



Framing Human Security in Development: A Critical Discourse Analysis of World Bank Projects in the Aral Sea Basin

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ABSTRACT

The Aral Sea crisis, a landmark case of human-induced environmental disaster, has prompted extensive international intervention. The World Bank (WB), as a major donor, plays a pivotal role in shaping responses to this crisis. This paper argues that the WB's interventions are legitimized through a powerful discursive strategy: the partial securitization of the crisis as a threat to human security. Using Critical Discourse Analysis (CDA) and securitization theory, this study examines how the WB frames the Aral Sea's degradation in two key projects: the Syr Darya Control and Northern Aral Sea Phase I Project (NAS) and the Climate Adaptation and Mitigation Program for the Aral Sea Basin (CAMP4ASB). The analysis reveals that by constructing a narrative of imminent threat, the WB prioritizes technical, top-down solutions and measurable economic outcomes. This WB's strategy in the Aral Sea basin, however, effectively depoliticizes the crisis, obscuring its historical and socio-political roots and sidelining community participation and structural inequities. This paper identifies a process of partial securitization, whereby the WB frames an issue as a critical threat to human security to justify intervention, but deliberately contains it within the realm of technical, market-based solutions, thereby avoiding the full political ramifications of a traditional securitization "speech act". The study concludes by discussing the implications of this security framing for development policy and advocates for more inclusive, locally grounded approaches to environmental governance.

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1. Introduction

The degradation of the Aral Sea stands as a stark reminder of large-scale environmental mismanagement, widely recognized as a global symbol of ecological catastrophe. The rapid retreat of the Aral Sea since the 1960s has set in motion a cascade of consequences, including widespread desertification, the collapse of fisheries, and severe public health crises, with profound effects on the lives of millions across Central Asia. (Micklin, 1998). In response, international financial institutions, most notably the World Bank (WB), have intervened with large-scale projects aimed at restoring environmental stability and promoting economic development in the region.

While these interventions are officially framed within the language of sustainable development, a critical analysis of WB project documents reveals a deeper, more potent discursive strategy. This paper contends that the WB securitizes the Aral Sea crisis—that is, it frames the environmental degradation not merely as a technical or economic problem, but as an existential threat requiring urgent and exceptional measures. This securitization narrative is strategically linked to the concept of human security, which broadens the notion of security beyond military conflict to encompass threats to individual and community survival, livelihoods, and dignity from economic, health, and environmental risks (UNDP, 1994). By portraying the crisis as a direct threat to human security, the WB legitimizes its interventions as morally imperative and technically essential.

The primary research questions guiding this study are therefore: 1) To what extent and how does the World Bank employ a securitization discourse in framing the Aral Sea crisis? 2) What are the implications of this discursive strategy for legitimizing the WB's interventions and for local governance in the Aral Sea basin?

To address these questions, the paper employs Critical Discourse Analysis (CDA) and securitization theory as its analytical lenses. CDA allows for an examination of how language is used to construct social reality, maintain power relations, and promote specific ideologies (Fairclough, 2003). Securitization theory, developed by the Copenhagen School, provides a framework for understanding how issues are moved out of the realm of normal politics and into the realm of emergency action by being presented as existential threats (Buzan et al., 1998). The subsequent sections outline the theoretical framework, methodology, detailed case studies, and a discussion of findings that sheds light on the complex interplay between language, power, and security in development policy.

The paper is organized as follows: Section 2 provides background on the Aral Sea basin, with particular attention to the World Bank's involvement and the human security dimension of the crisis. Section 3 reviews the theoretical foundations of CDA

and securitization theory. Section 4 describes the methodology and data sources. Sections 5 presents case studies of the two World Bank projects in the region. Section 6 discusses the results, and Section 7 concludes with implications for future policy and research.

2. The Human Security Aspect of the Aral Sea Environmental Disaster

The Aral Sea, once among the world's largest lakes at 68,000 km², has been receding since the 1960s, becoming emblematic of environmental catastrophe through desertification, habitat degradation, and the impacts of climate change (Micklin, 2016). Human security, central to UNDP's 1994 framework document, emphasizes protecting individuals from threats to survival, livelihoods, and dignity (Alkire, 2003; Gasper, 2005), a mandate critically undermined by environmental crises such as that of the shrinking of the Aral Sea (Roberts, 2022). The degradation of this ecosystem, with cascading social and economic repercussions, underscores the inextricable link between environmental sustainability and human security. Within this context, water is especially significant; as Selby et al. (2022) observe, "sufficiency of clean water is a sine qua non of health, livelihoods and human security".

The crisis started with a 'hydraulic mission' (Molle et al., 2009) in which Soviet authorities diverted the headwaters of the Syr Darya and Amu Darya, cutting off the Aral Sea's main natural water supply in pursuit of the 'virgin land' policy aimed at intensifying agriculture (Micklin, 2004). Consequently, the irrigated area in Central Asia expanded from 4.5 million hectares in 1965 to 7 million hectares by 1991 (Wegerich, 2005; Wegerich et al., 2015; White, 2013). This diversion caused the Aral Sea to recede, leading to severe environmental degradation and a range of health issues, including high infant mortality rates and lung diseases linked to cumulative pesticide use (Glantz et al., 1993, p. 189). By 2001, these impacts affected 5 million people, according to Médecins Sans Frontières (Nordström & Berggren-Palme, 2004). Over subsequent years, the local population has suffered from psychological distress (Crighton et al., 2003), and exposure to toxic salts, heavy metals, and chemicals in air, water, and food, resulting in respiratory diseases (Crighton et al., 2011). More recent studies indicate that water contaminants have entered the food chain, with increased salinity contributing to hypertension, cardiovascular diseases, and kidney stones (Anchita et al., 2020; Bartrem et al., n.d.; Saidmamatov et al., 2024). Additionally, the drying Aral Sea has precipitated declining forests, reduced wildlife, and devastated the local fishing industry, resulting in job losses, impoverishment, and the loss of a key protein source for the community (Plotnikov et al., 2023). This environmental degradation paralleled the collapse of the Soviet healthcare infrastructure, further stressing rural populations and spurring outward migration, notably among skilled professionals at the crisis's onset (Narbaev & Pavlova, 2022).

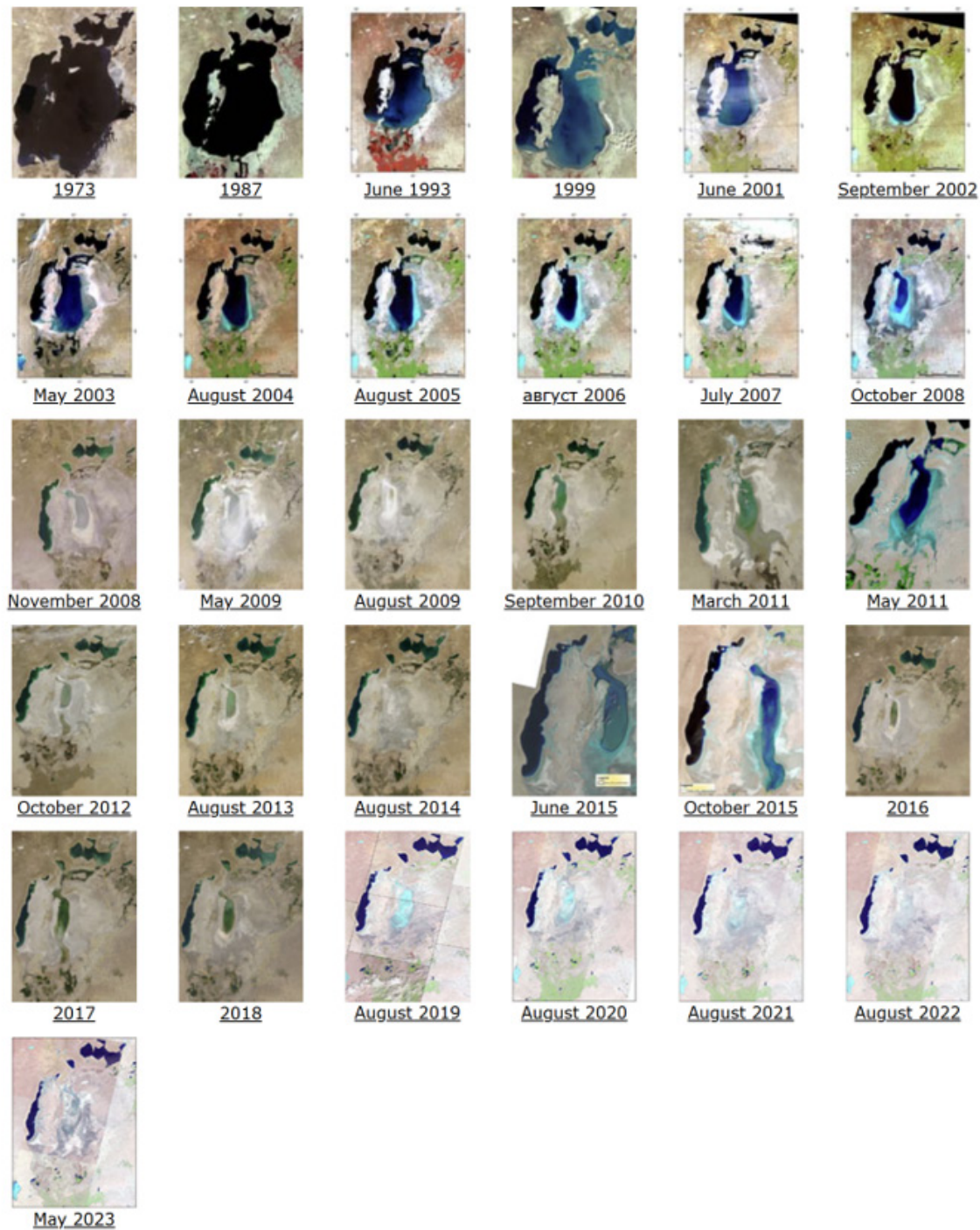


Image 1. Dynamics of Aral Sea transformation (landscape images). Source: CA Water Info, n.d.

2.2 The WB's Expertise in the Security-Development Nexus: A Critical Review

The shrinking of the Aral Sea did not go unnoticed; instead, it has become a textbook case of the failures of Soviet environmental planning. The dissolution of the Soviet Union and the widening global awareness of the Aral Sea disaster brought the issue to the attention of international organizations, as well as financial and donor institutions (Kemelova & Zhalkubaev, 2003). This heightened focus laid

the foundation for alternative approaches to environmental governance and new discourses on environment, development and security (Abazov, 1999). The sustainable development discourse, which permeated the environmental treaties of the time¹, was advanced by the United Nations and supported by the donor community. It reflected the understanding that human security cannot be achieved without development, and vice versa (Hubert, 2004). In this context, the involvement of the World Bank, the Global Environment Facility (GEF), USAID, UNEP, UNESCO, and the European Union in development initiatives across the Aral Sea basin may be understood as a manifestation of the broader international governance architecture, wherein interventions were justified through objectives ranging from environmental restoration to public awareness-raising, typically articulated within the framework of the social pillar of sustainable development (Table 1). For instance, according to a database of the development projects implemented in Central Asia in the period between 1991 and 2024, the WB was among the five biggest donor organizations in the Aral Sea basin (WEECOOP, 2023, the data extraction is compiled by the authors).

Table 1. The biggest environmental projects in Central Asia from 1990 to 2023. (WEECOOP, 2023, the data extraction is compiled by the authors).

Donor	Total Budget (in USD)	Project Name	Start Time Period	End Time Period
ADB (Asian Development Bank)	162,734,827	Climate Adaptive Water Resources Management in the Aral Sea Basin	2022	2030
IBRD, Borrower	64,065,000	Syr Darya control and Northern Aral Sea - Phase I, Syr Darya Control & Northern Aral Sea Phase II	2001	2010
World Bank, Borrower	44,780,000	Climate Adaptation and Mitigation Program for the Aral Sea Basin (CAMP4ASB)	2015	2021
World Bank	33,866,810	Climate Adaptation and Mitigation Program for the Aral Sea Basin (CAMP4ASB)	2021	2024
European Union	2,200,000	Development of effective Integrated Water Resources Management (IWRM) in the Aral Sea Basin	2003	2004
USAID	520,000	Integrated Water Resources Management in Lowlands of the Aral Sea Basin	2004	2004

¹ Nukus Declaration of Central Asian States on Sustainable Development of the Aral Sea Basin (1995).

The WB has emerged as a pivotal “development actor” in the Aral Sea Basin, justified by two primary arguments. First, the WB’s deep-rooted connection to global development politics exemplified by its promotion of “good governance, sound policies, and robust institutions” (Griffin, 2007, p. 231) has led it to focus on the newly independent post-Soviet states that were previously insulated from market economies. Since the 1970s, the WB’s institutionalist agenda has underpinned regional initiatives such as the Interstate Commission for Water Coordination (ICWC) and the International Fund for Saving the Aral Sea (IFAS), as well as the broader Aral Sea Basin Management Programs aimed at integrated water management and sustainable development. Transboundary water projects further illustrate the WB’s dual focus on technical solutions and governance reforms. Its early involvement in mediating disputes, such as facilitating the Indus Waters Treaty (Mehsud, 2021), the Nile Basin Initiative (Cascão, 2009) and later the stalled Red Sea-Dead Sea Water Conveyance project (Zawahri & Weinthal, 2014) demonstrates a pattern of downplaying political complexities in favor of technical, economic rationales (Bakker, 2012; Hussein, 2018). In Central Asia, where water resources span multiple borders, the WB’s approach has often neglected the structural roots of water scarcity, such as colonial legacies and socioeconomic inequities (Murthy & Mendikulova, 2017).

Second, the WB strategically links natural resource governance failures to conflict within the context of global climate change and human security. The human security framework, which emerged in the 1990s (UNDP, 1994), redefines security beyond military threats to include economic and environmental dimensions. This redefinition supported by scholars such as Buzan and Homer-Dixon positions water as central to individual and collective security (Buzan, 1991; Homer-Dixon, 1994). As Barnett et al. (2010, p. 18) observe, protecting “needs, rights, and values” becomes paramount when traditional security paradigms expand to include environmental and economic threats. Through its policies and reports, the WB has harnessed this discourse to reshape global development priorities, embedding human security into its operational frameworks (Gasper et al., 2013; Griffin, 2007).

Some researchers argue that historically, the WB’s evolution reflects a transformation from post-war reconstruction, aligned with Western geopolitical interests (Babb, 2009; Goldman, 2007), to a global development finance role championing the Green Revolution². In the 1970s, the WB viewed hydroengineering and agricultural modernization as avenues for poverty alleviation and economic growth, a narrative that morally justified investments as “doing good” while yielding economic returns (Goldman, 2008; Hickel, 2017; Hickel et al., 2022). The subsequent imposition of structural adjustment programs from the early 1980s further entrenched neoliberal policies, characterized by austerity, privatization, and deregulation, that reshaped the Global South’s economic and social landscape (Hickel, 2017; Hickel et

² The Green Revolution, or the Third Agricultural Revolution, was a period of technology transfer initiatives that saw greatly increased crop yields. These changes in agriculture began in developed countries in the early 20th century and spread globally until the late 1980s.

al., 2022). As a result, the WB's focus shifted from water resources development to water resources management, embedding economic principles at the forefront of environmental governance (Allouche & Finger, 2001a; World Bank, 1997).

In the water sector, the WB has promoted a “green neoliberal agenda” centered on water privatization. This green neoliberal approach rests on three main strategies: cultivating elite transnational policy networks, providing large development loans bundled with privatization mandates, and imposing stringent green-neoliberal conditions on borrowers (Goldman, 2001; Kelly & Lu, 2021). Such policies treat water as a marketable commodity rather than a public good, effectively insulating it from public debate and reducing transparency and civic participation (Menga et al., 2023). Furthermore, alarmist narratives of imminent catastrophe, whether concerning nutrition, poverty, or water scarcity, frame Global South states as corrupt and inefficient, thereby justifying external intervention and the privatization of water services (Allouche & Finger, 2001a, 2001b; Goldman, 2007; Hall & Taylor, 1998). Moreover, the WB's discursive power is reinforced by its investment in knowledge production and capacity building. Feasibility studies, policy papers, and tailored training programs for a diverse range of stakeholders (from civil servants to academia) help the WB present itself as an impartial mediator while depoliticizing water governance (Goldman, 2008, pp. 789-793; Griffin, 2007, p. 234). This strategy has not only expanded the WB's authority in international policy-making, but has also contributed to the broader financialization of nature, whereby water is increasingly treated as an asset for financial markets (Rudebeck, 2019; Schmidt & Matthews, 2018).

The WB's reform agenda also integrated water into a broader neoliberal framework from the mid-1990s. It increasingly portrayed governments as impediments to efficient water management, advocating for commercial principles and private sector participation (Harris & Roa-García, 2013, Kumar, 2025). This shift has led to policies where water assets are privatized and managed primarily for profit, thereby reinforcing the dominance of transnational corporations over local water providers (Allouche & Finger, 2001a). Alarmist narratives often linked to climate change further obscure the political and social dimensions of water governance, reducing water-related challenges to issues of market failure or blame them solely on the consequences of climate change (Calvin et al., 2023; Dalby, 2022). Critically, while the WB's policies are presented as solutions to water scarcity and environmental degradation, they also perpetuate the very human security issues they claim to address. By framing water as a commodity and promoting privatization, the WB's interventions often marginalize local voices and overlook the broader social and environmental consequences (Rudebeck, 2022, p. 5). This approach is encapsulated in its water sector reform policies, which focus on empowering water

users through institutional and legal changes while promoting efficient management by private operators—a shift that has historically favored upstream governments and transnational interests over local needs.

In summary, the WB's extensive involvement in the Aral Sea Basin is rooted in its longstanding development agenda, its strategic integration of human security into global policy frameworks, and its neoliberal reform agenda that aims at commodifying water and privatizing water governance. These policies, while framed as modernizing interventions, have profound implications for local governance, environmental justice, and the equitable management of vital water resources. The North Aral Sea dam and the Climate Adaptation and Mitigation Program for the Aral Sea Basin (CAMP4ASB) serve as contemporary examples that illustrate both the technical focus and the contested political dimensions of WB interventions in the region.

3. Theoretical Framework

3.1 *Critical discourse analysis*

Critical Discourse Analysis (CDA) is a powerful tool for examining how language shapes and is shaped by social realities, particularly in the context of power relations and identity politics. CDA enables researchers to “map the emergence and evolution of patterns of representations which are constitutive of a threat image” (Balzacq, 2010a, p. 39). This approach goes beyond analyzing what discourses explicitly state, delving into their implications and the ways they construct social reality.

Discourses, as uses of language involving practices and representations, produce meanings and constitute identities. The performative nature of language means that discourse can alter social reality, reflecting Foucault's assertion that “each society has its own regime of truth” (Foucault, 1981, p. 131). This understanding underscores the dual nature of discourse as both socially constituted and constitutive, shaped by social contexts while simultaneously affecting social and political realities (Escobar, 1984; Foucault et al., 2009). The context in which a discourse occurs is crucial for understanding its impact on meaning. Language and discourse are intrinsically linked to power, serving as means of ‘ordering’ reality and establishing ‘truths’ that create, disseminate, and impose specific knowledge (Foucault, 1981). This power of discourse structures social order, controlling subjects and influencing behaviors and possibilities of action (Foucault, 1982).

3.2 *Securitization Theory*

Within the discipline of Critical Studies, and in the aftermath of the Cold War, the Copenhagen School introduced the concept of securitization, establishing a new framework to analyze security. This approach deepened and broadened traditional theoretical perspectives by shifting the focus from a strictly state-centric view to

one that includes other referent objects, such as human beings. As noted by Buzan, traditional security agendas were expanded, acknowledging that threats to human wellbeing may arise from a variety of sources beyond the military realm (Buzan, 1991) - a notion further developed by Homer-Dixon (Homer-Dixon, 1994). In doing so, the Copenhagen School not only broadened the security agenda to incorporate environmental, economic, societal, and political sectors but also contributed innovative concepts such as societal security and the regional security complex (Buzan & Wæver, 2003).

Advancing securitization theory from a constructivist perspective, the Copenhagen School asserts that security threats are constructed “in the minds of policy-makers and the public” (J. Warner & Boas, 2017, p. 204). This theoretical framework emphasises the importance of language and discourse in the securitization process, illustrating how public problems become framed as security issues through ‘speech acts’ (Canveren & Akgül Durakçay, 2017). In this way, an issue that “has hitherto been conceptualised ‘only’ in political, economic, environmental or other terms” (Scott, 2012, p. 221) is redefined as an existential threat, entering the realm of security discourse.

Securitization does not require the presence of an actual existential threat; rather, it depends on the presentation of an issue as one (Mutimer, 2007, p. 61). It is described as a “rule-governed practice” that relies on the capacity to discursively frame developments as threatening (Balzacq, 2005, p. 179). The success of securitization is contingent upon “facilitating conditions” such as the form of the speech act, the role of the securitizing actor, and the historical context of the perceived threat (Buzan et al., 1998, p. 32; McDonald, 2008, p. 571). For an issue to be effectively securitized, the actor must align their security declarations with external realities, using language, tone, and imagery that resonate with public concerns, thereby legitimizing measures that might otherwise be considered unacceptable (Balzacq, 2010a; Buzan et al., 1998; Scott, 2012).

This performative process employs persuasion and strategic discourse, integrating metaphors, emotions, stereotypes, and even silences to shape public perception. The securitizing actor frames a referent object as vulnerable, compelling immediate action and often positioning themselves as the sole provider of solutions.

The concept of securitization finds a pertinent application in the field of water governance. Here, issues such as water scarcity and water-related disputes are reframed as threats to national, regional, or human security. Critical discourse analysts examine how governments, international organizations, and experts use their authority to shape water-related policies and investment priorities, thereby revealing imbalances in agenda setting and stakeholder inclusion (Allan, 2002; J. F. Warner & Zeitoun, 2008). By linking discourse to policy outcomes, CDA exposes how securitization narratives can pave the way for infrastructure mega-projects,

militarized border controls, or stringent legal frameworks that marginalize local communities (Menga, 2018).

The importance of water, combined with mounting pressures on local availabilities and intertwined social and political constraints, makes the study of water security more relevant than ever. Bréthaut et al. (2022, p. 466) note that this relevance is underscored by the increasing challenges in water governance (Bréthaut et al., 2022, p. 466), a view reinforced by the latest Intergovernmental Panel on Climate Change (IPCC) report, which emphasizes “the centrality of water security in light of climate change” (Calvin et al., 2023, p. 8). This issue is particularly acute in regions like Central Asia, identified as one of the world's “climate hot-spots” (Giorgi, 2006, p. 33). Although the linkage between climate change and water availability has long been acknowledged, the concept of “water security” was not crystallized in academic literature until the 1980s-1990s (Wutich et al., 2022). The United Nations’ definition of water security encapsulates its multifaceted nature, describing it as “the capacity of a population to safeguard sustainable access to adequate quantities of and acceptable quality water for sustaining livelihoods, human wellbeing, and socioeconomic development, for ensuring protection against waterborne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability” (UN, 2013, p. 1). This definition attempts to integrate all dimensions of water-related security, thereby influencing national security and sovereignty calculations (Lautze & Manthritlake, 2014; Wegerich et al., 2015, p. 4660). In practice, actors responsible for water governance, predominantly states, may instrumentalize the water security discourse to set different policy priorities (Bréthaut et al., 2022; Sayan et al., 2020). This phenomenon is particularly widespread in Central Asia, where water politics became intertwined with national security considerations (Kraak, 2012) following independence of Central Asian states from the former Soviet Union. Here, transboundary rivers have been leveraged for national economic growth, while regions such as the Syr Darya river basin have become focal points of political tension due to conflicting interests amid weak institutional frameworks (Assubayeva et al., 2023; Kraak, 2012; Roberts, 2022; Sehring et al., 2024). CDA in these contexts can shed light on how institutions like the WB frame projects in the Syr Darya and Aral Sea basins, paying close attention to the language used, the assumptions embedded within texts, and the representation of diverse actors, all while investigating local contexts and power imbalances.

In sum, the securitization theory and its application to water governance illuminate the dynamic interplay between discourse and policy. By understanding how security is constructed through language and framed as an existential threat, scholars and policymakers can better appreciate the profound impact these narratives have on shaping both international relations and domestic policy decisions.

4. Methodology

4.1 Research design

This study adopts a qualitative research design based on content and discourse analysis. It examines key WB documents, including project appraisal documents (PADs), implementation completion reports (ICRs), and restructuring papers, from two WB projects in the Aral Sea basin. These documents were selected to capture a broad spectrum of WB discourses from project conception through implementation and evaluation.

4.2 Data collection and analysis

The analysis proceeded in two main steps. First, a qualitative content analysis was conducted. In this phase, documents were systematically reviewed to identify recurring phrases, thematic patterns, and quantitative indicators. A coding framework was developed to capture key discursive elements, including phrases such as “technical solutions,” “economic benefits,” and “security threats.” Building on these findings, the second step involved a detailed discourse analysis. This stage examined how language was used to construct the narrative around human security in WB communications. Special attention was paid to the employment of technical language, the emphasis on quantified outcomes, and the framing of local populations as “beneficiaries.”

5. Case Studies

5.1. Case 1: Syr Darya Control & Northern Aral Sea Phase I Project

5.1.1. Context

Initiated in 2001, the Syr Darya Control & Northern Aral Sea Phase I Project was designed to address the environmental and economic decline of the Aral Sea region in Kazakhstan. The project aimed to stabilize water levels, restore fish production, and mitigate the effects of water mismanagement inherited from Soviet-era policies.

The first project selected for analysis aimed, in WB terminology, to sustain and increase agriculture and fish production in the Syr Darya basin and secure the North Aral Sea’s (NAS) existence by improving ecological and environmental conditions in the delta area. The North Aral Sea basin, located within Kazakhstan, was historically renowned for its fish production. However, as the Aral Sea dried up, fish yields fell dramatically, prompting many regional fishermen and associated businesses to relocate to the Balkhash Sea in Southeast Kazakhstan to continue their livelihoods (World Bank, 2008). Consequently, it is unsurprising that the Syr Darya Control & NAS Phase I Project (hereafter referred to as NAS) focused primarily on addressing these issues.

In addition to its emphasis on reviving fisheries, the NAS project set out to construct a system of closing dams aimed at mitigating water losses caused by floods. This dam system was built in the Berg Strait, the channel connecting the North Aral Sea with the larger South Aral Sea (World Bank, 2013). While some might label the NAS project as the most visible intervention in the region, it is important to note that other critical issues, such as water salinity, posed significant threats to the environment, human and animal health, and biodiversity. The construction of this extensive embankment and dam near the mouth of the Syr Darya, reinforcing a smaller lake of 3,300 km², has accelerated the depletion of the remaining Aral Sea in Uzbekistan. However, the diminished ecosystem has undergone an unexpectedly rapid resurgence, reinstating a predominantly illicit small-scale fishing activity (de la Croix, 2021, p. 19).

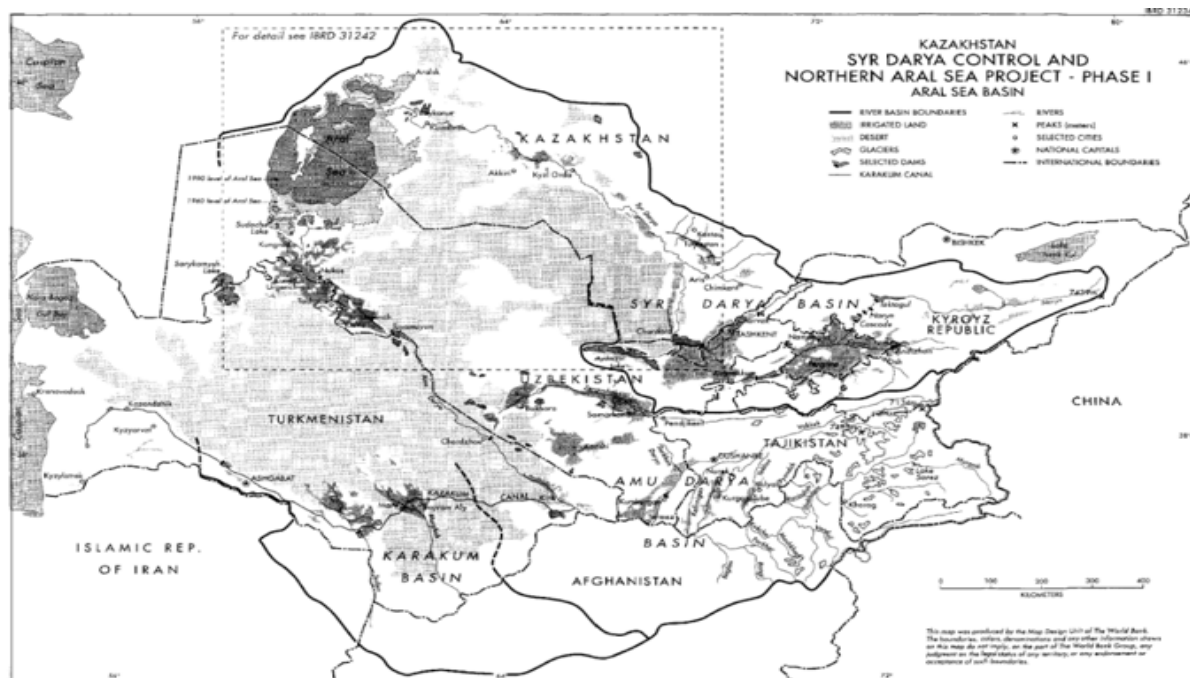


Image 2. Project sites of the Syr Darya Control & Northern Aral Sea Phase I Project (World Bank, 2001, p. 103).

The construction of the dam system was a costly endeavor, with Kazakhstan securing a total of \$85 million that included a \$64 million WB loan. By May 2006, the North Aral Sea had expanded by between 900 and 3,300 km², and its water level rose three meters above initial projections (Fairless, 2007). Beyond the recovery of fisheries, notable achievements were observed in reducing water salinity. The system of closing dams in the Berg Strait not only prevented water spills but also maintained the flow of fresh water during dry seasons. This directly impacted water salinity levels, which had reached 25 g per liter by the end of the century - a concentration that had caused the disappearance of all freshwater fish species (Aladin et al., 2009, p. 5). This issue was particularly critical for the North Aral Sea basin, which lacks

significant underground water reserves that could otherwise help moderate salinity levels.

Water salinity is a multifaceted problem affecting ecosystems, human health, and infrastructure. Rzymiski et al. explain that residents in the Aral Sea region face health risks stemming from desertification and water desiccation, including exposure to toxic elements, pesticide transport, and deteriorating drinking water quality (Rzymiski et al., 2019). These conditions have been linked to increased risks of cognitive impairment, anemia, miscarriage, preeclampsia, and neonatal morbidity. Moreover, elevated soil and air salinity exacerbate infrastructure corrosion, reduce pasture availability, and limit access to fuelwood resources (Shen et al., 2016).

Following the implementation of the NAS project, water salinity levels dropped to approximately 10 g per liter, fluctuating between 4 and 17 g per liter, resulting in noticeable health benefits and the return of fish and bird populations (World Bank, 2013). Although these outcomes represent significant progress in mitigating a human-induced environmental disaster, the full recovery of the Aral Sea remains a distant goal. Encouraged by the success of NAS Phase I, the Kazakh government planned a second phase to enhance flood management, aquaculture, and socioeconomic activities along the lower Syr Darya.

For the discourse analysis, three project-related documents were examined, including:

1. The “Project Appraisal Document on a Proposed Loan in the Amount of US \$64.5 Million to The Republic of Kazakhstan for the Syr Darya Control and Northern Aral Sea Phase-I Project” dated May 11, 2001 (hereinafter referred to as PAD, 2001);
2. The “Implementation Completion and Results Report (IBRD-46090 TF-56801) on a Loan to the Republic of Kazakhstan for a Syr Darya Control and Northern Aral Sea Phase-1 Project,” issued by the Sustainable Development Department, Central Asia Country Unit, Europe Central Asia Region on June 21, 2011 (hereinafter referred to as ICR, 2011);
3. The Independent Evaluation Group (IEG) review of the Implementation Completion and Results Report dated October 2, 2012 (hereinafter referred to as IEG review, 2012).

It is worth mentioning that Kazakhstan’s recently established Ministry of Water Resources and Irrigation, in partnership with the World Bank, plans to launch Phase II of the Northern Aral Sea restoration, anchored by a World Bank-financed feasibility study due in December 2025. The program assesses reconstruction of the Kokaral Dam to raise the sea to 44 meters and a new regulating structure near Amanotkel to manage flows into the Akshatau and Kamystybas lake systems, thus prioritizing technical efficacy under current hydrological conditions (Ministry of Water Resources and Irrigation of the Republic of Kazakhstan, 2025). If implemented, the sea’s surface

area is projected to reach about 3,913 km² with a volume near 34 km³, with refill expected over four to five years based on Syr Darya hydrology. Building on Phase I gains, such as higher water volumes, markedly lower salinity, and increased fish catch (Ismailov, 2025). Sustainability risks, however, remain, particularly regional flow pressures linked to upstream developments such as Afghanistan's Kosh-Tepa Canal.

5.1.2 Discourse analysis

The PAD (2001) frames the crisis as 'environmental degradation' and 'mismanagement' (p. 3), a technical description that obscures its historical and political roots. The project is presented as a technical solution, such as "rehabilitation of the Syr Darya basin" (PAD, 2001, p. 2) and "securing the existence of the Northern Aral Sea" (PAD, 2001, p. 2), suggesting a top-down, engineering-based approach. The success of the project is measured in terms of "sustaining and increasing agriculture (including livestock) and fish production in the Syr Darya basin in Kazakhstan" (PAD, 2001, p. 2). This economic emphasis and the "key performance indicators" (PAD, 2001, p. 2) (increased fish yields, improved water levels, crop production, etc.) prioritize quantifiable outcomes that align with economic and environmental targets. The PAD implicitly assumes the WB's expertise is essential, reinforcing its position as a leading development actor. Local populations are primarily framed as "beneficiaries" (PAD, 2001, p. 2). While the PAD mentions expected "improvement in general health of population in Kazaklinsk/Aralsk" (PAD, 2001, p. 2), this framing flattens the diversity of local experiences. The document briefly mentions the Soviet era and how "increasing amounts of water were diverted from the Amu Darya and Syr Darya mainly for irrigation" (PAD, 2001, p. 3) but does not fully explore the legacy of Soviet water management policies.

The PAD presents two development options to address the Aral Sea crisis. The first is the "restoration of the entire Aral Sea," which it simultaneously acknowledges as unfeasible. The second is the "no project" alternative in Kazakhstan, which is also deemed unviable (PAD, p. 9). The document argues that the no-project scenario would exacerbate the hardships of one of the country's poorest regions, and that proposed plans to relocate local populations were not supported by communities. In doing so, the PAD implicitly frames the situation as an existential threat, thereby employing a partial securitization narrative. Ultimately, the PAD suggests that implementing the project would enhance agricultural, livestock, and fishery production in the river basin and delta, while also improving environmental conditions in the NAS and surrounding areas. It therefore seems to adopt a "pragmatic" approach, trying to improve the situation in the NAS, without claiming to being able to restore the entire Aral Sea. The ICR (2011) states that "the project was considered of strategic

importance in addressing the environmental issues of the Aral Sea basin" (ICR, 2011, p. 1). At various points, the report frames the project as a success, downplaying areas of failure or delay (ICR, 2011, p. 10-11). The assessments of the borrower (the Government of Kazakhstan) are critical, particularly regarding procurement and management practices. This reveals the disparity between the Bank's international standards and the local practices, often viewed as insufficient (ICR, 2011, pp. 18-20). The ICR (2011) consistently foregrounds environmental goals to construct a narrative of social and ecological responsibility (pp. 6-10, 14-16). The discourse here suggests a "one-size-fits-all" approach to development, where environmental restoration is assumed to lead to improved social outcomes without deeper analysis of local socio-political dynamics (ICR, 2011, pp. 16-18). Framed within the broader international context of the Aral Sea Basin Program (ASBP), the project is presented as a global initiative aimed at addressing an ecological disaster. The WB's involvement in this global framework reinforces its role as an actor in environmental governance and policy-making (ICR, 2011, pp. 1-3, 6-9). The report critiques Kazakhstan's procurement and management practices, while simultaneously positioning the government as an essential partner in the project's success (ICR, 2011, pp. 6-9, 12-14). The local communities are identified as primary beneficiaries of the project, with benefits including improved health, biodiversity, and livelihoods (ICR, 2011, pp. iii, 3, 14-16). The report notes challenges in local stakeholder engagement. For instance, the Monitoring and Evaluation (M&E) system faced difficulties in data collection from local agencies (ICR, 2011, pp. 8-9, 16-17).

The IEG review (2012) assesses the project's data, objectives, relevance, efficacy, and efficiency. The review notes inconsistencies with the ICR regarding the full implementation of all components. The evaluation acknowledges positive outcomes related to the Northern Aral Sea's water levels, indicating success in the primary objective of securing its existence. The document primarily frames the Aral Sea crisis as a technical problem stemming from "increasing amounts of water diverted from the Amu Darya and Syr Darya mainly for irrigation" (IEG review 2012, pp. 3-4). While mentioning the initial water diversions in the 1960s, the document largely omits a critical examination of the Soviet-era agricultural policies that prioritized cotton production. The project is presented as a government-led initiative (IEG review, 2012). The evaluation makes little mention of the perspectives and participation of local communities (IEG review, 2012), and emphasizes the project's focus on technical solutions. The objective of "sustaining and increasing agriculture (including livestock) and fish production" (IEG review, 2012, p. 1) incorporates a sustainability discourse.

The project prioritizes technical, state-led interventions, with limited attention to the perspectives of local communities in the Aral Sea Basin. What

stands out is that there is little to no mention of how these communities perceive or experience the interventions undertaken. While environmental goals are framed as linked to economic benefits (PAD, 2001, p. 2), the emphasis on infrastructure and engineering solutions risks overlooking deeper, systemic issues such as unsustainable agricultural practices and social inequities, which remain central to the project's long-term viability.

5.2. Case 2: Climate Adaptation and Mitigation Program for the Aral Sea Basin (CAMP4ASB)

5.2.1. Context

The second project selected for analysis is the Climate Adaptation and Mitigation Program for the Aral Sea Basin (CAMP4ASB). Launched by the WB in 2016 in partnership with Uzbekistan and Tajikistan, the project was designed to address the high vulnerability of Central Asian countries to climate change. This vulnerability is attributed to factors such as temperate deserts and semi-deserts, economic underdevelopment linked to a historical focus on monoculture exports before 1991, and the social, economic, and institutional upheavals following the Soviet Union's collapse (Lioubimtseva & Henebry, 2009, p. 964). The project aimed to mitigate threats, including glacial melting, altered water flows, water stress, waterborne diseases, desertification, and droughts, which jeopardize local food, health, environmental, and economic security (Lioubimtseva, 2015).

CAMP4ASB focused on improving ecosystems and ecosystem services, health, food and water security, and the livelihoods of local communities. According to the WB, its primary beneficiaries were “the poorest and most climate-vulnerable rural communities,” particularly “farmers and farmer groups, villages and village communities, and resource user groups” (World Bank, 2019b).

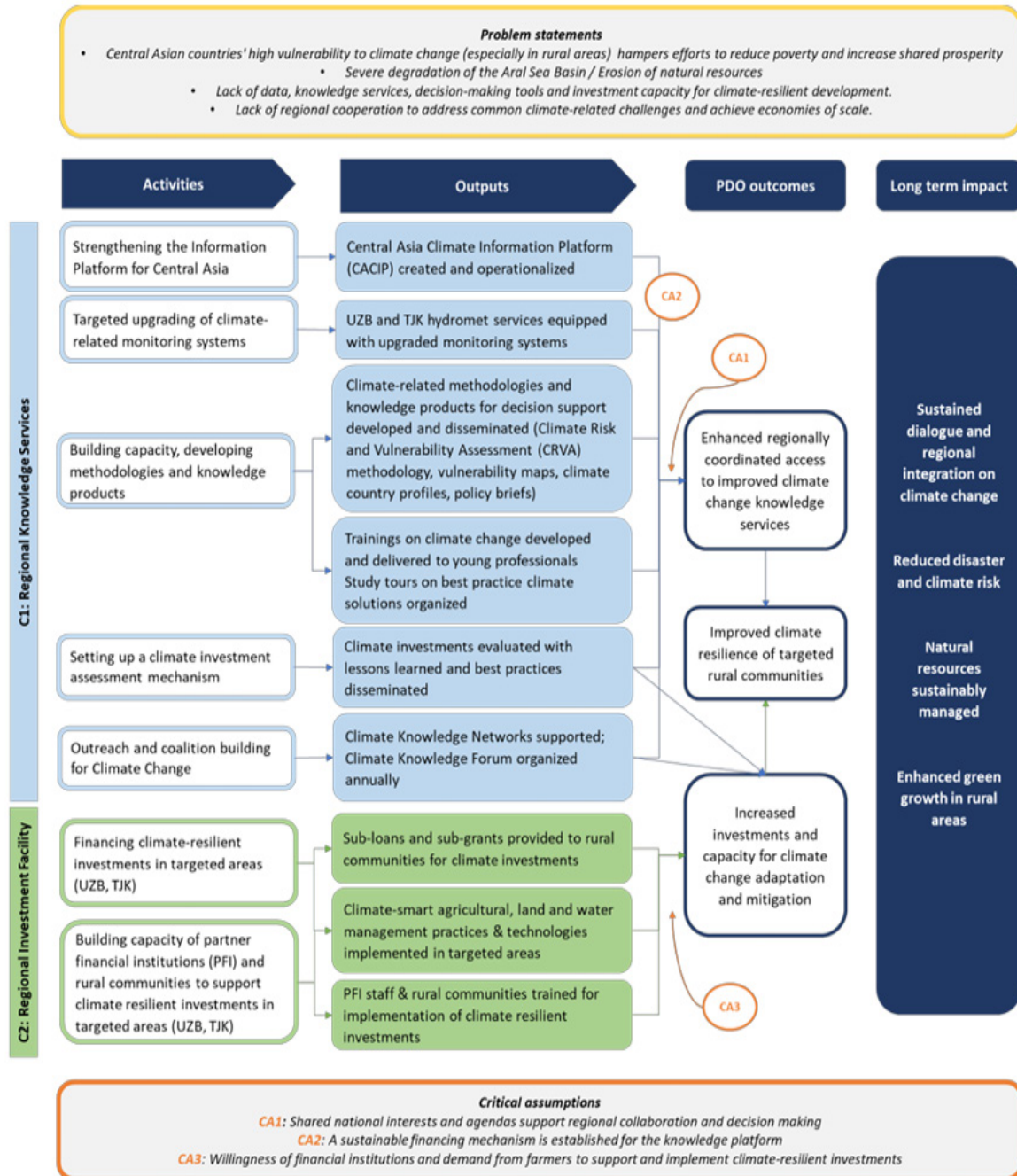
Key components of CAMP4ASB included:

- The development of climate knowledge services and regional dialogue platforms.
- Investments in climate-resilient agricultural practices aimed to improve productivity and sustainability across nearly 20,000 hectares of land.
- Training programs targeting rural communities and women, albeit within a framework that prioritized measurable, market-oriented outcomes.

The project sought to enhance access to climate change knowledge for key stakeholders and to increase investment and capacity building. It was structured around the aforementioned three components with an overarching emphasis on regional cooperation to accelerate learning and awareness of shared climate challenges. By August 2021, national investment components in Tajikistan and Uzbekistan had nearly concluded, yielding “effective” agricultural, land, and water management

measures over 18,450 hectares, the creation of 19,962 jobs, and targeted training on climate-resilient technologies, particularly for women from rural areas. In addition, regular dialogues among ministries of foreign affairs, national parliaments, civil society organizations, and academic networks were organized, culminating in three Central Asia Climate Change Conferences (CACCC) that promoted regional dialogue on climate change and sustainable development ("2020 Annual Performance Report For FP014: Climate Adaptation And Mitigation Program For The Aral Sea Basin," 2022).

FIGURE 1: THEORY OF CHANGE FOR THE CAMP4ASB PROJECT.



The analysis of CAMP4ASB is based on several key documents:

1. World Bank. (2015, October 13). Project appraisal document: Climate adaptation and mitigation program for Aral Sea Basin (Report No. PAD1228) (hereinafter referred to as CAMP4ASB PAD, 2015);
2. Disclosable Restructuring Paper - Climate Adaptation and Mitigation Program for Aral Sea Basin (hereinafter referred to as CAMP4ASB restructuring paper, 2021);
3. Disclosable Version of the Implementation Status and Results Report (ISR) - Climate Adaptation and Mitigation Program for Aral Sea Basin (hereinafter referred to as CAMP4ASB ISR report, 2024).

The three documents were selected for analysis as they collectively provide a comprehensive overview of the CAMP4ASB project's design, evolution, and outcomes. The Project Appraisal Document (2015) outlines the original objectives, components, and implementation framework; the Restructuring Paper (2021) captures the program's adjustments in scope, financing, and operational priorities; and the Implementation Status and Results Report (2024) presents the latest assessment of progress, achievements, and lessons learned. Together, these sources enable a nuanced understanding of how the project's intent to enhance access to climate knowledge, strengthen regional cooperation, and foster climate-resilient investments was translated into practice over time.

5.2.2. *Discourse analysis*

From the outset, the CAMP4ASB PAD positions Central Asian states as “among the most recent independent nations in the world” (CAMP4ASB PAD, 2015, p. 1), establishing a narrative of state formation and modernization that marginalizes longstanding ecological relationships. Climate change is depicted primarily as a threat to economic development, saying that “more variability and instability in the region's water resources and rising costs for development sectors” (CAMP4ASB PAD, 2015, p. 1), thereby converting environmental degradation into a technical problem manageable through investments and infrastructural improvements. This narrative is further reinforced by an emphasis on market-oriented, institution-based responses (e.g., “climate knowledge services,” “investment facilities,” and “capacity building”; CAMP4ASB PAD, 2015, pp. 8-10), which effectively commodify nature by reducing complex socio-environmental conflicts to issues of measurable technical efficiency.

The restructuring paper adapts the original design by attributing observed misalignments to the “evolved nature of the sub-projects financed by the project” (CAMP4ASB restructuring paper, 2021, p. 3). By framing the need for change as a response to unforeseen project evolution rather than as a failure of the initial design, the document sidesteps critical assessments of state capacity and local engagement. Its focus on revising quantitative indicators (e.g., “Number of users of public climate data and analytical services” and “Farmers adopting climate smart agricultural

technologies” (CAMP4ASB restructuring paper, 2021, pp. 10-11) not only underscores a neoliberal, data-driven approach but also shifts attention away from historical contestations over resource control. The paper’s emphasis on regional cooperation and individualized beneficiary models further enshrines a top-down, technocratic paradigm that prioritizes scalability over the complexities of local socio-political dynamics.

The ICR (2024) continues this discourse by framing Central Asian countries as “particularly vulnerable to external shocks” due to their resource-dependent economies and uneven growth trajectories (ICR CAMP4ASB, 2024, pp. 1-2). It recasts socio-environmental struggles as natural conditions remedied through improved “climate change knowledge services” (ICR CAMP4ASB, 2024, p. 5) and enhanced governance structures. Even discussions of political and governance risks are quickly neutralized by suggesting these challenges can be managed through technical and regional coordination measures. Moreover, the report’s reliance on quantifiable performance metrics and its focus on “improved climate and water resource monitoring systems” (ICR CAMP4ASB, 2024, p. 4) further embeds the securitization narrative, where environmental vulnerabilities are subsumed under the imperatives of economic stability and state security.

The CAMP4ASB infographic developed by the Central Asian Regional Environmental Center illustrates much of what this analysis seeks to argue. Through a multimodal format that integrates text, data visualization, charts, and icons, it constructs a narrative of progress and modernity (World Bank, 2019a). The infographic emphasizes quantifiable outcomes such as the number of training sessions, upgraded meteorological stations, and completed infrastructure projects, thereby reinforcing a technocratic vision of development. This focus on measurable outputs reflects a broader neoliberal development logic that equates success with efficiency, control, and the production of indicators. By framing climate adaptation as a data-driven and governable process, the infographic aligns with donor expectations and institutional accountability frameworks. However, this approach also risks depoliticizing the social and ecological dimensions of climate vulnerability by translating complex and context-specific dynamics into simplified, market-compatible representations of progress. This top-down portrayal reinforces the dominant power structures inherent in global development, where external agencies and international expertise are positioned as the primary agents of progress. The selective presentation of successes and milestones cultivates an image of rationality and efficiency and contributes to a discourse that legitimizes the intervention as both necessary and effective.

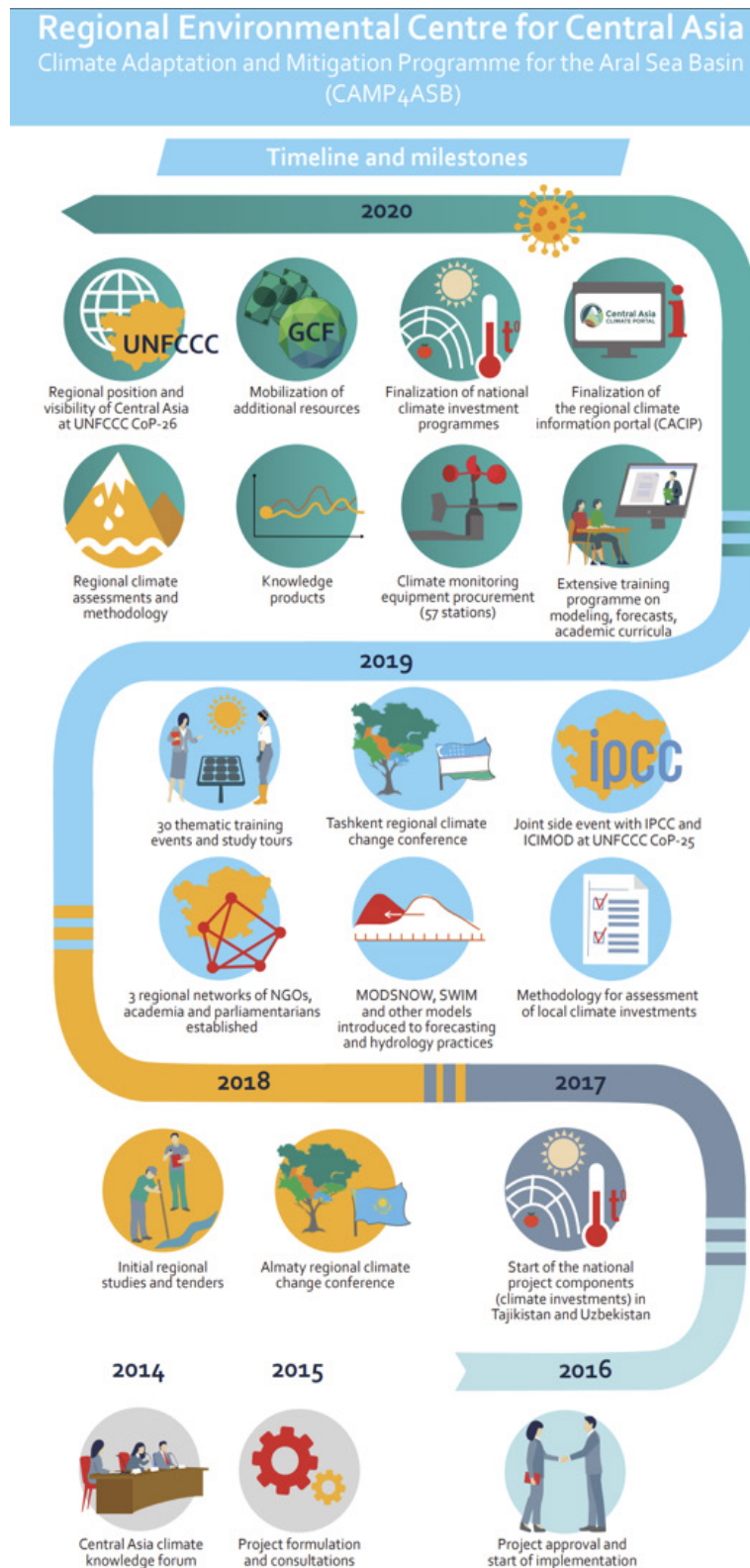


Image 4. CAMP4ASB all-in-one infographics. Source: World Bank, 2019a, p. 8.

Although the CAMP4ASB PAD documents primarily frame climate change and resource management in terms of development and risk, elements of a securitization narrative are present, albeit only partially. Water and energy are repeatedly described

as “strategic resources” whose availability is essential for regional stability and economic prosperity (CAMP4ASB PAD, p. 1). The text highlights that slow growth, resource inefficiencies, and climate impacts could “undermine social stability” in countries with significant rural populations living in poverty (CAMP4ASB PAD, p. 1), linking resource and environmental issues to broader societal vulnerabilities. Cross-border risks are also emphasized, with climate impacts affecting shared rivers, agricultural production, and energy systems across multiple countries (CAMP4ASB PAD, p. 1-3), suggesting that regional cooperation is necessary to prevent conflict or disruption. These framings employ some of the key elements of securitization. They position resources as critical, connect scarcity to stability, and highlight potential risks, but do not fully portray climate change or resource scarcity as an existential threat requiring extraordinary measures. The discourse therefore reflects a partial securitization, combining security-adjacent language with a stronger focus on governance, institutional strengthening, and development-oriented solutions.

6. Results and Discussion

6.1 *Synthesis of findings*

Both case studies reveal that the WB employs a consistent narrative of partial securitization. It frames water and climate issues as critical to stability and wellbeing, legitimizing intervention, but contains the threat within a technocratic, neoliberal framework.

Although not explicitly stating the water security, food security, and climate security issues as existential threats, implicitly the WB frames these challenges as critical to regional stability, economic growth, and social well-being. By emphasizing the strategic importance of water and energy resources, the potential for cross-border disputes, and the vulnerability of rural populations dependent on agriculture, the Bank constructs a narrative in which inaction or insufficient coordination could undermine development outcomes. This partial securitization legitimizes the need for coordinated regional interventions, institutional strengthening, and investment in climate-resilient infrastructure, while maintaining a focus on technical, governance, and policy solutions rather than emergency or extraordinary measures. In view of this, the WB portrays environmental challenges as technical problems amenable to engineering solutions. Project documents emphasize interventions such as dike construction, hydraulic rehabilitation, and weir restoration, framing these as straightforward technical fixes. For instance, the rehabilitation of the Northern Aral Sea (NAS) is narrated through a story of progress, evidenced by the increase in water levels “from a pre-project low of 38 m to the desired design level of 42 m” (IEG review, 2012, p. 4). However, a strong reliance on numerical indicators reinforces a

neoliberal logic (Brown, 2015; Foucault, 2010). Environmental restoration is linked to tangible economic benefits, for example, increased agricultural and fish production (IEG review, 2012, p. 2), which legitimizes interventions through measurable economic returns. The frequent use of abstract terms such as “ecological and environmental conditions” (IEG review, 2012, p. 2) underscores a reduction of complex socio-political realities to quantifiable metrics, potentially sidelining critical qualitative dimensions.

Partial securitization transforms technical or natural issues into matters of national and human security, thereby justifying extraordinary, top-down political and economic interventions. By declaring water scarcity and environmental degradation as existential threats, policymakers instill a sense of urgency. In Central Asia, the World Bank project documents we examined underscore the “existence” of the Northern Aral Sea and the imperative to stabilize water flows, which constitutes a narrative that implies imminent collapse if decisive action is not taken. The documents often attribute water scarcity in the Aral Sea region to climate change, emphasizing technical “water-smart” solutions, particularly in agriculture, while avoiding more sensitive issues related to justice and equity. This framing risks scapegoating climate change for water issues, potentially diverting attention from more direct governance failures that also contribute to water challenges. By portraying climate change as an external and uncontrollable force, the narrative may obscure the role of human agency and accountability in addressing water governance shortcomings.

6.2 Implications of the discursive strategies

When complex socio-political issues and historical injustices are framed as mere technical challenges, important perspectives can get lost. For example, while projects like the NAS rehabilitation often showcase tangible benefits (like higher water levels and economic gains) they tend to sideline deeper discussions about how these changes affect local communities’ daily lives. This narrow focus can end up drowning out local voices and alternative viewpoints that advocate for more participatory, community-driven approaches. The emphasis on market-based, quantifiable outcomes may reinforce existing power imbalances. By privileging technical expertise and measurable indicators, such as “improved water levels” and increased agricultural output, the WB’s narrative supports a neoliberal development model where state and international actors dominate decision-making, while local agency and indigenous knowledge are sidelined.

Similarly, framing human security through a technical lens may justify rapid, top-down interventions that overlook the necessity for holistic, long-term environmental management. This partial securitization narrative legitimizes extraordinary measures that prioritize state and economic stability over community

empowerment and inclusive development. Consequently, such policies risk reinforcing entrenched inequalities and undermining sustainable, participatory approaches.

6.3 Limitations and Future Directions

Discourse constructs the social space where actors perform by establishing concepts, objects, and subject positions (Balzacq, 2010a). It acts as both a vehicle of meaning creating immediate communicative action and a part of agency (Balzacq, 2005). In this way, discourse analysis reveals how language use can perpetuate power dynamics, ideologies, and social inequalities.

However, the inherent limitations of discourse analysis must be acknowledged. As a qualitative method, it is interpretative, and its findings are open to contestation (Crawford, 2004, p. 24; cited in Bréthaut et al., 2021, p. 469). While we have sought to mitigate this subjectivity through a systematic, two-step analytical process, several specific limitations arising from our application of CDA must be noted.

First, our analysis is confined to English-language grey literature and official WB publications. This selective corpus inevitably privileges the Bank's institutional voice and obscures alternative narratives and local counter-discourses. Consequently, the perspectives of the very "beneficiaries" mentioned in the reports, such as the farmers, fishers, and residents of the Aral Sea disaster zone, are largely absent, creating a significant gap between the top-down discourse we analyze and on-the-ground realities.

Second, our Foucauldian-inspired approach to CDA, while useful for uncovering the relationship between discourse, knowledge, and power, may underemphasize the material and economic structures that underpin these discursive formations. As hinted at in the theoretical framework, a Marxist critique would posit that the World Bank's "green neoliberal" discourse is not merely a regime of truth but a direct reflection of underlying economic interests (Herzog, 2018). Our analysis focuses on the how of the Bank's discursive strategies, but a different methodological lens would be required to more fully explain the why rooted in political economy.

Finally, by focusing predominantly on textual analysis, this study may not fully capture the multimodal nature of contemporary institutional communication, which employs visual and rhetorical strategies across infographics, videos, and public speeches to reinforce narratives (Kress, 2010; Kress & van Leeuwen, 2021). While we incorporated a preliminary analysis of one infographic, a comprehensive multimodal discourse analysis would be needed to fully appreciate the persuasive power of the Bank's communications.

By acknowledging these constraints, we situate our findings as a critical, yet necessarily partial, interpretation. Therefore, future research should seek to expand this analytical framework. A crucial direction is the integration of local perspectives

through qualitative fieldwork, including interviews and case studies in the Aral Sea basin, to capture lived experiences and offer a vital counter-narrative. Furthermore, future investigations could benefit from incorporating additional theoretical frameworks, such as post-colonial theory and political ecology, to better illuminate historical legacies and power asymmetries. Addressing the methodological limitations identified here, such as expanding the corpus to include local language sources and enhancing methodological transparency regarding subjectivity, would also provide a more comprehensive and balanced view. Future research that integrates primary field data is essential to capture a more comprehensive picture of the local impacts of development projects in the Aral Sea basin.

7. Conclusion

This article addressed the primary research questions: 1) To what extent and how does the World Bank employ a securitization discourse in framing the Aral Sea crisis? 2) What are the implications of this discursive strategy for legitimizing the WB's interventions and for local governance in the Aral Sea basin? The findings indicate that the WB employs partial securitization, framing water, food, and climate challenges as critical to regional stability and human security without fully presenting them as existential threats. This is achieved by emphasizing vulnerability, potential social and economic risks, and the necessity of external intervention.

In the Syr Darya Control & NAS Phase I Project and the CAMP4ASB Project, the WB constructs a technocratic narrative portraying Central Asian communities as reliant on external expertise due to institutional deficiencies and limited technical capacity. By highlighting the consequences of water scarcity, climate variability, and the Aral Sea's ecological decline, the WB positions itself as an indispensable provider of solutions. This aligns with Escobar's observation of development actors portraying local communities as "like children in need of adult hands" (Escobar, 2007), creating a moral imperative for intervention. The WB reinforces a top-down governance model through capacity building, institutional reforms, and defining legitimate knowledge in climate and resource management. Local populations are positioned as passive recipients, which mobilizes resources and legitimizes intervention but risks depoliticizing local challenges and reinforcing existing power asymmetries.

Through partial securitization, the WB legitimizes technical and market-oriented solutions while downplaying locally driven or politically engaged approaches. This framing is effective in attracting international support and consolidating the WB's governance role, but it marginalizes local voices and obscures socio-political drivers of environmental degradation. In conclusion, the WB's discourse constructs a sense of urgency that justifies interventions designed to protect human security through

technical, top-down measures. Future research should examine other international actors' discourses, assess impacts on local stakeholders, and explore alternative or complementary narratives to better understand the interplay between global development actors, securitization discourse, and human security in environmentally and politically sensitive regions like the Aral Sea basin.

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Annex 1.

Documents for the analysis

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