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FROM RESOURCE MANAGEMENT TO POLITICAL ACTIVISM: CIVIL SOCIETY PARTICIPATION IN NICARAGUA'S RURAL WATER GOVERNANCE

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ABSTRACT

Sarah T. Romano

From Resource Management to Political Activism: Civil Society Participation in Nicaragua's Rural Water Governance

How to secure sustainable access to water is an increasingly acute problem that is global in scope. *From Resource Management to Political Activism: Civil Society Participation in Nicaragua's Rural Water Governance* demonstrates that this problem is also one that intersects in crucial ways with democratic political processes. Based upon thirteen months of field research in Nicaragua, this dissertation examines how community-based resource managers and water service providers transcend their rural localities and roles in order to engage in fundamentally new forms of political engagement, advocacy, and networking. After thirty years of constituting a legally-unrecognized resource management scheme in the country's rural areas, Potable Water and Sanitation Committees (CAPS) have formed dozens of new transcommunity, multi-sectoral "CAPS networks." These networks are serving as platforms for the participation of rural social actors in formal politics and their integration into policy processes. Notably, these dynamics are unfolding in an unlikely context: one of extreme political polarization and state attempts at cooptation via new mechanisms of direct democracy at the subnational level. This dissertation is motivated by the puzzle of how CAPS collectively assert themselves across political scales while maintaining autonomy and pluralism—even as the state seeks to

incorporate expressions of civil society into partisan channels of citizen participation from above. I argue that this outcome of autonomy and pluralism is explained by three interrelated and mutually-dependent factors: 1) the CAPS' empowerment, capacities, and legitimacy as local resource managers; 2) their alliances with domestic and international NGOs and multilateral organizations; and 3) their strategic discourses of water use, access, and distribution. Principal research methods include semi-structured interviews; participant observation; and review and analysis of government and nongovernmental reports and documents, newspaper articles, and national legislation. Guided by an explicitly interdisciplinary orientation, this dissertation generates more robust theoretical arguments about two important trends in Latin America: democratization and decentralization.

ABBREVIATIONS AND ACRONYMS USED

ADEMNORTE	*Asociación para el Desarrollo de los Municipios del Norte* (Association for the Development of Northern Municipalities)
ADIC	*Asociación para el Desarrollo Integral Comunitario* (Association for Integral Community Development)
AMNLAE	*La Asociación de Mujeres, Luisa Amanda Espinoza* (Nicaraguan Women's Association "Luisa Amanda Espinoza")
AMPRONAC	*Asociación de Mujeres ante la Problemática Nacional* (Association of Women Confronting the National Problem)
AMUNIC	*Asociación de Municipios de Nicaragua* (Nicaraguan Municipalities Association)
ANA	*Autoridad Nacional de Agua* (National Water Authority)
AOS	*Ayuda Obrera Suiza* (Swiss Workers Aid)
ATC	*Asociación de Trabajadores del Campo* (Rural Workers' Association)
CAPS	*Comité de Agua Potable y Saneamiento* (Potable Water and Sanitation Committee)
CDS	*Comité de Defensa Sandinista* (Sandinista Defense Committee)
CEAP	*Centro de Estudios y Análisis Políticos* (Center for Political Research and Analysis)
CIRA	*Centro de Investigaciones de Recursos Hídricos* (Center for Research in Water Resources)
CISAS	*Centro de Información y Servicios de Asesoría* (Center for Information and Consulting Services)
CODA	*Coalición por el Derecho al Agua* (Coalition for the Right to Water)

CONAPAS	*Consejo Nacional de Agua Potable y Saneamiento* (National Council of Potable Water and Sanitation)
COSUDE	*Agencia Suiza para el Desarollo y la Cooperación* (Swiss Agency for Development and Cooperation)
CPC	*Consejo del Poder Ciudadano* (Citizen Power Council)
CPI	Common property institution
CPR	Common property regime
CST	*Central Sandinista de Trabajadores* (Sandinista Workers' Central)
DAR	*Dirección de Acueductos Rurales* (Direction of Rural Aqueducts)
DNRM	Decentralized natural resource management
DP	Design principle
ECODES	*Fundación Ecología y Desarrollo* (Ecology and Development Foundation)
ENACAL	*Empresa Nicaragüense de Acueductos y Alcantarillado* (Nicaraguan Water and Sewerage Enterprise)
EPA	*Ejército Popular de Alfabetización* (Popular Literacy Army)
FISE	*Fondo de Inversión Social de Emergencia* (Emergency Social Investment Fund)
FSLN	*Frente Sandinista de Liberación Nacional* (Sandinista National Liberation Front)
GAR	*Gerencia de Acueductos Rurales* (Rural Aqueducts Administration)
GPAE	*Grupo de Promoción de la Agricultura Ecológica* (Promotion Group of Ecological Agriculture)
GPC	*Gabinete del Poder Ciudadano* (Citizen Power Cabinet)

IBRD	International Bank for Reconstruction and Development
IDB	Inter-American Development Bank
IMF	International Monetary Fund
INAA	*Instituto Nicaragüense de Acueductos y Alcantarillado Sanitario* (Nicaraguan Water and Sanitation Institute)
INETER	*Instituto de Estudios Territoriales* (Institute of Territorial Studies)
IRBD	International Bank for Reconstruction and Development
JGRN	*Junta de Gobierno de Reconstrucción Nacional* (Governing Junta of National Reconstruction)
JS-19	*Juventud Sandinista* (Sandinista Youth)
MAGFOR	*Ministerio Agropecuario y Forestal* (Ministry of Farming, Livestock, and Forests)
MARENA	*Ministerio del Ambiente y Recursos Naturales* (Ministry of Environment and Natural Resources)
MAS	*Ministerio de Acción Social* (Ministry of Social Action)
MC	*Movimiento Comunal* (Communal Movement)
MDC	*Comité de Desarrollo Municipal (*Municipal Development Committee)
MIDINRA	*Ministerio de Desarrollo Agropecuario y Reforma Agraria* (Ministry of Agricultural Development and Agrarian Reform)
MINAS	*Ministerio de Energía y Minas* (Ministry of Energy and Mines)
MINSA	*Ministerio del Salud* (Ministry of Health)
MO	*Organización de masa* (Mass organization)
NGO	Nongovernmental organization

ODESAR	*Organización para el Desarrollo Económico y Social para el Área Urbana y Rural* (Organization for Economic and Social Development in Urban and Rural Areas)
PAHO	Pan-American Health Organization
PLANSAR	*Plan de Saneamiento Básico Rural* (National Plan of Basic Rural Sanitation)
PLC	*Partido Liberal Constitucionalista* (Liberal Constitutionalist Party)
PRACS	*Programa Rural de Acción Comunitaria en Salud* (Rural Community Health Program)
RNDC	*Red Nacional en Defensa de los Consumidores* (National Consumers Defense Organization)
RRAS-CA	*Red Regional de Agua y Saneamiento para Centroamérica* (Regional Water and Sanitation Network of Central America)
SERMUNIC	*Departamento Nacional de Servicios Municipales* (National Department of Municipal Services)
SIMAS	*Servicio de Información Mesoamericano sobre Agricultura Sostenible* (Latin American Information Service for Sustainable Agriculture)
SINAS	*Sistema Nacional de Información de Agua y Saneamiento Rural de Nicaragua* (National Information System of Rural Water and Sanitation)
SNV	Netherlands Development Organization
UMAS	*Unidades Municipales de Agua y Saneamiento* (Municipal Units of Water and Sanitation)
UNAG	*La Unión Nacional de Agricultores y Ganaderos* (National Union of Farmers and Ranchers)
UNICEF	United Nations Children's Fund
UNO	*Unión de Oposición Nacional* (National Opposition Union)

UNOM	*Unidades Nacionales de Operación y Mantenimiento* (National Units of Operation and Maintenance)
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization
WSP	World Bank Water and Sanitation Program

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"[In] the absence of an effective state, civil society groups have important roles in service delivery, while at the same time mobilizing society to demand better governance. This means, of course, that civil society organizations will sometimes face the need to transform themselves (e.g. from service delivery to advocacy), a task fully as difficult as transforming society."

- Deepa Narayan, 2002

"[Nicaragua] has potable water committees, which are expressions of society, expressions of the community, which aren't part of the government, and which in an autonomous and self-sufficient manner promote and provide water and sanitation service, principally potable water, in their own community."

- Carmen Pong, COSUDE, Managua, 11/19/09

"We have to formalize ourselves."

- Potable Water & Sanitation Committee (CAPS) member, Managua, 11/9/09

CHAPTER ONE:

THE POLITICAL ECOLOGY OF RURAL WATER GOVERNANCE

In a global context of neoliberal restructuring and ongoing environmental degradation, international and domestic actors alike struggle to construct effective arrangements for securing access to critical resources for residents in developing countries. In rural areas across the global South, millions of local, non-state groups participate in this endeavor. Common property regimes (CPRs), defined as non-state, community-based arrangements for resource management, play a crucial role in facilitating and regulating access to resources like water, forests, and pastures.[1] Notably, the vast majority of these local regimes operate "below the radar" of formal decentralization initiatives or state policies, oftentimes compensating for inadequate state reach or capacity to manage or distribute resources necessary for livelihoods. Even as an *alternative* to state-led or privatized resource management, however, CPRs are not insulated from the practices, dynamics, and decision-making associated with state or private actors. Indeed, policies, practices, and institutions within and beyond the community level may threaten or compromise the access to resources facilitated by these "local" regimes, as well as their decision-making prerogatives and environmental management.

The challenge of securing sustainable and equitable access to *water*, in particular, is enormous. Given its fluid nature; tendency to cross national and subnational jurisdictions; and the multiple actors implicated in its extraction, use, and

distribution, water "poses the problem of collective action in a particularly acute way" (Bakker 2010, 191). That is, water as a resource transcends many of the legal and political boundaries formal laws and policies dictate. Hence, even when policies and institutions exist to regulate and manage water resources, they may be undermined by water's biophysical properties and the potentially conflicting and overlapping legal jurisdictions and property rights applying to water from a given source. Moreover, as a resource fundamental to productive processes and the livelihoods of diverse urban and rural stakeholders, water use and distribution is a highly contested and dynamic policy and political terrain. Indeed, policies and decision-making at different political scales, and between different political authorities, often intersect and come into conflict with one another.

The overlapping of formal and "unofficial" realms of policy and decision-making around water resources poses additional governance problems. As formal legal frameworks are implemented and/or restructured—as they have been across countries and contexts in recent decades—one question that emerges as salient is how to reconcile long-standing, yet unrecognized, prerogatives to control local water systems and sources with state policies that may undermine local regimes (Boelens, Getches and Guevara-Gil 2010). For communities intimately involved in resource extraction, use, and conservation at the grassroots, opposition to top-down policies that alter water ownership and/or management may be particularly vibrant and assertive, owing to the necessity of water for life and livelihoods, the intimate connection between water and processes of identity formation (Boelens 2008), as well

as the de facto ownership and control of water resources on the part of communities and user groups who contest losing these prerogatives (Perrault 2006; Romano 2012). How is water to be governed? What arrangements produce equitable and sustainable governance of this resource spanning biophysical, geographic, social, political, and institutional scales? *Who does and who should participate in water governance, and how?* This study addresses these kinds of questions through examining the social transformation of water users' associations in Nicaragua as they "scale up" politically in order to defend their water systems and seek political recognition.

Surprisingly, community-based systems of water management in Nicaragua began to emerge in the late 1970s in the context of a repressive dictatorship. Across three decades, the *Comités de Agua Potable y Saneamiento* (Potable Water and Sanitation Committees, or CAPS) have continued to emerge and evolve, negotiating extremely diverse ecological, political, and social environments to extend drinking water service to many of the poorest and most remote parts of the country. As a contemporary phenomenon, the CAPS constitute a geographically uneven, yet widespread, resource management scheme in the country's rural areas. Taken together, these organizations unite upwards of 30-40,000 rural residents in the day-to-day work of securing access to water for domestic use.[2] The challenge of improving access to clean water in Nicaragua is stark: 52% of rural residents lacking access to drinking water (compared to 25% for urban) (Herrera 2007), and increasing deforestation and contamination of water sources threaten access to this critical resource for immediate and future human consumption and livelihoods. In this

context, the environmental and social implications of CAPS-led water management and provision are significant. Community-managed water systems, including wells and gravity-fed systems, enable water access to over an estimated one million rural residents nation-wide—a little over half of the country's rural population (Medrano et al. 2007, 18).

Until very recently, despite their crucial role in enabling water access in rural areas, the CAPS have been rendered largely invisible in political and legal terms beyond their communities. This invisibility was starkly illustrated in the early 2000s as national attention turned to the government's plans to commercialize the urban water sector (see Avendaño 2004; Romano 2012). Perceiving the impending privatization of the state water company, a strong resistance movement ensued, garnering the participation of religious, consumer advocacy, community development, and human rights organizations. One key outcome of the anti-water privatization social movement was the enactment of legislation that, in theory, would provide a comprehensive legal framework for the use, administration, conservation, and regulation of the country's freshwater resources. Yet, not only were the CAPS as rural water managers left out of "public" debates on water privatization and the process of designing the *Ley General de Aguas Nacionales* (General Water Law, or Law 620). The CAPS were also, more startlingly, excluded from its content.

More recently, however, the CAPS have begun to mobilize, thereby challenging the political and legal landscape that has effectively "hid" these community-based water users' associations for over thirty years. Since 2005, the

CAPS have turned themselves into effective policy advocates, transcending their rural localities and roles as resource managers in order to engage in fundamentally new forms of political engagement, advocacy, and networking. The CAPS' increasing visibility on the national stage owes in large part to their formation of over thirty municipal level "CAPS networks," participatory spaces that constitute processes of horizontal bridging among the CAPS, domestic and international NGOs, multilateral organizations, and in some cases, local and national government officials. In 2007, a national CAPS network was formed, uniting many of the same CAPS from across municipalities and geographic regions. In part through leveraging the human and financial resources these networks have amassed, the CAPS have played a direct role in shaping the content of a new "Special CAPS Law"—which legislators passed in May of 2010—as well as advocated successfully for the granting of greater resources to communities for improving and extending water provision.

What explains this quick mobilization of these community organizations, previously isolated and disconnected from one another in geographic and political terms? How have the CAPS overcome not only their physical dispersion, but also their unofficial legal status and political marginalization to achieve inclusion in formal policy making processes, and ultimately, legal recognition? Explaining *how* the CAPS have organized with a broad, pluralistic base towards engendering greater political recognition and authority as stakeholders in the sector is particularly puzzling given the political context in which the CAPS networks are proliferating. Notably, the forming of new civil society (i.e. CAPS) networks has occurred as

political polarization has intensified at both the national and subnational levels in Nicaragua. Politicization of intra-community and state-society relations, including within the realm of water management, owe in part to the implementation of President Ortega's new model of "direct democracy" at the subnational level. In 2007, President Ortega decreed the creation of the *Consejos del Poder Ciudadano* (Citizen Power Councils, or CPCs) as decision-making bodies at multiple levels of governance. The CPCs have received harsh criticism as an alleged party tool of the *Frente Sandinista de Liberación Nacional* (National Sandinista Liberation Front, or FSLN) and have accompanied a broader narrowing of space for autonomous civil society since Ortega's election (Anderson and Dodd 2009; Chamorro, Jarquín, and Bendaña 2009; Prado 2010). Promoted by FSLN authorities as the exclusive vehicle of citizen participation at the subnational level, the CPCs have presented challenges to the CAPS' embracing of political pluralism and striving for organizational autonomy.

This study's central question is: **How have the CAPS mobilized to form transcommunity, multi-sectoral organizations while promoting pluralism and maintaining relative autonomy—even as the state seeks to incorporate expressions of civil society into partisan channels of citizen participation?** Despite confronting a polarized political context and embracing the paradoxical objective of seeking formal independence at the grassroots as well as a greater state role in the sector, the CAPS networks have largely developed as autonomous organizations, free from the control or oversight of political parties or partisan

agendas. As one NGO staff member and key informant expressed, "The community wisdom [of the CAPS] has been not to have a political affiliation, and this richness [*riqueza*] at the grassroots is being maintained at other levels"[3] (interview, Eduardo Zamora, Managua, 6/28/10). The autonomous character of the CAPS networks has been demonstrated by several behaviors and organizational characteristics observed over the course of this study, which focused on a select group of municipal networks in the central-northern highlands as well as the National CAPS Network, which integrates CAPS representatives from across regions. One key network behavior observed is participants' concerted efforts to keep CAPS networks as spaces separate and distinct from the government's "citizen power" organizations at the subnational level, despite government officials' efforts to integrate these (see Chapter 4). In the departments of Matagalpa and Jinotega, for example, NGOs—as opposed to local governments—have contributed much of the financial and organizational support needed to initiate, develop, and sustain the CAPS networks. The CAPS networks intimately observed for this project have also promoted pluralism through bridging partisan, urban-rural, and state-society divides through their inclusion of multiple actors and sectors. While observed and documented at the subnational level, this character is particularly salient at the national level. The National CAPS Network engages urban-based NGO staff, CAPS from across regions who embrace different political loyalties, and, when invited, national government officials.

The Nicaraguan case provides clear evidence that contestation over legitimate ownership and use of water resources *intersects with* contestation over appropriate

sites and means of democratic participation and decision-making. That is, determining arrangements for water's ownership, use and protection is intimately related to how well these arrangements recognize, validate, and/or construct legitimate sites and *means of participation* in decision-making around water resources. As the following chapters will detail, the ability of the CAPS to cultivate a pluralistic base and promote the relative autonomy of their multi-CAPS networks is intimately related to their work as resource managers. In fact, two of the three primary factors explaining the outcomes of pluralism and autonomy build upon the first: the CAPS' capacities and legitimacy as resource managers and service providers. As I will argue, the CAPS' day-to-day work at the grassroots—and the capacities and legitimacy this generates—informs and supports their collaboration with extralocal allies and provides the foundation for their strategic discursive framings of their local organizations as they scale across and up politically.

FROM RESOURCE MANAGEMENT TO POLITICAL ACTIVISM: COLLECTIVE ACTION ACROSS SCALES

How do civil society actors responsible for resource management and service provision at the grassroots become engaged in decision making at higher political scales? In other words, what explains the transcendence of water management and provision towards overt political activism and engagement in the public sphere, including policy realms? I argue that answering these questions requires engagement with a broad body of multi-disciplinary scholarship so as to capture in the frame of analysis the environmental, social and political dimensions of this process of

organizational transformation and political engagement. This dissertation seeks to build upon the common property regime (CPR) and decentralization scholarships, primarily through applying theoretical and conceptual frameworks from political geography and political sociology. The resulting political ecology approach, I argue, allows for a more thorough and empirically grounded investigation of the CAPS as social and political actors than either a CPR or decentralization framework alone.

COMMON PROPERTY THEORY

Conventionally, the "tragedy of the commons" (Hardin 1968) has been taken as an explanation of how people fail to organize collectively to prevent over-exploitation of natural resources. Hardin advocated the establishment of private property rights or government regulation over natural resources as a solution to the problem of non-sustainable resource use. Yet, this conception of resource management has proved insufficiently adaptable to accommodate study of common property regimes (CPRs), or community-level commons management by local resource users' associations. CPR theorists, grounded primarily in economic understandings of human behavior, have made outstanding contributions towards understanding the conditions under which communities may viably manage common pool resources—like water, pastures and fisheries—over time.[4] Successful CPRs have been characterized by a number of elements: small group size, locally-devised system of rules, clearly delineated resource boundaries, and effective local monitoring arrangements that external government authorities do not undermine (Becker and Ostrom 1995; Gibson, Williams, and Ostrom 2005; Ostrom 1990; Ostrom 2002;

Feeny et al. 1990; Lu 2001). The CPR "design principles" (DPs), in particular, have sought to delineate the characteristics of enduring common property regimes (Ostrom 1990; see Chapter 3).

Because of its focus on community-based commons management, the CPR scholarship has served as a corrective to theoretical and policy debates casting resource governance in dichotomous public/private terms. However, the scholarship has overwhelmingly been concerned with the micro-level dynamics of institutional creation, operation, and change, paying particular attention to individuals' cost-benefit analyses in confronting "temptations to free-ride, shirk, or otherwise act opportunistically" (Ostrom 1990, 29) as members of local resource management regimes (see also Bromley 1992; Ostrom 1990; Ostrom 2010; McKean 2000, Feeny et al. 1990, McKean 2000, Wade 1978). The CPR DPs, for instance, speak largely to institutional characteristics and norms that foster a sustainable resource management and allocation regime.

Yet there are shortcomings of this emphasis, including neglecting the extralocal determinants of local institutional development or robustness as well as the ways in which local resource managers transcend their communities and articulate at other scales. Importantly, a CPR frame of analysis has the potential to account for some local-extralocal (including CPR-state) dynamics. For example, the CPR DPs emphasize the importance of the state granting legitimacy to common property institutions (CPIs) through minimal recognition of and/or respect for the right to organize at the community level as well as the importance of large-scale CPRs being

"nested" within broader structures of rules and norms.[5] However, broader processes and policy shifts like decentralization and privatization, and accompanying changes in state-society relations, are putting new pressures on CPRs, making this original schema relevant, yet inadequate. Indeed, an "increasing awareness" (Mwangi and Wardell 2012, 80) of the need to look across environmental and political scales in assessing and designing resource governance arrangements has contributed to a growing body of scholarship focusing on "multi-level governance" (Pahl-Wostl 2009; Termeer, Dewulf, and van Lieshout 2010), "polycentricity" (Nagendra and Ostrom 2012; Ostrom 2010b), state-society relations (Singh 2002; Pomeroy and Berkes 1997; Wilson et al. 2006), and CPRs in the context of globalization (Rudel 2011). Overall, however, common property theory itself proves insufficient as a framework for understanding increasingly complex landscapes of environmental governance, including circumstances under which—and *how*—local resource users and managers act collectively across communities and for political ends. Indeed, in focusing largely on CPRs in isolation from one another, CPR theory effectively leaves the political mobilization and organizing of common property institutions—like the CAPS in Nicaragua—outside the frame of analysis.

DECENTRALIZATION THEORY

Scholars of decentralization, contrastingly, have addressed natural resource management most often at spatial scales beyond the most local level. Most attention, in fact, is directed to politics and actors at the municipal and national levels in

assessing how governmental actors formally devolve management and regulation responsibilities and decision-making authority to actors at the subnational level (Crook and Manor 1998; Larson 2004; Larson and Ribot, 2004; Ribot 1999; Ribot and Larson 2005; Ribot 2007; Bergh 2004; Agrawal and Gupta 2005; Ribot 2011).[6] Scholars have shown the impetuses for administrative, as well as fiscal and political, decentralization across the global South to be manifold. Among these include the objectives of reducing central government expenditures in the context of fiscal crises (Garman, Haggard, and Willis 2001), strengthening political parties via elections at the subnational level (O'Neill 2003), and promoting local governments "that are responsive to local needs and accountable to local citizens" (Narayan 1999, 42; see also Ribot 2003; Ribot, Agrawal, and Larson 2006; Ackerman 2004). Assessments of decentralization initiatives in terms of achieving their stated objectives have been mixed. Scholars have variously pointed to individual politicians' interests at the national level (Eaton 2001), limited government capacity (Larson 2002), and devolving of responsibilities to non-democratically accountable actors at the subnational level (Ribot 2003; Ribot 2011) as barriers to effective decentralization (see Eaton 2006 for an examination of how devolved fiscal resources have also fallen into the hands of non-state, armed groups in Colombia).

Importantly, a focus on environmental management, service provision, and policy making brings additional actors into focus at the subnational level—beyond the state actors central governments tend to empower with new resources and decision-making responsibilities. Some scholars have theorized that the participation

of *civil society* actors in governmental decision-making around resources improves the effectiveness of resource management and public service provision. This is because in theory "local" residents contribute better information to projects and spending decisions and are likely to be more invested in outcomes than non-local politicians (Narayan 1994; Agrawal and Ribot 1999). Scholars have variously emphasized the role of "clients," "users," and "citizens" in delineating the important role civil society actors can and do play in the provision of public goods and services such as education, water, sanitation, and healthcare. Especially relevant to this study is the concept of "coproduction." As opposed to conceptions of citizens as "clients" of the government receiving projects, services, and infrastructure from the state, "[c]oproduction implies that citizens can play an active role in producing public goods and services of consequence to them" (Ostrom 1996, 1073). When the inputs of state and non-state social actors complement one another, this body of scholarship argues, more effective and efficient production of goods and services can be enabled (Evans 1996; Lam 1996; Ostrom 1996; Whitaker 1980; Alford 2002; Kiser 1984; Parks et al. 1981).

In addition to this ostensibly "depoliticized" participation (Ackerman 2004, 450) in the production of public goods and services like health care, civil society actors may participate directly in governmental decision-making. Ackerman (2004), for example, works to bridge the scholarship on coproduction with that examining citizens' direct participation in shaping the legal and political contours of certain sectors. While not attentive explicitly to community-based resource managers or

service providers as potential political actors, much scholarship has examined how civil society actors constitute "active participants who engage in making and shaping social policy and social provisioning" (Ackerman 2004, 450). In the global South, the most notable, widespread, and deeply examined case of participatory democracy is that of participatory budgeting in Brazil. The scholarship is vast, closely examining the mechanisms by which civil society actors participate in formal governmental decision-making both in the North and South (Abers 2000; Abers and Keck 2009; Avritzer 2000; Avritzer 2009; Cornwall and Coelho 2007; Fung 2003; Fung and Wright 2003; Goldfrank 2006; Pateman 2012; Wampler and Avritzer 2004; Alarcan de Morris and Leistner 2009; Zittel and Fuchs 2007; Wampler 2007a; Peruzzotti and Selee 2009; Wampler 2007b; Alarcan de Morris and Leistner 2009). While earlier research granted attention to the dynamics of how civil society actors both help to construct and come to participate in government-instituted channels and spaces of participation (see, for instance, Fung and Wright 2003; Wampler and Avritzer 2004), more recent scholarship on participatory democracy largely focuses on the effectiveness of these arrangements in increasing the accountability of public officials to the citizenry and in curbing corruption and clientelism. State-society synergy matters. The important concept of "mobilizing the state" (Abers and Keck 2009), for example, highlights how activists within and outside the state have a crucial role to play in contributing to the state's capacity to implement policy decisions made by deliberative bodies.

This attention to how participatory mechanisms are improving governance and service provision is important and necessary. However, relatively little attention has been directed to how politically marginalized civil society actors get *to* the formal bargaining table. Additionally, because the participatory democracy literature is largely urban-focused, rural residents are not treated as potential participants—even though rural and urban residents draw from the same resource bases (most often to the detriment of the former). A question still relevant in many countries and contexts, then, is how do formal politics and policy processes at the municipal and national scales become more participatory and inclusive when the government does not "directly stimulate the participation of society" (Ackerman 2004) in governmental decision-making? A traditional decentralization approach would fall short of explaining actually-existing water management in Nicaragua because of scholars' focus on how government actors more effectively devolve responsibilities to official subnational actors or implement participatory mechanisms from above. The dynamic landscape of water governance in Nicaragua—and elsewhere in the global South—necessitates examining how actors *overlooked* by public officials and lawmakers organize from below, as well as from intermediate political scales, to participate in policy processes and self-advocate vis-à-vis the state. This involves the interventions of *rural* actors in policy making and implementation and in helping to determine public funds allocation.

Assessing and understanding the dynamics of socio-organizational change and transformation pertaining to the CAPS, their allies, and state actors in Nicaragua in

this moment necessitates an approach that is multi-scalar in geographic, temporal, social, and political (including institutional) terms. Capturing these dynamics and diverse actors requires broadening the frame of analysis beyond that of either a CPR or decentralization approach.

THE POLITICAL ECOLOGY OF WATER GOVERNANCE

Arguably, the challenge of studying water politics mirrors the difficulty and complexity of this resource and its attendant social relations in practice. This dissertation adopts a political ecology approach to examine the inherently multi-actor and multi-scalar politics characterizing water governance. As I embrace it, a political ecology approach is fundamentally concerned with human-environment interaction and the multiple scales (ecological, environmental, social, political, temporal) characterizing this relationship and its outcomes (Zimmerer and Bassett 2003). As a resource, water transcends not only bio-physical and geographic scales, but also social, political, and institutional scales (Abers and Keck forthcoming; Bakker 2010; Mehta, Veldwisch, and Franco 2012; Boelens, Bustamante and Perreault 2010). Recognizing this multi-scalarity and complexity, I argue that problems of water access, distribution, use, and conservation are largely problems of governance; that is, problems of navigating "how decisions about water resources are made, by whom, at what geographical scales, and to whose benefit" (Perreault 2008, 835). The nature of water and the multiple scales implicated in its use, management, distribution, and conservation necessitate a research approach that aims to capture these dynamics and processes across temporal, geographic, social, and political scales.

A political ecology approach therefore directs attention to dynamics within formal as well as "unofficial" realms of resource governance to allow insight into the ways in which norms, practices, organizations, decision-making structures at different spatial scales overlap with, relate to, and impinge upon each other (Perreault 2006). Because of its attention to scale, this kind of framework serves to expand conventional CPR and decentralization approaches, bringing into focus those actors and organizations who—even if politically unrecognized and/or non-state sanctioned—are nevertheless actors consequential to resource governance and service provision (see, for example, Bakker 2007; Bakker 2003; Abers and Keck 2006; Boelens 2006; Boelens 2009; Boelens and Gelles 2005; Boelens, Getches and Gil 2010; Fuys and Dohrn 2010; Spronk 2007; Romano 2012).

As a brief history of the CAPS as social organizations makes evident (see Chapter 2), local actors, such as rural water managers, may play significant roles in decision-making around resources, even when operating below the radar of formal state policies. In part, examining and understanding environmental governance means asking how community-based actors and organizations become empowered in the absence of an official state mandate or formal devolution of resource management and/or service provision responsibilities. Notably, the CAPS' empowerment to manage resources is one that, while intimately related to the financial investments of international agencies and foreign governments, has largely grown out of the day-to-day labors of this work at the grassroots, as opposed to official decentralization initiatives. What I call an "organic empowerment" refers to an empowerment not

dependent upon formal policy or decentralization initiatives. This contrasts with many decentralization scholars' conceptions of empowerment that emphasize "direct" forms of "empowerment through the control of valuable resources and significant decision-making powers" (Ribot 1999, 25) that state actors confer. Even when scholars expand their frame to encompass nonstate actors like traditional authorities and community groups at the local level (see, for example, Agrawal and Ribot 1999; Ribot 2003; Ribot 1999), they are still fundamentally concerned with *formal* granting of authority to subnational actors. The broader lens adopted in this study reveals that non-legalized, non-state conferred control over valuable resources like water constitutes a form of empowerment that ultimately may *contribute* to formal legal prerogatives and state recognition—even though initially this empowerment has developed outside of formal legal or political frameworks.

This study found an intimate connection between the water and environmental management of rural communities and the social and political legitimacy of CPRs. As several authors contend, traditional and/or local managers of resources, like forests, oftentimes are the legitimate authorities at the local level, rather than governmental institutions (Brown and Lassoie 2006; Benjamin 2008; Fuys and Dohrn 2010). Because "they are not the state but they exercise public authority," I contend that the CAPS are usefully characterized as "twilight institutions" (Lund 2006a, 673). Although nonstate, twilight institutions demonstrate the "state qualities of governance" (Lund 2006b, 685) via their public functions, including the "defining and enforcing [of] collectively-binding decisions and rules" (676). In the Nicaraguan

case, the CAPS as twilight institutions subsidize the state's limited reach into communities by managing and administering rural water infrastructure. The very act of managing water systems on a daily basis, I found, infused community organizations with social legitimacy that subsequently strengthened their political interventions at higher scales.

To account for the CAPS' public work and the legitimacy this confers upon them as resource managers, this study necessarily moves beyond a limited focus on the CPR design principles and discussions of CPI longevity and strength. Understanding the significance of the social and political legitimacy of local commons management for scaled up advocacy and policy interventions necessitates the development of broader and frameworks for "local" commons management. The more nuanced framework I have developed, which encompasses yet expands upon the DPs, demonstrates how the work and the capacities of local water managers have technical, financial, organizational, environmental, as well as legal and political dimensions. Hence this framework (introduced in Chapter 3) aims to capture the dynamics and iterative processes of innovation, education, physical labor, knowledge development, and social relationships that constitute the local commons management observed during the course of this study. Attention to these intra-institutional as well as intracommunity dynamics and relationships allows seeing and understanding the multiple ways CPIs generate legitimacy in the eyes of regime members. In so doing, this research sheds light on an undertheorized dimension of common property

management—social and political legitimacy—which matters when resource managers engage with authorities beyond the community level.

Yet, under what circumstances do the dynamics of local resource management intersect with politics and policies at higher political scales? While at times highly insulated from actors and institutions at other scales, the work of political geographers, including political ecologists, has demonstrated how rural communities experience the tensions and contradictions generated by the intersections of market logics, formal political arenas, and local livelihood imperatives even when their local institutions for environmental governance remain largely "outside of" formal policy initiatives (see Bebbington, 2004; Bebbington et al. 1993; Bebbington 1999; Guillet 1992; Boelens and Zwarteveen 2005; Fuys and Dorhn 2010). As noted above, government policies may effectively deprive communities of the water management responsibilities they had fulfilled through the imposition of culturally or politically inappropriate rules and/or decision-making bodies (see, for example, Baer 2008; Bakker 2007; Bakker 2010; Boelens 2008; Boelens, Getches, and Gil 2010; Shiva 2002; Olivera and Lewis 2004; Swyngedouw 2004). Recognizing that "top down" economic and political agendas trickle down (and out) to affect rural communities, there is an opportunity—and political imperative—to examine the contestation of and collective responses to these dynamics at multiple geographic and political scales, including how resource managers and service providers must take on the additional role of political agent (see Bebbington et al. 1993; Narayan 2002).

Theories of social capital are particularly useful for explaining *how* very local, rural-based community organizations of both resource users and managers achieve political participation at scales beyond the community level. Particularly useful to my theoretical framework is the work of scholars like Fox (1996, 2007), Woolcock and Narayan (2000), and Narayan (1999), who call attention to the role of social capital in facilitating politically marginalized and impoverished social actors' mobility and inclusion in formal politics. In fact, much scholarship grounded in theories of collective action and social capital has demonstrated how connections between rural social actors and external actors like NGOs and "reformers" in the state can positively impact the capacities and mobility of the former (Bebbington et al. 1993; Boelens 2008; Fox 1996; Pretty and Ward 2001; Narayan 1999; Keck and Sikkink 1998; Brocket 1991). I draw upon theories of social capital in examining the "bonds" CAPS members share in their localities and with the residents they serve as well as to explain the "bridging" of the CAPS with different, non-local actors as part of the formation and functioning of new CAPS networks. "Bridging" social capital, or those connections, networks, and relationships across difference—be it socio-economic, sectoral, or class-based (Anderson 2010; Woolcock and Narayan 2000; Narayan 1999; Granovetter 1983)—contrasts with "bonding" social capital, or "relations among family members, close friends and neighbors" (Woolcock 2001, 13). The CAPS' cross-scalar organizing has been undertaken with a significant degree of nonlocal support, thus generating bridging social capital as the CAPS increase their ties to domestic and international NGOs and state actors. The "scaling up" and

"scaling across" that extralocal allies facilitate among the CAPS provides the opportunity to examine the relationship between bridging and bonding social capital. The present study helps "to identify the conditions under which the many positive aspects of bonding social capital in poor communities can be harnessed…while simultaneously helping the poor gain access to formal institutions" (Woolcock and Narayan 2000, 233). It does so through demonstrating how the asymmetries—in regard to resources, experience, social class—inherent in the bridging processes of the CAPS networks helps to explain the effectiveness of these in constructing a pluralistic, broad-base, as well as in equipping previously excluded rural resource managers for effective interventions in formal politics.

The CAPS' discourses of water ownership, access, and management also support in fundamental ways the autonomous and pluralistic character of their growing transcommunity networks. As Boelens argues, the "battle over the material control of water use systems" is accompanied by one "over the right to culturally define, politically organize and discursively shape their existence" (Boelens 2008, 50). The way the CAPS talk about their work and local organizations—and the way these collective action "frames" (Snow 2004; Oliver and Johnston 2000; Westby 2002; Goodwin and Jasper 2004; McAdam, McCarthy, and Zald 1996) get publically projected—supports the pluralistic and autonomous character of their networks as well as the achievement of their collective goals. In contrast to much of the social movement scholarship's casting of frames and framing processes as highly "contested," however, I demonstrate that the relatively consensual character of the

CAPS' framing owes to its high empirical credibility (Benford and Snow 2000) and the credibility of the CAPS themselves as frame articulators. The CAPS' frames are "empirically credible" because of their "fit between the framings and events in the world" (Benford and Snow 2000, 620). These "events in the world" include the historical and contemporary resource management undertaken by rural communities in Nicaragua. Likewise, the instrumentality of the CAPS' discourses is inextricably linked to how they reflect the concrete experiences, as well as the values and identities, of community-based water managers. Social movement scholars have emphasized the need for studies shedding further light on how framing affects the achievement of movement goals (see, for example, Benford and Snow 2000; McAdam, McCarthy, and Zald 1999). Through demonstrating how the CAPS discourses are taken up in the media and by state actors and are ultimately reflected in national legislation, this study contributes evidence that particularly resonant and credible frames may play a key role in attaining movement objectives.

STATEMENT OF ARGUMENT

This dissertation points to three interrelated and mutually-dependent factors that explain how the CAPS as locally-grounded resource managers and service providers form broad-based, pluralistic networks at the municipal and national levels while maintaining relative autonomy from the state (see Figure 1.1). First, I argue that the CAPS' "organic empowerment" grants them significant legitimacy in their interactions, struggles, and negotiations with authorities in the public sphere and

beyond the community level. As the following chapters detail, the CAPS' empowerment as water managers has occurred outside the boundaries of formal decentralization initiatives or state policies. I show how the day-to-day, multi-dimensional water management of the CAPS generates not only local legitimacy, but also capacities and public authority which in turn affect the *outward* legitimacy of CPIs in relation to state and other non-state actors. Developed through their direct and de facto control over local environments and resources, the CAPS' capacities and legitimacy positively come to bear on their political strength, credibility, and autonomy as collective actors vis-à-vis the state.

Second, I demonstrate how extralocal allies are of crucial importance to the ability of the CAPS as rural social actors to mobilize to transcend their localities, engage with state authorities, and integrate themselves into policy making processes. The CAPS' allies include domestic and international NGOs, multilateral organization staff, and local and national government and state agency officials. The CAPS networks, and the political interventions they facilitate, function *because* they depend upon multiple actors from different sectors and operate at multiple spatial scales. Extralocal allies facilitate the CAPS' "scaling up," or mobilization and/or participation at higher political or more encompassing geographic scales (Fox 2007b; Fox 1996), enabling a multi-scalar strategy to pursue their collective goals. Specifically, I argue that bridging social capital creates bonding social capital when it contributes to the mobility and hence connection of similar social groups. Because it depends on local and insular ties among similar people, bonding social capital

requires complementary inputs in order to spread or grow beyond a particular locale or social group. The bridging social capital generated as the CAPS connect to extralocal allies facilitates the production of new bonding social capital as CAPS members, similar in social terms but previously disconnected from each other in physical and political terms, link across communities and regions.

Third, I argue that the CAPS' discursive framings of water management promote their autonomy and the transcendence of partisan politics as they intervene in the political and legal reconfiguration of the water sector. Part of the way the CAPS collectively advocate for themselves and their water systems is through outwardly and publicly projecting their work and their local organizations via political pronouncements, radio spots, participation in public events, and direct engagements with public officials in CAPS network spaces or state spaces of representation. I examine three discursive framings with particular relevance for how the CAPS promote pluralism and autonomy in their burgeoning transcommunity organizations. These include discourses of the CAPS' autonomy vis-à-vis the state and ownership over water systems, how the CAPS talk about their work in relation to official state responsibilities in the sector, and the CAPS' calls for collective problem solving and greater state-society synergy within water governance. I contend that the CAPS frames are not highly contested by state actors—the principal "targets" of the CAPS policy interventions. Counterintuitively, rather than be contested, the CAPS' discursive representations of their organizations and work become reflected in the policy discourse of state officials. The high resonance and instrumentality of the

CAPS discourses towards achieving the CAPS' policy goals, I argue, emerges from how they reflect the day-to-day, historical and contemporary, experience of water management at the grassroots, and the ways this work implicates the state and conceptions of stateness.

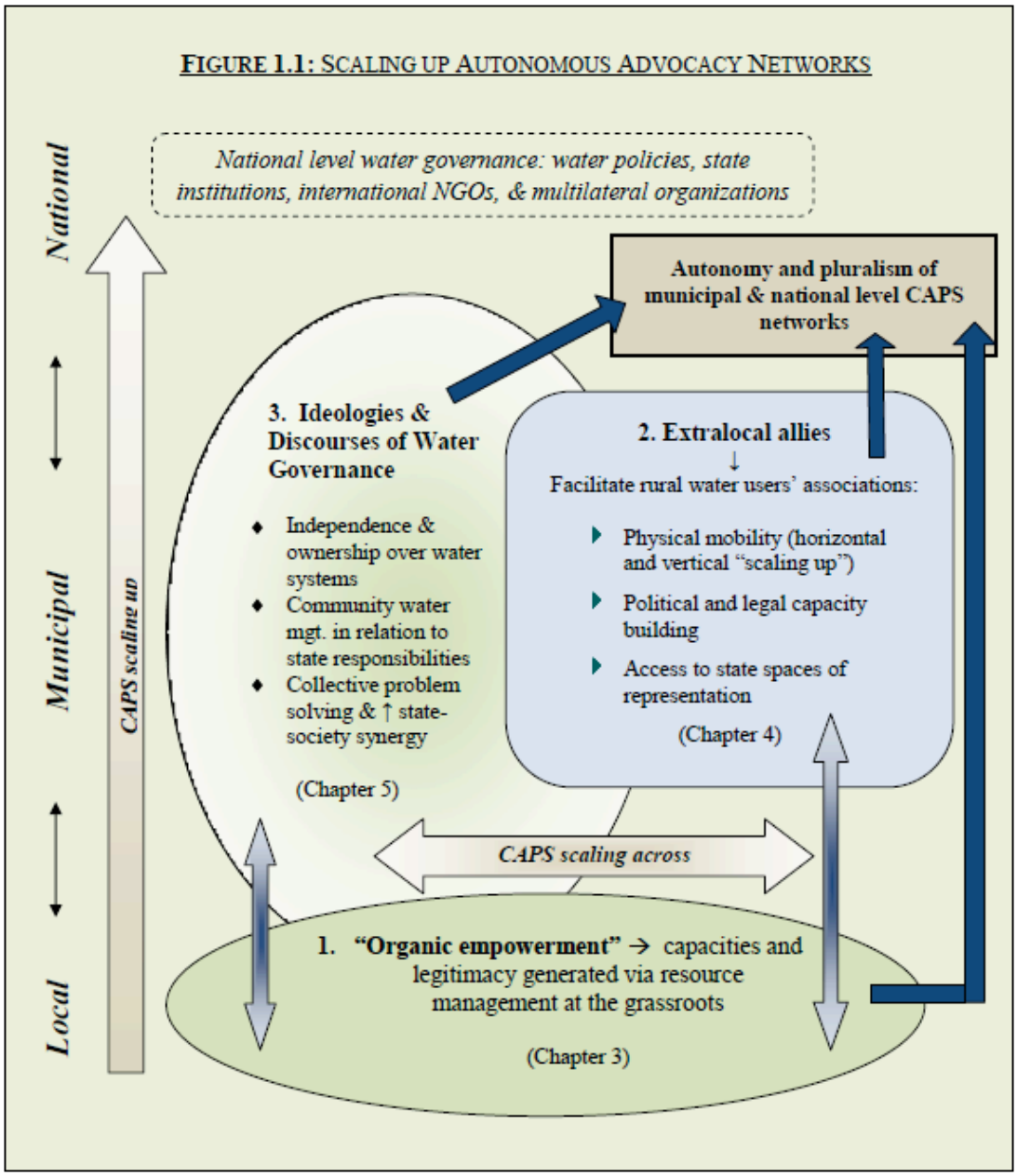


FIGURE 1.1: SCALING UP AUTONOMOUS ADVOCACY NETWORKS

CASE SELECTION AND METHODS

This project is based upon thirteen months of field research in Nicaragua, spread across four trips: November 2004-January 2005, August-September 2007, August 2008, and October 2009-June 2010. Research was conducted primarily in the department of Matagalpa, across four municipalities: El Tuma-La Dalia, San Ramón, San Dionisio, and Sébaco. This region was selected to study processes of municipal CAPS network formation and operation because it is home to the first CAPS networks in Nicaragua. In addition to being the region with the oldest and most established networks, Matagalpa was described by key informants as having the most vibrant and well-organized municipal networks nationally, hence making the department an apt site to examine how CAPS have mobilized and how their multi-CAPS organizations function and continue to evolve. The four above-noted networks were selected because they allowed for examining a range of networks in regard to date of formation, with San Dionisio being one of the first municipal CAPS networks to form in 2005, and Sébaco one of the most recent, forming in late 2009. These cases hence provided the opportunity to look for variance and overlap in regard to how CAPS work with NGO staff and pursue their collective objectives during network formation and in the months and years following.

Research examining the formation, operation, and growth of the National CAPS Networks took place primarily in the capital, Managua, yet extended to different regions as national-level meetings periodically changed locations. For

comparative purposes, secondary research on municipal-level networks was conducted in the municipalities of Estelí, La Trinidad, Pueblo Nuevo, Jinotega, and Palacagüina, which are also located in the central-northern highlands of Nicaragua (in the departments of Estelí, Jinotega, and Madríz). Important secondary research was also conducted at the Central American Community Water Management Fair (*Feria Centroamericana de Manejo Comunitario de Agua*) in Costa Rica (March 19-22, 2010) to gain comparative insight on the CAPS and their Central American counterparts as community-based water managers.

Primary research methods for this study include semi-structured and informal interviews and participant observation. Semi-structured interviews were conducted with over 150 key informants from 2004 to 2010 (see Appendix A, "Key Informants"). Informants include CAPS members; staff at domestic and international NGOs, multilateral organizations, and state agencies and ministries; as well as local and national elected officials in government. Semi-structured interviews with CAPS members were conducted both with CAPS *junta directivas*, or boards of directors, at the community level, as well as with the elected leadership bodies of municipal CAPS networks in the above-noted municipalities. Semi-structured and informal interviews were conducted with individual CAPS members and NGO staff across municipalities and departments at community events and assemblies, CAPS network meetings and assemblies, as well as other events.

Extensive participant observation was carried out at the community, municipal, departmental, and national levels. At the community level, this

observation took place as part of site visits to interview CAPS members, attend community events, and/or get a tour of the community and water system. At the municipal level, 15 CAPS network leadership meetings and municipal CAPS assemblies were attended and observed, while four departmental CAPS network meetings were attended in Matagalpa. At the national level, I attended four, two-day National CAPS Network meetings (64 hours total of meeting time). These all-day meetings provided the opportunity not only to observe the CAPS' and other network participants' work, interactions, and conversations in network spaces, but also to conduct semi-structured as well as informal interviews with a number of CAPS members representing different regions over shared breaks and meals. Participant observation was also carried out at various conferences and events including the National Land Fair (see Chapter 4) and multi-CAPS trainings and workshops hosted by NGOs.

Review and analysis of other primary and secondary data sources, including NGO and multilateral organizations' websites and written materials, newspaper articles, as well as national legislation also significantly inform the contextualization of interview and observation data and serve as important data sources for this study in their own right.

TOWARDS A MORE COMPREHENSIVE THEORY OF STATE-SOCIETY RELATIONS WITHIN RESOURCE GOVERNANCE

Importantly, this research engages with diverse scholarships that allow integration of attention to micro-level and "unofficial" resource governance dynamics

with the more macro-level concerns of scholars of democratization, development, and decentralization. As a result, it contributes to more comprehensive depictions, empirically-informed understandings, and robust theorizations of environmental governance. In theoretical terms, the Nicaraguan case generates new insight into how previously excluded civil society actors achieve political inclusion in formal governance realms, in part through demonstrating how the particular experience of local and unofficial resource management affects collective action beyond the community level and civil society engagements with state actors. Ultimately, and as will be discussed in the concluding chapter, the CAPS' organizing has significant implications for Nicaragua's ongoing process of democratization. Understanding these implications, however, requires grounding in Nicaragua's history of regime change and shifting state-society relations. It is to this dynamic historical landscape that the next chapter turns.

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[1] McKean defines common property regimes "as institutional arrangements for the cooperative (shared, joint, collective) use, management, and sometimes ownership of natural resources" (1996, 1). Pretty and Ward estimate that between 408,000 and 478,000 new groups for common property management emerged during the 1990s, citing cases from just 17 different countries in both the global North and South (Pretty and Ward 2001).

[2] Estimates of membership in CAPS come from data of documented rural water projects in the *Sistema Nacional de Información de Agua y Saneamiento Rural de Nicaragua* (National Information System of Rural Water and Sanitation, or SINAS), a database created by the Nicaraguan government and international donors in the mid-1990s to document project implementation. These data are based upon estimated CAPS membership of 5-10 residents and reflect documented water systems through part of 2004 only.

[3] "La sabiduría comunitaria ha sido no tener color político, y esa riqueza de base la ha venido conservando a diferentes niveles."

[4] The reifying of "community" has been critiqued on multiple grounds (see, for example, Bakker 2008; Agrawal and Gibson 2001). I find reference to "community" and "community-based" useful as a way to express how rural water projects are territorially delimited. Furthermore, use of this language allows reflection of how rural residents and the CAPS talk about themselves: those interviewed frequently invoke their "community" and their sense of belonging to their communities.

[5] As Ostrom (1990) argues, "Establishing rules at one level, without rules at the other levels, will produce an incomplete system [of resource governance] that may not endure over the long run" (102).
[6] "Decentralization takes place when a central government formally transfers powers to actors and institutions at lower levels in a political-administrative and territorial hierarchy" (Ribot 2002, 3).

CHAPTER TWO:

FROM DICTATORSHIP TO DEMOCRACY: STATE, PARTY AND SOCIETY IN TRANSITION

When the 1979 Sandinista Revolution broke the bonds of over 40 years of dictatorship in Nicaragua, it embarked the country on a course of dramatic political, social and economic change. Once in power, the *Frente Sandinista de Liberación Nacional* (Sandinista National Liberation Front, or FSLN) sought redistribution of the country's material wealth and political power in part through cultivating mass participation in public life. The promotion of popular engagement and empowerment not only had ideological underpinnings consistent with the Sandinistas' conception of democracy, but also served as part of the Sandinista state's governing strategy. The new government inherited a severely drained public resource base; moreover, faced with intense political and military aggression, the government was forced to direct much of the available public funds towards defense spending for political survival. In this context of resource shortages and war, the new regime depended upon its broad base of societal support to achieve its political objectives and to meet the basic survival needs of the populace.

Certainly, the overthrow of Somoza wrought greater associational space and a social change agenda concerned with the promotion of mass participation in public goods and service provision. The subjects of the present study, the community-based Potable Water and Sanitation Committees (CAPS), appear to be the kind of "self-help" and citizen-driven organizations that the Sandinistas sought to foster.[1]

However, regime change in 1979 cannot fully explain the emergence and development of rural water, community-based water committees as a resource management arrangement. First the available evidence reveals that the construction of community-based water systems began in Nicaragua *before* the 1979 Revolution; moreover, the number of these systems increased greatly *subsequent* to the electoral defeat of the Sandinistas in 1990 (see Table 2.1 for estimated rural water projects by regime through 2004 and Figure 2.1 for estimates of water rural water access across time). Second, attributing the development of these organizations solely to the socio-political change wrought by the Revolution cannot account for the emergence of parallel community-based water and sanitation management arrangements across Central America during the 1970s and beyond.[2]

This chapter examines *how* the CAPS fit within Nicaragua's historical and contemporary landscapes of dictatorship, revolution, popular participation, and public goods provision. To do so, I examine the CAPS' origins and evolution across three distinct political regimes in Nicaragua: the Somoza dictatorship before 1979, the Sandinista Revolution of the 1980s, the neoliberal democratic period from 1990-2006. I also examine the recent return of the FSLN to power at the national level as a distinct period because of the qualitative shifts in regard to the landscape of citizen participation and the water and sanitation sector this administration has wrought, in addition to how this administration informs the political context of the CAPS' transcommunity organizing. How have Nicaragua's historical shifts in political and economic regimes and administrations affected state-society relations and interfaces?

What can the evolution of the rural water and sanitation sector, in particular, tell us about the CAPS as a socio-organizational form, including their relationship to the state? What were the defining features of the political landscape in which the CAPS began to mobilize beyond the community level in the mid-2000s?

The remainder of this chapter is divided into four sections, each devoted to a different regime and/or political administration. I characterize each in terms of 1) its prominent political and economic features, and 2) the developments within the rural water and sanitation sector it prompted. In particular, I assess how each affected the emergence and operation of CAPS. Notably, the principle role of the Nicaraguan state in the rural water and sanitation sector *across* time has been remarkably consistent in spite of major regime and administration changes. In particular, each has supported the emergence of community-based water management regimes through its facilitation of major investments of international organizations and agencies, after which rural residents have taken on the management and administration of new infrastructure. Notably, a general pattern in regard to the state's relationship to the CAPS can be observed across time: support to rural communities (technical, financial, and organizational) in the wake of system construction has been extremely limited as well as geographically uneven. Thus, even when the state has attempted to control or to assert itself vis-à-vis rural sectors, state involvement in water sanitation has remained quite limited, approaching a de facto neglect of the sector, including the CAPS. Despite this continuity—most counterintuitive for the Somoza era—each

regime has presented unique opportunities and constraints for the CAPS' emergence and effective functioning.

The relatively high levels of foreign (versus domestic) investment in rural water and sanitation projects has combined with the inputs of "everyday" Nicaraguans and the limited financial and technical capacities of the Nicaraguan state to effect a "coproduced" rural water and sanitation sector. That is, a sector in which the inputs of state and non-state social actors complement one another to enable production of goods and services (Evans 1996; Lam 1996; Ostrom 1996; Whitaker 1980; Alford 2002; Kiser 1984; Parks et al. 1981). However, what I call a "limited coproduction," given the withdrawing of the state and NGO actors after initial investments, has contributed to the conditions for the CAPS' largely independent and insulated work and evolution as community-based organizations.[3]

TABLE 2.1: RURAL WATER PROJECTS BY REGIME (1960-2004)

Department (and Region)	1960-1979	1980-1989	1990-2004	Total Water Projects
Estelí, Madriz, Nueva Segovia (I)	0	209	1135	**1344**
León, Chinandega (II)	0	58	1160	**1218**
Managua (III)	0	15	62	**80**[a]
Carazo, Granada, Masaya, Rivas (IV)	54[b]	70	121	**334**
Boaco, Chontales (V)	0	7	697	**704**[c]
Jinotega, Matagalpa (VI)	0	101	1068	**1175**[d]
Región Autónoma del Atlántico Norte (VII)	NA[e]	NA	11	**58**
Región Autónoma del Atlántico Sur (VIII)	0	0	42	**42**
Río San Juan (IX)	0	19	42	**63**[f]
	54	***479***	***4338***	***5016***

Source: These figures come from data collected in the *Sistema Nacional de Información de Agua y Saneamiento Rural de Nicaragua* (National Information System of Rural Water and Sanitation, or SINAS), a database created by the Nicaraguan government and international donors in the mid-1990s to document project implementation. These data reflect water systems constructed through part of 2004 only.

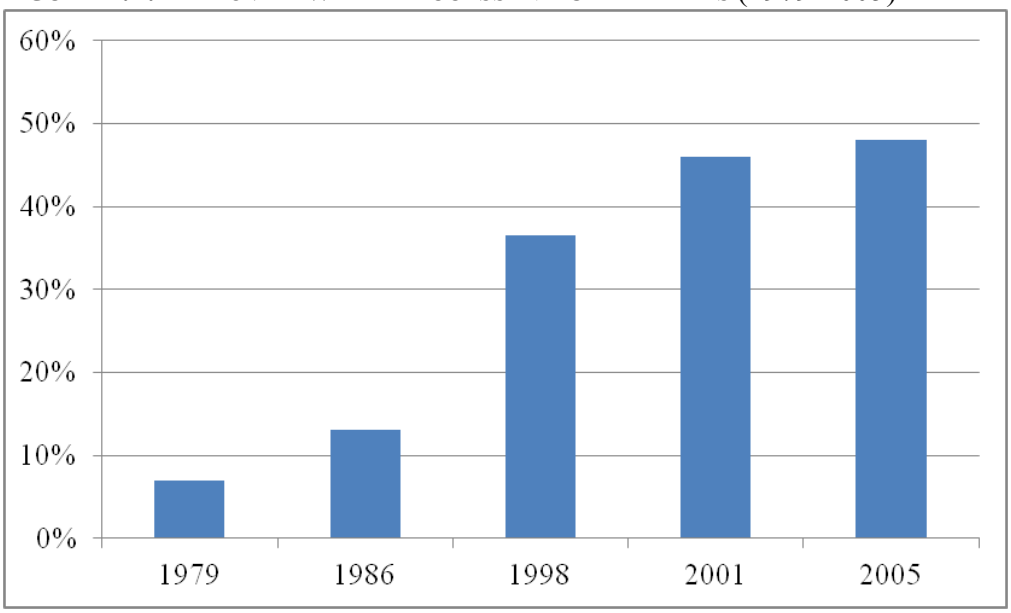
[a / d / f] These numbers are greater than the sum of projects noted across regimes because dates were not available for some projects, and hence were omitted for this table.

[b] Eighty-nine of a total of 143 water systems constructed before 1980 in Region IV were documented as "urban" water systems, and were thus omitted for the purposes of this table. It is likely that many of the 54 remaining systems serve urban, or at least peri-urban, neighborhoods as well. With the exception of three projects, this Region's projects from 1960-1979 are attributed to the state water company, ENACAL, an institution not created until 1998. It is much more likely that these projects were supported financially by the World Health Organization (WHO) through coordination with the Ministry of Health (MINSA), as there is evidence of collaboration between these two entities towards a "Water Service Plan" starting in 1972 (RRAS-CA 1998, 10).

[c] This number reflects 163 water projects constructed in the RAAS and twenty in the Río San Juan.

[e] Dates were not available within SINAS for most RAAN projects.

FIGURE 2.1: IMPROVED WATER ACCESS IN RURAL AREAS (1979-2005) [a]



Sources: INAA 1989; Medrano et al. 2007; FANCA 2006; Government of Nicaragua & PAHO 2004; RRAS-CA 1998).

[a] Data in this chapter referring to "improved" water access include water accessed via the following technologies: piped water into individual households (via gravity-fed or electrically pumped systems), public taps serving multiple households (via gravity-fed or electrically pumped systems), public wells (hand dug and drilled), and household wells (hand dug and drilled) (RRAS-CA 1998, 35).

PRE-REVOLUTIONARY NICARAGUA: THE SOMOZA DYNASTY (1936-1979)

Understanding the CAPS' collective mobilization and assessing its significance for political life and practice in Nicaragua requires understanding this activity within a unique historical context. The years leading up to the overthrow of Somoza in 1979 and the decades since are particularly relevant for observing dramatic transformations in the practice of public politics in Nicaragua—including the expansion of "everyday" Nicaraguans' role in public life.[4] As an authoritarian political regime, the Somoza dynasty ruled the country from 1936-1979, precluding political pluralism and residents' access to formal institutional channels (Vanden and

Prevost 1993; Bugajski 1990).[5] The regime's repressive apparatus depended upon both political patronage and military might. As the country's military, the National Guard functioned as a mechanism to control the urban and rural populace and came to be known as the Somozas' "private army." The Somozas' concentrated political and military power was accompanied by their massive concentration of wealth: the family had substantial economic investments in banking, finance, cotton, tobacco and sugar (Baumeister 1985); Anastasio Somoza García, the patriarch, had wealth amounting to between $10 and $60 million by 1945 (Booth 1985, 68). The Somozas' wealth reflected the country's broad patterns of economic inequity and ensured that most Nicaraguans would live in conditions of extreme poverty.[6]

The Somozas invested little in public services, including water and sanitation.[7] Yet surprisingly, and contrary to conventional wisdom on the Somoza era, attention to rural health—including provision of water and sanitation—began in Nicaragua *before* the 1979 Revolution.[8] Less surprising is that the impetus for this attention was external to the Nicaraguan state and the Somozas. Until the mid-1970s, the water sector was limited to urban areas and formal responsibility fell to local governments for its development. The National Department of Municipal Services (SERMUNIC), which Somoza decreed in 1955 (decree no. 26), was charged with "planning, designing, and constructing potable water projects in the urban sector and administering those municipal aqueducts that because of administrative, technical, and financial issues were not cared for [*atendidos*] by the appropriate municipal government" (Government of Nicaragua and PAHO 2004, 27).[9] State attention to the

rural water and sanitation sector began officially in 1973, when USAID issued the "Rural Community Health Services Grant 542-15-530-110" to Nicaragua, which in 1975 created the *Programa Rural de Acción Comunitaria en Salud* (Rural Community Health Program, or PRACS) (Donahue 1983, 267–268). A "complementary" program, the *Plan de Saneamiento Básico Rural* (National Plan of Basic Rural Sanitation (PLANSAR), was created in 1977 under the domain of the *Ministerio de Salud* (Ministry of Health, or MINSA). PLANSAR depended upon the financial support of USAID, and a year later, from the World Bank,[10] and would grant attention to rural sanitation in part through the construction of potable water systems in rural areas (Donahue 1983, 267; Nicaraguan Government & PAHO 28). The available evidence indicates that these programs and new collaborations prompted the construction of potable water systems and latrines and the development of vaccination programs in the country's rural areas where they had not existed previously—even though investments were undoubtedly stunted because of how foreign funds for rural water projects "were pocketed by the Somocistas" (Donahue 1986, 16, 115).[11] Yet, descriptive and evaluative data on these historical initiatives are scarce.[12] The *Sistema Nacional de Información de Agua y Saneamiento Rural de Nicaragua* (National Information System of Rural Water and Sanitation, or SINAS), for example, shows that an estimated 143 water projects were constructed by the end of the 1970s, although these are all in the department of Managua and 89 of these (62%) are listed explicitly as "urban" aqueducts.[13] The better indicator, then, of the

construction of rural aqueducts under Somoza is the estimate that improved water access had reached 7% by the end of the decade (RRAS-CA 1998).

Overall, the provision of health care under Somoza emphasized curative care dependent upon trained physicians (Luciak 1988, 36), rather than community- or neighborhood- based strategies. Nevertheless, accompanying these new foreign-financed initiatives was a vision of community organization that the Nicaraguan government, the Ministry of Health (MINSA) in particular, developed with USAID.[14] Like other sectors under the Somozas, the health sector (which subsumed water and sanitation) was based upon a "vertical power structure of control and patronage" (Donahue 1983, 266). Although health programs operated vertically, they sought to utilize a volunteer "rural health collaborator (CRS)" at the community level who would conduct educational work locally and work as an intermediary between residents and health clinics and programs. Health educators, who were school teachers, worked in a "supervisory capacity" and were to receive a "certification in health education" to be able to lead informational health courses for community members (Donahue 1983, 267). Despite these policy changes encouraging rural residents' participation in the production of public health, including potable water, communities were still subject to the overarching mode of governance characterizing the dictatorship. The government carried out "violent repression of any political dissent in the very areas in which the PRACS and PLANSAR programs were operating," and programs were selectively implemented to monitor dissent.[15] The community-based health programs were thus "a mode of community organization

which enhanced control and fragmentation" (Donahue 1986, 11); in short, they were part of Somoza's "overall political strategy" (Donahue 1986, 18) to control the populace and quell dissent. Not surprisingly, communities received little financial or technical support in the wake of system construction and were often left ill-equipped to manage and care for water systems (Medrano et al. 2007).[16]

THE SANDINISTA REVOLUTION: CO-GOVERNING THE NATION-STATE (1979-1990)

When the new government took power in 1979, Nicaragua was in physical as well as financial ruins. The effects of the revolutionary war only compounded the effects of the Somozas' over forty years of corrupt rule on the country's current and future ability to invest in public services.[17] Most importantly for the purposes of this study, the overthrow of Somoza opened the door to political democratization, in addition to a flood of international financial support for the Sandinistas' policy agenda emphasizing socio-economic justice and popular empowerment. The implications of this regime change for community-based water management were twofold. First, the Revolution wrought greater associational space for organizing in rural (as well as urban) areas. Second, international donor agendas around water and sanitation dovetailed with the Sandinistas' broad socio-economic agenda prioritizing access to health and basic services. This decade saw a marked increase in the number of international agencies working with the government in order to invest in rural water and sanitation.

Though the social change agenda of the new government would be severely undermined by the US-sponsored Contra War,[18] the *Junta de Gobierno de Reconstrucción Nacional* (Governing Junta of National Reconstruction, or JGRN) began to implement dramatic structural reforms to redistribute wealth and to equalize opportunities for access to land, basic health care and education.[19] With the political support and encouragement of the FSLN, the 1980s served to establish "the groundwork necessary for the construction of an effective civil society—that is, a society in which the majority is able to exercise decisive influence over the state through its own autonomous social and political organizations" (Coraggio and Irvin 1985, 29). Constituting this groundwork were the Sandinista mass, or popular, organizations (MOs) and their role in political representation and mobilization of civil society.[20] In practice, the MOs were forms of state-society synergy that contributed to the governability—as well as the political survival—of the Sandinista regime during the harsh years of the U.S.-funded Contra War.

CONSTRUCTING CIVIL SOCIETY FROM ABOVE AND BELOW: THE MASS ORGANIZATIONS

Prior to their 1979 triumph, the Sandinistas cultivated popular support for the overthrow of Somoza.[21] This support included the loyalty of diverse groups and sectors, including women, youth, urban and rural workers, landless peasants, and business owners, many of whom began and organize and form associations in the late 1970s. In 1977, for instance, a number of agricultural worker committees across five departments were united to form the *Asociación de Trabajadores del Campo* (Rural

Workers' Association, or ATC), which brought together agricultural workers and landless peasants to advocate for better living and working conditions (Kaimowitz and Thome 1982; Ruchwarger 1987). Women began to organize before the start of the Revolution as well: founding the *Asociación de Mujeres ante la Problemática Nacional* (Association of Women Confronting the National Problem, or AMPRONAC) in 1977 was a small group of urban middle- and upper-class women; soon after, working class and rural women began incorporating in the movement and AMPRONAC swelled from several dozen to 8,000 to 10,000 women engaged in protesting the violence of the Somoza regime and advocating for more just economic and social conditions (Ramírez-Horton 1982). In urban areas, *Comités de Defensa Civil* (Civil Defense Committees, or CDCs) were organized block by block at the neighborhood level by the *Movimiento Pueblo Unido* (United People's Movement, or MPU) as part of an urban defense strategy against the National Guard.[22] Radicalized segments of students, urban workers, and the Catholic Church also mobilized and played key roles in the ultimate demise of Somoza.

After Somoza fled Nicaragua and the National Guard disintegrated in mid-1979, the Revolution continued to give birth to and foment grassroots citizen participation organizations and initiatives as part of its governance strategy. The MOs had a dual imperative: "to defend and deepen the process of revolutionary transformation and to channel [societal] demands to the government" (Serra 1982, 95). Thus, in contrast to the popular movements and activism of pre-revolutionary Nicaragua, the mass organizations explicitly worked *with* those in power, versus

pushing against them. Nicaraguans not only took up arms as part of popular militias for the literal defense of the regime against internal and external threats. They also coordinated with the state and the FSLN to carry out tasks fundamental to economic productivity and daily social and political life. Notably, the close relationship of the mass organizations to the state, and even more so, to the FLSN, limited the extent to which popular mobilization during this period may be viewed as an effective *counterweight* to the state or political parties (see, for example, Gilbert 1988, Luciak 1995, Luciak 2001). Where autonomy was approached, it was relative (Gilbert 1988; Luciak 1995). The UNAG (discussed below) has been regarded as the most politically autonomous of the mass organizations during the 1980s because of its assertion of its members' interests vis-à-vis the state and the FSLN. Yet, even as "the most autonomous and assertive of all the popular organizations," the UNAG had "to tailor its work to the demands of the State" (Quandt 1995, 268).

Several of the most prominent MOs included the *Comités de Defensa Sandinistas* (Sandinista Defense Committees, or CDS, previously the CDCs), who perhaps most directly "filled the vacuum left by the disintegration of the Somocista state and economy" (Ruchwarger 1987, 91). The CDS distributed food and medicine, rebuilt houses and roads, carried out vaccinations against infectious disease, and treated the ill or those wounded from counterrevolutionary (or *Contra*) violence (Ruchwarger 1987; Serra 1982; Serra 1991). Regarded as the "most important of the mass organizations" by one author (Serra 1982, 105), the CDS' were also charged most literally with defending the Revolution, participating in civil defense as

neighborhood watch groups in urban areas (Ruchwarger 1987; Prevost and Vanden 1999; Harris and Vilas 1985; Serra 1982, 1991). Also contributing to the day-to-day production of public goods and services were members of *La Asociación de Mujeres, Luisa Amanda Espinoza* (Nicaraguan Women's Association "Luisa Amanda Espinoza," or AMNLAE, previously AMPRONAC), whose members worked as educators in the national Literacy Crusade, contributed to the development and implementation of child care facilities, and engaged extensively in policy formation and advocacy (see Ruchwarger 1987, 187-217). Additionally, the *Juventud Sandinista* (Sandinista Youth, or JS-19) participated actively in the *Ejército Popular de Alfabetización* (Popular Literacy Army, or EPA), constituted by upwards of 70,000 youth and other MO participants (Serra 1982, 108) who succeeded in reducing national illiteracy from 50% to 13% (Ruchwarger 1987, 111).[23] By the end of the 1980s, an estimated half million Nicaraguans had participated in the initiatives of the Revolution via the mass organizations (Serra 1991).

Although greater numbers of urban-based residents were directly incorporated into the Revolution's political and socio-economic projects during the 1980s (owing primarily to participation on a block-by-block basis in the urban-based CDS) (see below), rural residents also participated in and were affected by new government projects and initiatives. The dramatic restructuring of land ownership and the implementation of the national literacy campaign are two excellent examples of how reform *did* indeed concretely affect daily life within rural areas: roughly 43% of rural families received land as part of the agrarian reform (Baumeister 1995, 247), and in

the central highlands, where much of the current study was carried out, illiteracy was reduced from 66.7% to 20.2% (Hanemann 2005). Rural Nicaraguans were not only the beneficiaries of health and literacy campaigns, but also participated in these as well as cooperatives, workers' unions, and other organizations which served as platforms for representation and demand making (Ortega 1990, 122). Two MOs, in particular, were directly concerned with incorporating rural-based sectors. The Rural Workers' Association (ATC) and *La Unión Nacional de Agricultores y Ganaderos* (National Union of Farmers and Ranchers, or UNAG, formed in 1981) each incorporated different segments of rural workers. The ATC represented year-round agricultural laborers and small-scale campesinos (Ruchwarger 1987), while the UNAG formed to defend the interests of medium- and large-sized farmers in addition to small farmers within the (primarily state-run) cooperatives (Baumeister 1995; see also Ruchwarger 1987 on both the ATC and the UNAG). By 1989, the ATC and the UNAG had an estimated 50,000 and 125,000 members, respectively (Serra 1991, 49).

In addition to part of a strategy for implementing the governing party's socio-economic and political agenda, the mass organizations were part and parcel of the Sandinistas' vision for democratic development. The FSLN, as the "vanguard" party, saw itself as responsible for the political enlightenment and empowerment of the masses (Gilbert 1988). As "schools of democracy" (Serra 1982, 96), the mass organizations not only facilitated broad, cross-class mobilization at the grassroots, they also served as part of the channels through which everyday Nicaraguans' interests and demands reached those in government and the FSLN. A provisional

national legislative body, the national *Consejo del Estado* (Council of State), represented twenty-nine organizations, including five mass organizations (the CDS, ATC, AMNLAE, JS-19, and the *Central Sandinista de Trabajadores* [Sandinista Workers' Central, or CST]), in addition to political parties and private sector organizations (Serra 1982; Vanden and Prevost 1993). Though the FSLN remained committed to direct forms of participation in the provision of public goods and services, like and security and healthcare, international as well as domestic pressure engendered political compromise that produced a hybrid system of government. Representative democratic features came to be institutionalized in the "Western-style constitution" passed in 1987 (Gilbert 1988, 34; see also Reding 1991, 28–32). The new Constitution created four branches of government (executive, legislative, judicial and a "Supreme Electoral Council"), hence replacing the provisional JGRN and Council of State. The Sandinistas sought to maintain the participatory dimensions of governance they had fostered via the mass organizations. In fact, the significant overlapping membership between the FSLN and the mass organizations made it typical that leaders within the MOs would be appointed to posts within the party; in this sense the means of representation changed, but not necessarily the those individuals doing the representing.[24]

Notwithstanding their "immediate and direct political relationship with the Sandinista National Liberation Front (FSLN)" as they formed and participated in these organizations, peasants did not achieve the same levels of government-supported political mobilization as urban sectors. Although data specifying

demographics along rural-urban lines in the MOs (in particular, those not obviously bound in socio-geographic terms, like AMNLAE) are lacking, the available data suggest that revolutionary projects saw a relatively greater incorporation of urban sectors compared to rural. An estimated 115,000 Nicaraguans participated in MOs with rural bases including the ATC and the UNAG. In contrast, those with urban constituencies, including the CST, CDS, AMNLAE, and JS-19, had an estimated participation of 721,500 to 801,500, nearly seven times the number of participants in MOs with rural bases (Ruchwarger 1987; Gilbert 1988).

Rural and urban participation becomes more equalized in terms of numbers if one takes into account the rural residents who came to participate in the Sandinista-driven state cooperatives. Citing a 1989 UNAG self-diagnostic, Serra notes that 3,363 cooperatives had formed by the end of the 1980s, with an estimated 474,572 individual participants (1991, 51). Moreover, the mobilization of peasants to oppose the Sandinistas as part of the Contra War also constitutes a significant form of rural mobilization wrought by the politics of the decade. Walker (1991) cites that there were over 15,000 Contra combatants mobilized by the mid-1980s, a number that by the end of the 1980s had reached 50,000, of which an estimated 40,000 were Nicaraguan peasants (Langlois 1996; see also Horton 1999).

In addition to being relatively less mobilized via the Revolution's projects and initiatives than their urban counterparts, rural populations also failed to achieve the same extent of political representation vis-à-vis the state during this decade. For example, the Council of State reflected an urban bias, with fourteen of the mass

organization seats going to urban constituencies (including representatives of the CDS, JS-19, AMNLAE, and CST) versus four for rural (including representatives of the UNAG and the ATC) (see Booth 1985, 193). Rural Nicaraguans were "still not organized into a mass political movement" as were urban FSLN constituencies before the 1979 triumph, nor did they achieve the same levels of coordination and communication with the state and party (Ortega 1990, 126, 129).[25] To an extent, the relative disorganization of the rural populace reflects the legacies of repressive and manipulative political tactics wielded by the Somozas across their four decades of rule (see, for example, Booth 1982).[26] After 1979, "rural areas were still weakly organized" relative to urban areas in the health sector and health programs emphasized care in urban areas over rural (Bossert 1982, 266, 268).

Overall, the revolutionary state, the FSLN, and the mass organizations collaboratively implemented major initiatives in three areas: basic health and sanitation, literacy, and access to land.[27] Crucially, the "voluntary cooperation of the OMs [mass organizations] made it possible for a financially-beleaguered revolutionary government to attain a number of major achievements at very little monetary cost to itself" (Serra 1982, 101). The mass organizations played a significant—and politically recognized and supported—role in the carrying out "state" functions like provision of health care, education, and food distribution. Coproduced accomplishments included major reductions in illiteracy (from over 50% to less than 13%), enormous improvements in health (including significantly reduced incidences of polio, measles and other infectious diseases), and more equitable land

distribution (in part achieved through land de-privatization and creation of rural worker cooperatives) (Booth 1982; Bossert 1982; Serra 1982; Kaimowitz and Thome 1982). Certainly, "health became [an] engine for popular participation" (Donahue 1989, 260) during the Revolution, as documented through the work of *brigadas de salud* (health brigades); *consejos populares de salud* (popular health councils); and the CDS, AMNLAE, and health unions who carried out vaccination and health education campaigns (Donahue 1986; Donahue 1989). Yet although some have pointed to the role of the CDS and "voluntary labor" more broadly in the construction of water projects and latrines (see, for example, Gilbert 1988, 69; Serra 1991, 51; Bossert 1982; Serra 1982, 102), there is little to no *documentation* of these arrangements or forms of participation in rural areas, and hence limited popular and scholarly historical understanding of citizens' role in the development of the rural water and sanitation sector. The role of everyday—and in particular, rural—Nicaraguans in the management and provision of water has not been systematically delineated.[28]

Revolutionary or Reactive? The Potable Water and Sanitation Committees

How does the Revolution matter for explaining the emergence of the CAPS? The CAPS represent an ideal embodiment of Sandinismo: through their daily work they practice the ideological commitments of the Sandinistas in regard to their engagement of "everyday" Nicaraguans in the provision of public goods, promotion of equitable distribution of resources, and empowerment of the poor. Beyond this

obvious ideological alignment between the CAPS and Sandinismo, to what extent can the CAPS be understood as a product of the revolutionary government's initiatives in the areas of health and access to basic services? Sadrach Zeledón Rocha, the current mayor of Matagalpa and previous FSLN deputy in the National Assembly, cites the Revolution and the "popular initiative" and "volunteer work" it fomented as a key factor in the construction of new rural water systems during the 1980s. Zeledón, who served as the city's mayor during the 1980s as well, describes the volunteerism of this era as the "organizational seed" for the formation of CAPS in regard to water and other groups charged with day-to-day tasks in the areas of health and education (interview, San José, Costa Rica, 3/25/10), a clear reference to the Sandinista Defense Committees (CDS) and other MO efforts to implement vaccination and literacy campaigns. Gilberto Arauz, a specialist in rural water systems at the *Instituto Nicaragüense de Aqueductos y Alcantarillado Sanitario* (Nicaraguan Institute of Aqueducts and Sanitation, or INAA),[29] corroborates this direct connection between the invigorating organizational effects the Revolution had on civil society and the CAPS as an organizational form: "As we were in the revolutionary era, there was a committee for everything. Committee from here, Sandinista Defense Committee, a countless number of committees. So the potable water committees formed too, that's how it happened"[30] (interview, Managua, 8/19/2008).

Yet despite these characterizations of the CAPS as propelled by the proliferation of grassroots organizations during the Revolution, this explanation alone proves insufficient for explaining the continued emergence of the CAPS during the

1980s. First, the available documentation of government policies and activity in the area of basic services, including water and health, during the 1980s, reveals that neither the government nor the FSLN contributed much financial or political support to communities for the construction, maintenance, and administration of rural water and sanitation systems. Whereas other citizen participation initiatives can be directly linked to the FSLN (like health care, education, and civil defense), there appears to have been no such explicit or direct connection between residents' role in rural water and sanitation projects and national and party policy. Rather, it appears that the revolutionary government and the FSLN strategized *relatively little* about the role that rural residents would play in supporting water access. Second, and as noted, community-based water and sanitation management arrangements came into existence across Central America starting in the 1970s and continuing into the 1980s, suggesting that broader factors may be at work. In fact, as with the Somoza era, investment in rural water and sanitation projects under the Sandinistas was a product of development initiatives implemented by international agencies, multilateral organizations, and foreign governments, rather than the outcome of a state policy seeking to engender community participation in water management or to formally devolve water provision responsibilities to rural residents.

Although examination of the rural water and sanitation sector in the 1980s reveals this continuity with the Somoza era (discussed further below), there were dramatic breaks worth noting. The most dramatic ruptures wrought by regime change were contextual: the Sandinistas' efforts to organize "the masses" and their promotion

of associational freedom. The FSLN's democratic agenda was significant for the fostering of community level organizing in general terms during the 1980s. The CAPS as a civil society phenomenon benefited from the political space the Sandinistas granted to rural organizing. Community participation begun under Somoza could start to operate free from the patronage politics dominating the pre-revolutionary era, and was supported in ways by national leaders. As Donahue asserts in regard to the health sector, "The verticality, fragmentation, and control that characterized [community participation in health] under Somoza [was] now being modified under the Sandinistas" (Donahue 1983, 270). Certainly, communities' role in water provision and management was not subject to the same orchestration as was the participation of urban and rural residents in the FLSN's health campaigns, including vaccinations and health education. Yet, the 1980s saw important gains in regard to instilling a sense of empowerment among the masses to participate actively in social life without fear of repression—a benefit extended to both urban and rural Nicaraguans.

In fact, while historical accounts of the MOs mobilizing explicitly for water provision are lacking, early documents and reports of state agencies and ministries reveal the revolutionary government's intentions to imbue everyday rural citizens with responsibility for local water service (including via the MOs) and to limit its own direct involvement. Ministry of Health (MINSA) staff posited in 1981 that

> rural communities will have a great participation [in rural water and sanitation projects] through the mass organizations, in this case the C.D.S. [Sandinista defense committees]; this participation will be made effective through

> community contributions like money, labor, and the attainment of local materials. (Martínez and González 1981, 8)

That the project "counts on the support of the C.D.S." (7) suggests that some water committees may be organizational legacies of a rural CDS, although there is limited evidence that the CDS formed in rural areas (email communication, Eric Holt-Gimenez, Food First, 1/17/12; email communication, David Kaimowitz, Ford Foundation, 2/7/12). Revealingly, a 1989 *memoria*, or overview, of "Rural Aqueducts in Nicaragua" portrays the state's and external actors' *intentions* to have limited involvement post-construction of water systems: beneficiary communities "will [should] accept and comply with the responsibility of operating, maintaining and administering [these] water projects, having INAA with functions of help and consulting only" (INAA 1989, no page).[31] These documents demonstrate the revolutionary government's *goals* around community participation in rural water and sanitation. Yet, what is lacking is evidence of a systematic role of the MOs in water management in the 1980s.

This de facto strategy of community participation in water management and provision accompanied the Sandinistas' efforts to reconfigure state institutions and develop partnerships with external agencies in the water and sanitation sector. The Sandinistas "abandoned" their coordination with USAID at the start of the 1980s "due to political and ideological reasons" (RRAS-CA 1998, 11).[32] Yet, given the ambitious political goals and limited financial capacities of the state during the 1980s, this kind of domestic-foreign collaboration—or coproduction—remained necessary if water systems were to be financed. The 1980s saw continued, albeit more diversified,

foreign investment in the sector. Financially hamstrung throughout the 1980s, the state primarily concerned itself with coordinating the investments of international organizations, financial institutions, and foreign governments (although the state did contribute some limited financial resources to water and sanitation projects). The government created INAA in 1980.[33] In 1985, the government created the *Unidades Nacionales de Operación y Mantenimiento* (National Units of Operation and Maintenance, or UNOM) (Baltodano and Olmedo 2008). From 1987 to 2007,[34] there were regional *Dirección de Acueductos Rurales* (Direction of Rural Aqueducts, or DAR) offices (*delegaciones regionales*) in the departments of Matagalpa, Estelí, León and Chontales, among others, each intended to provide support within multiple municipalities. The UNOM worked out of these offices. Towards building community members' longer-term capacities, government agencies have produced several written guides through the years, as water provision tools for communities.[35] As a 2003 report found, "Very few new CAPS members receive a (formal or informal) training from an UNOM (Regional or Municipal) promoter" (ENACAL 2003). What has yet to be studied, however, is the extent to which this initial capacity building and the investing of certain technical abilities in specific individuals, when and where conferred, is able to be passed on in such a way so as to facilitate the assumption of technical tasks by new leadership.

Invested formally within the state responsibility for the rural water and sanitation sector, INAA facilitated new processes of coordination with international agencies for its development. These included organizations like CARE International,

the Swiss Development and Cooperation Agency (COSUDE), the United Nations Children's Fund (UNICEF), the Netherlands Development Organization (SNV), Popular Norwegian Aid (APN), Swiss Aid, KfW, and *Agua para la Vida* (Water for Life). The government also continued collaboration with the International Bank for Reconstruction and Development (IBRD) for the construction of rural water projects and latrines, as well as sanitation education under the auspices of PLANSAR (which had been transferred to INAA). As early as 1982, COSUDE began working on developing water and sanitation projects in Nicaragua (interview, Gilberto Arauz, INAA, 8/19/2008). CARE International's collaboration in the sector, which began in the late 1980s, reflects the division of labor characterizing the agreements the government had with this and other funders, like COSUDE: CARE would fund roughly 70% of costs (including construction materials like water pipes, transportation of heavy materials, and trainings for community members) while the central government would fund public employees' salaries and stipends for food and travel associated with water projects (interview, Francisco Baltodano, CARE-MARENA-PIMCHAS, Estelí, 2/3/10).[36] The government undertook similar collaborations with the UNICEF, CARE, Swiss Aid and SNV, among others.[37] Notably, financial investments were prioritized in urban areas: from 1980 to 1986, 81% of domestic and foreign governmental and nongovernmental investments in the sector were directed towards urban areas, with 19% directed to rural areas[38] (INAA 1989). Nevertheless, the period from 1980 to 1986 saw water and sanitation coverage of the rural population double, from 6% to 13% (the rise was 10%, from 67% to 77%,

for the urban population) (INAA 1989) (see Figures 2 and 3, below; note monetary value reflects local and U.S. currency, respectively)[39] By the end of the 1980s, over 480 rural water systems had been constructed in Nicaragua.

Some of the existing data suggest that rural residents' participation in water projects historically has been instrumental, versus as a means to popular empowerment. Although the role of the mass organizations specifically in water projects has not been delineated, there do exist qualitative accounts of what the limited coproduction described above meant in terms of community participation. Specifically, system beneficiaries were utilized for their "free" labor and other inputs into rural water infrastructure, rather than as social actors capable of participating in the design and planning of projects.[40] As a 1996 report of the *Red Regional de Agua y Saneamiento para Centroamérica* (Regional Water and Sanitation Network of Central America, or RRAS-CA)[41] characterized the sector from 1977-1982:

> If indeed community participation was one of the components of original [water and sanitation] programs, in practice what was sought was the construction of the water systems [*obras rurales*]. Community participation was only synonymous with the physical work of beneficiaries in digging ditches and carrying materials. (RRAS-CA 1998, 13)

The evaluation for the 1982-1990 time period changed little: "Community participation has predominantly taken place in the construction phase of projects, with involvement in planning being minimal" (14).[42] Carmen Pong, director of DAR in the early 1990s and currently an officer at COSUDE, corroborates this assessment:

> [In] the 1980s [the engagement of communities] was more to capture unskilled labor, so that once the program [i.e. donor activity] had left, there was someone to hand the system over to; [hence engagement was] perhaps

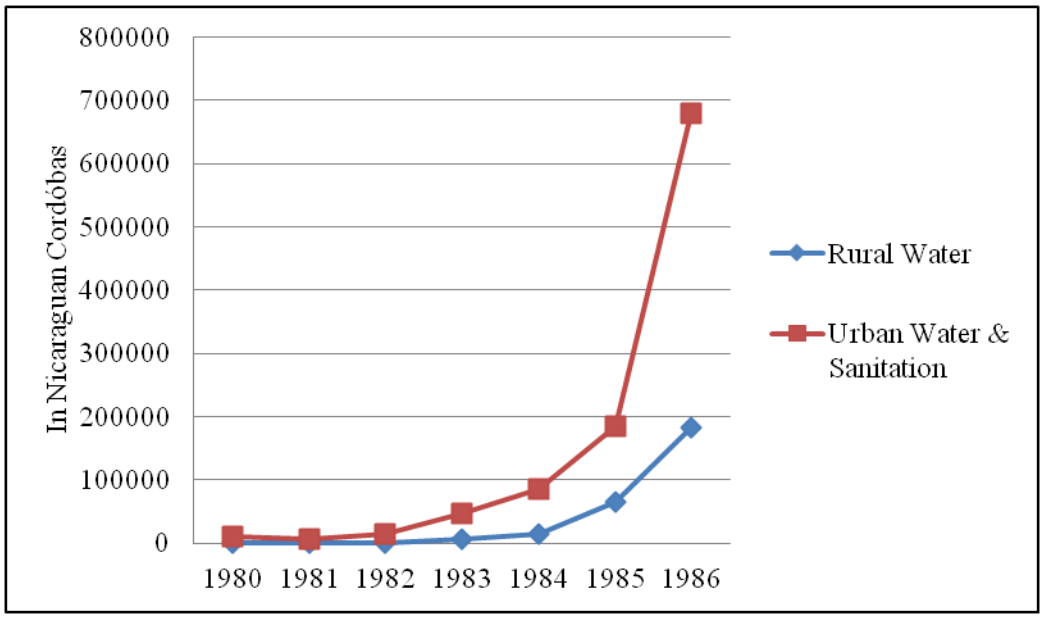
> less about a community development or service sustainability perspective. (Interview, Managua, 11/19/09)

What this approach to societal participation meant in practice was that the government did not implement an effective strategy to develop rural residents' capacities for the complex technical, political and social work that would befall to them after the construction of a water system. Communities in fact experienced a substantial degree of independence from "external," or non-local, actors in their management and administration of rural water infrastructure during the 1980s.[43] While this independence had positive unintended consequences for the CAPS' capacities as resource managers (see Chapter 3), it also meant that the CAPS were not afforded the same attention and support as were participants in the Sandinista mass organizations. Significantly, they also lacked the political representation that MOs representing other social and productive organizations had during the 1980s. To the extent that rural residents, water committees in particular, have become empowered and capable water managers locally, this has happened largely in the absence of state guidance and support.

On the whole, the manifestation of popular participation in the rural water sector during the 1980s must be seen as a continuation of the state-foreign collaboration in the sector begun in the late Somoza era. Under both regimes, international agencies financed rural water projects, which consistently depended upon the participation (consisting of labor and other inputs) of rural residents. The Sandinistas' socio-political change agenda found ideological alignment with numerous international development and multilateral organizations working in the

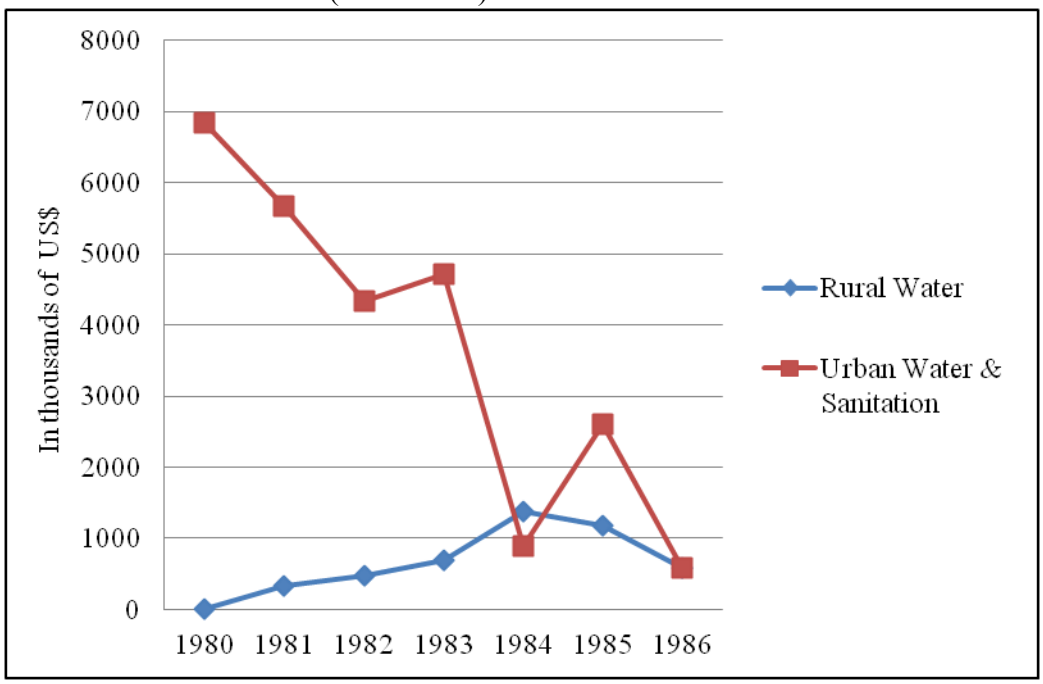
area of health and access to basic services.[44] Even though the Sandinistas' ideological and social agenda prioritizing popular participation and empowerment never came to be embodied in a visible, national policy agenda around rural water provision and access, those governing did achieve the creation of new public institutions with attention to the sector (like the Direction of Rural Aqueducts, or DAR). They thus helped to create state-society interfaces within the sector where they had not been previously and laid the institutional foundations for how the sector continued to develop into the 1990s. Moreover, the imperatives of maintenance and administration of new water infrastructure meant that communities were forced to develop organizations for the day-to-day labor required to sustain water provision. Though not all were successful, rural water committees emerged from the revolutionary decade as independent, task-oriented organizations who would continue to evolve in the absence of direct state (or party) support.[45]

FIGURE 2.2: DOMESTIC INVESTMENTS IN URBAN WATER & SANITATION AND RURAL WATER PROJECTS



Source: INAA 1989

FIGURE 2.3: EXTERNAL INVESTMENTS IN URBAN WATER AND SANITATION AND RURAL WATER PROJECTS (1980-1986)



Source: INAA 1989

INSTITUTIONALIZING NEOLIBERAL DEMOCRACY (1990-2006)

> *The profound changes which brought about structural adjustment have dictated the terms of negotiations between popular organizations and the government in a totally different way from that which existed in the Sandinista period.*
>
> ▪ Eduardo Baumeister 1995, 259

In the aftermath of the Contra War, the Nicaraguan state again found itself financially drained and in physical ruins.[46] The population at large also suffered great loss and emotional wounds: over 30,000 Nicaraguans (roughly half combatants and half civilians) lost their lives during the war, and 20,000 sustained wounds, many of them severe (Smith 1996, 51). As the country began the difficult transition out of war time and towards new political and economic systems and structures in 1990, the mass organizations underwent their own transitions as movements and organizations. Notably, compared to the organizations the Sandinistas promoted during the 1980s (including the MOs and worker cooperatives), rural water committees as such did not have to confront an end to state or direct party support. This support was never there as it was for the other organizations.

In fact, rather than confront what was for some a difficult transition—an attempt at "survival," as one book title framed the post-1990 plight of the MOs (Sinclair 1995)—the CAPS found greater opportunities to emerge and to develop as resource managers into the 1990s. Indeed, the booming number of rural water systems in the 1990s is attributable to the sustained relevance of foreign donors and investors to the sector, which expanded during this decade as international investments themselves increased.[47] Moreover, and as part of this expansion, the

decade reveals a concerted strategy on the part of the government and foreign agencies to build upon the lessons learned in the 1980s and integrate more attention to capacity building into the process of implementing rural water and sanitation projects (interview, Carmen Pong, 11/19/09). In terms of the direct relationship between rural communities and the state, however, the sector demonstrated little change overall. Post-construction support and technical assistance to communities (on the part of state actors, NGOs, and international agencies), though greater, remained limited and geographically uneven and also dependent on the availability of international donations to fund state involvement. Thus into the 1990s, communities and CAPS continued to work largely independently of external, or extra-local, support.

A Changing Landscape of State-Society Relations

With the FSLN no longer in power at the executive level, the relationship among state, parties and organized social sectors continued to evolve.[48] The 1990 elections set Nicaragua on a course of economic and political reform. Conservative president-elect Violeta Chamorro (of the *Unión de Oposición Nacional* [National Opposition Union, or UNO]) reactivated the government's relationship with financial institutions like the International Monetary Fund (IMF) and development agencies that had been hostile to the FLSN, like USAID, to facilitate economic structural adjustment (Prevost 1999, 16). This included the renewed promotion of export-oriented agricultural production and a reduced role of the state in the provision of public goods and services (Baumeister 1995; Rocha 2007; Anderson and Dodd 2005). In social terms, Chamorro's economic policies worked to undermine improvements in

the standard of living for impoverished Nicaraguans (Luciak, 1995; Prevost 1999) that the Sandinistas had prioritized, albeit in the financially-limiting context of the Contra War (see also Prevost and Vanden 1999). Coverage of social programs like health care were reduced and poverty and unemployment increased (Anderson and Dodd 2005; O'Kane 1995).

The electoral defeat of the Sandinistas meant that the mass organizations and the constituencies they represented now confronted a government much less sympathetic to their projects and the kind of change they were trying to induce and carry forward. As discussed, the MOs depended upon the political and ideological support and guidance of the state and the FSLN as they flourished throughout the 1980s. Furthermore, many received material inputs from the government in order to carry out production (see, for example, Baumeister 1995 on the UNAG and Quandt 1995 on the CDS). The Chamorro government enacted policies that directly reduced the resources available to the rural workforce, including reduced availability of financing to small farmers and their families (Baumeister 1995). Land and agro-industry privatization further undermined the gains of the 1980s in regard to state-controlled industry and worker-owned land and productive operations (see Luciak 1995; Quandt 1995; Stahler-Sholk 1999; Luciak 1995 notes that some workers were able to hold onto land. The ATC, for example, gained control of 136 privatized farms in the early 1990s). Regime change, as well as the dramatic political and economic reforms it wrought, produced the imperative for mass organizations to find their footing without direct financial and political support from the state.

Rather than fully dissolving, the mass organizations evolved. As Quandt (1995) and Haugaard (1991) argue, the harsh economic policies introduced in the wake of the 1990 elections and the government's "hostility to the popular sectors and their struggles" (Quandt 1995, 269) provided a clear "target" against which the groups and sectors organized during the 1980s could—and would—continue to mobilize. In the case of the CDS, members re-channeled into the *Movimiento Comunal*, or Communal Movement (MC), which formed in 1988. The MC sought to imitate the defense committees' organizational structure, with neighborhood level committees at the grassroots, but aimed to operate with less dependence on the FSLN for determining tasks (Hoyt 1997, 58). Other MOs also found themselves achieving greater political independence from the FSLN, oftentimes reestablishing themselves as nongovernmental organizations (NGOs). AMNLAE, while not itself disbanding, splintered into a number of different "autonomous" women's organizations which continue to provide services and engage in advocacy in the areas of maternal health, environmentalism, gay and lesbian rights, and domestic violence (Criquillon 1995). The UNAG, writes one author in 1995, has "a less dependent relationship [with the FSLN] although the majority [of its leaders] are Sandinista activists" (Baumeister 1995, 257). Across the board, the movements and organizations that sought coordination with (and in some cases, depended upon) the Sandinistas during the 1980s now had to advocate for their members and participants vis-à-vis a "hostile" government. The case of the UNAG illustrates this change well given its significant loss of "material and institutional support" (Baumeister 1995 260) with the change of

government. The importance of maintained associational space into the 1990s must be noted, however; in addition to those mentioned, new NGOs and movements continued to emerge in the areas of consumer defense, human rights, and rural and community development.

The presidencies of *Partido Liberal Constitucionalista* (Liberal Constitutionalist Party, or PLC) members Arnoldo Alemán (1996-2001) and Enrique Bolaños (2001-2006) continued to implement neoliberal economic reforms begun under Chamorro (Acevedo, 2008; Anderson, 2006). The terms of Alemán and Bolaños also saw "erratic support for democratic institutions, corruption, and scandal" (Anderson and Dodd 2005, 241). The now infamous pact constructed between Alemán and Daniel Ortega of the FSLN (at the time a member of the National Assembly) in 1998 has been criticized as contributing to the demobilization of the grassroots civil society cultivated during the 1980s (Grigsby 2005), as FSLN supporters defected from the party. The pact served to fix further the power of the FSLN and the PLC through a series of institutional changes, including political gerrymandering and new requirements to securing party representation as a way to restrict competition from third parties (Brown and Cloke 2005). As political elites' power grabs undermined both the legitimacy and integrity of Nicaragua's representative institutions, advancing privatization of public services continued to reduce the state's role in public goods provision.

THE RURAL WATER & SANITATION SECTOR: STATE RESTRUCTURING AND CONTINUED NEGLECT

How does the emergence of a neoliberal democratic regime in 1990 affect the CAPS' continued emergence and articulation with state and other non-state actors? Although paradoxical in the context of privatization and a "shrinking state" in regard to social welfare provision, the 1990s saw greater access to water and sanitation in the country's rural and urban areas. This owes in part to sustained foreign aid. Investments continued to have an urban bias, however, a trend which began in the late 1970s, as loans from foreign agencies and institutions like USAID, the IBRD, and UNICEF prioritized water and sanitation for Nicaragua's city dwellers (INAA 1989). This bias continued into the 1990s even though almost half of Nicaragua's population continued to be classified as rural.[49] For example, from 1998 to 2003, only US$25.3 million of the state water company's (i.e. the *Empresa Nicaragüense de Acueductos y Alcantarillados* [Nicaraguan Aqueduct and Sewerage Enterprise, or ENACAL]) investments in water and sanitation was invested in rural areas[50] versus US$120.5 million for urban areas (Government of Nicaragua and PAHO 2004, 135).[51] In other words, roughly 83% of the state's investments (via ENACAL) were directed towards benefiting 56% of the population.

Despite investment biases towards urban areas, by 1998, improved water access had reached an estimated 36.52% of the rural population (Medrano et al. 2007). This figure compares with an estimated 13% in 1985, and a projected estimate of 18% by 1990 (INAA 1989). The international character of the sector helps to explain this trend: the 1990s saw increased foreign and nongovernment domestic

financial investment in the sector, reflected in the booming numbers of water systems in the 1990s and the 2000s. From 1990 to 2004, over 4,340 government-documented water projects were constructed, more than a ten-fold increase since the change of political power at the national level in 1990. With over 5,000 rural water projects having been constructed by the mid-2000s, upwards of 30-40,000 rural residents were likely engaged in the day-to-day work of securing access to water for domestic use.[52]

Moreover, as noted, government did experiment with increased provision of technical support to communities in collaboration with NGO and bi- and multi-lateral organizations and agencies during this era. In 1990, the government developed municipal-level Units of Operation and Maintenance, or UNOM, building upon the regionally-located offices of the DAR from which regional UNOM had worked since the late 1980s (Baltodano and Olmedo 2008). With the financial support of *Ayuda Obrera Suiza* (Swiss Workers Aid, or AOS), the first *municipal level* UNOM promoter began work in Jinotega in 1990. While "attempts to persuade mayors of the importance of these units within a decentralization framework were made" (Medrano et al. 2007, 52), whether or not this position was created depended in part on the political will of a given mayor.[53] By 1996 there were twenty-three regional UNOM promoters across the Departments of Boaco, Chontales, Chinandega, Estelí, Jinotega, León, Managua, Madriz, and Matagalpa. Municipalities that did not have a municipal UNOM, including Sébaco, Esquipulas, and San Isidrio, remained dependent on the technical support and assistance of the regional, or "centralized," DAR offices. Even where there were UNOM, several studies have indicated their limited effectiveness

and reach within rural communities.[54] Overall, communities' assessments reflect inadequate support from staff of both the decentralized (i.e. municipal) and regional models, with 65.2% and 77.7%, respectively, reporting "little help" or "no help" from UNOM staff.

The new decade also saw the emergence of domestic NGOs that would come to play important roles in the water and sanitation sector, including the financing and construction of rural infrastructure.[55] The proliferation of NGOs as part of the neoliberalization of the public sector matters in two senses for the evolution of the sector during the 1990s. First, many NGOs came to subsidize the reduced state role in public welfare through their work to augment rural access to water and sanitation. While many of these organizations bypass the state in the implementation of rural water projects—that is, avoid formal processes of coordination—many NGOs continue to more officially coproduce water projects with local governments and/or international financing organizations.[56] Many NGOs involved in the sector have developed community-based trainings in community organization; system maintenance; and thematic areas like gender, water quality and administration that have also been integrated into the "project cycle" promoted by INAA in the 1990s (Medrano et al. 136). Oftentimes, these trainings and support take place solely in the initial project stages (through construction), though they constitute an improvement upon earlier project cycles that did not offer these kinds of capacity building.[57]

The second way in which domestic NGOs have been consequential to sector development in the 1990s concerns how they have served as activators of popular

mobilization around a host of social and economic issues—much as the state and FSLN did in the 1980s. Several of these, including agricultural, community, and rural development agencies, become the political and social "allies" of the CAPS in the mid-2000s as the latter start to organize across communities (see Chapter 4).

In important ways, a tension between the government-NGO-international objective of adequate technical assistance and support to rural communities and the state's efforts towards greater commercialization of the sector has characterized this regime. Legal restructuring in 1998 wrought a greater institutional division of labor, as well as a renewed focus of state attention and resources on urban service provision. The creation of ENACAL as part of these shifts meant new institutional divisions in regard to water management and regulation responsibilities. Moreover, as referenced in Chapter 1, the government took steps towards the greater commercialization of the water sector, seeking a private management contract with a Chilean company to help make ENACAL more "business-like" (see Romano 2012; Avendaño 2004).[58]

Though the IDB's loan posed the greatest threat to urban water systems, the new General Water Law (Law 620), passed in 2007, failed to quell all concerns over privatization: while stating that "potable water service will not be the object of any privatization, direct or indirect" limiting the provision to "water service" impressed upon civil society actors that the door would remain open to privatization of water *resources*. This law hence created part of the political motivation and justification for projecting the voices of grassroots, rural organizations and interests in national

politics (including the CAPS) who perceived their water sources and systems as vulnerable to outside private interests.

Indicative of a trend towards non-state service delivery, President Bolaños passed executive decree number 109 in 2004 which assigned formal responsibility for the rural water sector to the Emergency Social Investment Fund (FISE).[59] This decree has produced somewhat contradictory effects to date. On the one hand, FISE's nation-wide effort to implement rural water and sanitation projects in some cases has introduced this policy focus at the municipal level. For example, in Las Sabanas, Madriz, local government attention to the rural water sector *began* with the transfer of responsibilities to FISE.[60] As part of this new focus, the local government sent the water and sanitation *técnico*, Juan Alberto Corrales, to participate in a degree program in Managua called *Enfoque y Estrategia en Proyectos de Agua y Saneamiento Rural*: "In this moment, because of FISE's initiative, the local government decides…to send me to the National Engineering University (UNI) to get a diploma in rural water and sanitation projects, because [in the municipality] we didn't have anyone with experience in that, in the rural part" (interview, Las Sabanas, 6/10/10). FISE's sector strategy at the subnational level, which is national in scope, thus appears to be generating a greater focus on local water and sanitation needs in certain municipalities.

This model has also broadly restricted work in favor of building state capacity, however. Because this legislation shifted responsibility for the sector from ENACAL to FISE, it prompted the closing of all the regional and decentralized DAR

offices at a national scale.[61] This has served to significantly undermine state capacity in the sector, as state employees were laid off and work in the construction of water and sanitation systems became increasingly privatized.[62] FISE is highly dependent on loans and the contracting of private actors to carry out much of its "social" investing.[63] Prioritized hiring of "private" individuals or companies to assist with water projects may occur at the expense of greater capacity building within the state.[64] Thus, there exists a tension between the government objective of adequate technical assistance and support to rural communities and increasing privatization of the sector. The loss of government staff (i.e. regional and municipal UNOM) via the shutting down of the regional DAR offices in response to Decree 109 certainly suggests that communities may suffer from less availability of long-term technical support. COSUDE's Carmen Pong emphasizes how this shifting of responsibilities has negative implications for the CAPS:

> All this support that was given to the CAPS in the 1990s is cut in 2004 or 2005 when ENACAL is told that it will no longer attend to the rural sector and this work is delegated to FISE. FISE's mode of operation [*el perfil de FISE*] is one of investments and less support to projects. […] It's been hard for FISE to find a mechanism or alliance with the municipalities in order to have a means for the CAPS to have a channel [of] technical or social support. (Interview, Managua, 11/19/09)

Carmen suggests that with this institutional change, the CAPS will have less support for the day to day conflicts communities encounter in the management of their water systems. Yet while this change compromises the provision of post-construction support to communities, these effects are likely to be quite uneven geographically as support to communities will continue to vary according to municipal-level resources

and spending priorities. Moreover, because the problem of insufficient resources for the provision of public services has long plagued municipalities in Nicaragua, further research would be needed to isolate and assess the effects of the end of the DAR's role in the sector—and the subsequent expansion of FISE's.

THE RETURN OF SANDINISMO: "PODER CIUDADANO" FROM ABOVE AND BELOW (2006-PRESENT)

The 2006 election of Daniel Ortega raises important questions regarding how the FSLN's return to power at the national level has affected the relationship between the state and the organized rural sectors. Many assessments of his return to power cite a national trend towards greater central state and party control over local government as well as civil society mechanisms of participation in governance. Moreover, Ortega was elected with only 38% of the vote, limiting his mandate for change and making his efforts to centralize decision-making authority—and overriding of representative institutions of government—less legitimate in the eyes of many Nicaraguans. Yet it remains to be seen if Ortega's policies and governing strategy will fundamentally affect the state-society interface in the rural water and sanitation sector. As of his reelection in 2011 (which he won with 62.46% of the vote), the sector reflects many of the same characteristics it did during the previous two decades. International donors persist as the principle source of financing for water projects and technical assistance to water committees. Notably, 80.9% of ENACAL's financial resources for investments during the 1998-2003 period came from foreign donors (versus 6.26% from the government) (Government of Nicaragua and PAHO 2004, 137). Moreover,

both national and local governments continue to confront limitations to their effective reach into rural communities; hence the CAPS, as such, remain task-oriented and largely independent organizations at the grassroots.

Los Consejos del Poder Ciudadano: Instituting Direct Democracy "From Above"

When Nicaraguans re-elected the FSLN's Daniel Ortega in late 2006, the country's landscape of popular participation had evolved greatly from the 1980s.[65] Sandinismo as an ideology had come to be embodied in more than just the FSLN and the particular socio-economic initiatives it sought to implement upon re-taking power at the national level. The ideas and sense of empowerment cultivated during the 1980s lived on in the organizational and associational legacies of the Revolution—a strong women's and human rights movement, farmer cooperatives, unions—some of which maintained loyalty to the party, but others which embraced their self-sufficiency and autonomy vis-à-vis the FSLN. The "top-down" political projects of the FSLN in the 2000s would have a different relationship to the organized masses than it had during the 1980s. Perhaps ironically, the political consciousness and popular empowerment the revolutionary decade both inspired and made possible would make broad support of the FSLN's attempted restructuring of citizen participation more difficult. The political reassertion of the FSLN as the legitimate political and moral leaders of *el pueblo* (the people) has come into tension with the evolved political sensibilities and material realities of a civil society that has achieved much operational autonomy across sixteen years of neoliberal governments.[66]

The President's 2007 executive decree No. 003-97 created such tension; it has been cast as part of Ortega's attempt to undermine autonomy of both municipal government and organized civil society (see, for example, Chamorro, Jarquín, and Bendaña 2009; Prado 2010). The decree established the *Consejos del Poder Ciudadano* (Citizen Power Councils, or CPCs) as a system of "direct democracy" operating at multiple levels of government (community/neighborhood, district, municipal, departmental, and national). The implementation of the CPCs would, in effect, force the dissolution of the *Comités de Desarrollo Municipal (*Municipal Development Committees, or MDCs), a multi-tiered system of sector and organizational participation in governmental decision-making that was instituted by the 2003 Law of Citizen Participation (Law 475). The CPCs have received harsh criticism as an alleged party tool of the FSLN to co-opt and control rural and urban civil society as a means to help implement the government's social programs (Chamorro, Jarquín & Bendaña, 2009; Prado, 2010; Ruiz 2009). This critique is in part related to critical assessments of who and what the CPCs represent. A 2007 study, for instance, found that only 32% of Nicaraguans surveyed thought the CPCs represented the "general population," while 47% saw them as "structures of party control" (Chamorro, Jarquín, and Bendaña 2009, 5).

The Sandinistas' agenda around citizen engagement, as alluded to, has been closely connected in practice to their social programs in the areas of food and housing and their prioritization of access to basic services, including for the rural poor. The central mandate of the CPCs—and the *Gabinetes* (or Cabinets) *del Poder Ciudadano*

at the municipal level—have been to assist local government officials in making spending decisions, including through helping to prioritize project beneficiaries. *Hambre Cero* (Zero Hunger, also known as the Productive Food Program) and *Usura Cero* (Zero Usury) constitute two of the most visible programs, which aim to lessen hunger through subsidizing small-scale food production and to provide access to credit for small business owners, respectively (see Chamorro, Jarquín, and Bendaña 2009; Kester 2010; Alemán 2007). These social programs have been cited as contributing to Ortega's stronger political mandate in the wake of his 2011 reelection.

Although his support among the populace has increased since his 2006 election, Ortega continues to be criticized for what is seen as a broad undermining of representative institutions during his term. The 2008 municipal elections engendered claims of fraud, including 33 disputed FSLN mayoral wins, from both the left and right (Etica y Transparencia 2008; Greene 2009). Moreover, Ortega's 2011 bid for the presidency has been cast as "illegal" itself since it depended upon a ruling of FSLN-loyal judges within the Supreme Court of Justice (CSE) as opposed to a national legislature-approved Constitutional amendment to explicitly allow presidential reelections for consecutive terms (a vote which would not have resulted in Ortega's favor) (see, for example, Álvarez and Potosme 2009; Martínez 2011; see also Nitlapán Envío 2011 for a discussion of political polarization and allegations of voter fraud in the wake of the 2011 presidential election). National newspapers and journals have become forums in which Ortega's critics draw comparisons between the Somozas and Ortega given his quest for power and "authoritarian" style of

governance (see, for example, Córdoba 2009; Torres 2010). These controversies have further complicated the implementation of CPC model—which the national legislature sought to circumscribe through passing Law 603[67]—as well as local governance more generally. One study found that 61% of Municipal Council members in FSLN-governed municipalities indicated working *solely* with the CPCs, versus with multiple community organizations or the CDM structures that began to develop with the passing of the Law of Citizen Participation in 2003; in PLC-governed municipalities, 36% of council members indicated working with "auxiliary mayors," an individual appointed by the mayor to represent the "larger community," which constituted part of the CDM model Law 475 stipulated (Ruiz 2009, no pag.; interview, CDM Jinotega, 6/9/10; interview, Javier Mendoza, ODESAR, Matagalpa, 6/21/10). Hence acute polarization and perceptions of the cooptation of civil society—or minimally, political favoritism—via the CPCs continue to characterize Nicaragua's political landscape.

THE POLITICAL SIDE OF NEGLECT: OVERLOOKING THE CAPS IN THE LEGAL RESTRUCTURING OF THE WATER AND SANITATION SECTOR

Post-2006, the number of rural water systems continued to grow, although the state's and international donors' relationship to the sector changed little. Importantly, the financial and technical dependence of the CAPS on foreign agencies and domestic NGOs (relative to state actors) appears to have insulated the CAPS from both national level policies and partisan influence in their work at the grassroots. Hence as with

previous regimes, the CAPS-state relationship has depended little on the government's legal and political restructurings in the water and sanitation sector.

The Ortega government *has* increased state attention to the sector, however. Greater institutional prioritizing of water and sanitation projects is in part reflected in the now FSLN-controlled FISE's disregard for a contract signed between liberal President Bolaños and the Inter-American Development Bank (IADB) that established a competition-based process for FISE's project fund allocation at the municipal level. In contrast to this old model, which awarded funds based upon the highest *contrapartida*, or contribution, offered by a municipality to a given project, "*El Nuevo FISE*," or the "the New FISE," implements a demand-based approach at the subnational level which "conforms to the population's needs" (interview, Deborah Úbeda, El Nuevo FISE, Estelí, 2/5/10). Hence, rather than allocate funds based upon a municipalities own projected investments for a given project, FISE determines a percentage of funding that will go to water projects. Water has become, according to a FISE staff member in Estelí, the automatic priority at the municipal level, whereas before prioritized areas of investments included schools and other infrastructure. The numbers back this up: in 2008 and 2009, FISE spent 35% and 30% of its budget, respectively, on water and sanitation projects ("Proyectos Terminados," http://www.fise.gob.ni/, accessed 5/13/11). In both of these years, water and sanitation constitute FISE's (and local government's) most significant expenditure, standing in stark constrast to much lower spending in this area in throughout the 1990s (Government of Nicaragua and PAHO 2004).

The government's greater attention to the rural water and sanitation sector also directly correlates with civil society activism opposing water privatization, including the CAPS'. The Inter-American Development Bank's 1999 loan to Nicaragua, "Modernization of the Management of Water and Sanitation Services" (no. 1049), played a significant role in prompting the mobilization of numerous consumer defense, environmental, human rights, and community development organizations in the early 2000s to counter what they perceived to be impending privatization of the state water company, ENACAL (see Romano 2012).[68] In large part as a result of the pressures of this social movement, President Ortega passed the *Ley General de Aguas Nacionales* (General Water Law, or Law 620) in 2007 which laid out objectives for the "sustainable [and] equitable" administration, conservation, development, and use of the country's water resources, as well as the "simultaneous protection of other natural resources, ecosystems and the environment" (Art. 1). Given its ostensible aim of generating greater civil society participation in the sector, Law 620 could have delineated specific roles for the CAPS. Article 21 of the law establishes that resource users will have a formal role in political decision-making, citing that "four representatives from users' organizations" will participate in the National Council of Water Resources (*Consejo Nacional de Recursos Hídricos*), a new entity the law establishes to fulfill a coordination and planning role for the sector. Yet, it is unlikely that lawmakers intended this to refer to *rural* water committees.[69] Startlingly, the law makes no mention of those organizations at the local level—the CAPS—that already embody the "citizen participation" the creation

of this new committee seeks to generate, albeit at multiple scales.[70] The law's only mention of the CAPS, despite their crucial role in water management at a national scale, is found in the Regulations, published in November of 2007. These assert that the CAPS are subject to the "control and supervision" of the state water company, ENACAL, which before Law 620's passing in practice had been responsible for primarily urban water provision (see also Chapter 4).[71] Beyond being largely absent from this new legal framework, the CAPS were not included in Law 620's government consultations. Not surprisingly, the CAPS' political mobilization across territorial and political scales became a quest for recognition and defense of past, present, and future water management and provision work.

In addition to the overlapping and in ways overly fragmented responsibilities in the sector, several key factors continue to constrain the Nicaraguan state's effective support to rural communities in particular into the 2000s. These include limited access to information, limited financial resources, and low human capacity within the state.[72] Furthermore, the decreed shifting of sector responsibilities to FISE via decree 109 and the recentralization and assertion of ENACAL (in accordance with new prerogatives outlined in Law 620) reveal an institutional overlapping of responsibilities among various actors in resource governance (interview, Maira Blandino, CONAPAS, Managua, 3/25/10). With 48.3% of residents living in poverty (according to data from the World Bank's 2005 Living Standards Measurement Survey; see http://go.worldbank.org/09DW2V3650), and 80% of those in poverty living in rural areas (www.worldbank.org), Nicaragua struggles to provide

even the most basic services to its residents, particularly those in rural areas. Unfortunately, even after formal political, and subsequent administrative and fiscal, decentralization in 1989 and 2004,[73] respectively, there have consistently been insufficient resources devolved to municipalities to carry out those service provision functions with which they were charged (Larson 2004).

Furthermore, financial and geographic limitations intersect in crucial ways with the ability of the state to develop sufficient *human* capacity to attend to communities—i.e. staff with the knowledge and skills to effectively assist communities in the technical, environmental and organizational dimensions of their work.[74] Thus, particularly at the subnational level, financial considerations have greatly constrained the state's role in rural water provision. In addition, as decentralization expert Guadalupe Wallace emphasizes, even when local governments obtain central government funds for projects, they may lack the capacity to implement funds (interview, Managua, 8/29/08). That municipal governments have had very limited financial capacity—and have failed to cultivate much human capacity—has limited the extent to which, and how, they have been able to contribute to water provision. This includes participation in terms of providing adequate assistance to rural communities managing water infrastructure. Rosibel Kreimann's (2009) research, for example, paradoxically concluded that those more rural and geographically isolated CAPS tend to be those with *greater* capacities (compared to peri-urban, or semi-rural, communities) because they have come *not* to depend on the

support of state actors, while those closer to urban centers expect the state to invest in water access.

THE CAPS: DIRECT DEMOCRACY "FROM BELOW"?

While there have been shifts over time in the political strategies and financial investments on the part of the state, overall these have been sufficiently limited so as to produce a water and sanitation sector in which rural communities have worked largely independently and without much state financial, organizational, or technical support. Limited financial resources have prohibited, in a geographic sense, the state's effective access to and engagements with rural communities, who become the primary—if not sole—caretakers of water systems after their construction. In practice, the collaborations or partnerships between the Nicaraguan government and international aid agencies and multilateral organizations have helped to subsidize weak state capacity. Yet even with foreign financing of water systems there has been both uneven and limited provision of capacity building to the CAPS across time. Synergy in the rural water sector has most often been limited to the stages of project development and system construction, leaving communities post-construction as both the "providers" and "producers" (Ostrom 1990, 31) of local water systems.[75]

Though it has been limited, the role of the state in the rural water and sanitation sector *has* been consequential to the CAPS' emergence and evolution as social organizations. The end of the repressive dictatorship and the Sandinistas' change agenda had powerful effects in terms of the ideological promotion and

granting of associational freedoms necessary for rural community organizations of any kind to being to emerge in earnest. The 1980s were of crucial importance to the construction of space for collaborative organizing efforts between state and society, space that allowed for the community participation begun under Somoza to come to into its own in a way not possible before. As this chapter has argued, however, the CAPS have institutional origins that distinguish them from much other community- or neighborhood-based organizing within Nicaragua which began in earnest during the 1980s. Not only have the Nicaraguan state and political parties *not* contributed significant financial resources to support the CAPS over time, but they also have not provided the political support and recognition that has been granted to other organizations.

Even though CAPS cannot be considered a specific aim of a Sandinista or state "project," the CAPS embody the "popular" and "citizen" power that the Sandinistas have promoted in party policies and discourses during the 1980s and today, respectively. As several authors asserted: "The Potable Water and Sanitation Committee goes beyond the participation of the municipalities in public administration given that it constitutes a *citizen administration* [of water service]" (Medrano et al. 2007, 158–159, emphasis added by author).[76] The CAPS constitute a form of "direct democracy" at the grassroots given their de facto roles and decision-making. Notably, the CAPS' de facto prerogatives in the sector have conflicted with the FSLN's implementation of the CPCs as the exclusive vehicle of *participación ciudadana*, or citizen participation, at the subnational level. Interviews with CAPS

across several municipalities (including Nueva Segovia, Sébaco, and San Lorenzo) reveal how local government's promotion of the CPCs has undermined the efforts of water committees to communicate with public officials as "CAPS." This dynamic complicates the CAPS' efforts to form multi-CAPS networks and organizations while maintaining a non-partisan character. As Chapter 3 will detail, the *empowerment* of rural residents as water managers (i.e. CAPS) contributes to their ability to do so. The CAPS' empowerment has been an important byproduct of foreign investment, including state-foreign coordination, across political regimes. Crucially, it has been the CAPS independence from state actors in their day-to-day operation that has enabled them *to deepen* their capacities and legitimacy as resource managers. It is this capacity and legitimacy that supports the CAPS' cultivation of pluralism and, ultimately, their achievement of formal legal autonomy.

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[1] As the previous chapter introduces and the following elaborates, CAPS have been the primary organizations responsible for the construction, administration, and maintenance of rural water systems in Nicaragua.

[2] The CAPS are part of a regional phenomenon of community-based, rural water management: over 24,000 *juntas de agua*, or water committees, operate across the Central American isthmus, providing potable water to 25% of the region's rural inhabitants (FANCA 2006). This regional phenomenon is evidence of how the CAPS are more than mere reflections of broader changes wrought by a domestic Revolution.

[3] As common property regimes (CPRs) (Ostrom 1990; Feeny et al. 1990; Wade 1987; Ostrom 2002), the CAPS might be *expected* to have tenuous connection to "extralocal" actors and institutions like government officials and state agencies. Successful CPRs have been characterized as having sets of internal rules and norms that external authorities do not undermine (Ostrom 1990); they are, further, most often studied in terms of their institutional design without much attention to how they articulate with actors beyond the community level or at other political or geographic scales. Yet, CPRs have also been characterized as working best when "nested" within broader structures of rules and norms—that is, local commons management takes place within and as part of a multi-scalar system of governance that involves governmental authorities. As Ostrom (1990) argues, "Establishing rules at one level, without rules at the other levels, will produce an incomplete system [of resource governance] that may not endure over the long run" (102). See Chapters 1 and 3 for further discussion of the CAPS as CPRs.

[4] This chapter focuses primarily on the development of the rural water and sanitation sector under the Somoza dictatorship. For a broader overview and discussion of the Somoza era in Nicaragua, see, for

example, Clark 1992; Mande 1994; Millet 1977; Diederich 2007; Solaún 2005; Gould 1987; Gould 1990.

[5] Anastasio Somoza García took national power in 1936 with the support of the United States government; he also inherited control over a military-security force, the National Guard, that the U.S. Marines both created and trained starting in 1927 (Diederich 2007). In 1957 Somoza García was succeeded by his son, Luis Somoza Debayle, followed by his other son, Anastasio Somoza Debayle, in 1967 (Mande 1994).

[6] For example, the poorest half of rural Nicaraguans in 1972 had an average income of $35 per capita (Kaimowitz and Thome 1982, 225). Cast in slightly different terms, the poorest 50% of income-earning Nicaraguans (in the late 1970s) earned 15% of national income, while the richest 5% earned 30% (Booth 1982, 85). Booth (1982) outlines five factors affecting capital concentration during the Somoza era: "(1) the greatly increased land concentration in the coffee and cotton industries; (2) the coffee and cotton price increases (and the cotton cultivation boom) beginning in the late 1940s; (3) the expanded ties of Nicaraguan capitalists to U.S. banks and investors; (4) the political peace purchased by Somoza through permitting Conservative faction participation in the government; and (5) the growing role of Somoza and his family in the economy" (66).

[7] In fact, "The government spent less of its budget on health and education than any other nation in the region" (Booth 1982, 85), including Costa Rica, El Salvador, Guatemala, Honduras, and Mexico.

[8] Not a single key informant of this project could state with certainty when the first water committee emerged or as part of what public initiative, though most attributed the CAPS to the change ushered in during the Revolution.

[9] See Gómez, Ravnborg, and Rivas (2007) for a comprehensive overview of the legal framework for water management through 2007.

[10] Medrano et al. also cite the Pan American Health Organization and the Inter-American Development Bank as contributing financially to the rural water and sanitation sector at this time.

[11] For a detailed overview of health policy and health care provision in Nicaragua from the 1970s to the mid-1980s, as well as critiques of these, see Donahue 1986.

[12] For example, the Nicaragua country profile on the USAID website references collaborations beginning in 1990; archived "success stories" are not available before this date (see http://nicaragua.usaid.gov/niccountryplan.html).

[13] Unless otherwise noted, estimates of rural water systems within this chapter reflect data within SINAS, which includes estimates through part of 2004 only.

[14] The Nicaraguan government and USAID articulated their "concept of community organization" in the Chinandega Seminar of 1976, the overarching purpose of which was to encourage greater state attention to the rural health sector (Donahue, 1986, 16-17).

[15] For example, a USAID report in 1976 suggests that Somoza encouraged implementation of the two programs in two northern regions (Estelí and Matagalpa) with high levels of guerrilla activity because this would help to monitor this kind of activity (Donahue 1983, 268).

[16] Medrano et al. express a sobering take on the relationship between rural residents and external project supporters in the 1970s: *"*Upon finishing the projects, its implementers would leave the site without training the population in management of the systems, whether they were imported hand pumps or small gravity-fed systems. In the case of latrines, in many cases these were not utilized, due to an inadequate participation and education of the population in regard to the health benefits accompanying appropriate use of these" (2007, 75).

[17] As Laura Enríquez and other scholars have pointed out, Nicaragua's history of "dependent" capitalist development has produced great inequality of wealth domestically and has also negatively affected the ability of the Nicaraguan state to accumulate income to provide services and public goods (Enríquez 1985; see also Booth 1982).

[18] The U.S.-funded Contra War sought the political and economic undermining of the Sandinista regime in Nicaragua. This proxy war against the Sandinistas involved both military aggression (funded by the U.S. government, including the CIA) and economic sanctions (including a full U.S. economic embargo by 1985) (Smith 1996). The estimated death toll for all Sandinista military, Contra, and

civilians (by 1989) was 30,865, with many more seriously wounded, left orphaned, or without homes (Kornbluh 1991, 344). Furthermore the war significantly undermined the financial capacities of the Nicaraguan government to implement its social agenda. As noted by Smith (1996), "by 1985, defense spending had grown to more than 50 percent of the [national] budget, leaving much less money for more productive uses" (48). See also Donahue (1989), on the effects of the war on the Sandinistas' social agenda. For further reading on the Contra War, see Prevost and Vanden 1999; Walker and Trask 1993; Smith 1996; Harris 1985.

[19] The JGRN brought together three Sandinistas, Daniel Ortega, Sergio Ramírez, and Moisés Hassán; in addition to Violeta Barrios de Chamorro, the widow of the conservative Somoza opponent, Pedro Joaquín Chamorro, who had been assassinated by the National Guard in 1978; and Alfonso Robelo Callejas, a businessman (Vanden and Prevost 1993, 50). While representing a pluralistic coalition of Sandinistas, conservatives, and the business community, the JGRN existed alongside the ultimately more consequential force in the Revolution's development, the National Directorate of the FSLN. Beyond their collaborative work with the mass organizations and ensuring that MO representatives achieved representation of these in the Council of State, the Sandinistas "directly assumed the most important cabinet posts" in the new government (Gilbert 1988, 13). As Jonathan Fox importantly notes, "whether the Sandinistas represented the mass organizations or vice verse is a matter of debate, hinging on the empirical question of the varying degrees of internal democracy & autonomy of the mass organizations" (personal communication, 10/29/12).

[20] For a more comprehensive discussion of the political, economic, and social outcomes of the Revolution, including a more nuanced discussion of the mass organizations, see Luciak 2001; Luciak 1990; Vanden and Prevost 1993; Prevost and Vanden 1999; Wilson and Pendall 1987, Serra 1982; Gilbert 1988; Vanden and Prevost 1993; Anderson 2010.

[21] In fact, because of Nicaragua's history of social struggle—particularly the nationalist movement of Augusto Sandino (1927-33)—many scholars have encouraged viewing the Revolution as a "re-awakening" of the Nicaraguan people or as a reactivation of past struggles against socio-economic injustice and elite, including foreign, domination (see, for example, Vanden and Prevost 1993, 47; Anderson 2010, 50).

[22] The MPU formed as a coalition bridging the Sandinistas with "the Communist Party of Nicaragua, the traditional left, and more than twenty student, labor, women's, and civic organizations to develop a concrete plan for mass opposition to Somoza" (Ruchwarger 1987, 25).

[23] Serra's (1982) estimate of 70,000 participants in the Literary Crusade contrasts with Ruchwarger's (1987, 111) estimate of 50,000.

[24] Writing in 1987, Ruchwarger notes this potential conflict of interest: "It remains to be seen whether FSLN delegates who are also mass organization leaders will be able to effectively represent their memberships" (147).

[25] "By late 1980, most state relations with the peasantry were carried out by the party structures of the FSLN and the regional and local structures of MIDINRA [Ministry of Agricultural Development and Agrarian Reform], but not by any entity broadly representative of rural civil society. The lack of a peasant-oriented program on the part of party and state was quickly reflected in their inability to handle peasant social and economic demands" (Ortega 1990, 129).

[26] Ruchwarger (1987) does not distinguish between the urban and rural Nicaraguans when arguing how disorganization plagued the masses prior to the Revolution: "At the time of Somoza's overthrow, the Nicaraguan masses lacked the political experience and the organizational capacity to consolidate their position in the revolution" (90). The Sandinistas thus prioritized programs that benefitted those disenfranchised populations, while engaging most actively "the privileged social classes."

[27] Housing, social security, and welfare (i.e. emergency relief, drug and alcohol rehabilitation, elderly housing, infant care, etc.) also constituted important policy and programmatic areas during the 1980s (see Williams 1991).

[28] The best qualitative accounts of this role found during the course of research include Medrano et al. 2007 and RRAS-CA 1998.

[29] Arauz also worked with the *Dirección de Acueductos Rurales*—Direction of Rural Aqueducts, or DAR, discussed further below—in the 1980s.
[30] "Como estábamos en la época revolucionaria, había comité para todo. Comité de aquí, Comité de Defensa Sandinista, un sinnúmero de comités. Entonces se formó el comité de agua potable, así surgió."
[31] "Las comunidades rurales beneficiarias deberán aceptar y cumplir la responsabilidad de operar, mantener y administrar las obras de agua, teniendo el INAA, una función de apoyo y asesoría, únicamente."
[32] The end of coordination between USAID and the Sandinistas is not surprising as this agency gave direct support to rooting out leftist "threats," like the Nicaraguan Sandinistas and *Frente Farbundo Martí de Liberación Nacional* (Farabundo Martí National Liberation Front, or FMLN) in El Salvador, in Central America during the 1980s (see Smith 1996, 37, 43).
[33] Decision-making within PLANSAR continued to be centralized until 1982, when the Sandinistas shifted the water sector from the Ministry of Health (MINSA) to the DAR of the INAA (Medrano et al. 2007). While MINSA would take responsibility for sanitation installations and education, the newly created INAA would implement water projects.
[34] The last DAR offices, including those in Estelí and Matagalpa, shut down in 2007 when financial support from UNICEF expired. Nevertheless, diminishing transfer of resources from the central government to the offices began even before the official transfer to FISE in 2004, however (interview, Mirna Rojas, ADEMNORTE, 4/10/10).
[35] The *Gerencia de Acueductos Rurales* (Rural Aqueducts Administration, or GAR) elaborated its first *ciclo de proyectos* (project cycle) in the 1999 document *Normas y procedimientos técnicos para la implementación de proyectos de agua potable y saneamiento en el sector rural disperso de Nicaragua,* each cycle of which delineates the role of community participation. In 2001 INAA published the *Guía para la organización y administración de acueductos rurales* (Guide for the Organization and Administration of Rural Aqueducts) which was intended as a detailed source of information for the CAPS. This is a technical and organizational guide that INAA has made available to rural development NGOs to disseminate to communities receiving a new water system. That this INAA guide "never acquired the character of an official government document" (Medrano et al. 2007, 76) is indicative of the informal and extra-legal nature of the sector's evolution, even well into the 2000s.
[36] Ostensibly, Baltodano's estimates do not take into account the monetary value of the labor communities provide during and after project implementation. A 1981 MINSA-INAA-BIRF (International Bank for Reconstruction and Development) brief disaggregates water project expenditures in the following way: 18.3% external, 9.4% government, and 72.3% community, with community expenditures including labor and local materials (G. Martínez and González 1981, 17).
[37] A 1981 brief from the Nicaraguan government's first planning seminar with the IBRD outlined the objective of collaboration among MINSA, the IBRD, and INAA as "bringing basic, integral sanitation to rural communities in geographic areas defined as priority within the reactivation plan of the Government of National Reconstruction" (G. Martínez and González 1981, 2).
[38] In 1981, 47% of Nicaragua's population was considered rural (INAA 1989).
[39] Interestingly, while in absolute terms foreign investments in the sector were greater during the 1980-1986 period, the data show investments of the Nicaraguan government steadily increasing while those of foreign agencies sharply decrease—particularly in 1984 and again in 1986. The source for these figures (INAA 1989) does not explain the dramatic increase and decrease in spending on rural water and sanitation projects on the part of the national government and foreign cooperation, respectively. However, there is a plausible explanation for the drop in external support to projects in the mid- to late-1980s. As Donahue (1989) details, much spending in the area of preventative health halted as the Contra war destroyed vital infrastructure and increased the demand for curative and specialty care. Development and aid agencies like CARE International, UNICEF, and WHO shifted their financial and material investments to aiding those injured in the war as well as to meeting basic nutrition needs of Nicaraguans in war zones (Donahue 1989, 261–264). This pattern of decreased spending on infrastructure extends to rural water projects as well.

[40] In this sense, there was only a limited shift in the *logic* characterizing rural residents' role in water provision from the Somoza era into the revolutionary decade.
[41] RRAS-CA, created in 1992, is the regional counterpart to national level water and sanitation networks in Central American countries, and defines its objective as "optimizar los vínculos de colaboración entre Agencias Externas de Apoyo y países, a fin de contribuir al desarrollo ordenado del sector y por consiguiente a la ampliación de la cobertura y sostenibilidad de servicios a las poblaciones sub-servidas" (RRAS-CA 1998, 1).
[42] One of the criteria used by MINSA, INAA, and the IBRD for communities' selection for a water systems and latrines was the following: "Disposition of community residents to participate actively in the construction of projects, be it through work [labor] and/or money, such that this covers at least 15% of the total cost of the project" (Martínez and González 1981, 3).
[43] While as "CAPS" organized rural residents have experienced this high degree of autonomy and relative disconnection from partisan politics, interviews reveal CAPS members to have had linkages with other initiatives of the Revolution, some preceding their election to a local CAPS. In cases of water committees formed in the 1990s and 2000s, CAPS members may have previous (and/or ongoing) organizational experience as part of cooperatives, women's groups, local churches, workers' associations, unions, and government participatory mechanisms like the Community and Municipal Development Committees (CDCs and CDMs) and their successors, the Councils or Cabinets of Citizen Power (CPCs and GPCs).
[44] As Donahue (1989) asserted, "international health organizations share a common purpose with the development aspirations of the Nicaraguan government" (266); these organizations thus played crucial roles in "the consolidation of popular democracy" in Nicaragua (258).
[45] The emergence of concepts like "popular participation" and "mass organizations" in Nicaragua 1980s no doubt has influenced the ongoing social *construction* of the CAPS' origins as "revolutionary," even in the face of evidence that the CAPS were not an intentional product of the FSLN's social change agenda during the 1980s.
[46] From 1982 to 1990, the Contra War "cost…in excess of $12 billion in economic losses" (Vanden 1999, 49)
[47] The political economy of war—and specifically, the *end* of the Contra War—in part helps to explain a surge in investment. Francisco Baltodano, Director of the Direction of Rural Aqueducts (DAR) in Matagalpa until 2005, cites the Contra War as a factor limiting investment in certain regions during the 1980s: certain municipalities were prioritized simply because they were not "war zones" (interview, Estelí, 2/3/2010).
[48] It is important to note that although the transfer of power brought significant social and political ruptures, the relationship between the mass organizations, the state apparatus, and the FSLN remained somewhat fluid and dynamic prior to the electoral defeat of the Sandinistas. In fact, some argued that the mass organizations began to "decline" even in the mid-1980s with the enactment of a new Constitution (Serra 1991, 64). The new Constitution replaced the provisional government and the Council of State with an elected legislature, thus eliminating direct representation and participation of the mass organizations and various social and productive sectors in favor of representation by political parties. Notably, Katherine Hoyt argues that many in Nicaragua felt the 1987 Constitution did not affect popular participation in governance greatly because "the geographical representatives [of the political parties elected to the new legislature] were also members of the popular organizations" (Hoyt 1997, 53).
[49] In 2005, the date of the last census, the rural population was estimated at 44% (INIDE 2005).
[50] An additional US$1.2 million was invested in water system rehabilitation after Hurricane Mitch in 1998 ("Analisis Sectorial" 2004, 135).
[51] These percentages were calculated excluding the "credit lines" from Canada and Spain (INAA 1989, no pag.).
[52] By point of comparison, by the mid-1980s the Nicaraguan Women's Association (AMNLAE) had garnered the participation of 25,000 women, while the Sandinista Worker Federation (CST) included

80,000 rural workers and the Rural Workers Association (ATC) numbered 106,000 rural laborers (Ruchwarger 1987, 91).

[53] As Medrano et al. (2007) explain, "Because the Municipalities Law [Law 40] does not obligate local governments to manage water and sanitation systems, the decision to integrate a water and sanitation UNOM into [the local government's] structures is left up to each mayor" (167).

[54] A 2003 report (reflecting collaboration among ENACAL, SNV and COSUDE) of 75 communities in Matagalpa and Jinotega found that the municipal UNOM conducted more frequent community visits and also "performed better" during those visits (in regard to tasks like physical inspections of water systems, verifying the CAPS' functioning, and taking water samples) than the regional UNOM (ENACAL 2003). Baltodano and Olmedo (2008) investigated the experience of 60 communities, half in municipalities with a decentralized UNOM and half without, also within the departments of Matagalpa and Jinotega. Their results corroborate the finding of differential outcomes associated with the centralized versus decentralized technical assistance models. Baltodano and Olmedo found the municipal UNOM to have more contact with communities (68.2% of CAPS reported members knowing the municipal promoter, versus 37.5% knowing the regional UNOM), and communities reported more satisfaction with the assistance of municipal versus regional UNOM: 34.9% cited as "sufficient" the level of municipal UNOM help, versus only 22.2% for regional UNOM (Baltodano and Olmedo 2008, 49–50).

[55] Notably, domestic organizations in the rural water and sanitation sector themselves depend primarily on the donations of multilateral organizations.

[56] This coproduction may be happenstance, rather than the result of strategic planning, given that different entities may "discover" in the course of their work that they may have overlapping efforts A staff member at ODESAR in La Dalia paints a clear picture of how this collaboration may emerge in practice: "[W]e received financing from a source called Swiss Aid…We elaborated a proposal after doing an evaluation in the communities and approving funds for a water project in them. In the moment in which we were going to develop the project, we found that CARE was still [working] in the municipality and was going to elaborate another project that also depended upon the same source [Swiss Aid]. So *the mayor suggested we join forces to implement one project* to benefit six communities. Hence we have the project that we implemented with the mayor's office, COSUDE, ODESAR, Swiss Aid, four actors, although ODESAR is the executor. COSUDE finances CARE, Swiss Aid finances ODESAR, and the mayor's office contributes its resources; thus it's five institutions or five actors, elaborating and implementing a project together" (interview, La Dalia, 3/3/10, emphasis added by author). In contrast, the historical and present-day coordination between international NGOs and multilateral organizations involved in the sector—including CARE, COSUDE, and UNICEF—have entailed official agreements with central government agencies. Although several interviews referenced these historical *convenios*, or agreements, between state agencies and the international donors, no actual agreements were obtained for this study.

[57] In theory, the project cycle includes the following phases: 1) policy development, sector planning, and program formulation; 2) identification of programs and projects; 3) preparation of programs and projects; 4) evaluation and approval of programs and projects; 5) implementation and monitoring; 6) operation and monitoring; 7) extensions or next phases of the programs; 8) evaluation (Department for International Development 1998).

[58] The IDB's loan number 1049 to Nicaragua, "Modernization of the Management of Water and Sanitation Services," sought to increase private sector participation through establishing public–private partnerships to manage the water and sewage systems in four municipalities (Chinandega, Jinotega, León, Matagalpa), in addition to earmarking funds for a private management contract for the state water company, ENACAL, headquartered in Managua. According to the IDB, the "modernization," or commercialization, of ENACAL would "prioritize activities for the improvement of operational efficiency through a business strengthening program" (Inter-American Development Bank 2006, 2)

[59] Originally developed to serve as sources of short-term financial, social and infrastructural investment in the wake of emergencies, like natural disasters, in developing countries, as well as to offset the negative effects of structural adjustment policies, emergency social funds have been broadly

criticized as private-sector "solutions" to problems of public good provision that facilitating "avoiding essential reforms" within state ministries (Pradhan and Rawlings 2002, 276).

[60] As of 2004, only 12 rural water projects for the municipality had been documented in SINAS.

[61] The last DAR offices, including those in Estelí and Matagalpa, shut down in 2007 when financial support and accompanying contracts with UNICEF expired, effectively prohibiting further DAR operations. Nevertheless, the process of diminishing transfer of resources from the central government to the offices began even before the official transfer to FISE in 2004, however (interview, Jorge Rojas, Sébaco municipal government, 3/12/10).

[62] Nelson Medina, of the World Bank's Water & Sanitation Program (WSP) explains how despite its current attempts to assert control over the rural water sector, the state water company, ENACAL, has lost capacity through the closing of the regional DAR offices in the mid-1990s: "ENACAL claims the rural aqueducts but it had already lost all of its developed human capital [*capital humano capacitado*] that it had gained with experience…because of the closing of the [DAR] offices. If you want to take charge of something, how are you going to do so if you don't have the person that was trained for so long? They have the desire, the money if you wish, but they don't have the personnel anymore" (interview, Managua, 3/25/10).

[63] From 1998 to 2001, the Fund received 10% of its budget from the Nicaraguan government, .25% from ENACAL, almost 20% from donations, and 70% from loans (Government of Nicaragua and PAHO 2004, 139).

[64] While there appear to be some positive effects on local government capacity, such as facilitating local government staffs' participation in relevant degree programs, FISE's dependence on private contractors may limit these persons' direct involvement with rural communities and water projects. Even after earning his new degree, Juan Alberto explains, "We [the local government], to a certain point, are there, giving support and some advice [to communities], but we don't get involved directly, because the FISE model is used. Everything is done as paid work" (interview). Furthermore, part of FISE's strategy includes the promotion of municipal level *Unidades Municipales de Agua y Saneamiento* (Municipal Units of Water and Sanitation or UMAS), which aim to fulfill a role similar to those of the UNOM; in some cases, these may be the same individuals with a new title. However, the political imperative to create UMAS positions has been subject to the same financial and political constraints that affected the creation of municipal level UNOM prior to 2004.

[65] Ortega was elected in 1984, the first year elections were held since the overthrow of Somoza.

[66] In other words, the Ortega's decreeing of a new model of citizen participation "generated significant conflict with the vast network of civil organizations representing a wide variety of political and ideological beliefs which, for two decades, had done much to encourage citizen participation" (Chamorro, Jarquín, and Bendaña 2009, 5).

[67] Although President Ortega took measures to curb the effectiveness of Law 603, it "specifically prohibited the CPCs from compromising state-sponsored organizations or from having access to the state budget, and limited their work to social organizations such as the FSLN" (see Chamorro, Jarquín, and Bendaña 2009, 4).

[68] According to the IDB, the "modernization," or commercialization, of ENACAL would "prioritize activities for the improvement of operational efficiency through a business strengthening program" (Inter-American Development Bank 2006, 2).

[69] It is much more plausible that "user organizations" referred to NGOs like the *Red Nacional en Defensa de los Consumidores* (National Consumers Defense Organization, or RNDC) that participated actively in shaping the law at the time.

[70] Neither are the CAPS mentioned within one of the four sets of represented groups that will comprise the watershed committees; these include representatives of "water users," the Watershed Directive Council, the Autonomous Regional Councils, and "accredited" nongovernmental organizations (Art. 35).

[71] Article 75 of Law 620's Regulations states, "In communities where the service provider [ENACAL] does not have coverage, systems will be administered by the community, specifically the Potable Water Committees, who will guarantee service to the community, all below the supervision and control

of ENACAL." Even though ENACAL has primarily invested in urban areas, Law 276 creating the institution does specify its legal role in to "investigate, explore, develop and exploit the water resources necessary" to provide service in rural areas.

[72] The state's limited and fragmented control and supervision over the sector means there is no comprehensive data indicating the exact number of water systems—or functioning CAPS—in addition to accurate estimates of need in regard to potable water and sanitation in rural (not to mention urban) areas. Though expenditures of the state water agencies, including the Nicaraguan Aqueduct and Sewerage Company (ENACAL) and the Nicaraguan Institute of Aqueducts & Sewerage (INAA), are known, "there are no existing financial policies for the sector or a budget reflecting the economic or financial requirements for its effective functioning" (Government of Nicaragua and PAHO 2004, 134). Thus, the sector remains one lacking comprehensive analysis of appropriate and/or adequate levels of investment to meet—and in theory to elaborate—national level service provision goals. This, in turn, has the perverse effect of hampering the state's ability to generate a sector strategy that, if implemented, could work systematically to meet residents' needs.

[73] The November 2004 reforms to Law 466, Budget Transfers to Nicaraguan Municipalities Law (*Ley de Transferencias Presupuestarias a los Municipios de Nicaragua*), established fiscal transfers to municipalities of 6% of the national budget in 2005 and 2006, and 10% of the national budget from 2007 and onward. The amount transferred to each municipality is based on several criteria, including the local government's record of spending efficiency, their current savings, and levels of poverty within the municipality (interview, Guadalupe Wallace, GTZ, Managua, 8/29/07).

[74] This is related to patterns of high turnover in local government offices—mayors often select staff based on personal relationships, sacrificing professional criteria (ENACAL 2003)—and the assigning of water and sanitation staff to projects in diverse areas, hence restricting the time they have available to attend to communities' water-related issues.

[75] "The term I use to refer to those who arrange for the provision of a CPR is 'providers.' I use the term 'producer' to refer to anyone who actually constructs, repairs, or takes actors that ensure the long-term sustenance of the resource system itself. Frequently, providers and producers are the same individuals, but they do not have to be" (Ostrom 1990, 31).

[76] "El Comité de Agua Potable y Saneamiento va más allá de la participación de las municipalidades en la administración pública, ya que se trata de una administración ciudadana."

CHAPTER THREE:

ORGANIC EMPOWERMENT: WATER PROVISION & THE CONSTRUCTION OF LEGITIMACY FROM THE BOTTOM UP

The CAPS are the cornerstones of the [rural] water systems. [State] institutions don't help them…but in one way or another they are maintaining their systems.[1]

- Francisco Baltodano, CARE PIMCHAS, Estelí, 2/3/10

And how many people do we 5,000 committees serve? …More than one million Nicaraguans. What we've done, without help of the government, is give response.[2]

- Esperanza Soza, CAPS El Chompipe, Muy Muy, 8/21/08

The previous chapter demonstrated that the Potable Water and Sanitation Committees (CAPS) have had only a limited relationship to official state policies and initiatives historically in Nicaragua, even in moments when their mission and work has aligned with the policy and social goals of national administrations. Today, the environmental and social implications of CAPS-led water management and service provision are significant: the CAPS manage water systems in over 5,000 rural communities, resulting in over an estimated one million rural residents nation-wide—a little over half of the country's rural population—having improved water access (Medrano et al. 2007, 18) (see Figure 3.1 and Table 3.1).[3] The present chapter examines in detail the CAPS' rural water management with attention to the following questions: Under what circumstances do communities become empowered to manage natural resources? What is the relationship between the CAPS as community-based

resource managers and the local residents they serve? What are the implications of the CAPS' extensive water management for their interactions with actors and institutions at higher political scales, such as lawmakers, local and national government officials, and state agencies?

Drawing upon interviews with CAPS representatives from eighteen communities (including nine municipalities and four departments), I give an overview of how these water managers have come to build their capacities over time. In particular, I pay attention to how these rural social actors 1) function as common property regimes (CPRs), 2) develop and hone their capacities as resource managers and service providers, and 3) generate legitimacy in the eyes of residents (i.e. system beneficiaries) via their local water management and service provision. I argue, specifically, that the water management and provision responsibilities that have fallen to communities in Nicaragua have produced an "organic empowerment" of water users' associations—that is, an empowerment not dependent upon formal policy or decentralization initiatives, but rather grounded in the CAPS' day-to-day work as water managers. I contend, furthermore, that this empowerment not only generates legitimacy in the eyes of the rural residents the CAPS serve, but also has led to the development of *capacities* that *exceed* those of the state in the sector. Ultimately, as subsequent chapters will demonstrate, resource management capacities and legitimacy developed at the grassroots *matter* at other—including higher political—scales, functioning in support of the CAPS' quest for their legal recognition, and hence formal autonomy, in the current moment.

FIGURE 3.1: NICARAGUAN POLITICAL REGIONS



TABLE 3.1: RURAL WATER PROJECTS & BENEFICIARIES BY REGION

Region*	Water Projects	Houses in Region	Beneficiary Houses in Region	Population in Region	Population Served in Region
I	1,344	123,158	30,343	658827	169,780
II	1,218	89,187	31,769	553772	193,390
III	80	12,990	11,002	84,140	69,003
IV[a]	334	44,702	25,173	262,855	155,680
V	704	37,269	14,035	228,630	95,325
VI	1,175	92,580	40,972	597,848	269,415
VII	58	NA[b]	NA	28676	12,064
VIII	42	NA	NA	23,841	14,796
IX	63	NA	NA	38988	16784
Total	**5,017**	**399,886**	**153,294**	**2,477,577**	**996,237**

Source: These figures come from data collected in the *Sistema Nacional de Información de Agua y Saneamiento Rural de Nicaragua* (National Information System of Rural Water and Sanitation, or SINAS), a database created by the Nicaraguan government and international donors in the mid-1990s to document project implementation. These data reflect documented water systems and estimated population served through part of 2004 only.

[a] Figures include 20 water projects in the RSJ and 163 in the RAAS

[b] Data not available

*Each Region corresponds to the following departments (see map, Figure 4, above): 1: Estelí, Madriz, Nueva Segovia; 2: León, Chinandega; 3: Managua; 4: Carazo, Granada, Masaya, Rivas; 5: Boaco, Chontales; 6: Jinotega, Matagalpa, 7: Región Autónoma del Atlántico Norte (RAAN), 8: Región Autónoma del Atlántico Sur (RAAS), 9: Río San Juan (RSJ).

As common property institutions (CPIs), the CAPS demonstrate a number of elements associated with CPRs, or arrangements referring to a physical resource and its relationship to a membership-based group determining rules for its use and management.[4] These elements include small group size, locally-devised system of rules, clearly delineated resource boundaries and group of users, and effective local monitoring arrangements that external government authorities do not undermine (Becker and Ostrom 1995; Gibson, Williams, and Ostrom 2005; Ostrom 1990; Feeny et al. 1990; McKean 2000; Lu 2001; Bromley and Feeny 1992; see also Stevenson in Lu 2001). While CPR theorists have made outstanding contributions

towards understanding the conditions under which communities may viably manage common pool resources—like water, pastures, and fisheries—over time, this body of scholarship is grounded primarily in economic understandings of human behavior that focus on individuals' cost-benefit analyses to explain avoidance of "temptations to free-ride, shirk, or otherwise act opportunistically" (Ostrom 1990, 29). As discussed in Chapter 1, a limited focus on internal institutional dynamics has often come at the expense of not examining the multi-scalar relational and political dimensions of "local" resource management.

While grounded in CPR theory, this chapter both expands the frame of analysis beyond the CPR "design principles" (DPs) (see Table 3.2) in addition to shedding light on how these principles for institutional robustness and longevity embraced by CPR scholars require further refinement. Specifically, this chapter's analysis shifts the focus from these narrow measures of institutional strength and longevity to examine the socio-political *legitimacy* of CPIs. Locally-generated legitimacy, I contend, has implications not only for local commons management, but also for CPI political interventions at scales beyond the local level. Importantly, this social dimension of common property management is too often implicitly assumed to be a part of local arrangements for managing resources. Although the present study is not fundamentally concerned with institutional longevity, per se, legitimacy arguably matters for the robustness, effectiveness, and sustainability of a given CPR. In the absence of legitimacy—which for the purposes of this chapter I define as local buy-in and acceptance (Kull 2002)—common property institutions would struggle to engage

regime members in the collective endeavor of resource management. The analysis to follow highlights residents' financial and physical contributions to local water management, contending that these result from and are evidence of the CAPS' legitimacy. Ultimately, because contributions from those accessing resources within a CPR contribute to *sustaining* the regime, legitimacy must be seen as not only emerging out of, but contributing to, effective common pool resource management.

Certainly, the CPR scholarship has done much to illuminate the empowerment of local users' associations in the management of common pool resources, both in cases of official empowerment from-above or "unofficial" (i.e. de facto) empowerment from-below (see Pretty and Ward 2001 and Fuys and Dohrn 2010 for discussion of the ongoing emergence of CPRs globally and the origins of these). State actors may also provide incentives for the formation of new local organizations for commons management, without necessarily creating them, as was the case in India and Nepal with the government's granting of "access rights" to forest user groups (Pretty and Ward 2001; Agrawal and Ribot 1999; Agrawal 2005) and in Bolivia as the government took on an active role in training and granting legal rights to forest user groups, equipped with new financial resources after the passing of the 1994 decentralization law (Andersson and Gibson 2007). To account for the circumstances under which the CAPS have become empowered as resource managers, I define empowerment as either an officially-conferred or de facto access to and control over local resources that entails significant capacity building, decision-making, and leadership (Narayan 1994).[5]

The particular pathway to "empowerment," I contend, also has implications for the legitimacy resource management will confer upon those doing it. Across time in Nicaragua, the state has lacked sufficient financial resources, territorial reach, and political will to extend water service to rural areas—or minimally to ensure the quality of freshwater sources. The CAPS' empowerment to manage and control resources has emerged out of the imperative to take responsibility for the maintenance and administration of rural water infrastructure constructed with the primary financial support of international organizations (see previous chapter). Therefore, the decision-making and labors associated with this water management and provision have not been mandated by state actors "from above" or as a result of national policies and/or formal decentralization initiatives. I refer to this kind of empowerment that has emerged outside of formal legal or political frameworks an "organic empowerment." Notably, this conception of contrasts with conventional notions of empowerment in the decentralized natural resources management (DNRM) literature which tend to emphasize formal or legally-conferred control and decision-making (see, for example, Kull 2002; Ribot 2004; Ribot 2003; Serra 2001; Christensen and Grant 2007; Murphee 2009).[6] This emphasis on formal transfer or assignment of responsibilities has the consequence of leaving outside the frame of analysis legally unrecognized entities that nevertheless exercise control and decision-making authority in a given sector. Yet as Fuys and Dohrn (2010) note, in the absence of legal rights or political recognition, "Customary law and practice continues to be the most common source of legitimacy for [local resource] access rights" (198). Even in cases where the state

grants "explicit or tacit backing" (210) to projects, local leadership and systems of rules and norms often constitute the legitimate source of authority and legitimacy for local populations accessing a given resource. The CAPS' legitimacy, much like other common property institutions globally, results from their "community and voluntary efforts"—as opposed to the "legal or institutional formalities" (Kreimann 2010, 28) that DNRM scholars tend to emphasize.

This study provides evidence that the specific dynamics and contours of a given CPR-state relationship (and local-extralocal relationships, more broadly) influence how the local managers and beneficiaries of these regimes understand their work and relationship to a given resource. Relevant to this dynamic, I argue, is the way in which CPIs may fulfill resource management roles that legally and politically fall to the state. In so doing, they benefit from "the legitimacy that follows from control of public decisions and service delivery" (Ribot 2011, 8), even prior to or in the absence of official state sanctioning. Because "they are not the state but they exercise public authority," I contend that the CAPS are usefully characterized as "twilight institutions" (Lund 2006a, 673). Lund defines twilight institutions as institutions that "operate in the twilight between state and society, between public and private," and which "in the exercise of power, take on the mantle of public administrative authority [including] legitimated administrative operations" (678). Although nongovernmental, twilight institutions demonstrate the "state qualities of governance" (685) via their public functions—in this case, subsidizing the state's limited reach into communities by managing and administering rural water

infrastructure. As those responsible for the day-to-day management of water in Nicaragua's rural areas, the CAPS have developed organizational and technical capacities that oftentimes allow them to adeptly manage local water infrastructure. The limited resources and training of government officials in the sector and issues of territorial reach means that government actors may not have these capacities.

The remainder of this chapter draws upon interview and participant observation data with CAPS from eighteen communities to examine the CAPS legitimacy as community organizations.[7] Towards these ends, I examine the CAPS' challenges and responses to these along five dimensions of water governance: technical, financial, organizational, environmental, and legal/political (see Table 4).[8] Within each of these areas, I focus on how the capacity to manage and provide water locally serves to construct and reinforce the CAPS' legitimacy vis-à-vis system beneficiaries. Interviews with staff at local development organizations, international NGOs, multilateral organizations, and government officials also inform this overview of the CAPS and their local work. While the CAPS interviewed and observed for this project are by no means a representative sample of CAPS at a national scale in Nicaragua, the empirical illustrations drawn from these cases generate insight into the social dimensions of common property management that a strict focus on institutional robustness fails to capture. The five noted areas of common property management subsume the CPR DPs and move beyond them to encompass the complexity of the CAPS work as resource managers and the diverse ways in which they must build capacity as resource managers. This analysis therefore highlights ways in which CPR

theory may be expanded, and the design principles refined, towards accounting for the multi-dimensional and increasingly multi-scalar character of common property management. This chapter concludes with a summary of its main arguments and points to how locally-generated legitimacy may become the foundation for effective CPI interactions, struggles, and negotiations beyond the community level.

TABLE 3.2: CPR DESIGN PRINCIPLES (DPS)

1. Clearly defined resource boundaries for households and/or individuals
2. Congruence between appropriation (i.e. resource extraction) and provision rules and local conditions
3. Collective choice arrangements by which "most individuals affected by the operational rules can participate in modifying" them
4. Monitoring arrangement by or accountable to the appropriators
5. Graduated sanctions for those violating CPR rules
6. Conflict-resolution mechanisms
7. Minimal government recognition of appropriators' rights to organize
8. Nesting of the CPR within a larger system of institutions.

Source: Ostrom 1990, 90

TABLE 3.3: DIMENSIONS OF LOCAL WATER MANAGEMENT*

Technical

- Water system construction (e.g digging ditches, assembling tubes, etc.)
- Repairing and/or replacing broken tubes
- Installation, maintenance, and reading of water meters
- Cleaning of water storage tanks and aqueducts
- Water chlorination or filtration
- Water shut-offs and reconnections

Financial

- Collection of user tariffs
- Financial recordkeeping
- Fundraising
- Appealing to NGOs, international agencies, and local governments for financial support of water projects

Organizational

- Maintenance of users' registry
- Convening and facilitation of users' assemblies
- Organizing users for participation in water management activities (e.g. system cleaning, sanction notification, etc.)
- Enacting formal rule changes
- Training incoming elected CAPS members
- Implementing educational activities around basic sanitation and water and environmental conservation
- Coordination with other community social and environmental groups and state agencies
- *DPs 1-6*

Environmental

- Reforestation around water storage tanks and water "recharge zones"
- Day-to-day educational work and periodic campaigns to prevent and regulate deforestation, water contamination, and inappropriate and/or excessive water use

Legal/Political

- Negotiating intracommunity access to water sources and land for water distribution systems
- Pressuring state agencies and officials to implement environmental regulations
- Advocating and organizing for legal recognition of local organizations and ownership over water sources
- *DPs 7-8*

*The behaviors, activities, and tasks falling under each of these areas of water management are meant to be illustrative. Hence, they are not comprehensive, nor are they meant to imply that each CAPS interviewed and observed for this project carry out all of these functions.

"ORGANIC EMPOWERMENT": RESOURCE MANAGEMENT & ENVIRONMENTAL STEWARDSHIP OVER TIME

Since the late 1970s, state, nongovernmental, and foreign investments in Nicaragua have combined with community inputs to coproduce the rural water and sanitation sector (Lam 1996; Whitaker 1980; Evans 1996; Ostrom 1996; see also Chapters 1 and 2). Although the contributions of development agencies and multilateral organizations have been of critical importance for creating opportunities for the emergence of a high number of CAPS (through providing initial investments in infrastructure), the provision of longer-term technical assistance to communities has been very uneven over time and geographically. As Chapter 2 detailed, state-society synergy in the sector has most often been limited to the stages of project development and system construction. Post-construction, communities become both the "providers" and "producers" (Ostrom 1990, 31) of local water systems.[9] Hence, communities usually carry out their water provision work quite independently of external actors like government officials and NGO staff,[10] meaning in practice that the state's contributions to rural residents' water management and provision *capacities* have been extremely limited. In one basic sense, the CAPS' resource management generates local legitimacy because of the water access the CAPS provide within their communities: in most cases, coinciding with a CAPS' formation, residents gain access to a resource and infrastructure that previously did not exist.

This section examines how the CAPS' everyday practices have fostered and deepened their capacities in the technical, financial, organizational, environmental and legal/political realms of common pool resource management. As the discussion

will reveal, the CAPS have faced circumstances that pose extreme threats to their sustainability, let alone effective functioning, as community organizations. Yet, these same CAPS interviewed for this study successfully navigate difficult circumstances to ensure water system functioning and "survive" as social organizations. This involves work that is self-initiated, self-directed, and proactive towards achieving water management goals. Without romanticizing the significance of adversity in relation to the CAPS' identities and work as resource managers, the difficult circumstances discussed below lend themselves as windows of insight into how the CAPS innovate, negotiate, and persist in the face of adversity. The ability of these CPIs to maintain water flows to residents confers legitimacy upon them as resource managers. This chapter, then, is not fundamentally concerned with explaining the persistence of some CAPS over others; rather, it focuses on the social significance of CAPS-facilitated water access to provide insight into some of the intracommunity dynamics characterizing CPRs that may ultimately transcend the community level.

TECHNICAL CHALLENGES & RESPONSES

Unable to depend on consistent technical or financial support from NGOs or government after system construction (see Chapter 2), communities seek ways to sustain water provision and solve local problems as they arise. One particular issue affecting many rural communities, especially recently, is that of water systems ceasing to function or verging on obsolescence. As confirmed by both domestic and international NGO staff who work with communities in system construction, most

potable water systems are intended to last functionally for 15-20 years. A 2004 report of the Nicaraguan government and the Pan-American Heath Organization (PAHO) estimates that as of 2002, 18% of the 4,886 water systems documented in the National Information System of Rural Water & Sanitation (SINAS) were "out of use" (Government of Nicaragua and PAHO 2004). While some systems have become defunct from old age, others are broken because local residents lack the technical skills and/or resources to maintain them.[11]

Yet importantly, even when they have not been trained for certain tasks, CAPS members may innovate to problem solve and repair system components. Engineer Rafael Díaz, who began work in rural water and sanitation in Nicaragua as part of UNICEF in 1988, expressed surprise that many CAPS function as well as they do without much initial and/or sustained external support. He elaborated on the CAPS' technical ingenuity he observed in one community in the municipality of San Isidrio: residents were utilizing old hand pumps imported from India that UNICEF had installed 20-25 years ago—and that in his opinion, should have ceased to function. He explains that the CAPS members began to build their own spare parts for the system as repair needs arose. These technical innovations hence ensured the CAPS could function as resource managers and maintain water service to residents. Díaz recognizes that some technical undertakings require external support, and notes that communities who worked with him on system construction will reach out to him and UNICEF staff for help with tasks like changing water pumps (interview, Managua, 1/27/10). Nevertheless, this anecdote and others like it confirm Narayan's

(1994) argument that "[o]nce [beneficiaries of water projects] are empowered, they are more likely to be proactive, to take initiative, and to display confidence for undertaking other actions to solve problems beyond those defined by the project" (8).

While the capacities of individual CAPS vary, many pride themselves on having the faculties necessary to manage water systems technically and financially. An estimated 70% of communities have a resident sufficiently qualified to do basic plumbing work on systems (Government of Nicaragua and PAHO 2004, 100). The community of Compasagüe 1 (Muy Muy) built the first rural aqueduct in the entire municipality in 1995 with support from a program of the *Ministerio de Acción Social* (Ministry of Social Action, or MAS, created by the central government in 1993) that provided a small amount of funds for food while the community constructed the water system. The community collected donations internally from residents until there was enough money to buy the necessary materials. Combined with those of residents in the form of *mano de obra* (labor), these contributions saved the community the costs of contracting with and paying non-community members to work: "We didn't bring in people from outside, and that was one of the advantages of the project…we did everything, and because of that it cost us very little" (interview, CAPS Compasagüe 1, Muy Muy, 8/22/08). The CAPS coordinator expresses another "advantage" that his committee has today and going forward: "we have people who know how to plumb, who know how to build, and who know other skills we can use. Among ourselves we don't earn much. We don't charge much, but something, and we

do the work." Because of this capacity internal to the community, the CAPS can be largely self-sufficient in regard to water management and provision.

Many communities, in fact, come *not* to rely on local government actors for system maintenance support. In short, limited government capacity and resources make this kind of reliance infeasible. An *Unidad Municipal de Agua y Saneamiento* (Municipal Water and Sanitation Units, or UMAS)[12] staff in Pueblo Nuevo, Estelí, recounted a resident's request to have the local government water and sanitation staff visit the community to dismantle the pump in the community's well. He responded,

> I told her that I had never dismantled that. It would be irresponsible of me to take it apart. I told her that people in the community were trained to do that. When they built the system, that well, they left one person [trained] who could put together and take apart that pump. 'You all, take it apart, see what's wrong with it, and the day that you do that if you want let's go together, to look at what's wrong, and we'll see how the mayor can resolve [the problem].' (Interview, UMAS Pueblo Nuevo, 2/4/10)

For reasons unbeknownst to the *técnico*, or expert (literally "technician"), the community was attempting to involve the local government in an operation for which they, supposedly, had the capacity.[13] What is notable is that technical staff in the government office could not perform a task necessary to the functioning of the characteristic water systems within the municipality. Importantly, given both the initial training that the CAPS receive from NGOs, in addition to the knowledge and experience they accumulate in their day-to-day work over time, CAPS members understandably have greater technical capacity in water system operation and administration than many public officials—who even as water and sanitation

"experts" many have little to no experience in this sector. CAPS and communities often have no choice but to problem-solve independently.

FINANCIAL CHALLENGES & RESPONSES

Technical issues related to maintenance are very much intertwined with the financial problems, needs, and capacities of the communities who have a water system. Unfortunately, the state has had very limited resources to support communities financially, a factor that contributes to CAPS' attempts to problem solve without seeking state support. Esperanza Soza, the El Chompipe CAPS coordinator in the municipality of Muy Muy (whose system was built in 2001) expresses her CAPS' achievement of financial independence: "The truth is that to this day we've survived without support from the municipality and without the support of the national government. The central government—none of the [administrations] that have existed—have helped us economically in any way" (interview, Muy Muy, 8/21/08). Moreover, and putting issues of political will aside, a dearth of comprehensive information on the CAPS' financial statuses compromises the ability of state and nongovernmental actors to devise an effective strategy for helping to address the CAPS' financial weaknesses. Notably, there does not exist "one study that reflects with specificity what happens in regard to the CAPS' finances at a national scale"(Government of Nicaragua and PAHO 2004, 105).

Yet, this study's examination of several communities' experience with financial management demonstrates the CAPS' potential for effective economic

strategies and survival. First, it is evident that while the construction of water systems is rarely possible without significant external investment, these are in no way simply "gifted" to residents.[14] In addition to the everyday water management work that falls to them post-system construction, communities make significant contributions—both physical and financial—during the initial stages of a project. In the case of the community of Compasagüe 2, USAID supported the project with financing, the Organization for Rural and Urban Economic and Social Development (ODESAR, a local development organization) assisted with system construction, and the community members gave a financial support of 460 *córdobas* (US$22) per household. This financial contribution is something that people had to take "from their *gallinitas* [savings], taking a risk to have water," as a CAPS member expressed. Additionally, community residents each invested fifty hours of physical labor into the project. These contributions reflect the legitimacy of local leaders, including water committee members as those in charge of guiding project implementation; they represent a show of faith in the future water infrastructure and the CAPS' ability to manage it. Furthermore, community financial contributions do not end after system construction. Across CAPS interviewed, system beneficiaries pay between $0.23 and $2.85 a month per household for water service, an amount which depends upon not only residents' willingness to pay, but also the technical costs of a given system.

The CAPS' capacity to collect user fees does not necessarily translate into the community having sufficient funds to ensure system sustainability under all circumstances, however. In La Reina (San Ramón), the water system is living in "a

year of grace," according to CAPS vice-president Miguel Ángel López Úbeda. The CAPS has a savings of US$2,000 ($42,000 *córdobas*), plus accumulated materials and tools, an amount that comes from the ten *córdobas* a month tariff from users (US$0.50/month), and which Miguel Ángel emphasizes as "symbolic":

> I don't consider it a payment. It's an economic contribution for the project, because to have water twenty-four hours a day is really quite impossible for other communities. And we actually have this ability. It's ten *córdobas* [a month], which is nothing, it's symbolic. (Interview, 3/2/10)

These "symbolic" user fees have not, unfortunately, allowed the CAPS to accumulate sufficient funds to make significant repairs to their system: pipes that are in need of replacement will cost an estimated US$4,761 ($100,000 *córdobas*). Thus needed repairs stand beyond the community's financial means.[15] While the La Reina CAPS is confronting a system overhaul given its age, the income generated from user fees has proven adequate for the CAPS' "day-to-day" maintenance costs. These include costs associated with fixing and replacing broken or leaking tubes, materials which vice-president Miguel Ángel stores in a shed at his house in the community.

Some CAPS and system beneficiaries depend on water meters as a mechanism to ensure that payments correspond to household water usage. Mirna Rojas of the *Asociación para el Desarrollo de los Municipios del Norte* (Association for the Development of Northern Municipalities, or ADEMNORTE, another local development organization) explains that her organization promotes meters not only to allow individual household payments to be differentiated by the actual amount of water consumed, but also to help to conserve water, as people reduce usage (interview, Matagalpa, 4/10/10). In these cases, churches, schools and other

collectively-used infrastructure—like *casas comunales* (community houses) are excluded from water metering and payments.) Household meter installation is often met with resistance. CAPS members in Molino Sur and La Labranza (Sébaco) embraced the challenge of convincing residents of the benefits of meters, going "door to door" to "sensitize" residents to the idea. Marbelly praises the consciousness-raising effect that meter installation has had in her community, as users learn to waste less water. As the Molino Sur coordinator expressed during an inter-community exchange (*intercambio*) with CAPS members from Las Sabanas, Madriz, "You should always fight [*luchar*] for meters in your community" to help "moderate" water usage; otherwise, there may "not be enough" for everyone (meeting notes, Molino Sur, 4/29/2010). The experience of receiving water meters has enhanced both the capacities and confidence of the Molino Sur and La Labranza CAPS as resource managers. Community members' ultimate buy-in to the meters is indicative of their trust in the CAPS' usage of them as well as in their management of community funds; in a broader sense, this trust and support speaks to the CAPS' legitimacy as a local organization.

The legitimacy of individual CAPS is also intimately linked to what can be their quite remarkable capacities and commitments as financial managers. Because of their experiences working with and receiving training from domestic and international organizations like CARE and ADEMNORTE, many CAPS implement similar fiscal and organizational procedures. Delia of Molino Sur refers to the Nicaraguan Institute of Aqueducts and Sewerage's (INAA) "Guide for the Organization and

Administration of Rural Aqueducts" as her "little machete" (*machetito*), signaling how she has been able to harness the guide as a valuable tool in her work as treasurer. From outlining a recommended process of forming a CAPS to detailed discussion of how to organize effectively for local water provision and management, the INAA guide has enabled those who use it to overcome some of the problems plaguing the community in the past—such as theft of one of the committee's (and hence community's) funds by elected CAPS members. The guide, which may be disseminated to communities as part of the implementation of a new project, helps communities establish a financial record-keeping system, given its various templates of administrative forms: materials registry, service shut-off and reconnection request, and users' registry, among others.

Beyond sound financial practices and the capacity to collect users' fees, tailored and flexible by-laws and norms support effective commons management (McKean 1996). When norms and formal rules reflect the local context and lived realities of residents, these can have a significant legitimacy-enhancing effect on the common property institution. Several CAPS interviewed, for example, had norms and/or by-laws that reflect grounding in the day-to-day socio-economic realities of residents; in short, they demonstrate the valuing of universal and consistent access over rigid payment structures.[16] The Compasagüe 2 (Muy Muy) CAPS coordinator, Marlene Rodríguez, emphasizes how poverty affects people's ability to pay and hence the CAPS willingness to implement the by-laws:

> We don't implement [the by-laws] because we have few resources. Most of us women leave to harvest coffee each year. When we get back…most of us pay

> at once the 120 *córdobas* for the year…Not applying the regulations is a difficulty of the project, but *it's not because we don't want to, but rather because we have few resources, because we understand each other [*nos comprendemos entre nosotros mismos*]*. (Interview 8/21/08, emphasis added)

Across CAPS, accommodations are made for those families engaged in seasonal labor who do not have a constant flow of monetary resources during the year. While "some rules that are considered to be local 'community' rules are actually official norms, adapted and internalized by communities" (Boelens, Getches, and Guevara-Gil 2010, 9), the Nicaraguan experience demonstrates that certain "imported" rules may be adjusted, and in some cases broken, to adhere to local needs and norms. Alternative payment structures or timelines to accommodate local needs may entail the making of payments during part of the year, versus on a monthly basis. In La Labranza, where residents' financial circumstances, and abilities to pay, fluctuate throughout the year, the CAPS remains "flexible" according to its treasurer, "because we're the same family" (interview, Matagalpa, 12/11/09). The same CAPS member assesses that receiving late payments has been workable in her community: "Even though we're flexible, we don't have problems." In Molino Sur, Sébaco, the CAPS treasurer proclaims proudly that the only cases of water shut-offs in her community have been by request, when a beneficiary household temporary leaves, most often for short-term or seasonal work. Poverty in and of itself may affect the implementation of payment-related rules as well. As Carlos Loásiga of Compasagüe 2 emphasized: "We have understood the necessities of the people, their difficulties…if [a resident] is poor, he can't pay the tariff" (interview 8/21/08).

Notably, the tendency not to cut off residents' water supply negates many CAPS' by-laws stipulate cutting water for non-payment of user fees or lateness. Nevertheless, these financial decisions reflect appropriate accommodations given local circumstances, and also constitute sound economic decisions—since without them the CAPS might not collect *any* payment from certain households. In crucial ways, then, these decisions facilitate the sustaining of water flows, and hence the CAPS' deepest source of legitimacy vis-à-vis residents as common property institutions.

Certainly, the amount of money collected for water service varies across communities, and can be quite low. Yet the CAPS exercise local discretion in the use of their funds, and sometimes choose to support activities or endeavors understood as socially or economically beneficial to the community or individual residents. The La Labranza and Molino Sur CAPS felt sufficiently financially secure to innovate in the use of the CAPS' funds to advance their communities' sanitation goals: the CAPS made small loans available to families so they could pay a portion of the costs associated with the installation of the bathrooms and new plumbing that an international NGO (CIC-Bata) supported. Each household had paid back their individual loan by the end of the year (Tremenio interview, 12/17/09). Marbelly, who has over ten years experience on the La Labranza CAPS, showed off her new bathroom with pride, explaining that she did most of the installations herself, including the water piping.

CAPS may also choose to provide payment to CAPS members whose tasks depend upon certain technical expertise and/or are particularly time-consuming. The San Lorenzo, Boaco, CAPS pays the person in charge of operation and maintenance 700 *córdobas* a month (less than other communities reported), in addition to gifting him 700 *córdobas* at Christmas and "pardoning" him from paying his water service for the year. According to the CAPS coordinator, Luis Adolfo Vargas, "we [the CAPS] have wanted to rotate the position, but the community says no" (interview, Luis Adolfo Vargas, Managua, 2/18/10). Luis Adolfo calls this "a small help" to a community member who is "poor." The Molino Sur CAPS brings in over 4,000 *córdobas* (roughly US$190) a month from users' fees, and 2,500 (US$119) goes out a month as small stipend payments to certain committee members, including those in the areas of finance, operation and maintenance, and health. Despite these instances of financial remuneration, the CAPS still fundamentally consider themselves volunteers. As Luis Adolfo himself puts it, "We are the volunteer army of the community." Nevertheless, work on a CAPS can be full-time. Delia has wanted to resign from the CAPS to "rest," and also to find work that would provide a "livable" income, yet she describes her job on the CAPS as "permanent": she works seven days a week in the CAPS office at the front of her house, attending to community members arriving to pay their bill or perhaps request that their water be shut off during a period of leave. The US$47 a month she earns now working as treasurer does not, to use her example, provide enough to buy any needed medicines. However, she explains it would be hard to relinquish this position because no one else in the community has

"agreed" to be elected to do this work, which Delia deems vital to the operational success of the CAPS. While non-water-related expenditures like stipends to committee members may go against the recommendations of some NGO staff,[17] they do help to contribute to community development and stable livelihoods more broadly.

Organizational Challenges & Responses

The organizational dimensions of the CAPS' work are difficult to disentangle from the financial and technical situations and problems these groups encounter. Fundamentally, however, these concern the CAPS' ability to organize and engage local populations in water management responsibilities; in short, the ability of the CAPS as local leaders to implement local by-laws. Though the CAPS' by-laws vary by community and region, these typically include, but are not limited to, provisions for the following: elected leadership turnover; participation of system beneficiaries in water management responsibilities, including system maintenance and payment for water service; local environmental stewardship; and financial management. In practice, the CAPS demonstrate flexibility in the enforcement of rules and seek to make formal rule changes when these no longer work appropriately in a given local context (CPR DP 3). CAPS members' ability to implement, enforce, and when necessary, modify rules must be seen as evidence of their managerial and leadership capacities, and hence effectiveness as CPIs. Residents' compliance with these rules—whether via coercion or not—speaks to the CAPS' legitimacy as local authorities.

One commonly-embraced, formal rule *not* implemented across the board yet oftentimes reflective of CAPS members' local legitimacy is that of regular turnover of CAPS members. CAPS member Francisco Díaz Rodríguez in the community of San Esteban 2 in Jinotega has served as coordinator since the water system's founding in 2000. He explains his continued reelection as the result of community members trusting him as a leader. The CAPS appears to be highly successful along different dimensions: residents pay their water service fees on time, there is secure ownership of the water source, and the CAPS has full membership that meets regularly (interview, Jinotega, 8/23/08).[18] Although Francisco lacks a clear vision of how to transfer the responsibilities of heading the committee to a different community member, this "strategy" of not overturning the full committee in one election may contribute to organizational sustainability. For example, a blind adherence to by-laws which encourage annual elections and leadership turnover may leave a CAPS ill-equipped to function effectively. In the community of El Naranjo, San Ramón, a newly elected CAPS struggled to continue functioning in early 2010; not one member-elect had previously participated in the community's CAPS (personal communication, CAPS member, El Naranjo, San Ramón, 4/20/10). With leadership turnover, maintaining any initial capacity becomes more challenging, as the onus is often on those members being replaced to train those who are incoming on system use and maintenance.

Maintaining certain community leaders on the CAPS may be related to these leaders' local legitimacy and trust vis-à-vis residents as well. As CAPS coordinator of

eleven years Luis Adolfo Vargas (Boaco) explains: "There are times when a community leader has earned the great confidence of the community—such that they embrace him as a brother, as an important person…the same community cares for this person" (interview, Managua, 2/17/10). As Fuys and Dohrn (2010) argue in regard to customary institutions, "Compliance [of resource users to local rules] is more often than not based upon collective respect for local authorities, more than the possibility of punishment for infringements" (199). With the ability to elect new CAPS members via formal rules, residents' reelection of certain leaders may speak to their trusted or effective leadership—however defined—and legitimacy in the eyes of residents, as opposed to an organizational deficit of a CAPS.

One key organizational task falling to CAPS is engendering the participation of system beneficiaries in local water management and environmental stewardship. As CPR DPs three, four, and five emphasize, strong CPIs facilitate members' participation in the work of creating, modifying, implementing, and enforcing local rules. When CAPS engender the participation of system beneficiaries, it speaks to the legitimacy of their institution and the important outcomes they are trying to effect—with water access being the principle objective. The El Zapote CAPS in the municipality of San Dionisio designed an organizational system to ensure broad and regular participation of residents. After the community constructed its water system in 1986, the CAPS did not even implement a users' service fee ("it was a new system," and hence unlikely to need costly repairs in the near future, as the CAPS secretary José Francisco Salgado explained the logic used to justify not charging residents). As

the system started to age and new users were connected—the system began with 95 families (i.e. households) and as of late 2010 there were 165—the CAPS adopted an improved scheme for their increasingly complex local water management: since the late 1990s, families have been divided into twelve groups to carry out general functions like cleaning and communicating notifications—including warnings—to households about late payments. This system, dependent upon residents as volunteers (i.e. non-paid laborers), reflects local buy-in and ensures broad as well as regular participation on the part of system beneficiaries.

Even though collective choice arrangements, such as users' assemblies, may exist formally for these common property regimes, they may not be embraced by members of the regime, or community residents. In El Zapote, where water flows themselves have not been an issue, the CAPS once struggled to get residents to attend the community-wide CAPS assemblies. The CAPS implemented a risky strategy to increase participation: they cut off the water.[19] José Francisco proclaims that they no longer have problems with attendance. While enacting a rather extreme measure to garner the attention and greater participation of system beneficiaries, the El Zapote CAPS did, ultimately, improve the effectiveness of their rules regarding users' participation in community-wide assemblies that require quorum be met for voting purposes. That residents began and continue to comply with this CAPS-mandated participation is evidence of the legitimate authority of the water committee in the eyes of residents, even though in this moment participation depended upon the use of coercion.

Many CAPS, however, work to limit residents' "free riding" on the efforts of others through both coercive and non-coercive means. Confronted with non-participation of system users in the community, including some elected CAPS members, the La Reina CAPS' leadership devised a plan to ensure regularized and rotating participation in system maintenance. Miguel Ángel explains how, in the past, the same people tended to take responsibility for these tasks:

> When the system needed repairs, all the time the same people went. Most people never contributed to the work because it was a work without pay. So in a [community] assembly a tariff increase from five to ten *córdobas* was approved, and with the same funds the people doing the maintenance would be paid. It's turned out very well. We don't have problems with leaks. (Interview, 3/2/10)

In addition to this formal rule change to pay certain community members for technical repairs, the CAPS has also made changes towards a more effective arrangement for conducting regular cleaning around the water source. For a brief time the community experimented with a rotation system: one household (and/or family) a month would take responsibility for this work, for a total of twelve different groups each year. However, "in regard to cleaning, not everyone is going to have the same interest, [and] not everyone is going to do the same quality of work," Miguel Ángel explains. Encountering varying levels of interest, and wanting to ensure the quality of the work being performed, the water committee decided that elected CAPS members specifically would rotate this responsibility, recruiting several other residents to accompany them at the time of work. This solution to the problem of regularized cleaning and maintenance appears to have worked, even though it is not one that

engages residents more broadly in some of the day-to-day labors of water management.

Although most CAPS spoke of the need for participation of system beneficiaries in local water management, some have found that it may only take a "critical mass" (Marwell and Oliver 1993) to provide access to this critical resource.[20] The La Reina CAPS, for example, only had two active members at the time of the interview, even though it had "complete" membership on paper (that is, persons elected to all five positions: coordinator, vice-coordinator, secretary, treasurer, and *fiscal*[21]). Edwin López Arjeñal, the CAPS treasurer, describes this as a key organizational challenge to sustaining the water committee: "You form a committee, and in that moment the president says 'yes,' that all are going to work. [The members] work three, four, five, six months and then slowly they start to back out." As evidence of this, he explains that only two current CAPS members have been taking active responsibility for the work. From his perspective, however, "you have to take the lead," reflecting not only his willingness, but also his general sense of responsibility, to step up to the tasks that fall to elected CAPS members. Miguel Ángel demonstrates a similar commitment as a community leader when he asserts, "[with] or without a position [on the CAPS] I'm going to work" (interview 3/2/10). Even though Edwin emphasizes that "it's one or two who remain at the front" of the CAPS, the water management taking place in La Reina has demonstrated the importance of finding solutions and making decisions that support sustaining water flows to residents. With water flows constituting the deepest source of a CAPS'

legitimacy, the ability of two active members to sustain the CAPS allows the organization to survive and remain legitimate in residents' eyes—even though it is fundamentally weak in terms of elected membership.

Community-wide assemblies also enable the CAPS to draw upon their local authority to implement conflict-resolution mechanisms (CPR DP 6). These assemblies constitute processes by which residents can *reclamar*, or make demands on the CAPS. Reasons for doing so may include de facto exclusion from water access because of how the resource reaches, or fails to reach, a particular household, despite being connected to the system. The community of El Naranjo, San Ramón, currently faces the challenge of a deteriorating system coupled with a growing population: with leaks contributing to significant water loss and the addition of seventeen household connections since the system was constructed in 1999, some residents are not getting a regular water supply. During a community assembly, CAPS members contested paying their ten *córdobas* a month if their service was limited in this way (meeting notes, El Naranjo, 3/1/10). Although the CAPS may struggle to garner the levels of participation they desire—and that their by-laws mandate—the holding of community assemblies as forums to air residents' concerns and problem solve serves as a regularized assertion of the CAPS' local authority. Certainly, the CAPS' future legitimacy will depend upon their ability to rectify the situation and enable more consistent and equitable access to residents. Broadly speaking, however, attendance at and participation within assemblies serve as windows of insight into the local legitimacy of a CAPS.

ECOLOGICAL AND ENVIRONMENTAL CHALLENGES & RESPONSES

Water resources, including rivers, lakes and lagoons, constitute a striking ten percent of Nicaragua's surface area. The country has high annual rainfall and twenty-one watersheds, eight of which drain to the Pacific side of the country, where the population is concentrated (interview, Isaís Montoya, INETER, Managua, 11/25/09). When asked about the levels of water access in the country, INAA's Gilberto Arauz responds that "Here in the country, nobody has died of thirst. This means that everyone has access to water…The advantage here is that we have a lot of rivers and water basins. [The water] is contaminated, but we have access" (interview, Managua, 6/2/10). Miguel Ángel of La Reina expresses a similar assessment, from his vantage point as a CAPS member: "We have water in this country. We're rich in water, but the water we have that's not contaminated is at risk of being contaminated. This is what we're working on, protecting the waters and cleaning the water that's contaminated" (interview, San Ramón, 12/1/09). As these two key informants suggest, despite having significant surface and subterraneous water availability, very little of Nicaragua's water is potable because of contamination. This problem is both human-induced and naturally-occurring. For instance, naturally-occurring contaminants, which may enter a water supply when wells are dug, include lead and arsenic. A 2003 investigation conducted by UNICEF with funding from the Swiss government concluded that nationally an estimated 5.7% of water sources have levels of arsenic higher than those deemed safe for human consumption (Barrangne-Bigot

2004). The CAPS must face these issues of water quality, in addition to other ecological and environmental challenges, in their local resource management.

The CAPS studied demonstrate basic practices to address local water quality and sanitation issues. They do so through community-based health and sanitation education, as well as clean-ups around the water source and in the community more broadly. The DPs do not capture these social and relational dimensions of local water management. Yet, the education and outreach the CAPS carry out with residents, and their engaging of residents in management activities, is part and parcel of their resource management and leadership that confers respect and legitimacy. The CAPS' and communities' implementation of improved water sources (i.e. water from new systems with at least a minimal process of water purification) contributes to significantly reduced instances of sickness among residents. CAPS coordinator Justo Pastor Flores from the community of Santa Fe La Peña, Muy Muy, explained that before his community's potable water system was constructed in 2005 "[the] people in this community were living a crisis, drinking all of their water from the rivers. It came through really contaminated, both from animals as well as from the [wastes of the] same people" (interview, Santa Fe La Peña, 8/22/08). Justo explains the effects of local water management on health in the community:

> We chlorinate the water, so it comes a bit more treated…Therefore, illnesses in children, in the elderly, are avoided some…These are changes that are reducing little by little [the incidence of] illness. We don't want to say entirely, but on average [there is] less.

Improved water quality, and hence health, results in large part from the basic filtration systems that the CAPS and communities include in the construction of water

systems, as well as to the ongoing educational work around sanitation that CAPS promote.

One environmental challenge that is difficult to address at a local scale alone, however, is that of not knowing what toxins exist in the "local" drinking water. Indeed, the ecological and environmental challenges communities face in local water management points to the need to move beyond a focus on institutional robustness towards more encompassing theoretical frameworks for understanding commons management. In Nicaragua, since state officials do not have a close or consistent participation in rural water management, they may be of little help in regard determining the cleanliness of drinking water. Moreover, when state officials do undertake studies to obtain water quality data, this information may not be leveraged in a way that allows addressing water quality issues. An UMAS staff member in the municipality of Pueblo Nuevo, Estelí, recounts with frustration the lack of transparency and accountability on the part of ENACAL [the state water company] technicians who refused to release water test results to the local government:

> One time I questioned a person who worked at ENACAL because they weren't sharing the results [of the water tests]. He told me, 'look, I'm going to tell you confidentially, what's going is that there are some wells that are contaminated with arsenic and other heavy metals, but for ENACAL it's not advantageous [*conveniente*] to say the water is not of proper quality because that turns into a problem for us. We [would] have to dig new wells, so it's better to manage the information like this.' But which [wells] they are and where, that information we [in the local government] don't know. They [ENACAL] have done the water analysis, but not even with MINSA [the Ministry of Health] have they shared it. (Interview, Pueblo Nuevo, 2/4/10)

Without adequate water tests as systems are constructed, or full disclosure of completed tests, rural residents are at serious risk for poisoning from arsenic and

other contaminants. In part, this particular story reflects an illogical division of labor within the sector, with ENACAL equipped to conduct testing for arsenic while the Ministry of Health focuses on fecal coliform detection. This account also speaks to a disconcerting degree of both lack of transparency and institutional corruption: state agency staff are not fulfilling their legally prescribed roles in the sector in order to "cut costs," and they are jeopardizing residents' health as a result. Importantly, the state's ineffectiveness in this regard—and blatant shirking of formal responsibilities—contributes to the CAPS' multiple sources of legitimacy vis-à-vis local residents. Fulfilling "state-like" roles in the sector—water management and provision as well as environmental regulation and conservation—augments the CAPS legitimacy at the same time that it undermines that of state actors.

CAPS and rural communities also must confront dramatic weather patterns: both droughts and heavy rains affect water availability as well as the ability to plant and harvest key staple crops like beans.[22] These kinds of harsh environmental conditions compromise the CAPS' water provision and test their financial and technical capacities to cope with crises. According to a study carried out on the UNOM decentralization process in Matagalpa and Jinotega, almost a third (31%) of all CAPS interviewed reported that "generally in the summer there is not sufficient water to satisfy community demand" (ENACAL 2003, no page). Importantly, then, livelihoods are impacted by how rain, or lack of it, can limit the flow of drinkable water. In February of 2010, an article in the national newspaper *La Prensa* ran with the headline "Water committees with less work due to drought" (Pérez 2010). This

particular drought proved severe enough to nearly dry up the water available to some communities, in effect, leaving the CAPS without the means to work as water service providers.

Too much rain may also prove to be detrimental to rural communities' water sources and systems. Flooding may wipe out or severely damage existing water systems, or compromise the potability of drinking water. A storm in late 2010 severely damaged the Molino Sur gravity-fed water system, rendering it useless. The CAPS dug into their savings of over 84,000 *córdobas* (US $4,000) to help develop a local well for the community's use, which not only left the CAPS with a less robust monetary safety net in the short term, but also required additional financial support from the local government. The government contributed 130,000 of the 170,000 *córdobas* total that were required (of which the community paid the balance of 40,000 *córdobas*). This money went towards purchasing rights to a different water source in the community; how to rehabilitate the system with the existing well has yet to be determined. Even with strong financial and organizational skills, the CAPS are vulnerable to emergency situations for which they are responsible for navigating, though not financially secure enough to weather without worry and without some outside financial support.

The relationship of state actors to environmentally degrading processes suggests the need to rethink the DPs—and CPR theory more broadly—in regard to CPR-state relations. A more nuanced approach to this relationship can account for the ways the role of the state actors is significantly more varied and complex than

depicted. Beyond merely recognizing local actors "right" to organize—or, stated differently, not impeding local organizing—state actors may actively support commons management or undermine it in different ways (see Fuys and Dohrn 2010 and Chapters 1 and 2). The latter was observed in regard to the Nicaraguan state's role in environmental degradation affecting rural communities. Many of those CAPS interviewed and observed view the state as facilitating much of the human-induced environmental destruction that plagues their communities and surroundings. Notably, some CAPS expressed frustration their efforts towards environmental protection and conservation may be offset by the state's contribution to environmental degradation. For example, while small-scale campesinos make efforts to reforest, businesses get permission to continue deforesting for the purpose of expanding agricultural frontiers. A CAPS member from El Rama (R.A.A.S.) lamented the ongoing deforestation ("we no longer have forest frontiers") and river water contamination near where he lives because of the mines in the neighboring department of Chontales (Mina "La Libertad" and "Santo Domingo"). He asserts that Nicaragua's Cerro Silva (Silver Hill), one of the country's natural reserves—and hence supposedly "protected"—areas, is still being deforested (meeting notes, Managua, 11/5/09).[23] In the same National CAPS Network meeting in November of 2009, a CAPS member conveyed his perception of "little concern from those governing this country" in regard to environmental protection and conservation. Another referred to the problem of deforestation as "a policy problem of the government that affects us [as CAPS and rural communities] in these small cases," suggesting the complicity of the *Ministerio*

Agropecuario y Forestal (Ministry of Farming, Livestock, and Forests, or MAGFOR) through directly approving and/or neglecting to enforce restrictions on logging and land clearing. CAPS members also noted ongoing contamination of fresh water sources from mining—activity that implicates the *Ministerio de Energía y Minas* (Ministry of Energy and Mines, or MINAS). Thus, the CAPS interviewed and observed express awareness of how rural communities oftentimes bear the burden of decisions (and non-decision) of authorities at other scales.

Unless pressured, state actors are unlikely to intervene to ameliorate or help reverse many of the environmentally destructive processes that rural communities experience. Nor are local governmental officials or state agencies necessarily well-equipped to support communities during crises. In 1998, many of Nicaragua's rural communities were hit hard by destructive Hurricane Mitch. The CAPS in La Reina, San Ramón, received none of the local government support they requested, an outcome Miguel Ángel attributes to the *alcaldía* (local government) not having an interest in "direct support for water and sanitation." Community members spent three days repairing a damaged water system. The community's rebuilding of the water system after Hurricane Mitch speaks to the CAPS' and community members' technical capacities as well as their willingness to invest personally in the water project. Moreover, the state's active role in environmental degradation contributes to undermining the authority and legitimacy of state actors and augmenting that of those local actors seeking to slow or halt destructive processes.

While the CAPS have certain expectations—and at times merely hopes—that government will work in function of implementing environmental regulations, environmental protection efforts at the community level falls to the CAPS. In regard to ongoing deforestation, CAPS member Antonio Roque from Campasagüe 1 (Muy Muy) asserts that

> Ten years ago [in our region] there was more forest; now there's less and the water tables are lowering. As long as we as inhabitants here don't come to an agreement, no government, no mayor is going be concerned about us. No one is going to worry about us. It's us who have to feel this necessity. (Interview, 8/22/08)

Again, their ability to take measures towards environmental protection and conservation—at times against tremendous odds—has bolstered their legitimacy in the eyes of local populations as well as those of public officials where efforts are visible or have been noted. Several CAPS interviewed work to reforest around water storage tanks to produce shade and to promote better holding of underground water. In El Zapote, the CAPS has used its savings generated by user fees to purchase fifteen *manzanas*, or almost 26 acres, of forest land as a way to prevent ongoing deforestation and erosion and hence to curb lowering water tables. These kinds of environmental "solutions" may intersect with financial problem-solving, as well: one community in Sébaco has reforested around their water source with fruit trees; the CAPS then sells this fruit locally to raise money for the committee (Baltodano interview, 2/3/10). Some CAPS members even emphasize how they can play a role in environmental stewardship that extra-local actors cannot. While noting the responsibility the state has to citizens to provide water access, and its greater financial

capacity than rural residents, one CAPS member proclaimed that CAPS can give an "immediate response to water crises…How can the government give the same response?" (interview, Managua, 11/5/09). Overall, the inability of rural residents to depend upon state agencies and local government for financial or technical support increases the relative legitimacy of local institutions who do take productive measures to navigate and ameliorate difficult environmental circumstances.

Local government officials themselves may promote the idea that the CAPS are better suited to do this work. The local government water and sanitation *técnico* of San Ramón, Amílcar Ruíz Solbarvarro, asserts that "the water committees have the best opportunities to work protecting the environment." He believes the CAPS are better posed than non-community-based actors to be environmental stewards because

> [having] a water system, the water sources, this permits you, from the micro-basins, to maintain the water sources, protect those areas, reforest, investigate the areas where the tanks are located….having water systems permits you to work towards improving climactic conditions, [towards] bettering the environment in your community. (Interview, San Ramón, 2/26/10)

Scholars have cautioned against romanticizing rural residents' knowledge, "wisdom" and choices in regard to "local" environmental stewardship (see, for example, Agrawal and Gibson 2001; Redford 1991). However, these perceptions of rural residents' aptness and ability to act as local environmental stewards are in large part grounded in the CAPS' *experience* of "*dando respuesta*," or responding to communities' water needs, in the absence of an effective response from external actors—including those who have a direct role in creating and/or exacerbating environmental degradation. In fact, a national deputy said as much at a 2007 water

forum to an audience of CAPS and NGOs (discussed further below). The official stressed that local resource managers (including the CAPS and rural residents) have to "care for your resources here" because no one else will arrive to do so. He indicated that this was an issue of lack of effective state regulation as well: "make the denouncement" (*póngale la denuncia*), he instructed, if witness to a breach of environmental protection laws (meeting notes, UNAN Matagalpa, 9/7/07). Moreover, much scholarship supports the general proposition that residents can carry out certain functions more effectively, and at a lower cost, than external agents (like government), including those of regulation and monitoring (see, for example Singleton 2000; Singleton 2001). Perhaps not surprisingly then, communities' internal capacities to confront problems are often greater than those of local governments, a circumstance that has given the CAPS a "public" legitimacy and authority at the community level as well as vis-à-vis the state.

Political and Legal Challenges & Responses

As one water sector report explained, "Once the [water] systems are constructed, they are handed over the CAPS, who, lacking legal status, legally cannot receive them" (Government of Nicaragua and PAHO 2004, 100). As of 2010, only a handful of CAPS had obtained some form of legal status as associations or cooperatives, despite the extensive water provision these carry out at a national scale.[24] While not codified in national law until very recently (see below), the CAPS have enjoyed the right to organize at the community level for water management and

provision (DP 7). The distinction between the "right to organize" and *legal rights* that confer official government recognition matter for CPIs, as a lack of legal standing "creates the difficulty for resource users to defend their rights to the commons" (Fuys and Dohrn 2010, 2010). CAPS interviewed and observed encountered this difficulty in several ways.

The CAPS' property "rights," for example, must oftentimes be grounded in a locally-recognized legitimacy, rather than formal property rights conferred by the state. Issues of legality affect a community's ability to negotiate access to water sources or the land on which system infrastructure needs to be built or pass through—or to maintain this. Even as an increasing number of rural communities manage water systems, the state has not guaranteed any form of collective rights at the community level to facilitate water provision and management of water infrastructure.[25] Many CAPS, and of course system beneficiaries, thus depend upon very tenuous land "rights" that they achieve through negotiations with land owners in their own or neighboring communities.[26] In La Reina, the CAPS depends upon the good will of a local cooperative to uphold the non-legally binding agreement to concede access to the water source to the community that the former had made with a previous landowner. Other communities have not been as fortunate in this regard.

Residents will often work to purchase or negotiate rights as well. Striving to purchase legal rights to a water source or land in their communities are legal endeavors which have had the effect of deepening the organizational strength (and local legitimacy) of the CAPS. In San Esteban 2, community members amassed

10,000 *córdobas* to purchase access to the water source upon which they currently depend; a different resident in the same community donated land where the water storage tank was built. Some communities negotiate access to private land—to allow water pipes to pass over, for instance—by agreeing not to charge the owner for his water service. Contrastingly, the El Zapote CAPS in San Dionisio used community donations to ensure that water piping was laid on public, versus private, property, thus avoiding sometimes tricky negotiations with land owners. Furthermore, this committee has managed to obtain legal papers for access to the water sources upon which the community depends. Thus, despite the lack of legality or formal "rights," CAPS are typically able to secure de facto access to a water source. However, this is an ad hoc tendency, with little intervention of the local government. Overall, their "unofficial" status has left the CAPS and their water systems legally vulnerable, at times underfunded, as well as largely disenfranchised as social organizations.

The CAPS' lack of legal status also directly impacts their ability to manage and safeguard financial resources. A CAPS member from the community of Compasagüe 2 explains the financial limitations that result from not having formal recognition from either the central government: "Legally we can't have 500 *córdobas* collected in the fund and go to open a savings account at a bank, because we don't have legal status [*personería jurídica*]. This challenge confronts over one million, 200 thousand people" (interview, 8/22/08) (interview, 8/21/08).[27] Some CAPS members open personal bank accounts, which entail potential problems of transparency in management and use of the committees' funds. Others reported stolen

or nonauthorized use the CAPS' funds, as was recounted in the case of the Molino Sur CAPS. The authorization to open a bank account in the name of a CAPS became an important provision in recently passed legislation recognizing the CAPS (see below), as did this legislation's implications in regard to enabling formally-registered CAPS to receive funding directly from donors (rather than via the NGOs with whom they might work).

The CAPS' lack of legal rights as community organizations—and their legal "invisibility" given their absence from laws governing the sector—has been a major factor contributing to their *political* invisibility beyond the community level. As CAPS members frequently expressed in interviews and meetings, "*Somos de hecho, no de derecho*," or "We're de facto, without [legal] rights." The CAPS Compasagüe 1 coordinator lamented, "Now as CAPS we're not recognized. We're nobodies" (interview, 8/22/08). Part of this sentiment was confirmed in the wake of the General Water Law's (Law 620) passing in 2007. As Article 1 of the law articulates, the principle objective of Law 620 was the establishment of

> a legal institutional framework for the administration, conservation, development, use and sustainable, equitable, and preserving—in regard to both quantity and quality—exploitation of all existing water resources in the country…guaranteeing at the same time the protection of other natural resources, ecosystems, and the environment.[28]

As this and the preceding sections discuss, the CAPS play essential roles at the local level in each of these areas. Yet, not only was there very little participation of rural water users' in the consultations, but also the law made only indirect mention of the CAPS, those organizations who had arguably been the most important actors in rural

water management for several decades.[29] Although Law 620 became the subject of extensive state-society and NGO-society consultations in the early to mid-2000s, the law that passed in 2007 in effect "hid the CAPS," as one key informant expressed (interview, Eduardo Zamora, SIMAS, Managua, 8/18/08).

The CAPS' glaring absence from the law, except for a brief mention in the Regulations (published in November of 2007),[30] sends the message (and likely reflects) that the CAPS were an afterthought of lawmakers as they worked to modify the legal framework for the water sector. In fact, the CAPS' exclusion from both the law's consultations and its final content reflects non-recognition of their actual roles and capacities as resource managers. This exclusion from policy formation—and ultimate absence from Law 620—moreover is indicative of the CAPS' lack of political presence and voice to ensure their inclusion in the process of reshaping the institutionalization of the sector.

CONCLUSION: WATER PROVISION AND THE LEGITIMACY OF COMMON PROPERTY INSTITUTIONS

The experiences of the above-examined communities reflect challenges the CAPS encounter in their perennial water provision and management, in addition to the many ways these resource managers—and community organizers—successfully problem solve and innovate to ensure water flows to residents. Because the CAPS' empowerment as water users' associations has had only an indirect relation to formal government policies, which have tended to be both incomplete and urban-centered over time, their decision-making authority and capacities as resource managers

constitute an "organic empowerment." This empowerment is derived from the complex technical, financial, organizational, environmental and legal/political responsibilities and practices they undertake in the rural water and sanitation sector. While challenges within these realms sometimes constitute effective barriers to the efficacy of local water provision, the CAPS demonstrate both skill and innovation as they navigate the terrain of local resource governance. The water provision they facilitate and ensure oftentimes belies the extreme difficulties they confront in this endeavor.

Notably, the CAPS' independence from state actors in their day-to-day operation has provided both the imperative and the space to deepen their capacities as resource managers.[31] Although neither state recognition nor legal codification serve as sources of this empowerment and/or legitimacy in the Nicaraguan case, the "state-like" *nature* of the CAPS' water provision serves to bolster the legitimacy of these institutions within their communities. Rural residents are intimate observers, in addition to beneficiaries, of the CAPS' work, and their willingness to contribute to the functioning of water systems—through paying user fees, attending community assemblies, partaking in routine (and non-routine) system maintenance, etc.—is evidence of the CAPS' local authority and legitimacy as those ensuring water access.

Legitimacy as a socio-political dimension of functioning CPRs has received little attention in the scholarship. Yet, understanding the legitimacy characterizing this kind of work has important implications not only for how the day-to-day livelihood needs of residents in countries and regions across the global South are met.

This particular focus on legitimacy also has the potential to lend insight into how this quality comes to bear on CPI interactions with actors at *other* political and geographic scales. As subsequent chapters demonstrate, the capacities and the social legitimacy resulting from the CAPS' work as CPIs come to bear on their interactions with actors and institutions at other scales, including lawmakers, local government officials, and state agencies. Crucially, locally-generated legitimacy contributes to the ability of local resource managers to "scale up" politically as effective and credible collective actors at higher political scales.

The CAPS' quest for legal recognition, official autonomy, and political representation has required that they become politically visible and establish a presence at other scales. As Chapters 4 and 5 will highlight, the CAPS have leveraged their local knowledge, experiences, and capacities in their interactions with authorities at the municipal and national levels as part of their strategy for political and legal recognition. Nevertheless, the CAPS' successful mobilization and assertion their "organic empowerment" across political scales also depends much on their relationship to extralocal "allies." Domestic and international NGOs and multi-lateral organizations have played crucial roles in regard to the CAPS' collective identity formation, interest articulation, political savvy, and financial resources. These factors, all contributing to the CAPS' effective interventions in formal resource governance, are discussed at length in the following chapter.

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[1] "Los CAPS son las piedras angulares de los sistemas de agua. Las instituciones [del estado] no los apoyan… pero de una forma u otra están manteniendo sus sistemas."
[2] "¿Y a cuánto beneficiamos esos 5 mil comités?…A más de un millón de Nicaragüenses. Lo que nosotros hemos hecho, sin ayuda del gobierno, es dar respuesta."

[3] Data in this chapter referring to "improved" water access include water accessed via the following technologies: piped water into individual households (via gravity-fed or electrically pumped systems), public taps serving multiple households (via gravity-fed or electrically pumped systems), public wells (hand dug and drilled), and household wells (hand dug and drilled) (RRAS-CA 1998, 35).
[4] In technical terms, the "resources" managed within common property regimes are primarily "common-pool," meaning they are those that present potential problems of exclusion and subtractability. The problem of exclusion describes how the physical characteristics of the resource make regulating or controlling access difficult or costly. The problem of subtractability describes how one person's use "subtracts" from the availability of the resource for the next user (Bromley 1992, Ostrom 1990, McKean 2000, Feeny et al. 1990, McKean 2000, Wade 1978).
[5] "Any activity that leads to increased access and control over resources and to acquisition of new skills and confidence, so that people are enabled to initiate action on their own behalf and acquire leadership, is an empowering activity" (Narayan 1994, 10).
[6] As defined by Ribot (2002), "Decentralization takes place when a central government formally transfers powers to actors and institutions at lower levels in a political-administrative and territorial hierarchy" (3). As noted in Chapter 1, even when scholars expand their frame to encompass nonstate actors like traditional authorities and community groups at the local level (see, for example, Agrawal and Ribot 1999; Ribot 2003; Ribot 1999), they are still fundamentally concerned with *formal* granting of authority to subnational actors. The broader lens adopted in this study reveals that non-legalized, non-state conferred control over valuable resources like water constitutes a form of empowerment that ultimately may *contribute* to formal legal prerogatives and state recognition—even though initially this empowerment has developed outside of formal legal or political frameworks.
[7] These communities were in the municipalities of El Tuma-La Dalia, Esquipulas, Jinotega, Matagalpa, Muy Muy, Nueva Segovia, Pueblo Nuevo, San Dionisio, San Ramón, and Sébaco (see Appendix A, "Key Informants").
[8] Much research within the field of political ecology has demonstrated it can be taken for granted that these are not distinct, but rather overlapping and mutually constitutive, realms—a finding also demonstrated in the CAPS' explanations of the challenges they confront. However, for the purposes of simplification they are here presented as analytically distinct domains of governance.
[9] "The term I use to refer to those who arrange for the provision of a CPR is 'providers.' I use the term 'producer' to refer to anyone who actually constructs, repairs, or takes actors that ensure the long-term sustenance of the resource system itself. Frequently, providers and producers are the same individuals, but they do not have to be" (Ostrom 1990, 31).
[10] As noted in Chapter 1, Rosibel Kreimann's (2009) research concluded that those more rural and geographically isolated CAPS tend to be those with *greater* capacities (compared to peri-urban, or semi-rural, communities) because they have come *not* to depend on the support of state actors, while those closer to urban centers expect the state to invest in water access. This study corroborates her general findings in regard to state-society relations and the effects of these on capacity building, even though it cannot make explicit comparison between peri-urban, semi-rural and rural areas.
[11] Community-level interviews and observations corroborate organizations' recognition that water systems have a *vida útil* of only fifteen to twenty years. Like La Reina, many communities find themselves needing to replace large system components, like pipes or water pumps. Moreover, in many rural communities, it not unusual to find more than one "potable" water system—old, defunct wells in addition to a newer, gravity-fed system, or no longer utilized "public" (and shared) water posts in addition to functioning "private" household taps (evidence of the ongoing investment of domestic NGOs and international organizations in the water sector). This project cannot draw a generalized conclusion as to the logic behind this continued building of new systems in rural areas, but of the communities visited that fit this description, there were two noted explanations: in some cases, infrastructure had become defunct in a functional sense, hence the justification for pursuing another system, and in others, the system was "additional" in the sense that the existing system was functional, but the community was to receive an "upgrade" in regard to access. This most often meant the

construction and addition of in-home (or to-home) piping, to replace use of a public well or public taps.

[12] Promotion of the Municipal Units of Water and Sanitation (UMAS) began in 2007 as part of the Emergency Social Fund's new strategy for the water sector. The UMAS fulfill a role similar to those of the UNOM; in some cases, these may be the same individuals with a new title, as the previous chapter noted.

[13] In one Kenyan district, Narayan found that the local government "instituted a legal transfer of hand pump ownership to communities when they found that, *despite training, communities expected the government to repair pumps*" (Narayan 1994, 11). This is relevant to the Nicaraguan case in that it suggests that where governments or other "external" actors have helped to implement projects, there may be an initial expectation on the part of beneficiaries (i.e. rural residents) that continued support will be forthcoming.

[14] Relatedly, a CAPS member from Muy Muy emphasized a desire for support, but not for a mere "gift": "We don't want [the government and NGOs] just to give us things. Because never, of all of us CAPS who are organized, do we want them to give away things to us. We want them to help us" (interview, CAPS Compasagüe 2, Muy Muy, 8/21/08).

[15] Fortunately, after requesting assistance from CARE International in 2010, the community achieved approval for a renovation of the water system in 2011—an investment that collected users' fees alone could not support.

[16] This commitment to meeting basic needs in many cases also reflects the prioritization of community over individual needs and thus stands in contrast to liberal notions of equity that inform state-supported systems of individual property and resource rights and market-guided systems of resource allocation (see Anderson 1994; Boelens 2009). The CAPS' rules do not always support affordable access to water, however. A staff member a Matagalpa NGO, PRODESSA, cited a CAPS whose by-laws stipulate a payment of $200 to gain access to the community's water source, a provision which he claims limits access to this necessary resource (interview, Matagalpa, 8/22/08).

[17] Some NGOs caution the CAPS they work with against the using the funds generated from users' tariffs for any other purpose than investments into the water system. Mirna Rojas says that ADEMNORTE "orients" CAPS to consider spending to receive further technical assistance or trainings related to water provision. The money should not be spent for other purposes, in part because the safety net that such funds provide: "It's not right because when an emergency arises they don't have a means to respond." CAPS are encouraged to save the funds accumulated from the paying of tariffs for emergencies, like repairs to pipes (Rojas interview, 4/10/10). The financial situation and spending strategies of individual CAPS would have to be further investigated to determine whether or not these compromise current or future water provision work.

[18] This finding is similar to that of Tendler et al. (1983) in their research on Bolivian cooperatives: Although "[leadership] and management positions usually rotated among the same few persons," hence not conforming to researchers' "vision of coops as participatory and democratic" (5), these organizations may still be highly successful. Tendler et al. found that cooperatives with exclusionary and non-participatory decision-making structures still could provide members and even non-members with many benefits, including better prices for goods, lower transportation costs, and availability of credit.

[19] José Francisco says the water was shut off for all residents for 3-4 days to send a message.

[20] "It is not whether it is possible to mobilize everyone who would be willing to be mobilized. It is not even whether all the members of some organization or social network can be mobilized. Rather, the issue is whether there is some social mechanism that connects enough people who have the appropriate interests and resources so that they can act. It is where there is an organization or social network that has a subset of individuals who are interested and resourceful enough to provide the good when they act in concert and whether they have sufficient social organization among themselves to act together" (Marwell and Oliver 1993, 54).

[21] *Fiscal* refers to the person in charge of general oversight to ensure transparent functioning of the committee, use of funds, etc. Some committees incorporate other positions as well, including individuals in charge or environment (in some cases, "reforestation") and public relations.
[22] An estimated 92.3% of rural Nicaraguan households carry out some form of productive agricultural or forest-based activity (Gómez, Ravnborg, and Rivas 2007).
[23] Fuys and Dohrn found four of forty cases of local CPRs wherein "state-led conservation efforts have increased conflicts over natural resources and undermined existing systems to manage resources as common property, such as through the creation of national parks and forest reserves" (203).
[24] COSUDE's Carmen Pong expressed that the CAPS have "always" had problems with obtaining a formal legal status because "the country has difficult legislation as regards forming community or civil society organizations" (interview, Managua, 11/19/09).
[25] As Boelens articulates, "The flip-side of the recognition question is the well-known danger of curtailing local autonomy, chaining local rights groups to new strict rules and boxing them into a generalizing State law system" (Boelens 2009, 317).
[26] It is important to note that where CAPS, and hence water systems, exist, there has already been a negotiated use of land and/or a water supply among local residents. Failure to secure access to an existing water source, or to land on which a system must be constructed to feasibly and effectively serve a community, in many cases prohibits moving forward with a water project, even in cases where sufficient financial investment were attainable. The tenuousness of access to water or land if no legal documents have been signed by parties means that in some cases access can be reversed or challenged, however.
[27] Here the CAPS member cites the number of estimated rural beneficiaries nationally of CAPS-managed water systems, per documentation in the SINAS (see above).
[28] "…el marco jurídico institucional para la administración, conservación, desarrollo, uso, aprovechamiento sostenible, equitativo y de preservación en cantidad y calidad de todos los recursos hídricos existentes en el país…garantizando a su vez la protección de los demás recursos naturales, los ecosistemas y el ambiente."
[29] A limited number of CAPS from the department of Matagalpa with ties to rural development NGOs achieved participation in protests and NGO-led educational forums around different versions of a General Water Law that were to be considered by the National Assembly. Participation in this movement constituted the first instance of collective action beyond the community (and/or municipal level) as "CAPS" for CAPS members (see Chapter 4).
[30] Article 75 of Law 620's Regulations states, "In rural communities where the service provider [ENACAL] does not have coverage, systems will be administered by the community, by the Potable Water Committees, who will guarantee service to the community, all below the supervision and control of ENACAL." ["En las comunidades rurales donde el prestador de los servicios no tiene cobertura, los sistemas serán administrados por la comunidad, conformando para ello los Comités de Agua Potable, que garantizarán el servicio a la comunidad, todo bajo la supervisión y control de ENACAL."]
[31] This independent day-to-day work and sense of ownership empowers the CAPS to make legitimate claims over rural water systems when they do confront state authorities (Romano 2012). Certainly, even though this dissertation presents the argument that weak state capacity left the political space for the CAPS and rural communities to develop quite significant capacities in the rural water sector, improved state capacities would be a boon to the sector—including to the CAPS—under certain circumstances. For example, increased state capacity, in theory, could mean that the CAPS have access to greater financial resources and technical assistance, improved enforcement of legislation affecting local resource management and environmental stewardship, as well as improved and more accessible conflict resolution mechanisms.

CHAPTER FOUR:

EXTRALOCAL ALLIES: BRIDGING COMMUNITY, CLASS, AND PARTY ACROSS SCALES

ODESAR [the Organization for Rural and Urban Economic and Social Development] has always accompanied us, trained us, mobilized us.[1]

- José Francisco Salgado, CAPS El Zapote, San Dionisio, 5/19/10

Just three days after the General Water Law's (Law 620) passing in 2007, national Sandinista deputies presented an inchoate draft of a "Special CAPS Law" to dozens of Potable Water and Sanitation Committees (CAPS), local government officials, and NGO representatives at a 2007 water forum, "A Toast to Life," in Matagalpa ("Un Brindis para la Vida," UNAN-Regional University Center, Matagalpa, 9/7/07). On October 24, 2008, a bill was introduced for debate in the National Assembly which would give legal status to the CAPS after a process of registering with the government. Much like Law 620, the Special Law of the Potable Water and Sanitation Committees, or Law 722, remained in flux for many months before going to a vote in May of 2010. It passed unanimously.[2]

Importantly, the legal recognition that Law 722 bestows constitutes only one facet of how the CAPS have become, and are becoming, more politically and legally visible to actors and institutions "beyond" the community level. The question becomes *how* the CAPS' experiences and capacities as resource managers, discussed in the previous chapter, have come to bear on their relationship to the state as they

make claims to formal participation in resource governance. As demonstrated, the water management and provision capacities of CAPS and the extent to which their capacities exceed and are compared to those of the state have contributed to the legitimacy of these resource managers in the eyes of water system beneficiaries. However, the CAPS' provision of a public service and fulfilling of state-like roles—and in legal terms, actual state roles—and the public legitimacy this confers does not ensure the CAPS' establishment of a public *presence* and effective negotiations with state actors. In fact, the CAPS' contributions to shaping Law 722 *prior to* its passing required that these rural resource managers be taken into account as stakeholders by public officials and hence establish a minimal presence in the public sphere. The CAPS' development of a public presence and engagement with authorities, processes described within this chapter, have required collective action across communities—specifically, collective action that resists state efforts at cooptation.

This chapter argues that the CAPS' horizontal and vertical "scaling" to form municipal, departmental, and national level "CAPS networks" (see below) owes in large part to their relationship to extralocal allies, or those non-local domestic and international actors and agencies collaborating with the CAPS. In particular, extralocal allies have been of critical importance to the CAPS' ability to construct a pluralistic base and preserve their autonomy from political parties and state actors as they pursue formal recognition and greater access to public resources. Hence, whereas the prior chapter looked within and among the CAPS to examine their capacities, this chapter shifts the focus to explore the increasingly dense connections

among CAPS and between CAPS and other actors as they pursue collective goals across scales. The CAPS networks involve new connections not only among water committees themselves, but also new and evolving relationships with extralocal actors like NGOs, international and multilateral organizations, and in some cases, government officials. Certainly, the CAPS' "organic empowerment" and the legitimacy this confers support their ability to pursue collective goals at higher political and broader geographic scales.[3] However, it is the explicitly *multi-sectoral* nature of collective action that enables the mobility and effective political interventions of the CAPS as rural social actors.

As instances of transcommunity collaboration across rural-urban and other sectoral divides, the CAPS networks are engendering new bonding and bridging social capital. Bridging social capital, or those connections, networks, and relationships across difference—be it socio-economic, sectoral, or class-based (Anderson 2010; Woolcock and Narayan 2000; Narayan 1999; Granovetter 1983)—contrasts with "bonding" social capital, or "relations among family members, close friends and neighbors" (Woolcock 2001, 13). While bonding social capital has been described as having the potential to "become a basis for the pursuit of narrow sectarian interests" (Woolcock and Narayan 2000, 230), bridging social capital has been found to facilitate entry into new political and economic arenas because of the "cross-cutting ties" (Narayan 1999) it entails.[4] Indeed, much of the scholarship suggests that there are "risks" that accompany strong intracommunity ties in the absence of ties that connect people to *different* groups (see, for example, Granovetter

1973; Woolcock and Narayan 2000; Adler and Kwon 2002; Narayan 1999). As Adler and Kwon argue, one such risk is that "high internal linkages combined with low external linkages will create a situation where internal solidarity is likely to be detrimental to the actors' integration into a broader whole" (Adler and Kwon 2002, 32). Limited social and geographic mobility of bonded social actors, for example, may prevent broader political participation and networking. Yet, opportunities for people in bonded social groups to connect to socially different actors and obtain access to greater and/or different resources can serve as an antidote to insularity and disconnection from "broader wholes."

An important question which arises, then, is under what conditions does bonding social capital, and the positive synergies among the people who share it, transcend the geographic, social, and political boundaries of these "tight-knit" groups (Adler and Kwon 2002)? This chapter makes two arguments regarding social capital and collective action. First, I contend that bonding social capital may come to *support* networking and collective action at other scales. While bonding social capital's strong ties may "[breed] local cohesion, lead[ing] to overall fragmentation" (Granovetter 1973, 1378), they also form the basis for social solidarities (Narayan 2002, 13). As Chapter 3 demonstrates, the CAPS' work at the community level produces "strong horizontal ties" (Woolcock and Narayan 2000, 230) that translate into shared bases for identity and goals. This "horizontally scaled" social capital also contributes to the effectiveness of bonded actors' political interventions. As Fox and Gershman (2006) contend, the horizontal ties between "base groups"—in this case, between and among

CAPS from different communities and regions—"may be weaker than intragroup ties, but they play a critical role in terms of generating bargaining power vis-à-vis other actors" (209). Importantly then, the sharing of similar experiences at the grassroots become not only the basis for shared identities, goals, and objectives once previously disconnected water users' associations begin to connect via new networks. These bonded actors' political clout and effectiveness also increase as collective action occurs *across* communities, linking base groups in greater numbers. Vertical scaling of bonding social capital matters for these dynamics too. For example, CAPS members must "scale up" vertically from the community level to participate in policy advocacy and interventions at the municipal and national levels (Fox 2007; Fox 1996).[5] Hence, the CAPS' participation in new networks entails both horizontal and vertical scaling of social capital.

Second, I argue that bridging social capital facilitates the spread of bonding social capital. Much of the scholarship points to the need to consider the relationship between multiple forms of social capital, for example, in discussing the role of this resource in "outcomes" like economic productivity, political participation, and greater political bargaining power (see Woolcock 2001; Woolcock and Narayan 2000; Adler and Kwon 2002; Granovetter 1973; Narayan 1999; Fox and Gershman 2006). The present study contributes to a growing body of scholarship grounded in theories of collective action and social capital that reveals the importance of linkages among different groups and organizations in order to achieve "the ultimate value of a given form of social capital" (Adler and Kwon 2002 32). Several authors have

demonstrated, for example, how bridging between rural social actors and extralocal actors like NGOs and reformers in the state can positively impact the capacities and mobility of the former (Bebbington et al. 1993; Boelens, Getches, and Gil 2010; Boelens 2008; Fox 1996; Pretty and Ward 2001; Narayan 1999; Keck and Sikkink 1998). While these analyses have stopped short of theorizing a specific relationship between bridging and bonding, there is much evidence for the claim that locally-grounded, and oftentimes materially resource-poor, bonded actors must *bridge* with different and differently-endowed actors in order to engage in "social action that is politically and economically efficacious" (Evans 1996, 1124) or to gain "mobility" (Granovetter 1983). Ultimately, this study provides evidence that the "limits" on the potential for synergy between different actors "seem to be set less by the initial density of trust and ties at the micro level and more by the difficulties involved in 'scaling up' micro-level social capital to generate solidary ties and social action" at other scales (Evans 1996, 1124). The CAPS' organizing to form municipal and national level CAPS networks provides evidence of how bonding and bridging social capital can interact to support effective collective action at broader, more encompassing geographic and political scales. Specifically, the asymmetries—in regard to resources, experience, social class—inherent in the cross-sectoral relationships constituting the CAPS networks helps to explain the effectiveness of these in constructing a pluralistic, broad base, as well as in maintaining relative autonomy vis-à-vis the state.

The production of bridging social capital via the CAPS' new collaborations with extralocal allies also has implications for the vertical scaling of CAPS members beyond network activity at the municipal level. That is, bridging between and among CAPS and other actors at the municipal level entails processes that increase the likelihood of individuals' participation in network activities at higher (i.e. national and/or transnational) scales. In one sense, municipal-level bridging contributes to the CAPS' capacity to participate effectively in activities at higher scales and to engage authorities due to the political and legal capacity building processes occurring within them. In another sense, engagement at the municipal level increases the likelihood that a participant will "scale up" to the national level given the information and *invitations* that circulate in these municipal-level spaces. As a result, social capital begets more social capital: participation in national—and even international—forums and events, in turn, become opportunities for further bridging with diverse actors across geographic, class, social, and partisan divides. Esman and Uphoff (1984) have presented a related argument in finding that horizontal linkages between organizations have a greater effect on positive development outcomes than vertical ones, though a *combination* of both demonstrates an even higher success rate.[6] Although analytically distinct, the horizontal and vertical scaling dynamics of the CAPS networks go hand in hand towards promoting the CAPS' broad and pluralistic base, as well as political effectiveness and relative autonomy, as collective actors.

The following section provides an empirical account of the municipal and national level CAPS networks as new instances of horizontal and vertical scaling

among the CAPS and their allies. As part of this, I introduce the allies, or the key organizations that collaborate with the CAPS, that have helped to form the CAPS networks and continue to participate in them. In particular, I describe the municipal networks and their attendant allies in departments of Matagalpa and Jinotega (where the majority of this study's research was carried out), in addition to the allies and collaborative dynamics that have supported the formation of a National CAPS Network (see Table 4.1). Next, I assess how extralocal allies contribute to the construction of a pluralistic base and to the protection of the CAPS' autonomy vis-à-vis parties and state actors as these resource managers build their organizational presence at the municipal and national levels. Specifically, I argue that allies contribute to achieving this outcome in three ways. First, allies facilitate the CAPS' physical mobility, and hence their horizontal scaling as bonded social actors, a process which in turn facilitates the CAPS' political visibility and influence as a collective actor. Second, allies confer legal and political capacity building to CAPS in network spaces, strengthening their knowledge of public policies and their capacity to influence policy processes. Third, allies enable the CAPS' scaling up to access to state spaces of representation—state-society interfaces where the CAPS' knowledge and experience as resource managers, as well as their newfound legal and political knowledge, come to bear. Because allies have been integral to the emergence as well as functioning of the CAPS networks, I discuss the outcome of pluralism and autonomy in regard to allies' role in both the formation of the networks and their sustained operation at the municipal and national levels.

MULTI-SECTORAL NETWORKS ACROSS SCALES: THE CAPS NETWORKS

New CAPS networks at the municipal and national levels are serving to bridge actors and organizations across political boundaries, partisan loyalties, geographic regions, and urban and rural divides. Importantly, these sites of horizontal bridging among CAPS and their non-local supporters constitute one of the principle interfaces between the CAPS as a collective actor and other, non-local actors and institutions. Certainly, relationships between the CAPS, domestic and international NGOs, and government officials are not entirely new; they build upon historic synergies in the rural water and sanitation sector. Yet, the CAPS' networks, which began to form in 2005, represent a new kind of relationship between these community-based actors and the organizations that support them. In particular, these have become a means to advance *policy* goals, including the recognition of CAPS as rural, community-based resource managers. Their effectiveness in doing so has depended upon the resource pooling of actors with differential inputs (financial, social, and political) who commit to shared goals related to the CAPS' political recognition and greater state human and financial support for the rural water and sanitation sector. However, this coproduced collective action contrasts with the limited coproduction characterizing rural water provision historically in Nicaragua whereby NGO and/or government staff typically withdraw from "project sites," or rural communities, after construction (see Chapters 2 and 3). The following sections describe the formation of these networks, including the extralocal allies involved, at the municipal level within Matagalpa and Jinotega as

well as at the national level (see Table 5 for a summary of the allies discussed in this chapter).

TABLE 4.1: THE CAPS' EXTRALOCAL ALLIES*
Domestic Allies
• Organization for Rural and Urban Economic and Social Development (ODESAR) • La Cuculmeca • Latin American Information Service for Sustainable Agriculture (SIMAS) • Group Promoting Agroecology (GPAE) • Information and Heath Service Center (CISAS) • Association for the Development of the North (ADEMNORTE) • Coalition for the Right to Water (CODA)
International Allies
• AVINA Foundation • Fundación Ecología y Desarrollo (ECODES) • Government of Aragón, Spain • Pan-American Health Organization (PAHO) • Popular Norwegian Aid (APN) • SwissAid • United Nations Children's Fund (UNICEF) • World Bank Water and Sanitation Program (WSP)

*This table indicates those allies working with the National CAPS Network and the municipal level networks discussed in this chapter; it is not reflective of all the domestic and international organizations and agencies that have supported the CAPS' political mobilization and networking, or those who have made financial contributions to the sector over time.

As noted earlier, the impetus for the CAPS' network formation came largely from of their *exclusion* from the primarily urban-based anti-water privatization organizing of the early to mid-2000s. Although the CAPS' extralocal allies—including government officials—are in part to blame for their exclusion as rural stakeholders from the process of formulating Law 620, as the CAPS were not invited to government or civil society-led consultations of the General Water Law, the former came to play a key role in promoting the CAPS' transcommunity organizing. Staff at domestic NGOs[7]

making up the *Coalición por el Derecho al Agua* (Coalition for the Right to Water, or CODA) saw the CAPS' engagement as a timely opportunity as the coalition formed in 2005, at the height of anti-privatization organizing. Although a coalition of organizations, the CODA may also be viewed as an "ally" given the role it has played in supporting the CAPS' political advocacy. Mobilizing the CAPS would not only enhance NGO and other social movement actors' strategy to propel the passing and influence the implementation of the General Water Law. It would also serve to strengthen—and bring to light—the CAPS as community-based, materially important organizations within the water sector.

Conversations within the CODA hence led to the intentional and strategic "drawing in" of the CAPS into debates around water privatization and the legal restructuring of the sector—debates which until that moment had almost exclusively seen the participation of urban publics. One CODA member organization, the *Organización para el Desarrollo Económico y Social para el Área Urbana y Rural* (Organization for Rural and Urban Economic and Social Development, or ODESAR), began engaging the CAPS across communities in Matagalpa in the same year that the CODA formed (2005). ODESAR, which formed in 1990 with roughly twenty Sandinista-affiliated ex-mayors from the departments of Matagalpa and Jinotega (interview with Javier Mendoza ODESAR, Matagalpa, 6/21/10), has as its mission is to

> develop efforts in function of awakening the individual and collective consciousness of women and men who find themselves disadvantaged and in conditions of poverty, in order to create capacities and carry out change

> processes that incite betterment in the standard of living and practice of citizenship. (www.odesar.org)

Javier Mendoza, a staff member at ODESAR and the facilitator of the departmental CAPS network in Matagalpa (formed in 2009), summarized the decision to attempt to engage and organize the CAPS as part of the broader water-related activism taking shape:

> We [in ODESAR] talked about organizing the [water] committees…we started there, calling them and presenting the idea—did they want to be organized in that way? Because we also realized [*analizábamos*] that the committees didn't even know each other from one community to the next. Even though they were in all the communities, no one knew what a water committee was…And from here, within ODESAR, came the idea of how to unite them in a municipal movement. (Interview, Matagalpa, 6/21/10)

Working in the area of water system construction in addition to social and economic development more broadly, ODESAR had previous connections to CAPS members across communities in Matagalpa. Those CAPS members contacted by ODESAR staff responded favorably and enthusiastically to the prospect of expanding their organizational presence and goals. As part of this, the CAPS expressed a desire to confront a potential policy shift towards privatization, which they perceived as a threat to communities' de facto control, and sense of ownership over, community-controlled water systems.[8]

As of late 2009, five municipal CAPS networks had formed with the organizational and financial support of ODESAR. These included the municipalities of El Tuma-La Dalia, Muy Muy, San Ramón, San Dionisio, and Esquipulas—all locations where ODESAR has physical offices. ODESAR also facilitated the formation of a Matagalpa-based departmental CAPS network in 2009 that functions

with an elected representative from each of these five municipalities. Two CAPS members from Sébaco, whose municipal network was formed in December of 2009, also participate in the departmental network. At the time of research, there was no municipal level CAPS network in the city of Matagalpa, the department's capital and the main meeting location for the network.

Within Matagalpa, a second NGO has also been integral to the formation of municipal level CAPS networks: the *Asociación para el Desarrollo de los Municipios del Norte* (Association for the Development of Northern Municipalities, or ADEMNORTE). Since 2002, ADEMNORTE has worked in support of rural water and sanitation projects. While similar in vision and mission to ODESAR, ADEMNORTE formed with four staff members from the government's *Dirección de Acueductos Rurales* (Direction of Rural Aqueducts, or DAR) office in Matagalpa, which closed in response to sector restructuring in 2007.[9] Thus, the organization formed with the participation of individuals who had experienced and witnessed the shortcomings of government-provided organizational, technical, and financial support to communities. ADEMNORTE formed with the goal of providing more holistic support to communities before, during and in the wake of new community-based water and sanitation projects (interview, Mirna Rojas, Matagalpa, 4/10/10).[10]

ADEMNORTE began to support the formation of CAPS networks in 2009, when Delia Aydeé Tamariz, one of the Sébaco-based CAPS members who had been participating in the departmental CAPS network in Matagalpa, approached staff to request support for the formation of a Sébaco municipal CAPS network. After staff

agreed to help facilitate the process, Delia requested financial support from *El Servicio de Información de Mesoamericano Sobre Agricultura Sostenible* (Latin American Information Service for Sustainable Agriculture, or SIMAS, a Managua-based NGO) to fund a municipality-wide CAPS meeting. In December of 2009, roughly thirty CAPS representatives (including representatives from municipal networks in El Tuma-La Dalia and San Dionisio); a local government council member; the municipality's water and sanitation *técnico* (technical staff); and staff from ADEMNORTE, ODESAR, and SIMAS participated in an inaugural municipality-wide CAPS meeting in a school auditorium in the city's urban center. After presentations about CAPS network formation and functioning in neighboring municipalities, and discussion about how a CAPS network could function in support of Sébaco's water committees, the CAPS in attendance elected a seven-person (three men, four women) leadership body for the network. Delia reports that the US$400 SIMAS contributed to the event—to cover invitations, food, and transportation—was spent in full. The formation of CAPS networks in other municipalities have similarly held municipality-wide CAPS assemblies, to which local government officials are invited, as a way to initiate network formation.

Akin to ODESAR's work in the department of Matagalpa, La Cuculmeca has served as an important ally of the CAPS within the department of Jinotega (see Table I for a summary of the allies discussed in this paper). As an "association of education and communication," La Cuculmeca "facilitates and seeks to effect the sustainable development of the environment and communities' participation in their own

development" (www.cuculmeca.org). One CAPS member described the importance of La Cuculmeca for the municipality:

> It's the only NGO that's cared about training people. Others don't do it; they just put things in motion and stop there. While the Cuculmeca, no, they succeed in moving people forward and developing good leaders. (Interview, Sixto González, Jinotega, 5/3/10)

La Cuculmeca works with local populations in a variety of thematic areas, including environmental conservation and education, economic development, and citizen participation. Like ODESAR, La Cuculmeca constructs long-term relationships with local residents in order to build their capacities as local leaders and community advocates.

As a member of the Coalition for the Right to Water (CODA), La Cuculmeca was involved in early conversations about fomenting the CAPS' policy advocacy at municipal and national levels. However, prior to beginning to mobilize water committees for the purpose of municipal network formation in 2009, the organization did not work directly with communities on water and sanitation projects. According to La Cuculmeca's Harmhel della Torre, "there were institutional learnings" as the organization started to increase their capacities in this regard (interview, Jinotega, 7/6/10). La Cuculmeca staff received human and organizational support from ODESAR in Matagalpa in order to build their internal capacity to work with rural communities in Jinotega, in addition to financial resources from *Ayuda Popular Noruega* (Popular Norwegian Aid, or APN) via SIMAS—the organization administering APN's funding for the CAPS networks—to support CAPS municipal network formation in all eight of the department's municipalities. Notably, Harmhel

emphasized that La Culculmeca's support to networks was "weak" a year after their formation, and that it would be a challenge to provide both organizational support to the CAPS networks and maintain assistance to communities in regard to water system management and sustainability.

The CODA and its member organizations helped to spark the scaled up participation of the CAPS in resource governance at the national level as well. As CODA-member organizations like SIMAS adjusted their work plans to include a new kind of work (i.e. one more overtly political) with rural communities, financial support to mobilize the CAPS at both regional and national scales came from Popular Norwegian Aid (APN).[11] This multi-lateral organization originally channeled resources for water and "clean technology" through the organization *Nicaragua Ambiental* (*Nicambiental*, or Environment Nicaragua) (interview, Eduardo Zamora, Managua, 6/28/10). In the early 2000s, APNs' funds directed to Environment Nicaragua were transferred to SIMAS,[12] and the scope of APN's aims broadened to include supporting advocacy related to water rights. In large part, these financial resources have been channeled towards mobilizing water committees for national level meetings typically hosted in Managua, but in other departments of the country; at the time of writing, the most recent national-level CAPS assembly was held in the northern municipality of Estelí (May 16-17, 2011).

At the national level, financial resources have also gone to support the contributions of Eduardo Zamora, previously a staff member at SIMAS and now an independent contractor, and Denis Meléndez Aguirre, a staff member at the *Centro de*

Información y Servicios de Asesoría en Salud (Information and Heath Service Center, or CISAS) to the CAPS' mobilization. These two individuals have not only planned, coordinated, and facilitated both the formation of the National CAPS Network (see below) and its ongoing functioning, but have also worked as policy and legal experts within network spaces, providing training on national legislation and supporting the CAPS in articulating their collective goals (discussed further below). Additionally, some of these funds have been used to support municipal level network activities, as was the case with Sébaco's network formation in 2009.

Numerous "*encuentros nacionales"* (national meetings) of CAPS and their allies have followed since the first group of CAPS convened in Managua in January of 2007, accompanied by ten nongovernmental organizations including La Cuculmeca, SIMAS, CISAS, ODESAR and the *Grupo de Promoción de la Agricultura Ecológica Nicaragua* (Group Promoting Agroecology, or GPAE, also a member of the CODA). By November, the thirty-four people in attendance at the January meeting (including 17 CAPS representing six municipalities and three departments) had expanded to seventy people representing eight departments. This meeting elected a provisional Coordinating Commission for what came to be called the "*Red Nacional de Comités de Agua Potable y Saneamiento*" (National Network of Potable Water and Sanitation Committees, hereafter referred to as the National CAPS Network) (interview, Eduardo Zamora, 8/18/08).[13] In May of 2010, this provisional body was replaced by the election of a seven-person Coordinating Commission (with CAPS from six municipalities representing five departments) as well as a

geographically-representative council that included one representative per department (meeting notes, Matagalpa, 5/25/10).

Today, over thirty municipal networks (in ten departments) have formed around the country and over 80 municipalities have sent CAPS members to participate as representatives in the national CAPS network meetings (see Table 4.2, below, for a list of documented municipal CAPS networks in the departments of Matagalpa and Jinotega). Across four National CAPS Network meetings from 2009-2010, average CAPS attendance was 50, and the number of municipalities represented ranged from 13 to 41. At the time of research, departmental level networks were also under discussion in Jinotega, Leon, and Nueva Segovia. As evidence of the CAPS' growing and potential political importance, several organizations pledged support to their organizational efforts during a National CAPS Network meeting in June of 2010—a meeting that sought to invite new potential allies and that drew press attention. At the meeting, the multi-lateral organization Swiss Aid as well as UNICEF and the World Bank committed to supporting the CAPS' upcoming efforts to disseminate information on the recent passing of the CAPS Law and to promote its implementation at a national scale. WaterAid, an international NGO headquartered in London, suggested that their most significant contribution could be the linking of communities and water committees in the *Region Autónoma del Atlántico del Sur* (South Atlantic Autonomous Region, or RAAS) to the National CAPS Network. Other agencies present included APN, the *Fundación Ecología y Desarrollo* (Ecology and Development Foundation, or ECODES), the

European Union (EU), the Pan American Health Organization (PAHO), and Progressio (a Netherlands-based international NGO). As the next section details, the CAPS' close collaboration with extralocal allies is not only helping to insulate their networks from partisan agendas, but also is also contributing to bridging across partisan, class, and state-society divides.

TABLE 4.2: CAPS MUNICIPAL NETWORKS*	
Jinotega	**Matagalpa**
▪ El Cua-Bocay ▪ Jinotega ▪ La Concordia ▪ San Rafael del Norte ▪ San Sabastian de Yalí ▪ Santa María de Pantasma ▪ Wiwilí	▪ Ciudad Darío ▪ El Tuma-La Dalia ▪ Muy Muy ▪ Esquipulas ▪ San Dionisio ▪ Matagalpa ▪ Sébaco ▪ San Ramón

* See map in Chapter 3

EXTRALOCAL ALLIES' ROLE IN BRIDGING DIVIDES & PROMOTING AUTONOMY

> *By fostering and mobilizing associational networks that stretch beyond local and national boundaries, local resource-user organizations can amplify their voice, may increase their financial assets (in financial, knowledge-based or technical terms), and in many cases tend to increase their legitimacy in the view of the state, nongovernmental organizations (NGOs) or private actors.*
>
> ▪ Boelens, Getches and Gil, 2010, 283

The "stretching" of resource users' associations beyond the local level—to which Boelens, Getches, and Gil (2010) refer in the Andean context—would be impossible in the Nicaraguan case without the contributions of the extralocal allies

discussed above. As noted in Chapter 1, one of the original motivations for the CAPS' mobilization was to confront water privatization, a potential policy shift perceived as a threat to communities' de facto control, and sense of ownership over, their community-based water systems. Yet with the emergence of the transcommunity organizing described in the previous section, the CAPS networks as *multi-CAPS organizations* have become subject to the threat of cooptation on the part of the government actors with whom they seek to engage as they pursue their agenda. This section documents the significant role of extralocal allies, including domestic and international NGOs and agencies, in facilitating the broad-based emergence of the CAPS networks in addition to working to ensure that these continue to be pluralistic and relatively autonomous from the state and political parties. The three key contributions extralocal allies make towards these ends include 1) facilitating the CAPS' physical mobility and political visibility, 2) providing political and legal capacity building, and 3) ensuring access to representation within the state.

FACILITATING MOBILITY & POLITICAL VISIBILITY

Arguably, extralocal allies' financing of CAPS representatives' physical mobility is the single most important contribution they can and do make towards connecting the CAPS across communities and helping to build their collective organizational presence and effectiveness. With extralocal allies financing CAPS members' mobility to network meetings and spaces, they are, in essence, *making possible* the CAPS' physical mobility and horizontal and vertical "scaling up" to form

broad-based municipal and national networks. The extralocal financing of CAPS' gatherings across communities has been necessary to water committee members' participation because of the difficulties of affording, and limited availability of, transportation to reach other communities, municipalities, and departments. As one CAPS member from Sébaco explains: "The communities are far [away]. We have to travel at times on foot to afford a trip, so we don't have to pay for two [bus or taxi] rides, and be able to arrive on time to a meeting…Since we want to work, we want to continue advancing, we have to be creative" (interview, Isabel Cristina Gámez, CAPS network member, Sébaco, 2/24/10).[14] In fact, it would not be an exaggeration to claim that without resources donated for the purpose of mobilizing the CAPS, these networks—both municipal and national—would not have formed. According to Eduardo Zamora, facilitator of the National CAPS Network, it can easily cost US$15,000 to cover the costs of 120 individuals to attend a two-day national-level meeting in Managua, the capital. One meeting, then, constitutes 37.5% of the US$40,000 total (from APN) that went towards supporting the functioning of the National CAPS Network in 2009 (interview, Carmen María Lang, 6/30/10). Eduardo admits, "if we hadn't had initial resources, we wouldn't have gotten [the National CAPS Network] off the ground, unfortunately. But that's how it is" (interview 6/28/10).

New CAPS networks at the municipal and national levels are, notably, the first instances of transcommunity organizing among CAPS.[15] Because there were few—if any—linkages between CAPS of different communities before organizational

efforts beginning in 2005, the horizontal connection of CAPS through new networks constitutes an important opportunity both to explore and construct a shared sense of interests and objectives as "CAPS." As CAPS member José Francisco Salgado of San Dionisio elaborates:

> [Before 2005] each CAPS worked individually…each community looked out for its own CAPS. No one proposed forming an organization or uniting. Until Law 620 [the General Water Law] appeared, the [notion of] privatizing water, that's when we started to come together. [The CAPS] directed their administration. But we weren't organized. And no one was interested in building our capacities [*capacitarnos*]. (Interview, Matagalpa, 6/5/10)

Whereas previous advocacy occurred on an individual (i.e. single CAPS) basis, the networks facilitate the transcendence of territorial divides and partisan loyalties in the pursuit of collective goals.[16] To date, the CAPS' elected leadership bodies reflect bipartisanship (i.e. both Sandinista and Liberal loyalties[17]), suggesting that members with affiliations across the political spectrum are being not only drawn to the networks, but also supported in leadership roles.[18] The lack of previous linkages among water committees has made the transformational potential of these gatherings greater since they offer the opportunity to construct a *shared* set of objectives as CAPS.

Importantly, the physical linking of CAPS and other actors across territorial, partisan and state-society divides is serving to foster pluralism in these incipient organizations. Although individual CAPS representatives hail from different regions and embrace different political loyalties, CAPS members share substantial common ground in their work as water managers. Network meetings have become sites to share commonly-held challenges like tenuous rights to water sources, costly

maintenance and/or replacement of deteriorating water systems, and uphill battles against water contamination and land degradation. Experiences shared and vocalized in network meetings also demonstrate that similarities oftentimes outweigh differences when it comes to the actors "against" whom the CAPS are creating a united front: lawmakers, political elites, and private businesses affecting water resources or rural environments and landscapes more broadly. As one CAPS member asserted during a CAPS municipal assembly in San Dionisio, the National CAPS Network represents only "one CAPS" (meeting notes, 5/7/10), and the CAPS and their allies often refer to the *familia of CAPS*, or "family of CAPS" in meetings. Observations suggest that water management activities, responsibilities, and conflicts at the grassroots become *the basis for* water management-based solidarities across communities, and hence across territorial and partisan divides.[19]

As evidence of the ties and sense of solidarity among CAPS, those interviewed and observed expressed their recognition of both a desire to continue to incorporate greater numbers of CAPS in these organizations, as well as the sentiment that the CAPS networks represent all CAPS—even those who have not achieved direct participation in the network spaces. During an *intercambio* (interchange) between CAPS from the municipalities of Sébaco, Matagalpa, and Las Sabanas, Estelí, a CAPS member from the latter asked Delia Aydeé Tamariz, treasurer of the CAPS Molino Sur, how they as CAPS can "became part of" the National CAPS Network as they have thus far been "outside" of it. Delia responded, "you're not outside of the network…we just don't see each other in meetings" (meeting notes,

Molino Sur, Sébaco, 4/29/10). She continued that when CAPS members go to the national level meetings, the idea is to represent all CAPS. Other CAPS members reflected the sentiment that the networks do aim to recognize "all" CAPS, whether or not they all come to participate. CAPS La Labranza member Marbelly Tremenio shares what can be taken to be part of her vision for the CAPS network in Sébaco:

> Now that we're organized as a municipal network...*[it's] going to represent all the CAPS in the municipality of Sébaco*, which I imagine are many, and we still don't all know each other. They're going to be able to count upon a directorate that represents them in many events, anything [*cualquier cosa*], and that speaks for them. And that brings helps to those CAPS that need it. (Interview, Matagalpa, 12/11/09, emphasis added)

As efforts to convene CAPS at municipal and national scales continues, so too does work to incorporate increasing numbers of CAPS into these organizational processes.

Beyond financing, in a material sense, the CAPS' physical mobility, domestic and international NGOs are enabling the CAPS to establish a public presence as social and political actors. The CAPS' collective projections and self-assertions that emerge from work in network spaces, and that draw upon their shared experiences as CAPS, have taken several forms: a collective action platform, political pronouncements, participation in public events, and use of media outlets to share messages and objectives. In fundamental ways, these collective pronouncements and public showings have depended upon the financial, organizational, and political support of allies. In regard to organizational effectiveness, including autonomy from state actors, they serve two purposes. First, they put forth a political voice and set of interests that help to establish the CAPS' distinct public presence as social actors. Second, as a result, they promote the CAPS as an independent and autonomous

interest group relative to other actors, including municipal and national government officials.

With the support of SIMAS and CISAS staff, the National CAPS Network elaborated a concrete set of goals and demands in its *Plataforma de Lucha*, literally "Platform of Struggle," published in September of 2008 (hereafter referred to as the CAPS' collective action platform) (see Appendix B, "CAPS *Plataforma de Lucha*"). This action platform presents common goals around environmental stewardship, legal recognition, and greater participation of government in rural water access and management. Several items on the CAPS' collective action platform directly assert their agenda of pressuring the state to be more active in supporting water access and quality via its legally designated functions. For example, point three asserts as an objective "To demand resources in the municipal and national budgets for the construction, expansion, maintenance and rehabilitation of systems, in order to manage water well [*con calidad*]." Point six calls explicitly upon the Ministry of Health (MINSA) in "[demanding] periodic inspections of [water] basins by MINSA in order to protect water quality and the rigorous application of laws in regard to those to commit environmental crimes and harm [water] sources." Importantly then, the elaboration of these kinds of documents, which promote and reflect the CAPS' independent, collective voice, constitute a key outcome of the CAPS' working relationship with domestic and international allies, via their networks.

Extralocal allies have also supported the CAPS' ability *to project* these newly articulated collective goals and demands. Allies' financial and political support has

enabled the dissemination of the CAPS' collective action platform; letters to public officials; and political pronouncements among the CAPS, rural community members, urban publics, government officials, and NGOs. An abbreviated version of the CAPS' twenty-one-point collective action platform was published in *Enlace* as a free issue explicitly—and solely—focusing the CAPS, including their history and administration of water systems (9,500 copies in total were published; see Appendix D, "CAPS Enlace No. 18 2008") (Enlace 2008). The CODA helped to organize and coordinate this endeavor, while financing was received from APN. Allies have also helped to place the CAPS' political pronouncements, reflective of their collective action platform, directly in the hands of elected officials. As early as 2007, the National CAPS Network emitted its first pronouncement elaborating recommendations for a potential "CAPS Law" that Sandinista deputies had drafted and presented to a gathering of CAPS, local government officials, and NGO representatives in late 2007, soon after the General Water Law's passing.[20] At the event, facilitator Eduardo Zamora (SIMAS) took the opportunity to workshop a set of proposed ideas about the law to share with the government. One month later, in October, the national network sent a letter presenting their ideas for the CAPS Law to a National Assembly's Commission of Environment and Natural Resources member, José Martínez.

Through their networks and the connections to allies these encompass, the CAPS have also made demands regarding the policy implementation. In February 2009, the "Coordinating Commission" of the National CAPS Network publicly

demanded the government's proper *implementation* of Law 620, in addition to its passing of the Special CAPS law (Zamora interview, 8/18/08) (see Appendix D, "CAPS Law 620 Pronouncement 2009"). The commission specifically called for adequate financial and personnel investment in the country's water institutions and recommended the appointment of one of two individuals to lead the yet-to-be created *Autoridad Nacional del Agua* (National Water Authority, or ANA[21]): Dr. Salvador Montenegro Guillén (the director of the *Centro de Investigaciones de Recursos Hídricos* [Center for Research in Water Resources, or CIRA] at the National Autonomous University of Nicaragua) or Dr. Jaime Incer Barquero (a well-known biologist and environmental conservationist).[22] The broad publication and dissemination of these pronouncements contributes to the CAPS' public visibility as actors seeking to hold the state accountable, hence promoting the CAPS as independent and consequential organizations and stakeholders.

Extralocal allies have also used media outlets to help establish the CAPS' public presence. These outlets have included blogs and radio spots, which allies have created/maintained and financed, respectively. "Social networking" resources like Twitter have also been leveraged. National CAPS Network facilitator Eduardo Zamora emphasizes the importance of technology for the CAPS' mobilization: "Where are the [National] Network's offices? In the internet and on cell phones. They are virtual offices, but I think that always has its advantages" (interview, Managua, 6/28/10).[23] In 2008, staff at SIMAS began administering a "CAPS Blogspot" to post upcoming CAPS events, relevant news articles, video documentation of the CAPS'

work and meetings, and links to partner organizations' (i.e. allies') websites (http://capsnicaragua.blogspot.com/). It is the first website that appears in a Google search of "CAPS Nicaragua" as well as "comités de agua Nicaragua," and asserts in the tag line, "One million two hundred Nicaraguans have water thanks to the CAPS." The blog has also posted a series of 2010 radio spots that promote the implementation of Law 722 among the CAPS, local governments, and the Nicaraguan Institute of Aqueducts and Sanitation, or INAA, the national regulatory agency in the water and sanitation sector.[24] Together, these forms of projected collective voice put forth an increasingly public display of the CAPS, their water provision and environmental stewardship work, as well as their growing transcommunity networks.

National media has also played a role in promoting these rural water managers and making them more visible. Indeed, national newspapers must also be seen as an "ally," given their staffs' contributions to the CAPS' visibility as materially consequential as well as independent organizations at a national scale.[25] Arguably, the media attention given to the CAPS, their water provision, and their efforts to be recognized has legitimacy-generating effects for them and their networks. A September 2008 *El Nuevo Diario* news article, for example, portrayed the CAPS as large-scale water service providers, managing over 5,000 water systems nationally and hence providing water to over 1.2 million Nicaraguans, or 23.33% of the population (the article cites data provided by the Coalition for the Right to Water, or CODA) (García 2008c). Individual CAPS' stories have entered these news forums as well, framed as examples of thriving local water management. The CAPS of Nueva

Segovia, as discussed in an interview with Juan de Dios Benavides (CAPS coordinator and future-coordinator-elect of the National CAPS Network), serve water to "hundreds of families" and are "in charge" of local resource protection as well as contributing money "to maintain infrastructure in stable conditions" (García 2008c). Beyond these mostly descriptive accounts serving to bring to light the CAPS and their work, news articles have also become a forum for the CAPS' social and political goals. One article presented the CAPS' demand for "autonomy," explaining that they "have demonstrated militancy [*beligerancia*] in their work related to water service, thanks to the support of civil organizations like the Organization for Rural Development (Odesar)" (García 2008a). Another similarly advocated for the CAPS through lamenting their exclusion from recent legal modifications to the sector and national development plans:

> [These] groups were not contemplated nor included in the General Water Law (Law 620)…nor are they included in the draft of the National Human Development Plan (PNDH), which the government has been divulging in different spaces of consultation, *despite the fact that the CAPS provide [water] service to 53 percent of the rural population*. (García 2008b)

Media portrayals of rural residents' work thus invoked a sense of justice around their right to participate in national water policy-making processes, connecting this to the impressive—and largely unknown—scale of the CAPS' water management.

In addition to their growing visibility via media outlets, the CAPS have taken advantage of direct participation in public events and forums to become literally visible to urban publics, including both citizens and public authorities. Again, extralocal allies have financed the CAPS' travel—and hence participation—in these

spaces, and have contributed material resources to enhancing the visibility of the CAPS at these. Perhaps the best example of the CAPS' collective showing at a public event has been their participation in the 2010 *Feria Nacional de la Tierra* (National Land Fair). This annual event showcases the work and services of agricultural, environmental, and community development organizations and provides the opportunity for the public to observe and participate in panels on subjects pertaining to agriculture and resource use and conservation. Hosted in Matagalpa, the 2010 Land Fair brought together the general public, agricultural producers, lawmakers and public officials, and a noteworthy number of CAPS from across the country ("Agua, Biodiversidad, y Cambio Climático…Unidos por la Madre Tierra," June 4-5, UNAN Matagalpa). The roughly 60 CAPS in attendance (author's estimate) convened around the booth of Matagalpa-based ODESAR, where meals were served and from where National CAPS Network facilitators distributed black baseball caps to CAPS members and NGO staff with "*Red Nicaragüense de CAPS*" ("Nicaraguan CAPS Network") printed in bright blue. CAPS members from different regions also wore t-shirts designating "*Red CAPS Nicaragua*" ("Nicaragua CAPS Network") on the front and "*Trabajando la Gestión Integral de Agua*" ("Achieving Integrated Water Management") on the back. A giant banner hung in front of the booth: "*Trabajando por el Derecho Humano al Agua. Red Nicaragüense de CAPS.* www.capsnicaraguablogspot.com" ("Working for the Human Right to Water. Nicaraguan CAPS Network"). On display and for the taking at the ODESAR-CAPS booth were the CAPS' collective action platform and copies of the General Water

Law (Law 620). Furthermore, hung from the university's buildings within the fair were banners with statements the CAPS had devised in network meetings, mostly concerning water conservation and protection, messages attributed directly to the CAPS networks. Not only did the CAPS have the opportunity to disseminate and display their message in written form—and be seen in large numbers—they also attended and actively participated in a panel session devoted solely to discussion of the rural water sector and the CAPS' role, in particular, in this.

The contributions of various allies made possible the CAPS' effective public presence and participation in the Land Fair as actors consequential to resource governance. Land Fair planning meetings hosted in Matagalpa, which public officials, NGO representatives, and a number of CAPS attended, helped to strategize for the CAPS' participation. With ODESAR as a local "host" the day of the fair, APN contributed US$10,000 (of the US$40,000 total to the CAPS' organizational efforts in 2010) for their participation in this event (including transportation, food, and lodging, t-shirts and hats). Overall, the CAPS' presence at the Land Fair served to promote their networks and their image as distinct stakeholders in the sector. Their participation in this national event, moreover, is evidence of how the CAPS are achieving greater attention at higher and more encompassing political scales.

POLITICAL & LEGAL CAPACITY BUILDING

As rural water managers, the CAPS have depended in fundamental ways upon the resources of extralocal allies in order to connect across communities and act

collectively at broader and higher political scales. Yet, how do the CAPS' water networks become effective, autonomy-promoting platforms for the CAPS' engagement with government officials and state actors once they have achieved this collective action beyond the most local levels? I argue that the capacity building extralocal allies confer in network spaces helps the CAPS to know, and thus defend, their legal rights, as well as gain access to the state in order to *leverage* legal and political knowledge. Having occupied different roles than the CAPS within the rural water and sanitation sector, extralocal allies bring to the table information and experience in regard to policy advocacy, research, and provision of technical and financial support to rural communities. They are thus able to contribute legal expertise and political savvy within network spaces, which in turn inform the CAPS' own political capacities and strategies. This section reveals how the CAPS' collaboration with extralocal allies in network spaces allows these to be sites of political learning and capacity building, and therefore platforms for action towards promoting the CAPS' autonomy.

Much of allies' capacity building work with the CAPS has centered upon three laws: the General Water Law (620), the *Ley de Participación Ciudadana* (Law of Citizen Participation or Law 475),[26] and the *Ley Especial de Comités de Agua Potable y Saneamiento* (Special CAPS Law, or Law 722). As noted, Law 722 passed unanimously in the National Assembly in May of 2010. In addition to recognizing, ex post facto, the extensive role of rural residents in water management, the law outlined a process for the CAPS' registration with both local governments and the national

regulatory agency, INAA.[27] While the CAPS were able to influence the content of Law 722 before its passing (discussed below), detailed trainings facilitated primarily by SIMAS and CISAS staff (Eduardo Zamora and Denis Meléndez, respectively) on national legislation have been giving CAPS the legal and political tools to hold state actors accountable.[28] Allies have not only disseminated copies of national legislation to CAPS and their communities; they have also led the CAPS in systematic review of legislation in network spaces, affording the CAPS the opportunity to examine, analyze, and assess policies—work that has become the basis for the previously-noted political pronouncements that the CAPS disseminate to the public and lawmakers.

In August of 2007, the Coalition for the Right to Water (CODA) published and disseminated to CAPS and NGOs a "non-official"—meaning not yet published—version of Law 620, an endeavor supported financially by ECODES; the Government of Aragón, Spain; and APN. With further financial support from APN, this publication was followed in December of the same year with the publication of the official law and its regulations. Two thousand copies of the draft CAPS Law were also published by international donors—in the name of the National CAPS Network—to foster awareness of the impending legislation. Silvio Prado of the *Centro de Estudios y Análisis Políticos* (Center for Political Research and Analysis, or CEAP) asserts that

> [These] two laws [Law 620 and Law 722], one after the other, allowed the CAPS to sink roots, diversify their contacts and strengthen the capacity for discussion around something concrete. The laws were their banners, which they grabbed hold of and used to make a forceful entry into the field of political advocacy. These two laws have enabled the CAPS to be what they are now with respect to advocacy. (As cited in Kreimann 2010, 26)

Certainly, as Prado emphasizes, Laws 620 and 722 have presented opportunities for the CAPS' self-advocacy vis-à-vis authorities. However, the CAPS' ability to articulate specific demands related to national legislation owes to ally-led capacity building processes within municipal and national CAPS network spaces. As CAPS member and Jinotega municipal network coordinator, Sixto González, expresses:

> We want to have laws to be able to fight with them…there are laws but we don't have them in our hands. It's like you said, that you need a machete, [and] there's a machete, but it's for sale and you don't have it. There's a machete, but we don't have it. (Interview, Jinotega, 5/3/10).

Just as the passing of Laws 620 and 722 is insufficient for ensuring their implementation, their enactment alone does not ensure broad public knowledge of them, nor the public's ability to contest and/or leverage them.[29]

Ally-led "trainings" on legislation have focused on reviewing provisions that are most relevant to the CAPS in regards to their self-advocacy and efforts to affect policy implementation. In regards to Law 620, SIMAS, CISAS, and ODESAR staff have spent time in municipal and national level network meetings primarily on three articles that the CAPS have perceived as threats to their organizations and water systems. These include the aforementioned Article 4, which asserted that "water service" would not be privatized, leaving out reference to the country's water *resources*. Other provisions to which allies have directed the CAPS' attention include Article 49, which states that all potable water distribution networks are "property of the state, represented by ENACAL [the state water company]," and Article 75, which asserts that small-scale rural water systems—while administered by "Potable Water

Committees—are to be "under the supervision and control of ENACAL." As Isabel Cristina Gámez of the CAPS municipal network in Sébaco expressed (in reference to the former),

> [We], the communities, can't allow these systems to pass to the government, because they belong to the community. I think this would be one of the objectives [of forming the CAPS Networks]. To protect the systems and to protect ourselves [as CAPS]. (Interview, Sébaco, 2/24/10)

Not surprisingly, the CAPS reacted strongly to new legal provisions that not only ignored the degree to which they had operated independently over time at the grassroots, but also challenged their long-standing autonomy as community organizations.

An additional provision within Law 620, interestingly, has been embraced by the CAPS in their efforts to strengthen their organizations, in effect countering the thrust of Article 75 through seeking to hold local governments accountable to rural communities and their water access needs—largely via supporting the CAPS and their projects. Article 150 asserts that municipal governments "are obliged…to prioritize potable water, sewerage, and sanitation projects above [all] other projects" in order to reduce residents' "vulnerability" in regard to water access. In practice, the CAPS' awareness of this provision has translated into advocacy on behalf of their organizations and communities vis-à-vis state actors. Marbelly Tremenio of the CAPS La Labranza and the Sébaco municipal network articulates the process of learning about existing laws:

> Just now we have realized, in article 150 of the Law 620, that it's an obligation of local government to promote water systems. And they've never done it. Of course, as we were unfamiliar with the law, we never went to

> knock on their door…The only thing that [the government] has given is a signature so financing organizations could enter the community. (Interview, Matagalpa, 12/11/09)

Marbelly's statement implies that not having knowledge of Law 620 contributed to her feeling without recourse to approach government actors to request support with local water management. The CAPS' greater legal and political knowledge has empowered them to confront authorities, and is coming to bear on their engagements with state actors. The coordinator of the municipal network in Sébaco, Delia Aydeé Tamariz, tells her story of educating the mayor on recently passed laws as a means to hold him accountable:

> The first time I went to the mayor's office, he had a complete lack of knowledge that [the CAPS] had elected national representatives [to the national network], that there was a CAPS law in the works, and he even suggested that I just return to my community. I brought magazines, because we had contributed twice to the magazine *Enlace*, I brought the National Water Law, I brought the draft water committee law. I said, 'look, Don Luis, here is article 150, an article specific to the mayor's offices.' I opened the page and the law says that the mayors are obliged [to prioritize water related investments], it's not just if they want to or not...water is fundamental and it's an obligation. (Interview, Sébaco, 2/24/10)[30]

Across municipalities in Matagalpa, CAPS members reported similar experiences of legal empowerment—that is, obtaining the "machete" to which CAPS member Sixto González referred. Esperanza Soza, CAPS El Chompipe president and coordinator of the Muy Muy municipal CAPS network, shared, "Today as a municipality we have thirty-six CAPS…We know many laws, it's true. We know Law 620, which is the National Water Law" (interview, Muy Muy, 8/21/08). The CAPS network coordinator in El Tuma-La Dalia, Misael Blanchard, asserts that although "[setting up the municipal CAPS network] has been challenging [*nos ha costado un poco*], today

it's a really strong organizations and it's going to help us…The CAPS network…brought knowledge of Law 620 to the municipality" (interview, Sébaco 12/9/2009). In a basic sense, knowing the laws serves as a foundation for the CAPS to self-advocate as independent water managers and service providers.

Notably, CAPS in several municipalities have leveraged—like a machete or tool—"new" information about local governments' prescribed role in the rural water sector as a means to garner greater state resources. CAPS in the municipality of Esquipulas succeeded with their request for money from the local government: 100,000 *córdobas*, or roughly US$4,760 was awarded in 2009 to rehabilitate a water system (interview, Florentín López, Esquipulas CAPS network, Matagalpa, 6/5/10). In Jalapa, the local government has supported the municipal CAPS network with an office space (interview, Juan de Dios Benavides, 5/25/10). In both San Dionisio and San Ramón at the time of research, CAPS network representatives were making requests of local governments for support of their work as municipal CAPS networks. These requests—both fulfilled and pending—are evidence of how the CAPS' political capacity building is coming to bear on their recognition as autonomous organizations serving the public interest.

In network meetings, CAPS members have also systematically reviewed the text of Law 722, both before and after its passing. Ally-led review and examination of the law has centered upon several provisions. These include the CAPS' process of registering with local governments and INAA (Articles 11-14; 30-33), the establishment of differentiated energy tariffs for CAPS whose water systems utilize

electric pumps (Article 25), and the process through which local governments can declare inputs (like freshwater sources) of "public utility" if private ownership over them is obstructing local water access needs (Article 4) (CAPS network meeting notes, 11/5/09, Managua; 12/1/09, San Ramón; 12/3/09, Matagalpa; 12/9/09, Sébaco; 5/25/10, Matagalpa; 6/25/10, Managua). Importantly, CAPS network meetings reveal strategizing on the part of CAPS and their allies as to how best to leverage and/or contribute to enforcement of these provisions. The participation of INAA representative Gilberto Arauz in one National CAPS Network meeting (June 25-26, 2010) greatly facilitated this strategizing, as Arauz could listen to the CAPS' concerns and work with them towards fostering understanding of the law and easing its implementation. For example, CAPS representatives requested that formal notice of Law 722 and its provisions be presented to mayors so CAPS themselves would confront fewer obstacles to capitalizing on the law (see Appendix J, "CAPS Letter to Mayors, June 2010"). Many CAPS also took the opportunity to voice their concerns about having pre-existing articles of incorporation and by-laws (which Law 722 mandates for individual CAPS' recognition) which diverged from INAA's prescribed formats. INAA has been flexible in this regard, recognizing that individual CAPS have likely developed local rules based upon local norms and needs.

While not a focus of this chapter, it is important to note that observation of municipal level CAPS network meetings has revealed shifting dynamics of interdependence among CAPS and their allies. In one CAPS assembly in San Dionisio, for instance, the coordinator of the municipal CAPS network, José

Francisco Salgado, himself led participants in an overview of Law 722 as well as the process through which CAPS can pursue *personería jurídica*, or official legal status as a non-profit organization. The ODESAR representative participating explicitly noted that José Francisco would give the legal overview because he was the one who "knows the law [Law 722] well" (meeting notes, San Dionisio, 5/7/10). That CAPS member José Francisco had years of experience in National CAPS Network spaces learning about impending and enacted legislation meant in practice that he was more knowledgeable than local ODESAR staff who had not participated in such trainings. This observed dynamic also speaks to the relative autonomy CAPS have, or are cultivating, vis-à-vis their NGO allies.

Even though local and national government officials have been invited to participate in CAPS network meetings for the purposes of legal consultations, information sharing, and other forms of sector-related collaboration, challenges to the CAPS' incorporation and inclusion in *state-led* spaces of governance persist. In one remarkable instance demonstrating the CAPS' alliance with powerful actors, UNICEF and World Bank representatives deliberately chose not to attend a water-sector meeting organized and hosted by FLSN members of the National Assembly's Commission of Environment and Natural Resources. Although deputies had not invited a CAPS representative to participate, this meeting came just weeks after the election of National CAPS Network representatives in Matagalpa (in May of 2010). That UNICEF and World Bank staff chose not to attend to demonstrates their support for the CAPS' representation as distinct actors vis-à-vis the government reflects the

deep legitimacy the national CAPS organization embodies. It also serves to send the message to government officials that "powerful allies" support the CAPS' inclusion as consequential participants in sector-related decision-making. As a result of UNICEF staff communicating this concern to lawmakers, a same-day invitation was issued to the coordinator-elect of the National CAPS Network, Juan de Dios Benavides, who resides in Jalapa, one of the northernmost territories in the country, and hours away by bus from the capital (personal communication, Eduardo Mendoza, 7/16/10). Hence despite the impressive inroads the CAPS have made into formal political arenas (discussed next section), they still confront a quite exclusive "public" policy making sphere.

With financial backing and political and legal "training" from extralocal allies, CAPS members are also making strategic decisions at the subnational level to insulate their organizations from partisan influence. For example, the leadership of the CAPS municipal network in Sébaco decided to discontinue holding network meetings in local government spaces in early 2010, soon after its formation. This decision, made collaboratively with ADEMNORTE staff, came in the wake of a municipality-wide meeting hosted in the local government building and for which local government staff had agreed to disseminate invitations to CAPS coordinators across communities (interview, Delia Aydeé Tamariz, Sébaco, 4/29/10). However, as became clear in the meeting, the government had not invited CAPS members, but rather *Consejos de Poder Ciudadano* (Citizen Power Councils, or CPC) representatives. Beyond constituting a clear display of local government's promotion

of the CPCs as the preferred vehicle for civil society participation at the community and municipal levels, this move violated the trust of the CAPS network members, including NGO staff, and prohibited fulfilling the meeting's principle objective: to collect baseline data on water systems and committees. The meeting was adjourned without collecting the desired data because those in attendance, quite simply, could not provide it (meeting notes, Sébaco, 2/15/10). The decision of the Sébaco CAPS network to no longer meet within the local government building is a double-edged sword: it allows an effective insulation against local government's potentially partisan-driven agendas, at least in regard to CAPS network meetings. However, this decision has also negatively impacted the ability of the CAPS to have a stable meeting place that is free of cost.

Although interviews and observation indicate that the CAPS do align with extralocal allies in wanting to maintain autonomy from government as organizations, it is important to note that sometimes allies may just make certain decisions in favor of the CAPS' autonomy. Enabling this "top-down," in a sense, decision-making is extralocal allies' role as facilitators and conveners in the networks.[31] Both Carmen Maria of APN and the national network facilitator, Eduardo Zamora, emphasized in interviews the challenge beginning of starting the CAPS' registration process (per Law 722) in late 2010 given the upcoming presidential election in the fall of 2012. They wanted to hold CAPS municipal assemblies to introduce the registration process as soon as possible after Law 722's passing to avoid the politicization of these spaces with election campaigning (Lang interview, Managua, 6/30/10; Zamora interview,

Managua, 6/28/10). Thus, allies, including Eduardo and Gilberto Arauz of INAA (the state agency legally responsible for the implementation of Law 722) have worked rapidly to co-host municipal-level assemblies with CAPS network leaders to introduce the CAPS Law and advocate for the quick registration of water committees in accordance with it (see also Chapter 6). Given that the Law's objectives necessitate government buy-in and collaboration, local government officials have also been called to participate in the meetings. Within them, CAPS leaders and network facilitators work to control the agenda to limit space for political "*discursos*," or speeches (Zamora interview; meeting notes, Leon, 7/15/10).

FACILITATING ACCESS TO REPRESENTATIVE CHANNELS OF GOVERNMENT

In addition to facilitating physical mobility and visibility, extralocal allies have been critical in ensuring that the CAPS access representative channels of government. The Special CAPS Law (Law 722) served to create a legal "sphere of recognition" (Brown and Lassoie 2006, 264) for the CAPS' water management. Nevertheless, the CAPS as stakeholders in the rural water and sanitation sector have been very much dependent upon the work of their allies to get them, literally, "to the bargaining table," both before and in the wake of Law 722's passing. Indeed, the CAPS' exclusion from participation in formulating the Law 620 greatly influenced their motivation to work in favor of law specifically aimed at granting them recognition. As part of the CAPS' quest for recognition of past, present, and future

water provision work, extralocal allies have worked to facilitate the CAPS' formal contributions to the Law 722's development.

Allies' connections to and relationships with political elites and elected officials have facilitated negotiating the CAPS' access to consultations with lawmakers and state water agency officials. As the National CAPS Network coordinator Juan de Dios Benavides stressed, the networks' NGO facilitators have "access to information" that includes their "connections" and "friendships" with government officials and that constitute a "pushing force" behind the CAPS' advocacy (meeting notes, Managua, 5/25/10). Carmen María Lang of APN also stressed the importance of allies' personal and professional "linkages" in order to facilitate the opening of space for the CAPS within government and to create this state-society linkage where it has not previously existed (interview, Managua, 6/30/10). Carmen María emphasized having relationships with members of government because of her time spent working for the government in the 1980s. Eduardo Zamora, the primary facilitator of the National CAPS Network, also worked for the government in this era.

In collaboration with urban and rural NGOs, including SIMAS and ODESAR, the national government hosted a series of department-wide forums in 2007 which CAPS from across municipalities attended. These forums served as opportunities for CAPS members to engage public officials in regard to the recently-passed Law 620 in addition to the budding CAPS law. The "Toast to Life" forum in Matagalpa brought together roughly 100 CAPS members (author's estimate) in addition to NGO staff

and government officials ("Un Brindis para la Vida," UNAN Matagalpa, 9/7/07). CAPS in attendance used the space both to interrogate their exclusion from consultations on Law 620 as well as to assert demands for its implementation. Notably, CAPS members appeared more versed in the content of Law 620 than the National Assembly members in attendance.[32] Familiarity with the provisions of this law is attributable to the novel collaboration between CAPS and their allies and the processes of capacity building discussed earlier. NGO allies also actively contested the CAPS' exclusion from policy consultations, defending the CAPS' right to participate in the formulation of water sector laws. As a staff member at ODESAR asserted, as a "network with a national dimension," the CAPS' are "not being taken into account in the processes of defining the country's water policies" (meeting notes, 9/7/07). Hence, the forum constituted an opportunity for the CAPS and their allies to demand participation of the former in the sector's legal development and restructuring.

The forum also served to introduce the CAPS to the government's initial work on a CAPS law. INAA's Gilberto Arauz characterized the 2007 departmental forums as an opportunity to solicit feedback on the draft:

> Various CAPS leaders were invited to get to know the draft bill. To listen to opinions [on it]. […] That was part of the consultation, the presentation of the draft CAPS bill to the CAPS leaders…*I was collecting the CAPS leaders' opinions to better the law.*" (Interview, 6/2/10, emphasis added).

At this event, national FSLN deputies making up the Commission of Environment and Natural Resources characterized the yet-to-be CAPS Law as helping to strengthen what communities had "already created": the Potable Water and Sanitation

Committees. Deputy José Martínez emphasized greater "regulation" in his calls for more government attention to the CAPS, a government role to which most CAPS, as later interviews indicated, would be averse. However, the deputy assured that this law was "of the people" (*del pueblo*), and was intended to respond to the interests of rural communities. CAPS in attendance took advantage of the opportunity to share ideas for the content of a potential CAPS law with state officials, like Arauz and national law makers.

Participation in the 2007 Matagalpa "A Toast to Life" water forum—and those like it in other departments—was just the beginning of what would be a series of water committee consultations with state authorities through to the passing of the CAPS Law in May of 2010.[33] Importantly, the process developing the "Special CAPS Law"—including the CAPS' contributions to its formulation—help to reveal how state officials have also served as allies. In December of 2007, FSLN deputies submitted a complete draft of a potential CAPS law as well as a "presentation of rationale" (*exposición de motivos*) to the president of the National Assembly.[34] While Law 620 ignored the CAPS as community-based actors in the sector, this document asserted that a CAPS law would serve to "institutionalize over thirty years experience of community participation" in Nicaragua. Legislators here made reference to the CAPS' decades of work as resource managers, serving to publicly legitimize these actors who remained, at that moment, legally unrecognized.

Subsequent consultations between the CAPS and state actors proved more contentious than those observed during the Matagalpa water forum—which had

demonstrated a dynamic of learning and exchange on the part of national and local government authorities, NGOs, and CAPS. One specific dimension of the Special CAPS Law that required negotiation was that concerning the CAPS' name. The draft CAPS law referred to the *Comités de Agua Potable*, or CAPs, omitting the "S" as had been done in the Regulations of Law 620. As the CAPS' negotiations with state actors revealed, the "S" holds symbolic importance and has potential material and financial significance as well. The CAPS do, in practice, take provisions to ensure sanitation locally; hence *quitando*, or taking away, the CAPS' "S" undermines and ignores the important work they do in this regard. A CAPS' encounter with ENACAL representatives during a consultation on the draft CAPS Law (Law 722) with national deputies in November of 2009 revealed further implications of formal responsibility for sanitation. As Jessenia Rivera recounts,

> But I think the bottom line for ENACAL [*el chiste de ENACAL*] was the budget. They said that if the CAPS took [responsibility for] sanitation [*se iban con saneamiento*], it would take [from them] half of [their] national level budget. They wanted sanitation for themselves, because sanitation brings money, even from the international organizations. That was the other key. We fought and fought in the second session in the Assembly, until it [the "S"] remained. (Interview, Matagalpa, 6/4/10)

In contrast to the assumed financial motivation of ENACAL staff for wanting to preserve their legal prerogative of ensuring sanitation, the CAPS found motivation in their desire to be recognized for the sanitation work they were already carrying out. Delia of Molino Sur offers another account from inside the meeting with National Assembly members and ENACAL staff. Like Jessenia, she recounts how ENACAL

asserted that the CAPS "didn't do sanitation," which according to ENACAL included constructing *pilas de recepción*, or waste storage tanks.

> But we said to the deputies that maybe we didn't do that, but we were chlorinating water in the communities and examining sanitation [practices], seeing that people don't burn trash, that they don't allow water to pool. That yes, it wasn't the sanitization that they [ENACAL] provide, but yet, it was a basic sanitation. How are we going to make [waste] storage tanks? (Interview, Sébaco 7/14/10)

As Jessenia and Delia report, as well as other CAPS representatives in national level meetings who attended this particular consultation, assembly members ultimately agreed with the reasoning to remain "CAPS," and not "CAPs." The ENACAL representative, in contrast, consulted with the company's president, Ruth Selma Herrera, over the phone and "left angrily" at the end of the meeting, stating a desire to engage ENACAL's lawyers in the debate (Tamariz interview, Sébaco, 7/14/10).

As this meeting demonstrates, the CAPS' direct engagements with lawmakers are also opportunities to contest extra-local characterizations of their work and assert their interests to public officials. Carmen María, who helped coordinate the late 2009 meeting with national deputies, described it as a *triunfo* (triumph), given that the CAPS "easily entered" into the National Assembly and "declared their historic and geographic presence to authorities" (interview 6/30/10).[35] Combined with their newfound physical mobility and knowledge of national laws, the CAPS' access to state channels of representation enables a multi-scalar political strategy in the pursuit of their goals. Specifically, official consultations with state actors have given the CAPS the means to pursue and advance their collective goals, including formalization

as a collective actor, hence promoting effective political interventions as autonomous actors.

CONCLUSION: PROMOTING AUTONOMOUS & PLURALISTIC ORGANIZATIONAL CENTERS

This chapter has argued that extralocal allies have contributed to the CAPS' promotion of pluralism and maintenance of relative political autonomy as the CAPS connect across communities and engage with authorities beyond the community level. Allies have done so through their role in the CAPS' physical mobility and visibility, political and legal capacity building, and access to state spaces of representation. In conceptual terms, I have argued that the CAPS networks constitute forms of horizontal and vertical scaling that engender new bonding and bridging social capital. Asymmetry in the new and evolving CAPS networks—the primary interface between CAPS and their allies—matters in fundamental ways: while the CAPS' bring their locally-grounded knowledge and "organic empowerment" to bear on their scaled up interventions in resource governance, extralocal allies prepare the CAPS for, and facilitate, these interventions, drawing upon their own political and financial capital.

Although the CAPS' transcommunity collective action is a quite new phenomenon, the findings of the present study suggest that bridging at different scales has varied implications for fostering network pluralism and autonomy vis-à-vis state actors. Specifically, the bridging dynamics within the National CAPS Network are perhaps more dramatic than at the municipal level in regard to promoting pluralism—given the greater diversity of CAPS, state actors (e.g. state agency officials), and

domestic and international organizations represented in these spaces. It appears that pluralism is more easily promoted and established at the national level for two reasons—both closely tied to the geographic "scaling" inherent in participation in a national level network. First, the geographic scope encompassed in national level meetings is much greater than at the municipal level. CAPS of diverse partisan loyalties come together in pursuit of common, water-related, goals, whereas at the municipal level there is more potential for homogeneity in regard to political tendencies (as is the case in San Ramón, Matagalpa, where the vast majority of the population identifies as Sandinista). Second, and also related to spatial dynamics, is the physical distance from spaces of government the National CAPS Network has been able to cultivate. The National CAPS Network spaces and activities appear to be less directly subject to the partisan practices and clientelistic logics of local government realms because meeting venues have consistently been nongovernmental and state actors must be invited into meetings. In contrast, issues of resources and the desire to engage local governments appears at the municipal level appear to more easily compromise the autonomy of municipal CAPS networks, as was the case in Sébaco. Further and more systematic research would be important to confirm this observed dynamic.

Even as the CAPS build their political and organizational capacities, their networks will likely continue to be multi-sectoral, dependent upon the participation of diverse actors within resource governance as well as the asymmetries in the resources these participants contribute. Some municipal CAPS networks, particularly those in

Matagalpa (i.e. the first to form), are demonstrating the ability to mobilize with greater independence from NGOs.[36] Yet, the CAPS remain highly dependent on international and domestic organizations for financial contributions, and also benefit from the legitimacy these actors bestow on their organizational processes, particularly at the national level. Notably, leaders of the National CAPS Network have called directly upon NGO allies *not* to distance themselves from the network *because* of its dependence on their particular contributions. Cross-class, urban-rural solidarity matters as well: during the May 2010 elections of the National CAPS Network representatives, the coordinator-elect Juan de Dios Benevides expressed more than a dependence on NGO allies as justification for their inclusion in ongoing network operations. He asserted that the CAPS' allies "are part" of the network and "[c]annot unglue themselves" from it (meeting notes, Matagalpa, 5/25/10). Reflecting the sentiment that allies are both CAPS network supporters *and* members, he concluded, "They're members of this family [of CAPS]. They are members of the CAPS network. They can't leave it. We need the help they've brought." With this "help," the networks continue to serve as important platforms from which the CAPS can assert a collective voice and engage authorities. They thus have the potential to continue to advance the CAPS' recognition and inclusion as political and social actors—including their achievement of a meaningful practice of citizenship within water governance beyond the community level.

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[1] "ODESAR siempre nos ha acompañado, nos ha capacitado, nos moviliza."

[2] Law 722 "establishes provisions for the organization, constitution, legalization and functioning of existing Potable Water and Sanitation Committees in the country and those that organize in accordance with the present law" (Law 722, Art. 1). Among its other provisions, the law describes the CAPS'

"faculties," including system rehabilitation, maintenance, and expansion; prevention and control of water contamination at the subnational level; and water distribution in accordance with the technical capacities of a given system (Art. 15). The day-to-day tasks that fall to the CAPS as common property institutions (Becker and Ostrom 1995; Bromley and Feeny 1992; Feeny et al. 1990; McKean 2000; Ostrom 1990; Wade 1987) include convening meetings, collecting fees, and authorizing and suspending service in accordance with local by-laws, are also detailed (Art. 17) (see Chapter 3).

[3] In Chapter 3, I define the CAPS' "organic empowerment" as an empowerment not dependent upon formal policy or decentralization initiatives, but rather grounded in the CAPS' day-to-day work as water managers. This conceptualization differs from that embraced by decentralization scholars who tend to emphasize transfers of power to *official* or state sanctioned bodies at the subnational national level (see below). I embrace a broader definition of empowerment that considers how resource users acquire *de facto* access to and control over local resources that entail significant capacity building, decision-making, and leadership (Narayan 1994).

[4] Bridging social capital conceptually subsumes "weak ties," or those ties among people who do not know each other very well, as well as "cross-cutting ties" which Narayan defines as "linkages between social groups" (1999, 13). Granovetter emphasizes the importance of weak ties as "local bridges" (Granovetter 1973, 1370). When they do not serve this function, they "might as well be counted with the strong ties" (1370), or those describing relationships between friends and family.

[5] This conception of "scaling up" of organizational power and the relationships that result differs from Anderson's conception of "vertical ties" (2010) which describe an individual's linkages to an organization's leader associated with "dependency and passivity [and] that induce powerlessness while fostering suspicion, caution, separateness, and even hostility toward non-members" (10-11).

[6] Esman and Uphoff (1984) emphasize the importance of both horizontal and vertical linkages within and among local organizations, although these authors explicitly emphasize linkages in terms of their promotion of "development objectives" (151), while the present study draws attention both to development and organizational outcomes (i.e. an organization's character in regard to pluralism and autonomy). The authors also discuss the importance of local organizations (LOs) having linkages to the government, as long as this relationship does not entail government as too controlling of the LO: "Government linkage warrants only qualified endorsement; local organizations are better off with none at all than with too much, although some official involvement appears to be the most favorable relationship. Even considerable government linkage can be quite desirable as long as it does not become directive, and as long as local leaders and members do not lose control of their organization or their feeling of responsibility for it" (Esman and Uphoff 1984, 155).

[7] The CODA is comprised of the following organizations: Asociación de Educación y Comunicación La Cuculmeca, Asociación Octupán, Asociación para el Desarrollo de Nueva Guinea (ADENG), Asociación para el Desarrollo Integral Comunitario (ADIC), Centro Alexander Von Humboldt, Centro Intereclesial de Estudios Teológicos y Sociales (CIEETS), Centro Nicaragüense de Derechos Humanos (CENIDH), Centro de Información y Servicios de Asesoría (CISAS), Colectivo de Mujeres de Matagalpa (CMM), Comité de Acción Global (CAG), Ecología y Desarrollo (ECODES), Grupo de Promoción de la Agricultura Ecológica (GPAE), Liga de Defensa de los Consumidores (LIDECONIC), Mesa de Productoras y Productores del Norte (MEPRONORTE), Organización para el Desarrollo Económico y Social (ODESAR), Servicio de Información Mesoamericano sobre Agricultura Sostenible (SIMAS), and a growing number of municipal CAPS networks.

[8] Although urban water systems were targeted for greater commercialization, Article 4 of the proposed General Water Law stated that "potable water service will not be the object of any privatization, direct or indirect," impressing upon civil society actors, including the CAPS, that the door would remain open to privatization of water *resources* (Romano 2012).

[9] Indicative of a trend towards privatized service delivery, President Bolaños (2001-2006) passed executive decree number 109 in 2004 which assigned formal responsibility for the rural water sector to the Emergency Social Investment Fund (FISE). Although the diminishing transfer of resources from the central government to regional and municipal level DAR offices began even before an official transfer to FISE in 2004, (interview, Jorge Rojas, Sébaco municipal government, 3/12/10), the

Matagalpa office operated until 2007, the year in which financial support and accompanying contracts with UNICEF expired (interview, Mirna Rojas, ADEMNORTE, 4/10/10) (see also Chapter 2).

[10]As a "multidisciplinary" work team integrating engineers, hydrologists and administrators, ADEMNORTE has little need to contract outside individuals to help with project planning, design and implementation: "I don't need to pay an engineer so (s)he can formulate and design a project. I don't need to pay a supervisor because we have someone who oversees [project] execution. We have social promoters who already have experience in water" (Rojas interview, Matagalpa, 4/10/10).

[11] APN began working in Central America in 1984 from an office in Guatemala. Since 1986, APN staff have worked directly in Nicaragua (interview, Carmen María Lang, APN, Managua, 6/30/10).

[12] A key informant explained that Environment Nicaragua "dissolved" and thus could no longer do the work (interview, Managua, 6/28/10).

[13] CAPS participating in a February 2010 National CAPS Network meeting decided to name the organization the "Nicaraguan CAPS Network," to distinguish itself from other national-level water committee bodies in Central America. I refer to the National CAPS Network as a means to distinguish this organizing at a national scale with the numerous municipal level networks that have also formed.

[14] Being creative and "innovating" to this member means sometimes taking the bus without paying, though assuring the bus driver that payment would be forthcoming.

[15] While the growing ties among CAPS from different communities and regions is new, the relationships between the CAPS, domestic and international NGOs, and government officials described within this paper are not. Yet, they contrast with the limited coproduction characterizing rural water provision historically in Nicaragua whereby NGO and/or government staff typically withdraw from "project sites," or rural communities, after water system construction. The CAPS' networks build upon historic synergies in the rural water and sanitation sector, but represent a new kind of relationship between these community-based actors and the organizations that support them. In particular, these have become a means to advance *policy* goals, including the recognition of CAPS as rural, community-based resource managers.

[16] Though the CAPS' mobilizations in 2005 and beyond constitute their first transcommunity efforts to obtain legal and political status for the CAPS as community organizations, this particular struggle is not entirely new. According to CAPS interviewed, there have been attempts, albeit unsuccessful ones, to obtain legal status as individual organizations. CAPS member José Francisco Salgado of San Dionisio describes his community's previous attempts to obtain legal personality: "I went to Managua three times [in the late 1990s]…and we couldn't get legal status in that moment. I still have the statutes, regulations [of the CAPS], [evidence of] the workshops I completed, everything…We couldn't do it. But we didn't know anything about the laws" (interview, Matagalpa, 12/3/09). CAPS member Esperanza Soza of Muy Muy suggests that governments "of the right" made these past attempts difficult ("we have to be clear that as we had neoliberal governments, they were going to make it difficult to gain legal personality or to give models of how to obtain it") and credits the CAPS networks with helping to advance this struggle in the current moment: "The thing is that there wasn't [in the past] an organization as fluid and as consolidated as the municipal [CAPS] networks" (interview, Matagalpa, 12/3/09).

[17] The author found no evidence of political loyalties other than Sandinista and Liberal among CAPS members interviewed and observed.

[18] To the extent that CAPS do know the political affiliations of others, it is certainly plausible that bipartisanship in the leadership bodies—such as the National CAPS Network's Coordinating Commission—reflects individual CAPS members voting for those with whom they share a partisan loyalty. Research for this project did not explore in depth rationales behind individuals' voting within the CAPS networks.

[19] To date, the CAPS' elected leadership bodies reflect bipartisanship (i.e. both Sandinista and liberal loyalties), suggesting that members with affiliations across the political spectrum are being not only drawn to the networks, but also supported in leadership roles. In one basic way, the lack of previous cross-community interaction and organizing across municipalities and regions has produced the simple dynamic of CAPS not knowing each other's political affiliations when working together on water

issues in network spaces. Research for this project did not explore in depth rationales behind individuals' voting within the CAPS networks.

[20] As noted in the previous chapter, Sandinista deputies presented an incipient "Special CAPS Law" draft to a gathering of CAPS, local government officials, and NGO representatives in late 2007, soon after the General Water Law's passing. CAPS and facilitator Eduardo Zamora (SIMAS) took the opportunity to workshop a set of proposed ideas about the law to share with the government. One month later, in October, the national network sent a letter presenting their ideas for a potential CAPS Law to a National Assembly's Commission of Environment and Natural Resources member, José Martínez.

[21] Chapter II of the General Water Law creates the National Water Authority, or ANA, as "the decentralized unit of the Executive Branch in regard to water, with legal independent legal status, and administrative and financial autonomy."

[22] The CAPS also made this request formally in a public letter to President Ortega in July of 2008 (see Appendix E, "CAPS Letter to President Ortega, July 2008"). A director—neither of the two the CAPS promoted—was named to ANA in June 2010, almost a full three years after the Law's passing.

[23] Though the CAPS at a national scale are exploring the possibility of renting an office space in Managua, this is an expensive option, according to Eduardo. Relying on technology, instead, helps to keep the costs of organizing low.

[24] One of the three radio spots included the following text: "Law 722, or the Special CAPS Law, requires as of September 2010 that local governments and INAA open the Technical Municipal Units and the central registry of potable water and sanitation service providers. We invite all CAPS to register in these offices. Nicaraguan CAPS Network" (http://capsnicaragua.blogspot.com/).

[25] It is worth noting how that the CAPS' blog and Twitter feed, because their viewing requires personal initiative and access to more expensive technology (e.g. internet service), are not as "public" as the radio spots and newspaper articles as sources of information on the CAPS. The CAPS Twitter feed began February 7 of 2011, and to date (through February 26, 2011) has posted twenty-three "tweets." This stands in contrast to the CAPS' blog, which has actively integrated new posts on an ongoing basis since its creation in 2008.

[26] The Law of Citizen Participation (Law 475) was passed in 2003, establishing provisions for citizen participation in law development, including participation in consultations on proposed legislation (Law 475, Chapter 1).

[27] The Special CAPS Law (Law 722) "establishes provisions for the organization, constitution, legalization and functioning of existing Potable Water and Sanitation Committees in the country and those that organize in accordance with the present law" (Art. 1). Among its other provisions, the law describes the CAPS' "faculties," including system rehabilitation, maintenance, and expansion; prevention and control of water contamination at the subnational level; and water distribution in accordance with the technical capacities of a given system (Art. 15). The day-to-day tasks that fall to the CAPS, such as convening meetings, collecting fees, and authorizing and suspending service in accordance with local by-laws, are also detailed (Art. 17).

[28] Similar dynamics were observed in Oaxaca, Mexico: "Local NGOs have continued to disseminate information about municipal funds to community leaders, in an effort to provide them with the tools needed to hold both municipal and state government officials accountable" (Fox 2007, 538).

[29] The resources that extralocal allies contribute to the CAPS also appear to matter greatly for individual CAPS' *compliance* with Law 722 in the wake of the law's passing. The registering process requires each CAPS to have materials to document and in some cases, to develop, constitutive acts, statutes and by-laws (e.g. paper, pencils, markers; financial resources to travel to the local government office (via bus and/or taxi, but also potentially on foot); and finally, the resources to travel to the capital. During a CAPS municipal assembly in San Dionisio, CAPS members read through Law 722 in small groups and then voiced concern with remaining "outside of the law" if they could not comply with its requirements to registering with the government (5/2/10). Of course, these "costs" come down to more than financial resources. Some rural community members must travel for three days to reach

the Managua via multiple modes of transportation, losing time away from family and important productive activities.

[30] The Enlace issue to which Delia refers was published in 2009; see Appendix F, "CAPS Enlace No. 19 2010."

[31] For instance, the National CAPS Network, at the time of research, chose to distance itself from the leaders of CAPS municipal networks in the department of León who were choosing to publically affiliate with the Sandinistas and were receiving funding from the *Club de Jóvenes Ambientalistas* (Youth Environment Club), a Sandinista youth organization. In practice, however, the decision not to invite certain León-based CAPS leaders was made by one of the non-CAPS facilitators, raising issues of network ownership and accountability. In the Sébaco municipal network case, there did appear to be a heavy influence of ADEMNORTE on the networks' decision to hold meetings outside of the local government. This assessment comes from private conversations with ADEMNORTE staff who shared their interest in holding meetings elsewhere out of frustration with local government staff, as well as from conversations with CAPS sharing awareness of ADEMNORTE's preferences.

[32] During a question and answer period with FLSN representatives, CAPS member José Francisco Salgado solicited comments from the elected officials on Article 4 of the General Water Law which proscribes privatization, but—as noted in an earlier footnote—only of "water service"; furthermore, other articles specifically outline procedures for granting water extraction and use rights to private individuals or entities (see Chapter II, Law 620). The officials' searching through the text of the law to locate and read the Article before responding to the forum participant gave the impression that some community members' familiarity with and knowledge of the law surpassed even that of the government officials who supported the law's development and ultimate approval in the National Assembly.

[33] Consultations were coordinated by the National CAPS Network coordinator, Eduardo Zamora, and Carmen María Lang of APN.

[34] Gilberto Arauz of INAA explains that the Pan-American Health Organization (PAHO) financed the development of the draft CAPS law, which Sandinista deputies ultimately ended up sponsoring in the National Assembly (interview, Managua, 6/2/10).

[35] Carmen María also emphasized that the CAPS' made a point of emphasizing to the deputies that they represented many different political tendencies and religions.

[36] Javier Mendoza, the facilitator of the departmental CAPS network in Matagalpa, jokes lightly that the CAPS are "firing" ODESAR as facilitators of community *intercambios*, given that "[already] the CAPS in this area don't ask us to accompany them much…now the water committees have been meeting among themselves alone. Now they call each other directly…To us it's excellent that they mobilize on their own" (interview 6/21/10).

CHAPTER FIVE:

TRANSCENDING POLITICS WITH IDEOLOGY AND DISCOURSE

We're the volunteer army of the community.

- Luis Adolfo Vargas Ríos, CAPS San Lorenzo, Boaco, 2/17/10

I hope we don't allow our municipalities to continue becoming politicized, because water doesn't have a political color, or religion, or belief system.

- Jessenia Rivera, CAPS El Mozonte, Nueva Segovia, 11/5/09

The previous chapter argued that the Potable Water and Sanitation Committees' (CAPS) collaboration with various domestic and international allies has been of paramount importance to the ability of these to connect horizontally as CAPS and scale up vertically to state spaces of representation. Combined with ally-supported legal and political capacity building, the CAPS' newfound physical mobility and access to state officials facilitates their construction of pluralistic networks and their maintenance of relative autonomy as they develop growing recourse with state actors and political parties. This chapter examines an additional dimension of the CAPS' transcommunity collective action and pursuit of multi-scalar goals: their discourses of water governance and how they influence the CAPS' relationship to state actors and the general public. I argue that the CAPS' discourses of water use, access, management, and conservation contribute to fostering collaboration across partisan and other divides among CAPS and extralocal actors in

resource governance and also promote the CAPS' autonomy vis-à-vis state actors and political parties.

This chapter analyzes three interconnected discourses that mediate the CAPS' public presence and interactions with authorities. These include 1) the CAPS' claims to autonomy vis-à-vis the state and ownership over water systems; 2) the CAPS' description of their work in terms of legally-prescribed state responsibilities in the water and sanitation sector; and 3) the CAPS' discursive focus on collective, practical problem solving, which prioritizes provision of public goods above rural-urban, state-society, and partisan divides, hence promoting pluralism. These discourses, akin to collective action "frames," were oft-heard within municipal and national CAPS network spaces and have also shown up in media representations of the CAPS' organizing efforts. The same discourses have also characterized the CAPS' exchanges and negotiations with state actors, as described in interviews with CAPS members. As I will argue, how these discourses reflect the CAPS as local organizations and their relationship to local and extralocal landscapes of water governance makes them particularly salient and effective towards promoting and achieving their objectives, including a greater role of the state in supporting rural water access.

Importantly, the way the CAPS talk about themselves and their work reveal their embeddedness in local "water territories"—social, political, and environmental landscapes in which the CAPS constitute the legitimate authorities and from which they "draw strength" for their organizing efforts (Spronk and Webber 2007, 31). As a

> scheme of mutual belonging that enables the rebirth of collective imaginations…water territories involve socio-natural webs with landscapes

> and waterscapes in which people live and make livelihoods and identities, for which people feel responsible, in which they are morally involved. (Boelens, Getches, and Guevara-Gil 2010, 19)

Not unlike rural water users' associations in other parts of the Global South (see Boelens 2008; Boelens 2009; Boelens, Getches, and Guevara-Gil 2010) the CAPS belong to and help to constitute local water territories through their resource management. The concept thus captures and explains the ideological and material underpinnings of the CAPS' experience as resource managers. Nicaraguan water territories encompass the value-laden and ideological dimensions of water management at the grassroots, which include community norms around universal water access and a shared commitment to protecting local water systems and access regimes from potential threats (which range from residents' unwillingness to pay user fees to tenuous water source rights, as noted in Chapter 3). Water territories also encompass identity-making: water plays a crucial role in processes of identity formation for rural communities intimately involved in its extraction, use, and management at the grassroots (Boelens 2008).[1] Discourses that frame and outwardly project the CAPS and their local landscapes and experiences of water management—i.e. the CAPS' lived realities of water territories—also serves to shape their relationship to the extralocal actors with whom they seek to engage and influence. Reflecting the legitimacy and credibility of the CAPS as social organizations, the CAPS' discourses support these resource managers' demands for autonomy and their construction of a broad social base.

The CAPS' collective discourses hence constitute an important means by which their "organic empowerment" and their rootedness in water territories become outwardly projected. While Chapter 3 focused on the CAPS' development of resource management capacities and their legitimacy in the eyes of residents, this chapter examines the outward articulation and projection of this work, know-how, and legitimate authority at the local level. The CAPS' discourses of independent resource management play a distinct function in promoting their pluralism and autonomy as they constitute a means for knowledge and representations of their work to "scale up" with them politically and transcend their communities as they become publically projected.

In certain respects, the CAPS' discourses of water governance serve as collective action "frames" as explored in the vast literature on social movements (Snow 2004; Oliver and Johnston 2000; Westby 2002; Goodwin and Jasper 2004; McAdam, McCarthy, and Zald 1996). Framing processes, or "the collective processes of interpretation, attribution, and social construction that mediate between opportunity and action" (McAdam, McCarthy and Zald 1996, 2), have been cast as a "dynamic, negotiated, and often contested processes" (Benford and Snow 2000, 3). The collective action frames that result encompass the "shared meanings and definitions that people bring to their situation" (McAdam, McCarthy, and Zald 1996, 5). However, the discourses examined in this chapter must be qualified as collective action frames in two ways, each of which contributes to our understanding of framing, discourse, and social mobilization.

First, the CAPS' framing processes and resulting frames have not been overtly contentious in the way described in much of the social movement literature (see Benford and Snow 2000; McAdam, McCarthy, and Zald 1996; Snow and Benford 2000).[2] In fact, what is perhaps most surprising about the CAPS' frames in light of theories of collective framing is how immediately effective they were in garnering an apparent "consensus" (Klandermans 1984, as cited in Benford and Snow 2000) among CAPS participating in networks, the media, and state actors—with the buy-in of the latter being all the more counterintuitive as the principal target of the CAPS' policy interventions. I argue that the lack of observed contention and emergence of "frame contests" is explained by the high degree of resonance of the CAPS' frames. This resonance owes principally to their "empirical credibility" as well as the credibility of the CAPS as frame articulators (Benford and Snow 2000). Importantly, CAPS and their allies have benefitted from a blank discursive terrain in regard to the CAPS and rural water management more broadly. That is, there was no need to re-interpret or challenge existing public projections of civil society involvement in rural water management because these scarcely existed. This discursive context likely lent the CAPS' framings additional leverage and strength as the CAPS could construct self-representations and project stories and descriptions of their work in the absence of conflicting representations. Arguably, in fact, the state's contesting of the above-noted collective action frames would not have been politically-advantageous. Doing so would have also meant contesting that the CAPS do the work that they do with little state support; that the state is the ultimate and legally-responsible guarantor of

basic services, like water; and that more state support to rural communities in the endeavor of water management is not valid, worthwhile, or important—in theory or in practice. Although the lack of framing contests is not particularly surprising given the CAPS' credibility as frame articulators and their highly credibly characterizations of local resource management, this finding contrasts with the characterization of framing and resulting frames as contested.

Second, although framing is oftentimes qualified as "strategic," the CAPS' framing is best understood as producing instrumental, yet not self-consciously strategic, "emergent" frames (McAdam, McCarthy and Zald 1996; Oliver and Johnston 2000). The CAPS' discourses reflect a process of "mak[ing] sense of both daily life and the grievances that [they] confront" (Oliver and Johnston 2000, 42). However, the CAPS' frames to date have not required much of the intentional and collective interpretive work described in the literature. Rather, the CAPS' discursive frames mirror their everyday, historical and contemporary, experience as resource managers. This lived experience encompasses the CAPS' valuing of universal access and collective solving problem, which also show up in their articulations of themselves and their work. As Benford and Snow (2000) argue, "collective action frames function as innovative amplifications and extensions of…existing ideologies or components of them" (Benford and Snow 2000, 613, fn 2). While the CAPS' discourses are akin to collective action frames, I favor reference to "discourses" and "discursive framings" over "frames" as I see the CAPS' language constituting discursive representations of their values as well as morally-guided work and roles at

the community level. “Discourse” better captures the extent to which ideology and language are mutually constitutive, and thus allows “do[ing] justice to the ideational complexity of a social movement” (Oliver and Johnston 2000, 38; see also Munson 1999; Jasper 1999; Westby 2002). Ultimately, when projected publicly and within spaces of engagement with state authorities, the CAPS’ discourses become a direct means of asserting the CAPS’ empowerment and legitimacy as resource managers, and work to promote pluralism and insulate their organizational efforts from attempts at state cooptation.

DISCOURSE AND THE TRANSCENDENCE OF POLITICS ACROSS SCALES

The CAPS’ discourses mediate their engagements with the state and connection to broader publics through several avenues. These include the CAPS’ engagements with state officials within CAPS network spaces, where the CAPS and their allies have garnered the participation of state actors like local government officials and national water agency representatives. Another important state-society interface has been policy consultations within government spaces of representation. Political pronouncements, billboards, and radio spots constitute additional means of projecting a collective voice. This section examines the CAPS’ three key discourses, drawing attention to the ways these reflect the CAPS’ embeddedness in water territories, as well as promote pluralism and the autonomy of the CAPS and their networks.

DISCOURSE OF INDEPENDENCE AND OWNERSHIP: "AQUÍ SOMOS LOS DUEÑOS"

The CAPS' discourse of autonomy and ownership reflects both their identity as resource managers as well as their particular position within the political economy of water governance in Nicaragua. As legitimate authorities in water management at the grassroots, the CAPS exercise a great degree of control over local water flows and "markets." Yet even as the de facto authorities involved in the local provision, regulation, and management of water, the CAPS have been denied recognition in political and legal terms and have received little support from the government as resource managers. This experience informs the ways in which the CAPS talk about their work and self-advocate vis-à-vis the state. As explained in Chapters 2 and 3, the limited and geographically uneven contributions of the state over time to rural water provision have not only produced the *imperative* for rural residents to develop water management capacities, but have also engendered among the latter a keen sense of ownership over water infrastructure and local water sources. In important ways, the CAPS draw upon their experience of "abandonment" and independence in local water management to assert autonomy vis-à-vis the state in public encounters and spaces. Indeed, the particular resonance and credibility of the CAPS' experience supports their claims to autonomy and control over water systems.

Importantly, the CAPS' discourses of autonomy and ownership reflect deeply held commitments to their communities' well-being. The interdependence of the CAPS and residents within local water territories—and the social commitments and "community bonds" (Bakker 2010, 173) this entails—both support the CAPS' water

management and lend strength and legitimacy to their efforts seeking recognition and formal autonomy. Identifying strongly as volunteers, as they are not compensated in economic terms for their work. Some CAPS explained their "volunteer" work in terms of an emotional connection to one's community.[3] As Luis Adolfo Vargas of San Lorenzo (Boaco) expressed,

> *We as community leaders, who work with love for our community, for our municipality, the majority [of us] live in poverty.* Why, because we don't have ability as others have to get out of it. If in a year we work one month, two months, that's a lot…At times when someone has a job, a little bit of work, [he's] not going to work in service of the community, if [he's] working to have his own money, his own life. Meanwhile we [the CAPS] don't do that. *We're the volunteer army of the community*.[4] (Interview, Managua, 2/17/10, emphasis added)

Luis Adolfo characterizes water management as emerging from the love of one's community, and implicitly, of one's family and neighbors within the community. Notably, participating in this community work of water provision requires great sacrifices in terms of time and energy, including the forgoing of monetary income. Jessenia Rivera of El Mozonte expresses the sacrifices and commitment that come with being a part of a water committee: "*Hay que enamorarse del proyecto*"—"You have to fall in love with the project" (interview, Managua, 11/5/09). Delia of Molino Sur, Sébaco, articulates a similar sentiment: "We have love…we care for [the water] as if it belongs to us"[5] (Managua, 11/5/09). The challenges inherent in this work "require," in some sense, an emotional connection to the water project and a commitment to one's community; in short, a commitment grounded in local moral economies (Bakker 2010; Scott 1977; Arnold 2008; Edelman 2005; Trawick 2001) which does not lend itself to replication or substitution by external actors.[6]

In interviews, CAPS members spoke openly and emphatically about the little assistance and support they receive from the government in water management and provision. Referencing local CAPS' experience in Muy Muy prior to the formation of the municipal network in 2005, and its subsequent representation in the Municipal Development Council (CDM), CAPS coordinator Esperanza Soza explains, "The truth is that before [starting participation in the CDM] we never had the support of any mayor. And we have been around for a long time" (interview, Muy Muy, 8/21/08). Marbelly Tremenio of La Labranza, Sébaco, also emphasizes her community's independent work: "[W]e've crawled along by ourselves, with our own money, for our own work. We have never, to this day, had help from a mayor" (interview, Matagalpa, 12/11/09). The CAPS and rural residents more broadly invest time, labor, and in cases, monetary resources into constructing as well as sustaining rural water systems. This investment and set of responsibilities fosters a strong sense of ownership of local water systems and water territories. Particularly in the wake of system construction, as Chapters 2 and 3 explained, communities bear the burden of sustaining water systems technically, organizationally, and financially. Misael Blanchard, the CAPS network coordinator of El Tuma-La Dalia, explains how a sense of independence in water management—here cast as "abandonment" on the part of the government—generates the desire and will to protect water systems from potential threats:

> *Imagine the [sense of] abandonment the local government gives the CAPS in their communities at times, it leaves great repercussions.* [CAPS network leaders] arrive to a community, where the person who had donated the well was waiting for us with machete in hand. [He] told us, "here the system is

> mine, the property is mine," etc., etc. We told him that we were an organization that didn't come to get involved with internal community issues, that our work is social, organizational, moral and we had to present the situation [*le tuvimos que plantear la situación*]. (La Dalia, 12/9/09, emphasis added)

This testimony, which was shared during a municipality-wide assembly to form a CAPS network in Sébaco, expresses vividly how this ownership can manifest. Importantly, local government and state agency officials were present to hear this member's characterization of the government's "abandonment" of the CAPS.[7]

Despite not always having official legal ownership over water systems and sources, CAPS' experience of independence in local water management informs an acute sense of ownership as well as a willingness to articulate claims to water systems. San Lorenzo, Boaco, CAPS coordinator Luis Adolfo recounted a direct interaction with the municipality's mayor, objecting to his attempt to put local water systems in the hands of the Citizen Power Councils (CPCs): "I said to the mayor, 'One moment, here the community we are the owners and señores of this water system. We understand that the [last] mayor donated the water source to us, because [he] bought it'" (interview, Managua, 2/17/10). Here the CAPS coordinator drew upon his community's agreement with the previous mayor to assert ownership over the local water system. A special issue of the popular publication *Enlace* projected the same discourse of independent and local authority and ownership among CAPS members in the Rafael Altamirano neighborhood of Muy Muy. CAPS coordinator María Ramona Espinosa asserts, "We are the owners of these resources, and we are the ones who have worked to have water in [our] homes" (Enlace 2008, 7). In

reference to a public water post built by ENACAL (the state water company) that preceded the community's construction of their "own," and ultimately less costly, water system, she continues, "why would someone from outside [of the community] come wanting to control us or put in a [water] meter?" These statements reflect a strong sense of ownership over and responsibility for local water systems and broader water territories. Their outward projection contributes to public awareness of the CAPS' water management and provision, hence promoting their recognition as distinct and independent actors within resource governance.

The CAPS' assertions of independence also show up in their efforts to keep out the influence—or interference—of "politicians" and local government officials whose partisan agendas may be divisive. As a CAPS member Antonio Roque of Muy Muy expressed, "here politics doesn't touch [our work] nor do we let it. What's political is political. Here we don't allow those things to mix, the political with the social. Partisan politics [that is]. *We're autonomous*" (interview, 8/21/08, emphasis added). Just weeks before the 2008 municipal elections, Antonio explained his water committees' approach to an upcoming meeting with municipal government candidates:

> By chance, the eighth [of August] we're going to a meeting with all the candidates so they can know everything that has to do with the water projects as well as avoid that they [end up] using those projects for political purposes, because *this isn't political; the only politics that we use [*utilizamos*] is the need of the people to have water to satisfy their needs.* [This is] not something political, that's what we try to avoid. And because of that we're building the capacity of [*capacitando*] our members, the same users who have to know everything that's happening so no one fools us along the way. (Interview, Muy Muy, 8/21/08, emphasis added)

This experience demonstrates that the CAPS use these kinds of public forums and interfaces with state actors in the public sphere to assert their resolve to keep water access free from partisan influence, a prerogative which they connect to their autonomy in local water management (see Appendix G, "CAPS Article 150 Declaration 2008," for the CAPS internal declaration to pressure to-be elected municipal government candidates to prioritize water and sanitation projects in their municipalities).

Even as state officials have begun to recognize the CAPS as legitimate actors within water governance, the latter have found themselves contesting the state's characterization of their work when this misrepresents their actual resource management practices. Interactions with public officials are opportunities for the CAPS to assert the distinct and important role they fulfill in water management when state actors fall short in their awareness of the CAPS and the water provision they facilitate. One such example of this occurred after the passing of the General Water Law (Law 620) in 2007: CAPS member José Francisco Salgado of San Dionisio participated in a workshop hosted and led by the Central American University's Nitlapán Research Center entitled "Water Management in Nicaragua: Implications of the Law [620] and Water Regulation." As the only CAPS member to participate in the event, José found himself in the company of representatives of state institutions (like the Ministry of Energy and Mines) and domestic NGOs (like ODESAR, SIMAS, and Acción contra el Hambre). His interchange with a government official from the Ministry of Natural Resources and the Environment (MARENA) demonstrates his

assertion of the CAPS' extensive water provision, even though the government had yet to recognize it formally. He recounts:

> I even received a course in Managua on the National Water Law… I was the one there from the CAPS…So I spoke as a CAPS. Someone from MARENA comes and she tells me that the CAPS aren't anything, they don't know anything. "What?" I tell her. "One moment. *The CAPS, we're five thousand [nation-wide], and we serve 200 thousand people across the country. And no one gives us anything. If you don't know us, now, yes, you're going to begin to know us*." (Interview, 3/19/10, emphasis added)

José Francisco hence counters the MARENA representative's discounting of the CAPS' extensive contributions to water management at a national scale. With their increasing inclusion in government and nongovernmental spaces of dialogue and exchange with public officials, the CAPS have greater opportunities to make these kinds of vocal assertions in the public sphere.

The above examples provide evidence of how the CAPS' discourses do not always serve as strategic frames in a social movement sense. Because they emerge from the CAPS' experience of water management within local water territories, they do not constitute the outcome of collective processes of interpretation and strategizing. Even lacking collective processes of negotiating and devising frames, however, the CAPS do *collectively project* the discursive framings of their work. The CAPS' struggle with the Nicaraguan Aqueduct and Sewerage Enterprise (ENACAL) to hold onto their "S" (discussed in the previous chapter) provides evidence that the discourse of independent work at the grassroots also shows up in their collective, transcommunity endeavors, like seeking official state recognition. The CAPS' name, while having symbolic importance in its representation of the CAPS' collective

identity, also reflects very tangible, material dimensions of the CAPS' work, including what they feel are their rightful domains of work within the rural water and sanitation sector. At a November of 2009 meeting with representatives of both ENACAL and the Commission of Environment and Natural Resources, participating CAPS members countered the water company's claims that they lacked the capacity to provide for basic sanitation in their communities. CAPS member Jessenia Rivera from El Mozonte, Nueva Segovia, recalled an ENACAL representative questioning the capacity of the CAPS, yet following with the acknowledgment that "'we as ENACAL haven't had the coverage to enter into rural areas [to provide service].'" Jessenia recounts her subsequent intervention:

> So that's when I asked to speak and I said: 'You're telling us that we're incompetent. Excuse me but we—the water committees—are more competent than ENACAL. Because, yes, we have entered into rural communities and you [ENACAL] haven't been able to. And there we are. We're getting water [*el vital líquido*] to the people. You think that we're not capable of providing sanitation but we're already doing so. We chlorinate water, we do sanitation campaigns. If we haven't constructed drainage systems, latrines, or hygienic services, it's because we haven't had the legality [to do so]. (Recorded meeting notes, Managua, 11/5/09)[8]

The CAPS' struggle for legal and political recognition is deeply rooted in their fulfillment of local water and sanitation work. The CAPS fiercely contested losing the prerogative of local sanitation—even if only in the sense of having their name altered within national legislation. The significant degree to which the CAPS have engaged in their work independently—and "unofficially"—over time is helping the CAPS to draw distinctions between their rightful and legitimate roles and prerogatives in the rural water and sanitation sector, and those of other actors, including state agencies

and officials. Importantly, "winning" this struggle over the "S," at once discursive and material, depended upon the CAPS' articulations of their local sanitation work. National deputies' ultimate siding with the CAPS may be viewed as a boon to their autonomy as actors within resource governance. Counter-intuitively, and as the next section details, the political marginalization, and until recently, nonrecognition, of the CAPS also informs the CAPS discursive strategy as they scale up politically.

DISCOURSE OF STATENESS: "UN TRABAJO QUE CORRESPONDE AL ESTADO"

As demonstrated, CAPS members frequently invoke the state in characterizing their local water management. Notably, they do so not only to establish that they work with very little state resources and support, but also to project the *state-like* qualities of their water management. Much like the CAPS' historic and contemporary experience of independent resource management at the grassroots, their fulfillment of a role and set of responsibilities that are legally assigned to the state—and that are a part of popular *imaginaries* of the state—bolsters their claims to autonomy. As Boelens argues, citizens have both an "ideological construct" of the state as serving the public interest and their actual *experience* of the state through their contact—and, importantly, lack of contact—with multiple state agencies, officials, and policies (Boelens 2008, 52). Thus, at the same time that the CAPS lament the state's neglect of the rural water and sanitation sector, they ascribe to the state responsibilities in this regard.

Indeed, the CAPS' discourses around fulfilling "state roles" in the sector enable them to leverage how the state has fallen short in its formal responsibilities. The 1987 Nicaraguan Constitution makes the state responsible for basic services:

> It's an obligation of the State to promote, facilitate and regulate provision of basic public services [including] energy, communication, water, transportation, vital infrastructure, ports, and airports to the population, and access to these is an inalienable right of the population. (Art. 105)

The 1988 Municipalities Law (Law 40) encourages local governments to promote "good use of natural resources…and protection of the environment with special emphasis on sources of potable water [and] elimination of residual liquids and solids" (Art. 28). More recent legislation makes the state role in the water and sanitation sector more specific. The 2007 General Water Law (Law 620) makes explicit reference to the CAPS and their formal relationship to the state. The Law's Regulations, as noted in Chapter 3, state that in rural areas where ENACAL

> does not have coverage, systems will be administered by the community, by the Potable Water Committees, who will guarantee service to the community, *all below the supervision and control of ENACAL*. (Art. 75, emphasis added)

The Special CAPS Law (Law 722) not only reiterates the state's "responsibility" and "obligation" to "promote, facilitate, and regulate basic public services" including potable water (Preamble). It also delineates a series of state responsibilities related to the process of the CAPS' "legalization" (Chapters IV and VIII); the implementation of differentiated energy tariffs for CAPS (Art. 25); and technical assistance and support to CAPS in regard to environmental management and organizational sustainability (Chapter VII); among others.[9] Moreover, a host of national level institutions within the state—including ENACAL; the National Commission of

Potable Water and Sanitation (CONAPAS); as well as the Ministries of Environment, Energy and Mines, and Health, have legally-outlined roles in implementing the above-noted laws and in regard to in water and resource governance more broadly.

Notably, the CAPS' discursive framing of state actors' inaction, including limited support to rural water provision, encompasses their contrasting of this with their own fulfillment of state roles. CAPS member Marbelly Tremenio from the municipality of Sébaco expressed her "discovery" in Law 620 that the government was not fulfilling its role as guarantor of water access:[10]

> Since 2007 to the present, with Delia, I've been in the struggle of the CAPS in which we're aspiring to a law that supports us [*que nos ampare*]. Now we've realized, from article 150 in Law 620, that it's an obligation of the local government to look after [velar] the water systems. And they've never done it. Of course, as we didn't know the law, we never went to knock on their door. The [water and sanitation] organizations, yes, because we would go to them to ask for backing. But I tell you…the only thing [the government] has done is give a signature so the [nongovernmental] organizations could work in the community. (Interview, 12/11/09, emphasis added)

Miguel Ángel of San Ramón expresses similar understandings that the government has not taken responsibility, in practice, for ensuring water access:

> Those [tests of water quality] are an obligation of the government and whenever they've done it it's been free. Because *it's an obligation of the government to guarantee water to every Nicaraguan.* […] Article 19 of the Water Law 620 says it clearly, where it says that *the central and municipal government have to…[give] priority to potable water for communities and their habitants*. (Interview, 12/1/09, emphasis added)

This quotation reflects recognition that state actors have legal responsibilities to rural communities, which includes the assurance of clean drinking water. Yet, as Chapter 3 noted, many CAPS in interviews reported that they were unaware of the actual quality and potability of the water flowing through their "potable water" systems. Moreover,

the results of official water tests may not even be shared with communities, and CAPS' own local efforts in environmental stewardship may be undermined by private and/or external actors, such as local land owners or state agencies. For example, some CAPS spoke of the state as complicit in the destabilization of local conservation efforts through a lack of sufficient regulation, such as not penalizing companies or private land owners for their legal breaches.[11] Another CAPS member pointed out during a 2009 National CAPS Network meeting that as *campesinos* they do not receive "payments for environmental services" from the government, but they are doing the work of stewards, protecting the forests and water sources (meeting notes, Managua, 11/5/09). The CAPS' historic and contemporary assumption of a "state role" via their extensive water management, in addition to their environmental stewardship, lend legitimacy and credibility to their demands for recognition as autonomous resource managers and service providers.

The CAPS have not been the sole source of this discourse of state responsibilities in the water and sanitation sector. National newspapers have publicized the state's legal duties in the sector while projecting an image of the CAPS as the guarantors of potable water in the country's rural areas, with articles appearing most often around the passing of new legislation (i.e. Law 620 and Law 722). These portrayals reflect the CAPS as filling in "gaps" left by the state, in addition to complementing its work. Several articles in 2008—from both major newspapers, *El Nuevo Diario* and *La Prensa*—mentioned the provision of Law 620 requiring local governments to prioritize water projects above all others, with one author citing

Article 150 in full (García 2008a).[12] Journalist Mendoza drew attention to a different provision of the law, Article 66, which specifies that the government must assure prioritization of water for human consumption before all other uses (Mendoza 2008). He quotes CAPS member Carlos Loásiga (Compasagüe 2, Muy Muy): "'This article provides an important tool so that the municipal authorities prioritize water for the population, be [the people] where they are.'" Water committees were also portrayed as working where ENACAL "doesn't offer public service" (García 2008b). As a *La Prensa* article in early 2010 articulated:

> The CAPS are practically the only ones who enable the provision of potable water in rural areas, given that the Nicaraguan Aqueducts and Sewerage Enterprise (ENACAL) only covers urban areas, although not all [of them]. *Where ENACAL is not [present], there you'll find the CAPS.*" (Pérez 2010, empasis added)

Hence in the process of acclaiming the CAPS' work, media depictions of the rural water sector served to concretize an image of the state as shirking its duties as a provider of public services.

Quite remarkably, and as evidence of the effective projection of the CAPS' role as resource managers, reformers in the state advocating for the CAPS' recognition have adopted a similar discourse around the state's service provision responsibilities. In early 2010, the Environment and Natural Resources Commission, a bipartisan group of National Assembly members, issued an introductory report entitled "The Potable Water and Sanitation Committee Law Project," submitted to the President of the National Assembly in February of 2010. This report described the work and mission of the CAPS as follows:

> They are nothing more than groups of voluntarily organized people at the community level, in charge of the maintenance and sustainability of potable water and sanitation projects. In few words, *taking actions and make efforts [*gestiones*] that correspond to the state* to assure the population's access to the vital liquid in the urban-rural zones in the country. (Emphasis added)

The Commission members thus chose to characterize the CAPS' work as legally assigned to the state, hence discursively elevating the important work the CAPS do. The deputies also further legitimate the CAPS' demands for recognition and legality through their paraphrasing of CAPS' voices heard during consultations on the proposed law:

> [An] expression gathered [*recogida*] during the consultations was the following: "In passing this law, it would be hardly a cancellation of one of the many debts that the government and the deputies have with us, given that we've been doing the work of the government without receiving anything in return; better said we've had to sacrifice with the paying of high prices [*hemos sido sacrificados con el pago de altos precios*] for the materials that we buy. [In] general we have been abandoned by the government and the municipalities.

These pronouncements reflect the lawmakers' recognition that the CAPS are carrying out work that legally falls to the state, even though they stop short of explicitly recognize that the CAPS have been doing work at a geographic scale that the state has not had the full human, financial, and technical capacity to carry out. Reifying the state the ultimate guarantor of public services like potable water and discursively solidifying the state-society dichotomy works in the CAPS' favor: their fulfilling of "state" functions of water provision and sanitation, as well as local environmental conservation and regulation, grants them legitimacy vis-à-vis state authorities and provides the grounds on which to build greater synergy with other actors and institutions within the sector.

Discourse of Collective Problems Requiring Collective Problem Solving

In contrast to the "us vs. them" framework characterizing the CAPS' assertion of ownership over water systems and autonomy vis-à-vis the state, the CAPS also discursively promote processes of collaboration and coordination among diverse actors in resource governance—even though these processes in practice may be fraught with conflict. As part this promotion of greater collaboration in the sector, the CAPS promote a greater state role in the water and sanitation sector. Paradoxical as it may be that the CAPS aggressively assert independence while encouraging the state to be more active, this particular confluence of objectives and strategies is not surprising.[13] In fact, the CAPS' independence has affected their resolve to pressure the state for greater resources while simultaneously asserting local autonomy over water systems and management practices. The CAPS' discourse of collaboration—and working across rural-urban, state-society, and partisan divides—in the water sector helps to reveal the relationships between the CAPS' quest for independence in water management and the seemingly contradictory goal of greater involvement of, and resources from, the state.

At the grassroots, the CAPS work across partisan and other divides to problem-solve. Collaborative problem-solving at the grassroots and the imperative to work across partisan divides informs the CAPS' promotion of synergistic efforts at other scales of governance. The CAPS' local practices demonstrate a valuing of universal water access, the achievement of which in practice means overcoming

barriers to collective action and "find better solutions to their problems," especially because livelihoods are at stake (Ostrom 1990, 34).[14] In describing how the water committee of which she is a part works in her community, Delia Aydeé Tamariz of Sébaco asserts that her CAPS "doesn't mix its work with politics [*lo politico*]" (interview, Matagalpa, 11/5/09). Although highly critical of the Sandinistas' new model of citizen participation at the grassroots—the *Consejos del Poder Ciudadano* (Citizen Power Councils, or CPCs)—Delia embraces residents of different political loyalties working together on the CAPS.[15] Similarly, in the community of San Francisco, San Lorenzo, the CAPS coordinator exclaims that since the committee's formation eleven years ago residents of diverse religious backgrounds and political loyalties have worked together (meeting notes, Managua, 11/9/09). The CAPS knows that the water project "is for everyone. [In the CAPS] are liberals, Sandinistas, conservatives and [people] of all parties and religious beliefs" (interview, Luis Adolfo Vargas, Managua, 2/17/10).[16] Hence, in a local political economy in which residents struggle to secure sufficient basic resources for livelihoods, "mutually-supportive interaction" (Anderson 1994, 5) within communities and engagement in forms of reciprocity tends to be the norm (Scott 1976; Anderson 1994), especially when there is little outside support for securing livelihoods.[17] The livelihood, and fundamentally survival-related, imperatives of having a source of drinkable water contributes to the CAPS collective problem-solving to meet local water needs.

The CAPS' collective discourses and ways of talking about problem solving within water governance reflect their approach to water as a collective good and

resource whose use and distribution must be protected from potentially divisive dynamics. For instance, the CAPS' articulated anti-water privatization stance conveys the sense of a need to act collectively across territorial, organizational (i.e. CAPS) and rural-urban divides. During and in the wake of the anti-privatization social movement (2000-2007), CAPS members spoke of their perceived connection to a broad community of water users who would potentially be affected by water privatization. Specifically, their discursive framing of privatization reveals their perception that this kind of policy prescription would affect people across geographic, including urban-rural, divides, and thus requires transcending these divides to confront. As a member of one of the first municipal CAPS networks formed in 2005, CAPS Santa Fe (Muy Muy) coordinator Justo Pastor Flores expressed,

> [We saw] the need to form a municipal level water network to focus on the problematic of water privatization. [Before] we saw this problem as only [affecting] Muy Muy. But after some time we understood that *not only Muy Muy was going to be affected*. (Interview, 8/21/08, emphasis added)

The CAPS, particularly those in Matagalpa who engaged with anti-privatization organizing in the mid-2000s, cite the threat of privatization as one of the primary reasons for forming municipal CAPS networks. "When [people] were talking about privatization, we formed the network," explains José Francisco Salgado of San Dionisio (personal communication, Managua, 11/5/09). This multi-scalar organizational strategy reflects the CAPS' and their allies' understanding of this potential national policy as having implications, symbolic and material, for both urban and rural Nicaraguans at a national scale. Indeed, the anti-water privatization

social movement mobilized Nicaraguans across sectors, geographic regions and state-society divides (see Chapters 1 and 2).

The CAPS discursively projected their stance on water privatization via several means. A set of "Declarations" coming out of a September 2008 National CAPS Network meeting (published with the support of Popular Norwegian Aid [APN]) voiced their demands for the government to fulfill its legal imperative to prioritize water and sanitation projects at the municipal level; additionally, the CAPS asserted a demand to participate in state committees devoted to integrated water resources management at a national scale. Each declaration concluded with the following statement: "The right to water access is a human right essential for life, the privatization of this resource is a social crime." Moreover, the CAPS' collective action platform (see Chapter 4 and Appendix B, "CAPS *Plataforma de Lucha*") states the CAPS' objective to "Promote anti-water privatization and water resource protection resolutions in all municipalities," making explicit the notion that government policies must work in concert with local protection efforts. Although at a national scale anti-privatization organizing was most prominent prior to the passing of the General Water Law (Law 620), the CAPS have continued to embrace publicly an anti-privatization stance as well as an anti-privatization discourse as a unifying construct. This publically-projected policy stance has contributed to the mobilizing of CAPS across geographic and partisan divides, as well as the bridging of CAPS with other, including urban-based, actors.

The CAPS take pride in the extent to which they do not depend on outside actors to manage water locally, as previous sections demonstrate. Yet, engaged as they are in the productive pursuit of water management which benefits society in a broad sense, the CAPS have expectations around the support they will receive in return from the rest of society and the state (Anderson 1994). Importantly, the CAPS support a state role in the sector that *complements* their local water provision and efforts around environmental conservation; their experience of the technical, financial, legal and environmental challenges that accompany water management inform their understanding of water governance as requiring the resources and inputs of actors at different scales, including the government and state agencies. Thus, the CAPS' articulations of "solutions" to or strategies for addressing these oftentimes include these actors as part of this equation.

Beyond calling for the state *not* to adopt a certain policy strategy (like privatization), the CAPS have promoted working across state-society divides via their collective action platform and public pronouncements. Notably, the CAPS' local experiences with land degradation, water contamination, and decreased water availability motivate calls for greater synergy, including a more active state role in water governance. In network meetings and interviews, CAPS spoke of the state-society interdependencies these kinds of environmental problems present. For example, the CAPS notice lowering water tables in their communities but also recognize their own limitations in curbing these changes that threaten local livelihoods. Issues of legality and formal political authority compromise the CAPS'

ability to ensure environmental protection and conservation. As CAPS member Carlos Loásiga of Muy Muy asserts,

> [Global warming] can be confronted. But that's where the problem of legality [arises]. If the owner higher up decides to clear land for pasture, it's his property. With that it's only the authority that can go and say, "Look, below is a water source that serves this many people, if you deforest there and make a pasture, you're going to lower the water table, because this is a [water] recharge area." But we can't do that as a water committee, the authority has to do it. (Interview, 8/21/08)

As discussed in Chapter 3, some CAPS do negotiate, albeit not always successfully, with private land owners. At the same time, promoting a strategy in which local government officials intervene in local resource struggles in favor of protecting water access makes sense, given the primacy of private property laws that government officials most effectively can undermine in order to support securing this basic need for residents. Carlos continues:

> [It's] the local government's role, the local government with the communities, to care for the water sources. Because each year the water sources have lowering water tables and that's a risk and a natural danger that exists. And we're not free from this [problem] in this community. […] [That] law, what it says is that the competent municipal authority has to do that [control deforestation]. That is a problem, it's a difficulty that's pending for future years. (Interview, Compasagüe 2, 8/21/08)

CAPS coordinator Antonio Roque of Compasagüe 1 similarly asserts that protecting forest cover is "[one] of the commitments we want municipal governments to assume…In the municipality the first [priority] should be water" (interview 8/23/08). Carlos' comment demonstrates how the CAPS' concerns over environmental degradation and climate change have critical temporal dimensions as well. As articulated by another CAPS member, "The water is lowering each day…What are

we going to do for the coming years? For the next generations?" (meeting notes, Managua, 11/5/09). Although some communities already experience severe water shortages, recognizing impending shortages—as well as confronting immediate issues of water quality and access—engenders a sense of urgency in regard to problem solving and attention to "future" generations who will inherit worsening problems. The CAPS' awareness that they cannot fully "solve" or resolve all of these problems on their own translates into their calls for collaborative, or co-governance.

Importantly, the state's legal responsibilities in the sector facilitate the CAPS' demands for greater state environmental regulation and protection. In their "work platform" (adapted from their collective action platform), the CAPS "[d]emand periodic inspections of water basins by MINSA [the Ministry of Health] to protect water quality and apply the law rigorously in regard to those who commit environmental crimes and harm [water] sources" (*Enlace* 2008, 80). As one CAPS member expressed during a 2009 National CAPS Network meeting, "water basins don't always coincide with the department" (Managua, 11/9/09). The CAPS' collective action platform reflects the understanding that water does not conform to political boundaries, and requires co-governance across jurisdictions. The CAPS' collective action platform also makes explicit the CAPS' expectations around the roles of state agencies and public officials in regard to environmental regulation and conservation. For example, the platform calls upon national and municipal government to "[declare] areas around water sources as protected areas and [to implement] actions to reforest in order to protect them"; furthermore, the platform

calls for greater synergy among environment-related state agencies "in order to develop actions together, in particular those of awareness [*concientización*] and information sharing [*divulgación*], with the objective of complying with the Environment Law [*Ley de Medio Ambiente*]." The CAPS seek to be part of these synergistic efforts too: objective eight of their platform is to promote the CAPS' "participation and involvement in all the [organizations] managing water resources…at the watershed and national level, especially those [institutions] created by Law 620."

Climate change constitutes one environmental issue around which the CAPS frequently vocalize concerns, and which they frame as requiring problem solving as a collective endeavor with extralocal actors and institutions. Like land degradation and water quality, the issue of climate change transcends rural communities' efforts at environmental stewardship. The CAPS' awareness of and concern over climate change came to the fore during the above-noted November 2009 National CAPS Network meeting during which an NGO representative presented national and global climate change data, including the Intergovernmental Panel on Climate Change's (IPCC) citation of Nicaragua as the third most vulnerable country globally to the risk factors associated with climate change (after Honduras and Bangladesh). These risk factors include displacement, crop destruction, spread of diseases, and species extinction (meeting notes, 11/5/09). According to one CAPS member present, "This responsibility should touch each one of us" (meeting notes, 11/9/09). (See Appendix H, "CAPS Climate Change Pronouncement 2009," which the National CAPS

Network released in 2009.) Amílcar Ruíz Solbarvarro, a local government water and sanitation *técnico* working with the CAPS municipal network in San Ramón, believes that the current government has made water and sanitation a priority, and that

> there have already been significant and positive advances with respect to the environment and water resources. *We could say that this theme has to do with everyone*. We are looking at it at a national level; *we should all be concerned, uniting forces*. (Interview, San Ramón, 2/26/10, emphasis added)

In the case of San Ramón, the local government itself discursively promotes collaboration in regard to confronting climate change. Other evidence of potential state-society synergy around climate change includes the overarching theme of the 2010 National Land Fair held in Matagalpa (6/4/10-6/5/10), in which the CAPS' participated (see also Chapter 4): "Agua, Biodiversidad y Cambio Climáctico: Unidos por la Madre Tierra"—"Water, Biodiversity and Climate Change: United for Mother Earth." Overall, the affinity of the CAPS' discourse of collective environmental problems to the purported values and policy-strategies of the national government and international development agencies enhances their salience and resonance.

CONCLUSION

This chapter has examined how the CAPS' discourses promote the transcendence of partisan and other divides as well as the CAPS' relative autonomy from the state as they organize and seek to participate in the political and legal reconfiguration of the rural water sector in Nicaragua. The effectiveness of the CAPS' discourses in doing so owes in part to their high degree of resonance with publics and public officials. This experience of local water management infuses the

CAPS' discourses, or collective action frames, with their self-reflections as organizations and character of their local work, including their sense of interconnection and interdependence among residents. Because of how they reflect their embeddedness within water territories, the CAPS' discourses have high empirical credibility. Importantly, these discourses are an important means by which the CAPS' independence and valuing of pluralism at the grassroots scale up with them as they act collectively and establish a presence in the public sphere. They are thus an important factor contributing to their ability to cultivate autonomy and pluralism as collective actors.

Notably, each of the examined discourses, while motivated by actually-existing policies in Nicaragua, reveal an ideological construct of the state as the set of actors and institutions ultimately responsible for water management, provision, and conservation. Like other Nicaraguans, the CAPS "confront meanings [of the state] that are embedded in institutional discourses" (Ferree and Merrill 2004, 259); their embrace of a conventional and dominant conception of the state as responsible for basic services like water reflects this. Yet how they do so constitutes "innovative framing tactics to challenge and change them" (Ferree and Merrill 2004, 259), even if these tactics are not self-consciously *strategic*. The CAPS' assertions that the state has failed to fulfill its legally-prescribed role in the sector serves a strategic purpose—that of promoting their recognition and rights as autonomous, non-state water managers meriting greater state resources and support. Discursively representing their work as fulfilling state roles lends legitimacy to their calls for

recognition and claims to more formalized and politically-independent participation in the sector because of how it juxtaposes their local, state-like work as CAPS with the state's own shirking of its legal water provision and management responsibilities. Ultimately, this discursive framing supports their autonomy and recognition because of how they have not historically received the legally- and politically-mandated support and resources of state actors and institutions.

It is of course too early to see how these discursive collective action frames may change over time as the CAPS networks evolve, and as more and more CAPS come to participate in these processes. Yet it is striking that even in their "emergent" phase there is much evidence that the CAPS' frames have not yet been contested by their target—principally state actors. In short, the CAPS appear to have "won" the "framing contest," at least in the short term. As they work to self-advocate and secure legally and politically their place within water governance, the CAPS are, in the process, helping to construct a more comprehensive legal and institutional framework for the management of the country's water resources. Crucially, this framework and water politics more broadly are evolving not only to effect a greater participation of the state in water management, but also to develop state capacities in the sector, as state actors become more attuned to water politics and benefit from direct engagement with civil society actors in the sector. The CAPS' collective action and advocacy thus has played a key role in mobilizing the state (Abers and Keck 2009) as part of shifting state-society relations and power differentials within the water and

sanitation sector. These dynamics as well as other practical and policy implications of the CAPS transcommunity collective action are examined in the final chapter.

[1] As Boelens argues in the Andean context, "the intrinsic connection of local water control systems to particular localities and communities, in terms of agro-ecological properties, political and cultural embeddedness and historical processes of rights generation, transformation and defence, intimately joints water rights to processes of identity formation" (Boelens 2008, 48).

[2] "There is widespread agreement among movement framing researchers that the development, generation, and elaboration of collective action frames are contested processes" (Benford and Snow 2000, 625).

[3] As noted in Chapter 3, some communities do have by-laws that stipulate paying a stipend to certain members of a CAPS, like the treasurer and individual in charge of operation and maintenance. These payments are largely symbolic, however, in that they do not cover the basic costs of living.

[4] "Nosotros como líderes comunitarios, *la mayoría, que trabaja con amor por nuestra comunidad, por nuestro municipio, vivimos en la pobreza*. Por qué, porque no tenemos el alcance de trabajar como otros que se superan. Al año si trabajamos un mes, dos meses es mucho…A veces cuando uno tiene empleo, un trabajito, no va ir a prestar servicio a la comunidad, si está trabajando para tener su propio fondo, su propia vida. Mientras que nosotros [los CAPS] no. *Nosotros somos ejército sin sueldo, de la comunidad*."

[5] "Tenemos amor…tenemos [el agua] como propio de nosotros."

[6] Moral economy refers to held norms, values, and entitlements which inform social and economic relationships and guide decision-making and behavior within these realms.

[7] Interestingly, the testimony also provides evidence that some communities' desire to protect their water system may serve as at least an initial barrier to their engagement with CAPS from other communities.

[8] Jessenia's last statement refers to the challenges the CAPS have encountered because they lack legal status (see Chapter 3). This fact precludes their receipt of grants or loans and the opening of non-personal bank accounts that would permit technical improvements or updates to water systems or—as she references—the expansion of existing services. This interchange, moreover, reveals how the CAPS' quest to achieve adequate and *accurate* recognition has entailed not only self-advocacy and self-assertion vis-à-vis elected officials. It has also required efforts to *educate* public officials about the local water provision and sanitation work CAP do, in fact, carry out in their communities.

[9] The state is also broadly responsible in political-legal terms for environmental management via the 1996 General Law of the Environment and Natural Resources (Law 217).

[10] It is important to note that all the interviews with CAPS members for this project took place immediately before as well as after the passing of Law 620, the General Water Law, in August of 2007. Thus, many CAPS' assertions of the proper, and legal, role of the state in ensuring water access are often direct and/or implicit references to this law, though some may also be references to the municipalities law (Law 40).

[11] CAPS from the municipality of La Concordia reported that land owners are putting chemicals in the trees so they dry out and thus have a legal justification for cutting them down (meeting notes, 11/5/09). In addition to this continued and unregulated deforestation, chemical and pesticide use on crops—many of them for export markets—also severely affects water sources.

[12] Article 150 reads, "Municipal governments are obliged to prioritize potable water, sewerage, and sanitation projects above other projects; as well as guaranteeing the minimum conditions of sustainable

hydraulic infrastructure in order to reduce the vulnerability of the population [in regard to] water crises resulting from climate change."

[13] As Boelens argues, "[Notwithstanding] their often contradictory objectives, it would be mistaken to suggest that local user organizations try to avoid interaction with the state or development institutions to defend their autonomy. Actual practice proves the contrary. For instance, both the state and the users try to achieve the most favorable ratio of investment versus control for their purposes, where local user groups try to gain more access to state resources and international funding without handing over local normative power (Boelens 2008, 62).

[14] Admittedly, discussion of the CAPS' efforts to provide "universal" water access glosses over intracommunity inequities and injustices that also characterize these common property regimes. For example, historically there has been differentiated participation and inclusion along gender lines within CAPS. In 1996, across all six of the country's regions, women constituted only an estimated one quarter (25.3%) of all CAPS members (RRAS-CA 1998). Moreover, water access itself is often differential in regard to consistency and strength of water flows. For detailed analysis of these kinds of micro-level inequities (that also typically speak to those at broader scales), see, for example, Agarwal 2000; Crow and Sultana 2002; Meinzen-Dick and Zwarteveen 1998.

[15] At the time of interview, two of the CAPS' five members—including the coordinator—were members of the local CPC.

[16] It would be impossible to argue that *all* CAPS at a national scale reflect a bipartisan membership—or for that matter, one integrating both men and women, the elderly and young, and old and new community residents. Yet, across interviews and observation, it was evident that many CAPS do incorporate diversity along these dimensions, with how and to what extent being very context specific. For example, in the community of Tejerina—a semi-rural community outside of the city of Matagalpa—there was a high degree of youth and women's participation in the newly formed CAPS. This community worked closely with the Matagalpa-based *Asociación para el Desarrollo Integral Comunitario* (Association for Integral Community Development, or ADIC) in the construction of community a gravity-fed water system and the formation of a CAPS. Across rural (and urban) development organizations like ADIC, ADEMNORTE, ODESAR, and La Culcumeca, staff directly promote the participation of women, and in some cases, youth, in the CAPS. In fact, these facilitating and funding organizations often introduce sample CAPS by-laws that stipulate, for example, an equal number of men and women on a committee—although women tend to be concentrated in certain positions, such as secretary and treasurer. The dimension of partisan affiliation within a CAPS is more "invisible" and thus harder to capture. It is also a dimension with important spatial dynamics: the degree to which a CAPS is bipartisan depends in part upon the extent to which a community has been settled by individuals and/or families of more than one political loyalty. In some cases, a community may be uniformly of one political tendency, resulting in a CAPS that is homogenous in this regard. For example, in the community of El Naranjo, Sébaco, where only a handful of families identify as liberals, residents elected only Sandinista-affiliated individuals to the CAPS.

[17] As Anderson (1994) articulates, "Living life on the edge of disaster makes peasants constantly aware of their own vulnerability and of the extent to which they depend on community support for survival" (3).By "edge of disaster," Anderson appears to refer to a context in which meeting basic needs for survival is precarious (see also page 8).

CHAPTER SIX:

DEMOCRATIZING WATER GOVERNANCE: CONFRONTING AND CREATING CHANGE FROM THE GRASSROOTS

We've done a job that corresponds to the state—to ENACAL and INAA. Now the state knows that we exist.

- José Francisco Salgado, CAPS El Zapote, 5/7/2010

Once politically inconsequential beyond the communities in which they live and manage water resources, Potable Water and Sanitation Committees (CAPS) in Nicaragua are starting to come into focus as collective actors at broader geographic and higher political scales. From the start of their transcommunity organizing in 2005, the CAPS have embraced a dual imperative: to demand recognition from and a greater role of the state in rural water provision and to protect and promote the autonomy of the CAPS and local water systems. Facing this potential paradox has been complicated by the politically polarized context in which the CAPS are organizing. At times the CAPS have competed for legitimacy with government-sponsored channels of citizen engagement (i.e. the Citizen Power Councils, or CPCs) at the subnational level, or faced pressure to integrate their networks within these channels. The FSLN's top-down imperative that local governments prioritize the CPCs as the exclusive channel for citizen participation has threatened to undermine existing CAPS at the community-level and also has posed challenges to productive

working relationships between municipal governments and the CAPS municipal networks.

This chapter aims to summarize the main findings of this research and cast its broader implications in regard to resource governance and state-society relations in Nicaragua and beyond. The first section summarizes the main argument of the dissertation, the second outlines what my findings suggest about future research, and the third discusses the key policy and political implications and theoretical contributions of this project. In regard to practical and policy implications, I point to how the CAPS' organizing has contributed to the development of a more comprehensive legal and political framework for the governance of Nicaragua's water resources. Formal recognition of the CAPS and their work—while not a panacea for problems of rural water access and management—provides an important foundation for civil society actors to hold state agencies and officials accountable to rural communities; new laws also lay the groundwork for greater state-society collaboration in the sector. I also draw out the broader *political* implications of this organizing and collaborative dynamics by explaining how the evolution of the CAPS networks as pluralistic, independent, society-driven conduits for new civil society participation in resource governance sheds light on Nicaragua's ongoing process of democratization. Specifically, the greater enfranchisement and political inclusion of rural social actors constitutes a *deepening* of Nicaraguan democracy, as does the way in which new state-society synergy in the water and sanitation sector is promoting the state's capacity to act in the public interest. Finally, at a theoretical level, this

dissertation lends new insight into *how* politically marginalized and impoverished social actors gain greater political inclusion, findings which extend beyond Nicaragua and apply to the governance of other resources and sectors. Ultimately, the examination of water politics in Nicaragua has implications for how we study "local" or decentralized governance, provision of public goods and services, and state-society relations across countries and contexts.

SUMMARY OF ARGUMENT

What explains how the CAPS have been able to form pluralistic and autonomous networks and achieve meaningful representation with the state in a context of political polarization and state attempts at cooptation? This study has adopted a political ecology approach to explain the CAPS' cultivation of autonomy and pluralism as a means of documenting and examining the complexity and multi-scalarity of these organizational processes. In so doing, I have sought to expand the scope of existing scholarship on common property regimes (CPRs) and decentralized natural resource management (DNRM). I argue that both traditional CPR and decentralization frameworks prove inadequate for studying water governance as a complex environmental, social, and political landscape. Expanding these frameworks has entailed, on the one hand, broadening the CPR frame of analysis to examine how common property institutions (CPIs) act collectively and articulate across geographic and at higher political scales, as well as how this organizing and projection of collective voice has been informed by local water management. On the other hand, expanding the frame of decentralization scholars has meant granting explicit attention

to when, where, and how top-down policies and formal decision-making realms meet up and overlap with "unofficial" actors in resource governance, or those whose work is not formally recognized or sanctioned by state actors.

In particular, this dissertation has argued that three interrelated and mutually-dependent factors explain the CAPS' transcendence of their rural localities and roles as resource managers to form politically autonomous and pluralistic transcommunity networks. First, the CAPS' accumulated knowledge and capacities in daily water management have come to grant them significant legitimacy in their interactions, struggles, and negotiations with authorities in the public sphere, hence promoting their relative autonomy. The CAPS' "organic empowerment" as resource managers has occurred outside of formal political or legal frameworks, yet is evident in their complex local water provision and management. Documenting how local resource management infuses CPIs with legitimacy—both locally and beyond the community level—necessitates moving beyond a limited focus on the CPR design principles and discussions of CPI longevity and strength. The more nuanced framework developed during the course of research encompasses yet expands upon the CPR design principles, demonstrating how the work and the capacities of local water managers have technical, financial, organizational, environmental, as well as legal and political dimensions. While work and social relations along these dimensions affect the generation of legitimacy locally, the ways in which the CAPS' capacities as resource managers rival those of state actors also serves to augment the public authority of these community-based resource managers and service providers. That is, the CAPS'

legitimacy is not only derived from their provision of a critical and necessary resource, but also from their superior ability relative to state actors to provide water service locally. National and subnational state actors do not have a guaranteed and/or demonstrated access to or legitimacy within rural communities, despite being legally responsible for securing water access; state actors hence have a limited ability to provide a public service that many communities today consider their own. The CAPS' legitimacy and capacities not only are *not* easily taken over by other—even state—actors. They also are not easily disputed, and in fact have engendered new recognition at the highest political scales.

The second factor explaining the outcomes of pluralism and autonomy is the CAPS' relationship to domestic and international allies, who have played a key role in the CAPS' physical mobility, political and legal capacity building, and access to spaces of political representation. While increasing attention of CPR scholars has been paid to CPR-extralocal dynamics, the scholarship has been principally concerned with the micro-level dynamics of institutional creation, operation, and change, and has stopped short of explaining how resource users and managers engage at higher political scales. Allies have not only strengthened local resource managers' ability to engage politically as autonomous actors with the government via legal and political capacity building processes. They have also helped to enable their direct connection to public officials—including municipal government officials, staff at state agencies, and national lawmakers. Because it has been undertaken with a significant degree of nonlocal support, the CAPS' vertical "scaling up" generates

bridging social capital as the CAPS increase their ties to domestic and international NGOs and multilateral organizations, and in some cases, state actors. I argue, furthermore, that this bridging social capital creates bonding social capital when it contributes to the horizontal mobility and hence connection of CAPS as "bonded" social actors—i.e. those who are similar in social terms given their membership within the same family or community. In a simple sense, allies' financing of the CAPS' travel has enabled collective encounters of these resource managers across communities, thus generating new bonding social capital as CAPS—previously disconnected from each other in physical and political terms—cconnect across communities and regions. Ultimately, new kinds of relationships among urban and rural, state and non-state, actors who bring asymmetrical resources to the formation and operation of the CAPS networks have produced the kinds of social capital necessary for the CAPS networks' broad base and effective political interventions.

The CAPS' discourses of water use, access, and conservation constitute the third factor informing the character of their collective mobilizations. The CAPS' discourses, akin to collective action "frames," serve as an additional and important means of outwardly projecting their capacities, legitimacy, and evolving political and legal knowledge. The discourses most instrumental towards promoting the autonomy and pluralism of the CAPS networks include 1) the CAPS' assertions of their independent resource management and ownership over local water systems, 2) how the CAPS talk about their work in relation to official state responsibilities in the sector, and 2) the CAPS' calls for collective problem solving and greater state-society

synergy in the sector. In contrast to the social movement scholarship's depictions of frames and framing processes, the CAPS framings were not found to be highly contested. Counterintuitively, in fact, the CAPS' discursive representations of their organizations and work quickly become reflected in the policy discourse of state officials—the principal "targets" of the CAPS' policy interventions. The high resonance and instrumentality of the CAPS' discourses towards achieving their policy goals, I argue, emerges from how they reflect the day-to-day, historical and contemporary, experience of water management at the grassroots, and the ways in which this work implicates the state and conceptions of stateness.

IMPLICATIONS FOR FUTURE RESEARCH

Further comparative and systematic research is needed to examine the unfolding of the CAPS networks at the national and subnational levels. Documenting and assessing how the networks continue to emerge and evolve in different regions could provide insight into their longevity, as well as their varied degrees of social and political inclusiveness, financial stability, organizational cohesiveness, and success in achieving stated goals. Moreover, future comparative work would be important towards determining the conditions under which the CAPS networks maintain a pluralistic base and operate more or less autonomously from state actors and political parties. The primary municipal level networks examined for this study have features that contrast with those observed in the municipalities of Pueblo Nuevo (Estelí), La Trinidad (Estelí), and Palacagüina (Madríz), where secondary research was

conducted. These cases outside of Matagalpa show that local governments, as opposed to domestic NGOs, have served as the conveners and facilitators of CAPS networks. Although local governments have been working in close coordination with an international NGO, CARE International, there is an important opportunity to examine how this qualitatively different alliance affects the bonding and bridging dynamics observed in Matagalpa between and among actors the municipal level—including implications of these varied relations for the promotion of pluralism and relative autonomy.

The present study also reveals important gaps in research regarding the documentation of local water users' associations. This project's examination of actors, policies, and institutions at different scales—and how these variously overlap, conflict, and impinge upon one another—has been limited in important ways by the lack of much documentation of the CAPS. This study has provided important empirical illustrations and drawn initial conclusions about the CAPS' work as resource managers from a non-representative sample in the central-northern highlands of Nicaragua. However, these organizations have not been studied systematically at a national scale towards knowing their exact numbers and locations, including the extent to which government documentation of water projects correlates with the number of existing and/or active water committees. In the absence of this basic baseline data, there does not exist a means of a taking a representative sampling of CAPS to assess their general effectiveness as water managers and how their relationship to state and other non-state actors has varied over time. The problem of

documentation is generalizable to other Central American countries—and likely other regions—for which "official data are scant" on rural water users' associations (FANCA 2006). The CAPS themselves are part of a regional phenomenon of community-based, rural water management: an estimated 24,000 *juntas de agua*, or water committees, operate across the Central American isthmus, providing potable water to 25% of the region's rural inhabitants. Nevertheless, in the absence of official documentation, the number of *juntas de agua* in the region—and the extent of the water access they facilitate—cannot be known.[1]

The documentation of local contributions to resource governance, particularly in rural areas, presents a challenging research objective given the geographic dispersion of those participating and their tendency to exist outside of formal legal frameworks or state policies. Nevertheless, work in this vein is critical not only for understanding the environmental management and service provision outcomes associated with such civil society participation. It also matters for understanding and explaining the collective action of resource users and managers *beyond* the community level. For instance, the Nicaraguan case found that the material impact of the CAPS in regard to resource management and service provision at the grassroots greatly affect the character and outcomes of their multi-scalar organizing. Hence, assessing the social and political significance of this kind of collective action beyond the community level arguably depends (at least in part) upon knowing what these resource managers actually do in their communities and how extensive their work is. This documentation has practical implications for advocacy as well: a complete

registry of exiting *CAPS* nationally, versus an estimation of *water systems* alone, for example, would lend extra credence to the advocacy goals being projected by a relatively small number of CAPS via their networks.

Significantly, the formation of transcommunity associations may be a means of asserting and projecting the existence of local management regimes when "official data" are lacking. The Honduran Association of Water Boards (AHJASA), for example, represents over 700 *juntas de agua* and 650,000 water users, numbers the association itself can back up even though national-level data on these groups are lacking (FANCA 2006). Similarly, the National CAPS Network in Nicaragua has served as a platform for asserting the CAPS' presence and work across regions, even though to date it cannot claim to have as high an active membership of users' groups as the national Honduran association.[2]

IMPLICATIONS FOR POLICY, POLITICS AND THEORY: DEMOCRATIZING WATER GOVERNANCE FROM BELOW

What are the policy and political implications of the CAPS' mobilization and networking? What theoretical contributions does this study make in regard to state-society relations, democratic development, and environmental governance in Nicaragua and beyond? What does this case suggest for how we study water politics and the governance of other sectors and resources more broadly? One important practical and policy implication of the CAPS' organizing and policy interventions in Nicaragua has been the integration of the previously disconnected spheres of national policy and rural water management in practice. The CAPS' advocacy in favor of a

law to recognize their rural water provision has helped to create a more comprehensive legal framework for freshwater management and provision. In many ways, the Special CAPS Law (Law 722) serves as a *corrective* to the General Water Law (Law 620). That is, while establishing several new provisions to the legal landscape of the water sector at its publishing, the CAPS Law in large part has served to recognize the CAPS' role in water provision nationally and hence reflects an already existing reality in Nicaragua. Several provisions should confer immediate and new benefits to the CAPS, however. These include differentiated energy tariffs, tax exemptions for system-related purchases or investments, and a pathway to formal recognition for individual CAPS. How and to what extent the CAPS' new legality will facilitate access to more, as well as more direct, financial support from the government and development organizations is not yet clear. However, as Chapter 4 elaborates, there have been early successes in this regard. Indeed, Popular Norwegian Aid's (APN) direct funding of a CAPS association with legal status in Masaya beginning in 2009 demonstrates that the CAPS networks may be increasingly empowered in financial terms—and perhaps more independent from the domestic NGOs who have served as financial intermediaries between donors and the networks.

Of course, having new laws "on the books" does not ensure their implementation. Even though Laws 620 and 722 promote greater engagement of the state in the water sector, state capacity and political will likely constitute challenges to quick and thorough implementation of the laws at the national and subnational levels. Lack of public funding allocated to implementing Law 620—as well as

disagreements among national deputies—contributed to a lag time of three years before the central government appointed someone to head the National Water Authority (ANA), or the highest state institutional authority for the water sector created by the new law. In regard to Law 722, INAA's Arauz cautions that local governments will have difficulty complying with the law's provisions around creating a local registry of CAPS given limited financial and human resources (interview, Managua, 6/2/10).[3] Another caveat is the potential for "politics" and political will to skew the effective and appropriate implementation of certain provisions of new laws. For instance, despite Law 620's mandate that water sources be declared for "public utility" in order to provide water access for residents (Art. 19), local governments risk alienating private property owners if they follow through with this provision.[4]

In regard to political implications, there are several ways in which the CAPS' organizing processes and outcomes may be viewed as deepening Nicaraguan democracy. First, the extent to which the CAPS have developed and publically-projected a presence as collective social and political actors is highly significant in regards to Nicaragua's ongoing process of democratization. The CAPS networks' nonpartisan, pluralistic character and the relative autonomy they have cultivated are indeed remarkable and unique as part of a national political landscape characterized by ideological polarization, political divisiveness, and cooptation. The organizing of the CAPS and their allies reflects a kind of politics in Nicaragua that is highly unlike the partisan political struggles that tend to grace the pages of national newspapers and characterize public debates. Importantly, these dynamics and processes are evidence

of problem-driven civil society organizing and collection action not motivated by partisan loyalties or dependent upon the agenda of state actors or political parties, as has often been the case in Nicaragua (see Chapter 2). Second, I would argue that the CAPS' mobilizing has contributed to a deepening of Nicaraguan democracy because of the political learning, participation, and representation it has engendered.[5] The CAPS networks have been a means for previously disenfranchised water users' associations to build a collective presence, project collective goals, and have representation with the state. These outcomes are highly significant in political terms for Nicaragua as they signify state-society relations shifting away from cooptation of civil society towards greater synergy and collaboration.

The greater state-society synergy put into motion by the CAPS' organizing constitutes a third way in which these dynamics can be seen as favorable to Nicaragua's process of democratization. Although CAPS have had a tenuous relationship to the state since their inception as community institutions, the CAPS networks constitute a new society-society interface through which these resource managers can collectively self-advocate vis-à-vis the state as well as collaborate with state actors in regard to water policy and management. The CAPS' transcommunity organizing indeed has done more than just increase *awareness* of the CAPS on the part of state officials and agencies and broader publics. The CAPS networks, encompassing their primarily non-state allies, are facilitating these resource managers' direct contributions to policy development and implementation through the new state-society linkages these foster. The CAPS' role in the design and

implementation of Law 722 is a clear example of their direct connection to state officials and policy processes. CAPS representatives have played an integral role in efforts to publicize and explain Law 722 to CAPS, state agency bureaucrats, and local government officials in different municipalities. This publicizing of the law and education of those who are to carry it out are necessary, even if insufficient, contributions to the law's implementation at the subnational level. In a broader sense, then, the CAPS' contributions to Law 722's can be seen as a boon to national public policy processes—particularly their collaborative, synergistic dimensions.

This synergy in regard to public policy is also evidence of how the CAPS networks function as a mobilizing force behind and alongside state actors. Indeed, an important implication of these growing collaborations among CAPS and their allies is how they are "mobilizing the state" (Abers and Keck 2009) towards greater involvement in the water and sanitation sector and in the process improving "the state's ability to serve the public interest" (294). In regard to Law 722, INAA's Arauz argues explicitly that the legislation strengthens state institutions:

> [*This] law will strengthen state institutions*, since it promotes participation and coordination to support building the CAPS' capacity in administration, sustainability, service provision, control of water quality, and environmental care and protection.[6] (Interview, 6/2/10, emphasis added)

Thus at the same time that the Law 722 formally establishes the "autonomy and independence" (Art. 6.f) of the CAPS and outlines their water management "responsibilities" at the community level, it also sets forth new legal responsibilities of state actors at national and subnational levels. Laws 722 and 620 thus provide significant leverage for CAPS and civil society actors more broadly to hold the state

accountable in regard to their responsibilities in the water and sanitation sector, and also bring the state's Constitutional provision "to promote, facilitate and regulate" water service into greater focus (see Chapters 4 and 5).

Arguably, water is a particularly apt lens through which to study the development of democracy and changing state-society relations at a global scale. Civil society actors, including community-based users and managers, have mobilized across countries and diverse political contexts to defend local resource management regimes from the increasing pressures of decentralized governance, privatization of sectors and resources, and environmental degradation.[7] Indeed, claims that "the era of top-down water policy formulation and implementation has surely ended" (Boelens, Getches, and Guevara-Gil 2010, 4) rest upon evidence that civil society actors and organizations, including non-state as well as "unofficial" water users and managers, have mounted effective challenges to elite-led shaping of rural and urban water sectors in developing countries. The Bolivian "water wars" of 2000 constitute the most well-known and perhaps exemplary case of civil society actors' forceful response to perceived threats to water access. Yet, examples of such water struggles are numerous, found in such diverse cultural, political, and economic contexts as Uruguay, South Africa, Indonesia, and the United States (see, for example, Belanya et al. 2005; Hall and Goudriaan 1999; Hall et al. 2005).

However, one question raised by the salience of water in the Nicaraguan case is what is to be gained from examining the horizontal and vertical organizing and political interventions of non-water-based common property institutions (CPIs) or

civil society actors who coproduce non-natural resource-based sectors, like health care, in light of this study's findings. Would qualitative differences in regard to membership and state-society relations be notable between and among transcommunity organizing efforts for water and other resources like forests, pastures, and fisheries? Between CPIs for drinking versus irrigation water? Similarly, do different kinds of CPRs enact different strategies and discourses than those mobilizing to defend their role in water governance? How do the variables of capacities and legitimacy matter for resources other than water when local actors scale up? A similar question applies to different public sectors as well, such as health care, which may draw upon the active participation and "local" knowledge and experience of civil society actors (see, for example, Coelho 2006; Mahmud 2007; and Cornwall 2007 for discussions of civil society participation in the health sector in Brazil and Bangladesh).

While further research would be needed to draw these kinds of contrasts and comparisons, the Nicaraguan case generates theoretical insights that inform the broad question of how politically marginalized and impoverished social actors come to engage in or be integrated into formal decision making at higher political scales. While water politics in Nicaragua and other countries have produced visible state-society struggles and negotiations (many of which often implicate private actors as well), similar politics of inclusion and exclusion extend to the governance of other sectors and resources. The scholarship on participatory democracy is particularly relevant to the dynamics examined in this dissertation because it seeks to account for

the participation of civil society actors in decentralized decision-making around public policy and spending priorities. Yet like scholars of decentralized governance more broadly, scholars of participatory democracy tend to focus on government-instituted participatory mechanisms, hence neglecting to consider how social actors *overlooked* by public officials and lawmakers organize from below, as well as at intermediate political scales, to create space for effective engagement with the state. Although the CAPS' engagements with the state are not "invited" from above, as in cases of institutionalized participatory democracy, the new state-society collaboration prompted by new water networks are not entirely extra-institutional either. Rather, these networks must be seen as engendering state-society collaboration as water committee members successfully access state spaces of representation as well as invite *state actors* to participate in network spaces. In light of these findings, a fruitful avenue for future research would focus explicitly on how civil society-driven organizing contributes to an expansion of formal *representative* channels of government from below—in part through carving out space for direct participation in policy development and implementation (see Romano 2012; see also Weldon 2011). That is, how do civil society actors move from being "users and choosers" to "makers and shapers"? (Cornwall and Gaventa 2000; see also Ackerman 2004). This kind of research is especially relevant when materially-consequential actors like resource users' associations are not "invited" to the table of governmental decision-making (Ackerman 2004; Cornwall and Coelho 2007; Cornwall 2004).

The question of how heretofore unrecognized *resource managers* and *service providers* gain recognition for their work and secure treatment as consequential stakeholders in national and subnational level politics will continue to be particularly relevant in the global South. Community-based organizations of resource users and managers, many of them rural, are widespread in developing regions of the world. Across countries and contexts, decentralization, privatization, and other "rescalings" of governance are affecting (or have the potential to affect) local resource management regimes.[8] These policy and governance shifts from-above create an imperative to study how locally-grounded or community-based institutions and management regimes are increasingly affected by, and articulate with, actors, institutions, and policies at other scales. How are civil society actors responding to or articulating with top-down policies and processes? Moreover, in cases where collective action and mobilizing at other scales does ensue, how does this in turn affect "local" commons management and/or the provision of goods and services? These shifts prompted from-above call upon us to consider how we study "local" or decentralized governance, provision of public goods and services, and state-society relations more broadly.

Ultimately, developing effective state-society governance arrangements will require *capturing* in an integrative way the complexities and multi-dimensionality of governance in practice. This entails investigating not only how civil society actors and organizations coproduce goods and services, but also how they inform and participate in public policy processes. This dissertation has demonstrated the

usefulness of engaging with multi-disciplinary scholarship towards integrating attention to micro-level and "unofficial" resource governance dynamics with the more macro-level concerns of scholars of democratization and decentralization. Importantly, more integrative and interdisciplinary research has the potential to inform the crafting of more inclusive, as well as collaborative, governance structures and practices across sectors and scales.

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[1] For instance, the number of associations in the Guatemalan and Honduran cases (10,000 and 5,000, respectively) is based entirely on estimates (FANCA 2006, 14-15).

[2] National CAPS Network facilitator Eduardo Zamora estimated in July of 2010 that roughly 800 CAPS members at a national scale had been exposed to the CAPS Law prior to its passing to discuss its provisions in CAPS network spaces. While 800 constitutes only a small fraction of the estimated thousands of active CAPS members nation-wide, it is likely that the number exposed to new legislation (and CAPS network processes) is much higher given the less visible sharing of these laws within communities as CAPS members return to their communities from network meetings—and as the process of registering individual CAPS with the government continues in accordance with Law 722 since its passing in May of 2010. It is important to note that a critical mass of CAPS has enabled the achievement of several of the CAPS' early goals, even if those actively participating constitute a small percentage of these resource managers nationally.

[3] As Arauz stated, "[According to Law 22,] the local government makes a registry and afterwards they send this registry to INAA so INAA can emit certifications [to registered CAPS]. But there are local governments that are poor and that don't have a technical person who can take charge of making the registry."

[4] In the case of the community of La Chocolata, San Ramón, the mayor failed to work out an agreement with the a land owner—ironically, the president of the state water company, ENACAL—who had refused to cede access to a stream on her property so local residents could use the water source for a new gravity-fed system.

[5] I embrace a definition of democracy I have defined elsewhere as "a multi-faceted...[and] dynamic set of processes put in motion by *either* state or societal actors that augment the inclusivity of public debate and decision-making, increase people's capacity to engage in political practice, and make government actors and elites more accountable and responsive to the populace" (Romano 2012, 501, emphasis in original).

[6] "Más bien esta ley viene a fortalecer a las instituciones del Estado, ya que promueve la participación y coordinación para apoyar a los CAPS en los programas de capitación sobre administración, sostenibilidad, operación del servicio, control de la calidad del agua, cuido y protección del medio ambiente."

[7] It is important to note that multiple groups, both urban and rural, participated in the Cochabamba "water wars" of 2000, in which civil society actors contested, and successfully overturned, the recent city-wide privatization of water (see Assies 2003; Baer 2008; Olivera and Lewis 2004; Perreault 2006; Spronk and Webber 2007; Finnegan 2002).

[8] International policy contexts matter greatly for local commons management as international financial institutions and development organizations continue to promote and invest in community-based natural resources management models (Bakker 2010; Agrawal and Ribot 1999; Richards, 1999).

Appendix A: Key Informants

DOMESTIC NGOS			
NAME(S)	**ORGANIZATION**	**DATE(S)**	**LOCATION**
Altamirano, Francisco and Mirna Rojas	Association for the Development of Northern Municipalities (ADEMNORTE)	2/1/10	Matagalpa
Aviles, Marcia	Organization for Economic and Social Development in Urban and Rural Areas (ODESAR)	8/22/08	Managua
Baca, Miguel Ángel	Legal Consultant, National Consumers Defense Network (RNDC)	12/15/04	Managua
Blackwell, Andrew	Water and sanitation consultant	11/23/09	Managua
Dalla Torre, Harmhel	Citizen Participation program, La Cuculmeca	9/07 8/22/08 6/7/10	Jinotega
Gámez, Sergio	Environmental Research and Analysis Center (CIEMA), University Nacional Ingeniera	1/27/10	Managua
García, Lourdes	Group of Ecological Agriculture Promotion (GPAE)	8/18/08	Managua
Gómez, Carlos Benavente	Network of Civil Society Organizations (ROSCM)	9/08	Managua
González, Fátima	National Consumers Defense Network (RNDC)	9/07	Managua
Herrera, Ruth Selma	Coordinator, National Consumers Defense Network (RNDC)	12/17/04	Managua
Hurtado, Mario	Comunidad Indígena de Sébaco	7/14/10	Sébaco
Jarquín, Dolores	Community Development and Solidarity Network (REDSCOM)	8/20/08	Managua
Kreimann, Rosibel	Center for Political Study and Analysis (CEAP)	11/5/09	Managua

Leyton, Silda, Wilma Perez and Teresa Castiblanco	Association for Integral Community Development (ADIC)	4/13/10	Matagalpa
López, Carlos Fernando	Director of Population and Development, Nicaraguan Association of Municipalities (AMUNIC)	9/5/07	Managua
López, Herman Augusto	Association for the Development of Northern Municipalities (ADEMNORTE)	12/17/09	Sébaco
Martínez, Benjamín	Organization for Economic and Social Development in Urban and Rural Areas (ODESAR)	8/21/08 11/30/09 6/17/10	Matagalpa
Martinez, Clemente	Centro Alexander von Humboldt	12/16/04 8/28/07	Managua
Meléndez, Denis	Health Information Center and Consulting Services (CISAS)	9/07	Managua
Mendoza, Javier	Organization for Economic and Social Development in Urban and Rural Areas (ODESAR)	6/21/10	Matagalpa
Morales, Maura	Nicaraguan Consumers Defense Network (LIDECONIC)	9/07	Managua
Ocampo, Evert and Orontes Muñoz	Organization for Economic and Social Development in Urban and Rural Areas (ODESAR)	3/3/10	La Dalia
Osejo, Ricardo	National Consumers Defense Network (RNDC)	8/20/08	Managua
Pacheco, Carlos	Center for International Studies (CEI)	3/12/04 8/29/07	Managua
Quintana, Mario	Coordinadora Civil	9/11/07	Managua
Ravnborg, Helle Munk, Ligia Gómez, and Tania Paz	Nitlapán Research Center, University of Central America	11/24/09	Managua
Rivas, Roberto and Miguel Alemán	Nitlapán Research Center, University of Central America	9/08	Managua

Rojas, Mirna	Association for the Development of Northern Municipalities (ADEMNORTE)	4/10/10	Matagalpa
Ruiz, Damaris and Jorge Granera	Nicaraguan Network for Democracy and Local Development (Red Local)	9/13/07	Managua
Salgado, Gonzalo	Coordinator, National Consumers Defense Network (RNDC)	11/29/04	Managua
		9/3/07	
		8/20/08	
Stuart, Roberto	Center for Political Study and Analysis (CEAP)	9/19/07	Managua
		8/20/08	
Urbina, Harold	Human Rights Ombudsman (PDDH)	9/13/07	Managua
Wheelock, Sonia and Roberto Rivas	Nitlapán Research Center, University of Central America	9/5/07	Managua
Zamora, Eduardo	Latin American Information Service for Sustainable Agriculture (SIMAS)	9/19/07	Managua
		8/18/08	
	National CAPS Network facilitator and independent consultant	6/28/10	

INTERNATIONAL NGOS AND MULTILATERAL ORGANIZATIONS			
NAME(S)	**ORGANIZATION OR AGENCY**	**DATE(S)**	**LOCATION**
Altamirano, Olmedo	Fundación SODIS	1/25/10	Managua
Baltodano, Francisco	CARE-MARENA-PIMCHAS	2/3/10	Estelí
Castillo, Ronald	CARE International	11/30/09	Matagalpa
Díaz, Alfredo Miranda	PRODESSA Nicaragua	9/2008	Matagalpa
Díaz, Rafael	UNICEF Consultant	1/26/10	Managua
Elizonda, Desiree	CABAL Group	11/25/09	Managua
González, Carmen	Agua Para la Vida	11/11/09	Managua
Hostetler, Sharon	Witness for Peace	9/10/07	Managua
Hernández, Carla	Action Churches Together (ACT)	9/07	Managua

Lang, Carmen Maria	Popular Norwegian Aid (APN)	6/30/10	Managua
Medina, Nelson	World Bank Water & Sanitation Program (WSP)	3/25/10 6/1/10	Managua
Messina, Michele	United Nations Children's Fund (UNICEF)	1/22/10	Managua
Molieri, José Antonio	CARE-MARENA-PIMCHAS	12/2/09	Estelí
Moneada, Myrna	Consultant for Save the Children, COSUDE, USAID	11/27/09	Managua
Obando, Wanda	United Nations Children's Fund (UNICEF)	1/20/10	Managua
Pacheco, Carlos	Trocaire	9/11/07 11/4/09	Managua
Pong, Carmen	Swiss Agency for Development and Cooperation (COSUDE)	11/19/09	Managua
Rodríguez, José Ángel	CEPAD	1/12/05	Managua
Romero, Sergio	Compatible Technology International	2/2/10 5/5/10	Matagalpa
Toruño, José	Swiss Agency for Development and Cooperation (COSUDE)	3/26/10	Managua
Wallace, Guadalupe	GTZ Local Development and Fiscal Transparency Program	8/29/07 8/25/08	Managua

STATE ACTORS AND AGENCIES			
NAME(S)	**POSITION AND/OR AGENCY**	**DATE**	**LOCATION**
Acuña, Jorge and Ever Acuña	Water and Sanitation *técnico*, Alcaldía de Pueblo Nuevo	2/4/10	Pueblo Nuevo
Arauz, Gilberto	Nicarguan Water & Sanitation Institute (INAA)	9/2008 6/2/10	Managua
Arauz, Marvin	Mayor of San Ramón	6/16/10	San Ramon
Arauz, Nelly	Municipal director, Citizen Power Cabinet, San Ramón	2/26/10	San Ramón

Blandino, Maira and María Julia Castillo	National Council of Potable Water and Sanitation (CONAPAS)	3/25/10	Managua
Calbo, Doriam Escobar	Direction of Citizen Power, Alcaldía de Matagalpa	5/4/10	Matagalpa
Castillo, Azucena	Public Relations, Nicaraguan Water and Sanitation Enterprise (ENACAL)	9/07	Managua
Chavarría, José Adan	Water & Sanitation *técnico*, Alcaldía de Sébaco	5/21/10	Sébaco
Cordero, Alberto Avellán	General Manager, Nicaraguan Water and Sanitation Enterprise (ENACAL)	12/15/04	Managua
Corrales, Juan Alberto	Water and Sanitation *técnico*, Alcaldía de Las Sabanas	6/10/10	Las Sabanas
Gadea, Francisco	Ministry of Environment (MARENA)	12/16/09	Managua
García, Bayardo	Water & Sanitation *técnico*, Alcaldía de La Trinidad	2/5/10	La Trinidad
Gutiérrez, Ramón	Water & Sanitation *técnico*, Alcaldía de Jinotega	6/23/10	Jinotega
Jarquín, Francisco	National Deputy	6/30/10	Managua
López, Leonardo Centeno	Water & Sanitation *técnico*, Alcaldía de Sébaco	3/12/10	Sébaco
Matamoros, Arnulfo	Water & Sanitation *técnico*, Alcaldía de La Dalia	3/4/10	La Dalia
Montoya, Isaís	Institute of Territorial Studies (INETER)	11/25/09	Managua
Municipal Council members	Alcaldía de Matagalpa	5/24/10	Matagalpa
Peña, Reyna	Director of Citizen Power, Alcaldía de San Ramón	3/1/10	San Ramón
Rojas, Jorge Luis	Direction of Citizen Power, Alcaldía de Sébaco	3/12/10 5/10/10	Sébaco
Ruíz, Martha Elena	Ministry of Natural Resources and Environment (MARENA)	8/25/08	Managua
Sáenz, Nadia and Yuri Espinoza	National Commission of Potable Water and Sanitation (CONAPAS)	9/19/07	Managua

Salazar, Emilio	Direction of Environment, Alcaldía de Matagalpa	11/30/09	Dirección Ambiental, Matagalpa
Solbarvarro, Amílcar Ruíz	Water & Sanitation *técnico*, Alcaldía de San Ramón	2/26/10	San Ramón
Úbeda, Deborah	El Nuevo FISE	2/5/10	Estelí
Valeria de la Cruz, Luisa	El Nuevo FISE	6/2/10	Managua
Vega, Douglas Salmerón	Director of Projects, Alcaldía de la Trinidad	2/5/10	La Trinidad
Zeledón Rocha, Sadrach	Mayor of Matagalpa	3/25/10	San José, Costa Rica

POTABLE WATER AND SANITATION COMMITTEES (CAPS) AND WATER SYSTEM BENEFICIARIES			
NAME AND TITLE	**NAME OF COMMUNITY**	**DATE**	**LOCATION**
CAPS members*	La Chocolata, San Ramón	4/19/10	San Ramón
CAPS members	San Fernando, Nueva Segovia	2/18/10	Managua
CAPS members	Jigüina, Jinotega	8/23/08	Jinotega
CAPS members	San Esteban 2, Jinotega	8/23/08	Jinotega
CAPS members	Compasagüe 1, Muy Muy	8/21/08	Muy Muy
CAPS members	Compasagüe 2, Muy Muy	8/21/08	Muy Muy
CAPS members	Santa Fe La Peña, Muy Muy	8/21/08	Muy Muy
CAPS members	Multiple communities, San Dionisio	5/19/10	San Dionisio
CAPS members	Multiple communities, Ocotal and Jinotega	6/5/10	Matagalpa
CAPS members	Multiple communities, San Dionisio and Esquipulas	6/4/10	Matagalpa
CAPS members	El Naranjo, Sébaco	4/14/10	Sébaco
CAPS members	La Reina, San Ramón	3/2/10	San Ramón
CAPS members	La Reforma, Masaya	6/29/10	Masaya
Delia Aydeé Tamariz, Treasurer	Molino Sur, Sébaco	7/14/10	Sébaco
Esperanza Soza, Coordinator	El Chompipe, Muy Muy	9/21/08	Muy Muy
Luis Adolfo Vargas, Coordinator	San Francisco, Boaco	2/18/10	Managua

Marbelly Tremenio, Secretary	La Labranza, Sébaco	12/11/09	Sébaco
Miguel Ángel López Úbeda, Vice Coordinator	La Reina, San Ramón	12/1/09	San Ramón
System beneficiaries	El Castillito, Las Sabanas	6/10/10	Las Sabanas

* "CAPS members" refers to a group of two or more elected CAPS members, i.e. members of the CAPS' board of directors.

CAPS NETWORK BOARD OF DIRECTORS		
NETWORK	**DATE**	**LOCATION**
Departmental Network Matagalpa	12/3/09	Matagalpa
Municipal Network El Tuma-La Dalia	3/4/10	La Dalia
Municipal Network Jinotega	5/3/10	Jinotega
Municipal Network Palacagüina	2/4/10	Palacagüina
Municipal Network San Dionisio	5/19/10	San Dionisio
Municipal Network San Ramón	4/20/10	San Ramón
Municipal Network Sébaco	2/24/10	Sébaco

CENTRAL AMERICAN COMMUNITY WATER MANAGEMENT FORUM MARCH 22-24, SAN JOSE, COSTA RICA	
NAME(S)	**ORGANIZATION**
Marín Luis, Arnoldo and Omar Torres	Adminstrative Association of Community Aqueducts & Sanitation (ASADA) Suerre de Pococí, Costa Rica
Martínez, Rolando	Indigenous & Rural Association of Comunal Agroforestry (ACICAFOC), Nicaragua
Marín, Rolando	Union of Adminstrative Associations of Community Aqueducts & Sanitation (ASADA) La Grecia, Costa Rica
Mejívar, Julio	National Association for the Defense, Development, & Distribution of Rural Water (ANDAR), El Salvador
Naranjo, Manuel Antonio	Ministry of Environment, Energy, & Oceans (MINAET), Costa Rica

Appendix B: CAPS *Plataforma de Lucha*



Plataforma de Lucha

1. Demandar la No Privatización del Recurso Agua, en ninguna de sus formas, en todas las instancias que sean necesarias y el reconocimiento de los CAPS, por ser un importante actor nacional.

2. Promover en todos los municipios resoluciones de las autoridades municipales contra la privatización y por la protección del recurso agua.

3. Demandar recursos en los presupuestos municipal y nacional para la construcción, ampliación, mantenimiento y rehabilitación de sistemas, para el manejo del agua con calidad. Demandar que los recursos provenientes de la administración de acueductos de las cabeceras municipales queden en el mismo territorio para ser invertidos localmente en las necesidades locales.

4. Demandar y gestionar asesoría legal para el movimiento en los diferentes territorios de trabajo, para legalización de las áreas dónde se encuentran las fuentes. Que los gobiernos municipales declaren de utilidad pública, el pase de servidumbre sobre la línea de conducción en aquellos casos que así lo ameriten.

5. Obtener personería jurídica para los CAPS. Demandar a las Autoridades Nacionales la aprobación de la Propuesta de Ley Especial de Comité de Agua Potable y Saneamiento. Esta propuesta debe ser respaldada con la firma de beneficiarios y beneficiarias. La personería debe ayudarnos a demandar facilidades para la apertura y manejo de cuentas bancarias de los CAPS y la propiedad sobre fuentes de agua y obras de conducción.



6. Demandar inspecciones periódicas del MINSA en las cuencas para proteger la calidad de las aguas y la aplicación con rigor de la ley a quienes cometan delito ambiental y dañen las fuentes. Así mismo, gestionar la facilitación de cloro para el tratamiento del agua en los sistemas.

7. Gestionar recursos para la capacitación de los CAPS para elevar los conocimientos en el mantenimiento y administración de los sistemas. Establecer alianzas con instituciones que pueden apoyarnos, entre ellas ENACAL, brindando capacitaciones y asistencia técnica.

8. Promover nuestra participación e involucramiento en todas las instancias de gestión y manejo del recurso hídrico en el ámbito municipal, de cuenca y nacional, en especial los creados por la Ley 620. Es necesario que los CAPS formen parte de los Consejo de Desarrollo Municipal, Consejo Ambientales Municipales, Comisión Forestal Municipal, Comités y Organismos de Cuenca y Consejo Nacional de los Recursos Hídricos.

9. Incidir ante las autoridades municipales para que los CAPS tengan participación y sean consultados sobre la autorización de permisos para explotación de agua de riego, corte de árboles y para las concesiones mineras.

10. Gestionar apoyo para la realización de diagnósticos municipales o de cuenca sobre la capacidad de los acuíferos y áreas de recarga que permita contar con el mapeo de las fuentes de agua.

11. Que sea efectiva la apertura de los Libros de Asociación de Pobladores en las municipalidades para que podamos inscribirnos, según lo establecido en el marco de la Ley de Participación Ciudadana.

12. Promover foros de sensibilización sobre la problemática del agua con los gobiernos municipales. Promover campañas de sensibilización en el seno de los habitantes urbanos y rurales para no quemar la vegetación y no contaminar el agua.

13. Promover ante los gobiernos municipales y gobierno nacional, la declaración de áreas protegidas y de recargas alrededor de las fuentes de agua y acciones de reforestación para protegerlas. Que las instituciones no den permisos a propietarios de fincas donde se explote en zonas de reserva natural.

14. Promover alianzas con instituciones de medio ambiente para articular acciones de conjunto, en especial los llamados de concientización y divulgación, a fin de cumplir con la Ley de Medio Ambiente.



15. Incidir en los gobiernos locales que prohíban el uso de agroquímicos en las áreas de recarga y fuentes de agua por medio de ordenanzas municipales.

16. Promover la obtención de incentivos para los productores por servicios ambientales dirigidos a que conserven y reforesten el bosque, la conservación del suelo, el uso de abonos orgánicos y la regeneración natural. Que el gobierno municipal promueva ante las autoridades nacionales, la obtención de incentivos para dueños de propiedades que conservan el bosque y sancione a los destructores del mismo.

17. Avanzar en la organización de los CAPS en el ámbito municipal, departamental y de cuencas, para elevar su nivel de gestión alrededor del recurso agua en todas las instancias y espacios definidos por la Ley General de Aguas Nacionales funcionando como una red nacional. Recopilar la información de nuestras estructuras y redes departamental y municipal de CAPS, necesidades y capacidades. Promover la creación de redes departamentales de CAPS que funcionan con sus propios estatutos y reglamentos, a fin de que monitorear el cumplimiento y aplicación de la Ley No. 620, Ley General de Agua Nacionales.



18. Promover el encuentro y trabajo coordinado entre comunidades indígenas y otras instituciones o personas que trabajan en el tema del medio ambiente, considerando su importancia en el manejo del recurso agua.

19. Promover la realización de encuentros e intercambios entre CAPS donde podamos compartir y establecer puntos en común y acuerdos alrededor de nuestra agenda de trabajo de interés.

20. Publicar material con información útil, como leyes, ordenanzas municipales o experiencias de trabajo, fortaleciendo la divulgación de los resultados a través de los medios de comunicación.

Red Nacional de Comité de Agua Potable y Saneamiento (CAPS)

Appendix C: CAPS Enlace No. 18 (2008)



Appendix D: CAPS Law 620 Pronouncement

PRONUNCIAMIENTO

Nosotros los abajo firmantes, miembros de la Comisión Coordinadora Ampliada de la Red Nacional de los Comités de Agua Potable y Saneamiento (CAPS), en nuestro carácter de dirigentes municipales de CAPS; sesionando en Managua el día 5 de noviembre del 2009, preocupados por la implementación de la Ley No. 620, Ley General de Aguas Nacionales, acordamos hacerles saber que urgimos:

1. La necesidad de destinar recursos en el Presupuesto General de la República 2010 para la implementación de la Ley No. 620
2. Proceder al nombramiento del Director de la Autoridad Nacional del Agua (ANA), recordando que hace un año sugerimos para este cargo a personas con conocimiento y autoridad como son el Dr. Jaime Incer y el Maestro Salvador Montenegro.
3. Explorar la posibilidad de fusionar o integrar a INAA en la ANA, para racionalizar los recursos limitados en nuestro empobrecido país.
4. La aprobación de la Ley Especial de Comité de Agua Potable y Saneamiento (CAPS)

En diferentes momentos hemos hecho llegar estas inquietudes a ustedes sin ser escuchados/as, por lo que una vez más y en nombre de más de 35 mil voluntarios/as de los CAPS que trabajamos en más de 5 mil comités de agua para llevar el recurso a 1 millón doscientos mil personas, les demandamos tomen en consideración nuestra propuestas.

Aprovechamos el presente Pronunciamiento para expresar nuestra solidaridad con:

1. La Red Municipal de CAPS de San Ramón Matagalpa, que ha solicitado por medio de la Alcaldía Municipal la autorización a Lic. Ruth Selma Herrera, para que 70 familias de la comunidad La Chocolata, se beneficien del agua de una fuente situada en la finca Santa Elena de su propiedad, en la comarca Yasica Sur.
2. El CAPS de la comunidad San Francisco del municipio de San Lorenzo que sufre amenaza de intervención por parte de la alcaldía municipal.

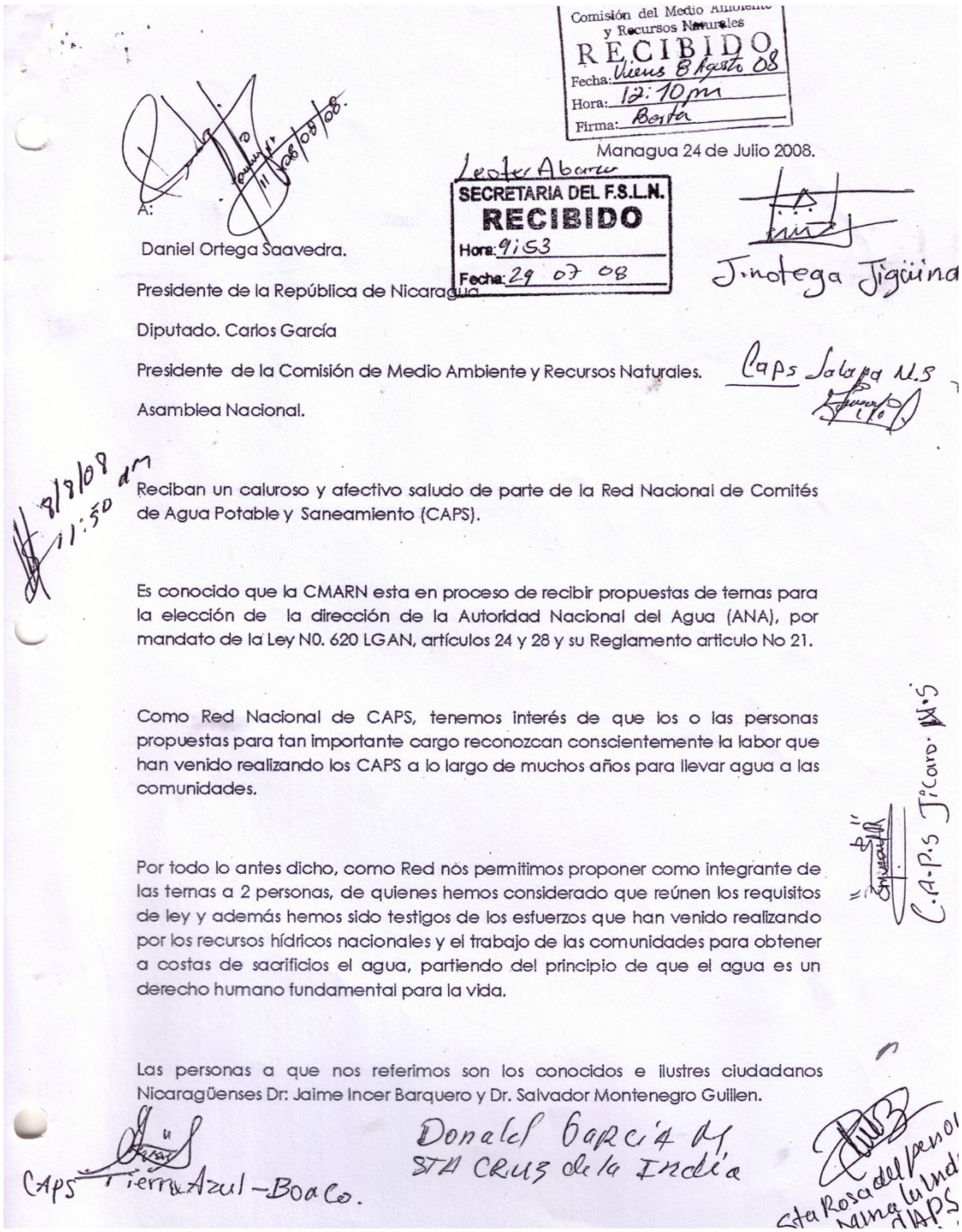
Nos declaramos en alerta por las pretensiones de ENACAL para ocupar nuestros sistemas de agua potable, lo que puede verse en el arto. 49 del reglamento de la Ley No. 620 y en diferentes opiniones publicadas en medios de comunicación.

Municipio	Nombre y Apellido	Firma
Por Matagalpa	Janeth López Zamora	
Matagalpa	Elizabet Esperanza Soza	
Esquipulas	Florentin López M	
San Dionisio	José Inés Salgado M	
Sébaco	Delia Aydée Tamariz	Delia Tamariz.
San Ramón	Miguel A López M	

Municipio	Nombre y Apellido	Firma
Muy Muy		
Tuma La Dalia	Misael Vladimir Blanchard	
	Santos López Jarquín	
Por Estelí		
Estelí	Augusto castillo O.	
Condega	Agustos Noel Pastrana C.	
	Adanelis Pasrilla Valdivia	
Por Chinandega		
San Pedro		
Santo Tomas	Julián Calderón Sirón	
San Francisco		
Villanueva		
Somotillo	Aristides Alvarez Izquierdo	
Por RAAS		
Muelle de los Bueyes	Salvador Sobalvarro López	
Rama	Juan Rostor Guido	
Nueva Guinea	Justo Pastor Reyes A.	
Por León		
Achuapa		
Jicaral	Ricardo Antonio Davalos	
Santa Rosa del Peñón	Donald García MAIRENA	
	Pablo Alfonso Ruiz M.	
Por Nueva Segovia		
Mozonte	Jessenia Margarita Rivera Matute	
Jalapa	Bayardo Sanchez Hernandez	
	Juan de Dios Benavides P.	
Por Boaco		
San Lorenzo	Luis Adolfo Fargas Rios	
Teustepe	Leoncio Diaz Rodriguez	
Santa Lucía	Felix B. Mendoza Mendoza	
San José de los Remates	Tomas Evelio Burgos	
Boaco	Santiago Ramos Sotelo	
	Jose Santiago SA	

Municipio	Nombre y Apellido	Firma
Por Madriz		
Palacaguina	Aleyda Acevedo Hurtado	A.A.A.H.
San Lucas	Carlos M Mendoza Flores	Carlos M Mendoza Flores
Por Jinotega		
Jinotega	Fco Ramón Altamirano	
La Concordia	María Idalia M.2	
Por Masaya		
Masaya	Leonel R. Calero O.	
	Francisco A Lopez Gdz	
Condega	Dilcia Centeno	
	Salvador Guerrero	

Appendix E: CAPS' Letter to President Ortega, July 2008



Comisión del Medio Ambiente y Recursos Naturales
RECIBIDO
Fecha: Viens 8 Agosto 08
Hora: 12:10 pm
Firma: Berta

Managua 24 de Julio 2008.

SECRETARIA DEL F.S.L.N.
RECIBIDO
Hora: 9:53
Fecha: 29 07 08

A:

Daniel Ortega Saavedra.

Presidente de la República de Nicaragua

Diputado. Carlos García

Presidente de la Comisión de Medio Ambiente y Recursos Naturales.

Asamblea Nacional.

Reciban un caluroso y afectivo saludo de parte de la Red Nacional de Comités de Agua Potable y Saneamiento (CAPS).

Es conocido que la CMARN esta en proceso de recibir propuestas de ternas para la elección de la dirección de la Autoridad Nacional del Agua (ANA), por mandato de la Ley N0. 620 LGAN, artículos 24 y 28 y su Reglamento articulo No 21.

Como Red Nacional de CAPS, tenemos interés de que los o las personas propuestas para tan importante cargo reconozcan conscientemente la labor que han venido realizando los CAPS a lo largo de muchos años para llevar agua a las comunidades.

Por todo lo antes dicho, como Red nos permitimos proponer como integrante de las ternas a 2 personas, de quienes hemos considerado que reúnen los requisitos de ley y además hemos sido testigos de los esfuerzos que han venido realizando por los recursos hídricos nacionales y el trabajo de las comunidades para obtener a costas de sacrificios el agua, partiendo del principio de que el agua es un derecho humano fundamental para la vida.

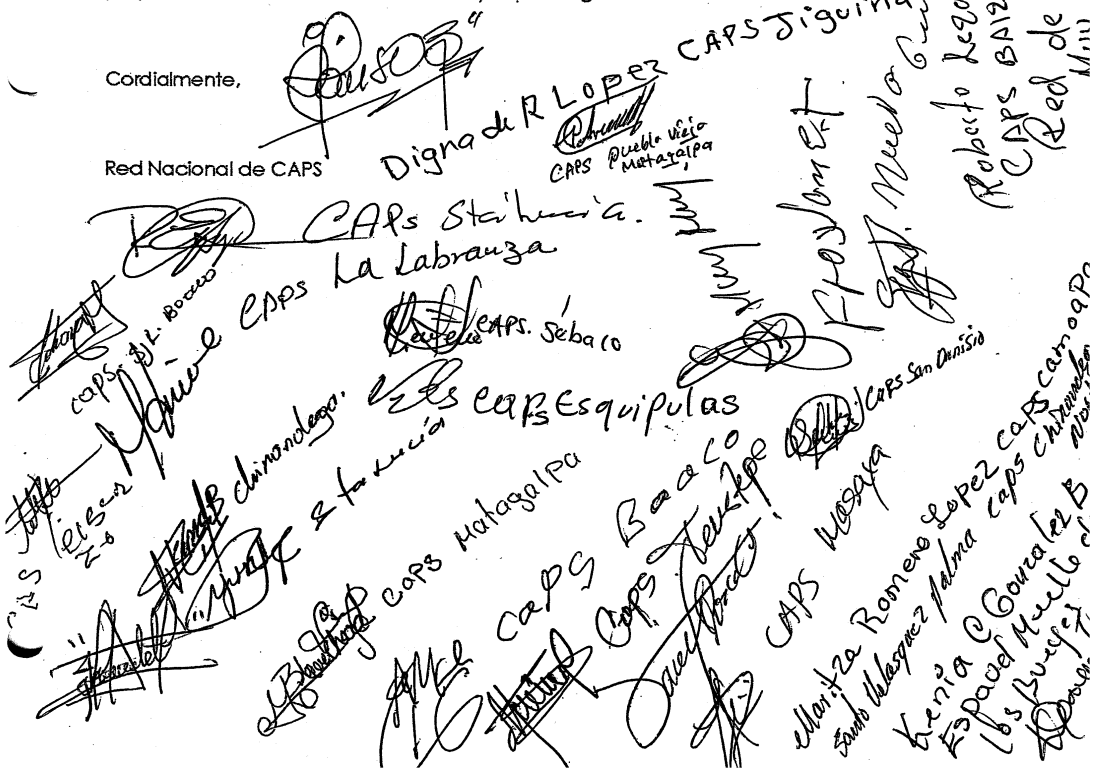
Las personas a que nos referimos son los conocidos e ilustres ciudadanos Nicaragüenses Dr: Jaime Incer Barquero y Dr. Salvador Montenegro Guillen.

La Red de CAPS ha estado en los procesos de fortalecimiento y capacitación de sus integrantes a nivel nacional, de cara a la gestión local del agua y el marco jurídico del sector. Como todos sabemos existen mas de 5000 CAPS, que integran a mas de 30 000 personas trabajando para beneficio de cobertura de agua a las comunidades.

Estimados Diputados, reconocemos la labor legislativa que han realizado y deseamos éxitos y buena fe en sus próximas gestiones, esperamos que nuestra propuesta sea considerada cuando haya que elegir a los directores de la ANA.

Cordialmente,

Red Nacional de CAPS



Red de AGUA Esquipulas MAT.

Marta Adilia Z CAP Buena Vista.

Red Agua Sans Bromis

José Dc Salgado Red de agua San Dionisio

Delia Zamora CAPS Molino Sur.

Horacio Tiron Suazo CAPS El chaperno muy muy

Gerardo Aguirre Busto

Ricardo Landaverde CAPS. León Norte

Bernabé Herrera A. CAPS Madriz

Benjamin Mendez CAPS Madriz

Carlos Loaisiga Obando C.A.P.S

B.M.A.

Appendix F: CAPS Enlace No. 19 (2009)



Appendix G: CAPS Article 150 Declaration (2008)

DECLARACIÓN
DE LOS
COMITÉS DE AGUA POTABLE Y SANEAMIENTO (CAPS)
CON RELACIÓN A LA OBLIGACIÓN DE OTORGAR PRIORIDAD A LOS SISTEMAS COMUNITARIOS DE AGUA POR PARTE DE LAS AUTORIDADES MUNICIPALES QUE RESULTEN ELECTAS EN NOVIEMBRE DE 2008.

25 Y 26 DE SEPTIEMBRE DE 2008.

Los Comités de Agua Potable y Saneamiento (CAPS) -reunidos en el III Encuentro Nacional de los CAPS, en Managua, Nicaragua- considerando que el Arto. 150, Ley No. 620 – Ley General de Aguas Nacionales establece que:

> **SE OBLIGA A LOS GOBIERNOS MUNICIPALES A PRIORIZAR POR ENCIMA DE OTROS PROYECTOS EL AGUA POTABLE, ALCANTARILLADO Y SANEAMIENTO; ASÍ COMO GARANTIZAR LAS CONDICIONES MÍNIMAS DE INFRAESTRUCTURA HÍDRICA SOSTENIBLE PARA REDUCIR LA VULNERABILIDAD DE LAS POBLACIONES PROVOCADAS POR CRISIS RELACIONADAS CON EL AGUA A CAUSA DE LOS CAMBIOS CLIMÁTICOS.**

Así mismo, teniendo presente que en la primera semana de noviembre de 2008 se celebrarán elecciones en Nicaragua para cambios de autoridades municipales (alcaldes y alcaldesas, concejales y concejalas), la ocasión es propicia para demandar la incorporación de este mandato de otorgar prioridad al acceso de agua potable, saneamiento y manejo adecuado de los recursos hídricos en los planes municipales y presupuestos, independientemente de las personas que resulten electas en este ejercicio ciudadano.

Los Comités de Agua Potable y Saneamiento (CAPS) demandamos que las personas que resulten electas en las elecciones municipales de noviembre de 2008 se comprometan a cumplir con lo establecido en la Ley No. 620 – Ley General de Aguas Nacionales a través de:

1. Los planes municipales, indicando de manera precisa que los Sistemas Comunitarios de Agua, que operan los CAPS, son una prioridad para cada municipio, porque garantizan el acceso de agua potable y saneamiento a la población,

2. Los presupuestos municipales, indicando las partidas presupuestarias destinadas a mejorar los Sistemas Comunitarios de Agua y el acceso de la población a la misma para: mejorar la infraestructura, legalización, protección y reforestación de fuentes, desarrollo de capacidades, exploración de fuentes, etc.

3. La adopción de planes para reducir la vulnerabilidad de las poblaciones provocadas por crisis vinculadas al acceso a agua.

4. Ampliación de la cobertura de agua y saneamiento en las comunidades que lo requieren.

El derecho de acceso a agua es un derecho humano esencial para la vida, y la privatización de este recurso es un crimen social.

Managua, 26 de septiembre de 2008

III Encuentro Nacional de los CAPS
Managua, Nicaragua
25 y 26 de septiembre de 2008

Appendix H: CAPS Climate Change Pronouncement (2009)

PRONUNCIAMIENTO

Nosotros los abajo firmantes, miembros de la Comisión Coordinadora Ampliada de la Red Nacional de los Comités de Agua Potable y Saneamiento (CAPS), en nuestro carácter de dirigentes municipales de CAPS; sesionando en Managua el día 5 de noviembre del 2009, preocupados por los efectos del Cambio Climático, que traerá afectaciones a poblaciones, y en especial en la disponibilidad de agua, animamos a nuestras autoridades a:

1. Hacer cumplir la ley, para evitar más deforestación, contaminación de fuentes hídricas y concesiones de los recursos naturales.
2. Sumarse a posiciones por la defensa de la humanidad y las acciones de mitigación y adaptación que los países más pobres deben demandar en la próxima reunión de Copenhague.
3. Que el Gobierno Nacional Asuma la Estrategia Nacional ante el Cambio Climático y que asigne recursos económicos y humanos a la misma.
4. Trabajar por la Seguridad Alimentaria y Nutricional de la población.
5. Acelerar el cambio de la matriz energética del país.
6. Elaborar con carácter de urgencia la **Ley de Pago por Servicios Ambientales Hídricos** que mandata la Ley No. 620 – Ley General de Aguas Nacionales
7. Fortalecer el trabajo de manejo de las cuencas hidrográficas, aplicando la Ley No. 620.
8. Promover la agricultura sostenible reduciendo los agroquímicos, estableciendo programas de prácticas orgánicas, sin quemas y preservando semillas criollas.
9. Promover a todos los niveles el trato adecuado de la basura, reduciendo la contaminación.

Municipio	Nombre y Apellido	Firma
Por Matagalpa	Janeth López Zamora	
Matagalpa	Elizabeth Esperanza Saza S.	
Esquipulas	Florentin López M.	
San Dionisio	José Dic Salgado Mercado	
Sébaco	Delia Aydee Tamariz	
San Ramón	Miguel A López M	
Muy Muy		
Tuma La Dalia	Misael Vladimir Blanchard	
	Santos López Jarquín	
Por Estelí		
Estelí	Augusto Castillo O.	
Condega	Santos Noel Pastrana C.	
	Adanelis Rossilla Valdivia	
Por Chinandega		

Municipio	Nombre y Apellido	Firma
San Pedro		
Santo Tomas	Julián Calderón Jirón	
San Francisco		
Villanueva		
Somotillo	Arístides Alvarez Izquierdo	
Por RAAS		
Muelle de los Bueyes	Salvador Sobalvarro López	
Rama	Juan Ramón Guido	
Nueva Guinea	Luis Iván Chamorro J.	
	Justo P Reyes Sanchez	
Por León		
Achuapa		
Jicaral	Ricardo Antonio Raudales	
Santa Rosa del Peñón	Donald García Medrano	
	Pablo Alfonso Ruiz M	
Por Nueva Segovia		
Mozonte	Jessenia Margarita Rivera Hodgde	
Jalapa	Baylardo Sanchez Ch	
	José Santiago S A.	
Por Boaco		
San Lorenzo	Luis Adolfo Fargas Rios	
Teustepe	Leoncio Diaz Rodriguez	
Santa Lucía	Félix B. Mendoza Mendoza	
San José de los Remates	Tomas Evelio Burgos	
Boaco	Santiago Ramos Sotelo	
	José Santiago S A.	
Por Madriz		
Palacaguina	Alayda Acevedo Hurtado	A.A.H.
San Lucas	Cástulo Amaya Torrez	
Por Jinotega		
Jinotega	Fco Ramón Altamirano	
La Concordia	María Idalia Martínez	

Municipio	Nombre y Apellido	Firma
Por Masaya		
Masaya	Leonel A Gafaro O. Francisco A Lopez Gdor	
Condega	Dilcia Centeno	

Appendix I: First INAA CAPS Inscription, January 2011

Gobierno de Reconciliación y Unidad Nacional
El Pueblo, Presidente!

2011: UNIDAD POR EL BIEN COMÚN

CERTIFICADO DE INSCRIPCION

El Presidente Ejecutivo del Instituto Nicaragüense de Acueductos y Alcantarillados (INAA-ENTE REGULADOR), en uso de las facultades que le confiere la Ley No. 722 "Ley Especial de Comités de Agua Potable y Saneamiento, publicada en La Gaceta, Diario Oficial No. 11 del 14 de Junio del Año 2010, CERTIFICA que el día Diez de Enero del Año Dos Mil Diez, en el Tomo I, Folio Uno (1) del Libro de Registro Nacional de Prestadores de Servicios de Agua Potable y Saneamiento que lleva el INAA en el año 2011, se inscribió la Asociación Civil denominada **"ASOCIACION DE AGUA POTABLE Y OTROS PROYECTOS DE SAN RAMON, SANTA CRUZ, SAN JERONIMO Y EL RIITO"**, que íntegra y literalmente dice:

Registro No. 01-2011- **"ASOCIACION DE AGUA POTABLE Y OTROS PROYECTOS DE SAN RAMON, SANTA CRUZ, SAN JERONIMO Y EL RIITO"**, ubicada al Norte del Municipio de Tisma, Departamento de Masaya, inscrita bajo el Número Perpetuo No. 2556; Folio: 5407 al 5417; Tomo IV del Libro Séptimo del Registro de Asociaciones de la ciudad de Managua el día 07 de julio del 2003, según Escritura Pública No. 08 del 01 de agosto del 2002 ante los oficios de la Notario María Dolores Gómez Sáenz y publicada en La Gaceta, Diario Oficial No. 144 del 31 de Julio del Año Dos Mil tres, todo en base a lo establecido en la Ley 147 "Ley sobre Personas Jurídicas sin Fines de Lucro, Solicitud de Inscripción presentada ante INAA el día 12 de agosto del año dos mil diez, por el señor Pablo Narváez en su carácter de Presidente de dicha Asociación, en cumplimiento a lo establecido en el Artículo 33 de la Ley Especial de Comités de Agua Potable y Saneamiento, teniendo como autoridades actuales a los siguientes miembros:

1. Presidente : Pablo Narváez
2. Vicepresidente : Avelino Potosme
3. Secretario : Santos Vílchez
4. Tesorero : Denis Pérez
5. Fiscal : Félix García
6. Vocal : Magda Laguna

Dado en la ciudad de Managua, a los Trece días del mes de Enero del Año Dos Mil Once.-

Carlos E. Schutze
Presidente Ejecutivo

PODER CIUDADANO Nicaragua Gana con Voz!

Seguimos Cambiando Nicaragua!
CRISTIANA, SOCIALISTA, SOLIDARIA!

INSTITUTO NICARAGÜENSE DE ACUEDUCTOS Y ALCANTARILLADOS

Tel: 22668444 / Fax:2266-8447 E-mail:pres.ejinaa@inaa.gob.ni. web: www.inaa.gob.ni Aptdo. 1084

Appendix J: CAPS Letter to Mayors, June 2010

Red Nicaragüense de Comités de Agua Potable y Saneamiento (Red CAPS)
redcapsnicaragua@gmail.com

Managua, 26 de junio del 2010.

Sres./as. Alcaldes y miembros de Consejos Municipales

Reciban el más cordial saludo de nuestra Red CAPS.

Conscientes del importante trabajo que las alcaldías realizan alrededor del agua y saneamiento en las comunidades rurales de todo el país, labor que nuestros CAPS también desarrollan como un servicio comunitario y social básico, y de que la Ley 620 o Ley General de Aguas Nacionales y la Ley 722 o Ley Especial de CAPS, han abierto tareas importantes en el registro y apoyo a los CAPS que ameritan el apoyo mutuo entre Alcaldías y CAPS, nos ponemos a su disposición para juntar esfuerzos en este sentido, en especial alrededor de toda la tarea de inscripción de los CAPS en los Registros Municipales y ante el INAA a nivel nacional.

En la reunión de los órganos de gobierno de la Red CAPS el pasado 25 y 26 de junio del 2010, acordamos que nuestras Juntas Directivas o Redes Municipales, se pusieran en contacto con ustedes para tener una mejor coordinación alrededor de estas tareas.

Esperando que nuestras comunidades sean beneficiadas con estas coordinaciones,

Fraterno

RED CAPS NICARAGUA

Juan de Dios Benavides Paz
Coordinador Nacional
Red CAPS
Tel. Cel. 83676537

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