study the municipal economy of Calakmul, this chapter asks: 'Who's got the money now?' And, what relationship, if any, is there between conservation programs and Calakmul's more lucrative financial opportunities? While the boundaries of a municipal economy can be arbitrary—Calakmul is well integrated into national and international structures—the idea is locally relevant. Similar to U.S. counties in size and governing authority, Mexican municipalities are a basic building block of the state, framing the flow of state funding. Authorities report welfare, agricultural, and other expenditures according to municipality. The municipality also shapes localized policy-making. Since 2005, this policy-making has included the participatory forums associated with PROCODES and Productive Assets. Both bodies include publically elected municipal officials, federal agents, and representatives of cattlemen's, forestry and other associations. Between 2005 and 2009, the same 30 or so individuals participated in both forums. Throughout the chapter, I refer to this group, collectively, as 'local policy-makers'.

In outlining Calakmul's municipal economy, I begin by depicting the region's main economic activities as described by local policy-makers. During a twelve-month period spanning 2009–10, I documented 12, day-long meetings of the public, participatory bodies (4 meetings of the Reserve's Advisory Council and 8 meetings of the department of agriculture's Municipal Council on Rural Sustainable Development). I also gathered archival information, including lists of programs approved by the participatory bodies. I supplemented these observations with both formal and informal interviews with local policy-makers. In 2004, their vision of the regional economy was published in a planning document known as a *diagnóstico*, a 'diagnostic.' The document analyzes the municipality's economic and social qualities, suggests state interventions to foster economic growth, and forecasts future social life. Calakmul's diagnostic surprised local policy-makers by asserting the region had changed from a forest-based economy to a cattle ranching economy.

In the paragraphs below, this surprise provides an entry to comparing those ideas of the Calakmul economy circulating among local policy-makers with data on the value of primary production, state welfare aid to households, and remittances from migration (The larger research goal for 2009–10 aimed at teasing out relationships between international migration and conservation.) A comparison across this information reveals aspects of Calakmul's economy overlooked by local policy-makers: international migration, women's increasing authority over household expenditures, and a growing populace dependent on salaried employment. As I explain, silence on these matters is partly due to the use of participatory forums by members for personal and political goals, but also to important identity differences between members of the forums and the larger Calakmul population.

This broader economic picture has implications for the use of ICDPs as conservation tools. The diagnostic implicitly questioned the value of ICDPs, as Calakmul seemed to be following the well trod path of cattle expansion and rain forest depletion (Fearnside 2005). The data reported here offer a different lesson. Since ICDP expenditures began in Calakmul in the mid-1990s, the region's economic and political structures have changed. The chapter's discussion section explains how Calakmul now reflects what Latin American researchers call the *nueva ruralidad* or new rurality. In these circumstances, the financial import of ICDPs may be diluted, and the model of conservation that pays people to protect biodiversity needs reconsideration.

This regional approach to ICDPs has little precedent in the academic literature. Thus, before delving into the case material, I review how economics and geographic scale have been treated in social science writing on ICDPs and point to the need to connect diverse bodies of writing on socio-ecologies to address the situation at Calakmul.

Economics and Scale in Conservation Research

The role of Calakmul's local policy-makers in conservation connects two issues in research on natural resource management. First, what counts as an ICDP, and how should researchers measure the ability of ICDPs to achieve their goals? Second, what role do regional decision-making bodies have in ICDPs and other kinds of environmental management? For the most part, ICDP examinations are carried out by researchers interested in conservation as a unique social phenomenon (Brechin et al. 2003). These researchers take as a point of reference the ICDP itself and pay less attention to regional bodies. Contrastingly, research in political ecology and natural resource management institutions suggests regional forums can be important places where people debate the content of ICDPs and influence their success. Collectively, these three strands of research call for detailed descriptions that convey the inner workings of regional institutions in order to connect their activities with environmental outcomes.

At the most specific level, ICDPs seek to conserve a particular species, aid ecosystem functioning, and improve human livelihoods (Robinson and Redford 2004). At the broadest level, ICDPs aim to improve relations between a protected area and surrounding communities (Hughes and Flintan 2001). ICDPs are usually associated with a protected area, instigated by NGOs or government-based conservationists, and target people living in that park or reserve's vicinity. ICDPs operate on the assumption that development aid will ease antagonisms toward conservation and, perhaps, produce desired ecological outcomes. As such, they differ from a formal economics approach, which measures whether 'it is worthwhile to protect nature' based on people's willingness to pay for conservation (see Folke 2006: 686).⁴

Given their localized quality, ICDP research has tended toward case studies, and a cottage industry has developed in the form of periodic reviews of the cases. This structure has a particular geographic quality, as reviewers move between the local and global levels (see, for example, Brosius and Russell 2003). Two reviews of the

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conservation literature illustrate these divided attentions. Both West et al. (2006) and Naughton-Treves et al. (2005) begin their accounts by describing the expansion of protected areas in the late 20th century. Both reviews then outline global agreements on biodiversity protection and the transnational institutions that put these agreements into effect. An economy of conservation must certainly exist at the international level (Igoe and Brockington 2007), but these reviews tend to conceptualize conservation as fostering localized economic consequences.

In this regard, both reviews find ICDPs fail to live up to their promises. West et al. are the more pessimistic, cataloguing relocations from protected areas that can force a loss of livelihoods. In place of subsistence practices, protected areas offer ICDPs that convert the local environment into a marketable good. West et al. fear the ecological consequences of such projects, citing how 'certain species have gone from being little known or valued by local people to being highly valued commodities' (2006: 283).

Naughton-Treves et al. agree that 'reviews of ICDPs consistently have found ... it is hard to identify substantial achievements either in improving social welfare or in protecting biodiversity' (2005: 240). At the same time, the authors describe as 'truth' that 'desperate poverty' is a threat to biodiversity (ibid: 239). Consequently, their review describes a growing commitment in the global conservation community to poverty alleviation. Notably, the authors disagree with this change, arguing the responsibility is simply too much for conservation programs. An emphasis on poverty alleviation, they say, also distracts consideration from those 'large-scale actors and policies' that influence social ecologies (ibid: 243). Instead, Naughton-Treves and colleagues assert, conservation research and practitioners should employ alternative geographies that address conservation's social complexities. They call for 'landscape-level initiatives' and offer zoning as an example of an alternative geography.

How do researchers define 'landscape' or its companion concept, the 'regional' economy? What kinds of institutions would operate at this level? Naughton-Treves and colleagues are vague on the answers to these questions, a response that leads some anthropologists to fear a kind of geographic creep. These skeptics focus on the political dynamics of landscape-level institutions. The bigger the 'landscape' the greater the environmental restrictions demanded by protected areas. These same researchers also observe that 'landscape' management risks creating geographies of scale too big for local-level decision-making (Peterson et al. 2010). In such settings, the default decision-makers become people with the finances and technological resources to undertake such management.

The ideal landscape might, thus, be a geographic level at which sufficient natural resources exist to merit conservation and where local level knowledge remains valid and applicable. Mexican municipalities fit this description, and the participatory bodies at Calakmul's Reserve and department of agriculture arose as part of a zoning process operating on these principles (see below). These kinds of groups have the advantage of filling in gaps between the 'local' and the 'global' and demonstrating how these two are connected. Conservation researchers increasingly agree these kinds of institutions are key elements of conservation programming (Oldekop et al. 2010; Waylen et al. 2010). The fields of political ecology and institutional research on

resource governance offer tools to examine regional decision-making bodies. Researchers in both fields cite the need for careful descriptions that locate questions of power and social connectedness at the center of conservation decision-making.

By taking into account the power relations that shape regional decision-making bodies (Adger et al. 2006; Berkes 2008), institutional researchers are beginning to look more and more like political ecologists (Robbins 2004). As institutional researchers move from the local-level studies that previously dominated the field to regional scales, they note the complications these larger associations pose:

Just as distant managers are apt to be ignorant of and insensitive to local considerations, local managers tend to know little about linkages to larger systems and the interests of those who are not physically present at the local level but exert economic pressures involving land use and the production of commodities. In addition, local managers are often not provided with financial means to achieve proposed goals of decentralized authority.

(Brondizio et al. 2009: 269)

Hesitant to theorize these relationships just yet (*ibid*), institutional researchers again parallel those political ecologists who critique the field for arriving at conclusions while weakly delineating the politics, economics, and ecologies under consideration (Paulson et al. 2003). For both intellectual traditions, regional institutions are, at this stage, a black box that requires closer examination.

The following paragraphs take a step toward illuminating that black box by describing how members of Calakmul's regional institutions conceptualize the municipality's economy. In this example, the economic question is also a geographical question. The economic flows reflect people's spatial commitments. In some cases, these economic and spatial ties are represented by specific members of the participatory bodies. Some economic and spatial connections, however, have no physical representative, and these are precisely the trends that challenge ICDPs as conservation tools.

Calakmul: Municipality and Biosphere Reserve

The municipality of Calakmul is located in Campeche State on the Yucatán peninsula, where Mexico borders Guatemala and Belize. At roughly 723,000 hectares, the Calakmul Biosphere Reserve covers half of municipal territory. The remaining territory is a patchwork of more than 80 communities. The 25,000 people who live in Calakmul are spread out among a few large towns (four locales house 1,000–3,300 people) and numerous, smaller villages (INEGI 2007). By Mexican standards, the region is not prosperous, although its circumstances have been improving. Mexico's National Population Council maintains an 'Index of Marginalization' that compares municipalities on issues such as urbanization, literacy, and household income. The Council, then, locates each municipality within five categories ranging from 'very high' to 'very low' marginalization. In 2000, the Council ranked Calakmul a zone of

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'very high' marginalization, but by 2005, the municipality had moved up a rank to 'high' marginalization (Anzaldo and Prado 2006).

This improvement has its roots in ICDPs, which heralded the expansion of state welfare in Calakmul. Calakmul was an agricultural frontier with little government infrastructure until the early 1990s. The area's poor farming soils and periodic droughts meant economic hardship, and, while the frontier saw a regular influx of new migrants, it also experienced regular outflows of people who found they could not survive the region's harsh conditions. Then, Reserve authorities founded an ambitious ICDP agenda (Haenn 2005).

Between 1992 and 1996, the Reserve's agenda operated at three scales. At the household level, authorities encouraged the diversification of household economies in areas such as organic agriculture, intensive cattle-ranching, and agroforestry. At the community level, conservation programming reckoned with the common property quality of the villages—or *ejidos*—where most county residents live. Within *ejidos*, landed farmers (90 per cent of whom are men, see Radel 2005) exercise collective responsibility for community resources. Reserve staff worked with *ejido* members to demonstrate the economic value of an array of forest goods. Collaborating with the Reserve, *ejido* members established protected areas within *ejido* boundaries and created systems of sustainable hunting and timber extraction. At a third level, Reserve authorities created a peasant organization whose thousands of members sent representatives to a regional forum to debate the area's future and press for more financial aid. In 1995, collective expenditures for ICDPs neared 1 million U.S. dollars a year, an amount little changed fifteen years later (see below).

This movement ended for a variety of reasons, including the creation of new, rival peasant organizations, the end of funding cycles that underwrote the programs, and the creation of the municipality. Some *ejidos* still maintain their protected areas, and a number of people active in the movement now count among local policy-makers. Their understanding of ICDPs reflects this earlier time period with its emphasis on men's work in the primary sector. The municipality, however, replaced the Reserve as the main geographic lens through which both state authorities and local residents viewed the region. Today, the municipality is the largest government entity in Calakmul, commanding a budget 14 times that of the Biosphere Reserve. The municipality is the largest formal employer in the region, and its elections are fiercely contested.

The municipality's financial weight is made possible by federal monies. Calakmul's tax base is almost null. Instead, the municipality relies on federal funds channeled directly from Mexico City or administered by Campeche State.⁵ (Supplemental funds are available to regions of 'high' marginalization.) This financial dependence is widely recognized among local-policy makers, and, sometimes, increases the prestige of locally posted federal agents—at the Reserve and department of agriculture – whose own budgets are considerably smaller than the municipality's.

Alongside these agencies, one additional federal office is involved in natural resource management in Calakmul, the National Forestry Commission (CON-AFOR). At present, the forestry commission is the biggest environmental spender in

Calakmul, offering payments to landholders for ecosystem services. The Commission has no local staff, and local policy-makers complain the agency does not participate in regional participatory bodies.

Defining a 'Conservation Economy'

This section uses the municipal diagnostic and an analysis of projects supported by PROCODES and Productive Assets to establish how local policy-makers define a 'conservation economy'. In all, three federal agencies make financial contributions to conservation in Calakmul. Figure 10.1 lists the total amount offered by these agencies in household subsidies in 2009. (I discuss the 'Opportunities' category below.)

PROCODES, which disbursed 2.2 million pesos in 2008 and 2009, and Productive Assets, which disbursed 550,000 pesos in the same period, are only part of their respective agencies' larger offerings.⁶ Nonetheless, the public forums linked to these programs allow researchers to witness how local policy-makers conceptualize and put into practice sustainability.

Originally published in 2004 (Arreola, A. et al. 2004), the diagnostic was part of a project funded by the German development agency, the Deutsche Gesellschaft für Technische Zusammenarbeit (or GTZ), to zone the municipality for sustainable resource use. In gathering information for this task, the diagnostic identified the municipality's principle economic activities: subsistence farming, forestry, cattle ranching, bee keeping, cash crop production, tourism, and various subsidy programs. The document then examined data published by the state (where available) to assign a financial value to each of these and evaluate their relative weight in the local economy. The GTZ simultaneously worked to bolster the Reserve and department of agriculture's public participatory bodies. The economic categories outlined in the diagnostic closely reflect the framework within which these groups operate.

To the surprise of local policy-makers, the diagnostic concluded cattle ranching was the most valuable economic activity in the municipality. The document makes

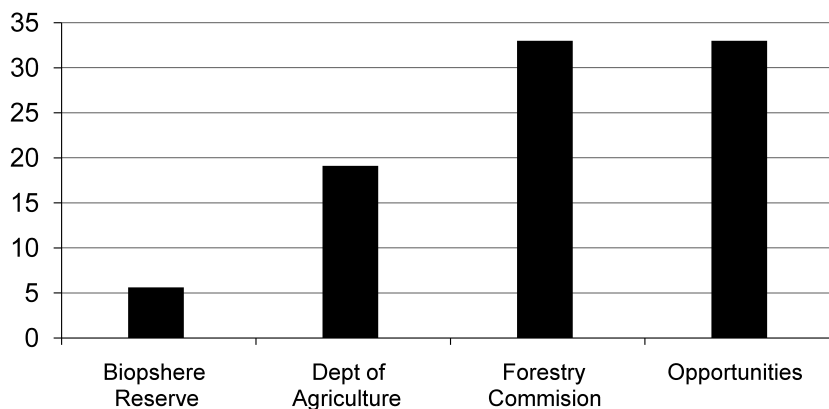


FIGURE 10.1 Household subsidies offered by state agencies, 2009.

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this estimate by evaluating the municipality's 'gross domestic production' (GDP), the market value of goods and services produced inside municipal borders. The authors estimated that ranching is responsible for 40 per cent of the municipality's annual GDP. Forestry generated 15 per cent, services 10.7 per cent cash crops 6 per cent, commerce 5.4 per cent, and honey just 2.5 per cent. Subsistence corn farming was ranked among the least remunerative of activities, even though corn is an important part of the social safety net in this 'marginalized' region.

For all the products mentioned, the authors estimated their value based on actual sales, but for cattle, they estimated the sector's value based on the number of animals in the municipal herd. (The calculation method is unstated.) In other words, they based the value of cattle on *potential* sales (Ibid.: 7). The authors added to this inaccuracy by relaying data from the state uncritically, even though interviews with officials in 2010 indicated that problems in the quality of this data were longstanding (see below). These mistakes, nonetheless, changed how local policy-makers thought about economic activity in Calakmul. Previously, policy-makers viewed residents as mainly combining forestry with slash-and-burn farming, activities that can be consonant with conservation. Subsequent to the diagnostic, Calakmul seemed to be following the well tread path of cattle expansion and forest depletion. The process seemed inevitable, as even Reserve officers argued ICDPs needed to support ranching: 'With these projects we're going to try to semi-stabilize cattle ranching. Because, as I mentioned, you cannot argue with the ranchers. They have a production system. And, you cannot tell them to limit themselves.' [Author interview, Aug. 19, 2009.]

With these categories in place, the Reserve and the department of agriculture's participatory bodies set about prioritizing the distribution of sustainable development funds. Table 10.1 outlines the distribution of funds by sector as decided by each of these participatory bodies for 2008 and 2009. Despite their overlapping membership, the two bodies show institutional differences when it came to supporting different sectors. The department of agriculture has demonstrated no interest in financing forestry, while Reserve offices have a long-term commitment to forestry activities. Policy mandates for the Reserve's ICDPs allow for greater latitude in the kinds of projects PROCODES can support. PROCODES can pay for technical studies and training workshops. Programs of these sorts sit within the 'Other' category. Concerns about ranching's negative effect on forest cover led to a collaboration between the Reserve and the department of agriculture in the conceptualization of a large-scale project that introduces methods to reduce the hectareage required to raise a

TABLE 10.1 Distribution of development funds by participatory bodies.

	<i>Ranching</i>	<i>Agriculture</i>	<i>Honey</i>	<i>Forestry</i>	<i>Ecotourism</i>	<i>Other</i>
Dept of Ag 2008	26%	24%	39%	0%	0%	11%
Dept of Ag 2009	44%	22%	20%	0%	7%	7%
Reserve 2008	12%	5%	19%	18%	14%	32%
Reserve 2009	10%	2%	0%	21%	21%	47%

single head of cattle. This project's approval led to the department of agriculture increasing its commitment to ranching between 2008 and 2009.

Activities listed in Table 10.1 convey what might be thought of as Calakmul's 'conservation economy'. These are the activities that receive attention in Calakmul's participatory bodies, where conversation moves between two poles: local production and state subsidies that support this local production. Households involved in Calakmul's primary sector rarely cover their costs by farming, forestry, or cattle ranching alone. Instead, they rely on the kinds of subsidies outlined in Figure 10.1. It is worth noting that the funds available to the Reserve and department of agriculture's participatory bodies are only 5 per cent of all federal subsidies associated with natural resource management entering Calakmul. This fact is well recognized by local policy-makers who complain that federal agencies decline to allow public input into their spending. The disparity confirms critiques which note that decentralized bodies allow local citizens some say in state development efforts, but fall short of allowing citizens to change the overall direction of those efforts (Paley 2004). In Calakmul, this minimal commitment to decentralization also translates into an ongoing disconnect between land managers and bureaucrats who subsidize certain kinds of land use.

A Conservation Economy in Context, Part 1

This conservation economy merits contextualization in two ways. The first examines these economic categories in light of additional state information on these sectors. The second contextualization examines these activities in light of economic activities not contemplated in the conservation economy (see below). In the case of ICDPs, contextualization helps delineate the impact of sustainable development interventions beyond the household and community levels. At the same time, the state plays a crucial role in both conservation and the Calakmul economy. Thus, contextualization indicates the manner in which conservation and specific economic activities are legible to various state authorities (Dove 1994).

Published in 2004, the diagnostic argued the principal economic activities in Calakmul, in descending order of importance, were: cattle, timber, pork, services, cash crops, commerce, and honey. For example, the diagnostic assigned a valued of 32 million pesos to the municipal cattle herd. Timber stood as a distant second at 12.2 million pesos. Where do these data come from? How reliable are these findings?

For the most part, local policy-makers and diagnostic authors worked with data generated by the department of agriculture and state environmental offices (SEMARNAT). In cases where these offices did not have information available, diagnostic authors turned either to local production associations or made their own calculations. The estimation of ranching's value is an example of the authors' own calculations. The authors never explain exactly how they arrived at this figure. The state data available to them at the time estimated not the value of the herd but the value of meat production. And, the state's estimations provide a markedly different picture. The state valued beef production around the time of the diagnostic's writing at 4.6 million pesos. In other words, state figures for beef production are only

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15 per cent of the diagnostic's valuation. The department of agriculture lists total meat production (beef, pork, mutton, and chicken included) at one-fourth the value listed in the diagnostic (INEGI 2007).

Exploring this discrepancy with state department of agriculture officials, I learned their data collection methods cast doubt on the reliability of all their agricultural production figures. Authorities calculate beef production by periodically surveying municipal butchers, even though Calakmul's largest beef producing regions are located near urban areas. Cattle raised in Calakmul and butchered in these urban areas fall outside the accounting. Estimates of cash crop production are based on farmers' self-reports. At no time do state authorities undertake an independent confirmation of crop production of any sort. In the case of corn, this led to an intriguing methodology for estimating the value of corn harvests.

Department of agriculture officials assessed local corn production based on the amount the agency pays in crop subsidies. One particular subsidy, known as PROCAMPO, came into effect in the mid-1990s and originally aimed at compensating subsistence producers for the drop in corn prices expected with Mexico's entry into the North American Free Trade Agreement (NAFTA). Over the years, the crops that qualify for the subsidy have expanded in number. Someone receiving PROCAMPO may or may not be planting corn. This point aside, policy-makers in Calakmul commonly acknowledge that people receive PROCAMPO without planting their registered amount (payments are by hectare) and, sometimes, without planting at all. Thus, even though corn is a central part of the social safety network in 'marginal' regions, actual corn production in Calakmul is largely illegible to state authorities.

For corn, state authorities are apt to focus on their own bureaucratic efforts associated with the crop, a tendency repeated in the case of timber production. Recall the diagnostic argued that timber was the second most valued economic activity in Calakmul. State environmental authorities calculate timber sales based on harvesting permits issued. Suspecting that illegal timber harvests are common, local policy-makers view this amount as an undercount. Figure 10.2 summarizes recent figures for those parts of the conservation economy where data is available.⁷ The multiple years of data attempt to capture the flux of agricultural production (2007 production was affected by a hurricane) but also aim to delineate the range of earnings possibilities for these activities.

This brief assessment of official data on primary production shows the extent to which Calakmul's local policy-makers necessarily operate in the dark about some of the municipality's main economic activities. State authorities are pressed to fulfill their own bureaucratic accounting, but those pressures do not necessarily extend to producing reliable data. Without accurate knowledge of the economy in which ICDPs intervene, it is impossible to assess their relative success. Instead, local policy-makers are left to work with their own qualitative assessments of the relative value of different sectors and the relative importance of ICDPs. Numerical assessments, even if calculated in error, can sometimes shape the thinking of local policy-makers, in part, because they offer the illusion of concreteness in decision-making processes that otherwise function under rules of thumb.

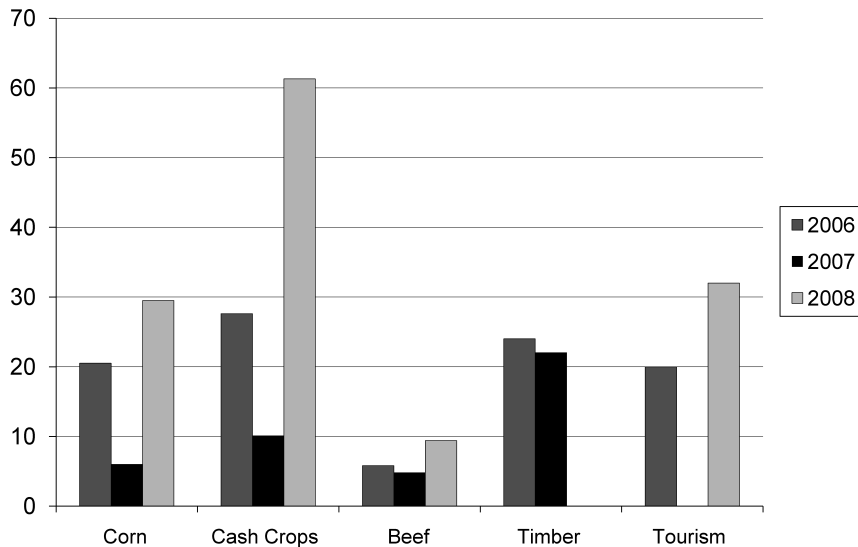


FIGURE 10.2 Estimated values in Calakmul's conservation economy, 2006–8.

These decision-making processes are also closely tied to competition over development monies. The projects reported in Table 10.1 are partly the result of prioritizing activities according to conservation criteria and partly the result of local policy-makers' jockeying for influence. Local policy-makers have a financial interest in the approval of certain projects. They may apply personally for these funds or charge a fee for championing a project in the voting process. The outcome, as a local department of agriculture official notes, is that members of these bodies 'have directed the majority of the funds toward themselves' [author interview, January 20, 2010]. In 2009, just two individuals, long-term members of the body, received nearly 20 per cent of the funds administered by the department of agriculture's participatory body. Decision-making related to the Reserve's ICDP expenditures could be even less transparent. Contrary to past years, the Reserve's participatory body never convened in 2010, and Reserve staff determined the successful applications.⁸ I revisit the more covert aspects of sustainable development funding after considering economic trends that go unconsidered by the Reserve and department of agriculture's participatory bodies.

A Conservation Economy In Context, Part 2

If the data on Calakmul's primary sector is unreliable, reports on other aspects of Calakmul's economy tend to be more trustworthy. These include data on salaried employment and household subsidies. Data on remittances is only partially available, and, below, I explain my calculation methods for remittances. Where debates at the Reserve and department of agriculture's participatory bodies give the impression that the male-dominated primary sector is the most salient portion of Calakmul's

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economy (it certainly employs the greatest number of people), this additional information offers a different economic scenario. It suggests the feminization of household financial management and a growing proportion of rural families connected to cash economies via salaried labor, state welfare, and remittances. These qualities are part of larger changes in Latin America that researchers characterize as a *nueva ruralidad* or new rurality (Kay 2008). Ideas of a new rurality ask researchers to consider the relationship between ICDPs and those rural people who are *not* active in the primary sector.

The largest employer offering salaried positions in Calakmul is the state, which hires soldiers, teachers, healthcare professionals, and municipal employees. For example, the National Defense Secretary supports a military base housing 300 soldiers, whose salaries amount to at least 25 million pesos a year or 75 per cent of the diagnostic's figure for cattle production.⁹ Statistics on the number of school teachers and healthcare staff, along with their salaries, were unavailable. Although likely significant, their contribution to the Calakmul economy is affected by perceptions that they are outsiders who only stay in the municipality during the work week. The municipality tends to import its professional class. Local policy-makers, thus, view teachers and healthcare staff as people who spend their money elsewhere, in their home communities where their families live full-time. (Also unavailable are data on Calakmul's tertiary sector, the shops that are a presumptive beneficiary of household spending.)

The military, educational and health sectors are rarely discussed at Calakmul's participatory bodies, even though the law framing the department of agriculture's body stipulates the forum as a site to coordinate the primary sector with health and education (SAGARPA 2001). In contrast, local policy-makers pay very close attention to employment possibilities in the municipality.

The municipality offers 300–350 jobs and an annual payroll of some 50 million pesos. About one-third of these jobs are reserved for unionized staff. The other two-thirds are doled out to supporters of the winning candidate for municipal presidency. Municipal presidents are elected every three years, and, upon their installation, non-unionized municipal staffing undergoes an almost complete turnover. The winners of these (temporarily) secure salaries include people who volunteered in the campaign, made hefty campaign contributions, or otherwise positioned themselves as someone who can deliver the vote.

The reserve and department of agriculture's participatory bodies are deeply implicated in these electoral machinations. (Some federal agents used perceptions of the forums as subject to electoral shenanigans as an excuse not to participate.) The 30 people who dominated the forums between 2005 and 2009 included one future municipal president and three losing candidates. Many more members are believed to harbor aspirations to the office. The forums might be a springboard for mounting a candidacy or a means to increase a person's position within his or her political party. In interviews, local policy-makers charged their colleagues with awarding projects to cultivate a network of political activists and voters. While nobody admitted to personally carrying out this practice, members of opposing parties accused one another of the same deed, suggesting a generalized electoral strategy.

These electoral considerations help explain a certain myopia within the participatory bodies regarding remittances and women's growing importance in household financial management. Politics in Calakmul is very much a man's game. Only 7 per cent of the county's elected officials are women. Prior to the region's incorporation into international migration, no women held public office, and migration appears associated with subtle shifts in women's public authority (cf. Taylor et al. 2005). Despite their growing numbers, elected women still encounter obstacles to wielding authority similar to that of men. In Calakmul, a woman who travels alone or speaks with men outside their families inspires intense community gossip which typically accuses her of licentiousness and marital infidelity. As a result, female elected authorities tend to be silent in regional meetings.

In this way, women's public power belies their private power. Financially, women's authority rests on government subsidies and remittances. A government subsidy associated principally with women is 'Opportunities' (see Figure 10.1). Opportunities is a poverty alleviation program that supports some 75 per cent of Calakmul households. This compares with half the Calakmul households who receive PROCAMPO, the most popular subsidy for subsistence farm production. Women receive Opportunities payments in exchange for regular check-ups and for showing up at healthcare talks. Children qualify for Opportunities with continued school attendance (payments are made to the children's mother). Average bi-monthly payments in the municipality are roughly equal to 15 days of wage labor. On an annual basis, this amounts to 25–100 per cent more money than PROCAMPO.¹⁰ PROCAMPO's relative weight in household finances is further diminished by the fact that the farm subsidy arrives once or twice a year, and its timing can be unpredictable. Opportunities provides families with a regular and reliable income.

Opportunities has become internationally fashionable; its model of cash transfers exported to other countries (Valencia Lomelí 2008). Researchers argue one of the program's qualities has been its ability to stay out of electoral disputes (although its ability to politically empower recipients is debated, see Hevia de la Jara 2007). In Calakmul, this assertion might also be applied to remittances linked to international migration. In fact, former migrants describe frustration with the way municipal old boy networks shut them out of the job market: 'Here in Mexico, the government supports you only to win your vote. The government gives benefits to the same government workers. They live off the backs of the poor.' [Author interview, April 3, 2010.]

State census figures report that 1 per cent of the Calakmul population worked in the United States in 2005 (INEGI 2007). A 2003 survey of 203 Calakmul households found the number to be much higher; 7.4% of the population older than 17-years was in the United States (Schmook and Radel 2008: 899). Migrants are typically young men in their 20s who leave behind a wife and young children. These migrants earn as much as four times their counterparts who choose not to migrate, and, in general, the income of migrating households is twice that of non-migrating households (ibid.).

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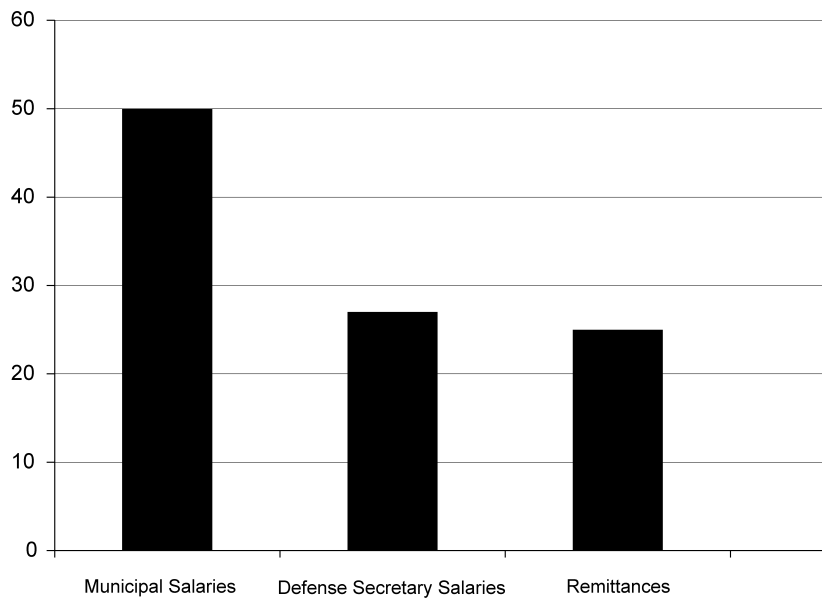


FIGURE 10.3 Salaried employment and wage labor earnings in Calakmul, 2009.

Official data on remittances entering Calakmul are unavailable. The estimate listed in Figure 10.3 of 25 million pesos/year is based on interviews with local financial houses where many residents receive their money. The amount excludes remittances sent to banks in urban areas. The upper limit of remittance receipts in Calakmul is, thus, unknown. Certainly, though, remittances appear roughly similar to what the municipality receives in Opportunity payments or the value of any single category in the region's primary sector (see Figure 10.2). Remittances may even rival what the municipality pays in salaries.

Because men constitute 90 per cent of Calakmul's international migrants (*ibid.*), women in migrating households tend to be responsible for household administration. Rather than assume agricultural labor themselves, migrants' wives take on the role of employer, hiring relatives and neighbors to undertake farm work. Women do not always find these new duties empowering (McEvoy 2008). Even so, women's new duties upset household structures in a region where women were previously categorized as 'helpmates' to male farmers (Radel 2005b). In this patriarchal, patrilocal society, women who channel money to their kin (as opposed to their in-laws) increase their standing in their natal family. Importantly, migration has created the possibility for women to become landowners.

Discussion

Demand for ICDP and sustainable development funding in Calakmul far outstrips what the Reserve and department of agriculture offer. In 2010, residents submitted

600 proposals to Productive Assets. Roughly 50 would be funded. PROCODES requests totaled 12.6 million pesos for a program budgeted at 2.5 million pesos. The conservation economy is clearly a socially vibrant entity in Calakmul, even if local policy-makers overlook the region's broader economic setting.

In recent years, this setting took on the qualities of a *nueva ruralidad*, or new rurality. The idea of a new rurality arose in the mid-1990s as researchers examined the effects of neo-liberal policies on rural communities. The notion has received little attention in English-speaking academic circles (although see Kay 2008 for an overview). In Latin America, however, the framework has become a common one for understanding the social and economic structures that shape rural life. Where before, researchers focused on rural areas as isolated sites, dependent on a farm economy, and governed by a few strongmen, the new rurality Kay (*ibid.*) notes emphasizes: farming as one, and not necessarily the most important, economic activity; the feminization of rural workforces; growing rural-urban interactions; and the increasing importance of migrants' remittances.

Local policy-makers in Calakmul acknowledge these trends in a very general way, but they have not incorporated women or migration into their understanding of Calakmul's economy. Not once during interviews or meetings did local policy-makers volunteer an observation about international migration, even though a handful of policy-makers had sojourned themselves to the United States. During 2009–10, only three or four of the 30-plus people attending the participatory bodies were women. Men might call on these women to speak up in the interest of gender equity, but they hesitated to connect these women's presence with underlying economic shifts.

'Whose got the money now?' And, what are the implications of that distribution for ICDPs? In Calakmul, the answer to these questions depends on one's standpoint. From a household perspective, people with secure sources of income include the minority with a full-time wage, such as a soldier or a municipal employee. Another typical money manager might be a woman administering Opportunities and migration remittances. From a political perspective, the people with the money are those who control the municipal budget. For the former groups, ICDP and sustainable development funding are, largely, inconsequential. These funds support the environmental work of a handful of men. Ideas of sustainable development in Calakmul, still rooted in the mid-1990s, have yet to consider whether and how to connect the Reserve to people located in a consumer economy.

Although exceptions exist, local control of ICDP and sustainable development monies in Calakmul have become part of a certain political tumult that accompanies decentralization and new ruralities. Researchers observe that under decentralization empowered local policy-makers take advantage of their newfound authority to press for diverse notions of democracy and the state. Writing on Chiapas, Leyva Solano (2001) notes that increased participation does not always translate into increasing citizenship or pluralism. In Calakmul, this participation has been revelatory in delineating local policy-makers' relationship to a welfare state.

Once distributed, ICDP and sustainable development funds in Calakmul often find a destination other than that proposed. There are few consequences for the

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misapplication of funds (cf. Blaikie 2006). For three years leading up to 2010, the Reserve officer charged with auditing ICDP projects was among the 25 per cent of Reserve staff *not* assigned a vehicle for travel. In 2009, only one-third of department of agriculture projects were audited and half of these failed to fulfill their proposed activities. An administrator of these projects asserted, with no hint of irony, participants had excelled in filling out the associated paperwork, 'it's the physical aspect of the projects that is lacking' [Author notes, June 30, 2010].

These findings might be different if my research had taken the more localized approach usually associated with ICDP research. For individual households and communities, ICDP and sustainable development funds can make quite a difference. In Calakmul, these monies have helped assure some people access to a year-round supply of water, created temporary jobs, and identified endemic strains of corn. However, given the goal of ICDPs to change the way people actually interact with the environment, the regional perspective raises the question of whether these benefits are enough.

As phrased here, the importance of a regional perspective to ICDPs is particular to Calakmul. Since the new century, Mexico is experimenting with a democratic openness that has increased electoral competition in a way that impacts all levels of government. Mexico's history as a welfare state and the importance of the municipal government as a rural employer may also be unique. Nonetheless, the case raises deeper questions about ICDPs anywhere a diverse economic setting creates a sizable group of people working outside the primary sector. (In the misallocation of funds, even local policy-makers tend to situate themselves in a consumer economy.) How might ICDPs focus on people other than impoverished natural resource users?

This question places Calakmul residents on the same economic terrain as people who similarly participate in a global economy as consumers and salaried employees, including members of the developed world and conservationists, themselves. The question, thus, demands a flattening of the global-local dichotomies that currently shape social science thinking on conservation.¹¹ It also makes even more urgent a fundamental re-thinking of how environmentalists counter destructive economic tendencies. Reviews of ICDPs have found successful projects, but not so many as to suggest the model reliably delivers conservation success. In the developed world, some researchers argue, ecology movements have similarly failed to create broad-based environmental solutions that combat consumerism and models of never-ending economic growth (Blühdorn 2000). Where might conservation go from here?

The next step in Calakmul appears to be a change in tactic that shifts attention away from the primary sector, where monies are easily monopolized by local policy-makers for personal and political gain. Through its environmental education programs, the Reserve is looking to experiment with establishing connections to adolescents and people other than local policy-makers. A focus on education connects conservation to a new generation and, given women's role in educating children, creates the possibility of making conservation more gender inclusive. If enacted, the environmental education programs would change conservation in the region, from one that focuses on buying out opposition to one that emphasizes experiential, even joyful,

connections to local ecologies. The tactic is partly opportunistic. Reserve authorities have been invited by UNESCO officials to submit an environmental education proposal. The change also responds to economic realities. As argued above, ICDP and sustainable development monies have an indirect impact on the region via their use in electoral politicking, and a Reserve that seeks greater social leverage via these expenditures has few chances for success. A creatively constructed environmental education program, however, may be poised to insinuate conservation into other parts of Calakmul's social life (cf. Waylen et al. 2010).

Notes

- 1 My thanks to Birgit Schmoock, Luis Melodelgado, Helen Kopnina, and Elle Shoreman-Ouimet for their helpful comments on earlier drafts of this article. Luis Melodelgado also aided in data collection for this project. This research was carried out under the auspices of a Fulbright-García Robles Fellowship.
- 2 The Calakmul Biosphere Reserve ranks third in the country in PROCODES funding, a program explained below.
- 3 PROCODES also supports research. For a complete list, see http://www.dof.gob.mx/nota_detalle_popup.php?codigo=5126638 available August 18, 2010.
- 4 Additional economic approaches are used to assess conservation settings (see, for example, Lynch et al. 2007). The two approaches listed here are those most commonly associated with research on ICDPs.
- 5 Federal authorities collect 94% of the country's revenue and account for 63% of government spending. States and municipalities account, respectively, for 29% and 8% of spending (Lazos Garza 2010).
- 6 Amounts listed for the Reserve include PROCODES and PET (the Temporary Employment Program), and *Maíz Criollo* (a program that seeks to conserve endemic corn strains). Amounts reported for the department of agriculture include 'Productive Assets, PROCAMPO (see below), a ranching and honey subsidy (PROGAN), and emergency aid distributed after natural disasters.' Amounts for the Forestry Commission include the program *Pro-Árbol* or Pro-Tree. Pro-tree supports activities associated with reforestation, tree nurseries, and biodiversity protection.
- 7 Tourism estimates are based on calculations of tourist expenditures made by Anaïs Jaud.
- 8 State policy encourages, but does not require, Reserve staff to take into account opinions emitted by its participatory body. See http://www.conanp.gob.mx/pdf_procodes/Lineamientos%20PROCODES%202009%20FINAL.pdf, available August 18, 2010.
- 9 This figure uses information gathered in interviews, i.e. the number of soldiers posted at the base multiplied by the minimum monthly salary a soldier might receive.
- 10 Average PROCAMPO payments in Calakmul for 2009 were 4,726 pesos for the spring-summer cycle. One-third of recipients earned, on average, an additional 2,200 pesos for the fall-winter cycle. Average Opportunities pay-outs per recipient for 2009 were 8,500 pesos. Wage labor rates at this time ranged between 100 and 150 pesos per day.
- 11 See Lomnitz Adler (1999) and Escobar (2008) for in depth discussions of the relationship between geography and social distinctions.

References

- Adger, W. N., K. Brown, and E. L. Tompkins.(2005) 'The political economy of cross-scale networks in resource co-management', *Ecology and Society*, 10(2): 9 [online] URL: <http://www.ecologyandsociety.org/vol10/iss2/art9/>

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- Alcorn, J., A. Luque, and S. Valenzuela (2005) 'Global Governance and Institutional Trends Affecting Protected Areas Management'. Online. Available. http://www.earthlore.ca/clients/WPC/English/grfx/sessions/PDFs/session_1/Alcorn.pdf (Accessed September 6, 2010.)
- Anzaldo, C. and M. Prado (2006) *Índices de Marginación, 2005*, México, D.F.: Consejo Nacional de Población.
- Arreola, A., R. Delgadillo, A. López, and G. García Gil (2004) *Diagnóstico de la Situación de Desarrollo en el Municipio Calakmul, Campeche*, internal document. Proyecto Prosureste, GTZ/CONANP.
- Berkes, F. (2008.) 'Commons in a multi-level world'. *Int. J. Commons* 2:1–6.
- Blaikie, P. (2006) 'Is Small Really Beautiful? Community-based Natural Resource Management in Malawi and Botswana', *World Development*, 34: 1942–57.
- Blühdorn, I. (2000) *Post-Ecologist Politics: Social Theory and the Abdication of the Ecologist Paradigm*, New York: Routledge.
- Brechin, S., P. Wilshusen, C. Fortwangler, and P. West. (2003) *Contested Nature: Promoting International Biodiversity with Social Justice in the Twenty-First Century*, Albany: State University of New York Press.
- Brondizio, E., E. Ostrom, and O. Young (2009) 'Connectivity and the Governance of Multilevel Social-Ecological Systems: The Role of Social Capital', *Annual Review of Environment and Resources*, 34: 253–78.
- Brosius, J.P. and D. Russell (2003) 'Conservation from Above: An Anthropological Perspective on Transboundary Protected Areas and Ecoregional Planning,' in U. Goodale, M. Stern, C. Margolius, A. Lanfer, and M. Fladeland (eds.) *Transboundary Protected Areas: The Viability of Regional Conservation Strategies*, Binghamton, NY: Food Products Press.
- Campebell, L. and A. Vainio-Matilla (2003) 'Participatory Development and Community-Based Conservation: Opportunities Missed for Lessons Learned?' *Human Ecology*, 31: 417–37.
- Dove, M.R. (1994) 'The Existential Status of the Pakistani Farmer: Studying Official Constructions of Social Reality', *Ethnology*, 33: 331–51.
- Escobar, A. (2008) *Territories of Difference: Place, Movements, Life, Redes*, Durham, NC: Duke Univ. Press.
- Fearnside, P. (2005) 'Deforestation in Brazilian Amazonia: History, Rates, and Consequences', *Conservation Biology*, 19: 680–88.
- Folke, Carl (2006) 'The Economic Perspective: Conservation against Development versus Conservation for Development', *Conservation Biology*, 20:686–88.
- Gibson, C. and A. Agrawal (2001) *Communities and The Environment: Ethnicity, Gender, and the State in Community-Based Conservation*, Piscataway, NJ: Rutgers University Press.
- Haenn, N. (2005) *Fields of Power, Forests of Discontent: Culture, Conservation and the State in Mexico*, Tucson: Univ. of Arizona Press.
- Hevia de la Jara, F. (2007) 'El Programa Oportunidades y la construcción de ciudadanía: Ejercicio y protección de derechos en un programa de transferencias condicionadas en México'. Ph.D. thesis, Centro de Investigaciones y Estudios Superiores en Antropología Social.
- Hughes, R. and Flintan, F. (2001) *Integrating Conservation and Development Experience: A Review and Bibliography of the ICDP Literature*, London: International Institute for Environment and Development.
- Igoe, J. and D. Brockington (2007) 'Neoliberal Conservation: A Brief Introduction', *Conservation & Society*, 5: 432–49.
- Igoe, J. and C. Fortwangler (2007) 'Whither communities and conservation?' *International Journal of Biodiversity Science, Ecosystems Services & Management*, 3: 65–76.
- INEGI (Instituto Nacional de Estadística, Geografía e Informática) (2007) *Cuaderno Estadístico Municipal: Edición 2005*, Aguascalientes: Instituto Nacional de Estadística, Geografía e Informática.
- Kay, C. (2008) 'Reflections on Latin American Rural Studies in the Neoliberal Globalization Period: A New Rurality?' *Development and Change*, 39: 915–43

- Lazos Garza, F. (2010) 'Municipal Finances and Participatory Budgets,' paper presented at workshop sponsored by the Consejo Regional Indígena y Popular de Xpujil, Xpujil, Mexico. April, 2010.
- Leyva Solano, X. (2001) 'Regional, Communal, and Organizational Transformations in Las Cañadas,' *Latin American Perspectives*, 28:20–44.
- Lomnitz Adler, C. (1999) *Modernidad Indiana: Nueve Ensayos Sobre Nación y Mediación en México*, México, D.F.: Editorial Planeta Mexicana, S.A. de C.V.
- Lynch, L., W. Gray, and J. Geoghegan (2007) 'Are Farmland Preservation Program Easement Restrictions Capitalized into Farmland Prices? What Can a Propensity Score Matching Analysis Tell Us?' *Applied Economics Perspectives and Policies*, 29(3): 502–9.
- McCarthy, J. (2005) 'Devolution in the Woods: Community Forestry as Hybrid Neoliberalism', *Environment and Planning A*, 37: 995–1014.
- McEvoy, J. (2008) 'Male Out-Migration and the Women Left Behind: A Case Study of a Small Farming Community in Southeastern Mexico', M.S. Thesis, Utah State University.
- Naughton-Treves, Lisa, Margaret Buck Holland, and Katrina Brandon (2005) 'The Role of Protected Areas in Conserving Biodiversity and Sustaining Local Livelihoods', *Annual Review of Environment and Resources*, 30: 219–52.
- Oldekop, J. A., A. J. Bebbington, D. Brockington, and R. F. Preziosi (2010) 'Understanding the Lessons and Limitations of Conservation and Development', *Conservation Biology*, 24: 461–69.
- Paley, J. 2004 'Accountable Democracy: Citizens' Impact on Public Decision Making in Postdictatorship Chile' *American Ethnologist* 31(4):497–513.
- Paulson, S., L. Gezon, and M. Watts (2003) 'Locating the Political in Political Ecology: An Introduction', *Human Organization*, 62: 2–5–217.
- Peterson, R. B., D. Russell, P. West, J. P. Brosius (2010) 'Seeing (and Doing) Conservation Through Cultural Lenses', *Environmental Management*, 45: 5–18.
- Radel, C. (2005) 'Women's Community-Based Organizations, Conservation Projects, and Effective Land Control in Southern Mexico', *Journal of Latin American Geography*, 4: 7–34.
- SAGARPA (Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación) (2001) 'Ley de Desarrollo Rural Sustentable', *Diario Oficial*, December 7, 2001.
- Schmook, B. and C. Radel (2008) 'International Labor Migration from a Tropical Development Frontier: Globalizing Households and an Incipient Forest Transition in Southern Yucatán', *Human Ecology*, 36: 891–908.
- Robbins, P. (2004) *Political Ecology: A Critical Introduction*, Hoboken, NJ: Wiley-Blackwell.
- Robinson, J. and K. Redford (2004) 'Jack of All Trades, Master of None: Inherent Contradictions among ICDP approaches', in T. McShane and M. Wells, (eds.) *Getting Biodiversity Projects to Work: Towards More Effective Conservation and Development*, New York: Columbia University Press.
- Taylor, M. et al. 2005 'Land, Ethnic, and Gender Changes: Transnational Migration and its Effects on Guatemalan Lives and Landscapes' *Geoforum*, 37(1):41–61.
- Valencia Lomeli, E. (2008) 'Conditional Cash Transfers as Social Policy in Latin America: An Assessment of their Contributions and Limitations', *Annual Review of Sociology*, 34: 475–99.
- Waylen, K. A. A. Fischer, P. J.K. McGowan, S. J. Thirgood, and E.J. Milner-Gulland (2010) Effect of Local Cultural Context on the Success of Community-Based Conservation Interventions *Conservation Biology*, 24: 461–69.
- West, P., J. Igoe, and D. Brockington (2006) 'Parks and Peoples: The Social Impact of Protected Areas', *Annual Review of Anthropology*, 35: 251–77.