

Making Sustainable Development Real Through Role-Play: “The Mekong Game” Example

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Abstract:

This paper describes a role-playing, negotiation “game” based on the Xayaburi Dam in Laos. We have used this activity in our graduate programs as a tool for bringing to life the complexities of decision-making around natural resources, economic development, and sustainability. Over the past several years of using the game in the classroom, we have found it to be an effective means of exposing students to the kinds of opportunities and constraints that different stakeholders face as well as the kinds of communication and negotiation tactics they might use to influence outcomes. We provide background on the real-world situation on which we based the fictional scenario for the game and discuss the learning outcomes we have observed.

Keywords:

Negotiation, role-playing, hydropower, Mekong River, transboundary resources, experiential learning

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Introduction

Developing the Mekong River as a source of sustainable and renewable energy is a complicated proposition. The river is a natural resource that supports complex ecosystems and livelihoods for tens of millions of people in thousands of local communities across six nation-states. The Mekong River crosses or forms the international borders of China, Myanmar, Laos, Thailand, Vietnam, and Cambodia. Damming the river is seen by proponents as a way to generate electricity, revenue, and much-needed economic development. Opponents point to the threat hydropower presents for farms, fisheries, and food security (Grumbine and Xu 2011; Kuenzer et al 2012).

For the past several years, we have used the case of hydropower development on the Mekong River to teach sustainability core competencies—e.g., systems thinking, stakeholder analysis and engagement, negotiation and decision-making, and conflict management and consensus building—to sustainability professionals in a professional masters degree program (Wiek et al. 2011; Hopkins 2012). Unpacking the many dimensions of this transboundary resource challenge, provides a vehicle for understanding diverse stakeholders and the strategies they use to influence others, the role of effective communication and interpersonal dynamics in shaping outcomes, and the social and technical complexity of natural resource management issues and their interconnectedness with other issues.

The role-playing, negotiation activity we created for experiential learning and to make global sustainability come alive is called "The Mekong Game." It is a fictionalized simulation based on the real world complexities of environmental conservation and natural resource development and, in particular, the Xayaburi Dam hydropower project in Laos. In the sections below, we provide some background on the Xayaburi Dam project and describe the fictional scenario we created to model the complexities of the decision-making context that our students must navigate as they play the roles of key stakeholder groups and negotiate the future of the Mekong River system.

The Xayaburi Dam

The 1285-megawatt dam at Xayaburi in Laos is the first to cross the main stem of the Lower Mekong River. Construction, estimated to cost 3.5 billion US dollars, began in 2012 and has continued despite resistance from downstream countries, vocal criticism from environmental non-governmental organizations (ENGOS), and opposition from other international voices, such as the United States (Biron 2012).

The Lao government's economic motivation to tap the hydropower potential of the Mekong River is strong; the Lao news media reported that the Xayaburi dam would bring billions of US dollars in revenue over the 29-year concession period, drive national economic growth, and fund poverty reduction efforts (Vientiane Times 2013). In pursuing its hydropower ambitions, Laos has partnered with various organizations in Thailand that are involved in the project's financing, construction, and operation. Thailand will also be the primary consumer of the electricity generated at Xayaburi.

Opponents of the dam point to the severe impacts it would have on ecosystems, biodiversity, and local downstream livelihoods dependent on natural river flows. International ENGOs, such as the World Wildlife Fund, have called attention to the biodiversity represented by the Mekong's fisheries (World Wildlife Fund 2012). Another international organization, International Rivers, has challenged the wisdom and the legitimacy of the Xayaburi project on a variety of fronts, disseminating information about the dam's threat to food security (Herbertson 2012), social and community impacts (Deetes 2014), and construction timeframe without prior agreement from downstream countries or sufficient assessment of transboundary environmental impacts (Herbertson 2013). It has also argued that, while Thailand has provided the major share of the project's financing and agreed to purchase the vast majority of the electricity generated by the dam, the purported benefits of the project for Thailand are overblown and that it is not critical in meeting the Thailand's energy demand (Deetes 2015, International Rivers 2011). In addition to publicizing different aspects of the project, International Rivers and other international groups have played a role in supporting and mobilizing coalitions of local and regional NGOs in Vietnam and Cambodia (Yasuda 2015).

The Mekong River Commission (MRC) is an institution bridging the countries of the Lower Mekong Region to cooperate on critical resource issues such as hydropower development. The Xayaburi dam, however, has presented a formidable challenge to the MRC's effectiveness as a multilateral governance institution. Laos has moved forward with the dam, in spite of the opposition raised by downstream MRC-member countries, Vietnam and Cambodia (Hunt 2013) and in spite of the MRC Secretariat's Strategic Environmental Assessment for Mekong hydropower, in which it recommended a moratorium on all Mekong dams for at least ten years (Mekong River Commission 2010). The MRC's failure to persuade Laos to reconsider its push forward on the Xayaburi dam and other proposed hydropower projects has led some observers to question the MRC's relevance and future (Hunt 2015).

Fictionalized Scenario and the Negotiation Simulation

The numerous stakeholders and the complexity of the biophysical conditions of the Mekong River make for a difficult sustainability and natural resources problem and a valuable teaching opportunity. We have drawn upon the actual circumstances of the Xayaburi project to create a fictionalized scenario that forms the basis of a negotiation and consensus-building simulation. In the scenario, the MRC has called a special meeting of representatives from key stakeholder groups in the Xayaburi dam project. The purpose of the meeting is to discuss the project to ensure that all groups have had a chance to voice their views about it and to attempt to reach consensus about the future of its implementation. Stakeholders include national governments, international organizations, financing institutions, and engineering firms. By the end of the negotiation game, which occurs throughout a full day, the participants, representing the key stakeholder groups, must sign joint or individual statements containing recommendations on the future of the Xayaburi dam. The goal is for the stakeholder representatives to reach consensus, if possible.

In designing this game, we used creative license to imagine a situation in which all the stakeholders represented in the game sit around a common negotiation table with the authority to make a binding, final decision about the dam's construction. While this negotiation-based, consensual decision-making scenario is largely imaginary, it is rooted in the actual events and facts surrounding the Xayaburi dam in Laos, and the informational materials drew upon existing data, published news articles, and other reports, with modifications made as needed to support the play of the game and the learning objectives most relevant to the participants.

At the start of the game, we provided each player a binder of information that contains a summary of his or her role and a set of additional materials corresponding to that role. This information is intended to shape the participants' perspectives on the Xayaburi dam and the arguments they bring to the negotiation table as the game is played. For example, the binders for the players representing Vietnam and Cambodia contained articles highlighting concerns about the dam's impact on food security in countries downstream of Laos, whereas the binder for the players representing the government of Laos contained information on Laos' economic development challenges and the potential economic benefits of the dam.

In more involved versions of the game, and as it is played in our professional graduate degree program, participants are provided prior training on basic skills and best practices related to interest-based negotiation, including learning modules on influence styles, active listening, empathic communication, creative problem-solving, group decision making, and stakeholder analysis and engagement. The game is one of several culminating experiences for students where they integrate and apply knowledge gained earlier in the degree program. That said, the game can be played successfully by participants with various levels of education and as a stand alone activity without the need for prior training modules. Apart from a few short, reading assignments introducing the topic of hydropower development on the Mekong River, most of our students to date have come to the game with little prior experience or expertise on the region.

The schedule we used to structure the game is presented below. It is worth noting that this schedule reflects the particular characteristics of our graduate program in which students convene for one full weekend per month, although it can likely be customized to fit a variety of formats or logistical constraints. We distributed the stakeholder information packets on the evening of the first day of class and used the full, second day of class for the game. We ran the game with groups of students large enough to have four or five sets of negotiations take place in parallel. In addition to having three sessions in which players convene around a formal negotiation table, there are also time slots scheduled for the players to talk to one another informally while still in the character of their assigned role and to meet with and strategize with other people assigned to the same role. The combination of formal negotiation and informal interaction was a key feature of the student experience, as we shall describe more below. Faculty members circulate among the students throughout the activity, providing feedback and redirection as needed. If and when necessary, faculty can inject new information to increase or decrease the complexity of negotiations and emphasize particular learning outcomes. Finally, the activity concludes with all participants reconvening to report to the full group on the decision reached at their particular negotiating table.

The Mekong Game Schedule

Day 1

7:15–7:35 pm	Mekong Game Introduction
7:35–8:35	Initial Stakeholder Group Meeting 1
8:35–9:00	Informal Networking (or continue stakeholder group meeting)
9:00	Adjourn

Day 2

8:00–8:15 am	Convene for questions, informal discussion
8:15–9:15	Negotiation Session 1
9:15–10:15	Stakeholder Group Meeting 2
10:15–10:30	Break
10:30–11:30	Negotiation Session 2
11:30–12:30 pm	Stakeholder Group Meeting 3
12:30–1:30	Lunch
1:30–2:30	Negotiation Session 3
2:30–3:00	Document and Reporting Preparation
3:00	Deadline to Submit Statements
3:15–4:45	Mekong Game Reporting and Debrief
4:45–5:00	Wrap-up & Adjourn

Learning from the Mekong Game

After playing this game in the classroom between 2013 and 2016 with approximately 120 professional graduate students in four cohorts (representing diverse academic disciplines and professional backgrounds including business, government, and nonprofit sectors), we have found it an effective vehicle for delivering a range of learning objectives. Here we will describe what we believe to be some of the game's most significant instructional values and key take-away lessons for students. These ideas are based on our observations of the game, the classroom discussions that followed the conclusion of the game, and feedback from students during the activity.

First, although we created a fictionalized scenario, we found that students were able to gain an understanding of the stakeholders involved in a project such as the Xayaburi Dam. The Mekong River is half a world away from most of our students' daily lives. This role-playing, negotiation exercise makes the issue of hydropower development on the Mekong much more immediate and real than it might otherwise be if it were introduced via a more traditional assignment or text. The game requires participants to step into the shoes of stakeholders and interact with each other from these role-specific perspectives. Simply by joining the game, participants develop a better awareness of the various groups involved in the decision-making process and what is at stake for each of them. The interests, motivations, challenges, and constraints of these different actors all come into sharper view. As a result, the game serves as a stakeholder analysis tool that provides empathic insights not available from other analytic approaches.

Second, students learned the importance of personalities and communication styles in influencing outcomes. Early in the game, they used their strategic thinking skills as they planned how to reveal their opinions to the other negotiators and the sequence in which to articulate different arguments or present certain pieces of information from their binders. As the game progressed and moved beyond initial speeches, we observed participants experimenting with varied communication strategies—persuading with scientific and technical data, delivering impassioned pleas, and shaming. The game provides an occasion for students to understand both the levers and constraints that different actors have available to exert influence. As noted in the previous section, an important feature of the game's format is the combination of both formal and informal interactions. Participants spend time in three formal meetings to negotiate with all other stakeholders present, but equally important are the time slots in between (including the lunch break), which participants use to hold smaller, private discussions both to persuade each other or to form alliances and strategize together. They see how personalities and modes of communication play a significant role alongside arguments and facts.

Finally, we have found this game to be a useful vehicle for fostering a systems perspective. Participants realize early in the game that the case of the Xayaburi dam is about much more than energy and revenue from electricity sales. It is about economic tradeoffs, biodiversity, food security, social stability, and geopolitical stakes as well. In the game's design, stakeholders bring different perspectives to the issue as they operate from the distinct data packs provided to them.

This role-playing game provides an opportunity for participants to see how negotiation, group decision-making, and consensus-building efforts can apply and have impact on actual complex situations. In reality, the Xayaburi dam's construction and the surrounding debates and controversies have unfolded over many years. The stakeholders may not ever have had the opportunity to engage with one another in a civil and deliberative dialogue such as in the imaginary meeting in the Mekong Game. In the context of the game, decisions must be made in a limited time frame and a consensus emerges or not depending on how students play their roles. What does become clear to most participants is that there are many potential outcomes that can be more or less desirable to specific stakeholders. Minds and alliances change as new information is introduced, frames shift, relationships form, and alternative outcomes emerge. When the students convene at the end of the day for the "Mekong Game Reporting and Debrief" session, they see how different negotiation groups arrived at different outcomes, with some groups reaching an agreement to cancel the dam's construction and others agreeing to let it proceed.

Through a post-game assignment, students are asked to reflect on the outcomes of their negotiation and write a simulated press release from the perspective of their stakeholder group. In this way, they analyze how the negotiation and deliberative decision-making process led to one or more particular sets of outcomes with far-reaching impacts. While students are forced to come to a conclusion, they realize that with more time and a different process, the outcomes could change and alternative development pathways are possible.

Conclusions

We wrote this paper to share our experience with a classroom activity that we have found to be an effective means for teaching students about various dimensions of complex sustainability challenges. As we described, this activity is based on a fictional scenario that is rooted in actual events in Southeast Asia. While the negotiation that takes place in the game is entirely imaginary, and participants might use approaches or reach outcomes that are not reflective of what has actually happened in the Lower Mekong, the role-play experience takes on a life of its own, in which students gain insight about communication, information, negotiation, and interpersonal dynamics that, in many respects, transcend the specific circumstances on which the scenario is based.

Students come away from the game eager to learn more and read more about the actual situation on the Mekong. Having stood in the shoes of a stakeholder in a fictional scenario, their appetites have been whetted to better understand not just alternative negotiation and decision-making processes but important environmental conservation and sustainable development issues in specific places, including hydropower development on the Mekong River. Another fortuitous learning outcome, therefore, is that students develop a sense of empathy for the diverse stakeholders involved in a specific challenge in a distant part of the world.

The evidence of learning outcomes presented in this paper is anecdotal, but in future use of the game, we plan to further substantiate the outcomes and offer the game to other groups of participants. In the meantime, Laos has moved forward with construction of the Xayaburi Dam project, altering the Mekong River's flow and impacting the lives of more than 60 million people. The world clearly needs informed leaders who are up to the task of negotiating complex sustainability challenges such as these.

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