Community Participation in Chinese Dam Projects

What level of community participation is found in large Chinese overseas dam projects and how can this be explained? – A case study of Bui Dam, Ghana



Bachelor Thesis in European Public Administration

First Examiner: Dr. Joy Clancy (University of Twente, Enschede) Second Examiner: Prof. Dr. Markus Lederer (University of Münster)

Date of Delivery: August 17, 2015

Birte Jetter, Philippistraße 13, 48149 Münster, Germany, b_jett01@uni-muenster.de

Student ID: 1611186 | Matrikelnummer: 396 039

Table of Contents

List	List of Abbreviations 2					
1.	. Introduction					
2.	Dam	is and	d Development	. 5		
2	.1.	The	Dams Debate	. 6		
	2.1.1	L.	Dams and their Benefits	. 6		
	2.1.2	2.	Negative Social Impacts	. 7		
2	.2.	Chin	a's Increasing Role in Dam Development	. 8		
3.	The	Conc	ept of Participation	10		
3	.1.	Why	v at all Participation?	10		
	3.1.1	L.	Instrumental Participation	11		
	3.1.2	2.	Empowering Participation	12		
3	.2.	Arns	tein's Ladder of Participation	12		
3	.3.	Criti	cism and Adaptations	13		
4.	Met	hodo	logy	15		
4	.1.	The	Case Study Approach	15		
4	.2.	Data	a Collection	16		
	4.2.1	L.	Semi-Structured Interviews	16		
	4.2.2	2.	Interview Partners and Interviewing Process	16		
4	.3.	Data	a Analysis	17		
5.	Case	e Stud	dy – The Bui Dam Project	18		
5	.1.	Sele	ction of the Case	18		
5	.2.	The	Bui Dam Project	18		
	5.2.1	L.	In Theory: Participation Standards	19		
	5.2.2	2.	In Practice: Participation in the Bui Dam Project	20		
5	.3.	Cont	textualization of the Findings	23		
	5.3.1	L.	The Responsibility Issue in Chinese Projects	23		
	5.3.2	2.	The Level of Participation in Chinese Projects	24		
	5.3.3	3.	Explaining the Level of Participation in Chinese Projects	24		
	5.3.4	1.	Are the Others Doing it Better?	26		
6.	Con	clusic	on	27		
Anr	nex A:	List	of Interviews	29		
Anr	Annex B: Questionnaire and Exemplary Transcripts of Interviews					
Annex C: List of Figures and Tables						
Anr	Annex D: List of References					

List of Abbreviations

BOT contract	Build Operate Transfer contract
BPA	Bui Power Authority
ERM	Environmental Resources Management
ESIA	Environmental and Social Impact Assessment
FAO	Food and Agriculture Organization of the United Nations
GDD	Ghana Dams Dialogue
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
IAP2	International Association for Public Participation
ICOLD	International Commission on Large Dams
IFC	International Finance Corporation
IRR model	Impoverishment Risks and Reconstruction model
IUCN	International Union for Conservation of Nature and Natural Resources
NGO	Non-governmental organization
RPF	Resettlement Planning Framework
UN	United Nations
UNDP	United Nations Development Programme
WCD	World Commission on Dams

1. Introduction

Dam development is a highly controversial topic. While no large dams are built in developed countries anymore – following a "sustainability discourse [which] has taken on a decidedly antidam form" (Hensengerth, 2013: 289)¹ – the industry is booming in emerging and developing countries². With the World Bank's temporary withdrawal from funding large dams from the 1990s onwards, Chinese financiers and hydropower companies have become the major actors in global dam construction, heavily scrutinized by Western media, NGOs, scholars, and international organizations. Media coverage of Chinese dam projects is largely negative, denouncing the adverse environmental and social impacts of the dam construction, miscarried resettlement projects, and a lack of public participation. According to a representative from an international environmental NGO, Chinese companies until recently had the reputation of "doing the job which others don't want to do" – even if this job is "dirty" (Interview T300415d³).

This paper deals with one specific aspect of dam projects: community participation. A United Nations report from 1979 defines participation as "sharing by people in the benefits of development, active contribution by people to development and involvement of people in decision making at all levels of society" (Desai & Potter, 2008: 115). Participatory processes can help to mitigate adverse social impacts. In his recently published encyclical letter, Pope Francis (2015: 134-137) demands that a consensus between stakeholders should be achieved in projects with social and environmental impacts. Where a broad consensus is not possible, he encourages "an honest and open debate". It is the aim of this paper to investigate to what degree participatory processes are present in Chinese dam projects and why. It focuses on Chinese overseas, not domestic, dam projects for two reasons. First, the Chinese domestic market for dam construction is almost saturated (Interview T300415a). Secondly, the Chinese authoritarian political system leaves little room for community participation. According to a consultant, "as international actors we [do not] have any potential to really change the behavior of Chinese companies in China, unless we address it by looking at how they behave in other parts of the world" (Interview T080615b).

The main research question covered in this paper is: *What level of community participation is found in large Chinese overseas dam projects?* Apart from contributing to the state of knowledge on Chinese overseas dam projects, the findings of this paper are also relevant for the development practice. Within the discourse on how good social impact assessment and mitigation strategies look like, participation processes are an important part. How can be ensured that dam projects become a win-win situation from which everybody benefits? Especially in Chinese projects, which are often criticized for their negative social and environmental impacts, participation is one answer to that question. First, a case study will be conducted, which analyzes the level of participation. This typology was chosen because, as an ordinal scale, it allows the ranking of modes of participation and it is one of the most comprehensive scales. Secondly, apart from examining the level of participation in large overseas dam projects with Chinese involvement, this paper will make a first attempt at explaining the (rather poor) participatory standards in these projects and therefore contribute to the existing literature.

Analyzing the standards of Chinese projects is relevant from a European perspective as well. Two decades ago, European dam developers were market leaders in large dam construction. This changed with China's *Going Out Policy*. Now, however, another possible turning point is reached. Apart from

¹ Another reason being that all lucrative sites have already been dammed.

² The terms "developed countries" and "developing countries" are used in this paper as they were common in the relevant literature and used by most experts.

³ All interviews have been anonymized and assigned a reference code which includes the date of the interview.

the World Bank's return to funding large hydropower projects, there is evidence for increased European involvement, for example with the Norwegian company Statkraft in Lao (Theun Hinboun Power Plant). Furthermore, Chinese companies have begun to buy into European companies: Two years ago, China Three Gorges Corporation became the largest shareholder of the Portuguese company Energias de Portugal (CCILC, 2015). Against this backdrop, it is becoming important for European companies, financing organizations, and policy makers to understand how the market-dominating Chinese companies implement their projects, especially in terms of environmental and social sustainability, in which standards are very different from European ones.

As a student of European Studies/European Public Administration, I was able to choose a minor in Sustainable Development, which is one of my particular interests. Large infrastructure projects and public participation are recurring topics in development studies. When I was offered to be part of a doctoral research project of the University of Oxford on the topic of social impacts of Chinese overseas dam projects, I accepted without hesitation. During the research and data collection for this project, I realized that one of the most severe consequences of large dam construction is the resettlement of local communities. While resettlement itself is an unpleasant experience, one of the greatest burdens for the affected population is insecurity – when is the resettlement going to happen, where will we be resettled, how will we be able to make a living? This led me to do own research on participation theories and participation practices in dam projects, for which I could in part build on the established contacts and interviews from the larger research project.

The paper is structured as follows:

Section 2 presents the *dams and development* debate. It is focused on the negative social impacts of dams to underline the need for community participation. Moreover, China's growing importance in the industry is outlined.

Section 3 provides the theoretical background for assessing the level of participation. Before introducing Arnstein's typology of participation, two justifications for participation are contrasted: Instrumental participation and empowering participation.

Section 4 explains the case study approach used in this paper as well as data collection and analysis methods. The paper draws on primary data from 33 expert interviews with representatives of international donors, NGOs, academia, private sector, and government organizations.

Section 5 consists of two parts. First, the level of participation is analyzed exemplarily in the case of the Bui Dam project in Ghana. Secondly, the findings are embedded in the wider context of the Chinese dam industry. By drawing on the findings from the expert interviews, potential factors which explain the level of participation are presented.

The main findings of this paper are twofold. Chinese hydroplayers frequently distance themselves from any responsibility for social impact mitigation and community participation processes. The level of participation in these projects is rarely above the modes of informing or consulting. The Bui Dam project, which actually in parts reaches higher levels of participation, seems to be rather exceptional.

2. Dams and Development

During the 20th century, large dams had become symbols of development, nation building, national pride, economic progress, modernization, and humanity's ability to harness nature (Biswas & Tortajada, 2001; WCD, 2000). The International Commission on Large Dams (ICOLD) defines a 'large dam' as one with a dam wall of above 15m in height (Shah & Kumar, 2008). Dams allow humans to retain and control water and thus yield benefits like irrigation and water provision, electricity, and flood control; but they also bring problems and dangers with them, as they constitute a severe interference with the natural and social environment.

The ICOLD Register of Dams lists more than 58,000 large dams (ICOLD, 2015). When the developed world had largely completed its construction programs by the 1970s, the focus shifted to developing countries which had gained independence and wanted to accelerate their national development processes (Biswas & Tortajada, 2001: 9-11). A new era of environmental and social movements began with the UN Conference on the Human Environment which was held in 1972 in Stockholm. Dam projects were increasingly seen as controversial. Adverse environmental impacts were one major reason for this; the other one was the issue of resettlement. Scudder (2011) estimates that dams have necessitated the resettlement of 80 million people in the past century, out of 200 million resettled by infrastructure projects in total. High public pressure ultimately led the World Bank as the major funder of large dams to withdraw from the industry in the 1990s. Together with the IUCN⁴, the World Bank also set up the World Commission on Dams⁵ (WCD), which had the task of a) reviewing the development effectiveness of large dams and assessing alternatives and b) developing internationally acceptable criteria (UNEP, 2015). Its final report was published in 2000. Even though the WCD Report is one of the most significant contributions to the debate on dams, it has been perceived in different ways. While many NGOs and international donors greeted the comprehensive guidelines, a representative of an NGO complains that it has not had the desired effect: Guidelines are voluntary and have not been endorsed by the industry (Fink, 2005: 40; Interview T300415d). According to the industry, on the other hand, the recommended standards are too high – if followed, no large dam could ever be built again (Interview T230415a). Subsequently, countries like China, India, and Turkey - which are actively involved in dam construction - rejected the report, whereas the developed world endorsed it.

Recently, in 2013, the World Bank has returned to funding large hydropower projects. Peter Bosshard, interim executive director of the anti-dam NGO International Rivers, elaborates on potential reasons (Bosshard, 2013), which we cross-checked with an employee of the World Bank (Interview T090715). While Bosshard gives pressure from dam-building nations such as the Chinese as a possible factor, our interviewee vehemently ruled this option out. Bosshard also mentions a new energy strategy paper of the World Bank which limits support for coal projects and instead increases lending for large hydropower, as these projects improve access to infrastructure services while at the same time fighting climate change. This argumentation is in line with what we heard from our interviewee who remarked that hydropower dams "address the growing demand for energy, for electricity, in a sustainable manner" in the context of combating climate change, as the World Bank "officially [considers] hydropower a renewable energy". For the World Bank employee, the World Bank's withdrawing was a "big mistake": "We know perfectly well how to identify good hydropower, we know perfectly well how to build good hydropower, so there is no excuse for anybody to abstain from hydropower". This claim stands however in opposition to the findings of the WCD report. Bosshard furthermore offers institutional self-interest as a cause for re-entering the large hydropower scene. The costs of

⁴ International Union for Conservation of Nature and Natural Resources.

⁵ The WCD was a multi-stakeholder body. One Chinese actor was a WCD Forum member: The Ministry of Water Resources of China.

preparation and supervision in relation to project size are smaller for large projects. With the World Bank's "pressure to lend", this may lead the World Bank to prefer few, large development projects over a bigger number of small ones.

2.1. The Dams Debate

In a time before social and environmental issues had been set high on the agenda, countries of the North could use large dams to develop economically. Now that developing countries are imitating this, there are widespread public protests against dam construction, according to Biswas and Tortajada (2001: 12) mostly by "environmentalists" from the developed world who already "have a good standard of living and access to clean water, adequate food and energy". Is the developed world trying to deny the developing world the right to develop like they did? This debate would fill a paper on its own. It is important though to note that, even if dams may further a country's development as a whole, they have significant impacts on the local population and local environment. There is a broad spectrum of opinions on large dams, from anti-dam organizations like International Rivers to the dam construction industry. Scientific papers however tend to stress the negative impacts of dams. In their meta-synthesis of the research on the social impact of dams, Kirchherr et al. (2016_b) found that only 5-6% of all articles are "largely positive". The next two sections explore justifications to build large dams as well as associated adverse impacts.

2.1.1. Dams and their Benefits

"The WCD considers that the end of any dam project must be the sustainable improvement of human welfare. This means a significant advance of human development on a basis that is economically viable, socially equitable, and environmentally sustainable." (WCD, 2000: 2)

A comprehensive summary of benefits used to justify dam projects has been compiled by Fink. He distinguishes between the four main purposes of large dams (hydropower generation, irrigation, water supply, and flood control) and further socio-economic benefits (Figure 1):



Figure 1 – Development Benefits of large dam projects (Fink, 2005: 12)

Additionally, hydropower has been "perceived and promoted as a comparatively clean, low-cost and renewable source of energy" and an alternative to depleting fossil fuels (WCD, 2000: 14).

2.1.2. Negative Social Impacts

As a preparation for the case study on participation, this section focuses on the adverse *social* impacts dam projects can have. Of course, the far-reaching environmental impacts of dams directly or indirectly influence the local community as well and are therefore touched upon.

Project affected people should not only be compensated, but should become project beneficiaries (Scudder, 1997). Most projects however fail to identify all affected people. Typically, mitigation measures address those who are resettled as well as people living near large-scale dams. This paper focuses on these directly affected people. Upstream and downstream communities are widely ignored in the industry, although impacts from large dam construction can reach as far as many hundreds of kilometres down the river (WCD, 2000: 112).

There are three main types of **social impacts** on communities which live in proximity of the reservoir and river. First, dam construction and particularly the inundation can have impacts on the local culture including the destruction of cultural heritage. Second, livelihoods are adversely affected: Dam construction leads to displacement of livelihoods, for example when meadows are flooded or local inhabitants cannot access forests anymore because of project facilities (Tajziehchi, 2013: 377ff). Moreover, dam projects transform ecosystems, often resulting in environmental degradation and loss of biodiversity, which eventually impacts the local communities' ability to sustain themselves (Khargram, 2003). Third, dam projects may pose health threats to the populations near the reservoir and also up- and downstream communities: New diseases may occur, ground-water is polluted, high levels of mercury accumulate in reservoir fish, to name but a few. (Égré & Senégal, 2003)

Resettled people are experiencing further adverse impacts. Approximately two thirds of all dams displace people (Khargram, 2003). Robert Goodland, former World Bank senior environment advisor, once noted: "**Involuntary resettlement** is arguably the most serious issue of hydro projects nowadays" (Scudder, 1997: 47). There are two contrary views on resettlement in the current discourse: Resettlement can help to reduce poverty (for example as poor people gain access to markets or electricity) vs. resettlement aggravates poverty (Sayatham & Suhardiman, 2015: 18). In practice, mitigation measures are mostly not sufficient: Successful resettlement takes time, minimum two generations (Scudder, 1997: 47); however, most mitigation projects do not cover this time span. Inadequate compensation schemes – like paying a certain amount of money in "one shot" – are common, instead of sustainable schemes (Fujikura, 2009). In their new location, resettlers often face a lack of opportunities for restoring and improving their living standard. They are often moved to areas which have no capacity to support the entire resettled population, without employment opportunities, with different geographical conditions from those in their village of origin. Adverse social impacts also include conflicts with host communities, marginalization, and psychological impacts such as stress or depression. (Égré & Senégal, 2003, Scudder 1997: 42ff)

Cernea's IRR (Impoverishment Risks and Reconstruction) model includes eight risks of displacement (Cernea, 2008: 3):

- 1. Landlessness
- 2. Joblessness
- 3. Homelessness
- 4. Marginalization
- 5. Increased morbidity and mortality
- 6. Food insecurity
- 7. Loss of access to common property
- 8. Social (community) disarticulation/dismantling of community structures

Particularly in developing countries, corruption can impede the implementation of resettlement schemes. A representative of an environmental NGO stated that "most money is going to someone's pocket and not enough money to the villagers" (Interview T270415). Even if there is an adequate resettlement scheme which is implemented carefully, two criticism are common in dam projects: First, there is no or no adequate participation of the affected people. Secondly, there are resettled groups which are not counted (WCD, 2000: 105): Those without land or legal title do not receive compensation. Therefore, three groups of people suffer disproportionately from involuntary resettlement: Women (who in many countries still are not allowed to own land), the poorest of the poor who depend on common resources like forests for subsistence, as well as indigenous people or ethnic minorities.

2.2. China's Increasing Role in Dam Development

Chinese hydropower companies and banks have become the largest dam builders in the world, building every second dam worldwide (Verhoeven, 2015). Already by 2000, China had built almost half of the world's dams (WCD, 2000: 9). The majority of Chinese overseas *active* hydropower dam projects are situated in Asia (167) – mostly in Southeast Asia – followed by Africa (85) and Latin America (27) (International Rivers, 2013). Construction companies are different Chinese state-owned companies⁶ with Sinohydro being now the largest hydropower company in the world. Financiers of dam projects are among others China Exim Bank and China Development Bank.

Driver of this development is a combination of circumstances. The withdrawal of the World Bank from dam construction left a gap in funding which emerging countries – predominantly China – could fill. Especially in Africa, the potential for hydropower is large: Less than 10% of the technically developable potential is used (Europe: 53%; Scheumann & Dombrowsky, 2015: 1). At the same time, China's 'Going Out Policy' at the beginning of the millennium has encouraged labor- and energy-intensive Chinese companies in particular to tap into new markets (Hensengerth, 2011: 2). Also the growing competition within the Chinese market, rising labor costs, and the aim to improve international competitiveness are driving factors of China's dam construction overseas (Brautigam in Hensengerth, 2011: 2). The domestic market is saturated, as there are only few opportunities left to build dams (Interview T300415a). Furthermore, the development is politically motivated, as hydropower projects are often part of bilateral trade and investment packages provided by the Chinese government (International Rivers, 2012: 4), which are promoted as win-win situations (Matthews & Motta, 2013: 1). One of our interviewees explained that China is especially interested in establishing good relationships with countries that have valuable resources (Interview T160615a). In the case of China's investment in hydropower in Southeast Asia, there are two further drivers: Energy security as well as a strengthened relationship with neighboring countries for national security reasons and economic reasons (Matthews & Motta, 2013).

China's growing role in (hydropower) dam construction has been critically eyed by Western donors. While international donors commonly tie their loans to conditions such as anti-corruption measures, the official position of the Chinese government is a policy of non-interference in domestic affairs (Nega & Schneider, 2011). Chen et al (2009: 76f) claim that Chinese construction companies are able to get projects overseas because they build more cheaply, as they follow lower environmental and social standards than their competitors do. According to International Rivers (2012: 5), dams by Chinese players are often built in politically instable countries with corrupt structures which have low requirements for environmental and human rights protection. In response to these criticisms, some

⁶ For example Sinohydro, China Three Gorges Project Corporation, China Power Investment, Datang Corporation.

Chinese players in the industry such as Sinohydro and China Exim Bank have begun to develop their own guidelines with regard to social and environmental issues (Hensengerth, 2011), which will be treated later in this paper. Whether the standards are actually implemented or only exist on paper remains questionable.

3. The Concept of Participation

These days, participation is a fashionable word. A good project needs to involve some kind of citizen or stakeholder participation, especially if it has severe adverse social impacts. Yet, the term is used in many different manners. It is an umbrella term with a variety of definitions. A common one was given by Slocum et al (1995: 3):

"Participation is broadly understood as active involvement of people in making decisions about the implementation of processes, programmes and projects which affect them."

The World Bank's Learning Group on Participatory Development defined participation as follows:

"Participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them." (World Bank, 1996)

A main difference exists between these two definitions. The first definition talks about "active involvement" of people, whereas the second one goes further, speaking of "control over" by stakeholders. There exist numerous other ways of defining participation and definitions often reflect the author's view on the purpose of participation, as will be seen in the next section.

If it is already hard to find one definition of participation, it is even harder to find ways to measure it. Some authors or international agencies publish indicators, such as the *frequency of attendance at meetings* (quantitative) or the *nature of contact with officials* (qualitative) (Musch, 2001: 21). Such indicators may be sufficient for the purpose of increasing the legitimacy of projects. Organizations may use them to show that they actually have included stakeholders. Oakley (1991) seems to go one step further: According to him, "[a]n indicator is the means by which the outcome of a project can be understood and, in one form or another, measured or explained" and should thus "accurately reflect the changes which have taken place" (p. 247). This is an interesting thought – is it enough to look at the process of participation or do we also need to include whether participation actually has yielded results? In the end, Oakley only lists few indicators which actually measure the benefit of a project. After that, he again names indicators such as the *frequency of attendance at project organization meetings*. In the end, it may be most reasonable to distinguish between the process and the outcomes of participation.

In the subsequent sections, Arnstein's typology of participation is presented, which lies somewhere in the middle. He conceptualizes participation as the degree in which power is transferred to citizens. First, however, the next section will address the question why actors do or should spend limited resources on participation.

3.1. Why at all Participation?

There are different perspectives on why participation is necessary, drawing on several ideological lines of though which Musch summarizes (2001: 18). Classic libertarianism would argue that people have a *right* to participate. Social-democratic thought would see the justification of participation in bringing about *social justice*. Another way of looking at it is from a poverty alleviation perspective – development starts with the *poor* (see for example Robert Chamber's concept of 'Putting the last first'). A last, more economic perspective would suggest that participation is necessary for the effectiveness of projects. The main cleavage in the discussion runs between the advocators of *instrumental participation* and those of *empowering participation*, who hold a more normative view. This is also known as the debate between *participation as a means vs. participation as a goal.*

3.1.1. Instrumental Participation

In many projects, participation is seen as a means to (better) reach a set goal, to better implement a project. Participation of local communities and stakeholders is a way of making programs more effective and to facilitate implementation. For example, Rifkin and Kangere (2002: 40) summarize a few reasons why the World Bank involves the local community (the list is not exhaustive):

- Local people have experience and knowledge,
- The involvement of local people can increase their commitment to the project,
- Participation can help local people to develop skills and therefore increase their employment opportunities,
- Participation processes increase resources available for the program.

Another reason for participation is mutual learning: Improved understanding between those doing the project and those affected can lead to harmonization of the respective goals and to better outcomes.

Beisheim and Dingwerth (2008) examine how good governance in terms of inclusiveness, transparency, and deliberativeness raises the success prospects of a project. They explore the link in the context of Public Private Partnerships – how does an open process help to enhance compliance of private actors with the desired norms and outcomes?

	Key elements of normative procedural legitimacy		Causal mechanisms	Success
(1)	Inclusiveness, fairness and representativeness	(M1)	Ownership through participation	
2)	Deliberation	(M2)	Social learning and persuasion	Enhanced compliance
(3)	Transparency and accountability	(M3)	Social control	

Figure 2 - Mechanisms that link legitimacy and success of private governance (Beisheim & Dingwerth, 2008: 13)

The three key elements (1) to (3) should also be found in participatory processes in other contexts. Each of them can help to improve the effectiveness of a project by enhancing compliance of stakeholders.

- Mechanism 1: If stakeholders are involved in an inclusive, fair, and representative manner, they are more willing to generally support a project or to compromise, as they become 'owners' of the process.
- Mechanism 2: In a deliberative process, arguments are exchanged and critically examined. This is expected to lead to a final decision which can be perceived as 'reasonable' by everyone, even if there is no consensus.
- Mechanism 3: If transparency and accountability are given, decision-makers can be controlled to a certain degree, which is expected to increase the willingness of stakeholders to adhere to the ultimate outcomes.

Instrumentalists regard the level of participation as a trade-off. On the one hand, participatory processes are costly and time-consuming. The higher the level of participation, the more inconvenient this can become for a planner of a project. On the other hand, participation can, in the end, lead to a

more successful project, as described above. Thus, the 'optimal' degree of participation would have to be carefully determined (this view neglects that the affected stakeholders themselves can try to enforce participation through public protests).

An interview with a representative of a large hydropower associations suggests that the industry is justifying participation from the instrumental perspective. The interviewee pointed to the importance of communication with the public to avoid public protests against a project (Interview T080615a).

3.1.2. Empowering Participation

For other authors, instrumental participation does not go far enough. Participation is seen as the (or a) goal in itself, as it empowers people. Slocum et al (1995: 4) define empowerment as "a process through which individuals, as well as local groups and communities, identify and shape their lives and the kind of society in which they live". In this regard, empowerment can be seen as the final stage of participation in a ladder typology (Musch, 2001: 31). This is also reflected in Robert Chambers definition of participation (Chambers in Nelson & Wright, 1995: 30):

"[Participation is] an empowering process which enables local people to do their own analysis, to take command, to gain in confidence, and to make their own decisions."

Empowerment and participation can also be understood within the context of local power relationships (Musch, 2001: 31f). There is a conflict between elites – or those in charge of projects – and those who traditionally have little influence, which are mostly the affected people of development projects. The struggle is around power over resources and/or decision-making. Participatory processes give those with little influence opportunities to shape projects and gain a certain degree of control. Then, participation has a transformative component:

"Participation [...] involves shifts in power." (Nelson & Wright, 1995: 1)

Some authors argue that participation can serve both purposes – instrumental and empowering – at the same time. Also organizations like the FAO, UNDP, and World Bank include a mix of purposes in their policy strategies (Musch, 2001: 23). Other authors like Slocum et al (1995: 3) argue that it is a question of either or, as an instrumentalist agenda will prevent empowerment:

"Participation can be for the purposes of transforming a present system or for simply maintaining the status quo."

3.2. Arnstein's Ladder of Participation

One way to rank modes of participation in decision-making is to use ladder typologies. The probably first ladder of participation was developed by Sherry Arnstein in 1969 for citizen participation in American cities. Since then, the concept has been adapted for different purposes, including youth participation, consumer-producer relationships, and development projects. Arnstein herself designed the typology "to be provocative" (Arnstein, 1969: 216). She criticizes that everyone supports participation, but as soon as those with little influence and resources aim at a redistribution of power through participatory processes, this support dwindles. According to Arnstein, meaningful citizen participation is only possible if power is redistributed, and this is reflected in her typology.

Eight modes or levels of participation are arranged hierarchically, ranging from modes of nonparticipation over tokenism to levels of citizen power. The first two rungs are levels of **nonparticipation**. No meaningful involvement of citizens takes place. Even if citizens are invited to meetings, this is only to persuade them or force them to sign or support a project. Subsequently, there are three rungs of **tokenism**. They differ in the extent to which citizens may voice their opinions and in which these opinions are considered. However, even in the highest stage of tokenism, placation, citizens have no institutionalized rights or responsibilities. In the best case, a few hand-picked citizens who are likely to support the project are placed on boards. The last three rungs constitute modes of **citizen power**. Citizens actually gain power in decision-making, ranging from partnership in which citizens are able to negotiate with traditional powerholders (however, bargaining power depends on their access to sufficient expertise, time, and financial resources) to full managerial power. The characteristics of the rungs are shortly summarized in Figure 3. (Arnstein, 1969)



Figure 3 – Arnstein's Ladder of Participation (author's own depiction, based on Arnstein, 1969)

3.3. Criticism and Adaptations

Arnstein's typology has been criticized and adapted in various ways. Arnstein (1969) herself admits that the ladder is a simplification and an artificial classification into eight levels. Secondly, it ignores the question of who profits from participation and who bears the costs (Musch, 2001: 25). Moreover, the second rung, Therapy, seems unsuitable in this kind of ordinal typology. Arnstein describes it as "administrators – mental health experts from social workers to psychiatrists – [assuming] that powerlessness is synonymous with mental illness", and she cannot justify why it is one rung above manipulation. Other authors have left out this rung (e.g. Pretty who adapted the concept for sustainable agriculture) or altered it (UNICEF for example, in its publication on children's participation, changed it to "Decoration").

The idea of ranking participation in a hierarchical way has been adopted by scholars and organizations. Some have extended the ladder, most, however, have condensed it. In fact, a comparison by Pedro Martín (2010) revealed that participation ladder typologies tend to become less comprehensive. For example, a ladder published by the OECD in 2001 completely neglects what Arnstein calls the scope of "citizen power". Figure 4 gives selected examples of adapted ladders of participation.



Figure 4 - Adaptations of Arnstein's Ladder (author's own depiction, based on IAP2, 2014; Mefalopulos, 2008; Noreed, 2012)

A major problem with ladder typologies is that they are too simplistic for complex projects with multiple stakeholders (Musch, 2001: 25). Different phases or aspects of participation in a project may be ranked differently. Furthermore, the question "who participates" is easily ignored. Other concepts of participation therefore look at participation as a system of rules which define who is in the process, who takes what actions in which way, and who decides (Coenen et al, 1998). However, this concept does not allow the ranking of participatory processes.

To analyze the level of participation in dam projects, I will use Arnstein's Ladder of Participation for three reasons. Despite the drawbacks of ladder typologies, it is an ordinal scale and thus allows the ranking of participation modes. Therefore, it is possible to compare participation levels. This paper focuses on participation in one particular dam project. The next step would then be to rank and compare participation levels in different Chinese projects or between Chinese and non-Chinese projects. Secondly, Arnstein's Ladder of Participation is more comprehensive than most other ladder typologies by organizations such as the World Bank or the OECD. Third, it has been chosen because Arnstein takes an empowerment approach to participation. This paper does not challenge the raison d'être of instrumentalist approaches. All stakeholders of a project have an interest in achieving good project results, which is why participation obviously also may serve the purpose of enhancing the effectiveness of a project. However, this paper looks at the implications of large hydropower dams for the local population and thus puts their right to be included in the decision-making process first. Arnstein's ladder as a measure of the degree of control locals gain is therefore a suitable typology.

After conducting the expert interviews, in which the level of participation has been overwhelmingly described as "Informing" in Chinese overseas dam projects, the hypothesis to be tested is:

 H_0 : The level of participation in the Bui Dam project is at level 3 (Informing) of Arnstein's Ladder of Participation.

4. Methodology

To answer my main research question – what level of participation can be found in large dam projects with Chinese involvement and which factors can help to explain it? – I conduct a case study of participation in the Bui Dam project in Ghana based on the theoretical framework of Arnstein's Ladder of Participation.

4.1. The Case Study Approach

A case study is a "research strategy that focuses on understanding the dynamics present within single settings" (Eisenhardt, in Hine & Carson, 2007) and "allows investigators to focus on a 'case' and retain a holistic and real-world perspective" (Yin, 2014: 4). Yin (2014: 16) gives a twofold definition of case studies:

"1. A Case study is an empirical inquiry that investigates a contemporary phenomenon (the 'case') in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident."

In this paper, I investigate thoroughly the phenomenon of participation in the context of a specific dam project. Second, a case study deals with "situations with more variables of interest than data points" and multiple sources of evidence (Yin, 2014: 17). This is applicable to my case study as well and will also be reflected in the data collection and data analysis methods chosen. Yin points out that although the world "variables" is used in the definition, the data analysis does not have to be conventionally variable-based; in contrast, case studies "favor[...] holistic approaches" (Yin, 2014:24).

Case studies have some advantages compared to other research methods. For example, they can identify new variables or hypotheses and examine potential causal explanations within single cases (George & Bennett, 2005).

Yin (2014) identifies three types of case studies: Exploratory, descriptive, and explanatory studies. The central research question in this paper is descriptive: What level of participation is found in Chinese overseas dam projects? To answer this question, a single typical case, Bui Dam, will be examined in depth and within the theoretical framework of Arnstein's ladder of participation. Going one step further, this paper takes a first attempt at identifying potential factors which have an impact on this level of participation (explanatory).

In the selection of cases, researchers face a trade-off between internal and external validity. The choice of analyzing only one case in depth enhances the internal validity of this research, which is important in order to understand the actions, processes, and mechanisms in the context of the one selected case. On the other hand, external validity is low, as it is difficult to generalize to participation in projects in general from a sample size of n=1. To address this constraint, several measures are taken: First of all, a *typical* example of a Chinese overseas dam project is chosen. The choice, based on literature review and expert interviews, will be explained in detail in Section 5.1. Still, the participation level found in one case can hardly be generalized to all Chinese cases. Another way of at least improving external validity is by making use of *within case over time variation* (van der Kolk, 2014), which means looking at a single case at two or more different points in time. In the Bui Dam project, there were two main resettlement phases, A and B, with different levels of participation. Thus, I can identify potential causes for the difference in participation levels found here will be compared to participation in other Chinese and non-Chinese dam projects. Because of the limited length of this paper, this will done only by drawing on information from literature and especially from the expert interviews.

4.2. Data Collection

Qualitative data were collected in 33 semi-structured interviews with experts and stakeholders⁷. In qualitative research, *thick description* can help to interpret social actions by "recording the circumstances, meanings, intentions, strategies, motivations, and so on that characterize a particular episode" (Schwandt, 2001: 255).

4.2.1. Semi-Structured Interviews

According to Hammett, Twyman, and Graham (2014: 139f), "most commonly, interviews [...] are used to develop detailed, subjective understandings drawing on people's knowledge, memories and perceptions". Resettlement and community participation directly involve people and the processes and impacts will be perceived differently, for example by the authority responsible for resettlement compared to the affected people themselves. Furthermore, interviews are also suited to explore causal relationships (Ibid.). Among the purposes of interviews is moreover the gathering of missing information (George and Bennett, 2005) and establishing "the decisions and actions that lay behind an event or series of events" (Tansey, in Rosenow: 66). As dam construction is a controversial topic, many answers were given only under the premise of anonymity during the interviews. Semi-structured interviews are suited if a certain range of topics needs to be covered, but the interviewer still wants to avoid that the interview is too directed and omits important information that the interviewee could give. This type of interview "allows for a degree of comparative analysis and is well suited to exploring understandings and perceptions" (Hammett, Twyman & Graham, 2014: 141).

4.2.2. Interview Partners and Interviewing Process

The 33 interview partners were identified through the snowballing method. Apart from that, the triangulation method was used to increase the reliability of the findings (Hammett, Twyman & Graham, 2014: 258). It involves using multiple informants or sources to investigate an issue and gain more detailed and robust findings (Laws et al., in Hammett, Twyman & Graham, 2014: 258). I tried to reach a balanced proportion of interviewees from NGOs, academia, international (donor) organizations, and the private sector (including independent consultants, Western and Chinese hydropower companies, and industry associations). A detailed overview is given in Annex A. This helps to identify the regularities but also differences between the perceptions of interviewees and helps to cross-check information from interview partners (Hammett, Twyman & Graham, 2014: 258). Therefore, interviewees were confronted with opinions voiced in earlier interviews. For example, a criticism on social impact mitigation raised by an anti-dam NGO was quoted to representatives from the hydropower industry and scholars.

It would have been desirable to conduct interviews directly with affected, resettled people in the Bui area. However, this is hardly possible without field work – for which financing would have been needed – , and a reach-out via social media was without success. However, many of the authors which I cite have retrieved their data during field work in Ghana through interviews, focus groups and observations. Matilda Mettle from the Norwegian University of Science and Technology for example employed qualitative research methods (such as participatory observation methods and in-depth interviews) in Ghana to find out how the lessons learnt from Ghana's Akosombo resettlement have been used in planning the Bui Dam resettlement. Also, NGOs and local organizations can at least to some extent express the opinions of local people.

⁷ Number of interviews by the time of writing this thesis. Data collection for the project continues.

The set of expert interviews formed part of a larger research project on social impacts, social impact assessment, and social impact mitigation in Chinese dam projects⁸. The majority of the interviews were on the general topic of social impacts, resettlement, and participation. A few interviews were additionally conducted specifically with stakeholders in the Bui Dam resettlement process. I reached out via e-mail and could conduct interviews with the following groups⁹:

International donors (8 interviews): International donors and financing organizations included the German GIZ, Asian Development Bank, International Finance Corporation, and World Bank.

NGOs (9 interviews): These interviews were undertaken with representatives of social and environmental NGOs, on local as well as on international level.

Academia (5 interviews): This group includes scholars from universities as well as from research organizations.

Private Sector (10 interviews): Stakeholders were representatives of large international hydropower and dams industry associations. Also independent consultants formed part of this group. The only stakeholder group which proved to be as hard to reach out to as expected were Chinese hydropower companies themselves. In the end, the questionnaire was translated to Chinese. This way, it was possible to receive answers by one state-owned Chinese hydropower corporation so far, unfortunately not Sinohydro who built the Bui Dam.

Government (1 interview): In an advanced stage of the data collection, it was decided to extend the interviews to representatives from governmental organizations. By the time of writing this thesis, a speaker for a Western embassy in Ghana had been interviewed.

All transcripts will remain anonymous in this thesis. However, (anonymized) examples can be found in Annex B. I conducted the interviews via Skype or telephone call, recorded them with the approval of the interviewee, and transcribed them. For the citation of the interviews, a reference code has been assigned to the transcripts, which comprises the date of the interview.

There are a few problems with these kinds of expert interviews. First, interviewees may have a limited overview over the industry, standards, and phenomena. Secondly, they may give biased accounts, especially those working for an NGO (for example International Rivers as an anti-dam organization) or the industry (such as the International Hydropower Association). I tried to process the data critically and incorporate different perspectives, also by using additional sources. Apart from that, the sufficiently large number of interviews as well as the triangulation test should result in a well-balanced set of data.

4.3. Data Analysis

Besides the interviews and scientific papers, data are mainly retrieved from published documents by relevant actors and institutions, such as the World Bank, China Exim Bank, Sinohydro, WCD. Combining qualitative interviews with document analysis is common in social science research (Bowen, 2009). The data are used to determine the degree of participation in the Bui Dam project and to compare it with other projects. Moreover, standards on resettlement and participation found in the documents are contrasted with the implementation of these standards in the actual case.

⁸ Julian Kirchherr (University of Oxford) & Nate Matthews (King's College London)

⁹ Interviews were conducted by me, the other researchers, or in teams. Numbers of interviews by the time of writing this thesis. Data collection for the project continues.

5. Case Study – The Bui Dam Project

5.1. Selection of the Case

The Bui Dam project in Ghana has been selected as an example of Chinese overseas dam projects for a number of reasons. The literature review and the expert interviews suggested that it is a typical Chinese overseas project, with the "archetypical Sinohydro-Exim Bank arrangement" (Urban, 2012). To promote trade, China Exim Bank frequently ties loans to the involvement of Chinese contractors in projects (Foster et al, 2008). Other requirements for a suitable case which would be worthwhile looking at were the following:

Requirement	Justification	Bui Dam
Chinese project	"archetypical Sinohydro-Exim Bank arrangement" (Urban, 2012)	\checkmark
Overseas project	"I don't think that [] we have any potential to really change the behaviour of Chinese companies in China, unless we address it by looking at how they behave in other parts of the world." (Interview T080615b) "In terms of new opportunities the hydropower industry in China is limited and it has a clear sunset date." (Interview T220415)	√ (Ghana)
Recent	Only recently, China Exim Bank (2008) and Sinohydro	✓ (1,216
involuntary	(2011) have adopted guidelines concerning the	people resettled
resettlement	environmental and social impacts of overseas projects, including topics of resettlement and consultation.	since 2008)

Table 1 - Requirements for the case selection

Last but not least, the data situation played a role as well. Since it was not possible for me to do field research on the ground, I needed to rely on data collected by other researchers. The literature on the Bui Dam is extensive compared to other recent dam projects.

5.2. The Bui Dam Project

The Bui Hydropower Station is a 400 MW dam constructed on the Black Volta River in Western Ghana during 2007 and 2013 (Sinohydro, 2015). The area inundated for Bui Dam covers 440km² of land, including 21% of the area of the Bui National Park (Mettle, 2011: 52). The multi-purpose-dam used for power generation as well as water supply is the second largest hydroelectric plant in Ghana (of three large dams in total; Kirchherr et al., 2016_a: 4). The main driver for its construction was the severe shortage of electricity in Ghana, which is de facto still ongoing. The demand for electricity is rising by about 10% per year, which is exceeding Ghana's economic growth¹⁰ (Interview T270515c). Ghana is largely dependent on hydropower and the Bui Dam project is regarded as "part of the short-term solution" to solve the energy crisis by one of our interviewees (Interview T240515b).

Bui Dam was principally funded through China Exim Bank loans (730 million USD), complemented by 60 million USD funding of the Ghanaian government (Kirchherr et al., 2016_a : 10). The Chinese hydro company Sinohydro was the construction company, meaning that the company only builds the dam and hands it over to the government. In 2007, the Parliament of Ghana established the Bui Power Authority (BPA) to plan, execute and manage the Bui Hydropower Station (BPA, 2015_a).

¹⁰Ghana's GDP growth was 7.6% in 2013 (World Bank, 2015).

Eight communities, 1216 people in total, had to be resettled, several more were impacted by the construction and inundation. The resettlement scheme consisted of three phases (BPA, 2015_c):

- Phase A: four communities (217 people), resettled because they lived at the construction site,
- Phase B: three communities (899 people), who lived in the area to be inundated,
- Phase C: one community (100 people), personnel of the National Park.

Originally, BPA promised the construction of the entirely new city Bui City for the resettled communities. By now, however, all communities have been moved to permanent settlements (BPA, 2015_d) and nothing points to this promise ever being fulfilled. In total, 1,216 people have been resettled. While resettlement has yielded some benefits for the communities – people are happy with the houses of the permanent settlement (Interview T040515), there are bore holes for water supply, and the accessibility of the area has been improved (Out-Tei, 2014) – reports on the adverse social impacts on resettled communities predominate. Among other issues, fishing communities were resettled in inadequate farming areas without receiving retraining; compensation payments were late or insufficient; and promises made by BPA to (re-)build infrastructure were not kept¹¹.

5.2.1. In Theory: Participation Standards

This paragraph reviews different participation standards: World Bank standards as an example of international standards, standards of Sinohydro and China Exim Bank, as well as Ghanaian standards, and explains which are relevant for the Bui Dam project.

The World Bank requires "meaningful" participation of involuntarily resettled people. Operational Policy 4.12 of the World Bank states that they should be "consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives" as well as "offered opportunities to participate in planning, implementing, and monitoring resettlement" (World Bank, 2004: 123).

However, in Chinese overseas projects, it is common that the laws of the host country are applied (Interview T270515b). In the Bui Dam project, the UK-based consultancy firm ERM conducted the Environmental and Social Impact Assessment (ESIA) and prepared the Resettlement Planning Framework (RPF). The RPF identifies gaps between the World Bank standards and Ghanaian legislation, especially in terms of public participation requirements, and thus specifically refers not only to Ghanaian law but also to World Bank standards (Hensengerth, 2011: 20ff). Fink (2005: 58) finds that requirements for participation in the Ghanaian law are "brief and unspecific". It merely requires hearings to be held on ESIAs in projects involving resettlement, environmental concerns, or intense public concern, all of which apply to the Bui Dam project (Hensengerth, 2011: 23). ERM additionally recommends in the RPF: "Public participation in the process of land acquisition and proposed resettlement must be promoted. Procedures or guidelines for such public consultation ought also to be clearly spelt out" (ERM, 2007: 78). Although the RPF recommends more comprehensive participation, limited to informing the public.

In addition to Ghanaian standards, Sinohydro's and China Exim Bank's internal guidelines on participation may play a role. However, as Sinohydro acted as construction company only, it was not responsible for the resettlement scheme or participatory processes. The BPA took on this responsibility for the Ghanaian Government. Only in projects where Sinohydro is responsible (Build-Operate-

¹¹ For more details on the adverse social impacts on the resettled communities see Hensengerth (2011), Mettle (2011), Otu-Tei (2014).

Transfer models), it has "committed to ensuring that there is an effective forum for two-way and open communication between the local community and the company" (International Rivers, 2014: 4). China Exim Bank has internal guidelines for funding overseas projects. According to its 2008 guidelines, Article 12.4, projects with serious negative impacts should openly consult the public – however "in accordance with the host country's requirements" (China Exim Bank, 2008). If projects cause serious problems and the project owner fails to properly address these, the Bank can withdraw funding (Article 19).

5.2.2. In Practice: Participation in the Bui Dam Project

The Bui Dam project can be subdivided into three different phases. For each, Arnstein's typology will be used to rank the respective level of participation.

Preparation of the ESIA report

Planning and feasibility studies for the Bui Dam project had been going on for decades when Fink did his field study around the Bui site in 2005. The communities complained that they had neither been consulted nor informed on the status of the project. Fink (2005: 76) quotes a local planning practitioner who said that "participation is en vogue in planning". However, the practitioner was opposed to the sharing of power in decision making as it would suffice to "hold community meetings to extract information".

The involvement of the local communities began when ERM conducted surveys, focus group discussions and base-line surveys for the ESIA (ERM, 2007: 112). In accordance with Ghanaian law, hearings were held in Accra and other larger towns, with different stakeholders, including Sinohydro. Hearings and public meetings can point to different levels of participation, depending on the actual involvement and influence of locals. Hence, one has to take a closer look. At the meetings for the Bui Dam project, local communities were given the possibility to express concerns. These mainly related to compensation and losses of livelihood (Hensengerth, 2011: 22). Twum et al (2008: 22) criticize that it is not clear to what extent the inputs made during hearings have influenced the further process as the results were not legally binding. The ESIA report just states that "all comments raised during the consultation carried out during preparation of this ESIA have been fully taken into account" (ERM 2007: 156). NGOs have furthermore pointed out that no hearings were held at the dam site, thus the hearings were hardly accessible for affected people (Hensengerth, 2011: 22).

The local consultation meetings were prepared by staff of the Ghana Environmental Protection Agency. The analysis of their report on a 2006 hearing with affected people gives the impression that the concerns of the local communities were not taken seriously: "Evidently demonstrated also was the emotional display of the fishing communities [...]. They advocated for resettlement along the river [...]. This requisite was purely on the basis of having spent all their lifetime in fishing business" (ERM, 2007: Annex). Minutes of another public hearing suggest that the main purpose of these "consultations" was to inform the public of the project benefits and to gather their support: "The whole consultation process was a success. For the first time most members of the potentially affected communities got to know what the Bui hydroelectric project is all about and the benefits they stand to gain under the project." (ERM, 2007: Annex)

Level of Participation: Coming back to Arnstein's Ladder of Participation, the modes of participation present in this phase of the project range from (3) Informing to (4) Consultation¹², both of which are

 ¹²(1) Manipulation (2) Therapy (3) Informing (4) Consultation (5) Placation (6) Partnership (7) Delegated Power
(8) Citizen Control

forms of tokenism. People are invited to meanings mainly to provide them with information and "educate" them on the benefits of the project, in order to gain their support. People are asked for their opinions and concerns primarily because it is necessary to "extract" information from them to be able to conduct the ESIA. It is unclear how and if the inputs are considered. In the case of the request to be resettled along the river, it has not been considered at all. Thus, participation is tokenistic.

Resettlement Phase A

BPA was responsible for the resettlement scheme and mitigation measures. Phase A of the resettlement affected four villages. When Sutcliffe interviewed affected locals in 2008 – one year after the ESIA report and RPF had been published – "none of the people [she] spoke to had an idea of when they were to be resettled, when they could expect compensation or how to make their grievances known" (Sutcliffe, 2009: 2ff). They had received some information through the radio, but none from the responsible authorities. Already two years later, in 2010, these villages had been resettled to temporary houses. Thus, informing happened very late in this phase – and it was not always correct: There was still confusion about their final destination. This was supposed to be Bui City, which was later on labelled a "myth" (Hensengerth, 2011: 29). Also, the affected communities of Phase A were promised that monthly income support would last for two years. When they were resettled, this was reduced to one year (Mettle, 2011: 100). According to Hensengerth (2011: 30), communities claimed that they were not consulted, but only given certain information.

The RPF had suggested to set up a Working Group, in which also villagers and NGOs would have been represented and which would have been responsible for implementing the resettlement scheme, including consultation, rehabilitation measures and grievances (ERM, 2007: 122-133). This was entirely ignored. Instead, BPA appointed a Resettlement Officer who was in charge. It was even perceived that BPA was reluctant to working with NGOs, as it feared their opposition to the dam project (Hensengerth, 2011: 28). When people took the initiative and informed BPA what they needed – such as a truck station – they received no response.

Level of Participation: While consultations were mandatory by law for the ESIA, they were almost completely omitted in the Resettlement Phase A. According to Mettle (2011: 77), Phase A was rushed with too little time to prepare, and the officers were unexperienced with consultation mechanisms. Even the process of informing was late and insufficient. The Working Group which had been suggested by the consulting firm in the RPF could have significantly increased participation levels, possibly to (6) Partnership – in which citizens actually gain some degree of power in decision-making and have certain responsibilities in planning and implementation. As this never happened, the participation appears to have retrograded to (3) Informing, in many respects.

Resettlement Phases B and C

Mettle (2011: 77) found significant improvements with regard to participation in the later resettlement phases. This phase was "gradual" and people had sufficient time to prepare and access to information. In Arnstein's typology, (5) Placation is a higher-level tokenism because citizens are allowed to advise, but the right to establish the rules and make the decisions is retained by the powerholders. Citizens thus begin to have a limited degree of influence but only profit from this participation as much as powerholders want them to profit. This situation can be found in the subsequent resettlement phases: The people were to some extent able to negotiate with BPA. They for example requested one additional room to the new houses, which was accepted by BPA (Mettle, 2011: 73). Representatives of the communities were taken to the construction site to measure if the houses matched the plans (Hensengerth, 2011: 33). On the other hand, inputs by the communities were again ignored if they did not fit BPA's plans. The chief of the largest resettlement community had successfully negotiated a location near the reservoir with another chief, to maintain fishing livelihoods. This was ignored by the

authorities; the village was resettled into a farming area, which "put them at a disadvantage" compared to the indigenous farming communities (Otu-Tei, 2014). Moreover, Mordzeh-Ekpampo (2010) found significant disparities in participation between different groups: Minority groups did not adequately participate in the planning process, likewise communities which were only affected, but not resettled (Ibid.: 58ff). He also did a study on the participation of women, identifying not only different levels, but also different instruments of participation between men and women. Chiefs, on the other hand, participated highly compared to other affected people.

A major reason why participation was improved in Phases B and C of the project is the Ghana Dams Dialogue (GDD). This platform was initiated in 2006 by local organizations and aims at improving the decision-making process in Ghanaian hydropower projects by integrating all relevant actors, in particular affected communities (GIZ, 2011). While the government and BPA showed no interest in the beginning, the GDD played an active role in later phases. It raised people's awareness that they needed to negotiate for good resettlement packages (Mettle, 2011: 76). The platform facilitated an active two-way information exchange (Twum, 2010) and was actively involved in the selection of the site for the resettlement (Interview T250515c). The GDD is still active and also gives recommendations for sustainable hydropower. However, the platform lacks a mandate to implement the recommendations (Twum, 2010) and thus remains advisory. According to Dr. Liqa Raschid-Sally, the representative of the International Water Management Institute at the GDD, the major achievement of the GDD is that it unified dam-affected people to speak with one voice and has a de-escalating influence on the relations between resettled and authorities (GDD, 2010: 4f). Today, there are still meetings with both parties to resolve issues "without tension".

Level of Participation: There has been improvements in the level of participation in the last phases of resettlement. The authorities tried to respond to the needs of the communities and consulted them

(GDD, 2010: 5). Especially the GDD facilitated information exchange and negotiations. As the officials were skeptical towards the GDD in the beginning, these spaces of participation are claimed rather than invited. As communities were not only consulted, but were actually able to negotiate with the authorities - to a certain extent the level of participation can be determined to (5) Placation, which is the highest-level tokenism. Although the GDD offers ideal conditions, there is no institutionalized inclusion of affected people in the decisionmaking structures, which is why the Bui Dam project does not reach Arnstein's range of citizen power.



Figure 5 - Participation Levels in the Bui Dam Project (Author's own depiction)

5.3. Contextualization of the Findings

The analysis of participation in the Bui Dam project yielded two main results: First, the responsibility for resettlement and consultation did not lie with Sinohydro. Second, levels of participation ranged from (3) Informing to (5) Placation in the different phases, which refutes the research hypothesis (which expected only the level of Informing). Also, from Phase A to Phases B and C of resettlement, the level of participation has increased, mainly due to a learning process and the claimed spaces by the GDD. The results also show that the level of participation cannot always be determined to one exact rung within one project. This is why the project has been divided into different phases which have been analyzed separately. The subsequent sections now contextualize these findings within the industry and explore the factors which affect the level of participation. It draws mainly on the data from the expert interviews.

5.3.1. The Responsibility Issue in Chinese Projects

At earlier stages of research, there was no particular interest in the responsibility question. However, I soon recognized that it is important in order to explain participation levels in Chinese projects: It is very common that Chinese companies overseas "outsource" social and environmental impact assessment and mitigation (Interview T040515). They pay the local government or a local company to manage the resettlement, who then also carries out the consultation process (Interview T270415). In the case of the Bui Dam, Sinohydro was the construction company only, so it was only responsible for building the dam. However, even in the case of a BOT contract for Kamchay Dam in Cambodia, Sinohydro left "dealing with the social and environmental impacts largely to the local authorities" (Interview T040515). This view and experience was shared by all interview partners who gave examples from different countries, such as Laos (Interview T140515, Interview T210515a). A researcher noted: "According to my experience, there is no approach to social sustainability in general from Chinese constructors. [...] Actually, they do not have any contact with the local population" (Interview T040515). A consultant with working experience in Laos adds to that: "For example in Laos, they say it's not our responsibility, it's the responsibility of the government. So they hand it over to the government, give them a couple of million dollars, and say 'you do it your way' and people might or might not get a tenth of that" (Interview T270515b).

The interviewees agreed that the main reason why Chinese hydropower companies "outsource" these matters is a lack of capacity and experience with these kinds of activities (Interview T160615a, Interview T250515a). One researcher noted that it actually makes sense for local organizations to implement the resettlement, as they are more aware of local conditions and the local culture (Interview T210515a). The Chinese hydropower company we interviewed gave a similar answer: "Because the resettlement problem is a complex, multifaceted issue – design, local customs, cultural traditions and law – it is usually the local government which solves such problems. The company basically does not participate in positive" (Interview T160615b)¹³. In China, the companies hand over all responsibilities to the Chinese government (Interview T160615a). Because of the authoritarian Chinese political system, they are not used to citizen participation or public controversy (Interview T300415d, Interview T300415a) and for most of them, overseas project are the "first time they've ever met an international NGO and an independent NGO as well" (Interview T220415).

Although there are good reasons for local organizations to implement resettlement schemes, one of our interviewees asked: "But of course, are these local partners well-trained enough to do it and are they really doing it?" (Interview T210515a) The local authorities follow the national laws – and in some cases, such as in Myanmar until recently, there are no laws on social or environmental impact

¹³ The un-corrected translation by Google Translate can be found in the Annex.

mitigation (Interview T300415a). According to a German scholar, the Ghanaian laws are comparably strict which is one reason why the resettlement in the Bui Dam project went comparatively smoothly (Interview T120515a). However, especially the understandings and norms of stakeholder engagement in developing countries are "not always what one expects to be international practice" (Interview T250515a). Moreover, corruption is a problem. When Chinese companies pay local institutions to do the resettlement and consultation, "the most money is going to someone's pocket and not enough money to the villagers" (Interview T270415).

5.3.2. The Level of Participation in Chinese Projects

The level of participation in the Bui Dam project was not yet at the stage of citizen power according to Arnstein's typology. However, it reached (5) Placation, mainly because of a vocal civil society through the GDD. This level of participation seems to be rather high for a hydropower project with Chinese involvement. A consultant stated: "I am afraid consultation too often is just seen as going in and telling people what is going to happen. And they don't talk to women and they don't talk in the ethnic language of a group. So sometimes it's not always clear. Or it puts the control in the hands of a very small elite" (Interview T270515b). The majority of our interviewees shared the view that people are informed rather than consulted and one added that for Chinese actors, "expropriation is a very, very practical way to go" (Interview T080615b). They agreed that Chinese consultation standards are much below international standards (Interview T080615b, Interview T030615). For example, in the case of the Kamchay Dam in Cambodia, "the Chinese were not interested in knowing the challenges of the local population, discussing about the problems" (Interview T040515). One interviewee from the academia stated that he had never heard of public consultation initiated by the Chinese (Interview T190515). Instead, they invite communities to give them superficial information and our interviewee got "the impression that the communities were dumbfounded or completely blown away by this great show of force. They show up with the provincial government, with all of the district people; it's very intimidating. And [the Chinese] get what they need". Many interviewees stressed that Chinese hydroplayers would only do what is required to meet national standards and only use consultation processes to respond to pressure (Interview T300415a, Interview T210515a). One interviewee however added that Chinese companies in some cases may be willing to respond to civil society, but are told not to do so by their local (Cambodian) partners (Interview T040515).

5.3.3. Explaining the Level of Participation in Chinese Projects

The analysis of the interview data revealed that participation processes in the majority of Chinese dam projects are at the level of informing only. Of the 12 interviewees who were asked for their assessment, 10 (83%) were of this opinion. Only 17% classified the participation level as consultation. In the case study of the Bui Dam, higher levels of participation were found. This leads to the obvious question: How can participation levels in Chinese projects be explained? Why are some Chinese players trying to improve standards? With only qualitative data and a sample size of n=1, I cannot identify any definite independent variables. Nevertheless, the interviewees offered a number of potential explanations and factors which affect the level of participation in Chinese projects; they may however also apply to participation in projects by other national or international actors. Some of the factors have a greater importance for the level of participation than others. A review of the interviews has led to a first attempt to 'rate' the relevance of the factors. The moon icons in the last column of the table indicate the relevance on an ordinal scale from 1 (least relevant, one quarter colored) to 4 (most relevant, completely colored). The rating takes into account the frequency with which the factors have been

mentioned, combined with the importance they were given by the interviewees. The results conform to the findings from the literature review. Most relevant for the participation level in a Chinese overseas project seems to be the existence of national comprehensive laws, as Chinese companies usually follow those standards, not international ones. On the other hand, factors like the late stage of entering the project and feelings of superiority may help to explain the rather low levels of participation. Compared to other factors however, they are of low relevance and neither did I encounter these explanations in the literature review.

Variable	Explanation/Mechanisms	Interviews	Relevance
Overseas	Chinese players are new to the overseas business and are	T300415d,	
Experience	inexperienced with managing public participation or	T220415,	\frown
	protests. In China, they are not responsible for	T270415,	
	resettlement issues. Because of the Chinese political and	T300415a,	
	societal situation, Chinese companies are not used to	T120515a,	
	public protests or participatory processes. The more	T080515,	
	overseas projects with protests/a vocal civil society they	T080615b	
	have conducted, the more experienced they become.		
Political	A vocal civil society in democratic states with open media	T080515,	
Situation/	pushes for public participation, in contrast to authoritarian	T220415,	\smile
Existence of a	states like Laos or China. The GDD in Ghana is one example	T190515,	
Vocal Civil	for claimed spaces of participation.	T210515a,	
Society		T300415c,	
		T010615,	6
Existence of	The Chinese government has advised its companies to	T250515a,	
Comprehensive	follow the social and environmental laws of the host	T300415a,	
Laws	country. The existence of laws which require consultation	T270515b,	
	and the question if their implementation is monitored play	T120515a,	
	an important role. This differs from host country to host	T140515,	
	country.		
Feeling of	Chinese companies perceive the locals as primitive, not as	T160615b,	
Superiority,	development partners. A quote from the interviewed	T160615a,	\bigcirc
Racism	Chinese hydroplayer supports this thesis: "Why is there so	T220415,	
	much protest against dams in SEA in your point of view?" –	T120515b,	
	"Relatively backward areas, local people and the	T240515a	
	development of quality awareness are not high enough".		
	Language problems further impede contact with locals.		
Strategic	Chinese companies want to become world leaders in the	T220415,	
Calculations/	global hydropower industry and care about their	T190515,	
Reputation	reputation. This leads so certain improvements in	T250515a,	
	environmental and social standards. An approximation to	T300415d,	
	international (participation) standards is thus a strategic	T080515,	
	decision.	T010615,	
		T160615a	
Stage of	Chinese players are new to overseas projects. They take on	T220415,	(\square)
Entering the	projects which have already been planned by the host	T300415d	\cup
Project	government but for which no other financiers could be		
	found. The later in the project cycle a company enters a		
	project, the more decisions have already been maken.		
	Communities are then not involved in the decision <i>if</i> a dam		
	is built or <i>where</i> , only <i>how</i> – leading to less participation.		

Table 2 – Explaining the level of participation in Chinese overseas projects (moon icons indicate relevance from 1 to 4)

5.3.4. Are the Others Doing it Better?

Most of these factors are specific to Chinese companies. The opinions differ on whether other players are following higher resettlement and consultation standards. According to a representative of an environmental NGO, also the World Bank is authorizing local authorities with the resettlement and consultation processes (Interview T270415), leading to similar outcomes as in Chinese projects. On the other hand, international donors have strict guidelines on participation and social mitigation and are monitoring frequently if they are followed (Interview T040515, Interview T270515b). Especially the Nam Theun 2 dam in Laos is often mentioned as a good practice project. It is the World Bank's "come back" in hydropower funding and had a high budget for resettlement and mitigation measures (T010615). The consultation process started early and was comprehensive, transparent and "more than just consultation" (T010615). Although the Chinese financier Exim Bank has guidelines concerning social impact mitigation and consultation as well (even though they are not as comprehensive as World Bank or IFC guidelines), it is unclear if their implementation is monitored (Interview T120515a). There has been only one reported case where the bank has actually suspended funding because of social and environmental issues (Kirchherr et al., 2016_a: 8).

Another interesting question is whether other national players are applying higher standards with regard to social safeguards and participatory processes. Comparisons were made by some of the interviewees. In the case of Nam Ngum 2, a Thai funded dam, the resettlement was handled similar to what Chinese players do: "The Thai company said to the Lao government 'here is a couple of million dollars, please resettle these people', so it was very much a hands-off approach" and the resettlement scheme was quoted as a bad example (Interview T140515). On the other hand, national players from other countries have been highlighted by interviewees, with regard to good performance in terms of social impacts and participation. A consultant noted that "the Brazilians are much better - they have a reputation for corruption, but in terms of sustainability behavior outside of governance, I would say that they are many, many classes better than the Chinese" (Interview T080615b). Especially companies from developed countries have been mentioned to perform better, as an "Australian, US, UK or German company couldn't operate outside the laws of its own country even for overseas investment" (Interview T030615). Also a representative from a Norwegian hydropower company sees the main problem with accountability. While the Chinese take local laws into account, Norwegian companies are "accountable to the Norwegian government, and eventually the Norwegian population" and thus apply the higher IFC standards (Interview T160615a). Even if the majority of players apply higher standards than the Chinese actors, a representative of WWF notes that the whole sector, not only the Chinese, still has to learn that public participation should involve getting the so-called "free, prior and informed consent" of the affected population¹⁴.

¹⁴ "'Free prior and informed consent' (FPIC), is the principle that a community has the right to give or withhold its consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use." (Forest Peoples Programme, 2015)

6. Conclusion

The case study yields two major findings. In the case of the Bui Dam, the local Bui Dam Authority was responsible for the social impact mitigation. Bui Dam is no exceptional case: Chinese hydroplayers commonly "outsource" the tasks of implementing resettlement schemes and conducting consultations due to a lack of experience and capacity. The environmental and social standards relevant are typically those of the host country, even if they are below Chinese standards. The actual standards which are applied may be even lower because of bad implementation and corruption issues.

Consequently, participation levels in large Chinese dam projects are below international standards. In the case of Bui Dam, one has to distinguish between two main phases of the project. While participation in Resettlement Phase A was limited to informing with some extent of consultation, it was advanced to placation in Phase B and C, which is Arnstein's highest-level mode of tokenism. No level of citizen power was reached. However, comparing these findings with the information from the expert interviews shows that the participation level in the Bui case was higher than in most Chinese projects. In fact, almost all experts which were not representing any large hydropower association classified participation in Chinese projects between informing and (in a few cases) consultation. Consequently, the hypothesis H_0 is rejected, as the level of participation in the Bui Dam project was at least in parts higher than the expected level of (3) Informing. This level rather applies to the broader Chinese overseas dam industry.

Insufficient participatory processes in Chinese projects can be explained by a number of factors, such as the internal set-up of companies, the stage in the project cycle, cultural differences, a feeling of superiority, as well as experiences from projects in China. Particularly relevant is also the situation in the host country: Comprehensive laws which require public participation as well as a vocal civil society in a democratic country may advance the level of community involvement. Recently, Chinese players like China Exim Bank and Sinohydro have taken first cautious steps towards own social and environmental regulations. In the interviews, this was explained mainly through learning processes and strategic calculations. Chinese hydroplayers which aim at becoming world leaders care about their reputation. In one example, Sinohydro "finds itself in the absolutely impossible position, where they give shitloads of money to the government and then the government does absolutely nothing. And they take the heat for it" (Interview T190515). Thus, reputational issues as well as stricter laws and implementation in the host countries may lead to an improvement of social impact mitigation and participatory processes in Chinese dam projects. Of the 11 interviewes who gave their opinion on the overall trend, eight expected a positive development.

There are two major reasons to enhance participation levels in huge infrastructure projects. From the perspective of the affected communities, participatory processes enable them to gain a certain amount of influence or even decision-making power over the project. Ideally, the community is involved already in the planning stage of a project and can influence for example where a dam is built, where communities are resettled, and how the compensation scheme looks like. Large dam projects always come with significant adverse social and environmental impacts. Community participation should ascertain that the project results in a win-win situation and that local affected people are not only compensated for losses, but become benefit sharers. On the other hand, participatory processes are desirable from the dam developer's perspective as well, as they increase the prospects of success of a project. Involving the affected communities leads to decisions which are acceptable to the public and thus decreases public protests, which entail the risk of a delay, suspension, or even cancellation of the project.

The findings of this paper are relevant for the scientific community as well as for development practice. Analyzing the level of participation with the help of Arnstein's typology contributes to the state of

knowledge of the rather new phenomenon of Chinese overseas dam projects. The ordinal typology has proven useful in terms of ranking projects. However, it strongly simplifies complex projects. An alternative, more comprehensive way of analyzing participation can for example be found in Musch (2001: 26, after Coenen et al.). Participation is broken down into types of rules to investigate how information is disseminated, who decides, how actions are taken, and how opinions and interests are aggregated. On the basis of this paper's findings, a number of open research questions can be identified which are worth investigating. The obvious next step is a comparative study of a larger number of Chinese dam projects to enhance the external validity of the results. Subsequently, the level of participation in Chinese projects could be compared to the level in international (e.g. World Bank) projects and projects of other national players. Furthermore, more research is needed on the factors which influence the level of participation. A discrepancy exists between the international discourse, in which participation is seen as an imperative, and the reality in the industry, where participation levels are rather low. Thus, how can participation levels be raised? The findings in this paper provide first answers to this question. Participation levels in a Chinese overseas project are above all dependent on the existence of respective laws in the host country. The management of the resettlement is typically outsourced to national players, often government authorities. So even if the blame for bad resettlement practice is often put on the Chinese players - and not without good reason - the constructive way to go is to approach policy makers. Development agencies could for example assist the ministries of developing countries in designing stricter environmental and social policies, whose implementation is effectively monitored.

All in all, the usefulness of large hydropower projects for developing a country remains highly questionable. After the World Commission on Dams report, the industry moved towards small- and medium-sized projects. The return of the World Bank to funding large dams again marks a turning point, the implications of which remain still unclear.

Annex A: List of Interviews

#	Reference Code	Туре	Торіс
1	T220415	NGO	Social impacts and participation
2	T230415a	International donor	Social impacts and participation
3	T230415b	International donor	Social impacts and participation
4	T270415	NGO	Social impacts and participation
5	T300415a	NGO	Social impacts and participation
6	T300415b	International donor	Social impacts and participation
7	T300415c	International donor	Social impacts and participation
8	T300415d	NGO	Social impacts and participation
9	T040515	Academia	Social impacts and participation
10	T080515	NGO	Social impacts and participation
11	T120515a	Academia	Social impacts and participation
12	T120515b	NGO	Social impacts and participation
13	T140515	Private sector	Social impacts and participation
14	T190515	Academia	Social impacts and participation
15	T210515a	Academia	Social impacts and participation
16	T210515b	Private sector	Social impacts and participation
17	T250515a	International donor	Social impacts and participation
18	T250515b	Private sector	Social impacts and participation
19	T270515a	Private sector	Social impacts and participation
20	T270515b	International donor	Social impacts and participation
21	T010615	Private sector	Social impacts and participation
22	T030615	NGO	Social impacts and participation
23	T080615a	Private sector	Social impacts and participation
24	T080615b	Private sector	Social impacts and participation
25	T160615a	Private sector	Social impacts and participation
26	T090715	International donor	Social impacts and participation
27	T160615b	Private Sector (Hydroplayer)	Social impacts and participation
28	T210515c	International Donor	Bui Dam
29	T240515a	NGO/Other	Bui Dam
30	T240515b	Government	Bui Dam
31	T240515c	Academia	Bui Dam
32	T250515c	NGO	Bui Dam
33	T270515c	Private Sector	Bui Dam

Annex B: Questionnaire and Exemplary Transcripts of Interviews

QUESTIONNAIRE (TRIANGULATION)

[BACKGROUND/QUESTIONNAIRE] This questionnaire ought to serve as guidance for interviews with those regularly corresponding with Chinese hydro-players, i. e. relevant government officials of those countries where Chinese hydro-players are most active in, relevant interest groups such as International Rivers, international donors, journalist as well as academics working on this topic. Do note that actual interviews may differ significantly from this questionnaire, depending on the expertise of the interview partner.

Interviewee features/overview

- 1. First of all, we would like to exactly understand in which contexts you have already been working with Chinese hydro-players, e. g. Sinohydro, China Power Investment (CPI) or Datang. It would be great if you could also share which companies you were involved with.
- 2. Chinese hydro-players are currently financing or building at least 103 dams in Southeast Asia. In your perspective, what drives the current boom in hydropower in Southeast Asia?

Social impact and social impact assessment

- 3. What do you think are the key negative social impacts of dams from the perspective of Chinese hydro-players?
- 4. What about positive social impacts from the perspective of Chinese hydro-players?
- 5. A variety of Chinese hydro-players have adopted social impact assessment (SIA) procedures and guidelines in recent years. How do you judge these?
- 6. What prompted the adoption of these guidelines and procedures in your point of view?
- 7. How do these guidelines and procedures compare to those of international donors?
- 8. Where do you think these guidelines and procedures, adopted by Chinese hydro-players, may stand five years from now?

Organizational set-up

- 9. Many dam projects run by Chinese players in Southeast Asia face severe public opposition. Think of the Myanmar's Myitsone Dam, for instance. What are the key reasons so many projects run by Chinese hydro-players face public opposition these days?
- 10. How do you judge these players' response to this opposition? Can you cite specific examples?
- 11. What could Chinese hydro-players do to improve their response to public opposition?
- 12. From your perspective, which efforts to mitigate negative social impacts of dams do Chinese hydro-players already undertake?
- 13. Can you specifically comment on the role of public participation in dam projects which are run by Chinese hydro-players?
- 14. How do participatory processes look like in Chinese projects and how do they differ from projects by international donors?

Closing

- 15. Is there any question I should have asked which I have missed? Is there anything you would like to add to what you have already said?
- 16. Who else may be interesting to talk to regarding this topic? Anyone you could refer us to?

INTERVIEW T040515 (ANONYMIZED) - ACADEMIA

Person 1: Can you tell us more about you and the research project you are doing with Frauke Urban?

Person 2: We are looking at environmental and social impacts, but also political aspects and governance issues relating large dam construction in developing countries, conducted by Chinese builders and developers. [...]

Person 1: Have you had the chance to talk to Chinese hydro-players? What was your involvement with them?

Person 2: We interviewed some Chinese actors, in particular Chinese builders such as Sinohydro. I did not interview them personally because of the language, but we work with people from Tongji University and Nottingham University Ningbo in China, and also International Rivers and they did the interviews with the Chinese actors in China. We didn't receive the information yet, so I cannot give you detailed information about these interviews. I worked in the fieldworks on the different case studies so I have more information about the impacts and the perception of the affected people, more than the Chinese views. I can give you some information regarding the type of contracts and what Chinese have done or not and the responsibilities of the different partners and actors in the case studies, the Chinese on the one side, and the host governments.

Person 1: How do those resettled usually perceive the Chinese engagement in these dam projects?

Person 2: According to my experience, there is no approach to social sustainability in general from Chinese constructors. The interaction between Chinese and local people is not very well developed. Actually they do not have any contact with the local population, because the consultation process is carried out by the host governments usually. We found some interaction between Chinese contractors, Sinohydro in particular, and the local population in Kamchay in Cambodia, in particular in relation to Kamchay Dam. In that case, the Chinese were involved in the definition of the compensation measures. So they actually visited the local communities and they measured the land, the trees belonging to the local population and they signed the compensation measures. And that's because it's also to the type of contract. In the case of Kamchay Dam, it was a BOT contract. So in this case, for this kind of contract, the host government grants a concession to Chinese builders to develop and operate the dam for several years. So, technically that makes the dam *builder in charge of the resettlement process and compensating the affected local people,* of implementing mitigation measures, to reduce the environmental and social impacts of the dam and to manage the dam and its impacts on a daily basis. But actually, what happened in Cambodia Kamchay Dam, our experience was that Sinohydro operates and manages the dam but leaves dealing with the social and environmental impacts largely to the local authorities. So actually, they worked on the compensation measures and they gave compensation to the local population through the local governments. But actually they didn't deal with the social and environmental implications and the Cambodian government, they prepared the environmental and social impact assessment. They actually did it after the construction of the dam so the process wasn't very good in this case. But in the other case studies, for example in the case of Bui Dam in Ghana, it was an EPC contract so actually the Chinese they didn't have any contacts with the local population but there was a local authority called the Bui Power authority. And they managed everything, the resettlement plan, environmental impacts and social assessment, compensation measures. So the implementation of the mitigation strategies in this were managed by the local authority, not by Chinese. There was a conflict for example in Ghana between Chinese contractors and some of the local population because the local workers were paid less than the minimum salary in Ghana, so there was a conflict *between them and the Chinese contracts.* And then the Chinese contractors, they increased the salary of these people. This is the only case of that I know that there was conflict like this.

Person 1: Looking at the two cases, Kamchay Dam and Bui Dam, do you think it's rather typical that actually the Chinese players get involved in designing the resettlement schemes or running the social impact assessment upfront, or do you know of any cases where the Chinese were more involved here and didn't give this to local authorities?

Person 2: In all our cases, no, they were not involved in any of these processes, apart from the Kamchay Dam where they designed the compensation measures. *They gave money to the Cambodian government for the mitigation strategies, but actually this money was not used for this by the local government. So there are problems between local governments in Cambodia and Chinese constructors because it's not very clear where the responsibilities are*. So that case was quite difficult.

Person 1: Specifically for the Kamchay Dam. There is a lot of sustainability protocols out there now that Chinese players are also involved in, concretely the HSAP where TGC was even involved in the drafting. Is this something were you guys found that this actually matters in day to day project implementation? Or what are the guidelines when it comes to social impacts that Chinese players act by?

Person 2: In our case studies not. This kind of guidelines or practices they were not taken into consideration. Actually the host government, they were responsible of dealing with SIA/EIA, in the case of Bui Dam for example, the environmental and social impact assessment was carried out by a UK company, consultancy, and for the case of Kamchay dam it was done by a local agency, but actually it was done after the construction of the dam. And it's not in English, it's only in Cambodian. There is just a summary in English on Environmental and Social impact assessment.

Person 1: In the case of Kamchay, Cambodia, did the Chinese players actually involve the community in the designing of the compensation scheme?

Person 2: There was no involvement of the local population also because of language barriers. So the local population said that the Chinese they measured the land and the trees but they didn't have any conversation with the local population. So it wasn't a consultation process. *The Chinese were not interested in knowing what the challenges of the local population, discussing about the problems.*

Person 1: Are there differences in terms of community involvement between projects by Chinese players and other international players like the World Bank?

Person 2: Yes there are differences. Because the World Bank projects they follow in general more the WCD guidelines on participation and consultation. And in the case of Chinese projects, they actually rely a lot on the host countries for consultation. So they are not involved in consultation, not interested in applying participatory practices following international guidelines. In our case studies at least. In other case studies there may be differences, for example for domestic Chinese projects. We are looking at overseas projects. I don't know for domestic projects where there are not problems of language barriers etc. if they actually implement participation. But for overseas projects it's very difficult for them and they rely a lot on the host countries. And these kind of guidelines for consultation, they were applied in the case of Bui Dam in Ghana, but they were not considered by the Cambodian government in the case of Kamchay Dam.

Person 1: You said that the Chinese hydro-player was designing the compensation scheme on paper whereas not implementing or executing it. Did you assess this compensation scheme from a pure de

jure perspective? Was this a scheme as would have been recommended by international NGOs, or what it a problematic scheme?

Person 2: I can speak based on the point of view of the local population, of the affected people. Actually not all of them received compensation for example. The ones that received compensation, they were happy with the compensation they received. This was about lands, trees, crops compensation, fruits compensation. For example they were measuring the tree and according to this they were evaluating the amount of fruits that the trees were producing. And so they gave compensation in terms of fruits production of these trees. So these people, the were quite happy with the compensation they received. But actually there was a lot of problems with people like Bamboo collectors or wild fruit collectors which were relying a lot on forest products for their livelihoods. Due to the inundation it was not possible for them to access the forest anymore, so they had a lot of reduction in livelihoods. And actually the land didn't belong to them, so they didn't receive any compensation for the loss of livelihood due to the reduced access to the forest area. So they had a lot of problems, a lot of negative impacts, but they didn't receive any compensation. So these kinds of impacts are not taken into consideration, because there were no property rights on the use of the forest. We have these problems in a lot of different projects. In most developing countries, land property rights are not very well defined and so they don't receive compensation for the loss of land they are using for livelihood but have no property rights for.

Person 1: In your view, can a resettlement process actually be done in a good way, also from the view of the involved communities?

Person 2: We have one very conflicting project in terms of resettlement, which is the Bakun Dam in Malaysia and in this case the resettlement process was quite negative in general and people were complaining a lot because they did not receive enough land, they were not involved in the decision about the resettlement sites. So I think in general in our case studies the resettlement process has always been conflictual and negative from the point of view of the local population. There was no resettlement in Kamchay Dam. And in the case of Bui Dam, there was a resettlement plan, but people are actually happy with the houses they received, for example, and no they have electricity access. But actually they have a lot of problems with land scarcity and the environment where they were moved to, it's completely different from the one they left. They don't have forests, the amount of land they have is scarce, and also the structure of the resettlement site is not very good for them.

Person 1: Would you say there is a lot of public opposition regarding the Kamchay Dam despite no resettlement taking place?

Person 2: No. There were some complaints, but people were complaining with local authorities about some compensations and the fact that they were not able to access the forest anymore. But in terms of street protest or more organized type of protest, no, this wasn't the case. This was the case actually in Malaysia, in the Bakun Dam, where the civil society organizations are more active in protecting the rights of the affected people. So in that case there was a lot of opposition and conflicts, with street demonstrations.

Person 1: Did you take any look at how Chinese hydro-players typically engage with the government of the country they are operating in, regarding to the next steps, the path forward?

Person 2: I don't know. We didn't look at this in detail.

Person 1: What we usually hear is that the Chinese don't engage very much with the government. They come in, run their project if it's an EPC project, and get out again. But there is not much of alignment going on between the domestic government and what the Chinese players do.

Person 2: Yes, sometimes they leave and for example in the case of Bui Dam, they have constructed the dam and then they stay there for a little bit to monitor the function of the dam. **But actually in general the relationship between the host government and Chinese builders is about engineer and technical problems regarding the materials, the monitoring of the dam, operation**. Apart from that, they are not interested in looking at the social and environmental challenges of the dam construction.

Person 1: If there is a delay in the dam construction, which happens often, do you know what happens between the host government and the Chinese player?

Person 2: No, we didn't have these kind of problems in our case study.

Person 1: Would you like to add anything?

Person 2: We are going to publish a lot on this topic; we have two papers forthcoming on the social and environmental implications, but also regarding social sustainability of Bui Dam and Kamchay Dam and implications with regard to the type of contracts the Chinese used, I can keep you updated about that. We have another paper which is on the social perceptions of the impacts on the affected peoples using a preference ranking method.

Person 1: Is there anyone we should talk to?

Person 2: We had interviews with some institutional actors, and an interesting conversation with Jamie Skinner from IIED. Most of Chinese players were not interested. We tried to contact for example Salini Construction, which is an Italian builder and they said that they are not interested in participating. And also NL which is another international Italian builder, we had the same response. We reached out to Sinohydro etc. through International Rivers but also Tongji University.

INTERVIEW T160615B (ANONYMIZED) – CHINESE HYDROPLAYER

(Online questionnaire; uncorrected Google Translation from Chinese)

What is your current position in the company? What are your responsibilities? Please also comment on hydro-power project in Southeast Asia you were recently involved in. If possible, you many also indicate which company you are employed by.

[...]

Chinese hydro-players are currently financing or building at least 103 dams in Southeast Asia. What drives the current boom in hydropower in Southeast Asia in your perspective?

1. China excellent credit policy for the Southeast Asian market.

2. The good cooperation between Southeast Asia and China.

3. Southeast Asian countries lag behind their own skills and abilities, a lot of high-quality water resources untapped

What are the key positive social impacts induced by a dam in your point of view?

The flood season of flood control, irrigation, increase local employment

What are the key negative social impacts induced by a dam in your point of view?

Impact local ecosystems, which may affect the survival of rare species, reservoir inundation area residents to move out of their homeland

What SIA procedures do you have in place?

In the project's pre-feasibility study and the development of the feasibility study stage, it will include social impact assessment report. Social impact assessment I will ask the local authority advisory body; backward countries, especially if the project is located, there is no such local authority advisory body, I will invite European and American consulting firm to carry out this work.

Do your SIA procedures differ from country to country

Social impact assessments of different countries, will be invited to the authority of the local advisory body in accordance with the program of the country, so in every country is not exactly the same.

Have your SIA standards evolved over time?

Over time, the focus of attention of the social impact assessment will be a corresponding shift, or according to specific professional consulting firm assessment.

Have you been involved in any dam projects in SEA which faced pulic opposition? Which?

No

Why is there so much protest against dams in SEA in your point of view?

Relatively backward areas, local people and the development of quality awareness are not high enough, the lack of government propaganda, causing people look the negative effects of the dam society, especially the construction of some of the people rely on to survive basin, the dam will inevitably have an impact on the surrounding, fisheries and agriculture will follow affected

How would you de-bottleneck a project which faces stark public opposition?

If a consensus between the government, that this project is worth developing, so the most important is to aid the government and the media publicity, change the public consciousness.

What would be a characteristic process during the construction of a dam to align with the government of the country you are operating in on the next steps and the path forward?

1, I do plan on project development proposal, submitted to the Council to review the host Government.

2, through the assessment, the parties discuss specific development plan.

3, the company set up a special working group, the Government also arrange staff to participate.

4, details on where the project area survey and conduct research on issues related to resettlement and other proposed solutions.

5, or with the support of government-led working group with representatives of immigrants or residents on development of communication, recording observations and prepare reports to the local government to assess the feasibility for development under conditions of reasonable and legitimate cleanup obstacles.

6, the government resettlement scheme and resettlement agreement or be properly resolved, the company will form a specific development plan with the government, the official start of the feasibility study and design work.

7, the design is complete, timely carry out project implementation.

Does your team usually agree on the path forward during a hydropower project?

Basically reached a consensus.

Are participatory processes involving those to be resettled a standard procedure in your firm? If so, please elaborate on these processes.

Because the resettlement problem is more complex, multifaceted issue design local customs, cultural traditions, laws, usually by the local government to solve such problems, the company basically does not participate in positive, only with the government

Can you describe the process within your firm through which targets (including milestones) for project completion are set?

2, whether the project is the country's priority development projects for local economic development and people's livelihood if there is a better or a positive role in promoting.

3, the project's research rival the intensity of investment in the project and attitudes, to compare their advantages and disadvantages, the main advantage to find itself.

4, strengthen communication with government departments, timely development of our company to provide technical and financial proposal for this project, for their support of my company, and it ultimately intended to cooperate with our company.

5, according to the principles of cooperation, gradually carry out detailed work, remove various obstacles and barriers to project before the formal development.

6, the two sides signed an agreement with the company on track to carry out substantive work, including exploration, pre-feasibility study, feasibility study and design.

What happens if key project milestones are not met? How do you debottleneck?

"This may lead to related work had to be suspended, or even reinvent the wheel. Increase is bound to make the project development costs, namely, human and material resources and other resource consumption increases, while project development prospects will be affected. It may need to be reassessed to continue Development of feasibility. "

Solution: 1, analyze the problem and the reasons for the formation of categories, such as the case of force majeure arising from the negotiations with the Government to stop the development, the need to research claims and other matters when necessary. If the cause of the government unilaterally belong, both sides need to research to find the right solutions for increased compensation from the latter part of the development costs should be based on the situation. If the company's own reasons, you should quickly find the approach, there is compliance remediation or punishment measures on the unit or persons responsible. Minimize adverse or negative effect caused by the incident, proposed to make up for the program.

Are there any questions we should have asked which we have missed? Would you like to add something?

No

Annex C: List of Figures and Tables

Figure 1 – Development Benefits of large dam projects (Fink, 2005: 12)	6
Figure 2 - Mechanisms that link legitimacy and success of private governance (Beisheim & Dingwe	rth,
2008: 13)	. 11
Figure 3 – Arnstein's Ladder of Participation (author's own depiction, based on Arnstein, 1969)	. 13
Figure 4 - Adaptations of Arnstein's Ladder (author's own depiction, based on IAP2, 2014;	
Mefalopulos, 2008; Noreed, 2012)	. 14
Figure 5 - Participation Levels in the Bui Dam Project (Author's own depiction)	22
Table 1 - Requirements for the case selection	18

Table 1 - Requirements for		0
Table 2 – Explaining the lev	el of participation in Chinese overseas projects2	5

Annex D: List of References

Arnstein, S. R. (1969). A Ladder of Citizen Participation. In: AIP Journal, July 1969, pp. 216-224

- Beisheim, M. & Dingwerth, K. (2008). Procedural Legitimacy and Private Transnational Governance. Are the Good Ones Doing Better? SFB-Governance Working Paper Series, Nr. 14, June 2008
- Biswas, A. K. & Tortajada, C. (2001). Development and Large Dams: A Global Perspective. In: Water Resources Development, Vol. 17, No. 1, pp. 9-21, 2001
- Bosshard, P. (2013). World Bank Returns to Big Dams. Retrieved July 27, 2015 from http://www.internationalrivers.org/resources/world-bank-returns-to-big-dams-8077
- Bowen, G. A. (2009). Document analysis as a qualitative research method. Qualitative Research Journal, 9, 27-40
- Bui Power Authority (2015_a). Legal Status. Retrieved June 25, 2015 from http://www.buipower.com/node/1
- Bui Power Authority (2015_b). 1,216 People Benefit From BPA Resettlement Programme. Retrieved June 25, 2015 from http://www.buipower.com/node/102
- Bui Power Authority (2015_c). Bui Power Authority Resettlement Programme. Retrieved June 25, 2015 from http://www.buipower.com/node/13
- Bui Power Authority (2015_c). Resettlement Communities. Retrieved June 25, 2015 from http://www.buipower.com/node/14
- CCILC (2015). China Three Gorges increases in renewable energy in Portugal and Brazil. Portuguese-Chinese Chamber of Commerce & Industry. Retrieved August 13, 2015 from http://www.ccilc.pt/en/china-three-gorges-increases-investments-renewable-energy-portugaland-brazil
- Cernea, M. M. (2008). IRR: An Operational Risks Reduction Model for Population Resettlement. Retrieved June 22, 2015 from http://www.nepjol.info/index.php/HN/article/viewFile/883/975
- Chen, C., Goldstein A., & Orr, R. J. (2009): Local operations of Chinese construction firms in Africa: an empirical survey, in: The International Journal of Construction Management 11/2009, 75–89
- China Exim Bank (2008). Guidelines for Environmental and Social Impact Assessments of the China Export and Import Bank's (China EXIM Bank) Loan Projects". Unofficial Translation
- Cleanleap (2015). Environmental and Social Policies of China Exim Bank and China Development Bank. Retrieved June 26, 2015 from http://cleanleap.com/policies-guiding-and-regulatingchinese-dam-building-companies/environmental-and-social-policies
- Coenen, F. H. J. M., Hofman, P. S. & Huitema (D.) (1998). Green Participation? Public participation and ist effects on the quality of environmental decision making. CSTM-SR nr. 106. Enschede, September 1998
- Desai, V. & Potter R. B. (Editors) (2008). The Companion to Development Studies. Second Edition. Hodder Education, London

Deutsche Gesellschaft für Internationale Zusammenarbeit (2011). Ghana Dam Dialogue. Fact Sheet

- Égré, D. & Senégal, P. (2003). Social impact assessments of large dams throughout the world: lessons learned over two decades, Impact Assessment and Project Appraisal, 21:3, 215-224, DOI: 10.3152/147154603781766310
- Environmental Resources Management (2007). Resettlement Planning Framework (RPF) for the Bui Hydropower Project.
- Felden, E. (2014). Laos: NGOs unerwünscht?! Retrieved June 28, 2015 from http://www.dw.com/de/laos-ngos-unerw%C3%BCnscht/a-18060291
- Fink, M. (2005). Integrating the World Commission on Dams recommendations in large dam planning processes: The case of Bui, Ghana. Diploma thesis, University of Dortmund
- Forest Peoples Programme (2015). Free, prior and informed consent (FPIC). Retrieved July 27, 2015 from http://www.forestpeoples.org/guiding-principles/free-prior-and-informed-consent-fpic
- Foster, V., Butterfield, W., Chen, C., & Pushak, N. (2008). China's Emerging Role in Africa: Part of the Changing Landscape of Infrastructure Finance. The World Bank. Retrieved from http://econpapers.repec.org/RePEc:wbk:wboper:10587
- Fujikura, R., Nakayama, M. & Takesada, N. (2009). Lessons from Resettlement Caused by Large Dam Projects: Case Studies from Japan, Indonesia and Sri Lanka, International Journal of Water Resources Development, 25:3, 407-418, DOI: 10.1080/07900620902958694
- George, A. L. & Bennett, A. 2005. Case studies and theory development in the social sciences, Cambridge, Mass., MIT Press
- Ghana Dams Dialogue (2010). Ghana Dams Dialogue Newsletter. Issue 6 December, 2010. Retrieved June 25, 2015 from http://ghanadamsdialogue.iwmi.org/Data/Sites/2/Documents/gdd newsletter-issue 6.pdf
- Ghana Dams Dialogue (2011). Report of Project Close-Out Durbar of the Ghana Dams Dialogue. Retrieved June 25, 2015 from http://ghanadamsdialogue.iwmi.org/Data/Sites/2/media/projectdocuments/reportoftheproject close-outdurbarofgdd.pdf
- Hammett, D., Twyman, C., & Graham, M. (2014). Research and Field Work in Development. Routledge
- Hensengerth, O. (2011). Interaction of Chinese Institutions with Host Governments in Dam Construction. The Bui dam in Ghana. German Development Institute, Discussion Paper 3/2011
- Hensengerth, O. (2013). Chinese hydropower companies and environmental norms in countries of the global South: the involvement of Sinohydro in Ghana's Bui Dam. Environ Dev Sustain (2013) 15:285-300
- Hine, D. and Carson, D. (Ed.) (2007): Innovative Methodologies in Enterprise Research.
- IAP2 (2014). Public Participation Spectrum. Retrieved June 21, 2015 from https://www.iap2.org.au/documents/item/84
- ICOLD (2015). Register of Dams. Retrieved June 22, 2015 from http://www.icoldcigb.org/GB/World_register/general_synthesis.asp
- International Finance Corporation (2012). Performance Standard 1. Assessment and Management of Environmental and Social Risks and Impacts. Retrieved June 20, 2015 from

http://www.ifc.org/wps/wcm/connect/3be1a68049a78dc8b7e4f7a8c6a8312a/PS1_English_201 2.pdf?MOD=AJPERES

- International Rivers (2012). The New Great Walls. A Guide to China's Overseas Dam Industry. Retrieved April 5, 2015 from http://www.internationalrivers.org/files/attachedfiles/intlrivers_newgreatwalls_2012_0.pdf
- International Rivers (2013). China Overseas Dams List. Retrieved June 22, 2015 from http://www.internationalrivers.org/resources/china-overseas-dams-list-3611
- International Rivers (2014). Activist Guide to Sinohydro's International Corporation Limited's Environmental and Social Policy Commitments. Retrieved May 20, 2014 from http://www.internationalrivers.org/files/attachedfiles/activist_guide_to_sinohydro_internationals_environmental_and_social_policies_12dec201 4_final.pdf
- Khargram, S. (2003). Neither TEMPLES A Global Analysis Nor TOMBS of Large Dams, Environment: Science and Policy for Sustainable Development, 45:4, 28-37, DOI: 10.1080/00139150309604542
- Kibler, K., Tullos, D., Tilt, B., Wolf, A., Magee, D., Foster-Moore, E. & Gassert, F. (2012). Integrative Dam Assessment Model (IDAM) Documentation: Users Guide to the IDAM Methodology and a Case Study from Southwestern China. Oregon State University, Corvallis, Oregon
- Kirchherr, J., Charles K., & Disselhoff, T. (2016_b). Social Impacts of Chinese Projects in the African Water Sector: The Case of Ghana's Bui Dam. Forthcoming
- Kirchherr, J., Charles, K., Pohlner, H. (2016_a). Cleaning Up the Big Muddy: A Meta-Synthesis of the Research on the Social Impact of Dams. Forthcoming in Environmental Impact Assessment Review
- Lithgow-Schmidt (2015). A Ladder of Citizen Participation Sherry R Arnstein. Retrieved June 11, 2015 from http://lithgow-schmidt.dk/sherry-arnstein/ladder-of-citizen-participation.html
- Matthews, N. & Motta, S. (2013). China's Influence on Hydropower Development in the Lancang River and Lower Mekong River Basin. In: State of Knowledge 4, published by CGIAR Challenge Program on Water and Food – Mekong Programme
- Mefalopulos, P. (2008). Development Communication Sourcebook. Retrieved June 23, 2015 from https://www.openknowledge.worldbank.org/bitstream/handle/10986/6439/446360Dev0Comm 1ns0handbook01PUBLIC1.pdf?sequence=1
- Mettle, M. (2011). Forced Resettlement in Ghana: The Dam and the Affected People. The Bui Hydroelectric Power Project in Ghana. Master Thesis, Norwegian University of Science and Technology
- Mordzeh-Ekpampo, M. (2010). Community participation in the planning process of the Bui Dam project in Mid-West Ghana. Master thesis, University for Development Studies, Tamale
- Musch, A. (2001). The Small Gods of Participation. PhD Thesis, University of Twente, Netherlands

Nega, B., & Schneider, G. (2011). International Financial Institutions and Democracy in Africa: The Case for Political Conditionality and Economic Unconditionality. Journal of Economic Issues, 45(2), 421–430. Retrieved from http://econpapers.repec.org/RePEc:mes:jeciss:v:45:y:2011:i:2:p:421-430

- Nelson N. & Wright (Ed.) (1995). Power and participatory development: Theory and practice. ITP, London
- Noreed (2012). Participation Models. Citizens, Youth, Online. A Chase through the Maze. Retrieved June 23, 2015 from http://euroopa.noored.ee/wpcontent/uploads/2014/09/Participation_Models_20121118.pdf
- Oakley, P. (1991). Projects with People: The practice of participation in rural development. Geneva, International Labour Office
- Otu-Tei, C. (2014). Broken Promises: Ghana's Bui Dam Resettlement. Retrieved June 25, 2015 from http://www.internationalrivers.org/resources/broken-promises-ghana-s-bui-dam-resettlement-8269
- Pedro Prieto Martín (2010). E-Participation at the local level: the path to collaborative democracy.
- Pope Francis (2015). "Laudato Si". Encyclical Letter of the Holdy Father on Care for our Common Home. Published June 18, 2015
- Power, M., Mohan, G. & Tan-Mullin, M. (2012). China's Resource Diplomacy in Africa: Powering Development? Macmillan Distribution Ltd, Hampshire
- Raschid, L., Twum, R. & Akoto-Danso, E. K. (2008). Research, Development and Capacity Building fort he Sustainability of Dam Development with Special Reference tot he Bui Dam project. Retrieved May 10, 2015 from http://ghanadamsdialogue.iwmi.org/Data/Sites/2/media/projectdocuments/issuepaper-r&d.pdf
- Rifkin, S. B. & Kangere, M. (2002). What is Participation? In: Hartley, S. (Ed.) (2001). CBR: a participatory strategy in Africa. University College London (Publisher)
- Rosenow, J. (2013). Politics of Change: Energy Efficiency Policy in Britain and Germany. Thesis submitted at the University of Oxford
- Sayatham M. & Suhardiman, D. (2015). Hydropower resettlement and livelihood adaptation: The Nam Mang 3 project in Laos. Water Resources and Rural Development 5 (2015), pp. 17-30
- Scheumann, W. & Dombrowsky, I. (2015). Die Proliferation von Wasserkraft im Globalen Süden Wie kann Deutschland zu einer sozial- und umweltverträglichen Agenda beitragen? German Development Institute
- Schwandt, T. A. (2001). Dictionary of qualitative inquiry (2nd ed.). Thousand Oaks, CA: Sage
- Scudder, T. (1997). Social Impacts of Large Dam Projects. In Biswas, A. K. (Ed.), Water Resources: Environmental Planning, Management, and Development. New York: McGraw-Hill Companies
- Scudder, T. (2011). Development-induced community resettlement. In Vanclay F. & Esteves A. M. (Eds.), New Directions in Social Impact Assessment. Cheltenham: Edward Elgar Publishing Limited
- Shah, Z. & Kumar, M. D. (2008). In the Midst of the Large Dam Controvery: Objectives and Criteria for Assessing Large Water Storages in the Developing World. International Water Management Institute, India
- Sinohydro (2015). Ghana, Bui Hydropower Station. Retrieved June 25, 2015 from http://eng.sinohydro.com/index.php?m=content&c=index&a=show&catid=42&id=127

- Slocum, R., Wichhart, L., Rocheleau, D. & Thomas-Slayter, B. (eds.) (1995). Power process and participation tools for change. ITP, London
- Sutcliffe, C. (2009). Interviews with People to be Affected by Bui Dam: A Field Report. Retrieved June 10, 2015 from http://www.internationalrivers.org/resources/field-report-interviews-with-bui-dam-affected-villagers-3956
- Tajziehchi, S., Monavari, S. M., Karbassi, A. R., Shariat, S. M., Khorasani, N. (2013). Quantification of Social Impacts of Large Hydropower Dams – a case study of Alborz Dam in Mazandaran Province, Northern Iran. International Journal of Environmental Research, Spring 2013, Vol. 7 Issue 2
- Twum, R. (2010). Ghana Dams Dialogue: Focus on Affected People. Retrieved June 25, 2015 from http://www.internationalrivers.org/resources/ghana-dams-dialogue-focus-on-affected-people-1707
- UNEP (2015). The World Commission on Dams. Retrieved June 10, 2015 from http://www.unep.org/dams/WCD/
- Urban, F. (2012). China goes global: A comparative study of Chinese hydropower dams in Africa and Asia – Project introduction [Powerpoint presentation]. Retrieved June 28, 2015 from http://www.esrc.ac.uk/my-esrc/grants/ES.J01320X.1/outputs/Read/02165f7c-f1ff-4c33-98a2-5e30f0336b9a

Van der Kolk, H. (2014). Qualitative Research Methods. Lecture script, University of Enschede

- Verhoeven, H. (2015). Water, Civilization and Power in Sudan The Political Economy of Military-Islamist State Building. Cambridge University Press
- World Bank (1996). The World Bank Participation Sourcebook. Retrieved May 12, 2015 from http://documents.worldbank.org/curated/en/1996/02/696745/world-bank-participationsourcebook
- World Bank (2004). Involuntary Resettlement Sourcebook. Planning and Implementation in Development Projects
- World Bank (2015). GDP growth (annual %). Retrieved June 26, 2015 from http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/countries/GH?display=graph
- World Commission on Dams (2000). Dams and Development. A new framework for decision-making. The Report of the World Commission on Dams. Earthscan Publications, London
- Yin, R. K. (2014). Case Study Research: Design and Methods Fifth edition.Sage Publications, London

Cover photo: http://4.bp.blogspot.com/-

PQ4ppfbgY94/VVtl8yqLUUI/AAAAAAAHUs/PQypnuO4gMc/s1600/Je_Participe___lls_profitent _by_kurtoglu.jpg (French Student Poster; in English: I participate...)