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# "Learning it the Hard Way": Social safeguards norms in Chinese-led dam projects in Myanmar, Laos and Cambodia



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# ABSTRACT

Chinese dam developers claim to construct at least every second dam worldwide. However, scholarly literature comprehensively investigating the social safeguard norms in these projects is rare. This paper analyses social safeguard norms in Chinese-led dam projects in Myanmar, Laos and Cambodia, hotspots of Chinese-led dam construction. We find that social safeguard norms adopted have significantly changed in the past 15 years. While Chinese dam developers claimed to adopt standards of the host countries upon the launch of China's Going Out Policy in 2001, with occasional adoption of more demanding Chinese standards, they did not adopt international norms. In recent years, however, they increasingly take into account international norms. We argue that the root cause for this change is social mobilization, with the suspension of the Myitsone Dam in 2011 as a particular game changer. Enhanced social safeguard legislation in host countries and China, stricter rules of Chinese funders and cooperation of Chinese dam developers with international players have also facilitated this change.

# 1. Introduction

Global dam construction is accelerating with global hydropower production projected to increase by 73% in the coming years (Zarfl et al., 2014). Many of these projects are apparently Chinese-led. For instance, Sinohydro, a Chinese state-owned enterprise (SOE), claims to construct every second dam globally (Verhoeven, 2015). Most Chineseled dam projects are pursued in Asia and the Pacific (170 projects), followed by Africa and the Middle East (88 projects), Latin America (23 projects) and Europe (12 projects) (International Rivers, 2014).

China's Going Out Policy is considered to be the main initiator regarding the engagement of Chinese dam developers overseas (Urban et al., 2013; Matthews and Motta, 2015; Nordensvard et al., 2015) with only 17 Chinese-led dam projects abroad completed prior to 2000, compared to at least 75 projects completed post 2000 (International Rivers, 2014). Issued in 2001 as part of China's 10th Five-Year-Plan (2001–2005), the policy is particularly aimed at the country's SOEs that had frequently outgrown the domestic market (Murphy, 2008; Urban et al., 2013) which meant for Chinese state-owned dam developers that they had developed all potential sites on the rivers they were assigned to (TN1<sup>1</sup>). China's Going Out Policy also coincided

with the unwillingness of international donors to fund dam projects from the late 1990s onwards, allegedly, because of anti-dam NGOs and their media power (Biswas, 2012b); Chinese dam developers keenly stepped in to fill this gap (TNI3; International Rivers, 2012, p. 3).

Initially, Chinese dam developers' expansion focused on Southeast Asia (TP13), due to the massive untapped hydropower potential in many Southeast Asian countries (with 97% of Myanmar's technically exploitable 100 GW hydropower potential undeveloped, for instance (Ironside, 2015)) in combination with the lagging technical skills in these countries (OP3; McDonald et al., 2009). Such Chinese-led hydropower development was and is frequently part of a larger agreement. As a consequence of a dam project carried out, China also expects a strengthening of political ties with the recipient (on China as a water hegemon: Liebman (2005), Sinha (2012) or Biba (2014)) as well as economic ties (Mattlin and Nojonen, 2015; Mattlin and Nojonen (2015); Kirchherr et al. (2016)). The most controversial economic tie may relate to electricity exports with hydropower developed abroad supposed to power the Chinese economy at times. A case in point is Myanmar's Myitsone Dam with 90% of the electricity generated supposed to be channelled to China in exchange for USD 17 billion (Linn, 2013).

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<sup>&</sup>lt;sup>1</sup> This and similar codes refer to interviews. Details are provided in the methods sections.

Chinese-led dam projects are also controversial due to the developers' alleged failure to address negative impacts of dams with many articles within the popular press published on this topic in recent years (e.g. (Oster, 2007; Motey, 2008)). Criticism regarding the implementation of Chineseled dam projects is directed at the norms employed by Chinese players during these dam projects. We are particularly interested in social safeguard norms. The scholarly literature on this topic is burgeoning. This research seeks to build on this literature in two ways. First, we analyze multiple projects in Myanmar, Laos and Cambodia, viewing these country cases as aggregate parts of a regional case study on social safeguards in Chinese-led dam projects. Current research analyses adherence to social safeguards via a case study approach that either focuses on only one or two dam projects (e. g. Hensengerth 2012; Siciliano et al., 2015; Urban et al., 2015; Kirchherr et al., (2016a)) or a single dam developer (e. g. Nordensvard et al., 2015). Thus, our work adds further validity to these findings by addressing multiple projects and dam developers simultaneously. Second, our research particularly aims to reveal the mechanisms that led to the adoption (or nonadoption) of various safeguards in Chinese-led dam projects. Current research usually analyses which social safeguards were adhered to, but does not investigate why these specific safeguards were adopted (a rare exception is Scheumann and Hensengerth (2014a) which is further discussed in Section 3 of this paper).

Throughout our paper, we distinguish between three sets of social safeguard norms – host country norms, Chinese norms and international norms (see Section 3). We find that Chinese dam developers only adopted (limited) standards of the host countries upon the launch of China's Going Out Policy, sometimes complemented by more ambitious Chinese standards. In recent years, however, international norms were employed more frequently. We argue that the root cause for this change is social mobilization, with the resulting 2011 Myitsone Dam suspension as a particular game changer. Additional pathways are enhanced social safeguard legislation in the host countries and China, stricter rules of Chinese funders and cooperation of Chinese dam developers with international players.

When we refer to Chinese dam developers, we do not intend to convey them as a single actor. Rather, we are aware that different players adopt different social safeguard norms. Hence, we attempt to differentiate as much as possible, while respecting demands regarding anonymity and still conveying overarching trends regarding social safeguard norms in Chinese-led dam projects in Myanmar, Laos and Cambodia. We focus our analyses on players constructing dams, not on those merely providing equipment.

The remainder of this paper is organized as follows. In Section 2, we describe the methods adopted. In Section 3, we outline the literature on norms as the theoretical framing for our paper. In Section 4, we discuss which norms were adopted by Chinese dam developers from 2001 onwards. We attempt to explain identified changes in Section 5 and our argument is summarized in Section 6.

# 2. Methods

Our aim for this study was to conduct a regional case study on social safeguards in Chinese-led dam projects and different country cases were envisaged to serve as aggregate parts of this regional case study. Our selection of country cases was guided by three criteria.

First, it was required that a significant number of Chinese-led dam projects were pursued in any country case included. This would ensure that there would be a sufficient number of relevant dam projects to study. Within Asia and the Pacific almost 50% of the various Chinese-led projects are pursued in Myanmar, Laos and Cambodia which are thus particular hotspots of Chinese-led dam construction (Fig. 1).<sup>2</sup>



Fig. 1. Chinese-Led Dam Projects in Myanmar, Laos and Cambodia.

Second, it was necessary that the authors of this paper were thoroughly familiar with any country case included. This would ensure that the research would be grounded in significant context knowledge of those conducting it which would contribute to the validity of findings (Basurto and Speer, 2012). Several authors of this paper have undertaken extensive fieldwork (oftentimes over multiple years) in Myanmar, Laos and/or Cambodia.

Third, we needed to study case countries and Chinese-led dam projects that had already been analyzed by previous academic studies concerned with social safeguards. This would ensure that results from our primary data collection could be triangulated which would further enhance the validity of our findings and contribute to the cumulative development of knowledge on this timely topic. Our review of the scholarly literature indicated that multiple relevant academic studies had already been undertaken on Chinese-led dam projects in Myanmar, Laos and Cambodia, e. g. Lamb and Dao, 2015; Sayatham and Suhardiman, 2015; Urban et al., 2015.

Findings outlined in this paper regarding these three country cases are based on semi-structured interviews, scholarly writings on Chinese engagement overseas (with a particular focus on Chinese dam developers) as well as relevant news articles and reports.

Semi-structured interviews were carried out in the field (Myanmar, Thailand, China and Singapore) from June to August 2015 and from February to April 2016; furthermore, telephone interviews (which include Skype interviews) were undertaken from April and August 2015 and from February to April 2016. Selected online surveys were also carried out during the telephone interviewing phase. All interviews are part of a larger research project investigating the politics of dam construction in Southeast Asia. More than 150 semi-structured interviews have been carried out for this research project to date; 47 of these interviews specifically addressed questions relevant for this paper (Table 1). These interviews are interviews with scholars (4 interviews), international donors (5 interviews), NGOs (17 interviews) and private sector players (21 interviews) (Table 2). All interviews are coded with the first letter indicating the mode of interviews (T for telephone/ Skype, F for face-to-face, O for online survey/e-mail), the second letter indicating the type (A for academia, G for government, I for international donor, NI for international NGO, NL for local NGO, P for private sector) and the sequence of numbers indicating the overall interview number within a type.

Snowball sampling was employed to recruit interviewees. This approach is frequently necessary when conducting research under less than optimal conditions (Cohen and Arieli, 2011). More formal sampling approaches were tried initially, but envisaged interviewees would not respond to any reach-outs. For instance, an initial e-mail reach-out to approximately a dozen Chinese dam developers yielded zero replies. A survey then initiated and sent out to more than 1500 dam developers via Aqua~Media (the host of a major global dam

<sup>&</sup>lt;sup>2</sup> Data for these analyses is from International Rivers (2014). Projects pursued can be projects completed, suspended, proposed, or under construction as well as those with an unknown status.

#### Table 1

Overview of Interviews.

#	Interviewee	Organization	Code
1	Scholar	British university	TA1
2	Scholar	British university	TA2
3	Scholar	Chinese university	TA3
4	Scholar	Thai university	TA4
5	Staff	International donor	TI3
6	Staff	International donor	TI5
7	SIA consultant	Freelancer, mostly working for	TI6
		Asian Development Bank (ADB)	
8	Senior official	World Bank	TI7
9	Senior official	World Bank	TI9
10	Senior staff	International NGO	TNII
11	Staff	International NGO	TNI2
12	Senior staff	International NGO	TN13
13	Senior staff	International NGO	TNI4
14	Consultant	dom projecto mostly in	11115
		Southeast Asia	
15	Senior leader	International NGO	TNI6
16	Senior staff	International NGO	TNI7
17	Activist	Norwegian environmental NGO	TNI8
18	Activist	Major international NGO	TNI15
19	Staff	Major international NGO	TNI16
20	Environmental activist	Southeast Asian NGO	TNL1
21	Activist	Burmese NGO	FNL3
22	Activist	Involved in various anti-dam	FNL4
		movements in Myanmar,	
		especially the Myitsone Dam	
23	Activist	Burmese NGO	TNL5
24	Activist	Involved in anti-Myitsone Dam	FNL6
25	Activist	Asian NGO	FNL7
26	Director	NGO in Myanmar	FNL14
27	Independent consultant	Served Sinohydro as a SIA	TP1
		consultant	
28	Staff	Global dam association	TP2
29	Former employee	Chinese dam developer	OP3
30	President	Dam industry association	TP4
31	Consultant	Global dam association	TP5
32	Senior staff	European dam developer	TP6
33	Representative	Global dam association	TP7
34	Senior staff	European dam developer	TP8
35	Former employee	Major hydro player	TP9
36	Senior staff	Major Chinese dam developer	OPIO
37	Lawyer, serving CEB in	Major global law firm	FP12
	Asian dam projects		
38	Managing partner	Consultancy specialized in	TP13
50	Managing partner	hydropower and water resources	11 15
		projects	
39	Environmental lawyer	Freelancer	FP16
40	Managing partner	Major global strategy consulting	TP17
	0.01	firm	
41	Senior engineer	European dam developer,	TP20
		involved in various dam projects	
-		in Southeast Asia	
42	Spokesperson	Chinese dam developer	TP21
43	Managing director	Large consultancy carrying out	FP23
44	Former on one loss	ESIAs	TD0 4
44 45	Managing director	Invostment firm in Myonmer	1124 TD25
46	Managing director	Major Burmese dam developer	TP26
47	Environmental specialist	Canadian dam developer	OP27
• /	operation		0.1

developer conference) yielded 5 answers, one of which was complete. The seeds of the eventual snowball sample were mostly recruited via the professional networks of the authors, developed prior to this research, a common approach utilized in snowball sampling (Miller and Brewer, 2003). The sample was terminated when additional interviews yielded limited or no novel insights (thematic saturation) (O'Reilly and Parker, 2012). The data collected was organized via NVivo 11 with all interviews coded according to a set of predefined themes, e. g. "reasons for social safeguards adoption". The resulting

clusters were then reviewed and analyzed by the authors. Coding on additional sub-themes was conducted, if appropriate.

We note that many of our interviews were more of a "casual, comfortable conversation" (Berry, 2002), loosely structured, and with many open-ended questions; they were not the systematic execution of a questionnaire. Indeed, we believe - echoing Berry (2002) - that this conversational approach helped us build trust with interviewees and thus gain additional insights. We acknowledge that this approach can limit the comparability of the various interviews conducted (e.g. evident in Fig. 2 of this paper with the status quo question posed in 30 interviews and the outlook question only posed in 21 interviews). Yet comparability (and even more representativeness) are not prime purposes of this research. Rather, we aim to provide an in-depth understanding, a common aim within qualitative research (Wilmot, 2005), regarding the Chinese-led dam industry in Myanmar, Laos and Cambodia through the eyes of those studied. The narrative outlined in this paper largely reflects the narrative of the players in the sector. While Berry (2002, p. 680) has noted regarding elite interviewing that "it is not the obligation of a subject to be objective and tell us the truth", we remain confident regarding our overall findings because the narrative is remarkably consistent across various stakeholders with differering interests (e. g. dam developers, international donors and NGOs).

The initial narrative from the semi-structured interviews was triangulated via a systematic review of the scholarly literature on Chinese engagement overseas (with a particular focus on Chinese dam developers), as outlined in the first paragraph of this section. For this purpose, we carried out keyword searches in several databases such as Thomson Reuters' Web of Science or Elsevier's Scopus. Searches included any scholarly journal articles, grey literature, book chapters and books that featured relevant keywords, e. g. 'Chinese dam developers' or 'social safeguards'. Furthermore, an advanced Google News Archive search was conducted for this paper (using multiple keywords such as 'Chinese dam developers' or 'social safeguards'). No limit was set for the time period, with the search yielding several hundred results. These results also pointed us towards various relevant reports, e. g. International Rivers (2015), which further helped to refine the narrative that emerged from the interviews.

#### 3. Theoretical framing

Social safeguards are defined as the policies in place to ensure that project-affected people are consulted about the project throughout the life of the project, from conception through to operation and removal, and that these people benefit from the project (World Bank, 2016). This definition of social safeguards is underpinned by notions of social justice<sup>3</sup> which scholars such as Boström (2012, p.5 ff.) and Nordensvard et al. (2015, p. 247 ff.) have conceptualized as entailing both a procedural and a distributive component. The procedural component of social justice relates to the consultation of those affected by a project, the distributive component to sharing the benefits of the project with those affected by it.

Discussions on distributive social justice are frequently embedded in a broader discourse on equitable development. While large dams provide multiple benefits such as electricity, irrigation or flood control at scale and thus can accelerate a country's overall economic growth (Biswas, 2012a; Tortajada, 2015), those displaced by a dam have been found to be mostly worse off upon displacement (Scudder, 2012) and scholars such as Moore (1998) and McCully (2001) have accused large dams of contributing only to unequitable development (with McCully (2001, p. 24 ff.) even claiming that large dams would not benefit a

<sup>&</sup>lt;sup>3</sup> Various definitions of environmental safeguards are frequently underpinned by notions of ecocentrism (Gagnon Thompson and Barton, 1994; Kortenkamp and Moore, 2001; Kopnina, 2016). Since environmental safeguards are not the focus of this paper, this underpinning is not further discussed, though.

#### Table 2

Types of Norms Adopted in Dam Projects.

Norm	Example policy	Requirements for dam developer	Typical operationalization
Host country	Laos Power Sector Environmental Policy	Limited (in Myanmar, Laos and Cambodia)	Procedural: No or only extremely limited project information is provided to project-affected communities
	Myanmar Environmental Impact Assessment Procedure (EIAP)		Distributive: No compensation is given to project-affected communities
Chinese	Regulations on Further Regulating the Development of Contracting Foreign Projects Guidelines for Environmental Protection in Foreign Investment and Cooperation	Intermediate	<i>Procedural:</i> Project information is provided to project-affected communities, feedback is collected and (at least partially) incorporated <i>Distributive:</i> Some compensation is given to project-affected communities
Inter- national	Hydropower Sustainability Assessment Protocol (HSAP)	Significant	<i>Procedural:</i> Project information is provided to project-affected communities, feedback is collected and incorporated to the maximum extent in a collaborative process
	World Commission of Dams (WCD) recommendations		Distributive: Significant compensation is given to project-affected communities and these communities are better off as a result of the dam development

# How do you see social safeguards project performance in Chinese-led dam projects in Myanmar, Laos and Cambodia from an international social safeguards perspective?



1 Interviewees responding to this question

Fig. 2. Social Safeguards Status Quo and Outlook in Chinese-Led Dam Projects in Myanmar, Laos and Cambodia.

country's overall economic development, but only its elites). Community-based energy initiatives (including small dams) are often proposed as an equitable alternative to large dams (Ansar et al., 2014; Bauwens, 2016), whereas even most scholarly proponents of large dams, e. g. Biswas (2012a) or Tortajada (2015), acknowledge the "importance of ensuring that project-affected people are better off as a result of dam development" (WCD, 2000, p.24).

Throughout this paper, we consider the category of norms to include shared ideas, expectations and beliefs about what constitutes procedural and distributive social justice in a large dam project with regard to project-affected people (on norms: Finnemore and Sikkink (1998), Moore (2012)). Norms evolve into a codified standard if consensus is sufficient among the stakeholders at question (Gilardi, 2012); with respect to the social safeguards for hydropower this can involve legal codification at a national level, and also involves codification in international law pertaining to indigenous populations, transboundary waters, or cultural heritage. However, norms should not be viewed as "immutable structures" (Park and Vetterlein, 2010), as they remain fluid even if consensus is reached. Codification is only an intermediate step in a continuous norm evolution process.

Chinese dam developers are influenced by three types of norms,

according to our conceptualization: First, host country norms, which are the norms of the country the dam developers are operating in (codified by the host country government). This type of norm overlaps with laws since there is a legal obligation for dam developers to comply with them. Laotian social safeguard regulations would be an example of such host country norms. Second, the norms of the country the dam developer originated in, in our case China (codified by Chinese decision-makers). These norms are usually not legally enforceable for activities outside the originating country (with several exceptions such as international tax evasion, for instance). An example for such norms would be principles on foreign investment published by China's State Council. Third, global norms such as the Hydropower Sustainability Assessment Protocol (HSAP) (codified by international organizations, in this case the International Hydropower Association (IHA)). These international norms are usually non-binding from a legal perspective with dam developers voluntarily adopting them.

We view the various international norms as the most demanding ones among these three sets of norms from the perspective of the dam developer, with the norms outlined by the World Commission of Dams (WCD, 2000) "regarded as the gold standard for dam building" (International Rivers, 2016). These are followed by Chinese norms in our point of view, with International Rivers (2012, p. 25) finding that China has relatively strong laws governing resettlement, for instance. Host country norms in Myanmar, Laos and Cambodia are least demanding, we find. Indeed, requirements to conduct an Environmental and Social Impact Assessment (ESIA) were only introduced in Myanmar in January 2016 (Thant, 2016). Yet these requirements largely neglect social impacts (FP23) and the government lacks enforcement capabilities to implement them (FP16). Laos has had various social safeguard policies in place since the mid-1990s (ADB, 2010), though these are "too broad and complex for the available resources" (ADB, 2010) and are thus allegedly frequently not complied with. Cambodia passed a set of environmental and social safeguards in 2010 (MPWT, 2010), vet it has been questioned if (Chinese) dam developers comply with these since the Cambodian government's enforcement capabilities are also limited (Hensengerth, 2015). A typical procedural and distributive operationalization of these three types of norms, adapted from Kirchherr et al., (2016b, is provided in Table 2. We argue that a project would come closer to achieving procedural and/or distributive social justice if international safeguard norms, as operationalized in this table, are mostly implemented.

While NGOs generally call upon dam developers to adopt international social safeguard norms, we note that even these norms remain controversial. For instance, the HSAP is an international social safeguard norm developed by the dam industry as well as various NGOs (such as WWF, Transparency International) (HSAP, 2015). Yet International Rivers (2013) calls it an "industry effort [...] to greenwash dams and undermine the recommendations of the World Commission of Dams (WCD)". An (also contested) alternative to both the HSAP and the WCD recommendations are the guidelines by the International Finance Corporation (IFC, 2016), a member of the World Bank Group; these norms were criticized (inter alia) because they would not (unlike WCD and HSAP norms) "apply specifically to hydro dams" (Scudder, 2005) and thus neglect the various impacts specific to this infrastructure (Kirchherr and Charles, 2016).

We apply the proposed analytical framework on the three different types of norms that we have summarized in Table 2 in Section 4 of this paper in order to map social safeguards norm adoption in Chinese-led dam projects over time.

The motivations for norm adoption by Chinese dam developers may be rational cost-benefit-calculations (with the adoption of certain norms eventually less costly than their non-adoption) or internalization (with those adopting them genuinely 'believing' in them) (Risse and Ropp, 2013) with Risse and Ropp (2013, p. 13) arguing that "the costbenefit calculations of utility-maximizing egoistic actors [adopting international norms due to] market pressures eventually lead to the incorporation of [these] norms". This deterministic argument suggests that Chinese dam developers would eventually internalize any demanding international norm adopted.

Scheumann and Hensengerth (2014a) (in their recent book *Evolution of Dam Policies*) suggest three pathways that explain initial international norm adoption which are based on a comprehensive review of the relevant literature (with a particular focus on Risse and Sikkink (1999)).

First, norms may be adopted due to a reputational pathway, i. e. because of a country's or company's effort to become a respected international player. This pathway is also suggested by Risse and Sikkink (1999) who argue that those 'shamed' for their non-adherence to international norms – as a result of this shaming – start adhering to them. We note that this explanation is closely intertwined with and possibly induces legal drivers, i. e. certain norms are complied with because it is the law of the host country (with governments passing and enforcing certain laws in order not to be 'shamed', or companies avoiding the negative publicity of a law suit).

Second, norms may be adopted due to social mobilization, i. e. a thriving civil society in a country leads to the TNC's adoption of international social safeguards norms. This hypothesis also draws on Risse and Sikkink (1999) who particularly highlight the significance of activists, both domestic and international, that highlight violations of norms to the international community; their pressuring then eventually leads to the adoption of international norms. Deitelhoff and Wolf (2013) specifically discuss the relevance of social mobilization for international norm adoption in the private sector.

Third, norms may change due to reliance on foreign financial services, i. e. institutions such as the World Bank only provide funding for a dam project if international social safeguard norms are adhered to. This third hypotheses relates most to the literature on conditionality as a pathway for norm adoption (Mattlin and Nojonen, 2015; Risse and Ropp, 2013; Gilardi, 2012).

A prerequisite for the adoption of norms are the capacities of those expected to adopt them (Risse and Sikkink, 2013, p.276 ff.). "What if [TNCs] do not have sufficient capacity to enforce [the safeguards] to which they have committed?", Börzel and Risse (2013, p.74) ask. Even if these actors were motivated to adopt certain norms, these norms may be violated due to lacking capacities; particularly companies with limited experience overseas (such as Chinese dam developers in the early 2000 s) may be lacking the capacities to implement international norms.

We apply the discussion on motivations for norm adoption in the beginning of Section 5 of this paper. We then utilize the three pathways suggested by Scheumann and Hensengerth (2014a) as an initial structure for our analysis on pathways explaining norm adoption. We close Section 5 with a discussion on cooperation with international players – a pathway that emerged from our data – and capacities.

# 4. Norms in Chinese-led dam projects overseas: 2001 and beyond

This section is structured in three sub-sections. First, we focus on *host country social safeguard norms*, arguing that Chinese dam developers mostly claimed to adopt these norms upon the launch of China's Going Out Policy in 2001. Second, we discuss *Chinese social safeguard norms*, outlining that more demanding Chinese norms were adopted at times as well in Chinese-led dam projects in the early 2000s. Third, we investigate *international social safeguard norms*, providing evidence that these norms were adopted more recently by Chinese dam developers. We also offer a brief outlook on the future direction of norm adoption by Chinese dam developers in this final sub-section.

# 4.1. Host country social safeguard norms

The Chinese-led projects implemented in Myanmar, Laos and Cambodia upon the launch of China's Going Out Policy in 2001 largely claimed to adopt the social safeguard norms of the host country, according to our interviews (e. g. TNL1, TP13, TP21). This was seen as a reflection of "China's promise of 'non-interference in domestic affairs'" (McDonald et al., 2009), a principle criticized by many Western players with international donors such as the World Bank usually tying their loans to a set of policies to be implemented by the recipient country, e. g. anti-corruption measures, in order to, allegedly, further accelerate the recipient country's development (Nega and Schneider, 2011).

Yet the Chinese dam developers' emphasis of host country social safeguard norms could imply that no norms whatsoever were adopted since no codified social safeguards policies were in place in Myanmar and Cambodia in the early 2000s, as outlined in the previous section. An example of a Chinese-led dam project commenced in the early 2000s that was particularly criticized for its lacking social safeguards (with farmers resettled allegedly resettled to non-arable land, a major violation of distributional social justice) is Myanmar's Paunglaung Dam whose construction started in 2004 (Lone, 2013; International Rivers, 2014).

Social safeguard policies were in place in Laos in the early 2000s,

but it is contested that these were (and are) adhered to by Chinese players. A Chinese-led project whose construction started in 2001 "without public consultation or participatory planning" (Sayatham and Suhardiman, 2015) (and thus lacking procedural social justice) is the Nam Mang 3 Dam. A more current case in point are the seven dam projects pursued by Sinohydro on the Nam Ou River since 2011; these are particularly criticized for the limited information provided about them (Mang, 2016) and are allegedly built with very little oversight from the Lao government (with the government not even having the financial resources to visit the site at times) (TP13). These projects thus also reportedly lack procedural social justice.

# 4.2. Chinese social safeguard norms

While the adoption of host country norms may have been emphasized in early Chinese-led dam projects abroad, our interviewees also suggested that Chinese norms may have impacted Chinese-led dam projects in Myanmar, Laos and Cambodia at times (e. g. TP9, TP21, TA1). Initially this was through translation of established working practices: "When Sinohydro came to Laos, they thought Laos is a smaller version of China", a European dam developer advising Sinohydro noted (TP8). "You are much more familiar with your home country standards. So you will try to use them [abroad]", a Chinese dam developer explained (TP21). The adoption of Chinese standards could even imply that developers implemented various costly yet noncompulsory safeguard measures reflecting an operationalization of social justice more demanding than those of the host country. For instance, compensation was (and is) paid by China Power Investment Corporation (CPI) in the case of the Myitsone Dam resettlement, although such compensation was not required according to Burmese legislation at that time (no consultation was conducted, though, and communities were displaced to non-arable land) (Kirchherr et al., 2016b). We note that various relevant pieces of safeguards legislation were introduced by Chinese authorities in recent years (Table 3). While their adoption is voluntary, as outlined in the previous section, Mang (2013) from International Rivers still calls them "a signal to overseas dam builders [...] to act responsibly".

#### 4.3. International social safeguard norms

Chinese dam developers nowadays claim to adhere to various international social safeguard norms with China Three Gorges Corporation (CTGC) and Sinohydro both publicly committing not to build any projects without an ESIA, for instance (Bosshard, 2016), a commitment to procedural social justice. A Chinese developer in Myanmar said that safeguards by the World Bank would be "our reference" (TP21). Yet our interviewees' overall judgement regarding international social safeguards adherence in Chinese-led dam projects nowadays is ambiguous (Fig. 2). NGOs - the key watchdogs of dam developers – were the most critical regarding current project performance. Of the 13 NGOs responding to this question, over 75% believed current project performance was poor from a social safeguards perspective. The ambiguity we found in our interviews is also reflected in two recent rankings, compiled by International Rivers (2015a) (Fig. 3) (with the results of these rankings reported to be even used in tenders by Sinohydro nowadays (TNI15)) (Fig. 3).

Overall, our interviewees believed that international norms may soon prevail in projects implemented by Chinese dam developers, though (Fig. 2). "The Chinese have now understood that it is not sufficient if there is a stamp on all of your papers and all permits are approved", an NGO leader collaborating with a major Chinese dam developer said (TNI3). "It is now widely accepted [by Chinese dam developers] that affected people are the first beneficiaries", a representative from a global dam association said when asked about distributional justice in Chinese-led dam projects (TP2).

We note that the prevalence of international norms in Chinese-led dam projects may not silence critics, as already indicated in the previous section, since the various international norms remain contested. For instance, the Theun Hinboun Dam project in Laos led by Statkraft, a Nordic player, was called a benchmark for social safeguard norms (TNI8). Yet both procedural and distributional social safeguards deficiencies regarding Theun Hinboun were portrayed (inter alia) by Whitington (2012) and Virtanen (2006). A dam project in Laos that, according to its funders, the World Bank and the Asian Development Bank, is a best practice dam from a social safeguards perspective is the

#### Table 3

Key Chinese social safeguards legislation (relevant for Chinese dam developers overseas). Sources: State Council (2007); Herbertson (2011); International Rivers (2012); Mekong Watch (2015); MOFCOM (2015).

Year Legislation Details Three-paragraph-policy on China Exim Bank's environmental policy guidelines 2004 China Exim Environmental Policy Publicly released only in April 2007 2006 9 Principles on Encouraging and Standardizing Foreign Called upon Chinese companies abroad to adopt host country laws and regulations Investment Also asked Chinese companies to care for local communities and their livelihoods Largely based on norms already in place for projects in China 2007 Regulations on Further Regulating the Development of Detailing the '9 Principles on Encouraging and Standardizing Foreign Investment' Contracting Foreign Projects Applicable also for banks, e. g. China Exim Bank (CEB) 2008 China Exim Bank's 'Environmental Guidelines' Significant expansion of the 2004 three-paragraph policy by China Exim Bank on environmental policy guidelines Requires any firm funded by a CEB loan to conduct an EIA for the project at question and to compensate project-affected communities for any environmental damage induced by the CEB-funded project 2009 Initial Draft on 'Environmental Guidelines for Overseas Developed by Chinese Academy for Environmental Planning (CAEP) (lead author) Investment Eventually passed as 'Guidelines for Environmental Protection in Foreign Investment' 2013 Guidelines for Environmental Protection in Foreign Include not only guidelines regarding environmental protection, but also numerous provisions on social Investment safeguard norms For instance, companies are encouraged to establish a communication channel with local communities on social issues

Rankings	Company Name	Environmental Management Scores	Community & Labor Relation Scores	Risk Management Scores	Overall Scores
1	Sinohydro International				•
2	Gezhouba	•	•	•	•
3	Datang	•			٠
4	PowerChina	0	0	0	
5	Three Gorges		0	•	•
6	Huadian		•		٠
7	Huaneng			<u> </u>	
Rankings o	f Project Performance Asses	sment of Chinese Ov	erseas Hydropower	Companies	-
Rankings o Rankings	f Project Performance Assess Company Name	sment of Chinese Ove Environmental Management Scores	erseas Hydropower Community & Labor Relation Scores	Companies Risk Management Scores	Overall Scores
Rankings o Rankings 1	f Project Performance Assess Company Name Sinohydro International	sment of Chinese Ovo Environmental Management Scores	erseas Hydropower Community & Labor Relation Scores	Companies Risk Management Scores	Overall Scores
Rankings o Rankings 1 2	f Project Performance Assess Company Name Sinohydro International Gezhouba	sment of Chinese Ov Environmental Management Scores	Community & Labor Relation Scores	Companies Risk Management Scores	Overall Scores
Rankings o Rankings 1 2 3	f Project Performance Assess Company Name Sinohydro International Gezhouba Three Gorges	sment of Chinese Ovo Environmental Management Scores	Community & Labor Relation Scores	Companies Risk Management Scores	Overall Scores
Rankings o Rankings 1 2 3 4	f Project Performance Assess Company Name Sinohydro International Gezhouba Three Gorges Huadian	sment of Chinese Ovo Environmental Management Scores	Community & Labor Relation Scores	Companies Risk Management Scores	Overall Scores
Rankings o Rankings 1 2 3 4 5	f Project Performance Assess Company Name Sinohydro International Gezhouba Three Gorges Huadian PowerChina Resources	sment of Chinese Ovo Environmental Management Scores	Community & Labor Relation Scores	Companies Risk Management Scores	Overall Scores
Rankings o Rankings 1 2 3 4 5 6	f Project Performance Assess Company Name Sinohydro International Gezhouba Three Gorges Huadian PowerChina Resources Huaneng	sment of Chinese Ovo Environmental Management Scores	Community & Labor Relation Scores	Companies Risk Management Scores	Overall Scores

SOURCE: International Rivers (2015)

Fig. 3. Policy Commitments and Project Performance of Chinese Dam Developers.

Nam Theun 2 Dam (Porter and Shivakumar, 2010). However, Baird et al. (2015, p.1101) find regarding Nam Theun 2's downstream impacts that "the situation is much less positive than has been portrayed", raising questions about distributional justice. These questions are largely echoed by Guttal and Shoemaker (2004). A consensus on international social safeguards and thus the constituents of procedural and distributional social justice in large dam projects may need to be reached among NGOs and industry before any dam project will be uncontested.

# 5. Pathways of norm adoption in Chinese-led dam projects overseas

This section is structured in five sub-sections. First, we analyze motivations for norm adoption, arguing that Chinese dam developers are led mostly by rational cost-benefit calculations. Second, we outline social mobilization as a direct pathway and root cause for international norm adoption, showcasing how the suspension of Myanmar's Myitsone Dam was a particular game changer for Chinese dam developers. Third, we outline laws of the host country and China as an indirect pathway which functions particularly due to China's interest to safeguard its reputation abroad. Fourth, we discuss provision of financial services as an indirect pathway which is also largely enforced by Chinese legislation. We close this section with a discussion of the indirect pathway of cooperation with international players and capacity, arguing that Chinese dam developers commenced cooperation with international consultancies and NGOs to address capacity issues regarding international social safeguards. A conceptual visualization of the described pathways of norm adoption is provided in Fig. 4.

# 5.1. Motivations for norm adoption

The majority of interviewees believed that reported improvements in social safeguard policies are induced by rational costbenefit-calculations of the Chinese dam developer – with the adoption of various international social safeguards ultimately less costly than their non-adoption (e. g. argued by TI5, TNI6, FNL4,



Fig. 4. Pathways of Norm Adoption in Chinese-Led Dam Projects Overseas.

TA4).<sup>4</sup> Social impacts "are just problems to get around", an NGO leader said (TNI6), for instance. Meanwhile, a scholar argued that some Chinese-led high-profile projects would be acceptable from a social safeguards perspective. However, these would not be representative for all projects, particularly the smaller ones with little international coverage and campaigning of international NGOs (TA4), e. g. projects developed in Laos' Sekong River Basin, a Mekong tributary (International Rivers, 2014). Chinese dam developers allegedly believed they could get away with limited social safeguards in these projects.

<sup>&</sup>lt;sup>4</sup> We note that it was also argued in our interviews that Chinese dam developers would have internalized international norms. For instance, staff from an international NGO stated (TNI3): "I was at a Sinohydro dam construction site. And a truck by one of the local communities close by was stuck. Sinohydro then took their crane to free the truck. And they did not charge anyone anything for this. They thought helping out would be natural. After all, they were just guests in this country". Such a viewpoint (focussing on 'caring' for impacted communities which may be seen as one operationalization of international safeguards norms) was not the prevailing viewpoint in our interviews, though, and is thus not further detailed in this paper.

## 5.2. Social mobilization

The example of Laos' Sekong River Basin already suggests that social mobilization was seen as the root cause altering Chinese dam developers' cost-benefit-calculations regarding the adopting of international social safeguard norms. "Chinese dam developers are verv, very sensitive to public pressure", an investor said (TP25) (also echoed by TNL1 or TI5). A Chinese dam developer acknowledged that "[protests can] lead to project suspensions [and thus additional costs]. To carry on, we have sometimes had to radically change our project management approach" (OP3). This finding on the significance of social mobilization as a determinant for norm adoption particularly echoes Risse and Sikkink (1999), as outlined in Section 3, and also resonates with Deitelhoff and Wolf (2013) who specifically discussed social mobilization as a root cause for norm adoption in the private sector. We note that Scheumann and Hensengerth (2014) did not conceptualize social mobilization as the root cause of international norm adoption in the dam industry, but only as one of three equal international norm adoption pathways - a conceptualization nuanced by our interviews.

A SIA consultant noted that protests against Chinese-led dam projects particularly culminated from 2008 onwards with various complaints then filed by international NGOs against Chinese-led dam projects (TI6). For instance, Laos' Nam-Lik 1-2 Dam (with construction starting in 2007) was criticized regarding its compensation scheme with (inter alia) the infrastructure provided to resettlees allegedly being substandard (Saokhamkeo et al., 2016). A second project also criticized for its limited social safeguards is Cambodia's Kamchay Dam (whose construction started in 2008) (Siciliano et al., 2015; Middleton et al., 2015; Hensengerth, 2015). A third controversial project that allegedly was influential in changing the norms adopted in Chinese-led dam projects was Myanmar's Myitsone Dam (e. g. stated by TP25, TNL1, OP3 or TA4). The project was suspended in 2011 due to massive public protests (Lynn, 2011; Linn, 2013). "This suspension was a really painful punch in the stomach", a Hydropower Sustainability Assessment Forum (HSAF) participant said (TNI3). "Chinese SOEs learnt a great deal out of the Myitsone project", a former employee of a Chinese dam developer stated (TP24).

While it was generally believed that governments in Myanmar, Laos and Cambodia would not halt a Chinese-led dam project, this perception changed upon the suspension of the Myitsone Dam with Chinese dam developers suddenly considering the halting of a project to be a credible worst-case scenario in Myanmar, Laos and Cambodia (e. g. stated by TI6, TI7, TNL1). CPI had spent over 800 million (according to its own calculations) on the Myitsone Dam prior to its suspension (Lwin, 2015) - investments irreversibly lost if the project is not resumed (assuming the Burmese government would not pay compensation to CPI once the project was permanently cancelled). If the Myitsone Dam project had adhered to international safeguards (particularly the consultation of project-affected people and civil society), this would have minimized protests and possibly avoided the suspension and thus financial loss, relevant private sector players believed (e. g. OP3, TP21, TP24). Indeed, CPI has now launched a civil society consultation regarding the project in order to resume it, a stark contrast with the lack of consultation prior to the suspension (Ikners, 2016).

The Myitsone Dam suspension and its alleged drivers (with lacking safeguards frequently mentioned as a key driver) were widely discussed in the press in Southeast Asia and beyond and the project was thus particularly seen as a warning sign by Chinese dam developers (TP24; OP3; Motlagh, 2012; Harvey, 2011; Kiik, 2016). "If you oversee a project like the Myitsone Dam and it blows up, then your career is basically over", an investor in Myanmar said (TP25), since pressure to deliver projects on budget and on time is tremendous within increasingly commercial Chinese dam developers (Reuters, 2014). "Learning it the hard way – that really describes the experience of Chinese hydro-

players going abroad", an HSAF participant summarized (TNI3).

We also found evidence via our interviews that selected intraorganizational dynamics within Chinese dam developers adversely impact improvements regarding social safeguard policies, though. For instance, salaries within Sinohydro are usually directly tied to the achievement of certain project milestones which may lead to prioritizing rapid project progress over sustainable implemention (TP8). This allegedly is a common practice among all industry players (TP25). Furthermore, a European dam developer claimed that the project budget for social safeguard policies in his firm is always fixed prior to the project start (TP8). By contrast, at a firm such as Sinohydro the project manager would decide upon the budget for social safeguard policies. "So it is up for negotation, competing with many other demands", the developer said (TP8). Particularly due to the frequent cost overruns in dam projects - estimated to be 99% for large dams on average (Ansar et al., 2014) - this can lead to the slashing of social safeguard budgets which may be a common practice in the entire industry, though (Haas and Skinner, 2015).

Our research suggests that NGOs can be central in counteracting these intra-organizational dynamics, however their campaigns must be permanent (Nordensvard et al., 2015). For instance, a European dam developer said (TP6):

"The NGOs are an extremely important actor. They are the independent police force that always will nag you and bite you and keep on your tail and make sure that you stay in line as a big, gigantic international cooperation".

Social mobilization impacts Chinese dam developers' social safeguard norms directly, as argued above, but it has also three indirect effects on Chinese dam developers, according to our interviews. While the first indirect effect (reputation/ legislation) and second indirect effect (reliance on foreign financial services) echo the hypotheses developed by Scheumann and Hensengerth (2014) outlined in Section 3 of this paper, the third indirect effect (collaboration with international players) only emerged from the research conducted for this paper.

#### 5.3. Laws of the host country and China

First, our research suggests that both host country governments and the Chinese government adopted higher standards due to social mobilization which Chinese dam developers then enforce. After all, countries with various protests or whose TNCs face various protests due to lacking social safeguards may fear for their reputation. Regarding host country legislation, the Chinese dam developers interviewed (e.g. OP3, OP10) confirmed that this has direcly impacted their social safeguards. Mang (2015) from International Rivers also found that "[Chinese dam developers] performed strongest at the project site if they were forced to do so by the laws of the host country". These government policy changes in standards are believed to be driven by social mobilization (OP10, TI6) with particularly the controversial Nam Theun 2 project having impacted safeguards legislation in Laos, for instance (Boer et al., 2016; Baird and Quastel, 2015). Meanwhile, particularly China's Ministry of Foreign Affairs (MOFA) is "concerned with safeguarding China's reputation in foreign countries" (International Rivers, 2012) since "China is trying to become one of the big players, and [thus] behaving seriously in these areas", as a European dam developer said (TP8). The causality between social mobilization and Chinese legislation may also be seen in Table 3 with the 'Guidelines for Environmental Protection in Foreign Investment', China's major social safeguards for its dam developers, only adopted upon the suspension of the Myitsone Dam, although the draft had already been developed in 2009 upon the initial culmination of protests against Chinese-led dam projects, as discussed previously.

# 5.4. Provision of financial services

Second, our interviews suggest that those financing Chinese dams overseas (mainly China Exim Bank (CEB) and China Development Bank) adopted stricter social safeguard norms due to social mobilization, which then, in turn, had to be adopted by the dam developer (e.g. stated by FP12, TI9). These changes in CEB's norms (with CEB's main environmental guidelines publicly released only upon the initial culmination of protests in 2008 (Herbertson, 2011, p.41; Table 3)) are also induced by the Chinese government, significantly intertwining the first and second indirect effect. After all, CEB and different dam developers are usually supervised by the same ministries. For instance, the 2007 "Regulations on Further Regulating the Development of Contracting Foreign Projects" are applicable both to Chinese banks as well as dam developers (International Rivers, 2012). A lawyer serving CEB on the dam projects confirmed that CEB nowadays pays close attention to social safeguards (FP12). A World Bank official said that "the approaches the Chinese banks take change really fast. They are now much more in sync with [our] approach" (TI9). CEB's evolved approach to environmental and social safeguards is reflected in its action regarding Gabon's Belinga Dam, for instance, with CEB suspending funding for the dam of upon safeguards concerns raised by various NGOs (Bosshard, 2010).

#### 5.5. Cooperation with international players and capacity

Third, our interviews suggest that Chinese dam developers' collaborations with various international players may also result in the adoption of international norms in Chinese-led dam projects (e. g. TNI1, FP16, TP20). This pathway is particularly intertwined with the issue of capacity, discussed at the end of Section 3. Indeed, Chinese dam developers were likely neither familiar with Chinese nor any host country social safeguard norms upon initially expanding abroad since dam developers in China solely have to focus on the engineering aspects of the dam, while social safeguards are the responsibility of the provincial and district level government (TNI1). Accordingly, a European dam developer reviewing a Chinese-led dam project in Laos recalled that "they did not even have a copy of any ESIA legislation [from] that country. [...] They were not aware that they existed" (TP6)" - an evident breach of the law made possible due to the limited enforcement capabilities of the Laotian government discussed in Section 3.

Chinese players hired local NGOs, local consultancies and international consultancies to carry out ESIAs to address capacity shortages regarding social safeguards, but also to fend off civil society criticism (assuming that projects would not be criticized regarding social safeguards if the project's ESIA was carried out by NGOs and/or respected consultancies) (e. g. stated by TP20, TP25). For instance, the Changjiang Institute of Survey, Planning, Design and Research (CISPDR), a Chinese high-tech SOE (Mang, 2011), conducted the ESIA on the Myitsone Dam jointly with the Biodiversity and Nature Conservation Association (BANCA), a Burmese NGO. Meanwhile, Sinohydro contracted Earth Systems Mekong, a Lao consultancy, to carry out the ESIAs on the Nam Ou Dams (TP8). The ESIA for Myanmar's Mong Ton Dam project is being carried out by SMEC, an Australian consulting firm (SMEC, 2015).

Interviewees also noted that Chinese dam developers possibly started adopting international norms due to collaborations with various dam industry players beyond ESIAs. For instance, Sinohydro has maintained an ongoing dialogue with International Rivers since 2009 (Bosshard, 2014) and CTGC with WWF (WWF, 2010), possibly as a pre-emptive move to lessen these NGOs' opposition against their projects (TNI16). Reportedly, attendance of Chinese dam developers at international dam conferences has also increased in recent years (TNI5; TP2).

## 6. Conclusion and policy implications

The alleged failure of Chinese dam developers to address dams' impacts on project-affected people has been discussed frequently in the popular press and also (increasingly) in the scholarly literature and the contribution of large dams to equitable development has been questioned on the basis of this alleged failure to address these impacts. We have researched social safeguard norms in Chinese-led dam projects in Myanmar, Laos and Cambodia with the intention to build on the burgeoining scholarly literature on this topic in two ways. First, we present the very first regional case study on social safeguard norms in Chinese-led dam projects (with previous work usually analyzing on 1-2 dam projects or a single dam developer) thus potentially enhancing the external validity of previous research. Second, we focus our work not only on which social safeguards were adhered to (as most previous scholarly work), but also on why these safeguards were adhered to – a question of particular interest both to NGOs as well as policy-makers.

Overall, we find that social safeguard norms adopted in Chinese-led projects in Myanmar, Laos and Cambodia have significantly changed in the past 15 years. Chinese dam developers claimed to adopt host country social safeguards upon the launch of China's Going Out Policy. Yet no social safeguard legislation was in place in Myanmar and Cambodia in the early 2000s and compliance with Laotian social safeguard norms by Chinese dam developers is contested. At times, more ambitious Chinese standards would be adopted in Chinese-led dam projects in the early 2000s – with various relevant Chinese legislations introduced particularly from the mid-2000s onwards. Only in recent years were international norms employed more frequently in Chinese-led dam projects, with the majority of our interviewees (76%) believing that mostly international norms will be adopted in Chinese-led dam projects in Myanmar, Laos and Cambodia in the near future.

Our interviews suggest that Chinese dam developers now increasingly view the adoption of international social safeguards norms as less costly than their non-adoption. Social mobilization plays a key role in this process. According to our research, the 2011 suspension of Myanmar's Myitsone Dam in particular directly altered the norms adopted by Chinese players in Myanmar, Laos and Cambodia, since only upon the suspension of the Myitsone Dam project, did Chinese dam developers begin to see the halting of a project by a government in Myanmar, Laos and Cambodia (partly) due to lacking social safeguards as a credible scenario.

We also found that social mobilization likely has led to stricter host country and Chinese legislation, stricter rules of Chinese funders (partly as a consequence of Chinese governmental legislation) as well as cooperation with international players – both via ESIAs and beyond. The collaboration with various international players was meant to not only to fend off civil society criticism, but also intended to address capacity issues of Chinese dam developers regarding social safeguards since these developers are not responsible for social safeguards when implementing projects in China (this is the responsibility of the Chinese government).

Our research overall paints a rather optimistic picture regarding social safeguards in Chinese-led dam projects in Myanmar, Laos and Cambodia and particularly highlights the impacts of activists regarding the adoption of international social safeguards. This suggests that policy-makers keen to ensure adoption of international social safeguards in Chinese-led dam projects could usefully provide targeted funding for relevant environmental NGOs, in addition to the more obvious remedy of expanding host countries' capacity to develop and implement more robust social safeguard legislation and regulations. These can then continue to play and possibly expand their role as watchdogs of the dam industry. We note, though, that this recommendation is only tentative. Indeed, more single case study research is needed to further nuance the narrative from this regional case study – too many (particularly smaller) Chinese-led dam projects in Myanmar, Laos and Cambodia have not been analyzed by scholars yet. Also, replication of this regional case study research may be needed soon since the social safeguard norms adopted by Chinese dam developers seem to be evolving at a rapid pace.

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