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Damming the World:
Burma as a Case Study for Chinese Exportation of Hydropower

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China's transformation from an underdeveloped and isolated country to one of the world's economic superpowers has astounded observers across the world, attracting both admiration and concern. To address both Western concerns for peace as well as a growing demand for natural resources and energy, China unveiled a new foreign policy in the early 21st century, touting its growth as "peaceful development" to allay concerns over China upsetting the political status quo. In addition to reassuring the world of its intentions, China emphasizes the situation as a "win-win" scenario by offering aid, cooperation, and the prospect of mutual growth to other developing nations. Given China's status as the world's largest dam builder, it is unsurprising that Chinese aid to developing nations often includes support for hydropower infrastructure. At first, Chinese aid was greeted with open arms, particularly by those in countries where Western aid came with the political price tags of human rights and environmentally sustainable development. Today, developing countries have started to question whether Chinese aid comes at the price of negative environmental and social consequences. This paper will analyze the role of hydropower development as an instrument in Chinese foreign policy, examining to what extent the environmental and social costs of Chinese-funded dams on the Irrawaddy River in Burma¹ have damaged Burmese perspectives of China.

To analyze the role that hydropower plays in Chinese foreign aid, it is necessary to first understand the context of recent Chinese foreign policy strategies. In many cases, the Chinese government's illustration of such policies differs greatly from Western examinations. White papers published by the Information Office of the State Council lay out Chinese foreign policy to make it available to the public. Those papers that address Chinese foreign aid, the "peaceful

¹ Since the takeover, the military regime has officially changed the country's name from Burma to Myanmar. I have chosen to use the name Burma because it is far more prevalent in English. The same holds true for the Irrawaddy River, which some refer to by its less well known Burmized spelling of Ayeyarwady.

development”² strategy, and the “going out” strategy are useful in analyzing the rhetoric of the Chinese Communist Party (CCP). This is a useful perspective for putting Chinese hydropower development within the context of Chinese foreign policy statements—while these documents do not directly address hydroelectric projects abroad, they lay out a general strategy for investment abroad and the ways in which the Chinese government views such investment. However, as these sources are official documents, they pertain to the ideology behind such policies and say little about implementation and results, nor do they address any negative effects or controversy of Chinese involvement in other countries.

Among those who analyze Chinese foreign policy, Robert Sutter and Evan Medeiros stand out for considering both Western concerns as well as the domestic spheres of Chinese policy. Sutter gives detailed analysis of Chinese policy up through the early 21st century, examining the political motivations behind many decisions as well as exploring the circumstances that led to the change from relative aggression in the region towards the emphasis on peaceful development. *China’s Rise in Asia*, published in 2005, hints at the changes under the peaceful development strategy and increases in Chinese outward direct investment (ODI), but he does not address the theory itself—the peaceful rise strategy was still being articulated at the time of publication, and thus it is useful largely as a historical reference. *Chinese Foreign Relations* (2008) addresses the ways in which the peaceful development perspective fits into the Chinese grand strategy, and he focuses particularly on the way that China interacts with the global economy as well as the perspectives and goals of interaction with Southeast Asia and the Association of Southeast Asian Nations (ASEAN). While Sutter’s works give great insight into internal decision-making process, they do not cover the responses of those in other countries in

² The “peaceful development” strategy was first called the “peaceful rise” strategy, but the phrasing has transformed over the past decade in response to concerns that advertising China’s growth as a “rise” implies a challenge to the current world order.

any detail, and only begin to address the growing concern and backlash against China's economic and political involvement in the region.

Evan Medeiros gives a more clear analysis of the framework behind Chinese foreign policy, drawing on China's history as a colonized nation to analyze their current strategy. Medeiros emphasizes three lenses for examining Chinese behavior: China's rise to reclaim its role as a major player on the global stage; the belief that China was victimized by both Western powers and Japan and the focus on regaining international face; and a resulting emphasis on bolstering China's security to ensure that other powers are no longer a threat and cannot victimize China again.³ While Sutter focuses on the actions China takes, Medeiros' analysis examines the deeper motivations behind Chinese policies of economic development, cooperation with other countries, and the Chinese insistence on non-interference. He also spends time specifically examining the ways that these ideologies have changed in recent years in response to external concerns and influences, and notes that energy security has become a major motivation for outward economic expansion. Published in 2009, Medeiros' work is also more recent than Sutter's and directly addresses the ways in which an emphasis on peace and cooperation with other developing countries benefits China directly.

While there is a vast body of literature discussing Chinese domestic and foreign policy, the Chinese development of hydropower abroad is so recent that it has yet to be thoroughly addressed. All the few articles that address Chinese hydropower projects abroad are authored by (or rely significantly on) the work of Peter Bosshard, who is best known for his role as the Policy Director of the International Rivers Network (IRN). Bosshard's analysis focuses on China's refusal to adopt international standards for social and environmental assessments on hydropower projects, linking the ways that this negatively impacts their projects abroad to way that

³ Medeiros 2009, xv-xvi.

companies operate domestically. Given his background as a Western academic and activist, Bosshard's analysis of the social and environmental damage of Chinese-funded infrastructure must be taken in context: he spends a great deal of time emphasizing the problems and does not discuss in any depth the positive outcomes in the region from hydropower investment. In addition, Bosshard seems to discount Chinese governmental involvement in pushing companies to invest in foreign markets. Given that many of the Chinese companies investing abroad are state-owned or get loans through government banks, this seems a notable oversight. That being said, his articles give a level of detail on environmental disturbances not specified in newspaper or governmental reports on Chinese aid.

While there are essentially no writings focusing specifically on hydropower as an instrument of foreign policy, Andrew Mertha's 2006 studies on domestic hydropower development introduce a framework that can also be applied in the international realm. Mertha is concerned primarily with the interaction between civil society actors and the state-owned enterprises in charge of developing hydropower. His case studies—looking at one example where public participation against the dams had a successful outcome, one where the outcome was questionable, and one where it failed—give insight into the decision-making process of hydropower companies and the way that they are accustomed to working in China. In examining the success of an anti-dam movement, Mertha notes the particular importance of “framing,” which is essentially the way that actors portray an issue when seeking the support of the broader community.⁴ When examining the movement in Burma against the Myitson Dam and the Irrawaddy cascade, it is important to keep this concept in mind: while anti-dam activists took a number of perspectives, some were far more effective than others.

⁴ Mertha 2010, 14.

Mertha also introduces the term “fragmented authoritarianism,” which refers to a system where the central government makes policies that are then put in the hands of local agencies and departments for implementation.⁵ This often results in notable differences in the way that these policies are implemented or even whether or not they are enforced due to the fact that the central authority’s goals often differ from those of other departments. While Mertha applies this specifically to the case China, the term is also applicable to Burma, where the central government’s power is historically weak. The fragmented nature of the Burmese government will come into play specifically when examining the differences in opinion between the civilian government, which is nominally in charge of the country though supported by the military, and the Tatmadaw, or the armed forces that have been in charge of Burma for the past five decades.

Burma’s political system, while clearly fragmented, is also a relatively recent development: it was only in 2010 that the current president, Thein Sein, was elected. Western critics largely denounced these elections, but Thein Sein’s actions since 2011 in opening up the political sphere to the opposition party and allowing for greater freedom of speech indicate that he is a reformer who genuinely seeks to change the system. Within this context of political change, Jurgen Haacke’s writings from 2006 and 2010 give an important historical lens for examining Burmese domestic and foreign policy. While many analysts focus on the military regime through the lens of human rights, Haacke emphasizes the historical issues of ethnic tensions and a lack of a central government that led to the coup by the Tatmadaw.⁶ These ethnic tensions continue today, and Burmese domestic violations of human rights are largely the result of concerns that the ethnic organizations in control of Burma’s border regions still seek independence and the disintegration of the state. Given that Chinese hydropower development on

⁵ Mertha 2010, 5.

⁶ Haacke 2006, 17.

the Irrawaddy is located in the Kachin State, which is still effectively ruled by the Kachin Independence Organisation (KIO),⁷ these concerns are relevant when considering Burmese desires for allowing dams such as the Myitsone to be built on the Irrawaddy River.

Regarding the Myitsone Dam itself, which is the largest and most controversial dam in the Irrawaddy cascade, very little has been published on the subject. The controversy is still ongoing: as of October 2011, Thein Sein has officially suspended the dam, but China Power Investment (CPI), the Chinese state-owned enterprise responsible for building the dam, is still lobbying for the project to reopen. The Kachin Development Networking Group (KDNG) is one of few organizations that has published articles on the subject—as a collection of local NGOs and other civil society groups, the KDNG’s writings take a relatively strong anti-dam stance. KDNG highlights the negative environmental impacts of the dams with a particular focus on ways in which the changing environment will affect the local Kachin citizens, although they also discuss the impacts that large dams like the Myitsone would have on Burmese citizens downstream.

While the KDNG publications are helpful, they are not released regularly and so news forms the basis for the rest of my analysis on the subject. Given the relatively authoritarian nature of Burma’s ruling military regime, the officially affiliated newspapers—*The New Light of Myanmar* and *The Myanmar Times*—allow insight into governmental perspectives on the dam, but often gloss over issues. *The Democratic Voice of Burma*, *The Irrawaddy*, and *Mizzima* are three online newspapers run by Burmese exiles which provide alternative perspectives on the situation in Burma, often covering items the government affiliated newspapers won’t touch due

⁷ It is important to note that despite its name, the KIO’s policies have changed and the KIO no longer seeks independence but simply desires autonomy within the state of Burma. In order to ensure that this autonomy is respected, the Kachin Independence Army (KIA) is still active in Kachin State, and holds direct control over much of the region.

to political sensitivity and giving additional and more thorough insight into the situation. These papers are more closely linked to the perceptions held by the populace, and it is important to weigh their perspectives just as heavily if not more so than those from officially affiliated sources. Due to the importance of ethnic struggle in Burmese domestic politics, I will also draw on articles from the Kachin News Group (KNG) to frame the perspective of the locals in the Kachin region directly affected by the dams under construction on the Irrawaddy River, keeping in mind that the anti-government assertions are biased and should be contrasted and compared with information from other sources. The news sources cover public outcry against the dam, the 2010 bombing of the dam site, the dam suspension in 2011, and the ongoing controversy over the dam debate and China's influence in Burmese domestic issues.

Chinese Domestic Development of Hydropower

The Chinese role of funding hydropower in Burma relates clearly to Chinese domestic development of hydropower, where China caught international attention and made its mark in the hydropower industry through construction of the Three Gorges Dam. Widely recognized as one of the largest dams in the world, the Three Gorges Dam on the Yangtze River in China is a colossal project: construction of the dam itself spanned more than a decade, the reservoir backs up the Yangtze for hundreds of kilometers, and the dam itself is over two kilometers long. The Yangtze River system is one of the largest rivers in the world both by length and discharge, and the Three Gorges Dam has fundamentally altered the water flow and composition of the river. While the Three Gorges Dam put China on the map as a hydroelectric powerhouse, what is not as widely known is that China has constructed nearly half of the large dams in the world—the United States, coming in second place, lags behind with a mere 14%.⁸ China's construction of large dams stands out not only for the impressive number of dams built, but for the time period

⁸ Wescoat and White 2003, 172.

in which this construction took place—a number of the largest projects have only started construction in the past twenty years, with new projects continuing to be announced each year. Today, major hydroelectric projects on the upper reaches of the Mekong River (*lancang jiang* 澜沧江), the Salween (*nujiang* 怒江) and Brahmaputra (*yaluzangbujiang* 雅鲁藏布江) rival the Three Gorges Dam in size and influence on their own river sheds.

This contrasts greatly with hydropower development in the West, where construction has slowed significantly over the past two decades due to the emergence of widespread concern over the environmental impact of large dams. The World Commission on Dams (WCD) released a report in 2000 analyzing the current state of the hydropower industry, and the results were not promising: in its examination of large dams, the WCD noted that dams regularly fail to live up to expected water and electricity targets, cause pervasive and mostly negative impacts on watersheds and local ecosystems, and cause greater impoverishment of the affected communities while passing the benefits on to other segments of the population.⁹ For a growing body of environmentally and socially conscious developers in the West, this nailed the coffin in the development of large dams. The World Bank—which previously invested heavily in hydropower and other infrastructure—significantly slowed its funding in the first decade of the twenty-first century.

China's entrance into the hydropower market has changed the game: while hydropower development in the West slowed and the focus moved to smaller dams and stronger environmental impact assessments (EIAs), China did the opposite. China's hydropower potential was recognized early in the 20th century, but it was not until the late 20th century that Chinese companies accessed the technology to pursue the larger projects such as the Three Gorges Dam.

⁹ World Commission on Dams 2000, xxxi.

As of 2000, there were over 200 large and medium sized dams, including approximately 20 mega-dams¹⁰, as well as tens of thousands of smaller hydropower stations spread throughout the country.¹¹ This number has just continued to rise in the years since, despite continued controversy over the social impact of the Three Gorges Dam, rising concerns from neighbors over the effects of major Chinese dams on international rivers such as the Mekong or Brahmaputra, and even concerns over the dangers of reservoir-induced seismicity (RIS). The Chinese development of hydropower—both domestically and internationally—can ultimately be attributed to concerns over economic development, addressing heightened tensions over environmental degradation and pollution, and energy security.

From its beginning, the Chinese Communist Party (CCP) advertised itself to the people as both ideologically superior to the capitalist system and as an equalizer, pulling down the exploitative landlord class to improve the lives of all China's citizens. Following the chaos and disillusionment of the Cultural Revolution, the ideological support for the CCP among the population was largely destroyed, and with it the legitimacy of the CCP. Under the leadership of Deng Xiaoping, China underwent a period of reform and opening up (*gaige kaifang* 改革开放). Deng's decision to allow foreign investment in China and permit a degree of capitalism was thus both out of legitimate concern for the low living standards of China's people as well as a political decision to re-orient the CCP's legitimacy around promises of improved living standards for the people through economic success. Deng's policies were radically successful: since China's opening up, foreign direct investment (FDI) has poured in, and China's economy has skyrocketed to the second largest in the world.

¹⁰ A large dam is considered any dam that is larger than 15 meters high. The failure of this term in capturing the impact that a larger dam can have on the environment has given rise to the term mega-dam, which can be defined generally as any dam with walls over 150 meters high, although some smaller dam with large reservoir capacities also fall into this category.

¹¹ Chen 2000, 18.

The promise of economic success has been kept for the millions of Chinese citizens who are firmly in the middle and upper class of society—but not without a price. China’s development has occurred primarily along the east coast, which is more internationally accessible. This has caused skyrocketing inequality: China’s Gini Coefficient—a measure of inequality in a society—reached .412 in 2000 and has not been published since by the government¹², indicating that the income gap has most likely continued to grow. Inequality is increasingly a concern for stability—however, a larger factor for instability that is also related to development is environmental degradation. The coal that supplies most of China’s energy demand not only brings access to modern commodities such as electricity, air conditioning, and television, but it also brings pollution. Air pollution, caused largely by coal use and increasingly by car fumes, has resulted in China receiving the dubious honor of being home to 16 of the most polluted cities in the world.¹³ Not unexpectedly, the inescapable pollution has led to increases in asthma, birth defects, and cancer, among other serious health concerns. This is leading to increasing unrest, with the head of the Ministry of Environmental Protection noting that environmental degradation has become one of the top threats to China’s domestic stability.¹⁴ This has led to both domestic pressure for change and international calls for “greening” China—and hydropower seems to be the natural answer.

Because of the close link between political legitimacy and economic growth, energy security is a major goal of the CCP. China’s economic growth is dependent on a continued increase in available energy. According to Andrew Mertha, “In order to meet demand, local officials build on average a thousand-megawatt coal-fired power plant each week, adding the

¹² Li 2012.

¹³ Economy 2007, 45.

¹⁴ Economy 2010, 91.

equivalent of Spain's entire electrical capacity every year."¹⁵ Given the increased agitation against environmental degradation and the rising prices of fossil fuels in the global market, hydropower is a favorable alternative option. Because hydropower is driven by the water cycle, China considers it to be clean and renewable. Because dams don't directly cause pollution, many developing countries consider them a highly favored alternative to building coal plants. While some studies indicate that the decomposition of trapped organic materials can cause significant emissions of greenhouse gases, China views this amount as unimportant when compared to the burning of fossil fuels necessary to provide the same amount of power. Through developing hydropower, China can both offset some of the pollution it would otherwise emit through the burning of coal and portray itself as an environmentally friendly country by avoiding fossil fuels.

China originally unveiled the "Develop the West" (*xibu da kaifa* 西部大开发) policy, which includes focusing investment on the Western provinces, to address issues of regional inequality. However, as environmental concerns over air pollution continue to rise, hydropower investment has become a key part of this strategy. The ideal locations for hydropower in China are not evenly distributed: nearly 70% of China's exploitable rivers can be found in the southwest.¹⁶ As this overlaps with the regions that are the least developed, hydropower development can both address energy demands for major cities as well as provide jobs, electricity, and investment to underdeveloped areas in the West. Given the governmental support and benefits available to those involved in hydropower infrastructure, competition was fierce, resulting in a "hydropower rush" (*xi he quan shui*) among companies seeking contracts with local governments.¹⁷ While the Develop the West policy was only unveiled in the early 21st century, the emphasis on immediate rectification of inequality resulted in a number of projects

¹⁵ Mertha 2010, 27-28.

¹⁶ Chen 2000, 9.

¹⁷ Mertha 2010, 45.

proceeding without the detailed plans and environmental impact assessments that were involved in the Three Gorges Dam. Considering that even the plans from the Three Gorges Dam failed to consider some notable issues—such as effects on upstream and downstream river flow or the thirty-fold increase in seismological activity caused by rapid movement of water through the gates¹⁸—the lack of prior planning on these recent dam projects will likely have significant and unexpected environmental impacts.

Hydropower as an Instrument of Foreign Policy

China's intensive development of hydropower domestically has international implications: not only is China now viewed as the world leader in the hydroelectric industry, but a number of developing nations—particularly those in Africa and Southeast Asia—are following in China's footsteps and investing in hydropower as an alternative to the use of fossil fuels. And China has not missed the chance to capitalize on this status: as of January 2012, Chinese hydropower companies—including the state-owned Sinohydro, Datang, and China Power Investment groups—were involved in the construction of 304 dams in other countries.¹⁹ As one of China's neighbors, it is no surprise that Burma hosts a number of Chinese dams being built overseas: China is involved in over twenty medium or large scale hydropower projects in Burma,²⁰ many of which are in ethnic minority regions. The scale of these dams varies from small, run-of-river projects to mega-dams nearly the size of the Three Gorges. Both in Burma and elsewhere, Chinese companies funded a significant number of these projects after the host countries failed to receive support from Western companies. A major motivation for many of these Chinese hydropower companies seeking projects abroad is domestic pressure—given the limited locations for viable hydropower even in the water-rich western provinces, competition

¹⁸ Dai, Miao, et al 2010.

¹⁹ IRN “China Overseas Dam List” 2012.

²⁰ Gleick 2012, 132.

drives many companies to look elsewhere. Foreign markets provide an attractive alternative for those companies that cannot compete domestically.

While domestic market pressures and demand abroad are both significant factors in drawing Chinese hydropower companies to other markets, the Chinese government is also involved. China is perhaps unique among major economies in the world in the sense that the government actively encourages domestic companies to invest globally. Since the reform period, China's unparalleled growth has put China in place to not only receive foreign direct investment (FDI) but also to invest some of its capital overseas. Called the "go out" policy (*zou chuqu zhanlue* 走出去战略), major domestic companies are encouraged to invest elsewhere by both the central government and the local business departments.²¹ There are numerous advantages for a company that chooses to do so: investing in other countries will help build prestige, provide access to new markets, and in many cases allow easier access to natural resources. Burma stands out as a primary example of this: while northern Burma is rich in timber, jade, and gold, it is historically underdeveloped. By funding infrastructure such as roads and hydropower stations, Chinese state-owned companies not only improve relations between China and Burma but also leverage their aid against rights for Chinese companies to exploit these natural resources.²²

The go out policy encourages companies to invest elsewhere, but draws on three previously established "policy banks"—the China Export-Import Bank (China Exim Bank), the Agricultural Development Bank, and the China Development Bank²³—to offer loans and subsidies to infrastructure projects in other countries. Because they are state-run organizations, the involvement of policy banks shows that the go out policy is part of China's long-term economic development goals. Hydropower projects abroad receive significant funding—the

²¹ Wangcheng Business Department, 2008.

²² Haacke 2006, 26.

²³ Sehart, 2000.

China Exim Bank funds nearly one sixth of China's hydropower projects abroad.²⁴ When a Chinese state-owned bank provides assistance to Chinese state-owned companies building hydropower in other countries with the support of local governments, these projects must be considered as a factor in foreign policy.

Given the CCP's relatively authoritarian policies, steadfast refusal to accept Western criticism on human rights violations, and occasional anti-West rhetoric, it is understandable that China's growing assertiveness concerns many observers. China's growing involvement on the international stage, long sought from those wanting China to behave as a responsible stakeholder, has more often than not taken the form of vetoing intervention in countries such as Burma or Sudan in the face of Western criticism. From the Western perspective, China's parabolic rise in power and contradiction of Western principles is overturning the natural state of world affairs. Since the advent of direct relations between China and the West, China has been relatively inwardly focused—the height of China's outward expansionism has been relegated to ancient history, covered by years of exploitation and colonization by Western powers. Given this, a China that is active in international affairs seems to be an anomaly. From the Chinese perspective, however, this time period was the aberration: the recent rise of China is viewed by many Chinese as a rightful return to China's role as a great power (*daguo* 大国) on the world stage.²⁵ Given its connotation, the use of the term *daguo* is a powerful reflection of China's ambitions.

That being said, China's leaders have come to understand that this resurgence of power is viewed as a threat, particularly by China's neighbors. This is not without reason: under the

²⁴ IRN "China Overseas Dam List" 2012.

²⁵ Medeiros 2009, 7-8.

leadership of Mao Zedong, while emphasizing the Five Principles of Peaceful Coexistence²⁶ in its official relationships with other governments, China simultaneously supported Communist insurgents under the premise that these were mere party-party relationships. While these policies ceased by the reform period, China's history of aggression and interference causes many Southeast Asian countries to be wary. Throughout the 1990s, most countries in ASEAN viewed China as a security threat due to its disruptive behavior over Taiwan and South China Sea border claims.²⁷ In response to fears of neighboring countries, China began to revise its foreign policy, rolling out the “new security concept” (NSC, *xin anquan guan* 新安全观) as an attempt to defuse concerns by emphasizing common security.

While the NSC emphasized mutual trust specifically among the Asian community, since the start of the 21st century China has extrapolated from these concepts to emphasize its “peaceful rise” (*heping jueqi* 和平崛起) in the global sphere. The peaceful rise strategy, also referred to as the peaceful development (*heping fazhan* 和平发展) strategy, draws on many of the concepts proposed by the NSC—such as cooperation for mutual benefit, non-interference, and equal opportunities for participation in international organizations—and applies them across the board.²⁸ In addition to these concepts, the peaceful development strategy clearly states that China intends to promote a harmonious society on the world stage and that China will not act as an aggressor. In line with these goals, the Chinese government emphasizes foreign aid:

²⁶ The Five Principles of Peaceful Coexistence, first articulated in an agreement between China and India, are as follows: respect for territorial integrity and sovereignty of other states; non-aggression; non-interference in the internal affairs of other states; cooperation for mutual benefit; and, lastly peaceful coexistence between Communist and capitalist systems. These Principles have continued as a mainstay in Chinese foreign strategy, seen in a continued emphasis on non-interference, and have been espoused by many developing countries (UN, 1958).

²⁷ Thayer 2011, 323.

²⁸ Information Office of the State Council, 2011.

“We will enhance unity with other developing countries, deepen traditional friendship, expand mutually beneficial cooperation, [and] sincerely help the other developing countries achieve independent development by providing aid and making investment and uphold their legitimate rights and interests as well as their common interests.”²⁹

By promising mutual benefits from aid agreements, China is emphasizing that it does not seek to exploit other countries, implying a contrast to Western powers and the exploitative practices of Western corporations.

China’s aid is also contrasted with the West, because unlike Western aid China’s aid does not come with a condition of improvements human rights or intensive environmental impact assessments for infrastructure projects. In a meeting with a United Nations (UN) development meeting, Hu Jintao emphasized these differences: “The path to successful development lies in a country’s independent choice of the path and mode of development suited to its national conditions.”³⁰ China’s aid is thus explicitly portrayed as an alternative to the coercive methods of Western organization, and Hu’s statements emphasize that unlike the West, China understands that economic development is the most important aspect of development for many poverty-stricken countries. China’s own success lends strength to the argument that economic development must happen before taking human rights or the environment into consideration—and this form of FDI has proven popular in many countries. Burma is a visible example, receiving notable Chinese aid and investment in infrastructure even in the face of vigorous sanctions by Western countries and multiple pushes by the United States and Great Britain for United Nations involvement. China’s emphasis on non-interference has won support from many developing countries in Southeast Asia and Africa, where any aid from Western countries comes with conditions and is often viewed as exploitative.

²⁹ Ibid.

³⁰ Reilly 2012, 74.

In contrast, China has touted its aid strategy as a “win-win” (*huli gongying* 互利共赢) for itself and other developing countries, where they can mutually benefit from such actions. By providing aid and investment, China is marketing itself as a responsible international power as well as supporting Chinese business abroad.³¹ When this aid is examined more deeply, however, there are more differences between Western and Chinese aid than the lack of conditions under which it is granted. Given their closeness to China both geographically and culturally, ASEAN nations are a natural choice as beneficiaries of foreign aid and investment from China. However, from 1995-2003, mainland Chinese investment in ASEAN amounted to approximately 0.3% of received foreign direct investment, compared to 3.2% from Hong Kong, 16% from the United States, and almost 30% from the European Union.³² For developing countries, the importance of Chinese aid is not only the relief that it brings currently but the underlying promise that aid will increase as China’s economy grows. The prolonged financial crisis has raised questions among many recipients as to whether the aid will come through in the extent expected,³³ as China has slowed down its economic targets for the future and is still dealing with internal development.

Perhaps more damaging are the environmental and social impact of many Chinese infrastructure projects. While Western aid often takes the form of grant money, Chinese aid notably embraces non-traditional forms, including debt-forgiveness of poor countries, soft loan assistance, free infrastructure projects, and joint ventures with Chinese companies.³⁴ These differences in strategy can be attributed both to China’s role as a developing country and the goals of the peaceful development strategy. Given the issues of development that China still faces at home, China has less money directly available to send abroad as grants than most of the

³¹ Ibid: 72.

³² Zhang 2006, 554.

³³ Naidu 2010, 35.

³⁴ Sutter 2008, 107.

Western countries, which necessitates either providing smaller amounts of money or finding an alternative form of support that will not be viewed as an economic loss. Free construction projects are perhaps one of the most efficient ways of supporting development in other countries while bringing tangible economic benefits back to China: most aid comes with the condition that a significant number of the construction contracts are given to Chinese companies.³⁵ Given China's relative monopoly on hydropower in recent years, it should come as no surprise that hydropower makes up a significant amount of these infrastructure projects.

Why Burma?: Sino-Burmese Strategic Relations

These noticeable differences between Chinese and Western aid cannot conceal perhaps the biggest similarity between them: that the beneficiaries of the aid are largely those countries rich in resources considered vital to Chinese interests, specifically oil and natural gas. China imports an amount of fossil fuels matched only by the United States and Japan,³⁶ and as a relative latecomer to the game, China's access to these strategic resources was relatively limited. Competition with Western powers drove China to seek fossil fuel supplies elsewhere—and this, just as much as access to iron ore and other resources, is the driving force for Chinese investment in countries like Angola and Sudan in Africa, which are rich in untapped oil reserves due to long-time civil wars, and Burma, which has vast and under-utilized gas reserves.³⁷ While energy security concerns drive Chinese investment in both Africa and Southeast Asia, Burma is perhaps a unique case given the additional importance of Burma's shared border with China and its strategic importance.

Burma's border with China allows easy access for both government-sanctioned as well as illegitimate investment and trade. Burma is widely recognized for its cultivation of poppies, and

³⁵ Reilly 2012, 77.

³⁶ Medeiros 2009, 39-40.

³⁷ Kurlantzick 2007, 91.

international opium trafficking: the CIA recognizes Burma as the world's third largest producer of opium.³⁸ Opium use has been an issue in China for centuries, and the proximity of Burma's opium fields mean that a significant amount of the black market trade is with China. A number of the ethnic groups are associated with the drug trade, and drug lords have significant political sway in the unregulated border regions. The overwhelming poverty pushes locals to seek any means of income possible, and the lack of centralized control over drug policy makes opium an attractive option. This becomes a significant security concern for neighboring Chinese provinces, necessitating Chinese economic involvement in the region.³⁹ This results in a push from China to address poverty and decrease the amount of opium flowing into China.

While health issues are a concern for Chinese authorities in Yunnan, Beijing's primary interests focus not on Burma's border with China but on Burma's location at the crossroads between the Indian Ocean and Southeast Asia. The majority of China's oil imports from Africa and the Middle East must cross the Indian Ocean before passing through the Malacca Straits and then up through the South China Sea to reach Chinese ports. While Chinese influence in South Asia is growing, India has stepped up naval modernization and exercises in the Indian Ocean, which it regards as its rightful sphere of influence.⁴⁰ India's navy is powerful enough that, in the event of a disagreement, India could block Chinese shipments of oil through the Indian Ocean. Even if the Indian Ocean remains clear, the Malacca Strait is of critical importance for China's energy security as a trade route. Currently, approximately 85% of Chinese oil imports pass through the Malacca Strait.⁴¹ In the event of an embargo by Japan or the United States, China would be hard-pressed to maintain energy flow and economic growth. Chinese investment in

³⁸ CIA 2012.

³⁹ Hak and Zheng 2009, 625.

⁴⁰ Fravel 2011, 79-80.

⁴¹ Hak and Zheng 2009, 627-629.

Burmese infrastructure allows China to circumvent these limitations: building a pipeline through Burma would allow for an alternate access point, and close relations between the Chinese and Burmese militaries allow for the possibility of monitoring the Andaman Sea.⁴² The prevalence of gas fields within Burma also allow for an alternative supply that is more easily monitored and more secure than those coming from the Middle East or Africa.

While Burma is best known in the energy sector for its vast, largely untapped sources of natural gas, hydropower also plays a significant role in domestic energy production. Burma is water-rich, as two major rivers in Southeast Asia—the Irrawaddy and the Salween—flow from the mountainous regions in the north to the Andaman Sea and Indian Ocean. Given the Burmese push for economic development and increasing domestic demand for electricity, Chinese development of hydropower was welcomed by the military regime. Myanmar began accepting loans from China in 2000 to fund hydropower projects,⁴³ and government officials view hydropower as the best option for developing the domestic energy grid. Chinese hydropower projects are located largely in the Burmese highlands, which are also the home to gold deposits, forests with significant hardwood reserves, jade, and other precious metals and mineral resources. The electricity produced through hydropower development will in part support extraction of these resources, many of which are exported primarily to China. From this perspective, Chinese investment in Burmese infrastructure can to a certain extent be linked back to China's "Develop the West" policy, as the benefits are exported primarily to Yunnan province.

While these tangible exports are the most obvious, the water itself must be viewed as a coveted resource. Similar to China's "Develop the West" strategy in the provinces of Yunnan,

⁴² Kolas and Tonneson 2009, 10.

⁴³ Haacke 2006, 29.

Tibet, and Sichuan, there is a significant emphasis on developing the Burmese highlands to gain access to hydroelectricity. To put Burma's hydropower potential into perspective, Burma's hydroelectric potential is estimated at 109 GW.⁴⁴ China has offered to fund hydroelectric stations which would produce 20 GW, which is more than ten times the amount of electricity used within Burma today.⁴⁵ And, like many of the other resources that China is able to exploit, the electricity produced via hydropower can also be exported back to China. In the case of hydropower, Chinese firms adopt what is known as the Build-Operate-Transfer (BOT) method: China will fund construction and build the dam, own and operate the dam for a set time period, and then transfer ownership and use to the host country. This allows China to benefit throughout the process by contracting with Chinese companies for supplies and labor and then profiting from the sales of electricity produced. In the case of the dam cascade on the Irrawaddy River, Yunnan United Power Development Co. Ltd. has an 80% equity and 90% profit share in the project, as well as rights to 85% of the energy produced.⁴⁶ This is a significant amount of energy, particularly when paired with the dams planned on the lower reaches of the Irrawaddy, its tributaries, and the Salween River.

The benefits to China from the hydropower development are clear—and Burma, which has been under strict sanction by the United States and the European Union for nearly a decade, welcomes the investment. The most obvious benefit for Burma is the direct economic development that Chinese funds bring to the country. The long-term civil war over ethnic conditions wreaked havoc for many regions, particularly the resource-rich border states, and today approximately a third of the Burmese population is below the poverty line.⁴⁷ While the

⁴⁴ Gaung 2008.

⁴⁵ Myint-U 2011, 111.

⁴⁶ Union of Myanmar 2008.

⁴⁷ CIA 2012.

foreign economic sanctions and mismanagement of the money by elites—most of whom are closely connected to the military regime—are prime causes for the widespread poverty, domestic issues with electricity generation and lack of infrastructure posed problems even for interested investors. Given these lacks, Burma's economy is focused on agriculture, which captures 43% of the GDP and employs approximately 70% of the population.⁴⁸ Recent investments in infrastructure allow for growth in the services and industry sectors, and as a result the percent of GDP from industry has risen ten percent since 2000.⁴⁹ While the economic growth is important, just as important is the fact that poverty estimates have actually risen by about ten percent.⁵⁰ While this can be partially attributed to changes in available sources for estimates, poverty has likely risen due to the fact that money from increased industry has been funneled to those families connected to the military regime rather than dispersed across the region.

As anger over inequality continues to simmer and the demand for electricity among the elites and industrial sectors continues to rise, exploiting the rich water sources has become a major goal of the government. Since the Burmese regime has undergone a transformation from a completely authoritarian regime to a (nominally) civilian-run government, the desire of the people for economic growth to alleviate poverty will necessitate a rising focus on electricity to meet their demands. The current electricity production is not sufficient, and there are regular shortages even in major cities. While Burma has access to large gas reserves, these are primarily exported to other countries. The energy produced through large hydropower projects is often diverted to military camps and elites, leaving the populace without reliable energy sources. For this reason President Thein Sein can emphasize his interest in foreign investment in hydropower: "Electricity is a sine qua non for becoming [an] industrialized nation.... as the country has natural

⁴⁸ CIA 2012.

⁴⁹ CIA 2000; CIA 2012.

⁵⁰ Ibid.

rivers and creeks to produce renewable energy, the Tatmadaw government [has] made efforts to generate hydropower [by] inviting foreign investments.”⁵¹ Even if China owns the rights to the vast majority of the electricity produced by large dams, Burma will still have rights to the remaining 15%. Given that government officials have stated that they want Burma to depend solely on hydropower for domestic energy consumption by 2030,⁵² it is not surprising that Chinese investments in hydropower are welcomed.

In addition to satisfying domestic energy and economic concerns, Chinese-funded dams will give Burma greater influence over the relatively autonomous border regions. Viewed through the lens of the Burmese national security imperative, increasing influence in the border regions will help address the historical issue of ethnic tension and national solidarity. The last real census in Burma estimated that the Burman ethnicity⁵³ made up only 60% of the population,⁵⁴ with the remaining 40% split among minority groups including the Shan, Karen, and Kachin. Cultural and religious differences have caused significant tension between these ethnic minorities and the central government—the Kachins, for instance, are Christians, and the creation of the Kachin Independence Organisation (KIO) is directly connected to laws passed by the central government promoting Buddhism as the state religion in the late 1950s.⁵⁵ For the Burmese government, the creation of groups like the KIO were viewed as directly threatening the independence that Burma had only recently received after centuries of colonization by Great Britain, and were a primary factor in the military takeover in the mid-twentieth century.

⁵¹ Thein Sein 2011, 1-2.

⁵² Probe International, 2006.

⁵³ The term “Burmese” refers to the general population of Burma, while “Burman” refers specifically to the ethnic group.

⁵⁴ Lintner 2003, 175.

⁵⁵ Wintle 2007, 188.

Officially known as the State Law and Order Restoration Council and later as the State Peace and Development Council (SPDC), the military regime continues to view ethnic conflict as the greatest threat to national unity: two of their “Three Main National causes” deal with preventing disintegration of the country and of national unity.⁵⁶ The continued existence of groups such as the KIO is viewed as a threat—while most groups have signed cease-fire agreements with the SPDC, many ethnic minority regions are still largely under the control of these groups. While the Kachin State—home to seven major Chinese-funded dams on the Irrawaddy River—is still under the control of the KIO, Tatmadaw officers are involved in supporting the Myitsone Dam. As early as 2010, the construction of the dam was billed as a major infrastructure project to help the Kachin region, and the governmental connection was clear through an inspection by Ministry of Defense officials appearing on the opening page of the state newspaper in autumn of 2010.⁵⁷ Such visits show a blurring of the line of control—while some evidence shows that these visits are permitted by the KIO, the sheer number of dams currently under construction in the region allows for a stronger military presence. Chinese investment and ownership of these dams directly serves the Tatmadaw’s domestic goals of economic growth and increasing influence in minority regions address the SPDC’s domestic security concerns.

While the direct benefits of allowing China to develop hydropower in Burma are linked to domestic goals, the foreign policy strategy of the SPDC also has an impact. Given the military regime’s authoritarian policies and international controversy over ethnic conflicts, it is unsurprising that many Western countries have taken a harsh stance on Burma’s government. This is seen both in the decision by many English speaking names to continue calling the country

⁵⁶ Haacke 2006, 17.

⁵⁷ “Maj-Gen Myint Soe” 2010, 1.

Burma, despite the government officially changing the name to the Republic of the Union of Myanmar, as well as the prevalence of international sanctions. The United States, European Union, and Canada are notable for not only refusing visas to families related to the Tatmadaw, but also for putting significant restrictions on trade and aid to Burma.⁵⁸ Given the prominent role of the United States and a number of European countries in the United Nations (UN), it is unsurprising that Burma has faced the possibility of UN intervention, ranging from further economic sanctions to possible involvement in the humanitarian crisis occurring within the borders of Burma. Each time a proposal for further involvement was raised, China has used its power to block these movements: one of China's six uses of the veto since joining the United Nations Security Council (UNSC) in the 1970s was used in 2007 to block a UN call for political change in Burma.⁵⁹ While Burma has strong economic ties to India and Thailand as well, China's position as a permanent member of the UNSC makes it Burma's most valuable ally on the international stage. Prior to the unexpected transition starting in 2010, Burma depended on China to defend its interests in the UN⁶⁰ due to external pressures. Given these deep connections, it is unsurprising that Burmese leaders are willing to grant China desired hydropower and gas pipeline projects: the hydropower projects can be seen as a repayment for aid in the United Nations.

Environmental Implications of the Myitsone Dam

The benefits of the dam projects for both China and Burma are clear—but any dam project must be viewed through the lens of environmental and social impacts, and these are far more controversial. The Irrawaddy river basin dominates the map of Burma, covering nearly

⁵⁸ BBC 2009.

⁵⁹ Medeiros 2009, 187.

⁶⁰ Haacke 2010, 119.

61% of Burma's land area.⁶¹ The Irrawaddy itself starts at the confluence of the Mali and N'mai Rivers in Kachin State, running south through Burma to form an expansive delta emptying into the Andaman Sea. As of 2008, Myanmar was planning to build seven dams on the upper reaches of the Irrawaddy River, which would generate approximately 17,000 MW of energy.⁶² As the major waterway in Burma, the Irrawaddy is fed by major rivers: the Chindwin, Shweli, and Taping Rivers. While the Irrawaddy River dams are controversial, it is important to note that the tributary rivers are also being developed. Thus the Irrawaddy River cascade cannot be viewed independently from planned dams on the tributaries.

Given the inhibitive cost of large dam projects, the Burmese government cannot afford to develop hydropower without support from large banks. Given the Tatmadaw's human rights record, most Western organizations will not get involved in the country, and so the SPDC turned to China for support: China Exim Bank, the China Export Credit Insurance Corporation, the Construction Bank of China, and the Industrial and Commercial Bank of China all entered into negotiations for supporting construction of the Irrawaddy cascade.⁶³ When negotiations were finalized, the two companies primarily responsible for building the dam were the Chinese Power Investment Company (CPI) and the Asia World Company. As Sinohydro and Gezhouba are involved as contractors, we see that the corporations involved are some of the biggest development groups in China,⁶⁴ as well as Asia World Company, which is a Burmese drug-cartel turned development company. CPI is one of the largest energy investors in China, involved in not only hydropower but also nuclear energy and other alternative energy sources.

⁶¹ KDNG 2007, 7.

⁶² Union of Myanmar 2008.

⁶³ KDNG 2007, 18.

⁶⁴ IRN "Overseas Dam List" 2012.

CPI operates directly under the leadership of the State Council⁶⁵—this connection implies that the Chinese government has significant sway over the investment decisions that CPI undertakes. Given the governmental pressure on domestic companies to “go out” it is no surprise that CPI is investing in the Irrawaddy Dam cascade in Burma, as this project—however, given the scope of the projects and the costs, CPI would need to get permission from higher ups in order to go ahead. Generally speaking, the State Council must approve any overseas projects which cost more than \$US 200 million,⁶⁶ and this includes the majority of large dams. Clearly, the Chinese government fully aware of the plans for the Irrawaddy dam cascade, as well as holding financial interest in the project since it is funded through a state organization. CPI plans for the Irrawaddy River involve seven large dams: the Myitsone, Laik Zar, Yen-an, Khaunglanphu, Phi Zaw, Wu Sauk, and Chi Phway,⁶⁷ with much of the implementation put in the hands of the Burmese government and Asia World Company.

Environmentally speaking, large dams are recognized for negatively affecting the quality of the water trapped in reservoirs. The amount of water impounded by a large dam is not insignificant: the Myitsone Dam reservoir will cover an estimated at 260 square kilometers,⁶⁸ flooding the low-lying areas along the contributing rivers. Pollution in reservoirs generally comes from two sources: the degradation of organic materials that are part of the flooded regions and human impact through the absorption of chemicals from habitations. This is significant in the case of the Myitsone Dam for two reasons: the first is that the Myitsone Dam is in a region generally classified as rainforest. Looking at a map of the Irrawaddy River, forest covers nearly 60% of the Irrawaddy basin, with the majority of the forested area being in the northern regions

⁶⁵ CPI “Corporate Profile” 2012.

⁶⁶ McDonald et al. 2008.

⁶⁷ Union of Myanmar 2008.

⁶⁸ BANCA 2009, 35.

along the Irrawaddy and the M'kai and N'mali rivers.⁶⁹ Should the Myitsone and other six dams be completed, much of the area flooded as the reservoir backs up the river would contain at least some organic material. CPI has noted that the Myitsone reservoir would inundate approximately 70 km² of farmland and trees,⁷⁰ but CPI argues that this is insignificant compared to the coverage of the entire basin.⁷¹ Given the Irrawaddy Basin's size, this is true—however, when comparing the amount of forested area to the size of the reservoir, it becomes a more notable issue. As organic material is trapped in the reservoirs, it undergoes organic decomposition—similar to the burning of fossil fuels, this decomposition releases methane and carbon dioxide into the atmosphere.⁷² Because the bacteria that decompose organic material are anaerobic, this decomposition can alter the quality and chemical composition of the water.

Just as notable is the human impact on the dam: areas habited by humans and worked as farmland often contain significant amounts of pollutants. The reservoir of the Myitsone Dam alone will flood many villages, in addition to farmland and a region where gold mines are common.⁷³ While the villagers have been relocated, some of the infrastructure—roads, waste services, pipes, and even some buildings—will remain behind, and when flooded will also release chemicals into the water. More importantly, the region is already known for significant build-up of mercury in the waters due to processes used by the gold mines. This is significant because the bacteria that feed off organic material sitting in reservoirs also convert mercury into methylmercury,⁷⁴ which is toxic to humans and also has negative effects on wildlife such as fish and birds. When combined with the pH changes that can occur from the changes in chemical

⁶⁹ Water Resources eAtlas 2003, 1.

⁷⁰ Changjiang Survey 2010, 30.

⁷¹ Changjiang Survey 2010, CPI Publication Note.

⁷² Hunt 2004, 206.

⁷³ BANCA 2009, 35.

⁷⁴ KNDG 2007, 42.

composition due to pollution from human habitation, methylmercury can have significant effects on fish populations in the region.

Toxicity is an issue in any river, but the Irrawaddy River and basin are particularly susceptible to changes given the high biodiversity in the region. The Irrawaddy River's upper reaches are located in what the World Wildlife Fund calls one of the "Global 200" priority regions for environmental protection,⁷⁵ indicating that it is an overlap of multiple hotspots for freshwater, avian, and mammal life. The Irrawaddy is particularly known for bird and marine life: there are four endemic bird spots along the course of the river,⁷⁶ indicating that many of the birds along the Irrawaddy River are not found anywhere else on earth beyond the confines of specific regions on the river. While fish species are plentiful, the Irrawaddy Dolphin—one of only four species of river dolphins in the world—was originally named after the river and continues to survive in the waters today. The Irrawaddy dolphin is perhaps unique in the sense that Burmese fishermen have trained them to cooperatively fish the river—however, the population has declined significantly over the past century, and the dams will cause further challenges to the dolphins through the impact of pollution on the fish population.

While the avian and mammal species in the region are dependent upon the fish, the fish in turn are dependent upon the river—and rising toxicity, changes in water temperature, and changing the waterscape of the river all have negative impacts on the fish. Dams, by their nature, obstruct the flow of water—this often results in a transformation of the water ecology downstream due to temperature changes. During the winter, the temperature of the water will not alter greatly—however, due to water's high thermal capacity, the water in the reservoir will remain colder for a longer period of time during the spring, and when this water flows

⁷⁵ Olson and Dinerstein 2002, 201.

⁷⁶ Water Resource eAtlas 2003, 2.

downstream it will maintain a cooler temperature than normal. This will have a significant impact on the fish species downstream: young fish are sensitive to temperature changes, and the changes in water temperature will lengthen the growth period of the fish, resulting in lower reproduction and ultimately fewer fish.⁷⁷ Given the importance of fish in the food chain, this will have significant impact on the humans, mammals, and birds that depend on the fish as food.

Dams change both the water temperature and the level of silt carried by water passing through the dam. As water collects in a dam reservoir, much of the sediment suspended in the river will settle to the bottom of the reservoir before the water passes through the turbines. Over time, this raises the floor of the reservoir and decreases the carrying capacity of the dam, decreasing its effectiveness and shortening the lifespan of the dam. This has already been seen as a major issue for Chinese dams on the Mekong River, and is likely to be a more serious issue for the Irrawaddy River due to the high rate of sedimentation: “The Irrawaddy (Ayeyarwady) River of Myanmar is ranked as having the fifth-largest suspended load and the fourth-highest total dissolved load of the world’s rivers.”⁷⁸ This high rate of sedimentation means that the Irrawaddy dams will likely collect sediment more quickly than average dams. As Chinese hydropower companies have shown a tendency to underestimate the sediment deposit rates in the past, the possibility that the Irrawaddy dam cascade will have a lifespan no longer than fifty years is not impossible.

This is significant for Burmese due to the designed lifespan of the dam. The BOT method of construction means that China will maintain ownership over the dam for a set time, reaping the benefits until ownership transfers to Burma. The agreed length of Chinese ownership in the

⁷⁷ Changjiang Survey 2010, 166.

⁷⁸ Robinson et al. 2007, 629.

case of the Myitsone Dam is 50 years.⁷⁹ Given the concerns about sedimentation and dam life spans, this raises concerns that Burma would inherit not a dam in pristine working order but one which would need to be decommissioned less than ten or fifteen years after the transfer of ownership. Many locals already feel that the dam is exploitative: “Part of the perception... is that the dams offer an opportunity for growing Chinese cities to acquire cheap electricity while imposing negative social and environmental impacts on Myanmar.”⁸⁰ Given that these concerns already exist, the sense that the people are being exploited can only rise in response to concerns of the life-expectancy of the dam.

The sedimentation rates not only lower the lifespans of the dams themselves, but also have significant effects on those living downstream. Because the water has deposited much of its normal sedimentation load while sitting in the reservoir, after it passes through the turbines to continue its flow downstream it will pick up sediment. The only place that this sedimentation can be taken from is the riverbanks, which means that erosion along the Irrawaddy will become an increasing issue.⁸¹ This erosion will threaten the livelihoods of those living downstream—and in this case, the Irrawaddy’s role as a major transportation hub and the sheer amount of space that it occupies on the Burmese geography make erosion along the riverbanks a serious concern.

The sedimentation and water flow changes can also have significant impact on agriculture downstream. Sediment carries vital nutrients for plants, and when the Irrawaddy floods it deposits these nutrients and increases productivity along the flood plains and in the delta. Approximately 30% of the Irrawaddy basin is devoted to agriculture,⁸² with nearly 60% of

⁷⁹ CPI “Basin Planning” 2011.

⁸⁰ Gleick 2012, 132.

⁸¹ KNDG 2007, 33.

⁸² Water Resource eAtlas 2003, 1.

Burma's rice production coming from the Irrawaddy delta alone.⁸³ Given that agriculture makes up a significant part of the Burmese economy, the impact of these dams cannot be taken lightly. If the Irrawaddy and its major tributaries are dammed, it is likely that the water flow to the ocean will drop significantly due to higher regulation of the water flow. When the water flow out into the ocean is slowed, this allows for the process of salinization of the delta region to begin as sea water intrudes. This has been seen in Vietnam as a result of dams on the Mekong River and its tributaries, where the rice production in the Mekong Delta has dropped due to the changes. Taken together, the decrease in nutrient deposits and the increased salinization of the delta could threaten Burmese food security.

Perhaps more serious a concern for those in the Kachin State where the dams are under construction is the increased likelihood of earthquakes in the region. Burma is seismically active: a number of fault lines run north to south through Burma, and minor earthquakes occur regularly. The Sagaing fault, which runs through major cities, is located less than 100 kilometers away from the site of the Myitsone Dam. However, while China Power Investment's EIA noted that there were active fault lines nearby that had the capability to produce violent earthquakes, there was no information on how the dam design would be strengthened to withstand such pressures.⁸⁴ In response to further pressures, CPI analyzed the region and announced that:

The study area is located in the relatively stable Myitkyina Fault Block, where the seismic activity is weak, there are no records of any $M > 6.0$ strong earthquake.... the Upstream Ayeyawady Hydropower Projects are located in the relatively stable area against the background of intense regional tectonic activity, and none of the project dams crosses any active fault. The dams are safe.⁸⁵

While this is technically true, CPI is ignoring the fact that the nearby Sagaing Fault—which was *not* included in its analysis of the local Myitkyina Fault Block—has experienced numerous major

⁸³ KNDG 2007, 9.

⁸⁴ Changjiang Survey 2010, 41-42.

⁸⁵ CPI "Introduction of Seismic Safety" 2011.

earthquakes. While the local faults may not have caused major earthquakes, risk of earthquakes along the Sagaing fault “increases steadily to the north in Kachin State”,⁸⁶ where earthquakes up to 8.0 magnitude have been experienced in the past.

An earthquake compromising the Myitsone Dam would be catastrophic for Kachin State residents: the state capital of Myitkyina lies less than 50 km downstream, and flooding due to dam collapse would be extremely destructive. The locals are already cautious about flooding because it has happened before: in early 2006, the Kyeinkran Kha Dam—previously the largest dam funded by the Tatmadaw in northern Burma—collapsed, killing five people and flooding the streets of Myitkyina.⁸⁷ Citizens’ concerns have focused on the history of earthquakes and dam collapses, but the fact that large dams have the capability to induce earthquakes cannot be ignored. Called reservoir-induced seismology (RIS), the weight of large reservoirs causes extra pressure on fault lines, triggering earthquakes. While this concept is not new, it has garnered interest since 2008, when scholars linked a major earthquake in Sichuan that killed tens of thousands of Chinese citizens to the presence of the nearby Zipingpu Dam. According to RIS scholars, the depth and volume of the reservoir are the largest factors in RIS, with dams higher than 100 meters tall posing the most risk.⁸⁸ RIS dams do not have the pressure necessary to cause dams on their own—but when built near existing fault lines, they can exacerbate underlying weaknesses and cause stronger earthquakes than experienced previously. The Myitsone’s dam wall is estimated at 152 meters and the depth of the dam increases to nearly 300 meters in the upper reservoir.⁸⁹ The Myitsone’s proximity to a number of fault lines makes it likely that at least moderate RIS would be noted in the region as the dam fills and releases water.

⁸⁶ KNDG 2007, 35.

⁸⁷ KNG 2007.

⁸⁸ IRN “Earthquakes Triggered by Dams” 2012.

⁸⁹ Tun Tun 2011.

CPI has not addressed the possibility of RIS, and CPI's apparent indifference towards local concerns over dam breakage concerns many locals. When interviewed, one Kachin leader asked, "Who can give us a guarantee that the Myitsone Dam will never break? The Chinese leaders or the Burmese leaders?... I think the dam is being built for two reasons: first, for generating electricity and second for China to control Burma. The dam is being built to control security within Burma; it's like planting a ticking bomb."⁹⁰ While the interpretation of the Myitsone Dam as a project intended as a future threat to Burmese security is unrealistically critical of Chinese intent, the fact that a Kachin leader asserts it shows that China's failures to address local citizens have had a far-reaching impact on the way that Burmese citizens perceive Chinese business practices in the area.

This resentment, while flaring up most significantly over the hydropower issue, is not new: Chinese demand for resources from the region has caused damage for many years. Kachin State is rich in both jade and teak, both of which are in high demand in China. In recent years, forest cover in Burma has dropped due to Chinese demand for teak and other hardwoods—this deforestation, while the result of unsustainable domestic practices, can be clearly linked to the intense Chinese demand.⁹¹ When riverbanks lose forest cover, they also tend to increase siltation because the roots of the trees no longer secure the loose soil, which can have widespread impact both on sediment deposits in dams as well as the quality of the water, which in the case of the Irrawaddy is used for irrigation. Like teak harvesting and gold mining, jade was also exploited by the local Kachins from an early time—however, as Burmese and Chinese investors moved into the region, the profits seen by the locals decreased significantly. Nearly 70% of the profits of jade trade today go directly to Chinese businessmen, with only about 5% reaching the local

⁹⁰ Mizzima "A Kachin leader's view on Myitsone Dam" 2011.

⁹¹ Thaung 2007, 271.

Kachins.⁹² And yet the locals are those needing to deal with the environmental effects of mines, ranging from pollution to Chinese companies dumping slag in areas where it disrupts water flow to the river. The result of such practices is that locals believe Chinese businesses in the Kachin region simply do not consider the environmental impact of their actions.

Social Impacts of the Myitsone Dam

This perspective has become increasingly common regarding the social impact of Chinese business practices as well, and this is clearly evident in the case of the Myitsone Dam relocation efforts. The Myitsone Dam alone will require the relocation of between ten and twenty thousand people, most of whom belong to the Kachin minority and do not wish to move. Part of the tension is due to religious concerns. The government, which is forcing villagers to relocate for the dam reservoir, endorses Buddhism as the state religion, while the Kachin are mostly Christian. For the Kachins, the land their churches stand on is considered sacred, similar to a Buddhist stupa or pagoda. Moving these holy sites is abhorrent to many,⁹³ and so military injunctions to move the crosses has angered many. While these policies generally upset only the villagers, the Tatmadaw has shown remarkable cultural and religious insensitivity in the way that they have handled destruction of the villages. By using forced labor from the nearest major cities, they have heightened ethnic tensions by requiring ethnic Kachins to tear down the homes and churches of their fellow Kachins.⁹⁴ This serves to unite the Kachin minority in anger over its treatment at the hands of the Tatmadaw, as the majority of the Tatmadaw officers and SPDC are of the Burman majority and are practicing Buddhists.

While cultural tensions build over the religious issue, there is also a common perception among the Kachin that neither the Burmese government nor CPI considers the economic losses

⁹² Perry 2008, 167.

⁹³ Mizzima “Kachin State chief minister” 2011.

⁹⁴ Mizzima “Kachins forced” 2010.

that villagers will face. Many Kachin are engaged primarily in agricultural production for their livelihoods, and the loss of approximately 2000 acres of farmland to the reservoir concerns many.⁹⁵ This is not only because they doubt the quality of the land they will be given for replacement, but because there is lack of transparency and clarity in the ways that compensation will be given. The government generally requires that a title be shown in order to receive compensation for lost land.⁹⁶ Given the history of civil war in the Kachin area, it is unsurprising that many farmers were either never given titles to the land by the Burmese government or have lost the titles through the civil war years. This means that many farmers, while in possession of significant farmlands or orchards, will not receive any monetary compensation at all.

With many farmers losing their access to land during the relocation process concerns over unemployment are on the rise. While CPI touts its investment in the projects as a factor in economic growth, it is notable that there are few Burmese locals hired in the construction of the dams. Rather than hire Kachin residents and support the economy, China has imported approximately ten thousand workers to build the Myitsone Dam.⁹⁷ This has become a notable trend in Chinese infrastructure projects in other countries, and it is one that is becoming increasingly fricative with locals. When the government and CPI announced that they intended for the hydropower projects to benefit locals, it was generally assumed that investment would flow into the local economy through the hiring of unskilled workers and supplies. However, many Chinese companies will import not only Chinese workers but all necessary equipment and construction materials from China in order to boost the domestic economy.⁹⁸

⁹⁵ “Dam forces relocation of 60 villages” 2009.

⁹⁶ KDNG 2009, 11.

⁹⁷ Myint-U 2011, 111.

⁹⁸ Chellaney 2011, 63-64.

These policies are increasingly viewed as exploitative by the locals, and when paired with the environmental damage of past mining operations many locals are actively angered. When interviewed, one noted that the Chinese “think they can do anything here by paying money... They tell us ‘Move your village... we will pay you 300,000 to 400,000 kyat [\$US 395-500] and you go and stay elsewhere for a while’ and everyone has to nod or deal with their threats.”⁹⁹ It is important to note that while locals are not against Chinese investment, they are angry at the way in which Chinese businesses implement their investment schemes. Thus the tension, while rising, is still subtle: anger at Chinese is more tangential, with anger more clearly directed against the Burmese government. When paired with increased ethnic tensions and anger over forced relocation, it is easy to see why locals feel justified in their anger.

While CPI is not directly involved in the forced relocation of villages, they are linked through their cooperation with the government as well as their insistence that contrary to popular experience the hydropower cascade will bring economic growth to the region and improve the lives of relocated villagers. The President of CPI, Lu Qizhou, has argued that the relocation movement has been a great success: “The standard of living for the relocated villagers is better than before... now they are satisfied with their living conditions.”¹⁰⁰ However, while Lu insists that the relocation effort has improved the lives of villagers, this would be a notable exception to the general trend that relocation projects generally lead to an increase in poverty. Indeed, according to the comments of one villager, CPI seems to be willfully ignorant of the true situation: “There is no water at the farmland they gave us... there is no land left to grow vegetables for family curry. There is no land for long term crops as well. Life is very terrible in here. Although we would like to go back to our original village, the village has already been

⁹⁹ Htwe 2012.

¹⁰⁰ China News 2011.

destroyed because it is located near the dam site..."¹⁰¹ Generally speaking, land only remains unoccupied because it is less desirable due to lack of fertile soil or easy access to water. Even with the benefits of infrastructure and housing that CPI has built, the lower quality of the new farmland will cost many Kachin their livelihoods.

As a result of these concerns, the Kachin people have begun to resist, albeit peacefully. As early as 2007, people in Myitkyina started petitions of civilian signatures to protest against the Myitsone Dam—and for their attempts, they were arrested and interrogated until it was agreed that they would cease petitioning.¹⁰² While local petitions and prayer meetings continued, the threat of military retaliation has led to a different kind of pressure as Burmese overseas get involved. In October of 2011, a protest involving not only Kachins but also Karen, Shan, and Mon living in Malaysia protested for nearly half an hour outside the Burmese embassy, apparently with the support of the Malaysian government.¹⁰³ Similar protests in other countries indicated that while the domestic Kachin and Burmese may be unable to safely disagree with the dam plans, they are able to reach out and gain the support of the international community. While Burma's international image is already tarnished due to a long history of human rights violations, these protesters had a political opportunity: by framing their arguments as one of domestic civilian concerns seeking to stop exploitation by the military and foreign companies, they were able to put pressure on the Burmese government as it was taking steps towards integrating into the international community. The involvement of NGOs such as Burma Rivers Network and the KNDG have helped reach out to the international Burmese diaspora.

These movements increasingly began to attract national attention due to the involvement of the KIO. Relocation alone could be viewed as simply a local threat, but the involvement of an

¹⁰¹ KDNG 2011, 2.

¹⁰² KNG "Five Irrawaddy" 2007.

¹⁰³ KNG "Major ethnic groups" 2011.

ethnic army such as the Kachin Independence Organisation complicates the situation. The dam's location in the heart of the Kachin State in an area controlled by the Kachin Independence Army means that the Myitsone's threat to social stability is a nationwide issue. The KIO's interests in stopping construction of the Myitsone Dam is not only over the harm the dam does to the local communities but over territorial control: the Tatmadaw is using the Myitsone and other hydropower projects in the region, such as Chinese-funded dams on the Shweli River, to justify sending in Burmese troops.¹⁰⁴ This upsets the balance in the region and going back on the agreements of allowing autonomy given in the ceasefire agreement. While concerns over the dam construction began as soon as the project was announced in 2007, the first sign of armed conflict came in 2010, when there bomb blasts at the site of the Myitsone Dam that killed Chinese workers.¹⁰⁵ While the bombs were likely planted by anti-dam activists or locals angry over losing land and the KNO refused responsibility, the attack shows the escalations of tensions over the project.

By early 2011, the KIO took a clear stance against the Myitsone Dam: the Chairman of the KIO wrote a letter to Hu Jintao clearly stating that, while the Kachins appreciate the close relations between China and those in Kachin State, the KIO refuses responsibility for civil war breaking out over the Chinese-funded Myitsone Dam due to Burmese incursions in KIO territory.¹⁰⁶ For the Kachin minority, the prices that they must pay for the dam—including the relocation, the loss of cultural and sacred landmarks, and the incursion of the government into their autonomous region—are unacceptable. The benefits of the dam—economic growth and further integration into the Burmese culture—are not consistent with the desires of the people or the KIO.

¹⁰⁴ TSYO 2011, 6.

¹⁰⁵ KNG "Four killed" 2010.

¹⁰⁶ Lanyaw Zawng Hra 2011.

As a result of KIO refusing to move troops away from the dam sites, the ceasefire—which had been negotiated in the early 1990s—came to an end in June of 2011. The KIA and Tatmadaw were drawn into armed conflict, which quickly spread to involve two Chinese-funded dams on the Shweli River, which is a tributary of the Irrawaddy.¹⁰⁷ This conflict threatens peace in the country more than any other single issue because of the KIO's power. The Kachin Independence Organization is one of few ethnic political groups that has maintained its status vis-à-vis the central government and has continued to hold the support of its people: "Levels of support for the KIO among the Kachin are higher than ever. There used to be many political factions within the Kachin group, but now the elements close to the military government, such as the NDA-K, are being marginalized."¹⁰⁸ The government's refusal to consider locals' concerns has essentially escalated the conflict, driving many Kachin who were previously not politically active into the arms of the KIO.

Within four months of the return to active armed conflict, calls to put an end to the Myitsone began to reflect concerns of possible escalation. This conflict has been addressed not only by the government, but has become a major factor in calls to end the Myitsone by even opposition leaders and protestors. Aang San Suu Kyi—generally viewed as the leader of the democracy movement in Burma—noted in her letter addressing the issue the impact that the Burmese policies in Kachin have resulted in instability: "Since the commencement of the Myitsone Dam project, the perception long held by Kachin people is that successive Burmese governments have neglected their interests."¹⁰⁹ While the issues between the KIO and the Burmese central government are clearly related to a history of exploitative practices, the fact is that the Myitsone Dam has become a rallying point against invasive Chinese investments where

¹⁰⁷ TSYO 2011, 6.

¹⁰⁸ Hui "Behind China's Suspended Dam (3)" 2012.

¹⁰⁹ Mizzima "Burma to halt Myitsone" 2011.

local opinions are not considered and the central government's policies towards ethnic groups.

While the conflict concerns the populace due to the threat ethnic conflict poses to the country's continued growth, the role that the Irrawaddy River plays in Burmese cultural identity acts as a unifying factor in galvanizing many Burmese to speak out against the dams. Given its central location in Burma's geography, it is not surprising that the river has great cultural significance in Burma. To many of the Kachin, the natural scenery at the confluence of the N'mai and Mali rivers holds religious significance dating back to before they converted to Christianity, and it is thus linked integrally to their culture. The Irrawaddy is at the cultural center of Kachin state, and a number of traditional legends involve the confluence. In the words of a local writer, "[Myitsone] isn't like Jerusalem or Mecca. We Kachin don't have buildings as symbols of our faith; we revere Myitsone in its natural state. If there was a reservoir here, then it wouldn't be Myitsone."¹¹⁰

The beauty of the scenery, while deeply appreciated, is secondary to the cultural connotations: for the Kachin, the confluence is both a religious experience as well as a sign of their homeland. While the religious connotations are singular to the Kachin people, many Burmese consider the confluence to be the birthplace of the Irrawaddy. The Irrawaddy's central role in Burma has resulted in the perspective that the Irrawaddy is Burma's "Mother River" because of the central role that it played in the creation and development of Burmese culture and history,¹¹¹ and as such the confluence is a cultural icon that is impossible to replace because it has become a symbol for the country. While the ethnic conflict is dividing, concern over the environmental impacts of the Myitsone Dam on the Irrawaddy River and the possible loss of a national symbol have united Burmese against the movement.

¹¹⁰ Hui "Behind China's Suspended Dam (1)" 2012.

¹¹¹ Li and Wang 2011.

The KIO's actions and the unification of the Burmese people against the implementation of the Myitsone Dam have paid off: Thein Sein, in a rare nod to the importance of public opinion, very unexpectedly suspended construction of the Myitsone Dam in September of 2011. In a letter published on the front page of *The New Light of Myanmar*, the government backed newspaper, he announced that due to public concern regarding the Myitsone Dam's impact on the natural beauty of the confluence and its role as a cultural landmark, the damage done to the ethnic minorities and businesses living and operating near the dam site, the threats of earthquake damage to the dam, and the likely effects on the Irrawaddy River, he was postponing further construction on the dam through the end of his term in 2015.¹¹² Thein Sein's decision clearly shows that his government seeks legitimacy, and at least in the short term it appears that they have found it. In the words of one activist, "this decision shows we have democracy because a democratic government always gives top priority to the public's desire."¹¹³ Thein Sein's decision has garnered popular support, and it is a clear sign that public desire is given rising import from the regime. But while the move to halt the dam was a step forward, it is clear that the decision is also partially driven by concerns over the recent uptick in violence from the KIA: as the dam is one of the major reasons that the KIA has started resisting the central government again, such a move should help to calm ethnic tensions in the region and avoid the spread of violence.

The Aftermath of the Suspension

Despite the apparent suspension for the dam, there are still concerns: environmentalists are concerned about the impact of the remaining six projects, which have not been canceled; the central government is concerned about the fact that at least some sectors of the KIO are still at odds; and, perhaps most importantly, Chinese backlash against the unexpected suspension have

¹¹² Thein Sein 2011, 2.

¹¹³ Lwin 2011.

caused a downswing in Sino-Burmese relations. In response to the suspension of the dam, Lu Qizhou, the President of China Power Investment Corporation, reacted with surprise and anger, saying that the first time he had heard of the dam project's suspension was through the news report.¹¹⁴ It is clear that Thein Sein's first acknowledgement of the dam suspension was through a letter to the local authorities, which was then published in the government paper, and the lack of communication with CPI has understandably upset Lu. However, many of his points in his interview—including that he was unaware of the issue—strike activists as highly suspicious. In response to the interview with CPI, Burma Rivers Network (BRN) released their own response, pointing out that numerous attempts have been made by activists, environmentalists, locals, and NGOs such as the BRN to communicate with CPI over the negative benefits of the dam.¹¹⁵ When paired with the highly publicized debate in Burma over the dam construction, it seems unlikely that the president was unaware of the public concerns.

Whatever Lu's background with the dam debate, his decision for going forward was made clear: if the dam suspension results in permanently ceasing construction, CPI will take legal action over the loss of investment and the failure of the Burmese side to follow through on the deal.¹¹⁶ From CPI's perspective, such a position is understandable: they have made the business decision to invest in this dam, and have already spent money on surveying, dam design, and the early stages of construction. An unexpected cancellation will cost them significant amount of money. Lu is not only CPI's President but also a member of the Chinese People's Consultative Committee, which advises the National People's Congress.¹¹⁷ Given Lu's position on the Committee, it is clear that he has *guanxi* (关系), a personal connection with the

¹¹⁴ China News 2011.

¹¹⁵ Mizzima "BRN responds" 2011.

¹¹⁶ China News 2011.

¹¹⁷ McDonald 2012.

government. Lu's *guanxi*, CPI's status as a state-owned company, and the importance of the Myitsone to Chinese energy companies have resulted in a political response from Beijing regarding the cancelation of the dam: Hong Lei, the spokesperson for China's foreign ministry, noted that the dam had undergone thorough examination by specialists in both countries, and urged the Burmese government to "protect the legal and legitimate rights of Chinese firms abroad."¹¹⁸ In doing so, he showed that Beijing stands squarely on the side of CPI—no mention was made of the conflict of interests or the complications of the situation.

Since that statement, Chinese politicians have shown their disapproval of Burma's actions on numerous occasions, most notably through Hu Jintao's sudden refusal to attend the Greater Mekong Sub-region (GMS) meeting held in Burma's capital of Naypyidaw later that year. This is notable given that the summit is meant to be a meeting between the leaders of each country, and went back on Hu Jintao's previously stated intent of attending.¹¹⁹ This recent chill of relations between China and Burma has evoked concern over the long-term damage that the Myitsone controversy may do to Sino-Burmese relations in the wake of Burma's growing acceptance by the international community. As Burma opens trade relations with the United States and the European Union again, China may face some competition for investment. Thein Sein's suspension of the dam not only mitigated domestic concerns but was a message to the international scene that he was taking his role as a reformist very seriously.

After his election in 2010, many countries—most notably the United States—were highly critical of the Burmese reform, viewing it as an illegitimate election due to constraints on the involvement of opposing leaders. Putting a hold on the Myitsone in response to protest from the Burmese domestic and overseas communities, as well as negative attention from international

¹¹⁸ People's Daily 2011.

¹¹⁹ Kean 2011.

environmental and human rights groups, is a sign that things are truly changing in Burma. This was clearly stated by the director of President Sein's office: "My president's cancellation of the Beijing-backed Myitsone Dam signaled to the world what he stands for... if the United States neglects this opportunity, Washington will part ways with the new order in the Indochina region."¹²⁰ Thein Sein has shown that he is aware of criticisms and wishes to address them, with the subtext being that he is willing to temporarily strain relations with China in order to secure open relations with the United States and other Western powers.

Additionally, suspension is a sign that these reforms have given Burma a chance for independence from Chinese control: strategically speaking, Burma is more important to China than the other way around.¹²¹ Burma's biggest need is investment, and with international criticism of the regime starting to disappear as Burma continues its transformation, that investment can come from other countries. China, on the other hand, depends on the future pipeline for energy security, and will reap most of the benefits from building dams like the Myitsone. Thus, Thein Sein's actions can be seen as a subtle criticism of the failures of Chinese companies to address social and environmental concerns among the populace, and a reminder that if Chinese companies will not do so, Burma now has other options.

That being said, Sino-Burmese relations are still critical to Burma's development, and Thein Sein's announcements have made it clear that he does not wish for this project to cause damage to Burma's relations with China. Despite tensions among the Burmese populace over Chinese investment projects, China was Burma's only international ally in the face of criticism, and the elites will not forget that.¹²² The relatively stable relations in recent history mean that the elites have strong connections with China, and this will likely remain the case even as the public

¹²⁰ Zaw 2012.

¹²¹ Shih 2011.

¹²² The Myanmar Times 2011.

becomes more involved in politics. China's role as the regional power—some might even say hegemon—means that while Burma can take steps to avoid being dependent on Chinese aid, it is still imperative to remain on good terms. Additionally, Burma's proximity to China means that even with increased engagement with the West, working with China to resolve border issues such as the drug trade, illegal logging operations, and the spread of communicable diseases will continue to be of importance. As Burma steps up participation in regional groups such as the Greater Mekong Sub-region (GMS) and ASEAN, which Burma will be chairing next year,¹²³ working with the prevalent power in the region to solve transnational disputes will become increasingly important. Chinese interests in Burma will need to be balanced with domestic concerns.

While Thein Sein's motivations for suspending the dam are discussed above, it is important to note that his announcement reflects not only the changes in Burma but also cracks within the political system. Leading up to the suspension of the dam, there were subtle hints that there was a split between hardliners and reformists. Just weeks before the dam's suspension, the Minister of Electric Power-1 was insisting that the government "won't give up" on the project and insisting that they don't need to listen to the concerns of activists.¹²⁴ However, at the same time that the military and MOEP-1 were insisting that the project had to go forward, other leaders began expressing their concerns. Numerous other ministers of departments as varied as forestry and industry to transport and mines expressed their concerns over the lack of information available about the environmental effects of the dams.¹²⁵ These cracks hint at a fragmentation of authority among the different sections of government. Thein Sein's actions have shown that he is not simply a figurehead, and legally his decisions ought to be carried out.

¹²³ Mon and AFP 2011.

¹²⁴ Lwin and Kyaw 2011.

¹²⁵ Lynn 2011.

However, the fact that the military regime under General Min Aung Hlaing has been undermining the central government's objectives in Kachin State shows that Thein Sein's decisions are not as top-down as might be supposed. Despite the announcement that dam construction is suspended, the military has continued to keep residents away from the villages: even as recently as March 2012, army representatives informed villagers in Tanghpree—one of the villages that would be flooded by the Myitsone Dam—that they had to leave permanently.¹²⁶ Considering that the dam is currently suspended, with many calling for a permanent end to the project, the military's actions are notably against the trend. Support for continued relocation and additional transportation of building materials indicates that the Tatmadaw, at least, is in support of resuming construction, and is willing to take action towards this despite the central government having placed the project on hold.

In addition, despite Thein Sein's call to end conflict with the KIA and to cease offensives, the army continues to move into the region, with continued fighting.¹²⁷ These differences indicate that while the civilian government is ready to allow activists and ethnic minority concerns to become a part of the agenda, the military is less ready to do so: the commander of the armed forces, Min Aung Hlaing, is not technically under Thein Sein's command, and this indicates that in the event that their opinions on an issue of internal security differ, Hlaing is not likely to obey commands from Thein Sein. Given the history of ethnic tension and movements for independence, it seems that Hlaing views the KIA as enough of a threat to internal security that he will continue movements against them.

In the case of the Myitsone, the military's own concerns over Kachin rebels mesh with an opportunity to regain favor with China by aiding a Chinese push to restart the dam. The early

¹²⁶ Naing 2012.

¹²⁷ Keenan 2012, 4.

reactions from Lu Qizhou and Beijing were to pressure the government into restarting construction, but Lu has recently changed tactics: rather than defend the dams against activists' assertions, CPI is actively courting the villagers. Starting in early 2012, CPI began distributing pamphlets defending the dam design, asserting that there would be few if any negative environmental impacts.¹²⁸ And in mid-April, Lu Qizhou himself went to address villagers in Kachin State to discredit the environmentalists who criticized the dam, offering an extra year's worth of free electricity and rice in exchange in the event that the project is restarted.¹²⁹ Considering that Kachin State is embroiled in conflict between the KIA and Tatmadaw, it is clear that CPI's actions are occurring with the permission and support of the armed forces.

Conclusion

Given Burma's current conditions, the final status of the dam is yet to be determined: while the civilian government under Thein Sein appears to support suspension until further studies can be done, China's growing campaign to restart construction and the Tatmadaw's policies indicate that construction will soon begin again. Numerous activists continue to protest the dam cascade, with many deliberately gearing up to face the continued push from CPI for continued construction—and with international eyes on Burma as political transformation continues, it is unlikely that Thein Sein will go back on his word. While it seems unlikely that a final decision on the Myitsone project will be reached in the next few months, China's investment in the Myitsone Dam will likely pay off in the end. Despite the start of a transition towards a civilian government that is held responsible to the people, the military regime is still operating without significant restraints. Unless the civilian government can effectively control

¹²⁸ Kaung 2012.

¹²⁹ KNG "CPI head meets" 2012.

the military regime, it is unlikely that the widespread anger and resentment among the general populace will have any effect.

But Thein Sein's official suspension of the Myitsone Dam—and his refusal to take back his announcement even when facing an angry backlash from China—is a sign that the anger of the populace towards what they view as exploitation will have an increasing significance in Burmese politics. As of early 2012, Burma's democratic transition is still in its early stages. While Aung San Suu Kyi, a proponent of ceasing hydropower construction at the Myitsone and the de-facto leader of the NLD, was elected, the NLD's effectiveness in forcing the military-dominated government is uncertain for the short-term future. As the power continues shifting towards the people, however, anger over Chinese support of the Tatmadaw's authoritarian regime will likely continue to rise—and the Chinese refusal to acknowledge the rights and concerns of the populace over a national monument like the Myitsone Confluence will not be forgotten.

China's mixed-bag success in Burma shows perhaps the biggest weakness in Chinese investment overseas: the belief of the Chinese government and state-owned companies such as Sinohydro and CPI that the primary contact for investment projects is the government and that they do not need to constructively engage with the general populace. China's own civil society is still developing, and further growth appears to have largely stagnated since the Arab Spring in early 2011 and the resulting crackdowns over fear of domestic instability in China. Chinese companies operating overseas have done so without significant oversight and under the assumption that they will not be held accountable for the negative environmental and social impacts of their actions as long as they work with the permission of the local elites and government. It took the suspension of the Myitsone Dam to force CPI, a state-owned enterprise whose leaders are familiar with political maneuvering, to realize that such methods of doing

business are not socially sustainable. The Chinese government has recognized this weakness, and there are laws on the books regulating investment abroad—but unless the CCP actively attempts to more closely monitor state-owned companies' businesses overseas and ensure that these laws are implemented, public opinion will increasingly view China in a category that the CCP wants to avoid: that of an exploitative power.

Useful Acronyms

CCP: The Chinese Communist Party
ODI: Outward Direct Investment
ASEAN: The Association of Southeast Asian Nations
IRN: International Rivers Network
KIO: Kachin Independence Organisation
KIA: Kachin Independence Army
CPI: China Power Investment
KDNG: Kachin Development Networking Group
NGO: Non-governmental Organization
KNG: Kachin News Group
WCD: World Commission on Dams
EIA: Environmental Impact Association
RIS: Reservoir-induced Seismicity
FDI: Foreign Direct Investment
NSC: New Security Concept
BOT: Build-Operate-Transfer model
SPDC: State Peace and Development Council of Burma
UN: United Nations
UNSC: United Nations Security Council
BRN: Burma Rivers Network
NLD: National League for Democracy

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