Conceptualizing Chinese Engagement in Southeast Asian Dam Projects:  
Evidence from Myanmar’s Salween River

Chinese engagement in Southeast Asian dam projects is usually conceptualized by scholars as engagement directly driven by China’s political leadership as part of a larger package whose terms would only be favourable to the Chinese party. This paper argues against this notion, conceptualizing Chinese engagement in Southeast Asian dam projects as engagement that can also be directly driven by a Chinese dam developer as a standalone project whose terms are favourable to all contractual parties involved. The cases of the Mong Ton and Hat Gyi dams on Myanmar’s Salween River, which feature the involvement of the Chinese dam developers China Three Gorges Corporation (CTGC) and Sinohydro, are presented as evidence for this latter conceptualization.

Keywords: Chinese dam developers; Myanmar; large dams; Salween River; Mong Ton Dam; Hat Gyi Dam

Introduction

This paper conceptualizes Chinese engagement in Southeast Asian dam projects. Chinese dam developers allegedly dominate the global dam industry (Urban et al., 2015, p. 577 ff.; Verhoeven, 2015, p. 178 ff.). Yet precise data on the overall engagement of Chinese dam developers overseas is lacking. Yeophantong (2013) reports that Chinese players are linked to more than 300 dam projects in 74 countries worldwide, but this
number equates to only 8 percent of the total 3,700 dam projects worldwide (planned or under construction, with a size of ≥ 1 MW) recently identified by Zarfl et al. (2014). International Rivers (2014), an NGO mostly advocating against large dams, lists a mere 209 dam projects with Chinese engagement worldwide. Whereas Yeophantong (2013) does not critically discuss the reliability of the data presented, International Rivers (2014) acknowledges that “we [...] cannot vouch for the accuracy of the information” which was mostly collected from media reports as well as government and company websites.

Whereas data on Chinese engagement in dam projects overseas is ambiguous, scholars such as Hensengerth (2015), Matthews & Motta (2015) and Gleitsmann (2015) are largely unanimous in their analysis of Southeast Asian dam development with Chinese involvement, conceptualizing this engagement as being driven by China’s political leadership as part of a package that yields various political, economic and social benefits for China, but exploits non-Chinese contractual parties of the project (more details in the next section). This paper aims to rebut this notion. It is argued that dam projects with Chinese involvement in Southeast Asia can also be driven by a Chinese dam developer as standalone projects that yield growth and profit for the Chinese dam developer, while bringing benefits for the remaining contractual parties involved. An analysis of the Mong Ton and Hat Gyi dam projects, which are among seven dam projects to be built on Myanmar’s Salween River and which feature the involvement of the Chinese dam developers China Three Gorges Corporation (CTGC) and Sinohydro, is presented to support this argument.

These two case studies are analyzed from the Chinese, Thai and Burmese engagement perspective (which includes the perspectives of dam developers, policymakers, NGOs etc.) to ensure a comprehensive view on these projects. Yet the role of lenders in these projects is not analyzed in the case studies due to the lack of access to information regarding lenders. Challenges faced while seeking information for this study are discussed in the section ‘Methods’.

On the organization of the remainder of this paper: Previous scholarly literature on dam projects with Chinese engagement is synthesized in the next section, followed by a discussion of methods. An overview on the dam projects pursued on the Salween River and in Myanmar is presented before the analysis of the cases of the Mong Ton and
Hat Gi Dam projects on Myanmar’s Salween River. The argument is summarized in the final section.

Literature Review


Three observations stand out when examining this body of literature. First, Southeast Asian dam projects with Chinese engagement are frequently described as projects directly driven by China’s political leadership. According to Hensengerth (2015, p. 520), negotiations regarding Cambodia’s Kamchay Dam were conducted “between Chinese and Cambodian government officials”. Both the dam developer and the lender are state-owned enterprises (SOEs) whose stock are largely retained by the central Chinese government (McDonald et al., 2009, p. 298). SOEs are seen as an extended arm of China’s political leadership at best. For instance, Matthews and Motta (2015, p. 6274) write that “the Chinese government and its SOEs have employed a number of [...] narratives [...] of hydropower”, a depiction largely echoed by Gleitsmann (2015, p. 65 ff.).

Second, scholars usually point out that the projects in question would be part of a larger deal. For instance, Matthews and Motta (2013, p. 4) argue that dam projects with Chinese involvement in Southeast Asia “must be viewed as a package rather than separate initiatives”. This claim is echoed by Urban et al. (2013), Nordensvard et al. (2015) as well as Hensengerth (2012) and Kirchherr, Disselhoff and Charles (2016). However, the latter two studies primarily focus on dam projects with Chinese involvement in Africa. Political, economic and social benefits are believed to accrue via such a package. Middleton (2008, p. 51 ff.) and Chellaney (2014) argue that these projects would help expand China’s political influence in the region but both authors remain rather vague regarding the exact mechanisms that can turn a dam project in a
Southeast Asian country into political influence for China (on dams and power: Moore (1998), McCully (2001)), and that these projects would be pursued to export their electricity to China (Matthews & Motta, 2015, p. 6279 ff.; Urban et al., 2013, p. 305 ff.) and that these projects would be designed to ensure that China’s own rivers remain untouched and thus dam-induced resettlement is avoided in China (Urban et al., 2013, p. 305 ff.).

Some works (Tan-Mullins & Mohan, 2012; Urban et al. 2013; Kirchherr, Disselhoff & Charles, 2016) note that dam projects with Chinese engagement are also pursued mainly because the Chinese dam developer involved aims to realize business growth and profit. Yet this statement is restricted to dam projects with Chinese involvement in Africa and explicitly excludes projects in Asia which would “pose a stark contrast to Chinese dams in Africa [where] motives such as business opportunities [are] key” (Urban et al., 2013, p. 313). It is imaginable that electricity exports to China are initiated primarily because the dam developer involved aims to realize a business profit assuming electricity prices in China are higher than in the country the dam is built in. However, the works of some scholars (Matthews & Motta, 2013; Urban et al. 2013) which did not suggest this argument proposed that electricity exports to China would be undertaken to supply sufficient and affordable energy for China. At least implicit in this suggestion is the allegation that these projects would exploit the resources of the country the dam is built in – which relates to the third overall observation.

Third, Southeast Asian dam projects with Chinese involvement are oftentimes believed to lead to win-lose results with China winning and the remaining contractual parties losing out. Lamb and Dao (2015, p. 2) provide an example of this viewpoint arguing that Chinese-led package dam projects would “suck resources (or is it blood?)” from Southeast Asian countries, while Kiik (2016, p. 22) writes, in an analysis of the Myitsone Dam in Myanmar, that this project package would be perceived as “Chinese exploitation and ‘takeover’ of Myanmar”. This claim is also echoed by Kirchherr, Charles and Walton (2016).

In sum, it can be argued that Chinese engagement in Southeast Asian dam projects is conceptualized as hegemonic by many current works — with the term ‘hegemon’ used with a negative connotation particularly by Chellaney (2014). The negative connotation of the term is adopted for this paper. While it is acknowledged
that the term can also carry a positive one, the negative one seems to be dominant in the social science literature on water (Furlong, 2006; Warner & Zeitoun, 2008, p. 805 ff.).

The conceptualization of Chinese engagement in Southeast Asia presented in the scholarly literature written in English is tested in this paper, but it is acknowledged that any synthesis of mostly qualitative literature is at least partly subjective.

**Methods**

Two case studies on Myanmar’s Salween River, the Mong Ton and the Hat Gyi Dam project, were chosen for in-depth investigation for this paper. This choice was driven by two criteria.

First, only dam projects on the Salween River were considered for in-depth investigation that did not seem to fit the current scholarly conceptualization of Chinese engagement overseas according to discussions with experts and a preliminary skimming of press reports. This would ensure that the case studies researched would likely further nuance scholarly writings on the topic. The Mong Ton Dam project and the Hat Gyi Dam project were identified as those two dam projects with Chinese engagement on the Salween River whose electricity would be exported to Thailand. Yet scholarly writing on the topic suggested that electricity generated from dam projects with Chinese involvement in China’s neighboring countries would be exported to China, as outlined in the previous section.

Second, only dam projects on the Salween River which had been the subject of earlier scholarly study and significant press reporting were considered for in-depth investigation. This would ensure that interview data collected could be triangulated which is particularly essential when carrying out research under less than optimal conditions (further discussed below). Numerous press reports and scholarly studies on the Mong Ton Dam project and the Hat Gyi Dam project such as Kirchherr, Charles and Walton (2016) and Lamb and Dao (2015) were identified.

The two case studies presented in this paper were analyzed via semi-structured interviews as well as a systematic review of scholarly writings on Chinese engagement overseas and the Salween River and relevant news articles.
Semi-structured interviews: This paper is based on 79 semi-structured interviews carried out from April to August 2015 and February to June 2016. Interviews have been conducted, inter alios, with senior government officials at the local and national levels in Myanmar, local NGOs in Myanmar, China and Thailand, international NGOs as well as with relevant Burmese and Chinese dam developers. In contrast, Hensengerth (2015), Lamb and Dao (2015) and other scholars who published on the same topic have not carried out interviews with Chinese dam developers. An overview of interviews mirroring the depiction of Siciliano et al. (2016, p. 5) is presented in Table 1. Given the sensitive nature of the topic, all interviewees were assured anonymity. Unique interview codes are used throughout this paper: the first letter indicates the mode of interviews (T for telephone, F for face-to-face, O for online survey/e-mail), the second letter indicates the type (A for academia, AA for adversely-affected communities, G for government, I for international donor, NI for international NGO, NL for local NGO, P for private sector) and the number indicates an interview number within a type. Most interviews were carried out face-to-face in Myanmar, Thailand and China or via telephone/Skype, while some were conducted by e-mail/online survey. Information on interviewee recruiting and sample termination can be found in Kirchherr, Matthews, Charles, & Walton (2017).

> Table 1 here <

Some gaps in information exist in the interview data collected for this paper because of the difficulties inherent in field research in Myanmar and in this topic, as described by Lamb & Dao (2015, p. 13) and Urban et al. (2013, p. 306 ff.). First, no interviews have been carried out with communities affected by the two dam projects specifically studied for this paper. This is because the NGO representative (which the author was collaborating with) argued that it would be too dangerous even for their local staff to visit these communities during the time of field research (FNL2). Simpson (2013, p. 140) also found that ethnic conflicts continuing both in the relevant Shan and Karen State in Myanmar make it difficult for researchers to access these states, even though research conditions in Myanmar have generally improved since its opening up in 2010 (Lidauer, 2012, p. 89 ff.). Second, no interview has been carried out with a Thai
dam developer because various interview requests were declined. Third, no interviews have been carried out with potential lenders such as China Exim Bank (CEB) because interview requests were also declined by these lenders. This indicates that the Southeast Asian dam industry is secretive and thus difficult for scholars to access (FP4; TA1).

Methodological triangulation, as described by Denzin (1978), was chosen as an approach to address these gaps. Data from semi-structured interviews are combined with a systematic collection and review of (a) scholarly writings on Chinese engagement overseas and the Salween River as well as (b) relevant news articles. Search results revealed at least partially the perspectives of those not directly interviewed for this paper, for example, the viewpoints of the relevant Thai dam developer.

**Systematic review of scholarly writings on Chinese engagement overseas and the Salween River:** The systematic review of the scholarly literature on Chinese dam developers’ engagement overseas and the Salween dams was undertaken by carrying out keyword searches in several databases such as Thomson Reuters' Web of Science, the University of Oxford Search Oxford Libraries Online (SOLO) or Elsevier's Scopus. Searches included any scholarly journal articles, grey literature, book chapters and books that featured (combinations of) relevant keywords, e.g. ‘Salween river’, ‘Mong Ton Dam’, ‘Hat Gyi Dam’ or ‘Chinese dam developers’. Results of these searches were presented in the previous section of this paper. It is noted that scholarly literature written in Chinese is not included in this study because the author of this paper does not speak Chinese. This is not considered a major limitation because Chinese scholars working on Chinese engagement in dam projects overseas such as May Tan-Mullins and Bingqin Li publish their results in English to join the international scientific discourse on this topic.

**Systematic review of relevant news articles:** A Google News Archive search was conducted for this paper with the keywords ‘Mong Ton Dam’ and ‘Hat Gyi Dam’ to ensure a holistic examination of relevant news articles. No limit was set for the time period with the search yielding 50 results. All articles found were reviewed by the author of this paper. The list of articles found is provided in the supplementary material. While news articles are frequently used as data sources in studies comparable to this one, for example Urban et al. (2013) or Matthews and Motta (2015), it is acknowledged that news articles (which include articles from NGOs such as International Rivers or Burma
Rivers Network) are less reliable than peer-reviewed sources. Hence, the author of this paper attempted, whenever possible, to use information from semi-structured interviews or peer-reviewed sources instead of news articles. The author also exercised caution when sourcing information from news articles for this paper.

**Dam Development on the Salween River and in Myanmar**

This section provides the background on dam development on the Salween River and in Myanmar in order to contextualize the case studies.

The Salween River with a length of 2,800 kilometers is the last remaining undammed major river ecosystem in mainland Southeast Asia (Mellino, 2016). The river originates in the Tibetan Plateau and flows through China as the Nu River, before becoming the Salween River in Myanmar and Thailand and emptying into the Andaman Sea (Figure 1) (Deetes, 2016). At least six million people in the Salween watershed depend on the river for their livelihoods (WWF, 2016).

![Figure 1 here](image)

Dam development proposals for the Nu River were collected from potential developers from 1999 onwards. According to formal reports, there were 13 Nu River hydropower projects with a total capacity of 21 GW in 2003 (Magee & McDonald, 2006, p. 47; Tullos et al., 2013, p. 9). The planned projects were initially approved by China’s National Reform and Development Commission (NRDC), the macroeconomic management agency under the State Council, China’s chief administrative authority (Tullos et al., 2013). However, this approval “set off a furor among Chinese environmentalists” (Ramzy, 2013) and international environmental NGOs (Tullos et al., 2013, p. 11). In contrast, Tilt (2014, p. 98 ff.) notes that relatively little protest by the communities to be displaced “due largely to the lack of information about how projects are proceeding, weak capacity to mount a campaign [...] and the high political risks involved in any opposition strategy”.

As a result of the environmentalists’ resistance, the proposed projects were abruptly suspended by China’s then Prime Minister, Wen Jiabao, in 2004 (Mertha, 2008, p. 160 ff.) in order to further study the projects’ environmental and social impacts (OG1),
and this led to a “rare victory” (Ramzy, 2013) for activists engaged in China. Nine years ago, Mertha (2008, p. 162), who has conducted the most comprehensive analysis on the protests against the Nu River hydropower projects, predicted ambiguity regarding their future because “Chinese politics is not linear”. Indeed, the construction of the projects was reported to have at least partially resumed in 2011 (MacLeod, 2011). But according to a recent source, national government officials were said to be less keen to pursue the projects again (Leavenworth, 2016).

In addition, multiple projects have been planned for the Salween River since 1990 (Simpson, 2013). Currently there are seven projects waiting to be implemented featuring a total capacity of up to almost 22 GW — a capacity even 1 GW greater than that of the envisaged Nu River cascade. These projects are depicted in Table 2 which is mostly based on NGO information and thus caution is required regarding the information presented. Simpson (2013) notes that these projects have been also extremely controversial among civil society and project-affected communities. Myanmar’s authoritarian regime attempted to suppress much of this opposition and various activists who fled to Thailand continued to oppose the projects until the 2011 regime change (FNL1; Simpson, 2013). Opposition was intensified when 122 civil society organizations in Myanmar supported the 2015 launch of the ‘Save the Salween’ campaign (OP3; FNL2; Naing, 2014). The current national government in Myanmar which has been in power since March 2016 has not revealed its stance on the projects yet (Aung, 2016).

> Table 2 here <

Overall, a major dam development boom in Myanmar is underway because as many as 45 dams are currently included in the planning phase (Brennan & Doring, 2014). The seven projects proposed for the Salween River thus only equate to 15 percent of the dams currently planned in Myanmar. Myanmar’s most well-known dam project is most likely the Myitsone Dam in Kachin State. Its suspension in 2011 was widely seen as a symbol of Myanmar’s transition towards democracy (Kirchherr, Charles & Walton, 2016). The 6,000 MW project is pursued by the Chinese dam developer China Power Investment Corporation (CPI). With CPI as lead developer, 90 percent of the dam’s
electricity would be exported to Southern China’s Yunnan province and USD 17 billion would be paid to the Burmese government over a period of 50 years (Kiiik, 2016; Kirchherr, Charles & Walton, 2016; TP10). Since Yunnan province has repeatedly reported an electricity surplus, electricity is planned to be further exported from Yunnan province via China Southern Power Grid, an electric utility, to neighboring provinces and even Shanghai (Hu, 2013).

**Chinese Engagement in the Mong Ton and Hat Gyi Dam projects**

This paper has presented three observations by scholars regarding Chinese engagement in Southeast Asian dam projects. This section is structured alongside the three observations arguing that these observations, and thus also the overall conceptualization of Chinese engagement in Southeast Asian dam projects are to be rebutted in the cases of the Mong Ton and Hat Gyi dam projects on Myanmar’s Salween River. Key facts regarding these projects are presented in Table 3.

> Table 3 here <

**Main Driving Actor**

The first observation identified in the scholarly literature held that Chinese political leadership would directly drive Chinese dam development overseas. However, the research findings suggest that the Thai government initiated both the Mong Ton and the Hat Gyi Dam project.

The Burmese and Thai government started negotiations (initiated by the Thai government) regarding cooperation on hydropower development on the Salween River in 1997. A Memorandum of Understanding (MoU) was signed between Thailand’s Minister to the Prime Minister’s Office, Sompoing Amornvivat, and Myanmar’s Minister of Energy, Khin Maung Thein, in July 1997. The MoU originally set out that up to 1.5 GW of electric power would be exported from Myanmar to Thailand by 2010 — a target not reached at the time of this writing (which is early 2017). Both the Mong Ton Dam project which was originally called Ta Sang project and the Hat Gyi Dam project were part of this MoU (OG1; OP5).
The original lead developer of the Mong Ton project was not EGAT, but another Thai developer MDX Group, which commenced initial construction works in 2004. Yet the contract was terminated in 2009 because the project did not proceed as fast as the Burmese government had envisaged. Only two days upon contract termination, a new MoU was signed for the development of the Mong Ton Dam project. Its project site is only 10 kilometers upstream of the original Ta Sang site with the EGAT as the lead developer as well as CTGC and IGE as additional developers (OG1). Contracts for the Hat Gyi Dam were signed in 2006 with EGAT also as the lead developer (Lamb & Dao, 2015, p. 13 ff.) and Sinohydro and MEPE as additional developers (Naing, 2016). Discussions between EGAT and the Burmese government had started in 2005 and EGAT was acting as a substitute for the Thai government in these discussions (OG1). EGAT has been reported to be a key implementer of the Thai government’s energy policy strategy previously (Matthews, 2012) with EGAT being significantly intertwined particularly with Thailand’s Ministry of Energy (MoE) and the Energy Regulatory Commission (ERC) until today (the process of liberalizing Thailand’s energy sector began in 2007, but not completed (IEA, 2016)).

Both Burmese private sector players involved in the projects, IGE and MEPE, were also found to be significantly intertwined with their government. IGE is owned by the sons of the late minister U Aung Thaung, one of the wealthiest political figures in Myanmar (Moe & Ramzy, 2015; OG1) and the various businesses of U Aung Thaung’s sons are reported to have particularly grown while their father was Minister for Industry from 1997 to 2011 (Kachin News, 2014). Meanwhile, MEPE is formally organized as a department within the Ministry of Electric Power (MOEP) since 1989 (MOEP is now the Ministry of Electricity and Energy (MOEE) (MOEE, 2017)). The Burmese government initiated the involvement of IGE and MEPE in the two case studies ex officio (by rights) with a Burmese partner being legally required for foreign companies in most business endeavors (Martov, 2012; Turnell, 2014, p. 185 ff.).

Meanwhile, the involvement of Chinese dam developers was initiated by these developers. Chinese dam developers (including CTGC and Sinohydro) approached the MOEP from 2006 onwards to discuss possibilities of hydropower development on the Salween River (OG1). One of the first Chinese dam developers reaching out to MOEP was China Huadian Group which held the development rights on the Nu River cascade
(Magee & McDonald, 2006, p. 48 ff.; OG1), but lost these projects after the suspension of the cascade in 2004. Notably, China Huadian Group did not manage to secure any project involvement on Myanmar’s Salween River (Table 2). No Chinese government officials were reported to take part in the meetings between Chinese dam developers and MOEP (OG1). It was also not suggested that the dam developer would be the extended arm (representative) of Chinese government officials (OG1).

Hence, evidence is lacking in these cases to argue that Chinese political leadership drove the Mong Ton and Hat Gyi Dam project directly. It is acknowledged, however, that the Chinese government prepared the ground for CTGC’s and Sinohydro’s engagement and thus drove their involvement indirectly via its Going Out Policy adopted in 2001 to encourage Chinese SOEs to expand their operations abroad. Discussions regarding China’s Going Out Policy can be found in Murphy (2008), Nordensvard et al. (2015) or Kirchherr, Matthews, Charles, and Walton (2017). The Burmese government and Burmese dam developers did not appear to stir the course of events either, but were approached because of legal obligations. The initial approach was undertaken by the Thai government with its Minister to the Prime Minister’s Office, Sompoing Amornvivat, who is thus the main driving actor. In the next section, the main benefits sought via this approach are presented.

**Type of Deal**

The second observation identified in the scholarly literature held that single dam projects with Chinese involvement would be part of a larger deal from the Chinese perspective. Typical deal elements described by scholars are related to political, economic and social benefits for China. While no such deal elements from the Chinese perspective were reported for both projects investigated, deal elements were found on the part of the Thai and Burmese.

While it could be hypothesized that Chinese officials encouraged CTGC and Sinohydro to take part in the projects to ensure a Chinese foothold in the country with political benefits possibly resulting from this foothold, no supporting evidence was found for this hypothesis. The electricity generated from both projects is not an economic benefit to China, as outlined previously, and thus no river in China is left untouched and no resettlement in China is avoided during these projects. It is further
noted that the Upper Thanlwin Dam and Nawngpha Dam are the only projects on Myanmar’s Salween River dams featuring future electricity exports to China, as shown in Table 2. These exports total a capacity of merely 2.3 GW with the Nu River cascade featuring a capacity of 21 GW. Thus, it can also not be argued that the multiple Salween River dams would be a substitute from the Chinese perspective for the Nu River cascade.

However, it is acknowledged that the Mong Ton and Hat Gyi dam projects were and are part of a larger deal between the Thai and the Burmese government, as outlined previously. No political benefits were apparently sought via this deal from the Thai side, according to the research carried out. Rather, both economic as well as social benefits drove this deal. “[This] is all about energy security [for Thailand]”, a consultant said (FP9). Thailand has consistently experienced rapid electricity demand growth since the early 1990s, with power consumption growing by 5 percent a year on average (IEA, 2016). The country’s hydropower potential stands at 15 GW — four times its current installed capacity (Aroonrat & Wongwises, 2015, p. 74). However, no large dams have been completed in Thailand since the Pak Mun Dam (completed in 1994) due to the fierce resistance of civil society and project-affected communities against this infrastructure (Bakker, 1999; Sneddon & Fox, 2008).

As a consequence of this resistance, Thai policy-makers started searching for sources of electricity in neighboring countries (Hirsch, 2010). A notable result of this search is Laos’ operational 1,070 MW Nam Theun 2 Dam. With 93 percent of its electricity exported to Thailand, this dam is thus “sending more hydropower across national borders than any other project in the history of Southeast Asia” (Baird & Quastel 2015, p. 1224). If completed, the Mong Ton Dam could break this record, even though Thailand does not intend to entirely depend upon energy imports from neighboring countries. Thailand continues to maintain at least partial energy self-sufficiency. Its target policy is to cap the share of electricity imported at 15 percent from 2020 onwards (IEA, 2016).

Not political, but economic and social benefits were also suggested regarding Burmese involvement. A relevant Burmese dam developer interviewed said that the firm had entered one of the two dam projects studied in order to “provide a source of income for Myanmar through […] energy sales” (OP5). It was further told that revenues from energy sales would be used for “local job creation [and] development of local
economies” (OP5) (which could be deemed social benefits), but no further details were provided by the interviewee. The developer also did not outline how profitable the dam endeavor at question would be for the company. Large dams typically take 20 years to amortize (Kirchherr, Disselhoff, et al., 2016).

Meanwhile, vague information provided supports the claim that benefits sought via these projects benefit Burmese policy-makers and businessmen rather than the people of Myanmar. The claim is also strengthened by the close intertwinement of IGE and MEPE with the Burmese government, outlined in the previous section. For instance, a former civil servant who worked in the Office of the President of the Union of Myanmar argued that one large dam project in Myanmar “creates [illegitimate] generational wealth for many public sector individuals” (TG2). No further evidence was given to support this argument though. Such a claim should be treated with great caution.

Meanwhile, the research carried out suggests that the main benefit sought by CTGC and Sinohydro via the two dam projects studied are business growth and profit — benefits suggested by scholars studying Chinese engagement in Africa, as outlined previously. Chinese dam developers can only explore certain rivers because different rivers are assigned to different companies for development. For instance, CTGC is only allowed to develop the Yangtze River (TNI4). After a company is assigned to build key dams on the Chinese part of the river, overseas expansion is necessary to continue growing (TNI1; TNI2; TNI4). CTGC will have completed its final large dam project on the Yangtze River in 2020 and is thus actively looking for growth in overseas markets via standalone projects (Reuters, 2014). For instance, CTGC has set up a joint venture with Utility Energias de Portugal (EDP), a Portuguese dam developer, to pursue large dam projects in Latin America (Clercq, 2015; TP8). Overall, the company aims to gain 25–30 percent of its profits from overseas projects via the realization of these growth opportunities (International Rivers, 2016) and the potential Mong Ton project. Meanwhile, Sinohydro is keen to further expand its share of 50 percent in the global hydropower construction market (CHINCOLD, 2009) and it views the Hat Gyi Dam as “a lucrative business” (Gleitsmann, 2015, p. 59) that would help in achieving this aim.

Hence, from the Chinese perspective, both the Mong Ton and Hat Gyi project appear as standalone projects pursued for growth and profit reasons. However, deal
elements were found from the Thai and Burmese perspective because both sides were keen to secure both economic and social benefits. Questions were also raised over whether the Burmese side pursued these projects for personal gains. The next section is a discussion on whether these benefits can be realized.

**Project Results**

The third observation outlined in the scholarly literature held that Southeast Asian dam projects with Chinese involvement would lead to win-lose results with China winning and the remaining contractual parties losing out. However, the research carried out suggests that both the Burmese and Thai players at least expect positive results from CTGC’s and Sinohydro’s involvement in the respective projects. Meanwhile, the deal between the Thai and Burmese government is difficult to assess.

Interviewees such as TP8 and FP4 argued that CTGC was involved in this specific project because only this developer would be able to develop a project of such a scale and that the project may not be possible to complete without CTGC’s engagement. CTGC may be the most experienced mega-dam developer globally, having constructed the 22.5 GW Three Gorges Dam, the largest hydroelectric power station in the world (McDonald et al., 2009; Wilmsen et al., 2011). Meanwhile Sinohydro’s vast capabilities for constructing large dams were also repeatedly praised by interviewees including TP6 and TP8. Already Magee and McDonald (2006, p. 49 ff.), McDonald et al. (2009, p. 297 ff.), and interviewees such as TP8 noted that Chinese companies have accumulated significant experience in constructing half of the world’s 45,000 large dams. No evidence showed that CTGC or Sinohydro may be exploiting its contractual parties via unfavorable contract terms or delivery. Rather, scholars such as Nordensvard et al. (2015, p. 250 ff.) stress that Chinese dam developers tend to be particularly low priced. This was echoed by European dam developers such as TP1 and TP2. Even International Rivers (2015), an NGO which was mostly advocating against dam developers, rated CTGC ‘good’ for its environmental management in its projects, and ‘fair’ for its social safeguard policy commitments. Meanwhile, Sinohydro was rated ‘good’ for its environmental project management and also ‘good’ for its social safeguard policy commitments (International Rivers, 2015). These ratings were largely echoed by TI1, FI2, TNI3 and FNL3.
An assessment of the deal between EGAT and the Burmese side would require access to the relevant contracts. This access has not yet been granted. The intransparency of the contractual details of these projects provides the ground for the claim that it would be a losing deal for the people of Myanmar. A lawyer consulting CEB noted how ill-prepared most policy-makers in Southeast Asia’s poorest countries including Myanmar would usually be when negotiating such deals (FP7). This suggests that the contracts may be more favorable to the Thai than to the Burmese side. The projects may not particularly benefit those displaced by them because resettled communities are usually worse off after resettlement, as seen in Scudder (2012)’s analysis of 50 resettlement cases. The social impact of the Mong Ton and the Hat Gyi Dam projects lies beyond the scope of this paper.

Overall, while data is insufficient to assess the deal between the Thai and Burmese government, both the Thai and Burmese players expect to benefit from the deal with the Chinese side.

**Summary**

None of the three observations found in the current scholarly literature regarding Chinese engagement in Southeast Asian dam projects seem to hold in the cases of the Mong Ton and Hat Gyi dam projects. While previous literature has largely conceptualized Chinese engagement in Southeast Asian dam projects as hegemonic, these case studies suggest that it can also be what the author of this paper calls contractual, which means a conceptualization that emphasizes the business lens over the political one with a decidedly more positive connotation than much of the current writing on the topic.

Observations from the current literature regarding Chinese engagement in Southeast Asian dam projects are compared with the Mong Ton and Hat Gyi Dam project in Table 4.

> Table 4 here <

While the Chinese engagement in the Mong Ton and Hat Gyi dam projects can be conceptualized as contractual, it is noted that the Thai engagement features at least
some hegemonic elements, given that in both projects, the Thai political leadership is the main driving actor seeking economic and social benefits in a package deal. Meanwhile, the conceptualization of Burmese involvement remains ambiguous.

**Conclusion**

A discussion with a Burmese activist carried out in the summer of 2015 may be indicative for the deeply held beliefs among Myanmar’s civil society regarding Chinese engagement in Southeast Asian dam project. The activist, FNL2, was involved in the ‘Save the Salween’ campaign which was supposed to focus particularly on the Mong Ton Dam project. Little was known about the project back then. But the activist hypothesized that “the Chinese government” must be behind the project that would be part of a greater effort to exploit the people of Myanmar and their political representatives (FNL2). It was outlined that these beliefs are also reflected in much of the scholarly literature on Chinese engagements in Southeast Asian dam projects.

Yet the analysis on Mong Ton and Hat Gyi dam projects in this paper underscore that the main driving actor of Chinese engagement in a Southeast Asian dam project can also be the Chinese dam developer instead of Chinese political leadership, considering that the projects overall are driven by Thai players, first the Thai government, later by EGAT. Both projects are standalone deals for the respective Chinese dam developers who seek continued growth and business profit via these engagements. The Chinese dam developers’ involvement led to a win-win deal for the contractual parties involved. This is because the respective Chinese developer brought in unique expertise for implementing large dam projects: CTGC constructed China Three Gorges Dam, the world’s largest dam, and Sinohydro holds a 50 percent share in the global hydropower construction market. Without such expertise, the Mong Ton Dam project, touted to be the sixth largest hydroelectric power plant in the world, could not be implemented. It could be argued that the non-implementation of both projects studied for this paper would be in the interest of the people of Myanmar.

These case studies are not intended to undermine other scholars’ earlier findings on Chinese engagement in Southeast Asian dam projects. The author of this paper has also studied dam projects (such as the Myanmar’s Myitsone Dam) that largely confirm the various observations frequently outlined by scholars regarding Chinese engagement
in Southeast Asian dam projects. However, this paper aims to nuance the generalizability of these observations. While much of the previous literature has conceptualized Chinese engagement in dam projects in Southeast Asia as hegemonic, the two case studies presented in this paper show that it can also be contractual at times. Thus, scholars working on this topic are encouraged not to politicize Chinese engagement in Southeast Asia a priori, but to consider it on a case-by-case basis.

However, more future research is needed to further conceptualize Chinese engagement overseas. While major data collection effort regarding dam construction on Myanmar’s Salween River have been undertaken by the author of this paper more than two years, gaps in the interview data remain, as acknowledged in the section ‘Methods’. The author of this paper has carried out field research in Myanmar since 2012 and having gained greater ease of access to interviewees over time, the author is optimistic about obtaining additional relevant stakeholder information regarding dam construction with Chinese involvement in Myanmar. This paper may serve as a foundation for future research on this topic.

Such future research could explore whether projects with Chinese engagement comparable to the Mong Ton and Hat Gyi Dam project also exist elsewhere in Myanmar, the remainder of Southeast Asia and possibly beyond. It can bring about a medium-N-study on the topic at hand to further generalize scholarly work on Chinese engagement in overseas dam projects. Research on Latin American dam projects with Chinese engagement would be of great interest because not much work has been carried out on such projects by the scientific community so far. Furthermore, analyses with a focus on Chinese lenders could further nuance the conceptualization of Chinese engagement in overseas dam projects. Their role in dam projects both within and outside of China also remains under-researched. Lastly, future research that conceptualizes both Thai and Burmese involvement in dam projects is also needed. This paper has only provided a starting point for such conceptualizations.

**Disclosure statement**

No potential conflict of interest was reported by the author.
References


<table>
<thead>
<tr>
<th>Interviewee group</th>
<th># of interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academia</td>
<td>8</td>
</tr>
<tr>
<td>Adversely-affected communities</td>
<td>4</td>
</tr>
<tr>
<td>Government</td>
<td>5</td>
</tr>
<tr>
<td>International donor</td>
<td>6</td>
</tr>
<tr>
<td>NGO (international)</td>
<td>14</td>
</tr>
<tr>
<td>NGO (local)</td>
<td>15</td>
</tr>
<tr>
<td>Private sector</td>
<td>27</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>79</strong></td>
</tr>
</tbody>
</table>

*Source: Author’s depiction*
Table 2: List of dam projects to be developed on the Salween River

<table>
<thead>
<tr>
<th>Project</th>
<th>Capacity (MW)</th>
<th>Developer</th>
<th>Power Purchasing Agreement (PPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Thanlwin Dam</td>
<td>1400</td>
<td>• Hanergy Holding Group (China)</td>
<td>PPA not yet signed; power likely exported to China</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Asia World (Myanmar)</td>
<td></td>
</tr>
<tr>
<td>Nawngpha Dam</td>
<td>1200</td>
<td>• HydroChina (China)</td>
<td>90% to China</td>
</tr>
<tr>
<td>Mong Ton Dam</td>
<td>7000</td>
<td>• China Three Gorges Corporation (CTGC) (China)</td>
<td>90% to Thailand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Electricity Generating Authority of Thailand (EGAT) (Thailand)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• International Group of Entrepreneurs (IGE) (Myanmar)</td>
<td></td>
</tr>
<tr>
<td>Ywathit Dam</td>
<td>600-4500</td>
<td>• China Datang (China)</td>
<td>Unknown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Shwe Taung Hydropower (Myanmar)</td>
<td></td>
</tr>
<tr>
<td>Wei Gyi Dam</td>
<td>4,540 – 5,600</td>
<td>• EGAT (Thailand)</td>
<td>PPA not yet signed; power likely to be exported to Thailand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Myanmar Electric Power Enterprise (MEPE) (Myanmar)</td>
<td></td>
</tr>
<tr>
<td>Dagwin Dam</td>
<td>792</td>
<td>• EGAT (Thailand)</td>
<td>PPA not yet signed; power likely to be exported to Thailand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Electric Power Development Company (EPDC) (Japan)</td>
<td></td>
</tr>
<tr>
<td>Hat Gyi Dam</td>
<td>1,360</td>
<td>• EGAT (Thailand)</td>
<td>90% to Thailand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sinohydro (China)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• MEPE (Myanmar)</td>
<td></td>
</tr>
</tbody>
</table>

Source: BRN (2017); data from semi-structured interviews
### Table 3: Key facts regarding the Mong Ton Dam and the Hat Gyi Dam

<table>
<thead>
<tr>
<th></th>
<th>Mong Ton Dam</th>
<th>Hat Gyi Dam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity (MW)</strong></td>
<td>7,000 (largest hydroelectric power plant in mainland Southeast Asia and 6th largest worldwide if completed)</td>
<td>1,350 (projected to be the first of Myanmar’s Salween dams to be completed)</td>
</tr>
<tr>
<td><strong>Resettlement</strong></td>
<td>12,000 people&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5,000 people</td>
</tr>
<tr>
<td><strong>Lead developer</strong></td>
<td>EGAT (Thailand)</td>
<td>EGAT (Thailand)</td>
</tr>
<tr>
<td><strong>Project shares</strong></td>
<td>• EGAT (Thailand): 40%</td>
<td>• EGAT (Thailand): Minority</td>
</tr>
<tr>
<td></td>
<td>• CTGC (China): 40%</td>
<td>• Sinohydro (China): Majority</td>
</tr>
<tr>
<td></td>
<td>• IGE (Myanmar): 20%</td>
<td>• MEPE (Myanmar): Minority</td>
</tr>
<tr>
<td><strong>Contractual agreement</strong></td>
<td>• Build-operate-transfer (BOT) project</td>
<td>• Engineering-procurement-construction (EPC) project</td>
</tr>
<tr>
<td></td>
<td>• Concession period of 30 years (extendable twice for 5 years each)</td>
<td></td>
</tr>
<tr>
<td><strong>Environmental and Social Impact Assessment (ESIA)</strong></td>
<td>• Completed in 2015</td>
<td>• Completed in 2008</td>
</tr>
<tr>
<td></td>
<td>• Carried out by SMEC, Australian consultancy</td>
<td>• Carried out by Chula Unisearch, Thai consultancy</td>
</tr>
</tbody>
</table>

<sup>1</sup> Samarkand (2015) notes that 300,000 people have been displaced around the dam site since 1996. These displacements are at least partly due to ethnic conflicts.

**Sources:** Burma Rivers Network (2016); Kirchherr, Charles & Walton (2016); Lamb & Dao (2015); Platts (2015); Samarkand (2015); Naing (2008); data from semi-structured interviews
<table>
<thead>
<tr>
<th>Main driving actor</th>
<th>Typical dam project with Chinese engagement (according to the current scholarly literature)</th>
<th>Mong Ton Dam project and Hat Gyi Dam project</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chinese political leadership</td>
<td>Chinese private sector player</td>
</tr>
<tr>
<td>Type of deal</td>
<td>Package</td>
<td>Standalone</td>
</tr>
<tr>
<td>Main benefits sought</td>
<td>• Political: Expansion of political influence</td>
<td>• Business: Growth and profit</td>
</tr>
<tr>
<td>(from Chinese perspective)</td>
<td>• Economic: Electricity import</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Social: Avoiding resettlement in China</td>
<td></td>
</tr>
<tr>
<td>Project results (Chinese player – partners)</td>
<td>Win-lose</td>
<td>Win-win</td>
</tr>
<tr>
<td>Overall conceptualization of Chinese engagement</td>
<td>Hegemonic</td>
<td>Contractual</td>
</tr>
</tbody>
</table>

Source: Author’s depiction