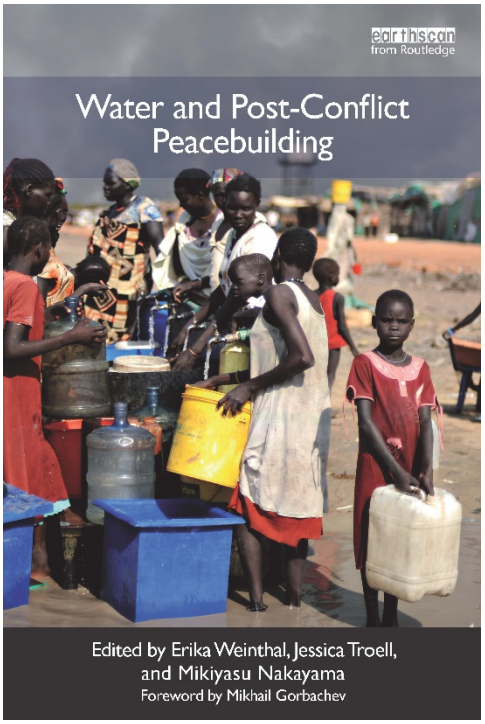
This chapter first appeared in *Water and Post-Conflict Peacebuilding,* edited by E. Weinthal, J. Troell, and M. Nakayama. It is one of 6 edited books on Post-Conflict Peacebuilding and Natural Resource Management (for more information, see www.environmentalpeacebuilding.org). The full book can be ordered from Routledge at http://www.routledge.com/books/details/9781849712323/.



Despite the best intentions? Experiences with water resource management in northern Afghanistan

Jennifer McCarthy, and Daanish Mustafa [a]
[a] *King's College London*

Online publication date: October 2014

Suggested citation: J. McCarthy, and D. Mustafa. 2014. Despite the best intentions? Experiences with water resource management in northern Afghanistan. In *Water and Post-Conflict Peacebuilding,* ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.

Despite the best intentions? Experiences with water resource management in northern Afghanistan

Jennifer McCarthy and Daanish Mustafa

The development and management of water resources has been part of the nation building projects of various Afghan regimes dating back to the beginning of twentieth century. Since 2001, the Afghan government has tried to enhance its legitimacy and reduce the influence of the insurgency by improving the living conditions of ordinary Afghans, but these efforts have not met expectations when it comes to water services for domestic use and irrigation, possibly because many of the water use and development initiatives have been shaped by national and international stakeholders without the full participation of the intended beneficiaries. At the national level, the key strategic frameworks informing Afghan development in the water sector and beyond, most notably the Afghanistan National Development Strategy (ANDS), are replete with references to participation, bottom-up development, and social equity (Farhadi 2008). At the local level, however, implementation of these concepts has proved problematic, and fulfillment of the basic need for water in rural areas has been difficult to achieve.

The case studies examined in this chapter highlight how some specific local Afghan experiences with water resource management programs and water infrastructure development have not been characterized by effective participation and equity in decision making. These water-related interventions have not met the basic need for water for irrigation, domestic water supply, and sanitation, but they have had implications for governance and the peacebuilding process at the local level.

The chapter begins with a history of water resource development in Afghanistan, identifying key features of traditional Afghan water management systems, which remained functioning at the local level despite decades of conflict, and providing an overview of water management systems dating back to the late 1800s. The chapter discusses the National Solidarity Programme, the implementing

---

Jennifer McCarthy is a Ph.D. student in geography at King's College, London. Daanish Mustafa is a senior lecturer in environment, politics, and development at King's College, London.

mechanism of the ANDS, and examines the deficiencies of the program with respect to improving access to water in Afghan villages. Lessons from local resource management are then highlighted, and two case studies from northern Afghanistan are presented. The case studies demonstrate how local power dynamics can drive conflict related to the national government's initiatives for water resource management. The chapter provides recommendations for rescaling water resource management to the local level, including government recognition and understanding of local power dynamics, the use of village-level stakeholders as water resource managers, and greater government legitimacy.

HISTORY OF WATER RESOURCE DEVELOPMENT IN AFGHANISTAN

Water resource development has been a key conduit for imperial control and nation building in many colonial and post-colonial contexts, and Afghanistan is no exception (Cosgrove and Petts 1990; Gilmartin 1994; Swyngedouw 1999). Water sector interventions helped to consolidate government control over rural Afghan society throughout the nineteenth and twentieth centuries (Shah 2009; Abdullayev et al. 2009). However, water management and provision remains a local phenomenon, contrary to the popular notion that it was decimated during the three decades of conflict that began with the Soviet invasion of Afghanistan in 1979 (Abdullayev et al. 2009). There is not an institutional and infrastructural void in rural Afghan water resource management. Indeed, government and international efforts to superimpose water management structures on existing and functioning resource governance systems in rural villages have caused resentment and given rise to local-level conflict between elites, who are often accused of controlling resources to serve their own interests, and others, who are not equally benefiting from government water management programs.

Traditional Afghan water management systems have been characterized by four key features (Shah 2009):

1) Community-based management structures with elected or, more often, selected water masters (called *mirabs*), who oversee water infrastructure construction and maintenance, enforcement of local norms, and conflict resolution.
2) Community-level water rights and allocation regimes based primarily on landownership and levels of contribution to water infrastructure maintenance.
3) Water infrastructure built and maintained by the community, often requiring high levels of labor and other resource inputs for development and maintenance.
4) A minimal or absent state role in rural water management.

These key features are reflected in the oral history of water management systems in Faryab Province, where decisions of mirabs, along with landownership, have determined levels of access to water from a range of water systems, such as dams, streams, underground canal systems (*karez*), and traditional water tanks

(*howz*).[1] For the most part, the state endorsed each mirab's selection by the most powerful elders in the community. This added legitimacy to the mirab's actions, which also drew legitimacy from tacit community endorsement gained through consensus or, sometimes, intimidation (Abdullayev et al. 2009).

Traditional water management systems were challenged by the state when, in the aftermath of the Second Anglo-Afghan War, Abdur Rahman (emir of Afghanistan from 1880 to 1901) initiated strong state intervention in local-level water management and infrastructure. Rahman was cognizant of the fragility of the nascent Afghan state and sought to undo the damage of the war by investing in the repair of water infrastructure; reclaiming vast swaths of territory in northern Afghanistan by constructing new canals; providing seed advances (known as *taqawi* loans) to farmers to increase productivity; and, most important, encouraging the settlement of ethnic Pashtuns and members of other loyal ethnicities in various parts of Afghanistan, particularly the north, in order to dilute ethnic divisions (Kakar 1979).[2] The settlement schemes, which continued through the early twentieth century, went hand in hand with the Afghan state's flirtation with the Soviets

[1] Interview with Faryab provincial government official, Meymaneh, 2009.

[2] Pashtuns are largely concentrated in the east and southeast of Afghanistan and have historically dominated Afghanistan politically. In the interest of national integration, the group was settled in the north and east by successive Afghan governments. The Taliban movement largely draws from the Pashtun ethnic group.

and even with some of the Axis powers in the 1930s. Afghanistan sought the Axis powers' assistance with water development until the British and Soviet governments forced the Afghan government to evict all Japanese, German, and Italian advisors during World War II (Shah 2009).

After World War II, the Tennessee Valley Authority model from New Deal era in the United States was exported to Afghanistan, as it was to many other places in the developing world (Hirsch and Wyatt 2004; Lahiri-Dutt 2003; Sneddon 2002). This model entailed undertaking multipurpose water development projects across a river basin with the intention of using irrigation and power generation for regional development and poverty alleviation. The Helmand-Arghandab Valley Authority (HAVA) in southern Afghanistan was the product of this U.S. assistance to the water sector in the 1950s (Shah 2009). HAVA focused on the development of physical infrastructure and largely overlooked the social aspects of water management, which is likely why the project was a resounding failure. The affected communities, which were at times forcibly or otherwise involuntarily resettled, quickly abandoned the project area because of ethnic conflict and state mismanagement (Shah 2009). The inherent design problems of the project revealed insensitivity to the inequitable resource distribution in the valley. For example, many farmers at the tail end of canals and watercourses could not benefit from the irrigation schemes, nor could they gain access to remedial support in risk management and mitigation from the project or provincial authorities. Operation and management of the infrastructure was lacking, as was revenue generation from the projects, which severely limited HAVA's ultimate efficacy (Shah 2009).

Chastened by the failure of HAVA and driven by other geopolitical imperatives, particularly the close relationship between its chief rival, Pakistan, and the United States, the Afghan government started a phase of more intense interaction with the Soviet Union in the late 1950s. This increased interaction included activities in the water sector. Throughout the 1960s and early 1970s, the focus of Soviet assistance to Afghanistan was on water development planning, such as the Hari Rud irrigation project in the Herat region and irrigation expansion on the Kikcha River in Takhar Province, the Kunduz river in Kunduz Province, and the Pyanj River in Badakhshan Province. One of the more substantive Soviet contributions in the late 1960s and the 1970s was improving Afghan farmers' access to cotton mills and markets in the Soviet Union, which caused considerable expansion of irrigated cotton farming in the country, particularly in the northern plains (Dupree 1975).

The period from 1978 to 2001 was a time of external invasion, local resistance, and then civil war in Afghanistan. Despite an ongoing civil war and unprecedented destruction of infrastructure as a result, the last of the Soviet-supported governments, that of Mohammad Najibullah, undertook some important developments in the water sector, including creation of the Ministry of Irrigation and Water Resources in 1988, as well as programs of support to farmers that supplied seeds, loans, and machinery for canal cleaning.

Soviet withdrawal in 1989 was followed by an era of civil war and dominance by warlords; in the second half of the 1990s the Taliban became the dominant force in most of the country. During the war, the role of the central state in the water sector was almost nonexistent. Water supply infrastructure was damaged throughout the country, and traditional elites with local control over water management were often replaced by predatory warlords. New political alliances allowed warlords and affiliated communities to violate customary water distribution agreements (Pain 2004). Traditional management systems in their purest form were not necessarily equitable or just, but the distortions spawned by civil conflict undermined what legitimacy they did have (Barfield 2007; Pain 2004). The Taliban tried to reverse some of the worst of the warlords' land and water appropriations, with limited success (Shah 2009).

In the present post-conflict era, international donors' ideas about the nature of development are often disconnected from the daily realities of rural Afghan life, and this sometimes has contradictory and problematic implications for peacebuilding.[3] The current peacebuilding efforts in Afghanistan began with the 2001 Bonn Conference, during which attendees together pledged billions of dollars in aid toward implementation of the Bonn Agreement, a plan laying out a three-year process of reconstruction (Barakat 2002; Montgomery and Rondinelli 2004). The Bonn Agreement resulted in the establishment of the Afghan Interim Authority, chaired by Hamid Karzai and charged with representing Afghanistan in external relations. Following the conclusion of the Bonn process, the Afghanistan Compact was created during a London conference in 2006. It outlined national and international stakeholders' political commitments to international cooperation in Afghanistan through 2011.

A key strategic document in the peacebuilding process, drawing together the goals of the Afghanistan Compact and the UN Millennium Development Goals, is the ANDS, which recognizes that post-conflict reconstruction must be undertaken in concert with long-term development initiatives. The ANDS lays out a strategy for putting Afghanistan on a "virtuous path towards peace, stability and prosperity . . ." (Farhadi 2008, 1). It states that the extent to which Afghanistan can be at peace with itself and its neighbors depends on the "effective utilization of all available human, natural and financial resources . . ." (Farhadi 2008, 4). However, when it comes to water, a comprehensive and sustainable management strategy is still in the formative stages. Preliminary benchmarks for rural water resource development are currently set at impressively optimistic levels: "Rural development will be enhanced for 90 percent of villages through the provision of safe drinking water, sanitation (50 percent) and small scale irrigation (47 percent) by the end of 2010" (Farhadi 2008, 83), but progress toward this

[3] The term *peacebuilding* in this chapter refers to "an endeavour aiming to create sustainable peace by addressing the 'root causes' of violent conflict and eliciting indigenous capacities for peaceful management and resolution of conflict" (Peacebuilding Initiative 2008, 2).

objective has been slow. In August 2010 the World Bank reported that only 27 percent of Afghans have access to safe drinking water, and only 5 percent have access to sanitation (World Bank 2010).

Personal accounts of rural villagers, together with the findings from Usman Shah's and Iskandar Abdullayev and his colleagues' research on water management mechanisms in the northern province of Kunduz (Shah 2009; Abdullayev et al. 2009), suggest a widespread inability to provide adequate water through rural water supply projects. Research also points to the complexity of differential power arrangements in rural Afghanistan, which are rarely congruent with the idealized village democracy model that is the basis for the institutional design of the National Solidarity Programme, the key institutional mechanism for implementing the objects outlined in the ANDS from 2003 to 2008 (McCarthy 2011).

THE NATIONAL SOLIDARITY PROGRAMME

The Ministry for Rural Rehabilitation and Development (MRRD) was charged with the management of the National Solidarity Programme (NSP), which aims to improve rural infrastructure, create robust local governance mechanisms, and alleviate poverty throughout Afghanistan. The MRRD implements the NSP across the country through its provincial departments, with international and national nongovernmental organizations (NGOs) acting as facilitating partners. These facilitating partners work alongside community development councils (CDCs) to provide technical assistance in project implementation and to report to MRRD's provincial departments. The local CDC is charged with creating a community development plan that includes the community's top development priorities and also with managing the funds for projects initiated through the program. The formation of a CDC is a required element for a community to participate in the NSP, and its leaders are chosen in a closed-ballot election (MRRD 2009).

Each community is entitled to US$200 per family, up to a maximum of US$60,000, to use for its priority projects. These funds are given directly to the CDCs. The community is required to provide a 10 percent contribution to the overall cost of a project, which most often comes in the form of in-kind manual labor. Projects are managed and monitored by the CDC, often with technical assistance from a facilitating partner (MRRD 2009). The NSP is one of the few attempts to devolve governance and conflict resolution to the village level in order to establish development mechanisms that contribute to peacebuilding efforts in the country (Dennys and Zaman 2009).

The government of Afghanistan has identified the NSP as the principal mechanism for achieving reconstruction and peacebuilding within the Comprehensive Agriculture and Rural Development program (Farhadi 2008). As such, the NSP is intended to play an important role in the creation of conditions for a stable peace in rural Afghanistan. In a return to the traditional social structure, the mirab has become the key interface between the provincial water management

department and the local communities under the NSP (Abdullayev et al. 2009; Shah 2009). Most national- and provincial-level stakeholders consulted in 2008 and 2009 during the research for this chapter believed that the NSP held great potential to bring peace to Afghanistan by increasing trust between the Afghan citizenry and the central government. As Barnett Rubin explains, building a legitimate and capable state requires "transitional governance institutions that incorporate the need for both national and international legitimacy" (Rubin 2006, 184). In addition, because it attempts to address the priority needs of the populace by devolving decision making to the village level, the NSP is believed to hold one of the keys to accountability and social cohesion, both nationally and locally. However, there has been widespread resentment over the fact that resources allocated to individual communities for infrastructure or livelihood enhancement projects have not actually achieved those goals. Water and related infrastructure are necessary for livelihoods in the agricultural economy of rural Afghanistan. Improved access to water for irrigation could thus be a litmus test of the efficacy not only of the NSP but also of the new Afghan government and the international community that stands behind it. Failure to improve access to water, either by improving infrastructure or by moderating the influence of powerful elements who appropriate water from the weak, undermines the confidence of the Afghan populace and reduces the potential of the internationally backed Afghan government to improve Afghans' lives.

The authors' interviews with several villagers suggest that projects affecting water resource management at the village level require much more scrutiny before the projects can provide a meaningful contribution to peacebuilding in northern Afghanistan. These findings demonstrate how water resource management in rural villages is not being effectively integrated into the Afghan peacebuilding strategy. Peacebuilding involves "identifying and alleviating the underlying sources of conflict within a war-shattered state, which [requires] a thorough understanding of local conditions" (Paris 2004, 3). During the fieldwork conducted for this research, the authors did not get a sense that the NSP managers and donors had a thorough understanding of local conditions, particularly of pre-NSP power structures and contemporary social dynamics. This lack of understanding has contributed to patchy service delivery and growing frustration on the part of Afghans.

In 2009, when the fieldwork informing a large part of this analysis was conducted, the government had six years of NSP implementation from which to draw lessons related to the program's impact on resource-based livelihoods, including water resource management. Issues such as local discrimination and insufficient financial and human resources still negatively affected access to water six years into program implementation. This suggests that the NSP's structure and implementation processes were not allowing for local experiences to be recognized and addressed as important barriers to peacebuilding. As a previous minister for MRRD explains, building trust between citizens and government

takes time, particularly in the case of Afghanistan, which was not left with anything resembling a functioning government after the fall of the Taliban regime.[4] However, it seems that the potential to even begin building a foundation for this trust through effective and informed management of the NSP has not been realized.

LESSONS FROM LOCAL RESOURCE MANAGEMENT

In the cases described later in this chapter, the NSP did not directly cause conflict over water. However, the inability of the NSP programs to secure equitable access to water resources led to increased frustration and tension in the villages discussed. Rather than creating an environment in which Afghans could gain equitable and sustainable access to water, the NSP inadvertently created a space in these villages wherein either power dynamics or social processes were exercised in an exclusionary manner, or in which projects simply did not deliver on their promises. Although this is not the case in every NSP community and the authors do not intend to declare the entire program ineffective, the examples presented in this chapter from different areas of northern Afghanistan, along with examples the authors have gleaned from secondary research, suggest that there may be similar situations in other villages.

If NSP stakeholders have more informed engagement with existing power structures, Afghans will have more space to voice their concerns and take collective action, and the program may become more effective in reducing the likelihood of local, resource-based conflict. More sustainable and equitable access to water during years of drought and beyond can contribute significantly to the potential for a stable peace in Afghanistan.

On the basis of observations in rural areas and discussions with NSP participants since 2005, Jennifer McCarthy concluded that the rural population viewed the NSP as the single largest government intervention in their communities (McCarthy 2011). Thus government legitimacy was tied to how the NSP was managed. Acquiring the quality and quantity of human resources required to adequately implement the NSP was a challenge for the MRRD. A former minister explained that a lack of in-country experience and capacity has limited the degree to which the ministry can take practical measures to improve the NSP's impact.[5] Legitimacy should be improved not merely by the provision of more financial resources, but by the assignment of people to the project who possess the skills and knowledge necessary to ensure that funds are used effectively and to address programmatic shortfalls when they become apparent.

When citizens lack access to adequate and safe water for consumption and irrigation even though the government is managing a participatory development program that aims to lay a foundation for poverty alleviation, the government loses legitimacy with the people. There is a growing body of evidence suggesting

---

[4] Interview with high-ranking MRRD official, Kabul, June 2009.
[5] Interview, Kabul, June 2009.

that frustration with ongoing vulnerability—which sustainable access to water would significantly alleviate—may be contributing to increased levels of violence in Faryab Province (McCarthy 2011). Perceptions of government legitimacy can thus be said to be a contributing element to building a stable peace in Afghanistan.

Power and CDCs: A combination for conflict resolution?

Noting that post-conflict development is not a conflict-free process, Christian Dennys and Idrees Zaman cite two examples from Badakhshan and Kunduz provinces in which the communal nature of NSP block grants created problems within the CDCs, largely because of shifting power structures (Dennys and Zaman 2009). They contend that the NSP has not sufficiently accounted for local dynamics, and that it shifted the social landscape by territorializing the rural areas into "communities."[6] Dennys and Zaman cite an example from Kunduz Province, where planning for reconstruction interventions disregarded the existing organizing feature of the province: an irrigation system that has survived the decades of conflict. They argue that there is "no real level of solidarity in the region and the NSP implemented through the Community Development Councils has not taken into account that identity is largely based on face-to-face interactions rather than through affiliation to a village" (Dennys and Zaman 2009, 28). The conflicting definitions of what constitutes "community" highlights the need for in-depth understanding of local dynamics and how they relate to water resource management.

In contrast to the 2009 findings presented by Dennys and Zaman, a high-level MRRD official cited social cohesion as the main benefit to come from creating NSP communities.[7] This perspective was also voiced by a representative of Faryab's Provincial Department for Rural Rehabilitation who explained that the NSP has enabled Afghans of different ethnicities to work together and share funds and information.[8] The representative cited a case in which multiple CDCs rallied together to complain about malfeasance by a facilitating partner organization's staff member. The staff member was dismissed, and the misappropriated funds were returned to the CDCs. This and other successes notwithstanding, the authors' ongoing research does not yield such sanguine conclusions about the benefits of the NSP.

People-centered strategy

As noted by key MRRD stakeholders at the national and provincial levels, the CDCs are demonstrating that they can undertake conflict resolution activities at

---

[6] McCarthy's wider research grapples with the issue of power structures in CDC "communities," both pre- and post-NSP, to analyze how power shifts due to the NSP have affected vulnerability to environmental hazards such as drought. See also Mielke and Schetter (2007).

[7] Personal communication, June 2009.

[8] Interview, Meymaneh, June 2009.

the village level, preventing issues from being escalated to the district-level government.[9] The potential for CDCs to grow in this role could play a key role in future peacebuilding strategies. This would not necessarily involve centering power in local institutions or reinforcing existing power differentials because CDCs could become more transparent and inclusive. Until now, the Afghan peacebuilding project has been conceptualized at the national level and has addressed warlordism, corruption, and criminality (Waldman 2008). This top-down approach to peacebuilding, which includes the NSP, has largely failed to address many of the practical concerns of Afghan citizens at the village level. National peacebuilding, development, and water resource management strategies are vital, but the government of Afghanistan should also develop peacebuilding strategies at the village level that make effective use of the CDCs and other local institutions and that facilitate meaningful two-way communication.

CASE STUDIES

Governance mechanisms at the national level can be paired with local-level initiatives to improve the equitable and sustainable use and management of water resources. Such an approach touches on reconstruction and peacebuilding as well as development (Farhadi 2008). The following case studies reveal how local power dynamics can fuel conflict and frustration related to water resource management efforts led by the national government.

Water management in Kunduz Province

Research on the Kunduz River Basin Programme (KRBP) offers insights into Afghanistan's domestic water supply and irrigation sectors, both of which are critical components a strong peacebuilding strategy (Shah 2009; Abdullayev et al. 2009). The KRBP is also a further example of an intervention that does not adequately integrate the structures and mechanisms of the social landscape that shape access to water in the target area. The weaknesses of the approach employed in the KRBP can thus be said to mirror those of the NSP—neither project realizes its objectives of improving resource availability and equitable access at the community level.

The river basin management approach used in the KRBP is based on the establishment of water user associations (WUAs) at the community level. The WUAs liaise with provincial governments' water management departments and their district-level officers. The water management departments report to the Ministry for Energy and Water at the central level. The KRBP is the authority at the river-basin level, with a mandate that crosses provincial and district boundaries. Its role is to formulate a basin management plan, undertake infrastructure improvements, regenerate upper watersheds, strengthen regional Ministry for Energy

[9] Personal communication, June 2009.

and Water offices, and improve water-use efficiency through community-based management and attention to the social aspects of water management (Shah 2009).

According to Shah, the KRBP project had so far failed to live up to its promises for a number of reasons (Shah 2009). To begin with, there was a lack of clarity about the mandates of two of the ministries involved: the Ministry of Energy and Water, and the Ministry of Agriculture, Animal Husbandry, and Food (now called the Ministry of Agriculture, Irrigation, and Livestock). Furthermore, the traditional mirab system was weakened during the conflict. Traditionally, there had been a single mirab from a community at the tail end of a canal who was charged with managing water along the entire length of the canal. However, social fragmentation that occurred during the conflict period resulted in the establishment of a separate mirab for each community. Coordination along the entire canal became more difficult than it had been before, and the KRBP did very little to address this conflict-related social development.

When the social organizers employed by the KRBP mobilized the WUAs, they typically interacted with and legitimized only larger farmers and other influential individuals, to the almost complete exclusion of smaller farmers and landless people. The project therefore reinforced existing social and financial hierarchies and inequities. Another problem was the considerable antipathy between the government and the international NGOs and other organizations running the KRBP. The international organizations controlled the resources for the projects, and the Afghan government departments were competing among themselves for a share of the finances. This led to obstructionist behavior, rather than facilitative roles for the relevant departments, further undermining the potential for building credibility with the local populace (Abdullayev et al. 2009; Shah 2009).

Water access and social marginalization in Faryab Province

In the course of research regarding the availability of water in rural areas and the impact of the NSP on villagers, McCarthy used participatory photography to understand the everyday lives of people in two villages in Faryab Province in northern Afghanistan, Lower Charvak and Khumsan.[10] Accounts from a couple and a young man in the two villages reinforce Shah's 2009 findings regarding the KRBP and further illustrate how local power relations and the idealistic

[10] Participatory photography is a research method in which participants use photographs to communicate their perceptions and experiences (Clover 2006; Crang and Cook 2007). After initial meetings in villages to recruit volunteers, McCarthy held workshops to familiarize participants with digital cameras, then left the cameras with them for one or two weeks so they could work in small groups to take photographs that communicated the most important issues in their lives. Lower Charvak, Khumsan, and Upper Charvak are fictitious names given to protect the research subjects profiled in this chapter, and they correspond to actual villages located approximately five to fifteen kilometers to the southeast of Meymaneh.

institutional design of the NSP have sometimes impeded meaningful improvement in access to water resources for economically or socially marginalized households in rural Afghanistan.

The research for these case studies was conducted over five months in 2008 and 2009. Group discussions about the villagers' photographs provided the bulk of data from which the main findings were drawn. The two villages had been participating in the NSP since 2003. Each has between sixty and eighty households and is situated less than ten kilometers from the provincial capital of Meymaneh. A mix of agriculture, livestock raising, teaching, and manual labor constitutes the majority of livelihoods in these villages. As is typical in Faryab Province, many households in these villages have a subsistence lifestyle; villagers depend upon what food they can grow and must barter goods or borrow money to meet their remaining needs.

Rural Afghanistan is full of female-headed households and members of ethnic minority groups who, for assorted reasons, are marginalized within the rural society. Despite the presence of the CDC, a supposedly representative body, power dynamics have prevented some of the most marginalized families from accessing water. Because of this, their livelihoods have faltered, and these rural Afghans have been frustrated with the development process and with the government of Afghanistan, which is responsible for managing the implementation of the NSP. The first of the two stories, focusing on Lower Charvak village, illustrates how the process of marginalization and exclusion plays out and how, within the participatory model, powerful elements that cause marginalization can use the idealized participatory structure of the CDCs.

Lower Charvak is the second largest of the three villages that make up the NSP community of Khumsan/Charvak.[11] It is nearly one kilometer off the main road, on the banks of the Meymaneh River. The Meymaneh was almost entirely dry from 2004 to 2009, and then the river reached its highest level in twenty years and threatened to flood the lower part of the village, according to village residents. Lower Charvak has worked with the other two villages in the community to implement three NSP projects, which include graveling roads, carpet weaving, and digging shallow wells for drinking water. Of these, Lower Charvak received one shallow well and graveled part of the main road through the village.

Seema's story

Seema, a Tadjik mother of three in a landless family living in Lower Charvak, and her husband, an Uzbek, are estranged from their extended family.[12] They are

[11] Charvak village is actually two separate villages, Lower Charvak and Upper Charvak. However, in the NSP documentation they are considered to be only one village that shares a CDC with Khumsan. The authors were unable to ascertain why the two villages were not kept separate in the program documentation.

[12] The names of the case study subjects and their villages have been changed to protect their identities.

tenants of the garden that is the main source of livelihood for them. As payment for the use of the land, they must relinquish half of the garden's yield. They feel a significant amount of financial pressure because they are responsible for purchasing all the seed, water, and fertilizer to be used on the land. If there is no yield, the landowner demands financial compensation in lieu of the expected food, a demand that has resulted in the swift accumulation of debt.

Access to water is obviously vital in such a situation. The lack of water during the 2008 growing season meant that the cost of irrigation was very high. Seema and her husband access irrigation water from a stream that is controlled by a mirab. Five or six privately owned gardens are fed by this stream, and each owner must pay for using the water. The mirab determines which gardens are irrigated and at what time. During the five-year drought the price of this water climbed until it was out of reach for many of those whose livelihoods depend on gardens, including Seema and her husband.

Most of the plants and trees in Seema's garden died due to the couple's inability to pay for sufficient water in 2008, and the landowner demanded a payment of approximately US$60 in compensation. In addition to investing money in the garden and paying the penalty imposed on them by the landowner, Seema's family also had to rely entirely on food purchased from markets for most of that year.

In the 2009 growing season, Seema and her husband faced a different situation but similar stresses. The rains had returned and there was plenty of water in the stream for all the gardens, and thus the price of water was much more affordable.[13] However, Seema and her husband were still unable to pay for sufficient water due to outstanding loans from previous years. Even when they do pay for water, their supply can be interrupted because of a long-standing family conflict in which some family members manipulate the irrigation stream to prevent the water from reaching Seema's garden.

These events led Seema and her husband to dig a water storage hole. They took out a small loan to purchase an electric water pump and some piping, which they hid from sight during the day. Late at night during the summer months, when everyone else was sleeping, Seema and her husband woke up to direct some stream water into the storage hole. Once the hole had enough water, they lowered the water pump from the tree where it was hidden and pumped water from the hole to irrigate their garden.

The extent of this couple's vulnerability to water stress was related to their relative position of power in relation to their neighbors, extended family members, and landowners. These power dynamics were key elements in Seema's differential access to water even though the village was participating in the NSP and she supposedly had access to a representative development council.

---

[13] Elders in other villages in Faryab Province indicated that spring 2009 brought more rain than people had seen in twenty years.

In an attempt to regain some control over her livelihood, Seema ran for deputy chair of the CDC's women's subcommittee in March 2009, and she won. However, the men's committee deputy chair refused to recognize her official position, and a number of other council members, including other female members, neglected to advise Seema about forthcoming CDC meetings. Though she was popular enough within the village to muster the majority of female votes, the NSP structure of electoral democracy was trumped by the preexisting power structures, and the results of the election were annulled to deny her the opportunity to have a formal voice in the community or a claim to benefits that accrued from NSP projects in the village.

Seema's story illustrates that although the NSP states that it aims to facilitate a representative voice and access to resources for Afghan women, it may not be effective in doing so (MRRD 2009). The degree to which marginalized women can exercise their agency to represent the concerns of fellow women is limited by male power holders.

It would be unreasonable to expect the NSP to confront and undo every local-level configuration of differential power and marginality. But it is reasonable to expect the program to identify these issues and to modify its interventions in individual communities accordingly. The insurgency in Afghanistan is carried out not by men belonging to traditional rural elites or the middle class, but by those belonging to the most marginalized segments of society. If the NSP cannot facilitate the most marginalized people's access to resources, then it has failed in one of the most elementary of its missions and perhaps even undermined the peacebuilding process.

Dennys and Zaman contend that the NSP draws on a formulaic approach to participatory development that was pioneered by Akhtar Hamid Khan in the Comilla District of Bangladesh in the 1950s and was subsequently taken up by the Aga Khan Foundation as a model of participatory development in its project areas across Asia and Africa (Dennys and Zaman 2009). This approach involves the establishment of elected community councils to manage development projects, but has been criticized for being based on an idealized conceptualization of "community" and for not anticipating or addressing the potential outcomes of coercive expressions of power within communities.

A more effective participatory intervention would not necessarily eliminate all power imbalances; there will always be injustices that the more vulnerable members of a community will need to overcome. However, with regard to water resource management, more meaningful participation in development planning and implementation could enable vulnerable people to gain a more powerful or representative voice in decision-making processes that affect their ability to pursue and achieve sustainable livelihoods. The imposition of structures of accountability in a context that is rife with existing prejudices and hierarchies is a risk with the NSP and can be a cause for concern (Escobar 1995; Peet and Hartwick 1999). However, it is a necessary risk if the aim is to enable the less powerful people in a village to exercise their agency in accessing resources.

Mohsen's story

Home to approximately one hundred families, Khumsan is the largest village in the Khumsan/Charvak community, and it is the closest to the provincial center of Meymaneh. Despite the presence of an NSP-funded shallow well, at the time of the study the village was still relying on a traditional water pool, or howz, for drinking water because the water of the NSP-funded well had high salinity levels and was not potable. The saline intrusion was most likely caused by a lack of precipitation, which prevented the aquifer from sufficiently recharging (Alim 2006).

Uncovered and fed by rainwater and an open stream, Khumsan's howz did not provide safe drinking water either, but villagers perceived the water as more palatable.[14] Mohsen, a local villager, explained that the contamination of their sole source of drinking water had a debilitating impact on the health and livelihoods of some families in the village due to increased incidence of waterborne diseases.

Research in other areas of Faryab indicates that children and elderly individuals are particularly susceptible to infection by the bacteria in contaminated water and many of them have chronic diarrhea (Petri et al. 2008; Walker et al. 2007). The availability of safe drinking water in all villages, including Khumsan, is of great importance to those whose livelihoods require them to remain healthy and strong enough to work.

The community was extremely frustrated with the failure of the government to provide safe drinking water, whether through the NSP or other means. In focus group discussions in Khumsan in May 2009, Mohsen explained that the CDC had approached the provincial governor about the problem: "All the time the people go to the government. . . . They say their problem but they didn't pay attention. They say, 'OK, we will try,' but they didn't pay attention."

Mohsen stated that people in Khumsan did not trust that the government or international agencies would be willing to work toward a solution for their water access problem. The international NGO that was acting as facilitating partner in Pashtun Kot District had visited and had seen the state of their drinking-water source, but nothing was done to rectify the situation. Even the body elected to represent the village and address such issues, the CDC, was not trying to solve the drinking water problem. In the May 2009 focus group discussion, Mohsen reported that members of the CDC believed that if they "trouble themselves and dig the well, [the water] will be salty," and they therefore preferred not to dig another well at all.

With exasperation, Mohsen further explained that if the government decided to dig a well, it would take five or six years to complete the task because of bureaucratic hurdles and systemic corruption. Those in Khumsan with whom

---

[14] This situation was occurring during a year when the rains had been the heaviest in approximately twenty years, according to village elders in this area. During years of severe drought, people from another village traveled to this howz to collect their drinking water as well.

Mohsen spoke no longer trusted that their government would take action to address their water problems. They perceived the government as unwilling and unable to work through the NSP to provide them with sustainable access to safe water. Mohsen was scathing in his critique of how local and regional power structures within the Afghan government and the NSP worked against equal access to resources.

LESSONS AND RECOMMENDATIONS

This overview of water management issues in post-conflict Afghanistan suggests that the rescaling of water resource management to the local level across Afghanistan has not been without friction in the rural areas. The villagers' experiences recounted here are not unique to them, to their villages, or to their region. Although each NGO facilitates the NSP differently, and although each CDC operates differently, the NSP's operational framework and structure is common throughout Afghanistan, and key managerial and operational details are identical across all projects. Also, the severe water scarcity of the region studied is a widespread issue in the country. The findings of these case studies are symptomatic of how the Afghan peacebuilding strategy is failing to effectively engage local water resource management as a central element in moving toward a stable peace.

Government learning and action

In order for there to be substantial progress in the provision of equitable access to water for all Afghans, engagement with Afghan water users and decision makers needs to be at a much deeper level than it has been thus far, and commitments to international paradigms of water management and development need to be much less formulaic. A key structural weakness of the NSP is the foundational assumption that it would be implemented upon a social tabula rasa. It is true that conflict reconfigures social and institutional power relations, but it does not eliminate them. Therefore, a sound knowledge of the history of local and national developments leading to such a reconfigured social reality—one that incorporates thorough gender analysis—is key to the success of any reconstruction and peacebuilding effort.

Recognizing the potentially harmful impact of introducing a new power structure in Afghan villages is a vital first step in making gains in local water resource management. Using evidence from India and Pakistan, Nicholas Hildyard and colleagues, and Daanish Mustafa, respectively, discuss the futility of exercising participatory development without due attention to differential and gendered power structures at the village level (Hildyard et al. 2001; Mustafa 2002). Concrete action to address unequal and sometimes exploitative power relations, coupled with an enhanced understanding of current and pre-conflict local practices of water management in various provinces and districts, will enable more informed

decision making by those who facilitate water resource management at the village level.

Local ownership of national peacebuilding strategies and activities

The institutional focus of development and governance interventions must shift in order for Afghanistan to move toward a stable peace. Village-level stakeholders can become effective water resource managers and can shape peacebuilding strategies through more effective processes of consultation and government learning. Peacebuilding analysts in Afghanistan strongly recommend building the capacity of local councils—including CDCs and the village-level decision-making groups called *shuras*, which existed before the NSP—in mediation, negotiation, and conflict resolution so they can resolve disputes peacefully and effectively (Dennys and Zaman 2009; Waldman 2008).

Contextually informed mediation of water-related conflict could be a useful first step in ensuring that decision-making and management authority is not further skewed in the direction of power holders—either those from the conflict period or those in power at present. Care must be taken to prevent a depoliticized conceptualization of peacebuilding from taking hold at the policy level. As Jonathan Goodhand and Mark Sedra argue, working toward an ideal of peace that is not infused with Afghan politics at various scales "succeeds in reducing the opportunity for alternative or indigenous approaches to reconstruction. As a result, donors and a narrow clique of Afghans 'own' the bureaucratic façade of reforms, while real ownership is exerted by local power holders, leading to very different outcomes from those intended" (Goodhand and Sedra 2010, 97).

Government legitimacy

An Afghan government that is aware of the relationship between water resource management and peacebuilding initiatives at the local level and that takes steps to afford Afghan citizens greater ownership of peacebuilding strategies is more likely to hold greater legitimacy in the eyes of its citizenry. Finding a balance between top-down, national-level interventions and bottom-up, village-level participation is a challenging task in the best of circumstances, and certainly seems a tall order in a complex and deeply troubled context such as Afghanistan. However, a government that is accountable to its citizens must recognize the challenges they face with regard to water resource management and must resolve to take concrete action and commit to real progress toward equitable and sustainable access to water for all of its citizens.

Another stumbling block along the road to government legitimacy relates to the role of international NGOs in the funding and implementation of water management interventions. Because these organizations have a relatively large wealth of human and other resources compared to the Afghan government departments, tensions can arise between them and with the populace (Ghani,

Carnahan, and Lockhart 2005; Goodhand and Sedra 2010; Howell and Lind 2008). Salaries are sometimes as much as twenty times higher for employees of international organizations than for civil servants, so the international organizations draw in many highly skilled staff, leaving the government with a lack of professional human resources (Howell and Lind 2008).

Achieving improvements in water resource management is as much a social process as a physical one, so professionals with skills in facilitation, conflict resolution, and mediation also play an important part in the realization of peacebuilding objectives related to water (Goodhand and Sedra 2006). If, as some research argues, peacebuilding efforts in Afghanistan need to be national rather than international, as well as legitimate, the necessary human resources must be accessible to the national institutions involved (Goodhand and Sedra 2006; Suhrke et al. 2002; Suhrke, Harpviken, and Strand 2002).

North Afghanistan: Struggling to move on from a legacy of conflict

The situation in Afghanistan continues to shift, with different regions experiencing varying degrees of conflict, post-conflict adjustment, and reconstruction and development activities (Donini 2007). Until mid-2009, Faryab Province seemed to be quickly moving on from a legacy of conflict. Peacebuilding objectives, including much work in water resource management, were incorporated into development interventions, and in most districts continuing armed conflict was sporadic rather than systemic.[15] However, it became clear during late 2009 that these interventions were not sufficient to prevent the growth of the Taliban in Faryab. An NGO staff member explained to the authors that young Uzbek men throughout the province were being lured into Taliban forces by a monthly salary of US$300.[16] Persisting poverty and vulnerability seem to be a contributing factor to the spread of the Taliban in Faryab. If this is so, then in order to prevent further expansion of the Taliban in the province, development interventions such as the NSP need to be more effective in enabling people to access and control the resources necessary for meeting their basic needs and generating income.

An engineer working for an NGO in Faryab explained to the authors in August 2010 that Taliban advances from the western provinces had begun to impede progress in reconstruction, with attacks against government authorities and attacks against and kidnapping of NGO staff working in the villages. These

---

[15] The exception here is Ghormach District, which was formerly within Badghis Province. When the district became part of Faryab Province in 2008, it carried with it a growing Taliban presence that has since spread across most other southern districts of the province.

[16] Personal communication, August 11, 2010; see also Giustozzi and Reuter (2010).

actions undermine the peacebuilding processes implemented in Faryab Province to date and also raise concerns about the future of any improvements in water resource management that may facilitate those processes. Growing insecurity will prevent government and nongovernmental institutions from carrying out further work on improving water resources and their management.

CONCLUSION

Afghanistan has suffered a host of local governance distortions as a result of three decades of conflict. The enhanced power of former warlords, breakdown of the traditional moderating influence of communities, and greater interethnic resentment all contribute to the political and social challenges facing the country. Ultimately the issue of differential power and its effects in the water sector cannot be ignored. CDCs and water user associations (WUAs) will not be able to deliver sufficient, safe water to the vast majority of poor and disenfranchised Afghans if they continue to represent only the rural elites. Interventions such as the NSP and the KRBP need to provide the necessary space for learning, growth, and change so CDCs and WUAs can more effectively address inequities experienced by rural Afghans.

Beyond functioning as a simple conduit for disbursement of international development aid and a testing ground for Western peacebuilding paradigms, the CDCs and WUAs could appropriate institutional vehicles for addressing the anomalies and distortions that have crept into the Afghan body politic during thirty years of conflict. Different relations between the international community and the Afghan government, and between the Afghan government and its people, based on mutual respect, willingness to admit mistakes, and a commitment to undoing the perverse legacies of the conflict in Afghan society are essential for movement toward relevant and responsive water management mechanisms within Afghanistan's larger peacebuilding project.

REFERENCES

Abdullayev, I., K. Mielke, P. P. Mollinga, J. Monsees, C. Schetter, U. Shah, and B. Ter Steege. 2009. Water, war and reconstruction irrigation management in the Kunduz region, Afghanistan. In *Water, environmental security and sustainable rural development: Conflict and cooperation in Central Eurasia*, ed. M. Arsel and M. Spoor. New York: Routledge.

Alim, A. K. 2006. Sustainability of water resources in Afghanistan. *Journal of Developments in Sustainable Agriculture* 1:53–66.

Barakat, S. 2002. Setting the scene for Afghanistan's reconstruction: The challenges and critical dilemmas. *Third World Quarterly* 23 (5): 801–816.

Barfield, T. 2007. Weapons of the not so weak in Afghanistan: Pashtun agrarian structure and tribal organization for times of war and peace. Hinterlands, Frontiers, Cities, and States: Transactions and Identities, Agrarian Studies Colloquium Series. New Haven, CT: Yale University.

Clover, D. E. 2006. Out of the dark room: Participatory photography as a critical, imaginative, and public aesthetic practice of transformative education. *Journal of Transformative Education* 4 (3): 275–290.

Cosgrove, D., and G. Petts. 1990. *Water, engineering and landscape: Water control and landscape transformation in the modern period*. London: Belhaven.

Crang, M., and I. Cook. 2007. *Doing ethnographies*. London: Sage Publications.

Dennys, C., and I. Zaman. 2009. Trends in local Afghan conflicts: Synthesis paper. Kabul, Afghanistan: Cooperation for Peace and Unity.

Donini, A. 2007. Local perceptions of assistance to Afghanistan. *International Peacekeeping* 14 (1): 158–172.

Dupree, L. 1975. Settlement and migration patterns in Afghanistan: A tentative statement. *Modern Asian Studies* 9 (3): 397–413.

Escobar, A. 1995. *Encountering development: The making and unmaking of the Third World*. Princeton, NJ: Princeton University Press.

Farhadi, A. 2008. Afghanistan National Development Strategy 1387–1391 (2008–2013): A strategy for security, governance, economic growth, and poverty reduction. Kabul.

Ghani, A., M. Carnahan, and C. Lockhart. 2005. Stability, state-building and development assistance: An outside perspective. Working paper, Princeton Project on National Security. Princeton, NJ: Princeton University.

Gilmartin, D. 1994. Scientific empire and imperial science: Colonialism and irrigation technology in the Indus Basin. *Journal of Asian Studies* 53 (4): 1127–1149.

Giustozzi, A., and C. Reuter. 2010. The Northern Front: The Afghan insurgency spreading beyond the Pashtuns. Afghanistan Analysts Network Briefing Paper No. 3. Kabul: Afghanistan Analysts Network.

Goodhand, J., and M. Sedra. 2006. *Bargains for peace? Aid, conditionalities and reconstruction in Afghanistan*. The Hague: Netherlands Institute of International Relations.

———. 2010. Who owns the peace? Aid, reconstruction, and peacebuilding in Afghanistan. *Disasters* 34 (1): S78–S102.

Hildyard, N., P. Hegde, P. Wolvekamp, and S. Reddy. 2001. Pluralism, participation, and power: Joint forest management in India. In *Participation: The new tyranny?* ed. B. Cooke and U. Kothari. London: Zed Books.

Hirsch, P., and A. Wyatt. 2004. Negotiating local livelihoods: Scales of conflict in the Se San River Basin. *Asia Pacific Viewpoint* 45 (1): 51–68.

Howell, J., and J. Lind. 2008. Civil society with guns is not civil society: Aid, security, and civil society in Afghanistan. NGPA Working Paper No. 24. London: London School of Economics and Political Science.

Kakar, H. K. 1979. *Government and society in Afghanistan: The reign of Amir 'Abd al-Rahman Khan*. Austin: University of Texas Press.

Lahiri-Dutt, K. 2003. People, power and rivers: Experiences from the Damodar River, India. *Water Nepal* 9/10 (1/2): 251–267.

McCarthy, J. A. 2011. *Reframing knowledges of participatory development and livelihoods in Afghanistan's rural north: A power analysis to understand complex realities of vulnerability*. London: I.B. Tauris Academic Studies.

Mielke, K., and C. Schetter. 2007. "Where is the village?" Local perceptions and development approaches in Kunduz Province. *Asien* 104:71–87.

Montgomery, J. D., and D. A. Rondinelli. 2004. Introduction. In *Beyond reconstruction in Afghanistan: Lessons from development experience*, ed. J. D. Montgomery and D. A. Rondinelli. New York: Palgrave Macmillan.

MRRD (Ministry for Rural Rehabilitation and Development, Islamic Republic of Afghanistan). 2009. *National Solidarity Programme (NSP) operational manual*. Kabul, Afghanistan.

Mustafa, D. 2002. To each according to his power? Participation, access, and vulnerability in irrigation and flood management in Pakistan. *Environment and Planning D: Society and Space* 20 (6): 737–752.

Pain, A. 2004. Understanding village institutions: Cases studies on water management from Faryab and Saripul. Case Studies Series: Afghanistan Research and Evaluation Unit. http://ageconsearch.umn.edu/handle/14639.

Paris, R. 2004. *At war's end: Building peace after civil conflict*. Cambridge, UK: Cambridge University Press.

Peacebuilding Initiative. 2008. History. http://peacebuildinginitiative.org/index.cfm?pageId=1764.

Peet, R., and E. R. Hartwick. 1999. *Theories of development*. New York: Guilford.

Petri, W. A., J. M. Miller, H. J. Binder, M. M. Levine, R. Dillingham, R. L. Guerrant. 2008. Enteric infections, diarrhea, and their impact on function and development. *Journal of Clinical Investigation* 118 (4): 1277–1290.

Rubin, B. R. 2006. Peace building and state-building in Afghanistan: Constructing sovereignty for whose security? *Third World Quarterly* 27 (1): 175–185.

Shah, U. 2009. Bringing order to the jangal: State building, social change, and international intervention in Afghanistan's Kunduz River Basin. MA Thesis, School of Geography and Environmental Science, Monash University, Melbourne, Australia.

Sneddon, C. 2002. Water conflicts and river basins: The contradictions of comanagement and scale in northeast Thailand. *Society and Natural Resources* 15 (8): 725–741.

Suhrke, A., K. B. Harpviken, A. Knudsen, A. Ofstad, and A. Strand. 2002. *Peacebuilding: Lessons for Afghanistan*. Bergen, Norway: Chr. Michelsen Institute.

Suhrke, A., K. B. Harpviken, and A. Strand. 2002. After Bonn: Conflictual peace building. *Third World Quarterly* 23 (5): 875–891.

Swyngedouw, E. 1999. Modernity and hybridity: Nature, "regeneracionismo", and the production of the Spanish waterscape, 1890–1930. *Annals of the Association of American Geographers* 89 (3): 443–465.

Waldman, M. 2008. Community peacebuilding in Afghanistan: The case for a national strategy. Oxfam Research Report. Kabul, Afghanistan: Oxfam International. www.oxfam.de/files/20080228_communitypeacebuildinginafghanistan_359kb.pdf.

Walker, S. P., T. D. Wachs, J. M. Gardner, B. Lozoff, G. A. Wasserman, E. Pollitt, J. A. Carter, and International Child Development Steering Group. 2007. Child development: Risk factors for adverse outcomes in developing countries. *Lancet* 369 (9556): 145–157.

World Bank. 2010. Afghanistan country overview 2010. Washington, D.C.