SHARED RESERVOIR AS IRONY: THE ROLE OF SOCIAL IDENTITY IN THE ARAL SEA ENVIRONMENTAL SITUATION

by

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ABSTRACT

SHARED RESERVOIR AS IRONY: THE ROLE OF SOCIAL IDENTITY IN THE ARAL SEA ENVIRONMENTAL SITUATION

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George Mason University, 2011

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Social identity has been shown to significantly impact – or even to cause – conflicts. However, it appears to be a relatively unstudied influence in terms of situations of environmental crisis, Western development aid, and conflict over natural resources. This study attempts to address this gap using the case study of the Aral Sea environmental situation as it has played out in Uzbekistan. The hypothesis is that the Uzbek regime has been able to manipulate social identity of outsiders in order to fulfill its own agenda, garner benefits, and otherwise improve its means of control in Uzbekistan. The research investigates the role of history in Uzbekistan as well as post-Communist dynamics and factors and uses Charles Tilly’s mechanisms as a means of understanding the dynamics and processes involved in social identity manipulation.

Additionally, Western professionals (e.g., academics, NGOs, IFIs, government workers) involved in the Aral Sea situation or related issues in Uzbekistan were targeted for study in order to determine their perceptions about the role of social identity in their
work and in the situation in general. Interviews as well as an online survey were conducted. Results indicate that social identity has been a significant influence in the situation. However, the situation is extremely complex and requires further study.
1. INTRODUCTION

“There is a common saying in the Aral Sea area: ‘If every specialist brought with them a bucket of water, the Sea would be filled again.’” (Small, 2001)

Social identity is an important component of human interaction. People, individually and in groups, act and behave to a significant degree according to their sense of social identity. This includes engagement in conflicts, some of which are so tied to identity that they can be labeled as identity conflicts. Identity and identity conflicts are strong areas of research and practice within the field of conflict analysis and resolution. However, what happens when a conflict is about identity to one party but not the other? Similarly, what if one party purposefully precipitates an identity conflict between other parties for their own benefit? These are questions that appear to be less often asked but seem to hold relevance for some conflict situations.

There are several possible reasons why such an imbalanced or projected identity conflict can occur. For example, such a conflict can serve as a proxy conflict for one, or even all, of the parties. This can happen when it is taboo to engage in conflict over a certain issue, so the anger and frustration are channeled elsewhere, such as happens when parties fight about tradition and culture when they are really concerned about relative deprivation, e.g., over water rights or economic advantage. Another type of false identity conflict can occur in cases where leaders or others in power manipulate their social
surroundings in order to improve their own situation or increase their position of
advantage.

In reviewing the case of the Aral Sea disaster in Central Asia, it seems that despite
considerable effort by many people, organizations, and governments to fix or mitigate the
situation, the environmental disaster was still enormous. In addition to the many and
multi-scaled efforts that went into the situation, there have also been numerous studies as
to what happened. Explanations vary and come from various vantage points, such as
géology, hydrology, geography, economics, and politics. While several very good
theories – and even models – have come from the research, there still seems to be more
that can be learned.

One area where more exploration seems to be needed is in the area of social
identity. This thesis will argue that social identity played a significant role in how the
Aral Sea crisis has played out in Uzbekistan. Uzbekistan’s unique background and
current leadership, combined with global circumstances and power structures and
dynamics, have provided a setting that led to the manipulation of social identity for
power politics, and may have contributed to the worsening of the Aral Sea environmental
situation. The latter perhaps cannot be explicitly proven. However, there appears to be
enough insight into what happened to demonstrate that a variety of actors and
organizations pursued relationships, projects and agendas that represented their values
and goals. In turn, these values and goals were to a reasonable degree representative of
those actors’ and organizations’ social identities. In some ways these identities varied
broadly, sometimes diametrically. In other cases, aspects of identity corresponded to
certain viewpoints across certain governments and organizations, for example, the “Washington Consensus.” In all cases, though, it appears that Islam Karimov, President of Uzbekistan, has been able to manage affairs and relationships in a way that engineered, balanced, orchestrated, and counterpoised the various identities in order to leverage the situation to his advantage, often for the purpose of power politics. The continued degradation of the Aral Sea, to include devastation of the mid- to lower- reaches of the Amu Darya River, the rare ecosystems, the agricultural fields, soils, irrigation systems, air quality, vegetation, and so forth has led to irreversible devastation to both environment and its inhabitants.

Karimov has been adept at playing national identities against each other, perhaps most notably in the East versus West struggle for global power, where he has played particularly Russia and the United States against each other in their bids to control development and resource access in Uzbekistan. He has made great efforts to mobilize Uzbek national and cultural identity in order to secure his place in power and increase security for his regime against perceived threats by minorities. He has orchestrated clan identities in order to keep various clans under control. He has appealed to environmental identity (arguably not explicitly social identity, but considered by some to be a component of it) in order to gather monetary support. He has suppressed religious identity through harsh treatment of those he considers too religious. He also labels dissenters of various types as religious extremists, thus enabling him to invoke a counterterrorism justification that appeals to both the East and West. In global relations and media, he has publicly identified with the Karakalpaks, the ethnic group that
traditionally has lived in the region closest to the Amu Darya River and the Aral Sea in order to garner aid and development support.

Amongst all of these appeals to social identity, Karimov himself appears to not have a particularly salient sense of social identity. Ironically, this is precisely the reason he was selected Secretary of the Uzbek Republic under the Soviet regime. He seems to be more driven by personal identity and interest in power. In this regard, his exploitation of the “plight of the Karakalpaks” inspired the title of this work, “Shared Reservoir as Irony.” In social identity theory, Vamik Volkan created the theory of the “shared reservoir.” Korostelina (2007, p 27) explains:

The development and preservation of group identity require strong internal components that show the main content of group identity and the specificity of intergroup relations. Volkan describes these as chosen glories… and chosen traumas…. (Volkan 1997: 48). They help individuals to unite around powerful ideas of group gains and losses… They are chosen because of the current state of relations with other groups and provide “explanations” for poor economic conditions or minority status.

These ideas of glories and traumas are linked to real or symbolic objects: suitable targets of externalization (STEs) (or shared reservoirs), determined either by culture (familiar objects of a child’s environment) or by parents and other adults… Positive STEs, or reservoirs of good representation, are associated with decent and trusted people such as parents, friends, leaders and allies. Negative STEs, or reservoirs of bad representations, are associated with terrible memories, threats, and enemies. STEs tie people together, unite groups, and transfer meanings to new generations.

In the case of the Aral Sea as a “shared reservoir,” what is distinctly a “chosen trauma” for one group, the Karakalpaks, as well as others who live close to the Aral Sea or along the lower reaches of the Amu Darya River, may not necessarily be a “chosen glory” for others, such as Karimov and his regime. However, it is certain that the “reservoir” is not “shared” between the two. The irony lies in the thought that the use of an environmental
catastrophe to gain international development and other financial aid and support may have exacerbated the desiccation of the lake rather than mitigated it.

The background to this situation is important because it created the environment for Karimov and his regime to be able to use social identity as successfully as they have. A history of long-term colonization by the Russians and then the Soviets shaped an elite with distinctive characteristics, values, and ways of doing things, including coping mechanisms and workarounds. Furthermore, the dissolution of the USSR left Uzbekistan an independent country for the first time in its history, leaving it to try to develop a national identity while also trying to survive on the global market and political stage. This globalizing world, dominated as it has been since the 1990s by neoliberal economics and a persistent focus on Westphalian-style governance, has had profound influence on a multitude of governments, organizations, and societies. This worldview has had a significant impact on how many actors have related to Uzbekistan and its issues. The Aral Sea disaster, although in large part due to Soviet environmental irresponsibility, was worsened after independence through continued over-reliance on and mismanagement of the commercial agricultural sector. Uzbekistan has continued this untenable situation to the present. However, it has had help – both witting and unwitting – in doing so, with social identity playing a role.

This research hopes to address the following questions:

- What role has social identity played in the Aral Sea disaster as it played out in Uzbekistan?
What role did social identity play in how various actors and groups understood, framed, and dealt with the environmental problem?

Did Islam Karimov manipulate social identity among various actors and groups for the benefit of his regime?

What lessons can be drawn from this case study for other or future environmental cases?

The literature review addresses these questions in part and focuses on Charles Tilly’s concepts of political theory and mechanisms. In order to better understand the role of social identity, interviews were conducted with outside actors in order to gather their perceptions and insight into what role social identity played for them while they conducted work and/or research on the Aral Sea or related issues in Uzbekistan, as well as their thoughts on the general role of social identity in the situation. An online survey with similar themes was also conducted. The participation audience is primarily Westerners from academia, non-governmental organizations (NGOs), International Financial Institutions (IFIs), and government. Westerners were particularly targeted, as it is their sense of social identity being studied in this research.

Chapter 2, “Literature Review,” will discuss in further detail the background to the case study, as well as linkages between social identity and the outcome of the situation. Chapter 3, “Research Methodology,” discusses the project design. Chapter 4, “Analysis,” discusses the results of the interviews and survey. Finally, Chapter 5 concludes.
2. LITERATURE REVIEW

The theoretical underpinnings of this work primarily belong to Charles Tilly and his concepts of political identity and mechanisms. Having read the introduction, some might think that Tilly would not approve of the focus on one individual actor. However, it is important to stress that it is understood that Islam Karimov is a product of his environment and background, as mentioned in the introduction. Furthermore, he is part and parcel of the relationships or ties with other individuals and groups which have helped create his perceptions and narratives and enable the interactions that he undertakes. Thus, at this point it may be helpful to build the case with relevant background.

THE QUEST FOR WHITE GOLD

The Russian Empire expanded into Central Asia starting in the early 1700s. By the 1800s, during the “Great Game” between the Russian and British empires over inner Asia, the Russians were pushing into the Aral Sea region (Houtsma, 1993). Seeing the region’s potential for agriculture, they began to direct agriculture there. However, it wasn’t until the American civil war cut Russia off from its primary cotton source that it looked to Central Asia for more intensive cotton cultivation.
When the Soviets came to power, they arranged their new lands into republics, regions, and other spatial units primarily based on ethnic groups. While the British generally chose a key minority group to administer each of their lands (Peacock, 2009), the Soviets formed subordinate units based on majority ethnic groups. Whereas the British struggled to maintain order in their far-flung domain, the Soviets had a greater ability to react quickly in the case of a rebellious subordinate. Thus, the Soviets could better afford to have majority groups in charge.

The Soviets not only meant to organize its domain through this method, it also intended to manipulate and control the balance of power. In Central Asia, control of the more numerous Kazakhs and Uzbeks was a concern, as exemplified in the bloody 1916 Turkistan uprising and the continuing struggle against the Basmachi after the Soviets re-imposed Russian rule in the early 1920s. However, the Soviets’ focus on ethnicity may have been ill-placed. Clan identity was more salient among the Central Asians than ethnicity (Collins, 2004; Kubicek, 1998; Rashid, 2000). By basically creating ethnic identities, the Soviets not only ignored a long-standing and persistent form of identity that pervaded politics, economics, society, and culture, but also, for some Central Asians, brought into being a new identity salience. An example of the latter is this: over a span of ten years between the mid-1920s to the mid-1930s, the Karakalpaks, an indigenous group living closest to the Aral Sea in Uzbekistan, were put in charge of their own Autonomous Soviet Socialist Republic (ASSR), then were placed under the Kazakhs, and then finally subordinated under the Uzbeks (Akiner, 1983). This determination as an autonomous region gave an air of special status that existed only in name. In reality, the Karakalpaks
had no autonomy to make decisions, as direction was conducted from Moscow through Tashkent, the capital of Uzbekistan.

However, the most obvious damage done by the Soviets to the area they supposedly administered was in the form of the agricultural plans that directed the region to function economically under a monoculture of cotton (Feshback and Friendly, 1992; Micklin, 2000). Stalin’s plan to “defeat drought” and turn the semi-arid region into a productive oasis engendered severe environmental ramifications. The Aral Sea, the fourth largest lake in the world in 1960, began shrinking at an alarming rate, mostly due to the high volume of water removed from the Amu Darya River for irrigation.

FIGURE 1. “We will defeat drought, too!”
By the 1970s, water, reused several times over the course of the river, was not only scarce but also highly saline and contaminated with pesticides, herbicides, industrial chemicals, and even heavy metals by the time it reached the river delta; dust storms were becoming more common (Peterson, 1993; Feshback and Friendly, 1992). The health of the people in the area worsened (Crighton, 2003; Feshback and Friendly, 1992), with a marked increase in respiratory, digestive, and reproductive ailments. By the mid-1980s, the Soviets acknowledged that the situation was a problem. Planners were in the process of developing a plan for remediation, mainly in the form of water diversion from Siberian rivers, when the Soviet Union fell (Peterson, 1993).

THE TRAGEDY OF THE COMMUNISTS

“…all social situations are structured by previous historical developments, at the same time as they contain the ingredients for future change.” (Hettne, 2010, quoting Cox, 1996)

The Soviets’ impact on Uzbekistan – and the rest of Central Asia – was pervasive and long-lasting. The USSR operated as an areal functional specialization system, meaning that different areas and different republics were responsible for – and were accordingly developed (or not) – based on their “assigned” functions. Some republics were developed for heavy industry; some were designated as agricultural regions. Thus, Ukraine was the “breadbasket” of the USSR; Central Asia was the producer of “white gold,” (i.e. cotton). Moscow also put Central Asian cotton on the international market to raise money for Soviet coffers.
In theory, this system was established to support the USSR as a self-sufficient political entity. However, when the USSR broke up, the former republics, now internationally recognized states, were left with whatever cards the Soviets had dealt them. However, they were not left with the same relationships and safety nets (Rashid, 2000). Standard trade relations, previously all directed by Moscow, were disrupted. Subsidization of energy supplies, public services such as health care and education, and infrastructure were severely cut or eliminated. In Central Asia, when the five countries across the Aral Sea watershed became independent, relations were severely complicated, particularly in terms of water-sharing. Under the Soviet system, water flow was dictated by the regime. Upon independence, water disputes appeared between upstream and downstream countries as well as between sub-national regions (Kindler, 1998).

Under such circumstances, the new states were released into the globalizing, neoliberal world. Secretary Islam Karimov became President Karimov, the first president of Uzbekistan, in 1991. With few economic options other than cotton (Weinthal, 2002), President Karimov continued the cotton monopoly, despite the obvious continued environmental degradation it incurred. Uzbekistan had arguably been dealt the best economic cards of the Central Asian states, with a reasonable industrial sector, reserves of gold and gas, and a large, educated labor force. However, the infrastructure was poor and quickly disintegrating. Furthermore, after a few years of allowing entrepreneurial freedom, Karimov started to centralize the economy again (Rashid, 2000). This is arguably due to two reasons. First, Karimov’s response to pressure from the international powers – both Washington and Moscow – was to take his own path, play the powers
against each other (Fumagalli, 2007), and to resist quick reform (Maynes, 2003), such as the shock therapy some of the other new countries endured. Independent business activity between citizens and outsiders was managed via Tashkent in order to ensure they supported national policies and programs, as non-transparent as they may be. Second, in order to maintain balance among the clan leaders, Karimov had to ensure tight control over national assets, including sources of income.

Uzbekistan represents a unique core-periphery model. The core-periphery model is a geographic model that has primarily been used to describe the relationship in the globalized world between rich core areas in the North, such as Western Europe and the US, and poor peripheral Southern areas, such as Africa and South Asia. The core-periphery model is also used at a smaller scale to describe relations within regions or countries. In the case of Uzbekistan, this model provides particularly useful insight in terms of development, the environment, and conflict. The core area in Uzbekistan is the capital, Tashkent, in the east. One could say that power diminishes outward until there is little left by the time one reaches the Aral Sea (Hanks, 2000). As the Aral Sea is located at the far periphery of the seat of power, there is much less concern about environmental problems there negatively affecting the population. On the other hand, the LeBillion model would place Uzbekistan’s western periphery at high risk for conflict due to the distance of the resource (cotton) from the center. Thus, there seems like a double reason for tendency towards conflict: environmental marginalization coupled with possession of a key commodity.
Economically speaking, economic power is also reserved in Tashkent. All imports are flown into Uzbekistan via Tashkent and distributed from there, likely reminiscent of Soviet times only without the ideological concern about equity. It is interesting (though not surprising) that the Uzbek periphery is the source of Islamic extremism, although it is more apparent in the far east, in the Ferghana Valley.

Returning to the clan issue introduced above, the Soviets, until later, dealt with the clan “issue” primarily by ignoring it. Particularly under Khrushchev, clans provided the political, economic and other leadership for Uzbekistan, as well as in other Central Asian states, perhaps not unlike they had done for hundreds of years (Collins, 2004; Feifer, 2002; Kiessling, 1998). Clan members who became influential party members brought in their relatives and other members of their clan, to whom the benefits of power were distributed. When Gorbachev came to power, he tried to eliminate clanism, with a considerable amount of push-back. In Uzbekistan he succeeded (after two unsuccessful attempts) to install an “appropriate” leader. Islam Karimov, a Tajik from the Samarkand clan, appeared to have only moderate clan ties. Thus, the other clans accepted him as a leader who could balance their interests (Collins, 2004).

Clans can be problematic. In a clan system, the majority of types of important capital (e.g., social capital, political capital) exist primarily between members within clans, suppressing the development of healthy civil society (Fukuyama, 2001). Kahl (1998) describes this phenomenon as “groupness” and supports that this type of exclusive social cohesion can have a strong impact on a state exploitation conflict.

“…in exclusionary states, state elites and their allies have both the power and the incentive to exploit resource scarcities and manipulate social
schisms to advance their narrow self-interests, because the social costs of such policies are spread out across society while the benefits are accrued by the narrow clique at the top. Furthermore, control over the coercive apparatus of the state provides state elites and their allies enormous potential to harm disadvantaged groups.” (Kahl, 1998)

Especially under conditions of rapid change or scarcity, clans tend to strip resources away from the system to the harm of the general good in a form of “spoil politics” (Collins, 2004; LeBillion, 2001; Kiessling, 1998). In the case of Uzbekistan, the abrupt devolution after the end of the USSR constituted this type of rapid change. The concomitant contraction of the economy provided another incentive for a resource grab.

The situation with the cotton industry was extremely problematic. Cotton was particularly “clan-friendly” for several reasons, despite the fact that it was becoming less and less tenable with reduced water and degraded soils. First, Uzbekistan was already a primary producer of cotton on the international market in short order after independence. Second, the turnaround time for money from cotton was relatively quick. Third, the Soviet system had taught the clans the important science of creative paperwork, in other words, how to adjust records (such as production reports) in order to support economic goals. There was considerable opportunity to make more money by manipulating the cotton reporting. Fourth, after independence, Karimov had established multiple exchange rates for the Uzbek som, much to the chagrin of international financial institutions. One of the effects of the multiple exchange rate system was that it allowed for differential benefits for certain groups. By being made privy to a special exchange rate, those in favor could benefit much more from the international cotton trade than others. Lastly, the power structure that ran the cotton industry was already well entrenched at various scales.
They were reasonably well positioned to extract resources at their levels and in their geographic areas as efficiently and self-interestedly as possible. This pursuit has become more and more challenging as agriculture has become more difficult. New sources of income will have to be found, but it may not be until the cotton fields are thoroughly and widely destroyed across major areas of Uzbekistan.

Long-term over-reliance on cotton and other crop monocultures has done more than destroy a major global water feature and surrounding ecosystems. In Uzbekistan’s case it has also led to extreme economic inequality, with the elites accruing enormous wealth and the rest of the population trying to survive in a world of decreasing resources. Neoliberalism here, as elsewhere, has not lead to a “lifting of all” (Pieterse 2002), with money being pumped back into the Uzbek communities, but instead consolidated within clan power centers and put in offshore banks to accrue. The development that has been allowed to occur benefits the elites, with very little impact on the average citizens. In fact, development has at least in part been to the detriment of the citizens, such as in the case of irrigation technology provided to the Uzbek government that, while increasing water efficiency, perpetuates the cotton industry when the country should instead be focusing on rehabilitation of the disaster area and diversification of the economy. It seems reasonable to argue that this is one way development can fuel conflict, i.e. if it is done in a way that preferentially creates or increases inequality and is done to the detriment of the average citizens.

Furthermore, the cotton industry is severely damaging Uzbekistan’s developmental options. Severskiy (2004) notes, “According to Global International
Waters Assessment (GIWA) assessment estimations, freshwater shortage is responsible for about 70% of the developmental problems in the region.” As the Aral Sea hydrological system is the only freshwater source supporting the region, this statement has direct relevance for the cotton industry. Additionally, as Gharabaghi (1994) notes, “…ecological conditions [i.e. related to the Aral Sea] will undoubtedly impede the development process in Central Asia, and therefore, any development strategy adopted by (or for) the region and/or its individual states, will have to face this issue as an integral part of the problematique.” These are considerations that the current regime is not taking into consideration for the future.

BALANCING ACT

“O’zbek xalqi hech qachon, hech kimga qaram bo’lmaydi.” (“The Uzbek people will never be dependent on anyone.”) Islam A. Karimov, May 25, 2005 (quoted in Fumagalli, 2007)

Since independence President Karimov has been doing a balancing act between major world powers, mainly between Russia and the US, but among others, as well, such as China, India, Korea, and Turkey. As Boris Rumer (as cited in Smith, 1996) surmised: This new "great game" in the heart of Asia is unfolding not so much among the old colonial powers as among their former minions, many of whom are themselves just emerging from colonial domination and seeking to define their roles in their regions and the world.”

However, the dominating balancing act remains that between Russia and the United States. Karimov is without doubt one of those post-Cold War leaders who views
aid as a tool of Western foreign policy (Duffield, 2010). However, he also would include any outside power in this category, i.e. of using aid for their own benefit. After the breakup of the Soviet Union, Russia remained involved with the Central Asian states, as it did with the rest of its former republics, and still considered the region as part of its sphere of influence. It helped partially reconstitute a group entity in the form of the Commonwealth of Independent States (CIS), in large part to maximize the efficiencies (if it can be so called) of the defunct Soviet Union in order to better survive in the “new world” of globalization and neoliberal economics.

While the United States was interested in the former Soviet regions, it found Uzbekistan remote (it is one of only two countries that is doubly landlocked) and was put off by its human rights record and failing efforts at democratization (Rashid, 2000). Nevertheless, in the mid-1990s, Clinton’s administration made efforts to befriend the Uzbek administration, to include financial incentives, primarily motivated by the increased Islamic extremism in the region (Feifer, 2002). Indeed, after September 11, 2001, overtures were made to Uzbekistan to become a partner in the “Global War on Terror” and included economic benefits that promised actual development, such as the construction of an air base at Karshi Khanabad (Ilkhamov, 2002). Generous military aid was provided, as well, to support Karimov’s own espoused “War on Terror” against internal Islamic extremists, but perhaps more accurately described as opponents of the Uzbek regime (Fumagalli, 2007). This topic is further pursued below under “The New Tamerlane.”
Uzbekistan’s relations with the US apparently cooled well before Andijan in 2005 (Fumagalli, 2007). The brutal crackdown was, apparently, the final straw in a relationship that Karimov already found too stifling in terms of requirements for democratic and economic reform. By November, 2005, Uzbekistan and Russia had signed agreements for closer relations. Such relations included increased Russian oil and gas development projects, pipeline and refinery plans, and other economic investments. It also included advanced security arrangements (Buszynski, 2005).

For Karimov, working with powers that are not overly critical of his regime’s harsh treatment of its citizens has certain advantages. Thus, relations have warmed with Russia and China, who tend to support sovereign statehood, especially as they have their own issues with Islamic extremism, such as in the Chechens in the Caucasus and the Uyghurs in Xinjiang. In such a manner, Uzbekistan renders Uvin’s “conditionality” approach, particularly in terms of the US and West Europe, in large part ineffective. As Mesquita (2005) notes: Authoritarian regimes around the world are showing that they can reap the benefits of economic development while evading any pressure to relax their political control. Nowhere is this phenomenon more evident than in China and Russia.”

Thus, Uzbekistan became a member of the Shanghai Cooperation Organization (SCO) in 2001, an organization established to provide military support to its members, particularly in terms of fighting extremists. However, it also has branched out into economic areas, as well (Lanteigne, 2006). An additional benefit is that since both Russia and China are members, there is automatic leverage against Russia (Buszynski, 2005). In the end Karimov sees Uzbekistan as between two great Northern powers
Regional cooperation within Central Asia has also been complicated (Allison, 2004; Libman, 2007; Rashid, 2000). Although it is widely agreed that development of economic and security pacts among the Central Asian states would be beneficial for multiple reasons, to date such plans, policies, and pacts have failed to materialize or, where on paper, produce real results. While a considerable international effort has gone towards pushing the Central Asian states towards cooperation (Allison, 2004), this has also not produced significant results. This is unfortunate, given the significant development and security problems Central Asia faces, such as water conflicts, Islamic extremism, clan disputes, being caught between major global powers, and the dire economic inheritance they received from the Soviet system (Gharabaghi, 1994; Gleason, 2001). On the other hand, some of these challenges serve as reasons for their inability to cooperate. For example, as the Central Asia states were developed as agricultural states without economic asymmetries, they are natural competitors instead of collaborators (Kiessling, 1998). Furthermore, it appears also that the international community may not have helped the situation in its efforts at development. From Gharabaghi (1994):

Shortly after the disintegration of the Soviet Union, the International Monetary Fund commissioned a series of economic reviews of the newly independent states of the FSU. Concluding that all the Central Asian economies are a mess, the IMF then produced a virtually identical package of recommendations for every one of the Central Asian states: reform the taxation system, cut spending, privatise, etc.

Uzbekistan attempts to keep its options open to opportunity. Interestingly, it has done a reasonably good job of portraying itself economically as a good investment. Its
economic statistics appear to be optimistic in comparison with some others in its “tier.” In other words, it has taken Duffield’s (2002) concept of “contrasting versions of the truth” to heart. First, these statistics are notoriously “cooked” (i.e. Pieterse’s 2002 warning about “manipulation of statistics”; Libman, 2007; Rist, p. 173) to place Uzbekistan in the best light. Figures in international reports, such as the HDR, that are necessarily constructed with assistance from the Uzbek statistical office tend to be suspect. Feifer (2002) quotes a local, “The economy is growing on paper. But take one look around you at how the people live and you’ll see the reality for yourself.”

Second, they tend to mask, through some interesting mathematical averaging, the disparity or inequality of life situations (e.g., salary, health) of its various inhabitants. For example, the Karakalpaks as a whole suffer from poor health, considered in large part to proximity to the Aral Sea disaster. However, this is not well known or advertised. Arguably, only Doctors without Borders, one of the least constrained (in relative terms) NGOs in Uzbekistan, truly understands the extent of the degraded situation for those people (e.g., Small, 2001). Sen’s “bottom-up” needs approach would never be allowed here because Karimov fears such interaction would both expose the degree of deprivation, as well as subsequently unleash the wrath of the people he has spent so much effort keeping quiet. Interestingly, especially among the older population, the “top-down” approach of having their needs dictated to them still remains “business as usual” after decades of Soviet control.

In his hot and cold relations with the West, Karimov is attempting to “force sovereignty” with a community that has theoretically shifted from sovereignty of the state
to sovereignty of the individual (Duffield, 2010). This significantly complicates any attempt to engineer power relations or maintain “coherence” between aid and politics (Duffield 2010), e.g., Lederach-style “long-term intervention,” Barnett’s liberal peacebuilding, human rights approach (Cornwall 2004), or the “cross-cutting” democracy aid-development programs as described in Carothers (2010). Indeed, between his refusal to reform politics as well as the economy, the IMF cut off funding and the World Bank severely restricted it in the mid-1990s (Collins, 2004). Uzbekistan was nearly bankrupt by 2001 (Collins, 2004). However, as seen below, 9/11 changed some of the dynamics again. Only time will tell if “hiding” within Russian and Chinese economic and security organizations will provide enough support from Western forces pushing for change. However, at this point it seems that Donnelly’s (1999) assumption that a country can be pressured into at least somewhat complying with what the West considers to be international norms of democracy and human rights might have been overstated.

“CULT OF STABILITY” (Kubicek, 1998)

“If Uzbekistan is not completely authoritarian, it is only because such a massively corrupt regime cannot overcome the inefficiency that comes with everyone being on the take.” (Feifer, 2002).

The longer Karimov has remained in power, albeit through commonly believed falsified elections and referenda, the more he has continued to consolidate political and economic power. While the informal yet highly powerful clan structure is poorly understood in detail, it is well understood that it demands a considerable amount of his attention and resources and provides a never-ending collection of threats to his power.
The recent further consolidation of power is likely an attempt to bring the clan leaders further under control (Collins, 2004).

A particularly unique aspect of this in today’s globalizing, neoliberal environment is that Karimov tightly controls relationships with the outside world. In this manner, he not only controls but also shapes the elites through their ability to accrue social and other types of capital with the North. This is done through several methods: regulations and laws concerning economic and other activity, control of the media, particularly the Internet, and government control of major economic resources, such as cotton and gas. In Uzbekistan, Hart’s (2001) “multiple, non-linear, interconnected trajectories…of globalization” are very limited under Karimov’s authoritarian control. He is trying to “monopolise the means of exchange …between a resource and the open economy” so as to preclude “an economic space [becoming] available for [his] allies and subordinates to become autonomous through commercial or criminal activities based on local resources” (LeBillion, 2001). Karimov takes a particularly ‘robust’ view of managing access to “strategic coordination” (Mesquita 2005); by limiting it for competitors, such as clan leaders, he attempts to reduce the likelihood that his regime will be removed.

Karimov has demonstrated that he is a shrewd, calculating and ruthless leader. However, his “hard power” approach to opposition may prove to be his undoing, unfortunately also likely to the detriment of the country as a whole. As he has suppressed or marginalized large groups of his population – moderate Muslims, certain clans, indigenous groups like the Karakalpaks – he has reduced their life chances and the opportunities that development might have otherwise brought. This has led to the driving
underground of a resentful contingent – numbers unknown – of the population. Karimov has in large part created a much larger extremist element than might have existed if he hadn’t approached the situation through such an extreme environment of structural violence, including a strong helping of Kahl’s (1998) “structural scarcity” (Buszynski, 2005). Furthermore, he has overemphasized the threat of foreign Islamic extremism. While this threat is certainly there, the elites’ perceptions of it have transformed it into an existential conflict that has further displaced the root conflict (Fumagalli, 2007) - i.e. the severe case of relative deprivation among the populace.

Thus, another large incentive behind Karimov’s vacillation between the US and Russia has been his preoccupation with security against his Islamic opposition. Russian failure to step in when Kyrgyzstan was attacked by Islamic Movement of Uzbekistan (IMU) rebels in 1999 and 2000 helped push Uzbekistan away from Russia towards the US (Buszynski, 2005). After 9/11, Karimov (and even Russia) thought that the US would station troops in Uzbekistan to counter the Islamists after 9/11. However, this did not materialize. In part, the SCO has satisfied some of Karimov’s concern about security, although doubts remain whether Russia – or China – would actually send troops to assist in a domestic situation.

However, after 11 September 2001, there were big changes in the West’s approach to security and development (Tschirgi, 2003; Allison, 2004; Maynes, 2003), moving away from integrated peacebuilding approaches as seen in USAID’s “governance assessment frameworks” and the World Bank’s political economy analyses (Carothers, 2010). As Hettne (2010) notes, “The discourse changed from ‘humanitarian intervention’
to ‘preemptive intervention’ or ‘war against terrorism’, and the underlying ideology was neoconservatism…” However, the concern that poverty in the Third World or South served as a threat to the North did not appear to change the US approach to providing support to Karimov. In other words, US aid weighed heavily in terms of military and “blank check” assistance rather than aid targeted to alleviate poverty and improve the situation for the general populace. This type of aid support avoided the “root issues” (MacCrae, 2001) of Uzbekistan’s problems, such as uneven development initiated in colonial times, inequality, and environmental damage. As Mesquita (2005) notes, “Foreign aid, as it is currently administered, tends to bolster rather than undermine undemocratic leaders.” Thus, it is strongly felt that the bulk of the “fungible” aid money (Ofstad, 2002) went in large part towards continuing the status quo, i.e. suppression of dissent and “strategy of accumulation” (LeBillion, 2001) of the regime.

Another rather extreme means of enforcing the status quo is through the geographic fixing of large portions of the population. Uzbekistan is one of the few countries left that enforces an exit visa. Furthermore, movement within Uzbekistan is controlled, as well, confining people to specific areas. This is significant in terms of life chances and human rights, especially if one considers that those living by the Aral Sea are trapped in that unhealthy environment. Moreover, this situation significantly contributes to what Pieterse calls “capability poverty” and also has established a form of internal colonialism in terms of the cotton industry, within which average farmers and agricultural workers must produce, by law, certain quotas of cotton and other directed crops. Aside from fulfillment of national economic interests, Karimov also argues that
migration must be controlled due to security concerns and the war on terror. Particularly since 9/11 and the West’s fear of the region exporting terrorists, this approach has been less questioned. Illegal migration is high, although numbers are hard to determine.

In looking for parallels in terms of development and conflict, a somewhat unexpected one comes in Deraniyagala’s (2005) case study of Nepal. Nepal, also a remote, landlocked nation with a largely agrarian economy and an authoritarian government, underwent democratization around the same time Uzbekistan became independent. In both cases, the change actually reinforced the power structure of the elites, rather than making the systems more representative and inclusive. Changes also allowed for the “extractive” state governments to garner more rents from their populaces. In the post Cold War period, Deraniyagala notes that increased consumption among the elites fueled feelings of relative deprivation among the populace. Over time, this discontent drove many previously moderate people to support the Maoist guerrillas. Likewise, similar discontent is driving moderate residents in Uzbekistan to support Islamic extremists. Thus, both share uneven development; “social and economic exclusion of large segments of the population;” poverty; low level of provision of public services; landlessness; “regional inequality;” and “predatory behavior and corrupt practices of state officials.” Deraniyagala concludes that there is a strong correlation between relative deprivation and intensity of conflict. This prediction does not bode well for Uzbekistan.
MECHANISMS AND IDENTITY RELATIONS

This section analyzes the Uzbek case study as discussed above by looking at relevant mechanisms at play at two scales: domestic, or within Uzbekistan and international, or outside of Uzbekistan. Tilly (2005) describes three types of mechanisms: environmental, cognitive, and relational. Environmental mechanisms are “externally generated influences on conditions affecting social life” in terms of their physical settings. Cognitive mechanisms relate to “alterations of individual and collective perception.” Relational mechanisms “alter connections among people, groups, and interpersonal networks.”

The two scales that are studied here are quite different from each other in terms of mechanisms, but influence each other greatly. Thus, they are very much related. The domestic mechanisms will be discussed here first. This study does not include all of the mechanisms at work, but it does hopefully cover some of the most relevant ones in order to demonstrate how mechanisms and actors interact, and how they affect – and are affected – by each other.

DOMESTIC-SCALE MECHANISMS

Clearly, the environmental mechanisms at the local level have been dominated by the Aral Sea situation and concomitant water scarcity, desertification and environmental degradation. Locally, the environmental damage most affects the Karakalpaks and others living closest to the affected areas, as discussed above, and has a huge negative impact on their lives and well-being. Even at psychological and metaphysical levels, the situation
has activated strong cognitive mechanisms. The Karakalpaks’ identification with the Aral Sea and the Amu Darya River had been longstanding and fundamental but changed drastically under the Soviet system. While the Karakalpaks became farmers on mostly collective farms, producing cotton, rice, and a few other crops for commercial sale, others, some Karakalpaks, but mostly Uzbeks and a few of Kazakh descent, were put in charge of managing the agricultural industry and became elites. The Karakalpak “Us” perceived itself as under-privileged, under-resourced in terms of social benefits such as health care and housing, over-worked, and increasingly subjected to environmental degradation (Hanks, 2000; Feshback and Friendly, 1992). A sense of cognitive dissonance, and then disillusionment, developed as a result of the simultaneous statements from Tashkent about the tragedy of the Aral Sea vice its draconian production standards. The Karakalpaks basically lost their homeland within a single generation. In this regard, their case can be compared to that of the American Indians, for example as described in Grinde and Johansen’s *Ecocide of Native America*. A victimization identity developed and intensified as it became clear that the corrupt Tashkent outgroup was manipulating the situation for its own personal benefit.

In addition to strongly influencing the local people’s cognitive mechanisms, the Karimov regime also dominates relational mechanisms, primarily through various types of suppression. Near absolute subjugation of environmental identity is one means. Suppression of religious identity is another. Both of these types have been discussed above. It is important to note that as Karimov suppresses these types of identity and relations, cognitive mechanisms of anger and frustration grow and relational mechanisms
of underground opposition increase. These dynamics are strongly related to – and reinforced by – some key dynamics found at the international level. This will be discussed further below.

However, the magnitude of this environmental crisis is not a daily lived, tangible experience for many in Uzbekistan. As the core-periphery model above suggests, the physical remoteness of the region from the seat of power and major Uzbek population centers blunts this environmental mechanism for many. For example, one Uzbek graduate student noted once after a conference presentation on the topic that she had no idea the environmental situation was so bad and that such things were not discussed in school or in the textbooks. She said that the presentation was the first time she had heard of it.

However, this does not mean that these environmental mechanisms do not exist outside Karakalpakstan. It means that they manifest themselves differently and the impacts are different, including on identity. First, as water demands upstream become more severe and as desertification worsens, water volume and environmental quality degrades further and further upstream and those upper communities begin to experience some of the hardships that had been relegated to the downstream communities. It remains to be seen how these communities will identify as a result, e.g., victim identification, increase in religious and/or political salience.

Arguably the most significant environmental mechanism that affects the larger community in Uzbekistan is the overall degradation of the agricultural sector. Aside from remaining Uzbekistan’s top cash producer on the global market, cotton also provides enormous rents for the Karimov regime as well as for multiple clans, as discussed above.
Environmental degradation, instead of activating a cognitive mechanism of realization of shortage that in turn promotes conservation, instead tends to lead to even greater natural resource exploitation. Thus, until or unless an alternate source of rents can be found, a positive feedback loop will exist until resources are depleted.

Relational mechanisms are dominated by Karimov’s balancing of benefits, such as rents, employment opportunities with foreign development organizations, system of differential exchange rates, and punishments (e.g., isolation from profitable connections – the opposite of Tilly’s “brokerage,” adverse (and often spurious) legal process). In this manner, Karimov tries to ensure that relationships between clans are minimized and relationships with his regime are maximized in order to mitigate clan coalitions against him, as well as to ensure their dependency, and, therefore, increase their compliance and support.

Another important set of mechanisms critical for Karimov’s agenda revolves around ensuring the support of the Uzbek citizenry, primarily meaning average ethnic Uzbeks. While Karimov can afford to marginalize the minority Karakalpaks and bribe the elites, he can afford neither of those approaches with the bulk of the population. Instead, he has worked to develop a national identity to control the populace. Having been bequeathed a reasonably blank slate upon freedom from the USSR (given that Uzbekistan has never in its history been a country), Karimov’s choice of a prototype is interesting and telling: he chose Tamerlane.

Ironically, Tilly (2005, p. 56) comments that, “…no polity operates entirely by means of harm and threats of harm. Yet some do a great deal of their work that way. Vast
Mongol empires, for example, maintained themselves for centuries through large applications of coercion.” Tamerlane, founder of the Timurid dynasty in Central Asia, was a 14th century conqueror who aspired to reestablish the Mongol empire. Invoking Tamerlane as a national hero activates multiple cognitive mechanisms. Regardless of whether average Uzbeks appreciate being associated with a ruthless plunderer, by associating his own personage with Tamerlane, Karimov makes it quite clear to all that he views violence and totalitarian control as appropriate tools of good leadership and entirely within his purview to employ.

The “us versus them” dynamics of incorporating Tamerlane into the collective axiology have become distinctly bipolar. The “us” consists of obedient, supportive, hard-working Uzbek citizens. The “them” are those who are not; these are generally labeled Islamic extremists; whether they are or not is not particularly relevant. While there
certainly are Islamic extremists in Uzbekistan – and seriously threatening ones – the
boundary Karimov had made to outline acceptable behavior creates an image of an
enemy that can be straightforwardly pursued. This is in theory. In reality, Karimov has
driven a large amount of the opposition – Islamic or otherwise – underground, thus
making it increasingly difficult over time for him to effectively control resistance.

Nevertheless, much of the average citizenry does appear to have had the cognitive
mechanisms of at least submission and fear (if not admiration and collective pride)
reasonably enough activated to be effectively cowed into obedience. Karimov can (and
does) use this support as leverage against the clans when they attempt to work around
him or override his decisions. Crackdowns such as that which occurred in Andijan in
2005 also help to both control people as well as secure the modern era of the legacy of
Tamerlane. An atmosphere of rigid control serves as a relational mechanism by creating
an environment where people are careful, even timid, about the relationships they
maintain and, thus, the identity they present. Given the highly controlled media situation,
it is difficult to determine how much of this is superficial versus how much is actually
internalized.

INTERNATIONAL-SCALE MECHANISMS

There are considerable regional-level mechanisms at work. The Aral Sea situation
impacts the entire region as the basin extends over all of Central Asia. As discussed
above, the dissolution of the USSR led to serious conflict among the former republics
over water distribution. Jockeying for water, international investment, international
development aid, relative advantage on the global market, and so on has occupied the former Central Asian republics since independence. Islam Karimov has played a major role in these interactions and relations. However, although such issues and related mechanisms constitute a critical area of analysis, this paper will leave them for another project and instead focus on certain aspects of global-power-level mechanisms.

As shocking as the environmental crisis in the Aral Sea was by the early 1990s, it is hard to imagine anything more impressive to the West during that time than the fall of communism. So identified was the West – and international entities such as IFIs – with its worldview of democracy, neoliberal economics and an established Westphalian world order, that its cognitive mechanisms were dominated by a mission to “fix” the former Soviet Union into an image of itself, albeit a subordinate, malleable one. As discussed above, huge amounts of aid poured into post-Soviet Central Asia.

Attention, humanitarian aid, development aid as so forth went to priorities determined by this Western ideal, not only of how the former Soviet republics should adapt to their “new world,” but also how it, the West, should relate to them. While Modernization Theory somewhat predated this period, it seems that there was a healthy dose of it involved. According to Potter et al. (2005), Modernization Theory asserts that in order to “evolve” into a developed nation, countries need to grow out of “problems” of traditional societies, cultures, and attitudes. They need to follow the Western path towards development, to include democratization, education, and industrialization. Modernization more quickly occurs with outside assistance, particularly from the West, which could (and should) a) be used as a “blueprint” and b) provide technology, know-
how, and money. By exposing the “right people” (i.e. urbanized middle class) to the influences of the West, the urban core would lead the way towards modernization with a rural periphery eventually following.

Neoliberalism has been a strong development theory since the 1980s. It attributes the main internal factor of government control as having a significant positive or negative effect on development depending on how little or how much influence it has on the economy. The economic market is seen as the primary factor of success for the growth of a nation. This concept of market incorporates both domestic and international markets, but emphasizes the greater importance of the latter. Like Modernization Theory, Neoliberalism considers problems to be internal, i.e. government and service-related issues of corruption, inefficiency, and “traditional” thinking and culture. (Problems caused by the multitude of Northern investors and corporations apparently are not considered significant exogenous influences; neither were the Structural Adjustment Programs (SAPs) which became common under neoliberal policies towards Southern nations and have been heavily criticized in association with increased poverty and inequality.) It is due to governments’ poor development policies that countries remain backward. Free markets and extensive operation on the international market will help countries find the tools, technology, ideas, and money needed to develop. Instead of artificially or politically setting up development assistance relations between developing nations and the West in order to develop the entrepreneurial class, the international market will naturally cultivate such a future elite.
Interestingly, despite the evidence that the current environment of globalization reduces the relevance of the role of the nation-state and the importance of international boundaries, neoliberalism continues to heavily weight the sovereignty and agency of the nation-state government (which seems ironic, given the theory’s assertion that central government must be minimized). For example, IFIs deal primarily with nation-state governments. Although attempts have been made to garner the thoughts of “civil society,” the fact remains that the central government can often do as it pleases in terms of deciding the direction of development projects and packages.

The above theories are ingrained in the worldviews – indeed, in the identities – of multiple Western nations and organizations (e.g., World Bank, International Monetary Fund, European Union) and are often identified with the “Washington Consensus.” These entities’ approaches to Uzbekistan as a Southern “them” reflect this mentality. However, President Karimov has managed to a large degree to adapt the dynamics to suit his own agenda. Early Western attempts to diminish the importance of the central Uzbek government and develop direct relations with the Uzbek upper and middle classes met with resistance. However, Western support for rapid boosting of primary commodity (i.e. cotton) production for quick success on the international market was enthusiastically encouraged. IFIs and other organizations’ offers to assist with the Aral Sea disaster have been consistently met with the professed need for advanced irrigation technology for improving cotton yields. In other words, in many cases Karimov has been able to frame Uzbekistan’s situation in a light that makes it look to Westerners like a textbook case in need of neoliberal change.
However, walking through the causality of some of the mechanisms to their outcomes produces some disturbing conclusions. Figure 3 provides a model of how the dynamics appear to work.

![Figure 3. Effects of neoliberal development approaches on the Aral Sea situation](image)

Figure 3 demonstrates somewhat of a positive feedback loop between Western development aid efforts and Uzbek over-extension of the cotton industry, leading to further environmental degradation. By focusing on short-term planning, rapid results, and the economic utility of the environment for primary commodity production, the West helped Karimov continue to use the cotton industry as a critical key to maintaining his authoritarian regime. Instead of “growing out of” cotton by diversifying the economy over time, the regime is bleeding the region dry, in terms of people as well as water. There is no “trickle down” effect of the benefits of neoliberalism in this scenario. On the
contrary, the situation has created an accelerated situation of elitism, exploitation of minorities, inequality, and environmental destruction.

However, these relations were not without their qualms of conscience, even if not explicitly expressed in terms of the Aral Sea. As discussed above, Western assistance to Uzbekistan waned in response to Karimov’s uncooperativeness, i.e. non-compliance with Western directives. However, Karimov has managed to leverage two types of relational mechanisms to his advantage. First, he has used the Global War on Terror to re-brokerage the West back into support relations when needed. In this manner, he makes the West’s Islamic extremist “they” and his own (real or fabricated) one and the same. In doing so, he has triggered the cognitive mechanisms tied to security concerns that have dominated particularly the US mindset – and concomitant policy – since 9/11.

Second, Karimov has skillfully manipulated the identity conflict between the United States and Russia. The conflict is transparent enough (at the macro-level) to be clearly mapped in a 4C Model (Korostelina, 2007). This conflict is long enough and has exhibited all four stages of the 4C Model – comparison, competition, confrontation, counteraction – long before Karimov came to power, even as Secretary Karimov. This lends support to the consideration of the conflict between the US and Russia as at least partly an identity conflict. Despite the loss of its communist ideology, ideology is certainly not a prerequisite for an identity conflict. As Russia regains strength after its fall, it has continuously compared itself to the West in many ways – economically, politically, militarily. Competition over former Soviet “turf” is a constant part of the modern global stage. Islam Karimov has done a good job of switching allegiances in
order to maximize benefits and minimize risks to his regime. At those points where he appears to waiver, confrontation – at least in words - between the two former superpowers can occur. When one side or the other temporarily “wins” Uzbekistan over to its camp, counteraction can occur by means of the losing side trying to win influence in another one of the opponent’s camp. In this manner, Karimov uses cognitive and relational mechanisms to inflame an already extant identity conflict in order to improve his own situation.
3. RESEARCH METHODOLOGY

This project attempts to contribute to answering the research questions introduced in the introduction. Once again, they are:

- What role has social identity played in the Aral Sea disaster as it played out in Uzbekistan?
- What role did social identity play in how various actors and groups understood, framed, and dealt with the environmental problem?
- Did Islam Karimov manipulate social identity among various actors and groups for the benefit of his regime?
- What lessons can be drawn from this case study for other or future environmental cases?

The literature review provided a historical/archival background as well as a Tilly based interpretation of mechanisms that facilitate manipulation of social identity in the Aral Sea case in Uzbekistan. These have hopefully provided some insight into the role that social identity has played in the environmental situation there. This next part of the research employs interviews and an online survey to gather primary information to further explore the above interpretation.
INTERVIEWS

The intent of the interviews was to gather professional and personal perceptions, thoughts and insights on the role of social identity in the Aral Sea environmental situation based on the experiences of Western academics, NGOs, IFIs, and other groups as appropriate. The questions addressed in the interviews are listed in Table 1 below. The questions were meant to serve as a starting point for additional topics or conversations as appropriate in order to gather relevant insights.

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Academics were selected based on their contribution to the literature on the Aral Sea or Uzbekistan in general. NGOs, IFIs, and others (i.e. government representatives) were difficult to recruit for this project, while academics were quite easy to engage. There
appear to be at least three possible reasons for this. First, there has been a lot of change in relationships and policy (development or otherwise) between Uzbekistan and the West over the past 20 years since the dissolution of the USSR and the initial introduction of developmental and other work by Westerners in Uzbekistan. Thus, there has been a significant amount of change in projects and focus for support by these Western agents. This has lead to a lack of continuity in organizational situational awareness of its history in Uzbekistan. For example, when asked for an interview, an employee from a major NGO stated that that NGO had never done work in Uzbekistan. That may be true now, but the literature and at least one of the interviewed academics say otherwise. Second, for some groups the topic may be uncomfortable. Although the issues of Western agendas, policies, or political biases were not discussed, these parties may have been reticent to delve into anything that might be political. Third, these groups may have felt it not worth their time to engage with a graduate student.

On the other hand, academics do have the requisite organizational continuity to address long-term trends and involvement in Uzbekistan, thanks to those with years of specialization and experience, as well as an archive of literature. They also (as a whole) tend to be more open to various views and not put off by questions about the environment. Lastly, they have more of a vested interest in working with graduate students who may serve as colleagues in the future.

Thus, all of the interviews conducted were with academics. Six interviews were conducted with five academics. Two interviews were conducted via Skype and four interviews were conducted via telephone.
ONLINE SURVEY

The survey was conducted for two main reasons: 1) to explicitly solicit opinions on various types of personal and social identity and their possible correlation with the Aral Sea environmental situation; and 2) to provide a quantitative base of data for the project. The survey was developed and published via Survey Gizmo. There are 28 questions in the survey; some questions are multiple choice, some are Likert scale, and three are free text if the answer “Other” was given in the previous question. The survey questions are listed in Appendix 1.

The questions query participants about their experience as associated with the Aral Sea situation in Uzbekistan. It then asks about salience of different types of identity, such as environmental, professional, political (i.e. neoliberal values), and others. It also inquires about participants’ perceptions concerning the social identity of their relevant groups (e.g., professional communities, employers) as they relate to their work in Uzbekistan and the Aral Sea situation. They are asked if they believe their work was manipulated or supported the agendas of various groups, such as their own government, the Uzbek government, and/or the local people. They are queried about their perceptions concerning identity conflicts and power politics and how (or if) they affected the situation. Other questions solicit opinions on the treatment of the environment, indigenous people, and their priority in relation to other values, such as the economy. Through these questions it was hoped that insight about the influence of social identity on the environmental situation could be discerned.
Three professional and academic organizations associated with Central Asia were approached in order to obtain participants. In two cases, online member databases could be queried in order to identify individuals who listed “Uzbekistan” or “Central Asia” in their regional or general interests. These individuals were emailed with the request to take the survey. In the case of the third organization, no such database existed, so an announcement went out via their GoogleGroup.

There was a challenge in the methodology for finding survey participants that proved problematic in terms of bias or problems in the data. Because there was no well-defined classification used or publicized for the type of participant needed, there are very likely errors of both commission and omission. Errors of commission are likely present in that there are probably non-Westerners who took the survey. No clear guidance was provided in terms of nationality, ethnic background, etc. While names, place of employment, home address, and university where graduated were used to evaluate individuals where the information was available, this was far from an accurate method. Furthermore, the issue is also problematic because some non-Westerners work or worked for Western academic organizations or NGOs and could provide good insight into the role of social identity as it relates to their profession or employer. Moreover, some non-Westerners have lived in the West at least their whole adult lives and perhaps have internalized Western values and viewpoints.

Errors of omission very likely occurred because many participants who were solicited based on their work as associated with the Aral Sea environmental situation did not realize or believe their work and the environmental situation were related. In this
author’s view (and as directly related to the thesis of this research), there is a broad array of work and research that is related to the Aral Sea environmental situation, for example economic or political research, cotton industry technological assistance, healthcare assessments or provision, and so on. However, the introduction to the survey, in retrospect, may have been misleading. It reads as follow:

Hello! Thank you for agreeing to take this quick survey. The survey is intended for those who have worked on the Aral Sea environmental situation or related issues in Uzbekistan only.

If your experience does not include Uzbekistan (e.g., only Kazakhstan), I would like to thank you very much for your willingness to participate but ask you to refrain. If your experience does include Uzbekistan, please be so kind as to continue to the survey.

Without identifying those activities considered to be “related issues” to the Aral Sea environmental situation, this left it up to the respondents to decide whether or not their work was related or not. As the results from the survey indicate, more often than not, this resulted in cases of omission, as the number of partial responses that ended at this point in the survey was very high. Furthermore, some very kind people emailed to say that they were sorry they could not take the survey because they didn’t have the requisite background. In some of these cases, it seemed as if they did have experience that met the (unfortunately fuzzy) standards for inclusion in the survey.

In any event, in terms of analytical methodology, the interviews are analyzed and used to provide qualitative evidence of support or non-support for the research questions. The survey data underwent basic descriptive statistical analysis. No more rigorous statistical approach was pursued, as the sample size
was small, having been primarily intended as an exploratory pilot study. The next section will discuss the actual results of the interviews and survey.
4. ANALYSIS

This section reviews the results for the interviews and online survey that were conducted in order to gather perceptions and opinions from professionals such as academics, NGOs, and IFIs concerning social identity in the Aral Sea environmental situation. The intent was to look at one group in particular – Westerners – in order to gain an understanding of how they felt the West interacted with the Karimov regime and how social identity might have been used to support the regime’s agenda, garner benefits, and better its position of power. The tools provided some interesting and useful results.

INTERVIEWS

Five interviews were conducted with five interviewees. The interview questions are located above in Table 1. In all but one case, these questions were provided to the interviewees prior to the interviews. More often than not, the questions served as a launching board for relevant topics that the interviewees wanted to discuss, or felt more comfortable discussing. Thus, interviewees addressed some questions more than others. Even after explaining social identity theory to them, some specialists did not feel comfortable with the topic but were able to provide information that spoke to it, anyway. The sections below will address the interview questions individually. The third person
plural pronoun “they” will be used in association with individual interviewees as an additional identity masking precaution.

Question 1: In what ways do you feel your sense of social identity most resonated with the work you did or do as related to the Aral Sea environmental situation?

This was a difficult question for most interviewees to address. Based on their comments, it was a little easier to assess their thoughts about others in the field. For example, one scholar comments about the political identity – and perhaps humanitarian identity, as well – of colleagues:

Most Westerns I met in Uzbekistan had rather leftist ideas, even those working at UNDP, the US Embassy and other international institutions. However in the early 1990s, the situation was probably different. And you are probably right that the policy guidelines of the World Bank, UNDP and also Europe Aid are tied to neoliberalism. As such it might be that these policies have also contributed to the fact that the area of Karakalpakstan is still worthening [sic] in regard to environmental, social and human well-being.

Another scholar did specifically claim academic identity as their dominant social identity in their work in Uzbekistan. This scholar has particularly identified with taking a critical view towards development aid and raising awareness that development aid is complicated. This is particularly important when faced with actors who only want to see “easy problems,” which makes situations even more problematic.

Question 2: Do you feel social identity has been used or manipulated to suit power politics or other agendas by any individual, group, organization, community involved in the Aral Sea environmental situation? Please explain.
This question was most often addressed in terms of relations between the West and the Karimov regime. One scholar agreed that yes, the West was manipulated by Karimov’s regime. However, they caveated that by saying that there are a lot of things that Karimov did that seemed contrary to an identity-manipulation effort. For example, Uzbekistan has a cotton board that directs cotton production and directs the government in setting exchange rates, clearly not a neoliberal method. This scholar also noted the US’s complicated relationship with Uzbekistan in terms of Islamic extremism. While US aid has been tied to irrigation infrastructure and subordinated under US security concerns (such as the Karshi-Khanabad airfield deal), at the same time the US faults Karimov for using anti-Islamic extremist policy as “an instrumental tool for autocracy.” Furthermore, the US State Department’s “International Religious Freedom” annual reports have been consistent in their concern over Karimov’s approach to religion in Uzbekistan.

Another scholar also seems to take a more nuanced approach to the situation. The scholar agrees that Karimov has manipulated Western developmental aid. However, they also note there was a lot of resistance from the Uzbek government to Western efforts. Unlike other post-Soviet countries, Uzbekistan didn’t listen to the International Monetary Fund (IMF), with one Uzbek leader telling the IMF, “You’re going to wreck our country!” This scholar thought the Uzbeks “had a point.” Furthermore, they said that while a lot of the early reform efforts fell under an umbrella of democracy building, a lot of it was really about Western visions of economics. It seems the West also misunderstood or disregarded Karimov’s concern about maintaining control after independence. He saw the loosening of national grip, particularly in terms of the West’s
efforts to develop the voice and power of other Uzbeks, as a means of losing political control. Thus, it appears that some scholars perceive at least a very complex situation, and, in some cases, that manipulation went both ways. Interestingly, one scholar noted that one of their tasks on a research trips had been to monitor the NGOs and IFIs.

Another interesting aspect brought up by two of the scholars was the “complex mix of how locals framed their needs.” The locals themselves wanted and needed infrastructure, whether associated with irrigated cotton or not. Local and regional governance “used the West to get things” that they wanted. The dynamics of how this has worked in an autocratic country would be an important and interesting area of more research.

**Question 3: Do you think the Aral Sea environmental crisis was complicated or worsened by identity issues? Please explain.**

This question prompted some interesting discussion. One scholar noted that the theory behind integrated water resource management is based on Western ideas of democracy. Integrated water resource management takes a holistic approach to water management that tends to fit (could one perhaps say “exacerbate?”) the Western development community’s “cookie cutter” methodology. Aside from the over-reliance on “a couple of blueprints in how projects should be developed,” there also appears to have been a “Western obsession with decentralization and privatization” and a “heavily ideological” approach that were strongly resisted by Karimov.

Ideology and identity also strongly influenced interpretation of the problem. For example, the post-Soviet 1990s saw the rise in Western concern over ethnic conflict, such
as in the Balkans. Interpretations of ethnic conflict were superimposed on oftentimes non-ethnic water and land conflicts throughout Uzbekistan. This unnecessarily complicated aid support.

Furthermore, after 9/11 the Western narrative of security and Islamic extremism strongly guided both interpretation of problems in the region as well as priorities for support. The “heavy lid theory” – that once the lid is lifted, the region will explode – was a common metaphor for support for Karimov. The aid given to Uzbekistan as part of the aid bundle provided with the Karshi-Khanabad deal provided continued support for the cotton industry. Throughout the above changes in events and approaches, two things have remained the same: 1) Karimov maintains the elite on cotton and sustains his power on the base of cotton, and 2) The Aral Sea situation has continued to worsen. While none of the interviewees seems to believe that the West is to blame that the Aral Sea situation has reached the point that is has, there appears to be some consensus that Western development efforts have had a negative effect.

Question 4: Describe any conflicts you feel were/are associated with the Aral Sea environmental crisis. Could any of these conflicts be considered identity conflicts or have significant identity-related aspects? Please explain.

This question prompted particular interest in talking about the Karakalpaks. One scholar noted that there is a feeling in Karakalpakstan that Tashkent hasn’t given them enough help, such as distribution of water and aid. However, there is not really strong resentment against the Uzbek people. A lot of Uzbeks live in Karakalpakstan and there are a lot of mixed families. There seems to be a political identity that dominates in that the people feel that the “‘republic’ has not received a fair shake.”
However, one scholar believes that it is a “sense of place” that keeps particularly the Karakalpaks there. Even for those who want to leave, their options are limited. One needs permission to live in Tashkent, for example. One can visit, but to live there requires registration with the police, who often disapprove requests. Karimov’s regime uses this as a tool of control. Furthermore, as discussed above, Uzbekistan still requires exit visas for those wanting to leave the country.

The Karakalpaks have developed a sense of identity that appears to be strongly linked to both ethnicity and victimization in terms of proximity to the Aral Sea. They commonly understand that the “government puffed up the need for aid” and this “helps define them.” Other Uzbeks, particularly towards the east in Tashkent, “don’t really know or care about it” (the situation with the Aral Sea).

An interesting comparison arose in terms of a project developed between the international community and the Kazakh government to raise and stabilize the Aral Sea in the north in the early 2000’s. So far, the project has proven successful. This project was undertaken based on a World Bank study in 1993-1994, which came up with a list of potential projects in the area and identified this one as a possibility. The raising of the south Aral Sea was determined to be physically unrealistic. The project in Kazakhstan cost approximately $85 million, of which Kazakhstan contributed about $20 million. A second stage is planned; it is currently estimated to cost $200 million. Kazakhstan has committed to contributing a larger amount of money.

When asked, this scholar felt that given similar circumstances (i.e. a comparable physical environment conducive to such a project), Karimov might have conducted a
similar project. Such projects are “good for international prestige and make people
grateful.” However, then the scholar noted that, “well, Kazakhs live there” and conceded
that there might have been “some ethnic motivation.” Thus, ethnic/indigenous identity
may have played a role in the Aral Sea environmental situation.

Question 5: Do you see any parallels between this situation and others in the world?

Interviewees most often gave general thoughts on this in terms of concern for how
international development aid is done elsewhere in the world. There is considerable
concern for how aid is done in general today. On a slightly different note, one
interviewee likened Islam Karimov to other notorious national leaders, specifically citing
Robert Mugabe of Zimbabwe and Muammar Khadafi of Libya. Otherwise, no special
insights were provided.

Question 6: What lessons about the impact of social identity can be drawn from the Aral
Sea environmental problem?

According to the interviewees, there are several lessons to be learned from the
Aral Sea environmental situation. First, development aid is a “complicated machine.” It is
complex. To try to oversimplify it is to ask for big problems. Tied to that, there are
certain political things that “cannot change.” Western organizations and institutions
cannot generate funding from Western nations otherwise.

Second, there is a great need in the West to understand the sociology and cultural
characteristics of the people they want to help. The West needs to work as much as they
can with local experts instead of highly paid outsiders. There needs to be less dependence
on foreign experts who don’t know the language or culture, as this creates ill feelings,
resentment, etc. The World Bank and others learned that if they can identity legitimate and non-corrupt NGOs, they should work with them.

Lastly, there is a continuity problem with NGOs, IFIs, and other such organizations. There is not a lot of organizational memory. Particularly because these organizations are now so based on technical knowledge and skills, their specialists move around from region to region and problem to problem. Thus, it is often hard to trace them. However, organizational memory is very important in order to maintain an understanding of the long-term (or even mid-term) effects of programs and policies.

ONLINE SURVEY

A total of 16 participants completed the online survey. There were also 28 partial completions of the survey. The incompletes all ended at the message requesting only people with experience in Uzbekistan continue with the survey; therefore, a considerable number of people were excluded based on that criterion. A future study might consider a comparison between perceptions about social identity between the situations in Uzbekistan and Kazakhstan.

While the sample size was small, the insights provided were helpful. Full results for the survey are included in Appendix 2. The first few questions addressed basic information about the participants. The participants were 50% academics, 12.5% government, 6.3% NGO, 6.3% IFI, and 25% “Other.” For “Other,” two people listed that they had experience in two of the listed areas: one who worked both as an academic and for an NGO; the other had worked as an academic and then for the government. One did
not consider the United Nations to fall under any of the above categories, which perhaps it does not. The last participant conducted private research. It seems that by approaching professional organizations (as discussed above in “Research Methodology”), a broader array of professions was reached.

In terms of length of time, 43.8% worked or have worked on the Aral Sea environmental situation or related issues for less than a year. There were 37.5% who worked or have worked there for 1-4 years. Finally, 18.8% had 10-14 years experience in the Aral Sea environmental situation or related issues. There were no participants who had a mid-level amount of experience (i.e. 5-9 years) in the area.

For question 4, there were no respondents who answered that their work was intensive in the Aral Sea situation. However, 56.3% responded that they had a moderate level of involvement in or focus on the Aral Sea situation. There were 31.3% who felt they had a minor amount of involvement, while 12.5% listed “sporadic.”

The next block of questions addressed participants’ thoughts about various types of social identity relevant for this study. Question 5 asked which identity the participants felt was most salient for them in their work with the Aral Sea or related issues. There were 37.5% who responded that their professional identity was most salient. Environmental and political were each 18.8%. Humanitarian and “Other” were each 12.5%. For “Other,” one respondent wrote that all three (humanitarian, environmental, and political) were equally important for them. The other respondent wrote that their work “covers everything to do with the Qaraqalpaqs and therefore concerns all of the above.” This response is interesting and significant. The spelling “Qaraqalpaq” is another
spelling for “Karakalpak” and is considered to be closer to the original indigenous spelling of the word. The fact that the respondent used this spelling suggests that their sense of identity incorporates a strong role of this indigenous group.

Question 7 asks respondents to estimate their sense of environmental identity. The definition for environmental identity is taken from Clayton and Opotow (2003):

“a sense of connection to some part of the nonhuman natural environment, based on history, emotional attachment, and/or similarity, that affects the ways in which we perceive and act towards the world; a belief that the environment is important to us and an important part of who we are.”

Of the respondents, 50% answered “strong” (25%) or “somewhat strong” (25%). There were 37.5% who responded “average,” while 12.5% answered “somewhat weak.” None answered “weak.”

Question 8 queried respondents for their opinion about what level of environmental identity their occupation carries. “Average” was highest with 37.5%. “Strong” or “somewhat strong” totaled 37.6% total (18.8% each). There were 18.8% who responded “somewhat weak,” while 6.3% responded “weak.”

Question 9 asks participants about their perceptions of their employer’s sense of environmental identity. Sixty percent responded “strong” (33.3%) or “somewhat strong” (26.7%). Twenty percent responded “average.” Twenty percent responded “somewhat weak” (13.3%) or “weak” (6.7%).

Question 10 asked respondents about the level of activation of environmental identity their work in the Aral Sea area generated. There were 25.1% who responded “high” (18.8%) or “somewhat high” (6.3%). There were 43.8% who responded “moderate.” There were 31.3% who responded “somewhat low” (25%) or “low” (6.3%).
In comparing the above four questions about environmental identity, some interesting points arose. Of the four questions, work associated with the Aral Sea environmental situation involved the lowest level of environmental identity: 25.1% for “high” and “somewhat high” combined and 31.3% for “somewhat low” and “low” combined. This compares to: personal sense of environmental identity (50% for “strong” and “somewhat strong” combined and 12.5% for “somewhat weak”); occupation (37.6% for “strong” and “somewhat strong” combined, and 25.1% for “somewhat weak” and “weak”); and employer (60% “strong” and “somewhat strong” combined and 20% “somewhat weak” and “weak”). It is unclear what this means. However, one possibility could be that respondents did not feel the work they were hired to do in the Aral Sea situation was tied to the environment. This may be true. On the other hand, it may be that they don’t see the connection. Conversely (and in support of the thesis of this paper), they perhaps did feel their work was connected to the environment but in a negative manner.

The next block of questions concerns sense of identity tied to neoliberal economics, which additionally serves (though perhaps too generally) as a proxy for the overall Western approach to development. Question 11 queries for individual identification with a neoliberal economic worldview. Neoliberalism is defined or explained in the survey thus:

An approach to economics and social studies in which control of economic factors is shifted from the public sector to the private sector. Drawing upon principles of neoclassical economics, neoliberalism suggests that governments reduce deficit spending, limit subsidies, reform tax law to broaden the tax base, remove fixed exchange rates, open up markets to trade by limiting protectionism, privatize state-run businesses, allow private property and back deregulation... "The use of the term "liberal" in economics is different from its use in politics. Neoliberalism's..."
policies seek to create a laissez-faire atmosphere for economic development. (source: investopedia.com)

In terms of individual worldviews, 18.8% responded “strongly” or “somewhat strongly.” There were 43.8% who responded “moderately,” while 37.5% responded “somewhat weakly” (12.5%) or “weakly” (25%). When asked how they felt about their occupation’s identification with a neoliberal economic worldview, 31.3% responded “somewhat strong” (There were no responses for “strong”). Twelve point five percent responded “average.” However, 56.3% responded “somewhat weak” (31.3%) or “weak” (25%).

Question 13 asks about respondents’ opinions about their employer’s adherence to a neoliberal economic worldview. There were 33.3% who responded “strong” (33.3%) or “somewhat strong” (20%), while 26.7% responded “average.” A total of 40% responded “somewhat weak” (26.7%) and “weak” (13.3%) combined.

When asked about how much they felt their work associated with the Aral Sea situation supported a neoliberal economic worldview, 6.3% responded “somewhat high” (There were no responses for “high”). There were 31.3% who responded “average.” A total of 62.5% responded “somewhat low” (25%) or “low” (37.5%).

Comparing these four questions on neoliberal economics also produced some interesting information. Interestingly, work with the Aral Sea situation involved the lowest association with a neoliberal economic worldview. While 6.3% responded “somewhat high,” a total of 62.5% responded for “somewhat low” (25%) or “low” (37.5%). This is very interesting, given that the above set of questions also associated the Aral Sea situation with the lowest levels of environmental identity in that set. It is unclear with this means. It is important to mention that the qualities of environmental identity and
neoliberal economic worldview may not be mutually exclusive; however, in the theory, they tend to be placed in at least somewhat oppositional roles. This area requires further research.

The next set of questions focus on respondents’ perceptions about how or if their work in the Aral Sea situation supported the agendas of various actors. Question 15 asks respondents whether they agree or disagree that their work has supported a Western neoliberal agenda and Western goals in the region, such as integration of economies into the global market and security in a potentially unstable area in terms of global terror. There were 43.8% who agreed (6.3%) or somewhat agreed (37.5%), while 31.3% answered “no opinion/don’t know/not sure.” There were 25% who disagreed. The relatively high percentage of “no opinion/don’t know/not sure” is interesting. It seems to indicate either that respondents don’t know how their work may have fit into a larger picture or didn’t care or both. However, the large response for combined “agree” and “somewhat agree” seems to indicate a large amount of concurrence of their work in a supporting role. However, part of the lack of clarity may also be that the question includes too much, i.e. asks more than one question; should not have given two separate types of examples (i.e. integration of economies versus instability and global terror).

Question 16 asks recipients if they feel their work has supported local national (e.g., Uzbek government) goals in the region, such as promotion of stability and security for the current regime. The results were nearly evenly broken out in thirds. A combined “agree” (18.8%) and “somewhat agree” (12.5%) counted for 31.3%. “No opinion/don’t know/not sure” also made up 31.3%. Combined, “somewhat disagree” (25%) and
“disagree” made up 37.5%. This overall ambivalence could be a result of lack of transparency in the relations and motivations surrounding the interactions between the West and the Uzbek government, which would support this paper’s hypothesis. However, it could also be due to other factors, such as the time the work took place or the type of work done. More research needs to be done in this area.

Question 17 asks about whether participants feel their work has supported local people’s goals in the region close to the Aral Sea, such as improvement in living conditions. There was a large response – 81.3% - for “agree” (37.5%) or “somewhat agree” (43.8%). Twelve point five percent answered “no opinion/don’t know/not sure;” 6.3% responded “somewhat disagree” (there were no “disagree” responses). The high response for agreement appears to indicate that participants felt they were helping people at a local level and with basic human needs. Whether this is the truth or not requires further investigation of the linkages between the work that was (or is) done, participants’ perceptions of the value of that work, mechanisms, and the actual outcomes. As seen above in the model in Figure 3, Western actions in the region have not always had the desired effects in the long run.

Question 18 asks recipients if they feel their work has been manipulated to support someone else’s agenda that they didn’t want to support. There were 12.5% who somewhat agreed (No one answered “agree”). “No opinion/don’t know/not sure” made up 31.3%. Combined, “somewhat disagree” (12.5%) and “disagree” (43.8%) made up 56.3% of the responses. On the one hand, no one wants to believe they wittingly or unwittingly supported anyone else’s unsavory goals. This might explain the
disagreement. However, perhaps indeed there was no support of another’s goal, perhaps due to the type of work or due to the time of work, such as economic reform in the early 1990s, a viscerally unpopular effort with the Karimov regime as discussed above. However, again, as with some of the other questions in this set of questions about support to various agendas, the high percentage of “no opinion/don’t know/not sure” appears to indicate there may be some real lack of understanding or ambivalence about where people’s work fit into the bigger picture.

The next few questions focus on politics, identity, and conflict. Question 19 asks if participants feel that in the Aral Sea environmental crisis, politics have often negatively interfered with efforts at positive change and aid to those who need it. Interestingly, 62.5% either agreed (37.5%) or somewhat agreed (25%). There were 18.8% who answered “no opinion/don’t know/not sure.” Also 18.8% responded “somewhat disagree” (12.5%) or “disagree” (6.3%). Thus, a large percentage of respondents felt that politics served as a significant impediment.

Question 20 asks for opinions about the statement, “In the Aral Sea environmental crisis, identity “us vs. them” conflicts among local actors (e.g., ethnic, clan, political, national-local) needlessly hampered efforts at remediation and aid.” A total of 56.3% responded “agree” (43.8%) or “somewhat agree” (12.5%). There were 37.5% who responded “no opinion/don’t know/not sure.” Only 6.3% responded “somewhat disagree;” there were no responses for “disagree.”

Similarly, Question 21 posits, “In the Aral Sea environmental crisis, identity “us vs. them” conflicts among international actors (e.g., IFIs, NGOs, governments)
needlessly hampered efforts at remediation and aid. A total of 56.3% of the respondents either agreed (25%) or somewhat agreed (31.3%). There were 12.5% who responded “no opinion/don’t know/not sure.” Combined, “somewhat disagree” (25%) and “disagree” (6.3%) equaled 31.3%.

In contradistinction from previous questions about whether or not their work supported others’ agendas, these questions about political and identity interference paint a stronger picture of perceptions that various actors have negatively interfered with efforts at aid in the area. The difference in answers to what seemed like similar questions may be due to the issue of the psychological effect of not wanting oneself or one’s work to be associated with anything negative. However, it may also mean that the previous questions were too vague in meaning in terms of what untoward agendas might have been meant. This aspect of the previous questions was originally done intentionally in order to include various types of agendas a participant might have imagined, for example either Karimov’s manipulation or the West’s policies. However, in retrospect, perhaps this way of questioning was more confusing than productively inclusive. Nevertheless, it seems that a relatively large percentage of respondents feel that politics and identity conflicts were problematic at both the Uzbek and international scales.

The next section of questions is intended to determine respondents’ thoughts about final outcomes in the Aral Sea area. Question 22 asks respondents for their opinions about the statement, “Degradation of the Aral Sea environment, while unfortunate, was an acceptable loss in order to ensure Uzbekistan a place in the global market by means of the cotton industry.” The great majority of the respondents disagreed.
Six point three percent responded, “no opinion/don’t know/not sure.” This question intended to ensure that the final drying up of the Aral Sea was not a goal or reasonable outcome, as believed by the Karimov government.

Likewise, outcome in terms of the treatment of the local people is an important consideration. Question 23 solicits opinions on the statement, “In your duties or research as they have related to the Aral Sea situation, the basic human needs of minorities (such as the Karakalpaks) have been relevant to the solution of the environmental situation.” There were 75.1% who agreed (43.8%) or somewhat agreed (31.3%). Only 6.3% responded “no opinion/don’t know/not sure.” There were 18.8% who somewhat disagreed; there were no answers for “disagree.” This response indicates that participants largely felt that indigenous people were a significant consideration in their work.

Question 24 asks for opinions about the statement, “The Aral Sea environmental situation was a disaster shared by all segments of the population alike, from national governments down to local people.” In response to that, 50.1% either disagreed (43.8%) or somewhat disagreed (6.3%). Twelve and a half percent answered “no opinion/don’t know/not sure.” A total of 37.6% responded either “somewhat agree” (6.3%) or “agree” (31.3%).

More specifically, Question 25 asks for opinions about the statement, “The Aral Sea environmental situation was a crisis for which some segments of the population were disadvantaged more than others, particularly those living closest to the lake or downstream Amu Darya River.” No one disagreed or was unsure about this question: 68.8% agreed and 31.3% somewhat agreed. Questions 24 and 25 were intended to be
contradictory but, given the answers, were not interpreted that way. In other words, a lower level of agreement should have resulted for Question 24 if the questions had been considered at odds. However, it is very possible that some of the respondents missed the qualifier “alike” in Question 24. They also might have been considering larger-scale effects, such as environmental, in their evaluations. Nevertheless, the significant point is that with Question 25, they acknowledge the higher level of disadvantage for those living downstream. This acknowledgement, as well as concern in previous questions about the situation of local people, suggests a concern about indigenous people that, as discussed above, often gets lost in Western developmental approaches. It seems clear that the respondents do not want to marginalize such peoples. Whether or not their work has a positive impact on these groups is another issue.

Question 26 queries respondents for their thoughts on what would have been the best approach the international community could have taken to the Aral Sea problem. An equal number of respondents (31.3% each) responded: “Provide economic developmental aid to affected countries’ national governments;” “Provide humanitarian relief at the local level;” and “Other.” Six point three percent responded “Provide humanitarian aid to the affected countries’ national governments.”

Question 27 solicited alternative answers from those who responded “other” to Question 26. The first of the five responses is this:

Neither of these options alone would ever contribute to the mitigation of this catastrophe. Most importantly efforts should aim at a stabilisation of the environmental conditions in the area. This of course should be accompanied by humanitarian relief, but instead of concentrating on the provision of food and health care a major focus should be laid on the reestablishment of local economies that goes along with relatively stable
environmental conditions since a major source of income will always remain agriculture and fisheries. thus the restoration of the remaining ecosystems in the Amudarya Delta should be a priority. concepts such as the ecosystem services approach might be promising. However the Aral Sea crisis is not addressed in its total complexity at the scale of the whole Basin, local efforts will definitely fail in the long term.

The second response, while much shorter, seems supportive of the first response:

“Helping seek out a locally executed plan of revitalization while helping revive economy and resources.” The third answer, while similar to the others, specifically addresses the issue of national-level interference: “Provide development aid at the local government level, thus bypassing the national (in the case of Uzbekistan).

The fourth response is:

YOU NEED TO DO A COMBINATION OF ALL THE ABOVE. WE CAN PROVIDE ALL THE AID WE WANT ON THE LOCAL AND NATIONAL LEVEL, BUT THE COUNTRY ALSO THEMSELVES NEEDS TO WANT TO FIX THE PROBLEM. I HAVE A PROBLEM WITH MANY OF THE QUESTIONS IN THE SURVEY. THEY ARE OVERLY SIMPLISTIC AND MISS A LOT OF THE NUANCE OF TECHNICAL/HUMANITARIAN ASSISTANCE IN CENTRAL ASIA.

The capital font was left here in case the respondent was trying to make a point of his/her displeasure, although perhaps it was not intentional. In any event, this person brings up important points, although it brings up questions, as well. By saying that “the country also themselves needs to want to fix the problem,” it is not clear whether the respondent means that the people in general don’t seem to want to fix the problem or that Karimov’s regime does not want to fix the problem (which would support this paper’s hypothesis). The respondent’s frustration with the survey questions is reasonable. However, a) the survey was meant to be about social identity, not the specifics of technical and humanitarian
assistance, and b) it was basically an exploratory survey to provide initial input on whether or not the thesis was on the right track. In fact, indeed, the results have been encouraging and a larger, more specific survey can (hopefully) be conducted in future research.

The fifth response is as follow:

- Promote better inter-governmental cooperation and trans-boundary management of major rivers (e.g. Syr- and Amu-darya) while taking account local mentality, clannish confrontation, widespread corruption, geo-political manipulation by trans-national investors (e.g. construction of Ragun Hydropower station supported by World Bank may cause enormous env'tl, social, economic disaster and regional conflict between states) and double-agenda pursued by Int'l Financial Investors (e.g. in practice the main goal of int'l donors turns out to be pushing huge credits with negligent concern about quality of interventions [esp. env'tl impact], spending most of loans for services of international consultants and companies, neo-liberal policy may also be compared with neo-colonialism and pursuing selfish interests by western elite for long-term dominance in the region and having control over natural resources / minerals); - Invest more into capacity building of local organizations and community-driven initiatives. Empower local communities with more knowledge and opportunities for self-governance; - Help to resolve energy-water nexus between upper stream (water for energy) and down stream (water for irrigation) countries. - Promote more synergy between donors and many more.

This detailed contribution looks at multiple scales (international, regional, national, and local) in analyzing the problem and its solution. It appears to support of the idea that neoliberal economic policy may have worsened environmental problems associated with the Aral Sea. It also supports the other respondents above, particularly the first three. It also appears to hint at furthering democracy, although it doesn’t explicitly say so. The issue of synergy development, while not addressed in this paper, is clearly significant.
Lastly, Question 28 asks whether respondents agree that the international community’s efforts were manipulated in order to support power politics and elite agendas, such as to gain more power or wealth. Combined, “agree” (25%) and “somewhat agree” (43.8%) make up 68.8% of the responses. There were 18.8% who answered, “no opinion/don’t know/not sure.” A total of 12.6% responded either “somewhat disagree” or “disagree.” This question was intended to suggest the Karimov regime’s manipulation of international efforts. It was not explicitly stated, likely out of reticence that stating it outright would scare off participants. However, in retrospect, given the audience, it might have been more helpful, and certainly clearer, to have stated it. Nevertheless, the rather high percentage of agreement seems to support the previously mentioned idea that perhaps respondents were more likely to agree when asked if general efforts were manipulated by personal agendas rather than their own personal work.

To conclude this section, while only a small study, a considerable amount of valuable information and insights about social identity was gained. It appears that while participants tended to see the Aral Sea problems within the frameworks of their own disciplines, they did have contributions to make in terms of how social identity impacted the situation in the Aral Sea environmental situation. In both the interviews and survey, there was strong consensus that the problem is a complicated, complex one and participants across the board were concerned that this aspect of it not be overlooked. This concern will be further addressed in the conclusion.
5. CONCLUSION

This project studied the role of social identity in the Aral Sea environmental situation as it played out in Uzbekistan. It was particularly concerned with evaluating the Uzbek government’s manipulation of the social identity of other actors in order to support its agenda, which is most strongly tied not to social identity but to remaining in power. The post-Soviet environment of Western-dominated development efforts provided ample opportunity for both cooperation and conflict between Uzbekistan and the West. However, it appears that the Aral Sea system has been degraded further, in large part as the consequence of human activity, apparently both intentional and unintentional.

This study used two main methods to study the situation. First, an analysis based on Charles Tilly’s concepts of political identity and mechanisms was carried out. Then, interviews and a survey were conducted. Particular focus for the interviews and survey was placed on Western actors (e.g., academics, NGOs, IFIs) in order to gather their perceptions about their and others’ sense of social identity as they relate to the Aral Sea situation.

In conduct of the research, it became all the more evident what a complex issue the Aral Sea situation has been. This is nicely demonstrated by the comments by one of the interviewees:

If you look at the huge Aral Sea projects of the World Bank and other organisations your assumption [about Western developmental approaches]
might be right and I think it is always worth to look at the question how western ideas clash with other cultures in development projects, not only the neoliberal ones. However the Aral Sea Crisis is very complex and already in 1990 the point of return was no more possible. The desiccation of the Aral Sea was deliberately planned by the Soviet regime. And I dare say that the persistence of soviet thought and corruption in Central Asian governments have highly contributed to the failure of western projects.

While this was an exploratory study, the results suggest that further research should be continued. The Aral Sea situation has proven itself to be a rich – albeit tragic – case study for learning about some of the dynamics of Western development aid, the environment, and conflict.

This study holds some advice for future, related studies. First, more nuance needs to be engineered in the research. One oft expressed point among the interviewees was that one needs to study the dynamics of the Aral Sea situation during different time periods. Furthermore, it might be best to study various types of Western actors first before lumping them together in the assumption that they all follow the same approach to development. Lastly, inclusion of non-Western actors in the interviews and survey would likely also provide valuable insights about the social identity of Westerners.

Another point for future research involves the need for better operationalization of social identity. Social identity as a concept is better understood among some disciplines and sub-disciplines than others. This might have skewed some of the survey results in that participants may not have understood the concept well enough to accurately answer. Furthermore, certain processes and mechanisms may not have been perceived or recognized in the context of the Aral Sea. Thus, perhaps more explanation is needed when presenting such questions in a future survey.
Several implications for policy arose throughout the study. Here are some main ones. First, the water situation is not going to get better in Uzbekistan if the status quo is maintained. For example, one interviewee noted that 17% of the Aral Sea basin lies in Afghanistan. While Afghanistan hasn’t become developed enough yet to take advantage of this water source, it may do so in the future, which would place an even larger burden on the Uzbekistan water situation. Furthermore, in time, the middle reaches of the Amu Darya River will run short on water, too. Aside from the environmental and basic human needs concerns, this will likely create another area of instability that Karimov will have to “manage.” This scenario must be of concern to the West and others.

Second, Western development aid theory ought to be relooked. Based on the model developed above in Figure 3, it seems evident that aid support may have engendered consequences that have been at least unproductive (as one interviewee stated, “The outcome of billions of dollars has been zero.”) and at most harmful. Furthermore, these consequences may have been undesired by those who implemented the related policies and programs. This is of urgent concern, given the huge aid efforts ongoing in the South today, a place where environmental degradation already is all too commonplace.
APPENDIX 1. Role of Social Identity in the Aral Sea Environmental Situation
Survey Questions

1.) Your experience tied to the Aral Sea situation in Uzbekistan is/was primarily tied to what kind of work:
   ( ) Academic research
   ( ) Government
   ( ) Non-government organization (NGO)
   ( ) International Financial Institution (e.g., World Bank)
   ( ) Other

2.) If you selected "other" for above question, please explain.
__________________________________________________________________________

3.) How much time have you spent working on the Aral Sea situation?
   ( ) Less than a year
   ( ) 1 - 4 years
   ( ) 5 – 9 years
   ( ) 10 – 14 years
   ( ) 15 – 19 years
   ( ) 20 or more years

4.) How would you describe your level of involvement in or focus on the Aral Sea situation in terms of intensity?
   ( ) Minor
   ( ) Moderate
   ( ) Extensive
   ( ) Sporadic
5.) I feel my most salient or strongest sense of identity in my work on the Aral Sea area is/was:
( ) Professional (e.g., scientist, academician, aid worker)
( ) Humanitarian
( ) Environmental
( ) Political (includes security concerns)
( ) Religious
( ) Other

6.) If you selected "other" for above question, please explain.
_______________________________________________________________________

7.) I feel my sense of environmental identity ("a sense of connection to some part of the nonhuman natural environment, based on history, emotional attachment, and/or similarity, that affects the ways in which we perceive and act toward the world; a belief that the environment is important to us and an important part of who we are." from Clayton, 2003) is: ___.
( ) Weak
( ) Somewhat weak
( ) Average
( ) Somewhat strong
( ) Strong

8.) I feel my occupation embodies a ___ sense of environmental identity.
( ) Weak
( ) Somewhat weak
( ) Average
( ) Somewhat strong
( ) Strong

9.) I feel my employer (NGO, academic organization, government, other) embodies a ___ sense of environmental identity.
( ) Weak
( ) Somewhat weak
( ) Average
10.) I feel that my work and/or research on the Aral Sea situation entails/ed a ___ activation or employment of sense of environmental identity.

( ) Low
( ) Somewhat low
( ) Moderate
( ) Somewhat high
( ) High

11.) I feel ___ identified with a neoliberal economic worldview. Neoliberalism can be explained thus: "An approach to economics and social studies in which control of economic factors is shifted from the public sector to the private sector. Drawing upon principles of neoclassical economics, neoliberalism suggests that governments reduce deficit spending, limit subsidies, reform tax law to broaden the tax base, remove fixed exchange rates, open up markets to trade by limiting protectionism, privatize state-run businesses, allow private property and back deregulation..." "The use of the term "liberal" in economics is different from its use in politics. Neoliberalism's policies seek to create a laissez-faire atmosphere for economic development." (source: investopedia.com)

( ) Weakly
( ) Somewhat weakly
( ) Moderately
( ) Somewhat strongly
( ) Strongly

12.) I feel my occupation generally carries a ___ identification with a neoliberal economic worldview.

( ) Weak
( ) Somewhat weak
( ) Average
( ) Somewhat strong
( ) Strong
13.) I feel my employer (e.g., NGO, academic organization) embodies a ___ neoliberal economic worldview.
( ) Weak
( ) Somewhat weak
( ) Average
( ) Somewhat strong
( ) Strong

14.) I feel that my work and/or research on the Aral Sea situation supports/-ed a ___ association with a neoliberal economic worldview.
( ) Low
( ) Somewhat low
( ) Average
( ) Somewhat high
( ) High

15.) I feel my work has supported a Western neoliberal agenda and Western goals in the region, such as integration of economies into the global market and security in a potentially unstable area in terms of global terror:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree

16.) I feel my work has supported local national (e.g., Uzbek government) goals in the region, such as promotion of stability and security for the current regime:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree
17.) I feel my work has supported local people's goals in the region close to the Aral Sea, such as improvement in living conditions:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree

18.) I feel my work has been manipulated to support someone else's agenda that I didn't want to support:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree

19.) In the Aral Sea environmental crisis, politics have often negatively interfered with efforts at positive change and aid to those who needed it:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree

20.) In the Aral Sea environmental crisis, identity "us vs. them" conflicts among local actors (e.g., ethnic, clan, political, national-local) needlessly hampered efforts at remediation and aid:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree
21.) In the Aral Sea environmental crisis, identity "us vs. them" conflicts among international actors (e.g., international financial institutions, NGOs, governments) needlessly hampered efforts at remediation and aid:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree

22.) Degradation of the Aral Sea environment, while unfortunate, was an acceptable loss in order to ensure Uzbekistan a place in the global market by means of the cotton industry:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree

23.) In your duties or research as they have related to the Aral Sea situation, the basic human needs of minorities (such as the Karakalpaks) have been relevant to the solution of the environmental situation:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree

24.) The Aral Sea environmental situation was a disaster shared by all segments of the population alike, from national governments down to local people:
( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree
25.) The Aral Sea environmental situation was a crisis for which some segments of the population were disadvantaged more than others, particularly those living closest to the lake or downstream Amu Darya River:

( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree

26.) The best approach the international community could have taken to the Aral Sea problem was or would have been primarily:

( ) Provide humanitarian aid to the affected countries' national governments.
( ) Provide economic developmental aid to affected countries' national governments.
( ) Provide humanitarian relief at the local level.
( ) Leave affected countries' alone to fix their problems as they see fit.
( ) Other

27.) If you selected "Other" for above question, please explain.
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

28.) The international community's efforts were manipulated in order to support power politics and elite agendas, such as to gain more power or wealth:

( ) Agree
( ) Somewhat agree
( ) No opinion/ Don't know/ Not sure
( ) Somewhat disagree
( ) Disagree
APPENDIX 2. Role of Social Identity in the Aral Sea Environmental Situation
Survey Question Results

Summary Report - Jul 20, 2011 (Survey Gizmo)
Survey: Role of Social Identity in the Aral Sea Environmental Situation

1) Your experience tied to the Aral Sea situation in Uzbekistan is/was primarily tied to what kind of work:

![Pie chart showing the distribution of experiences.]

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic research</td>
<td>8</td>
<td>50%</td>
</tr>
<tr>
<td>Government</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>Non-government organization (NGO)</td>
<td>1</td>
<td>6.3%</td>
</tr>
<tr>
<td>International Financial Institution (e.g., World Bank)</td>
<td>1</td>
<td>6.3%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>25%</td>
</tr>
</tbody>
</table>

2) If you selected "other" for above question, please explain.
3) How much time have you spent working on the Aral Sea situation?

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a year</td>
<td>7</td>
<td>43.8%</td>
</tr>
<tr>
<td>1 - 4 years</td>
<td>6</td>
<td>37.5%</td>
</tr>
<tr>
<td>10 â€“ 14 years</td>
<td>3</td>
<td>18.8%</td>
</tr>
</tbody>
</table>

**Statistics**

- Total Responses: 16
- Sum: 36.0
- Average: 4.0
- StdDev: 4.24
- Max: 10.0
4) How would you describe your level of involvement in or focus on the Aral Sea situation in terms of intensity?

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
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</thead>
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<tr>
<td>Minor</td>
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<td>31.3%</td>
</tr>
<tr>
<td>Moderate</td>
<td>9</td>
<td>56.3%</td>
</tr>
<tr>
<td>Sporadic</td>
<td>2</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

Statistics

Total Responses 16

5) I feel my most salient or strongest sense of identity in my work on the Aral Sea area is/was:
<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional (e.g., scientist, academician, aid worker)</td>
<td>6</td>
<td>37.5%</td>
</tr>
<tr>
<td>Humanitarian</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>Environmental</td>
<td>3</td>
<td>18.8%</td>
</tr>
<tr>
<td>Political (includes security concerns)</td>
<td>3</td>
<td>18.8%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

**Statistics**

| Total Responses | 16 |

6) If you selected "other" for above question, please explain.

<table>
<thead>
<tr>
<th>Count</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Our work covers everything to do with the Qaraqalpaqs and therefore concerns all of the above</td>
</tr>
<tr>
<td>1</td>
<td>All three are equally important - Humanitarian, Environmental concerns and Political implications.</td>
</tr>
</tbody>
</table>

7) I feel my sense of environmental identity ("a sense of connection to some part of the nonhuman natural environment, based on history, emotional attachment, and/or similarity, that affects the ways in which we perceive and act toward the world; a belief that the environment is important to us and an important part of who we are." from Clayton, 2003) is: ___.
8) I feel my occupation embodies a ___ sense of environmental identity.

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somewhat weak</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>Average</td>
<td>6</td>
<td>37.5%</td>
</tr>
<tr>
<td>Somewhat strong</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>Strong</td>
<td>4</td>
<td>25%</td>
</tr>
</tbody>
</table>

**Statistics**

Total Responses 16
9) I feel my employer (NGO, academic organization, government, other) embodies a ___ sense of environmental identity.

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak</td>
<td>1</td>
<td>6.7%</td>
</tr>
<tr>
<td>Somewhat weak</td>
<td>2</td>
<td>13.3%</td>
</tr>
<tr>
<td>Average</td>
<td>3</td>
<td>20%</td>
</tr>
<tr>
<td>Somewhat strong</td>
<td>4</td>
<td>26.7%</td>
</tr>
<tr>
<td>Strong</td>
<td>5</td>
<td>33.3%</td>
</tr>
</tbody>
</table>

Statistics
Total Responses 15

10) I feel that my work and/or research on the Aral Sea situation entails/-ed a ___ activation or employment of sense of environmental identity.

<table>
<thead>
<tr>
<th>Value</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>6%</td>
</tr>
<tr>
<td>High</td>
<td>13%</td>
</tr>
<tr>
<td>Somewhat low</td>
<td>25%</td>
</tr>
<tr>
<td>Somewhat high</td>
<td>6%</td>
</tr>
<tr>
<td>Moderate</td>
<td>44%</td>
</tr>
</tbody>
</table>
11) I feel ___ identified with a neoliberal economic worldview. Neoliberalism can be explained thus: "An approach to economics and social studies in which control of economic factors is shifted from the public sector to the private sector. Drawing upon principles of neoclassical economics, neoliberalism suggests that governments reduce deficit spending, limit subsidies, reform tax law to broaden the tax base, remove fixed exchange rates, open up markets to trade by limiting protectionism, privatize state-run businesses, allow private property and back deregulation..." "The use of the term "liberal" in economics is different from its use in politics. Neoliberalism's policies seek to create a laissez-faire atmosphere for economic development." (source: investopedia.com)
12) I feel my occupation generally carries a ___ identification with a neoliberal economic worldview.

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weak</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>Somewhat weak</td>
<td>5</td>
<td>31.3%</td>
</tr>
<tr>
<td>Average</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>Somewhat strong</td>
<td>5</td>
<td>31.3%</td>
</tr>
</tbody>
</table>

Statistics
Total Responses 16
13) I feel my employer (e.g., NGO, academic organization) embodies a ___ neoliberal economic worldview.

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Somewhat strong</td>
<td>3</td>
<td>20%</td>
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<tr>
<td>Strong</td>
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Statistics
Total Responses
15

14) I feel that my work and/or research on the Aral Sea situation supports/-ed a ___ association with a neoliberal economic worldview.

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<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
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<tbody>
<tr>
<td>Somewhat low</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>Somewhat high</td>
<td>8%</td>
<td></td>
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<tr>
<td>Low</td>
<td>37%</td>
<td></td>
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</tbody>
</table>
15) I feel my work has supported a Western neoliberal agenda and Western goals in the region, such as integration of economies into the global market and security in a potentially unstable area in terms of global terror:
16) I feel my work has supported local national (e.g., Uzbek government) goals in the region, such as promotion of stability and security for the current regime:

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
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<tbody>
<tr>
<td>Agree</td>
<td>3</td>
<td>18.8%</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>No opinion/ Don’t know/ Not sure</td>
<td>5</td>
<td>31.3%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
<td>12.5%</td>
</tr>
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</table>

Statistics

Total Responses 16

17) I feel my work has supported local people's goals in the region close to the Aral Sea, such as improvement in living conditions:

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<tr>
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<tr>
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<td></td>
</tr>
<tr>
<td>No opinion/ Don’t know/ Not sure</td>
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<td>Somewhat disagree</td>
<td></td>
<td></td>
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<tr>
<td>Disagree</td>
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</table>
18) I feel my work has been manipulated to support someone else's agenda that I didn't want to support:

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<th>Percent %</th>
</tr>
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<tbody>
<tr>
<td>Agree</td>
<td>6</td>
<td>37.5%</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>7</td>
<td>43.8%</td>
</tr>
<tr>
<td>No opinion/ Don't know/ Not sure</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>1</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Statistics
Total Responses 16
19) In the Aral Sea environmental crisis, politics have often negatively interfered with efforts at positive change and aid to those who needed it:

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>6</td>
<td>37.5%</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>No opinion/ Don't know/ Not sure</td>
<td>3</td>
<td>18.8%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Statistics

Total Responses 16

20) In the Aral Sea environmental crisis, identity "us vs. them" conflicts among local actors (e.g., ethnic, clan, political, national-local) needlessly hampered efforts at remediation and aid:
21) In the Aral Sea environmental crisis, identity "us vs. them" conflicts among international actors (e.g., international financial institutions, NGOs, governments) needlessly hampered efforts at remediation and aid:

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>7</td>
<td>43.8%</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>No opinion/ Don't know/ Not sure</td>
<td>6</td>
<td>37.5%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>1</td>
<td>6.3%</td>
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Statistics

Total Responses 16

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
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<td>4</td>
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<tr>
<td>Somewhat agree</td>
<td>5</td>
<td>31.3%</td>
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<tr>
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<td>12.5%</td>
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<tr>
<td>Somewhat disagree</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Statistics

Total Responses 16
22) Degradation of the Aral Sea environment, while unfortunate, was an acceptable loss in order to ensure Uzbekistan a place in the global market by means of the cotton industry:

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No opinion/ Don't know/ Not sure</td>
<td>1</td>
<td>6.3%</td>
</tr>
<tr>
<td>Disagree</td>
<td>15</td>
<td>93.8%</td>
</tr>
</tbody>
</table>

23) In your duties or research as they have related to the Aral Sea situation, the basic human needs of minorities (such as the Karakalpaks) have been relevant to the solution of the environmental situation:

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>7</td>
<td>43.8%</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>5</td>
<td>31.3%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No opinion/ Don't know/ Not sure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
24) The Aral Sea environmental situation was a disaster shared by all segments of the population alike, from national governments down to local people:

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>5</td>
<td>31.3%</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>1</td>
<td>6.3%</td>
</tr>
<tr>
<td>No opinion/ Don’t know/ Not sure</td>
<td>2</td>
<td>12.5%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>1</td>
<td>6.3%</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
<td>43.8%</td>
</tr>
</tbody>
</table>

Statistics
Total Responses 16
25) The Aral Sea environmental situation was a crisis for which some segments of the population were disadvantaged more than others, particularly those living closest to the lake or downstream Amu Darya River:

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>11</td>
<td>68.8%</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>5</td>
<td>31.3%</td>
</tr>
</tbody>
</table>

Statistics
Total Responses 16

26) The best approach the international community could have taken to the Aral Sea problem was or would have been primarily:

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide humanitarian aid to the affected countries' national governments.</td>
<td>1</td>
<td>6.3%</td>
</tr>
<tr>
<td>Provide economic developmental aid to affected countries' national governments.</td>
<td>5</td>
<td>31.3%</td>
</tr>
</tbody>
</table>
Provide humanitarian relief at the local level. 5 31.3%
Other 5 31.3%

Statistics
Total Responses 16

27) If you selected "Other" for above question, please explain.

<table>
<thead>
<tr>
<th>Count</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Neither of these options alone would ever contribute to the mitigation of this catastrophe. Most importantly efforts should aim at a stabilisation of the environmental conditions in the area. This of course should be accompanied by humanitarian relief, but instead of concentrating on the provision of food and health care a major focus should be laid on the reestablishment of local economies that goes along with relatively stable environmental conditions since a major source of income will always remain agriculture and fisheries. thus the restoration of the remaining ecosystems in the Amudarya Delta should be a priority. concepts such as the ecosystem services approach might be promising. However the Aral Sea crisis is not addressed in its total complexity at the scale of the whole Basin, local efforts will definitely fail in the long term.</td>
</tr>
<tr>
<td>1</td>
<td>Helping seek out a locally executed plan of revitalization while helping revive economy and resources.</td>
</tr>
<tr>
<td>1</td>
<td>Provide development aid at the local government level, thus bypassing the national (in the case of Uzbekistan)</td>
</tr>
<tr>
<td>1</td>
<td>YOU NEED TO DO A COMBINATION OF ALL THE ABOVE. WE CAN PROVIDE ALL THE AID WE WANT ON THE LOCAL AND NATIONAL LEVEL, BUT THE COUNTRY ALSO THEMSELVES NEEDS TO WANT TO FIX THE PROBLEM. I HAVE A PROBLEM WITH MANY OF THE QUESTIONS IN THE SURVEY. THEY ARE OVERLY SIMPLISTIC AND MISS A LOT OF THE NUANCE OF TECHNICAL/HUMANITARIAN ASSISTANCE IN CENTRAL ASIA</td>
</tr>
<tr>
<td>1</td>
<td>- Promote better inter-governmental cooperation and trans-boundary management of major rivers (e.g. Syr- and Amu-darya) while taking account local mentality, clannish confrontation, widespread corruption, geo-political manipulation by trans-national investors (e.g. construction of Ragun Hydropower station supported by World Bank may cause enormous env't'l, social, economic disaster and regional conflict between states) and double-agenda pursued by Int'l Financial Investors (e.g. in practice the main goal of Int'l donors turns out to be pushing huge credits with negligent concern about quality of interventions [esp. env't'l impact], spending most of loans for services of international consultants and companies, neo-liberal policy may also be compared with neo-colonialism and pursuing selfish interests by western elite for long-term dominance in the region and having control over natural resources / minerals); - Invest more into capacity building of local organizations and community-driven initiatives. Empower local</td>
</tr>
</tbody>
</table>
communities with more knowledge and opportunities for self-governance; - Help to resolve energy-water nexus between upper stream (water for energy) and down stream (water for irrigation) countries. - Promote more synergy between donors and many more.

28) The international community’s efforts were manipulated in order to support power politics and elite agendas, such as to gain more power or wealth:

<table>
<thead>
<tr>
<th>Value</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>Somewhat agree</td>
<td>7</td>
<td>43.8%</td>
</tr>
<tr>
<td>No opinion/ Don't know/ Not sure</td>
<td>3</td>
<td>18.8%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>1</td>
<td>6.3%</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Statistics

Total Responses 16
LIST OF REFERENCES


Julie (Johannes) Minde received her Bachelor of Arts in Russian from Iowa State University in 1991. She received her Master of Arts in Russian Language and Literature from the University of Iowa in 1997. She was admitted into Gamma Theta Upsilon, the International Geographical Honor Society, in 1999. From 2006-2008, she was awarded a George Mason University student fellowship with Loudoun County, VA, in order to pursue research in co-location of public facilities. She completed a Masters of Science degree in conflict analysis and resolution at George Mason University’s School for Conflict Analysis and Resolution (S-CAR) in Summer 2011. She will enter the PhD program at S-CAR in Fall 2011. She maintains membership in the Association of American Geographers, the American Planning Association, the Association for Conflict Resolution, the Association for Slavic, East European, and Eurasian Studies, the Central Eurasian Studies Society, and the International Studies Association.