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How Donor Requirements Shape Project Outputs and Outcomes: a Small NGO's Experience

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#### Declaration

I, (name), declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature

Date 01 JUNE 2020

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## List of Acronyms

Acronym	Name
BGET	Border Green Energy Team
BGF	Border Guard Force
СВО	Community-Based Organization
CSR	Corporate Social Responsibility
DFID	Department of International Development
DKBA	Democratic Karen Buddhist Army
EC	European Commission
EDF	Électricité de France Foundation
ECHO	European Civil Protection and Humanitarian Aid Operations
HDI	Human Development Index
ICLA	Information, Counselling, and Legal Assistance
ID	Identification Card
INGO	International Non-Governmental Organization
KED	Karen Department of Education
KNLA	Karen National Liberation Army
KNU	Karen National Union
M&E	Monitoring and Evaluation
MEP	Missions Étrangères de Paris
MoU	Memorandum of Understanding
MWW	Mae Wae Women's Cooperative Sewing Workshop
NCE	No Cost Extension
NFI	Non-Food Item
NGO	Non-Governmental Organization
NORAD	Norwegian Agency for Development Cooperation
OCHA	Office for the Coordination of Humanitarian Affairs
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
PCM	Project Cycle Management
PPE	Personal Protective Equipment
PV	Photovoltaic
SBK	Solbakken
SOP	Standards of Procedure
TBBC	Thailand Burma Border Consortium
SOV	Sources of Verfication
ТВС	The Border Consortium
TBF	The Branch Foundation
TOR	Terms of Reference
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
USAID	United States Agency for International Development
WASH	Water, Sanitation, and Hygiene Promotion
WH	Wide Horizons Organizational Development Program

Mae Wae



Picture 1: Map of Solbakken projects along the Thailand – Myanmar border from 2014 - 2018

#### 1. Introduction

In the field of development assistance and humanitarian aid work, donor requirements can often stifle the effectiveness and efficiency of a project or program. This can be especially true for organizations of smaller size that do not have the capacity to handle high administrative requirements, international procurement procedures, or complex non-standard technical designs. The result of these donor requirements can be an overburdened implementing organization that struggles to meet the agreed upon project outcomes while maintaining their own flexibility to navigate the local contextual environment. This paper examines how specific donor requirements affect the project's outputs and outcomes. In order to do this, I will examine projects completed by Solbakken (SBK) from 2014 – 2018, identify the donor requirements for each project and determine if they affected the project outputs and outcomes. During the organization's five years of operation, fifteen projects were implemented that were funded by five different donor organizations. Each donor organization had different requirements that created challenges and demanded different levels of attention and capacity. Donor requirements that divert resources is not a unique occurrence, but normally discussed in relation to government agencies or large international non-governmental organizations (INGO)s, not small local nongovernmental organizations (NGO)s. This paper attempts to show how these donor requirements affect projects in practical and observable ways.

It is important to note that the author of this paper was the founder and director of SBK. While this gives firsthand knowledge and experience of the examined projects, it may be difficult to approach donors and topics in a completely objective manner. While attempting to keep bias at a minimum, especially in the third section of the research design, the analysis, it is ultimately impossible to not be subjective, even if unintentionally.

#### 2. Background and Literature

In this section the regional context in which SBK worked will be established as well as a brief history of the organization. The academic literature surrounding the topic of donor requirements, outputs and outcomes as a success indicator, and NGOs will also be examined.

#### 2.1. Background

The history of SBK as an organization and the context in which it existed is important to know before attempting to understand its relationship to donors and the projects implemented. SBK was a NGO located on the Thailand – Myanmar border that designed and implemented drinking water,

domestic water access, and renewable energy access projects from 2014 -2018 (SBK, 2020). It was founded by two local colleagues and myself, the author of this study, in January of 2014. To understand how SBK came to be, my involvement, and the reason for its existence, a brief overview and the modern history of Myanmar follows below. It is important to note that Myanmar is the current name of the country formally called Burma. The name was changed in 1989 and thus in this paper, in the brief historical overview, the country is referred to as Burma until after 1989.

Myanmar is located in southeast Asia and borders Thailand and Laos to the east, China to the North, and India and Bangladesh to the west. It has seven states and seven divisions with the states being named after the major ethnic groups that live there. To the East there is Mon State, Karen State, Karenni State, Shan State, and Kachin State. To the West lies Chin state and Rakhine state to the south west.

The seven divisions are primarily home to the Burman ethnic group while the states are home to their corresponding ethnic minority group. Burmans, the majority ethnic group, make up between 60 – 70% (Walton, 2013) of the estimated total population of 55 million. The next largest ethnic group is the Shan, with 9%, and Karen, with 7% (Naing, 2016). This is a bit of a black and white interpretation as there are Burmans living in different states and ethnic minorities living in different divisions as well as mixed Burman-ethnic minority populations.

In 1948, when Burma gained independence from occupying Britain, the country struggled to quell internal insurgencies and fend off invasions from Nationalist China. The newly representative parliamentary democratic government that was attempting to unify the country while simultaneously defending against external forces was becoming very unstable by 1958. General Ne Win, who had been the commander of the Burmese military since 1949, foresaw two outcomes for the election of 1958. One, Burma becomes a Chinese backed communist nation, or two, the loosely unified country descends into bloodshed (Steinberg, 2013). The prime minster at the time, U Nu, opted to have temporary military rule and General Ne Win was selected to be a "caretaker" of the government which lasted 18 months. The goal of the caretaker government was to "restore law and order, 'eliminate economic insurgents', and prepare the country for civilian elections" (Steinberg, 2013, p. 55). They were quite successful in reaching these goals, receiving both domestic and international praise for their efforts, and free elections were held in February of 1960 with U Nu being elected again. However, in 1962, after two years of the civilian government, Burma again began to become unstable and disunified. General Ne Win took this opportunity to instigate a coup and regained full military control of the country on March

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2<sup>nd</sup>, 1962. This was the end of the democratic form of government and under General Ne Win, his oneparty socialist state led by the army maintained strict control until 1988 (Devi, 2014). This period, from 1962 – 1988, was marred by fighting between the Burmese military and ethnic minority groups and amongst ethnic minority groups themselves. Countless lives were lost, human rights abuses of the most severe type were perpetrated, and the country isolated itself from the outside world.

In 1988, with a faltering economy and continued student protests for democracy, General Ne Win formed a quasi-civilian government to appease the unsettled masses. However, the authoritarian government continued to persecute ethnic minorities, imprison political dissidents and journalists, and retain strict control of the country. In 1989, in an attempt to get rid of the negative associations that were connected to the name Burma, the nation formally changed its name to Myanmar. Until 2011, when the military junta was officially dissolved, the country, especially in the ethnic minority States and rural areas saw little economic, social, or educational development as indicated in the 2011 United Nations Development Programme (UNDP) report where Myanmar ranked 149<sup>th</sup> out of 189 in the Human Development Index (HDI) (p. 129). For Myanmar, the abuses perpetrated by the military are far from over. From the ongoing clashes in Karen state where 300 villagers had to flee their homes in February of 2020 (News, 2020) to the continued ethnic cleansing of the Rohingya people, where the UN Office for the Coordination of Humanitarian Affairs (OCHA) has called for immediate action on the 30<sup>th</sup> of April 2020 to help "the estimated 600,000 Rohingya remaining in Myanmar [that] face ongoing restrictions on their freedom of movement and access to education and healthcare" and have "warned that the Rohingya face an ongoing risk of genocide" (International, 2020).

In Karen State, the result of more than 60 years of conflict and oppression (the Karen National Union (KNU) has been engaged in some sort of conflict with the Burmese military since 1949) is a high poverty rate and poor infrastructure. Bordering Thailand, the mountainous jungle state that is home to people by the same name, holds an ethnic population that makes up nearly 7% (Summerer et al., 2014) of the total national population of 55 million. With a lack of income opportunities and access to education, many Karen people have fled to refugee camps or migrated to neighboring Thailand for employment. As of 2013, nearly "140,000 Burmese reside[d] in nine official refugee camps in the Thai borderland" with an "estimated 2 million Burmese living and working in Thailand." (Oh, p. 15). Along the Thai-Myanmar border there is a large population of Burmese migrants living inside Thailand both legally and illegally. The Karen population is notably high due to the proximity to their home state. However, life in Thailand for a Burmese migrant, legally or not, is not without its own vulnerabilities and

challenges. Inside the refugee camps, restrictions to movement can be stifling, especially as Thailand has never signed the United Nations (UN) 1951 Convention on the Status of Refugees. This convention established the basic minimum legal standards for treatment of refugees (Jackson, 1991) and as Thailand is not a signatory, they technically view the Burmese migrant population residing in camps not as refugees but as displaced persons (Bowles, 1998); allowing the Thai government to control and treat the Burmese as they see fit.

Outside of the refugee camps but still along the border, there is also a large population of Burmese migrants living in remote villages. While some villagers have legal Thai papers, either citizenship if they can prove they were born there or a multi-year working visa that also comes with movement restrictions, the living stands can be minimal in these villages. This is partly due to their remote location and possibly due to their high ethnic minority population designating them as a low priority area for development. With this background, we can identify three different marginalized populations living along the Thai – Myanmar border; the Karen population within Karen State, the mixed Burmese refugee population within the refugee camps, and the predominantly Karen migrant population living in remote villages inside Thailand. It is within this context that I arrived in Mae Sot, the largest border town and NGO hub, in 2012 to work for the Border Green Energy Team (BGET).

After one year of working for this organization that had a mission to "increase access to clean energy to improve the quality of life along the Thai-Burma border" (BGET, 2020), two local colleagues and I decided to start our own organization and subsequently founded SBK in January of 2014. SBK's goal was to improve the level of individual, family, and community health and livelihood for the migrant community along the Thai - Burmese border and communities within Myanmar. This was done by providing basic utilities to schools and their dormitories, training centers, and community centers. SBK worked to enhance the educational environment for school aged children and improve communities' livelihoods by allowing for a better educational environment. Specifically, we wanted to fill the gap and to work in areas that were not being accessed by other NGOs. The overwhelming majority of aid from other NGOS was directed to the refugee camps but the sizeable migrant population in rural communities, who faced similar challenges as those in the camps, received less assistance. Therefore, SBK only worked in two of the three previously identified target areas; the Karen population within Karen State and the predominantly Karen migrant population living in remote villages inside Thailand.

Since both of my local colleagues, one who was Karen-Burmese and the other Karen-Thai, had education in and were trained in renewable energy technologies, one being a solar engineer and the

other a solar technician, it was decided that renewable energy should be the main focus for SBK. Additionally, with my work experience installing water pumps and training in natural drinking water filtration systems, domestic water access and drinking water access also became core competencies for SBK. These three focus areas directly matched the needs of the target areas as evidence by multiple UNDP reports. In 2013, the UNDP released a report that especially highlighted the need for investment in electricity to overcome the high level of poverty (Schmitt-Degenhardt, 2013) in Myanmar. In 2020, UNDP released results from a 2017 report stating that "one out of five people in Myanmar does not have access to improved sources of drinking water in the dry season" and that "rural residents are significantly more likely than urban residents to have unimproved sources of water" and "about 40 percent of the population live in households that do not have drinking water on premise and thus need to transport water from the source back to their homes" (CSO, UNDP, & WB, p. 46). SBK addressed these needs by utilizing three different methods: solar energy, solar water pumps, and natural water filtration systems.

SBKs solar energy systems were relatively small in most cases and entirely off grid. This meant that none of the electricity generating systems were tied to government electrical infrastructure systems due to the fact that, with two exceptions, all of SBK's projects were implemented in areas that previously did not have any access to electricity. The solar power systems were connected to education facilities to allow students to study at night as well as remote health clinics to aid in the treatment of patients during the night. Most solar power systems only allowed for lighting, charging of small devices such as cell phones, and use of small low energy consuming devices such as certain pedestal fans. These systems were owned and operated by the receiving party, such as the school administration or health officials, but SBK conducted maintenance checks quarterly or when needed.



Picture 2: Solar panels from the Maw Kwee School Project



Picture 3: Solar panels for the Hoi Nam Yen water pump

SBK's water access projects, while including community structures such as schools or health clinics, often targeted the entire village as well. This was achieved by installing an autonomous solar powered pump that moved water to a storage facility at a point higher than the village. The water was then gravity fed to several access points that were distributed evenly throughout the village where community members could easily collect water for domestic use. These systems also often had separate connections that led directly to community buildings like schools or occasionally Buddhist monasteries. The benefit of using an autonomous solar pump is that it turns on when there is enough sunlight to power it and powers down at sunset. This eliminates the need for a responsible person to arrive at the water source, often kilometers away in potentially difficult to access areas, and turn the pump on or off. Additionally, the closed pipe system, as opposed to the common open channel systems that risks degradation of water quality and contamination due to their exposure (CSO et al., 2020), allowed for the transportation of clean water over long distances. Similar to the SBK's solar energy projects, these systems were owned and operated by the local community, usually by a pre-established water committee responsible for its operation, but maintenance quarterly by SBK or when needed.



Picture 4: Construction of water access point in Hoi Nam Yen



Picture 5: 2,000 liter water storage tanks in Hoi Nam Yen

To implement drinking water access projects, SBK utilized a natural water filtration method called a sand biochar filtration system. This system was designed by a local NGO called Aqueous Solutions and it mimics the effects of natural ground filtration. This is achieved by having the water filter through two barrels with increasingly small sized stones (large stones, gravel, pea gravel, and then coarse sand) before entering a barrel filled with bio-char. Biochar is essentially charcoal that is created in a low-oxygen high-temperature environment that produces an extremely porous charcoal that is able to bind to chemical contaminants. Biochar as an absorbent is an affordable decentralized water treatment method that has undergone extensive field and laboratory research (Solutions, 2020). SBK regularly tested the water for turbidity, biological contaminants such as E. coli, total coliform, and fecal

coliform, as well as chemical contaminants such as nitrates and nitrites that often derive from the use of chemical fertilizers in the areas that farmed. Eventually, SBK phased out the implementation of drinking water filtration systems as the rigorous water quality testing required extensive time beyond the organizations capacity and the assumed risk was deemed too high.





Picture 6: Bio-sand charcoal water filters in Mae Wae

Picture 7: Construction of large bio-sand charcoal water filter in Kler Deh

As an organization, SBK functioned with three permanent staff and a board of directors that oversaw organizational development and monitored operations. During project implementation it was common to hire local skilled labor for specific tasks such as technical cement works as well as hiring general labor for unskilled work. In some projects, upwards to 50 local laborers could be employed during single period while in others it could be as few as two. Skilled laborers received a higher daily pay rate than unskilled laborers and both were determined by the going rate in the village/region. Local SBK staff received a set monthly income that reflected salary rates equal to other NGO's local staff pay rates, around 12,000 THB (350 USD) a month. I did not receive salary from SBK but instead when I left the region for part of the rainy season (June – September), I worked carpentry, farming, or forestry jobs in the United States or Norway that could cover the cost of living modestly in Thailand for the remaining nine months of the year.







Picture 8: Villagers digging water pipeline

Picture 9: Villagers carrying solar materials

Picture 10: Villagers helping install AC electrical system

To be able to support the organization and the projects, SBK utilized several different funding modalities but grant proposals and commercial contracts were the two main methods of receiving funding. Grant proposals, which is inarguably the most traditional method of gaining funding for development projects, is a project or program idea submitted to an agency or organization requesting funding for implementation. Grants are often only eligible for humanitarian or development NGOs. Many government foreign affairs departments or UN agencies publish a call for development proposals seeking organizations to implement projects in line with their foreign assistance programs. Examples of funding agencies are the United States Agency for International Development (USAID), the United Kingdom's (UK) Department for International Development (DFID), United Nations High Commissioner for Refugees (UNHCR), the Norwegian Agency for Development Cooperation (NORAD), and the European Civil Protection and Humanitarian Aid Operations (ECHO) among many others. Since SBK was such a small organization with limited administrative and implementing capacity, we were not competitive to receive grants from these large entities directly. However, SBK was able to receive grants from regional NGOs and were competitive as a downstream partner. A downstream partner is an organization that works under the organization that receives the grant and helps them implement the programme or project.

Commercial contracts, while very similar in structure to grant proposals, are open to the private sector as well. This means that a for-profit company could apply to implement the humanitarian or development project on behalf of the funding agency. Non-profits are also eligible to apply for commercial contracts, but the profit earned is reinvested into the organization instead of becoming

earnings for investors/stockholders as with a for-profit company. Commercial contracts can be difficult for aid organizations to secure for two reasons. Firstly, it is a newer funding modality in the sector, especially for humanitarian organizations. Secondly, there are for-profit companies that are very experienced and specialized in securing these contracts making them highly competitive. SBK was able to secure two commercial contracts during the organization's lifespan; both of which had the two largest budgets out of all the projects implemented.

Applying for, securing, and managing grants or commercial contracts requires close collaboration with the donor. However, every donor is different, and their requirements can vary significantly resulting in either a very flexible donor or a micro-managing donor. Both of these have their positive and negative aspects. A donor who is too hands off or flexible may not ensure that the implementing organization is properly qualified to conduct the project or follow up to ensure that the outcome is in line with the original proposal. However, this flexibility may also allow for crucial decisions to be taken by the implementing organization creating a more dynamic, efficient, and effective project. A donor who micro-manages may overburden an implementing organization with requirements that may be unfeasible if they do not understand the local context or harm the implementing organization's local relations if they do not understand the local culture. However, strict requirements can push an organization to develop new technical proficiencies and improve the organizations Standards of Procedures (SOP)s. The bulk of the academic literature surrounding the donorimplementing organization relationship and the challenges surrounding it is more focused on the relationship between large INGOS and government agencies than small NGOs and their donors. The literature review that follows touches on this larger discourse before examining the more relevant smaller NGOs and their challenges/successes with donors.

#### 2.2. Literature Review

There is a large and broad academic discussion concerning donor requirements in relation to development and humanitarian work. The two main areas of discussion are donor funding eligibility requirements and donor coordination.

Donor coordination is a high-level issue that primarily affects multilateral aid between donor governments and recipient countries or INGOs. The discussion concerning donor coordination is how a single recipient entity loses efficiency and effectiveness in an attempt to manage multiple donors and their unique requirements and priority areas. There have been many initiatives and are currently many initiatives to increase efficiency and effectiveness among donor agencies through donor coordination. Coordination is essential in reducing resources waste and capacity burden as it can limit duplication, cross-purposes, loss of scale, administrative burden, and unclear leadership (Lawson, 2013).

One initiative to help achieve this balance is the Grand Bargain which was launched in May of 2016 at the World Humanitarian Summit (WHS) in Istanbul. The Grand Bargain is an "agreement between some of the largest donors and humanitarian organizations who have committed to get more means into the hands of people in need and to improve the effectiveness and efficiency of the humanitarian action" (IASC, 2020a). This enormous initiative, which involves many of the world's largest humanitarian aid organizations and donor governments, comprises of nine workstreams that attempt to increase the effectiveness of funding. Two of the nine main workstreams are "Reduce duplication and management costs with periodic functional reviews" (IASC, 2020c) and "Increase collaborative, humanitarian multi-year planning and funding, and reduce the earmarking of donor contributions" (IASC, 2020b). Both of these workstreams directly relate to donor requirements and demonstrates how serious the humanitarian sector is about improving donor coordination.

Donor coordination deals with the challenges that one implementing partner, whether government or NGO, has when overburdened with the complexity of managing multiple donors' requirements. While there were multiple donors in this paper's case study, however, only a single donor funded a single project at a time. There were never multiple donors funding the same project or program, which is the central challenge when dealing with donor coordination. Therefore, while donor coordination is a central theme in the larger discussion of donor requirements, this paper examines how a donor's requirements affects the specific project they funded.

The second larger discussion within the topic of donor requirements, is donor funding eligibility requirements. These are the requirements that a donor has that determine if an implementing partner is eligible to receive funding. The main discussion revolves around the idea that donors can have too much influence on which types of projects and programs get funded in a country or region. By making the funding eligibility requirements highly specific instead of funding the entire recipient organization and allowing them to be flexible and implement their own programming, a donor can shift the focus and priorities of implementing organizations. This is where it can be dangerous for implementing organizations to "follow the money".

This is especially true for humanitarian organizations who follow the four humanitarian principles of humanity, neutrality, impartiality, and operational independence (OCHA, 2010). These

principles can be compromised when an NGO adopts programming from a donor and ultimately this can weaken an NGOs legitimacy as independent actors in civil society (Edwards & Hulme, 1995).

For example, to be eligible to receive funding from a donor, an implementing organization that conducts Shelter and Water, Sanitation, and Hygiene Promotion (WASH) programming may be required to also implement an Information, Counselling, and Legal Assistance (ICLA) program. If ICLA programming is not within the implementing organization's focus area they will have to allocate resources to create this programming. To be able to receive the funding the implementing organization is shifting their organization's focus to increase their capacity in a competency they previously did not conduct. This can be inefficient and potentially harmful as the implementing organization may not have the capacity to conduct such work in a safe and appropriate manner. By dictating not just the funding amount but also programming, donors can inhibit the adaptive and flexible programming that an implementing organization is equipped to conduct. Edwards and Hulme note that when NGOs follow the money there is potential for "corruption of NGOs" due to the emphasis on donors rather than to beneficiaries (Edwards & Hulme, 1995, p. 850). This corruption of NGOs is not literal corruption, but the change of an organization's priorities or values to align with that of the donor. This can cause an organization to not be impartial, especially if the donor is a government agency with its own priorities. Edwards and Hulme get to the crux of this dilemma when they ask "is it possible to retain an independent mission while relying on donor funds?" (1995, p. 852). They argue that the contractual relationship between the implementing organization and the donor results in a focus less on the output and outcome of the project, and more on the fulfilment of the contract or grant agreement. They go further to explain that this is compounded by the fact that as NGOs grow, they will become more reliant on official funding, reducing the implementing organizations flexibility, and having to fulfil more complex requirements and monitoring, such as a Logical Framework (1995).

A logical framework, or log-frame, is a "tool to aid project and programme planning and management, especially management at strategic and institutional levels" (Wiggins & Shields, 1995, p. 2) first adopted by USAID in 1971. Since its inception, most large government funding agencies and international assistance entities require a log-frame as part of project or program proposal. While logframe terminology and layout can vary depending on the funding entity, it follows the same basic principles. Defining objectives, outcomes, outputs, and using indicators to measure them, it creates a neat and measurable representation of an often complex and nuanced development or humanitarian project. As Bakewell and Garbutt explain, "although the logical framework has become universally known, it is far from universally liked. It has been the subject of much criticism over the years, concerning both the theoretical basis of the approach, and the way it is applied in practice... donors insist on it, while NGOs use it under sufferance" (2005, p. 1). While not in opposition to the use of log-frames, Dale admits that the "methodology, as currently understood and applied, reflects a conception of development planning that is too standardised and often simplistic" (2003, p. 58). Even within the World Bank Logframe Methodology Handbook, it states the following limitations.

- Organizations may promote a blueprint, rigid or inflexible approach, making the Logframe a straitjacket to creativity and innovation.
- The strong focus on results can miss the opportunity to define and improve processes. (Bank, 2000)

However, this is the standard methodology that funding agencies use to measure the success of development and humanitarian projects and programs. While SBK was not required to submit log-frames in project proposals, probably due to the fact that we did not interact with institutional donors, the output and outcomes of a project were identified for each project and therefore provide a foundation to see how donor requirements affect these.

#### 3. Research Design

The following section defines the objective of this thesis, identifies the research question, outlines the conceptual framework, justifies the use of a case study, clarifies the sampling approach, and explains the data collection and data analysis process.

#### 3.1. Objective

The objective of this paper is to examine how a small NGO deals with varying degrees of intensity of donor requirements. In the context of this paper, a donor requirement is any condition established by the donor that the implementing organization is instructed to follow. The implementing organization is the organization that uses the donor funding to conduct the project. A project outcome is the result of the project, or the objective, and is different from a project output. The project output is the activity undertaken to meet the project outcome. The output is usually a measurable activity. For example, if a project output would the construction of X number of sanitation facilities. This distinction between outputs and outcomes is essential in understanding the Findings and Discussions and Conclusion section of this paper.

#### 3.2. Research Question

In an attempt to achieve this objective, the following research question has been identified: *How do donor requirements affect project outputs and outcomes?* For a large INGO working with an institutional donor, there is normally a thorough process involving policy and legal experts from both sides examining project outcomes and outputs as well as negotiating the terms of the donor requirements. For small NGOs who have less capacity and time to do such thorough examination and normally interact with smaller donors, the project's outcomes are usually agreed upon by the donor and implementing organization, the project outputs determined by the implementing organization, and the donor requirements are determined by the donor. The logic behind this study is that donor requirements can create challenges for the implementing organization in execution of the project outputs which in turn can affect the overall project outcome.

#### 3.3. Research Process: Donor Requirements

The first step in analyzing how donor requirements affect project outputs and outcomes is to identify the donor requirements. Determining what the donor requirements for each project were constituted a large part of the data analysis undertaken by this study. By reviewing contracts, Memorandum of Understandings (MoUs), and grant agreements, each project's donor requirements were pinpointed and noted in the Donor Requirements by Project table (see appendix one).

After reviewing the collected data, five categories of donor requirements have been identified: Administrative, Financial, Logistical, Technical, and Temporal. Within these five categories specific donor requirements have further been identified. They are as follows: Administrative - Narrative Status Reports, Final Narrative Report, Financial Reporting, Field Visits, and Media Reporting; Financial -Earmarked Funding and Budget Adjustments; Logistical – Labor, Transportation, and Procurement; Technical – Predesigned Specifications and Novel Standards of Procedures (SOP)s; Temporal - Hard Deadlines and Benchmarks. It is important to note that these categories were determined by the author after analyzing the data, they may not reflect a standardized categorization of donor requirements within the humanitarian or development fields. Each of these requirements influences the project in its own way; their potential impacts are explained below.

#### 3.3.1. Administrative Requirements

One of the manners that Donor Administrative Requirements, which contains Narrative Status Reports, Final Narrative Report, Financial Reporting, and Field Visits, can influence a project is by demanding time. This is time that could be otherwise spent on implementing the project. A narrative status report, which is a text that informs the donor of the current circumstances, situation, and project progress, can differ in length and complexity depending on the donor. However, regardless of the length, the narrative status report must be accurate and informative, alerting the donor to any occurred or potential problems and their solutions. Since narrative status reports are required during the implementation phase of the project, this administrative task can consume resources that would otherwise be used to conduct the project. This shifting of resources from project implementation to meeting a donor's requirements can disrupt the project's progression and delay its completion date.

Similarly, a Final Narrative report, a text containing the results of the project that indicate if the outcomes were met and any other requested information, is due after completion of the project. Donors often give the implementing organization time between the completion date of the project and the Final Narrative report as it can take time and resources to produce. In this way it does not take resources away from the completed project, as there is not more work to be done, but development and humanitarian organizations rarely engage in one project at time. In this way, the Final Narrative report can demand resources that could otherwise be put towards a different project that the implementing organization is conducting.

A Financial report, a document presenting the funds received and/or expenditure of said funds, can require a lot of administrative resources. This can be particularly true if there are many purchases from many different vendors, especially if there is an international element involved. Again, depending on the donor, a financial report can require a breakdown of costs to different degrees of specificity. While one donor may only require for differentiation between labor and procurement costs, another may require a specific breakdown such as transportation costs, taxation, import or customs fees, administration vs physical labor costs, and more.

Donor field visits, when a representative from the donor organization visits the project site, can demand a significant amount of resources. While often not costly, as the field visit is normally submitted in the original budget or covered by the donor, it can require a lot of time. It is not only that key staff must be present for the visit but also the preparations and logistical planning beforehand. When projects are in remote areas, arrangements for additional drivers, vehicles, food, and lodging must be made. Media reporting is when the donor requests media documentation, either video or photographs, of the completed project or project in process. These requirements can vary widely as a photograph of a completed water filtration system can be easy to capture while a full narrated and edited video of project's process can be time consuming and financially draining.

#### 3.3.2. Financial Requirements

Financial donor requirements, which is broken down into Earmarked Funding and Budget Adjustments, can greatly determine the scope of the project. Earmarked Funding, the condition that a certain amount of the funds goes towards a specific activity, allows for the donor to decide which aspects of the project receive special attention. While this appears to be logical, it can have the opposite impact. For example, when conducting a vaccination program, a donor would like a significant portion of the funds to be committed to the procurement and administration of the vaccine. This can neglect the framework and logistics around the Earmarked activity that are necessary to complete it such as staff payments or vaccination awareness/promotion. In this way the intended purpose of the Earmarked Funding, more funds towards actual vaccines and their administration leads to more people being vaccinated, can in turn reduce the total amount of vaccinated people due to the lack of funds available for supportive activities. Earmarked Funding is often criticized because the donor organization, with the best intentions, is making practical decisions that the implementing organization could better determine since they have the contextual knowledge.

Budget adjustments can negatively or positively influence an implementing organization's ability to meet the project outcomes. A budget adjustment is a decrease or increase in a project's budget after it has entered the implementation phase. While a budget may be increased to help the project meet the needs of the beneficiaries, extend its reach, or continue its activities, a budget decrease is less common.

A budget decrease can occur because of a breach of contract between the donor and implementing organization or a change in programming. A breach of contract can happen when the implementing organization is not compliant with a requirement within the contract or grant agreement. Instead of issuing a fine to the implementing organization, a donor will instead recall or withhold a portion, often small, of the original budget. A second way a budget can be decreased during the implementation phase of a project is if the donor programming changes. Within the field of development or humanitarian aid work a donor can have a program that consists of multiple projects. The program will have a single budget that is divided and allocated to the respective projects. If there is

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a circumstance where a single project suddenly requires an increase in funding *and* the donor is unable to increase the *program* budget, a decision can be made by the donor to move funds from one project to another. For example, if there is a humanitarian program that implements WASH and Education projects within a refugee camp and there is suddenly a bacterial disease outbreak due to destruction of/improper water infrastructure, the donor may shift funds away from the Education project to focus on the WASH project. If these projects have different implementing organizations leading them, it can appear, from the implementing organization's perspective, as if their budget was reduced without reason. Breach of contract and change of programing, the two categories with Budget Adjustments, can both have obvious consequences on the project outcome. With a reduction in funding, the inability to pay staff or labor costs or procure materials can drastically inhibit an implementing organizations ability to meet the project's outcome.

#### 3.3.3. Logistical Requirements

Logistical Donor Requirements, which can be divided into the categories of Labor Requirements, Transportation Requirements, and Procurement Requirements, all can greatly reduce the flexibility in which an implementing organization can conduct their work. Without this flexibility to carry out projects in a way they deem locally appropriate, the implementing organization may be forced by the donor's logistical requirements to push the social or even cultural norms of the communities they interact with. That can be especially apparent when it comes to labor requirements.

Donor labor requirements, or the rules regarding the hire or use of human labor to implement the project, may be problematic even if the intentions are good. For example, age restrictions for local labor imposed to combat child labor, requires that the implementing organization ask for identification papers to verify age. In conflict areas, refugee locations, or areas of heavy human migration, identification papers can be a contentious topic. Often these documents can be bought, forged, traded, or falsified and is a profitable illegal business opportunity (Kitiyadisai, 2005). For a population that has been marginalized by a government or ruling party, the least amount of information known by the oppressor the better. Therefore, asking for identification papers can both provide false information (such as age) or make the submitter uncomfortable, or worse, skeptical of and uncooperative with the implementing organization. Furthermore, for large community projects that require an entire village to work together for one or more days, ensuring that all laborer's meet the age threshold as well as supervising this so that the rule is not broken can divert human resources.

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Additionally, donor labor requirement that are meant to ensure safety can have the opposite effect and reduce project efficiency if not tailored to the local society. A donor labor requirement can reduce safety when, for example, steel-toed boots are required when working on a construction site. If the local laborers are not familiar with this cumbersome footwear, they can become clumsy and less steady resulting in more workplace accidents. Project efficiency can be reduced when safety measure put in place to protect laborers long term health, such as the amount of weight one person can carry, does not consider local conditions. For example, if cement mix is locally sold in 50 kilogram bags but the limit that one person can carry is 40 kilograms, either cement has to be purchased further away from the project area in smaller weights, the bags have to be split losing some material and sending cement dust into the air which can be inhaled by laborers, or two persons have to carry the 50 kilogram bag. Of course, safety requirements imposed by the implementing organization are vital to ensuring the safety of project laborers as local labor regulations may be lax or unenforced. The aforementioned examples show how these regulations, if not tailored to the local conditions, can have unintended consequences or in some cases have the opposite effect of their intended purposes.

Donor transportation requirements are the rules surrounding the movement of materials, from procurement location to project site, or people, from residency to project site and back. An example of requirements for material transportation is the restriction that the shipping and moving companies must be registered with the tax authorities within the country where the project is being carried out. This can be problematic in more rural areas where roads are treacherous and transportation networks are informal. Registered shipping and moving companies may not send materials all the way to the project site and instead leave them at the nearest distribution center. This could then require that an informal transportation method, i.e. people with the appropriate vehicles, transport the materials to the project site.

Transportation requirements for moving people can limit how efficiently projects can be conducted. Again, in areas where the transportation network is informal and roads are dangerous, the local transportation means must be utilized. If a donor requirement does not allow for people to be transported in the back of uncovered pick-up truck for safety reasons but the only means to get to the project site is buy such a truck, then a conflict emerges between this donor transportation requirement and the local means of movement.

Donor procurement requirements are the rules for the purchase of materials and services. Procurement requirements can complicate project implementation for two reasons; finding an appropriate supplier that meets the procurement requirements can increase time spent in the planning phase and the longevity of projects can be compromised if products are not locally sourced or easily replaceable by the maintenance stakeholder. For example, if a community takes over the operation of an infrastructure project that has technical components purchased internationally, it may be extremely difficult for them to navigate the purchasing process, transportation, language barriers, and international customs authorities. This can lead to either the project's technical components not being replaced due to the inability to procure the appropriate supplies or the replacement of components with different locally sourced materials that are not to the technical specifications of the project's design. Both of these options result in the project either a) not being operational, or b) the project not functioning as it was intended.

Procurement requirements for services differ from labor requirements mentioned above as labor requirements deal with the direct hire or utilization of labor while procurement requirements for services deal with the hire of a third-party labor service. The hire of a third-party labor services, such as a waste removal trucking service for a refugee camp, can have its own set of guidelines. Often companies need to be vetted to ensure they are not on any international watch list. This ensures that the donor is not indirectly funding a potential terrorist organization or international sanctioned company.

Procurement agreements between donors and companies can even be arranged before the implementing organization has been identified via a call for submission. This can be the case when a company, either through their connected foundation or through a Corporate Social Responsibility (CSR) campaign, will gift their product pro-bono to a donor specific project. This is more common for projects that are distributing non-food items (NFIs), such as solar lamps or water filters.

#### 3.3.4. Technical Requirements

Donor Technical Requirements can be divided into two categories, Pre-Designed Specifications and Novel SOPs. Technical requirements can be difficult to meet for the implementing organization depending on the expertise of local technicians and the similarity of the design to local systems. Meeting technical requirements can be very resource demanding in the planning and implementation phases of the project and are often intertwined with procurement requirements as well.

Predesigned Specifications are technical designs that are already completed before the implementing partner has been identified. This type of design is opposed to a collaborative process

where the donor organization and the implementing organization would design the project together or the implementing organization would submit designs for donor approval. Pre-designed specifications can be highly problematic if they are not tailored to the local region or project location. Different countries have different technical systems and different products available for creating those systems. When an implementing organization receives pre-designed specifications for a project that is unfamiliar to local technicians or requires technical components that are not normally used for those systems, a lengthy training process for technicians may be needed as well as the procurement of specific tools or equipment to work with the new technical components. This is why the United States Agency for International Development (USAID) will offer general guidelines that allow for flexibility in designing systems, for example electrical mini-grid toolkit (USAID, 2018), rather than pre-designed systems .

Novel SOPs are methods that are new or conflict with the local way of implementing work. For example, for an electrical infrastructure project, local technicians may adhere to the national standards when creating the electrical system. If the donor requires that they adhere to a different set of standards, often with the intention of higher safety features, the technicians may have to learn a completely new set of procedures for doing electrical work. This can be time consuming and cause technical issues if the new system is not fully understood. This can ultimately undermine the donors original intention of creating a safer system as the resulting work may not be up to the national standards, which may be safe but not meet the donor requirements, nor up to the donor requirements, which may be improperly implemented and create a safety hazard.

#### 3.3.5. Temporal Requirements

Donor Temporal Requirements can be divided into two categories, Hard Deadlines and Benchmark Deadlines. Both of these temporal requirements help guide the implementing organization to progress the project in a timely and structured fashion. However, temporal requirements can also cause additional work for the implementing organization and potentially lessen the quality of the project or program. This type of requirement is mostly prevalent during the implementation and monitoring and evaluation phases of the project.

A hard deadline is a predetermined date that the project or program must be completed. While this deadline is usually determined during grant agreement negotiations between the donor and implementing organization, unforeseen circumstances can delay projects. If the unforeseen circumstances are not covered by a force majeure clause in the grant agreement, the implementing organization may still be expected to meet the hard deadline while suffering from reduced capacity.

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Force majeure can be defined as "circumstances that are out of the control of both foreign and local partners, such as flood, fires, storms, epidemic diseases, war, hostilities and embargo" (Wang, Dulaimi, & Aguria, 2004, p. 241) and is a common clause in grant agreements for humanitarian and development work. Hard deadlines, if not met, can potentially reduce the chance of receiving funding from the same donor in the future. Some donor organizations do allow for No-Cost Extensions (NCE)s, which is an extended deadline to finish the project without any additional funding, but if an NCE is allowed, then the deadline would not be considered a hard deadline.

Benchmark deadlines are predetermined dates that indicate at what stage the project or program should be at. They are used to monitor the project or program's progression and to see if it is on schedule to meet the project completion deadline. Benchmark deadlines can be stressful for implementing organizations as they are often accompanied by status reports mentioned in the donor administrative requirements. These status reports can require monitoring and evaluation (M&E) data as well which means that M&E teams need to complete their field work, data analysis, and report writing as well. While benchmark deadlines do provide reassurance for the donor that their funded project is progressing in the right direction and on schedule; it can take significant resources for the implementing organization to indicate this to the donor.

All of these donor requirements are quite standard in development and humanitarian work and further requirements relating to monitoring and evaluation are frequently required in humanitarian operations. This paper is not arguing that these donor requirements are unnecessary as they serve the important purpose of oversight, transparency, and quality control while providing contextual insight and lessons learned for the donor. Additionally, government agencies that fund development or humanitarian projects are beholding to their citizens and need to justify why funding which could be allocated domestically, is spent on foreign assistance. Therefore, the more detailed and measurable the project reporting is, the easier it is for the government agency to justify their spending to the public.

#### 3.4. Research Process: Outputs and Outcomes

The second step in this paper's design was to identify each project's stated outputs and outcomes. A project's stated output is the activity undertaken while the outcome is its objective or goal and was usually identified in the project proposal, grant agreement, or contract. The stated outputs and outcomes for each project were identified and are noted in each specific project analysis.

#### 3.5. Research Process: Analysis

The third step in this study's design was to determine how a project's donor requirements affected the project process. This was done by analyzing both formal and informal communications between the donor and implementing organization as well as reflections of each project's process by the author of this paper, who was also the director of the implementing organization as mentioned in the introduction.

#### 3.6. Case Study

SBK was chosen as the case study for this paper as the author was both the director and founder of the organization. This was conducive to answering the research question for two reasons; one, the data was already accessible and partially organized, and two; the author could reflect and give personal insights to each project process, challenges, and project context. As mentioned in the introduction, I have attempted to minimize bias to the greatest extent possible and view the organization, projects, and donors as objectively as I can.

#### 3.7. Sampling Approach

This paper analyzes three of SBK's fifteen projects as a case study to examine how donor requirements shape project outcomes. Therefore, the sampling technique deployed is *critical case sampling*. According to Bryman, critical case sampling is when "sampling a crucial case that permits a logical inference about the phenomenon of interest-for example, a case might be chosen precisely because it is anticipated that it might allow a theory to be tested" (2016, p. 409). This study postulated that a case study was best way to answer the research question previously mentioned.

#### 3.8. Data Collection

The data collected for this study came from a variety of different sources. It included contracts, donor technical guidelines, emails, financial reports, grant agreements, MoUs, narrative reports, project proposals, survey reports, and technical reports. While all the documents were available to me, since I was in charge of SBK administration, it was an exhaustive process to organize and collect them all. This is because they were scattered across multiple platforms and even devices. As the organization developed so did the document archiving methods but they were never all consolidated into one place. As the original computer I used became badly damaged during a technical survey, its contents had to be divided between multiple external hard drives and reuploaded to my current computer though some content appears to be missing. Photographs and need-based assessment surveys where stored on

Dropbox for business while donor documents where kept in shared Microsoft One Drive folders. Since SBK's main electrical engineering consultant preferred Google applications, technical documents and product specifications where often kept on Google Drive. For this reason, email correspondences became essential to tracking down location and dates of documents. The emails examined were of importance as they often contained issues or challenges that needed to be overcome but where not included in official reports. It should be noted that the email correspondences examined were not just between SBK and the donor, but also internal staff communication, communication with partners, communication with potential and selected vendors, and communication with consultants.

#### 3.9. Data Analysis

After all the documents were collected, the contents within them were examined. While this was also an extensive process, it was not as difficult as the actual collection and organization of them. This is because most official documents, such as contracts, MoUs, and reports, were relatively short and used simple language as opposed to advanced legal terminology that may be found in binding documents between INGOs and institutional donors. Additionally, since the donor requirements were identified, it was relatively quick to determine what type of requirements each donor required for each project. However, the most extensive process and the one at the core of this study, was linking the donor requirements to changes in outputs and ultimately determining if it affected the project outcome. This entailed the systematic combing of emails and reports to see what the challenges were and how they were addressed.

#### 3.10. Ethical Considerations

There were a few ethical considerations when conducting this study. First, as donor and partner organizations are still existing, it was important not to divulge sensitive data or wield unfounded claims. Additionally, as I was the director of SBK, it was necessary to not engage in self-promotion, exaggerate organizational achievements, or blame donors for unnecessary project complications. While proud of the work SBK conducted, I readily admit that there were areas of improvement for the organization and for the projects that we implemented. But one principle that we were very strict on was that we would "do no harm". We always worked with the villagers to find solutions together and ensure that they were comfortable and had voice in the process. In fact, when writing this thesis, it became very apparent how embedded in the communities SBK was. It was often difficult to differentiate SBK from the community, as there was fluid and continuous dialogue through the project process. This was undeniably due to SBK's local staff being respected within the areas we worked, having experience in

the region for more than ten years, and treating others equally. Since two of SBK's board members were also well respected individuals in the area and with fa- reaching connections throughout the communities, high-level disputes were quickly and amicably resolved. Furthermore, SBK did not seek funding for a project and then look for a village within which to implement the project. All project requests came from the communities themselves. Word of mouth of what we were doing spread quickly and aided by the name recognition of our staff and board members resulted in a plethora of potential projects. Conducting needs assessment surveys of these projects and doing a feasibility study would then follow. In this way, no project was forced or pushed on to a village, projects stemmed from the villages' initiative and the process allowed for the community to be involved in every step of the project. All published photographs or media captured of individuals was taken with their consent. If the media included young children, parents or guardians were asked for permission. Soldiers were rarely photographed, and their names were not documented if present in a need's assessment survey, proposal, or report. All information that was potentially sensitive that SBK wanted to publish, such as the locations of a village where a high value solar array was installed, was submitted for approval to the local KNU leader. The names of the villages identified are the real names, but no individual villagers, partners, consultants, or donor representatives are identified by name.

#### 4. Findings and Discussions

In this section, a brief description of SBK's projects is presented, a donor overview is given, and three projects are examined thoroughly, each with a different donor that showcases different levels of donor requirement intensity. At the end of this section, a summary of the findings is discussed.

#### 4.1. Donor Overview

Child's Dream is a charitable, not-for-profit Swiss Association and Thai Foundation established in 2003 (Dream, 2020a). They work in Myanmar, Laos, Cambodia, and Thailand with a mission of "improving health and education for sustainable development" and a vision of "empowered people responsibly shaping their communities" (Dream, 2020b). They indirectly supported one of SBKs water access projects.

Foundation Groupe Électricité de France (EDF) is a French charitable foundation established in 1987 that focuses on education, inclusion, and environment (F. G. EDF, 2020). They are a foundation associated with the French power company Électricité de France that is describes itself as a global leader in low-carbon energy with an annual revenue of 69 billion euros (É. d. F. EDF, 2020). EDF supported three of SBK's larger projects. Founded in 2009, Gyaw Gyaw is a small NGO, based along the Thai-Burma border that implements community development projects by means of sustainable architecture. They focus on architecture, empowerment, and sustainability specifically along the Thailand/Myanmar border (Gyaw, 2020). They supported the first two projects SBK implemented.

The Border Consortium (TBC) is a non-profit, non-governmental organization that works together with displaced and conflict-affected people of Burma/Myanmar to address humanitarian needs and to support community-driven solutions in pursuit of peace and development (TBC, 2020). They receive funding from larger INGOs and government agencies and both implement their own projects as well as fund smaller NGOs. Founded in 1984 but under a different name, they are a group of nine different INGOs from different countries but are headquartered in Bangkok, Thailand. It is important to note that one of the previous names of TBC was the Thailand Burma Border Consortium (TBBC). In this paper, citations may be attributed to TBBC as the documents were created under the organizations previous name. TBC funded one project where SBK was the lead organization in a group proposal consisting of three organizations.

The Branch Foundation (TBF) is a New Zealand registered charity that was established in 2007 that "aims to work alongside marginalized communities in Southeast Asia to support sustainable community development through education, capacity building and renewable energy solutions" (TBF, 2020). TBF was an early partner of SBK and supported three renewable energy access projects.

Track My Electricity (TME) is a program where "for every MWh of clean energy sourced through the platform, a portion goes towards funding renewable energy projects in remote, off-grid areas to eliminate energy poverty and build sustainable communities" (TME, 2020). Corporate energy consumers are able to choose specific renewable energy sources that fund this program. TME is associated with World Kinect Energy Services, a global energy service provider supplying everything from liquid fuel to data management (Services, 2020). TME was based out of Bergen, Norway and was SBK's largest donor by number of projects funded, supporting five renewable access projects.

#### 4.2. Project Overview

In the five years of operation, SBK implemented 15 projects resulting in 5,100 beneficiaries using their systems. Over 2,900 people have benefited or currently benefit from SBK solar projects and nearly 2,000 more use or have used our water access systems. Water filtration projects account for the rest of the beneficiaries. Nine of the 15 projects were implemented in Karen state Myanmar and five were in

hard to reach villages in western Thailand. Only one project was implemented in an urban area, the Minmahaw school, located in Mae Sot, Thailand. This was an exception to SBK's target area; rural villages where other NGOs were not active.

The Minmahaw school is a two-year program that selects students between 17-23 from nearby refugee camps. The school's mission is to increase the access to international higher education for marginalized students. Before SBK undertook this project, the school had insufficient water to cook, bathe, and use the toilet. By installing a solar pump, water tower, and additional water storage tanks, the school, male dormitory, and female dormitory all received sufficient water access year-round.

The donor for the Minmahaw school project was Child's Dream but the project was conducted in collaboration with the Wide Horizons (WH) school. The WH school runs a program for young adults from Myanmar who work for community-based organizations (CBO)s and wish to develop their computer, English, and community development skills (Horizons, 2020). The final activity for the graduating class is to implement a real-life development project and in 2017 the WH school chose to solve the Minmahaw school's water deficiency problem. Thus, SBK saw this opportunity as a way to simultaneously conduct a water access project for a refugee school while training migrant students on project management and development work. Besides this notable exception, all other projects were implemented in rural locations.

Not all the rural villages SBK worked in can be considered hard to reach but the majority required multiple means of transportation. This included boats, pick-up trucks, large trucks, Burmese tractors, motorcycles, and travel by foot. This was especially logistically difficult when transporting kilometers of PVC pipe for water infrastructure projects or heavy material such as cement. The steep mountainous region combined with the abundance of rivers, many of which did not have bridges, required very precise planning and timing. This was especially important as there was very little cell phone reception in the area, so logistical agreements had to be made in advance. Hiring boat drivers to ferry materials across rivers or down/upstream meant that we had to be punctual in our appointments in order to not cause a loss of income for the hired boat drivers, or an increase in ferrying costs, as they would not take other jobs as they waited. This was often hampered by extremely heavy rains and mudslides that rendered roads impassable during the rainy season and the overheating/vehicle malfunctions in the hot season.

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Picture 11: (top) Truck transporting PVC pipe. Picture 12: (bottom) Boats being loaded to transport cement and PVC pipe across the Moei river.

Picture 13: Transporting solar materials by motorcycle across flooded riverbeds

While not addressed in this paper, all of the projects implemented on the Burmese side of the border required careful consideration of local power structures as to not offend any of the local or regional powerholders. The border region between Thailand and Myanmar is a complex web of national armies, ethnic minority armies, and mixes of the two. For a single project, SBK could potentially have to be acutely aware of or coordinate with the Thai military, the Thai police, the Karen National Liberation Army (KNLA) which is the military wing of the Karen Nation Union (KNU), the Democratic Karen Buddhist Army (DKBA), the Burmese military (Tatmadaw), or the Border Guard Force (BGF) which was a mix between the Tatmadaw and DKBA in the area we worked in. It was possible to pass through several areas controlled by different power groups to reach a single village. Thus, security was always a high priority, especially since there was sporadic firefights and continued conflict between these groups. Additionally, on the Burmese side of the Thailand – Myanmar border, there is a high amount of landmines still yet undetonated (Fasth & Simon, 2015). As of 2016, Myanmar as a country ranked 3<sup>rd</sup> in the world for most accidents and deaths from landmines only behind Afghanistan and Colombia (Cathcart, 2016). Therefore, SBK always strictly followed the safety guidance from the security personnel escorting us. This was extremely important because much of our work entailed land surveys that required us to traverse off path into the jungle for kilometers at a time. Over the course of five years, SBK staff and hired labor suffered no injuries or accidents relating to military conflict or

landmines. On one single occasion, as a white non-local, I temporarily had to go into hiding when the Tatmadaw made an unexpected visit to a project site and on separate occasion I had to flee the project site for the same reason. These hard to reach projects in Myanmar, while logistically complicated, constituted the majority of our work and on several occasions brought either running water or electricity to a village for the first time.



Picture 14: KNLA soldiers during Revolution Day. Photo: Line Ramstad



Additionally, SBK conducted many trainings and workshops for partner organizations as well as organized two solar lamp distribution campaigns. The solar lamp donation programme, which was the delivery of solar powered lamps/flashlights to areas without access to electricity, focused on households with school aged children to aid in their study at night. In 2014, SBK delivered 145 lamps to two rural villages inside Thailand and in 2016 SBK delivered an additional 212 lamps to rural villages in Karen State, Myanmar.



Picture 16: Household representatives lining up to received solar lamps in village in rural Thailand



Picture 17: School children holding up solar lamps in Karen state, Myanmar

#### 4.3. Specific Projects

The three projects that were selected for deeper analysis are the Kaw Lah Hai school, the Kler Deh school, and the Mae Wae school and workshop. These three projects were selected as all have different donors with different requirements. Furthermore, the Kaw Lah Hay school represents a project with low donor requirements, the Kler Deh school represents a project with medium donor requirements, and the Maw Wae school and workshop represents a project with high donor requirements. By examining these three projects with different levels of donor requirements we can determine the benefits and challenges stemming from each requirement level and how they affected the project outputs and outcomes.

### 4.3.1. Kaw Lah Hai School: Low Donor Requirements

The Kaw Lah Hai School is located in eastern Karen State, Myanmar and at the time of the project's completion, was attended by 198 students. Ninety-eight of those students came from neighbouring or far away villages to receive an education. For the duration of the school year these 98 students resided in dormitories that had very few accommodations. There was no running water or power so at night the students had to study by candlelight or kerosene lamp. This was problematic as in this remote area kerosene is not readily available and candles pose a serious fire risk to the timber and bamboo buildings. SBK brought installed a renewable energy system that provided power to the school, two dormitories, kitchen, toilets, teacher's house, and office. This project was funded by TME and was completed in 2015 with a budget of 5,100 Euros.

The outcome for this project was to provide "an enhanced learning environment and a safe living area" (SBK, 2015a). This was achieved by the completing outputs which were the installation of a four-panel solar energy system, the installation of lighting in all necessary school buildings, and a three day training for students and school staff on renewable energy and solar-energy system maintenance.

For this project, the donor requirements were very low as this project was part of a larger program that funded multiple projects. The *Donor Requirements by Project* table in appendix one shows the types of donor requirements TME specified to SBK. For this project, after the initial proposal was approved, the only donor requirement was Media Reporting.

This was the only SBK project that had a demanding requirement for Media Reporting. This is because the media requested was the creation of a promotional video for TME that was to document the project's process and relay the impact renewable energy had on local communities to TME's clients. It was to be premiered at TME's annual client conference in Bergen, Norway. SBK was alerted to the available funds for a project on the 23<sup>rd</sup> of April 2015 and an agreed upon date for the video completion was the 18<sup>th</sup> of May 2015, two days before it was to be shown at the conference. This gave us less than one month to complete the video. The reason this funding was awarded to SBK on such short notice is that we already had a standing agreement with TME on identified projects that needed funding and the money allocated was actually funds normally used to provide the conference attendees with conference memorabilia or for other conference activities.

Fortunately for SBK, we shared an office space with a Spanish photojournalist and videographer who was able to quickly accommodate our request that resulted in a three-and-a-half-minute video complete with interviews of key Karen Education Committee (KED) community members and medical staff from jungle clinics.<sup>1</sup>

The donor requirement for this project did not impact the project outputs or outcomes. The stated output, a four-panel solar energy system, was installed and this contributed to the outcome, an enhanced learning environment and safe living area. However, while not impacting the project's outputs or outcomes, it did affect the project process in one concrete way; it pushed forward the completion date of the project. Not wanting to waste resources or make unnecessary trips to the Kah Lah Hai school, as it required some difficulty to travel to, SBK also decided to complete the project on the same date as the video was to be finished. It was our internal decision to make the project completion deadline the same as the media reporting deadline and thus it is not considered a hard deadline from the donor.

This decision drastically increased the speed of which SBK normally implemented projects. For a standardized solar energy project, once funding was received, solar panels, charge controllers, inverters, battery wires, and batteries would have to be ordered from Bangkok. It could take between five to fifteen days to receive these materials depending on whether items were in stock for each supplier, the transportation company hired, and public holidays. Once received, SBK would custom build the solar panel frames, pre-wire the inverters, charge controllers, digital voltage meters, and batteries and then disassemble and package the system for transportation. This process would normally take one week but was dependent on the availability of other necessary materials in Mae Sot, where SBK's office was

<sup>1</sup> The video can be found at https://www.youtube.com/watch?v=dBXOJPxmnuU.

located, and the time staff had available to dedicate to this process. Then depending on the distance to the project site and the size of the solar energy system, the installation and training of local responsible community members could take one to two weeks. This timeline is greatly generalized but if there were no unexpected problems and staff had time only to dedicate to a single project, a small solar project like Kah Lah Hai could be completed in four to six weeks. Attempting to complete this project in the agreed upon 25 days required some significant logistical reorganization and reprioritization of projects. Fortunately, SBK had just finished preparing an identical system for a different project and could use those materials for the Kah Lah Hai project. This removed the time needed for shipping of components and pre-assembly in the office.

While the decision to utilize the components destined for another project for this project saved us time, we still had to write the narrative script of the video, create interview questions, conduct interviews, and edit the video. With the help of the hired videographer, SBK was able to complete the project and deliver the media reporting by the agreed upon deadline. One additional impact this media reporting requirement had was that it delayed the implementation of the other project from which we utilized the solar components from. The delayed implementation of that project was non-consequential as the donor for that project had a flexible deadline and SBK kept them well informed of that project.



Picture 18: SBK staff conducting training for Kah Lah Hai students



Picture 19: Kah Lah Hai students and staff helping install solar panels and wiring

## 4.3.2. Kler Deh School: Medium Donor Requirements

Kleh Deh is located in Karen State Burma, along the Moei River across from Mae Salit, Thailand. The rebuilding of a school compound in Karen state, Burma was both a symbolic and practical project initiated by the KED. The village of Kler Deh had been previously razed twice by the Burmese military and the reconstruction of the village, which was to be centered around the school compound, was seen as an act of resilience by the local Karen community. SBK collaborated with Gyaw Gyaw on this project with the idea of showcasing an alternative model of how future school compounds can be designed to incorporate effective sustainable solutions.

The stated outcome for the project was to create a physical learning environment, eliminate water borne diseases caused by drinking unsafe water, and provide the ability for students to study at night (SBK, 2015b). To achieve this, the outputs were the construction of an adobe high school by Gyaw Gyaw, which included three classrooms capable of housing 30 students each, the installation of two 2,000 litre storage tanks connected to a solar pump that ran to a three-stage bio-sand/charcoal filtration system that cleans the water and ultimately leads it to three water access points.

The target population of this project was a combined 200 high school students, teachers, and administrators who would eventually live in the village and attend or work at the school. The electrical and water systems that were installed were flexible so that the capacity could be increased when the middle and primary schools were later built. The donor for this project was TBC, had a budget of \$17,885 USD, and was completed in 2015.

The Kler Deh school project had a complicated process to receive funding. While the project was initiated by KED, I wrote the proposal for them to be submitted to the donor, TBC. Within this proposal I identified SBK as the implementor of the water access and drinking water filtration components of the project. While KED was technically the organization that was to report to TBC, I also ended up doing the reporting to the donor. To identify the donor requirements for this project I examined the following documents that were given to SBK by TBC at the time: TBC's Rehabilitation Project Reporting Guidelines, TBC's Procurement Manual, and TBC's Financial Procedures Manual. Additionally, email correspondences, project narrative reports, and project financial reports were also looked over.

The *Donor Requirements by Project* table in appendix one shows the types of donor requirements TBC specified to KED and SBK. They are as follows: Final Narrative Report, Financial Reporting, Field Visits, Earmarked Funding, Procurement Guidelines, and Hard Deadline.

TBC's administrative reporting guidelines were relatively lax and undetailed. For example, TBC's instructions for the Final Narrative Report were "a narrative description of the activities conducted so far... an assessment of indicators measuring the success of the project in achieving its short term

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objectives... an assessment of how much the project has progressed towards the long term aim" (2014, p. 1). These relaxed guidelines that did not detail report length requirements and resulted in a two-page final narrative report that satisfied the donor. Measuring the short-term objectives was not difficult as SBK had completed the project and the outputs included in the proposal were straightforward. They were:

- 1) To construct a high school for conflict affected students to be able to attend school.
- To provide access to water filters that will eliminate diseases caused by the consumption of untreated water.
- 3) To provide lighting by solar power that enables the target group to continue studying during the night time (KED, 2014).

Since the project completion was reliant on these objectives to be met, it was not difficult to assess the indicators for the short-term objectives. Similarly, the project's long term outcome to "provide safe living environment for Karen youth to further their education as part of rehabilitation of conflict affected communities" (KED, 2014) was simply dependent on the finished construction of the school and the water and power infrastructure; all of which were completed within the project timeline. Therefor the Final Narrative Report was a relatively light endeavor.

The Financial Reporting TBC required allowed for SBK to submit their own budgeting document and did not need receipts for small transactions to be attached. Any discrepancies between project costs in the proposal and in the financial report were explained in the narrative report.

The mandatory field visit required by TBC was not burdensome to SBK. This is because, unlike international donors, TBC is a regional donor that has local staff stationed close to the project site. This meant there was no hassle in securing transportation and security to visit the school.

While there was earmarked funding, it was determined by the budget submitted in the original proposal. This meant that the earmarked funding was determined by the implementing organization, not the donor. Thus, as the final budget matched the original budget proposal, there were no complications in fulfilling these requirements.

Interestingly, TBC does have strong procurement guidelines, but they were not relevant for this project. In section 3.1 of TBC's Procurement Manual it states that "All purchases from 60,000 to 600,000 Baht are subject to the following requirements: Minimum three bids, or sound reason documented why less than three bids could be elicited. A summary of verbal quotations or catalogue

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comparison is acceptable if written quotes are not available. Purchase Request. Purchase Order" (2011, p. 8). However, in section 3.2 of the same document it states that "there are no formal requirements for purchases valuing 60,000 Baht or less" (2011, p. 9). Since SBK did not make any single transaction above 60,000 THB (1,844 USD) this requirement did not apply to this project.

The hard deadline for TBC was only a hard deadline for reporting, not project completion. In this sense it does not truly fit the description of hard deadline described in section 3.3.5 of this paper but it is worth noting that TBC was very adamant about timely reporting.

Ultimately, TBC's donor requirements did not hinder nor impose undue stress onto SBK as an organization or affect the project's outputs or outcome negatively or positively. Their requirements did not necessitate any change in SBK's SOPs nor were their temporal requirements that were unrealistic or at odds with the implementing organization. For this project, the donor requirements did not significantly influence the project outputs or outcomes as TBC, SBK, Gyaw Gyaw, and KED were all aligned in the expectations and had a clear understanding of the context and dispersion of responsibilities.



Picture 20: Installing solar pump at water source for Kler Deh school



Picture 21: Conducting solar and water pump maintenance training to students at Kler Deh

## 4.3.3. Mae Wae School/Workshop: High Donor Requirements

The Mae Wae school and the Mae Wae women's cooperative sewing workshop (MWW) were technically two different projects that were installed almost simultaneously. Since they both share the same donor and were part of the same commercial contract they are presented together. Two other projects, the Hoi Nam Yen water access project were SBK brought running water to a village of 600 people, and the Poblaki water access project that SBK did not accept to implement, were part of the overall contract but are not included as part of the Mae Wae School/MWW project.

The MWW is located in Tak province Thailand on the border to Myanmar. The purpose of the sewing cooperative is to provide stable employment for local women that applies their skills in weaving traditional garments and gives them access to markets previously unavailable. While the workshop operated without electricity for many years, power was requested for three main reasons; electrical sewing machines to increase production, electric fans to reduce the temperature in the workshop, and lighting. The women employed at the sewing workshop have transitioned from traditional loom weaving to manual sewing machines. However, the speed at which products are made is dependent on the speed of the sewing machine and the skill of the worker. Therefore, to increase production, leaders of the workshop wanted employees to transition to electric sewing machines which required a stable supply of electricity.

The average annual temperatures in Mae Wae village range from  $12^{\circ}C - 38^{\circ}C (54^{\circ}F - 100^{\circ}F)$  (Khedari, Sangprajak, & Hirunlabh, 2002)<sup>2</sup> but reached temperatures of 44.6°C (112°F) in April of 2016 (Dolce, 2016). These high temperatures can make for uncomfortable working conditions within the workshop. To combat this, a cooling system, ultimately electric fans, were requested by the employees of the workshop. The workshop is a long rectangular building with a low overhanging roof to ensure that rain does not enter through the windows during rainy season (June to September). However, the low roof also reduced the amount of natural light that could enter through the windows. Therefore, lighting was requested so that the workers could work in more favorable and safe conditions.

To generate the electricity necessary to power the workshop, SBK was contacted by Missions Étrangères de Paris (MEP), a missionary arm of the French Catholic Church who runs the sewing workshop, who received funding from EDF to find a solution for providing power. A feasibility study was conducted comparing the practicality of hydro-power versus solar power with solar power ultimately being chosen as the preferred method due to the unavailability of the correct sized transformers and the dangers of the high-voltage transmission lines necessary for the hydro-power system in such a remote area. The installation of the solar power system in the Mae Wae workshop was completed in March of 2018 and is still operating now. The Mae Wae school, located not more than 100 meters from the MWW, would receive nearly an identically designed solar energy system in April of 2018. The school

<sup>&</sup>lt;sup>2</sup> Mae Wae village location is in Khedari, et al.'s climatic zone T1. Latitude/Longitude: 17°41'50.65 N, 97°52'40.51 E

wanted electricity so they could be able to use fans, projectors, computers, and other teaching aids within the school building as well as provide electricity to the student dormitory. The school solar powered system was completed in April of 2018 and apart from a short period when it was offline due to an unauthorized electrician making adjustments, has been running ever since.







Picture 23: Solar panel array for Mae Wae workshop with workshop and SBK staff

The donor requirements for this project were, relative to other SBK projects, very high. This may be due to the fact that the budget was also higher, around 55,000 EUR compared to the cost of an average SBK project of around 5,000 EUR, or that the donor was not an NGO or a development agency. Additionally, as it was a commercial contract, not a grant, the donor-implementing organization relationship was more akin to a business-client relationship. Even the language within the project Terms of Reference (TOR), the document containing the stated outcomes and outputs, tasks, responsibilities, and other project information, referred to SBK as the "contractor" as opposed to grant agreements where the language would specify SBK as the "implementing partner" or "implementing organization". However, this is normal for commercial contracts, but it was SBK's first experience of working with this funding modality. Additionally, possibly because it was a commercial contract, there were no clear stated outcomes. Outcomes are almost always specified in development and humanitarian grants and proposals and are an essential part of the proposal. It is possible however, to infer the outcomes from a single sentence in the Mae Wae School/MWW TOR. It was "to realize a pico [micro] hydro scheme, for the village's common buildings power supply: handicraft cooperative workshop, school, dormitory, common building and, if possible, households" (Caillette, 2015, p. 1). It can be assumed that that the outcome is power supplied to the MWW, school, dormitory, common buildings, and households. While

not a traditional outcome in the development sense as it assumes power will lead to beneficial and positive outcomes without indicating how. The outputs for this project, or how the outcome was to be achieved, was the installation of a micro-hydro power supply.

The donor requirements for the Mae Wae School/MWW were: Final Narrative Report, Financial Reporting, Field Visits, Labor Requirements, Transportation Requirements, Procurement Requirements, Predesigned Technical Design, and Novel SOPs. As mentioned, this project changed from a micro-hydro project to a solar power project after SBK conducted a feasibility study. No new TOR was created after this decision so examining the guidelines and requirements present in the original document are applicable, aside from the technical information.

The Final Narrative Report for the Mae Wae School/MWW project had two purposes; one to inform the donor of the project completion and give all the project data, and two, to provide future maintenance staff with the project history and all technical information regarding the solar energy system. To achieve this, two portfolios were created: one for the Mae Wae School and the other for the MWW. In order to indicate the extensive nature of the portfolio two pictures are included below and the *Mae Wae School Portfolio Table of Contents* is included in appendix two.



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Picture 24: Wiring diagram for Mae Wae DC solar system

Picture 25: Wiring diagram for Mae Wae AC solar system

The four main categories of the portfolio are the Introduction, which is the narrative project overview, the Design, which includes system technical data and specifications, Maintenance, which included schedules and the necessary actions to keep the system running, and Manuals-Data Sheets, which included all the technical information for each specific solar component. In total, the portfolio was 599 pages. Without counting the supplier's manuals and data sheets, which constituted the bulk of the portfolio, SBK produced 36 pages (SBK, 2018). Because this portfolio doubled as information for any future technical maintenance people, it required much more work than a standard narrative report; especially since two had to be created. While not affecting the outputs or outcomes of the project directly, this donor requirement did impact the project in the following way. It improved the transition of responsibility from SBK to the community as necessitated by the creation of an extremely thorough and detailed technical overview, delegation of maintenance responsibilities, and creation of a maintenance schedule to be followed.

The Financial Reporting for the Mae Wae School/MWW project was stricter than SBK was familiar with and the way financial disbursements were conducted was different than normal. With grant agreements, funds are usually received at the beginning of the project as one lump sum or in the case of longer higher-cost projects, in a serious of a few large disbursements with the dates of disbursement indicated in the grant agreement. For this project, an invoice was sent at the end of the month requesting reimbursement for SBK labor and administration costs. This was separate from material cost invoices which could be submitted at any time but required supplier quotations and accompanying budget detailing the individual material costs. While supplier invoices, administration costs, and specific materials costs are unusual to report on, it would normally be an annual or end of project process, not one required with every request for a funding disbursement. While taxing at times, especially when returning from weeks in the field, the financial reporting did not have any impact on the project outputs or outcomes.

There were two donor Field Visits for the Mae Wae School/MWW project: one in February of 2016 and one in February of 2018. The purpose of the first field visit was to conduct survey work with the donor on the potential four projects, Mae Wae School, MWW, Hoi Nam Yen, and Poblaki. Since the donor field visits are often only for a short period and there is much work to be done, they can be quite intense. To illustrate the potential intensity of a donor field visit, the schedule from the 2016 field visit with distances is included in the table below:

Date	Location	Distance			
February 11th	Mae Sot -Mae Wae	181 Kilometers			
February 12th	Mae Wae				
February 13th	Mae Wae -Hoi Nam Yen	204 Kilomters			
February 14th	Hoi Nam Yen				
February 15th	Hoi Nam Yen - Poblaki	151 Kilometers			
February 16th	Pobalki				
February 17th	Pobalki – Mae Sot	122 Kilometers			

Table 1: Distances between EDF project villages

Because of the short time, these days were very long, sometimes requiring twelve hour working days followed by travel to the next village. It is important to reiterate that travel between the three villages was not quick nor easy with maximum safe speeds in dangerous sections of the road not more than 10-20kmh. This meant that even if the overall distance was not long, the journey could be. Travel could be further hampered by the washed out roads due to heavy rain, vehicle failure as happened in the 2018 survey when the 4-wheel drive truck's engine gave out on a steep incline, or the very real danger of wild elephants blocking/attacking vehicles near Hoi Ham Yen village at night during mating season. These were the same elephants that eventually destroyed the solar array powering the solar pump for that project.



Picture 26: Hoi Nam Yen solar array with villagers



Picture 27: Hoi Nam Yen solar array after damaged by elephants

The mountains landscape added to the difficulty in travel as shown in the elevation profile between Hoi Nam Yen and the nearest paved highway.



Picture 28: Elevation profile from Hoi Nam Yen village to the main highway. Elevation gain/loss of 2,107 meters and max slope of 32.6%. Retrieved from Google Earth.

In addition to the survey work that was to be conducted, transportation, lodging and food needed to be prepared for the donor's representatives as well. In 2016, this was organized by MEP, as they were the accountable organization running the project but in 2018 this was not done, and SBK had to organize the logistics for this process resulting in extra preparation and burden.

Upon reflection, I would consider that the field visits, while not affecting the outcomes of the project, directly impacted the outputs. The Mae Wae School/MWW received electricity, the outcome, but the way it did so, the output, was largely shaped by the donor. The donor's representative was a civil and electrical engineer that provided SBK with guidance and expert feedback and review of the works conducted. This influenced the overall design and helped SBK solve many problems with the technical implementation. It is difficult to determine if the project would have been as robust as it is if the field visits had not occurred.

The Mae Wae School/MWW project was the only project where there were labor requirements specified from the donor. The following are the labor requirements taken from the "delivery, transportation, and storage" and the "safety" sections of the TOR (Caillette, 2015, pp. 18-19):

- For carrying materials, a maximum weight of 30kg cannot be exceeded.
- Children under 16 will not be allowed to carry any load.
- Helmets and gloves will be provided to villagers and workers for loading and unloading.

The limit of the 30kg of carrying capacity per adult was simply not feasible. It would be extremely difficult to enforce this restriction when managing civil works projects that are spread across many kilometers with many villagers working stimulatingly. Additionally, while the weight limit was probably backed by a health and safety standard in France, it did not make sense in this context. Villagers routinely bought and carried bags of rice in bulk at the standard weight of 40kg or 50kg. Bags of cement, which were necessary for laying the foundation for the powerhouses that contained the batteries and other electrical components of the solar energy system, came in a standard weight of 45kg or 50kg. To be able to comply with this labor requirement would mean either dividing larger bags of cement into smaller sizes (wasteful, illogical), or require two villagers to carry one bag which would be awkward and cumbersome. It was SBKs opinion, in agreement with the village leaders and workers, that the villagers participating in the project could safely self-regulate and decide what was too heavy for themselves or required two people to carry. These were competent individuals who routinely carried heavy hardwood timber out of the jungle and were sure footed and strong enough to traverse the steep inclines with heavy baskets of harvested mountain rice up and down the mountainside repeatedly. They knew their own physical limits and where not shy to suggest their own solutions to transportation or labor challenges. Therefore, SBK did not enforce this donor requirement and allowed for villagers to determine themselves what they could carry by themselves or needed assistance with.

Similarly, the second labor requirement, that children under the age of 16 would not be allowed to carry any load was not enforced. Most children 18 and under were in school during the project hours and did not participate in the labor. As Mae Wae was a very small village consisting of just over 70 houses, everyone knew each other and asking for verification of age via identification card (ID) would have been uncomfortable process and potentially disrespectful to the local villagers. ID and proof of age is somewhat of a contentious topic in the areas as many people are stateless and do not have a Thai ID card nor a Burmese passport which can lead to inability access social services (Pyne, 2007). It is common, if individuals are able to acquire enough money, to buy the ID of a deceased person who has unfortunately died young (Deepadung & Dumsa-Ard, 2007). For this reason and the fact that ID cards can be forged, traded, or borrowed, asking for proof of ID would not be an accurate way determining age and negate the donor requirement all together.

The third labor requirement, that helmets and gloves were to be needed for loading and unloading of materials was also not enforced by SBK. There were few materials that could not be lifted by a single individual and nothing was ever unloaded from a crane attached to a truck that could elevate material to a height that could cause damage to one's head. Gloves were available for anyone to use but few did. One of the reasons SBK chose not to enforce this labor requirement was from experience on a previous project. When working with a partner organization on a school construction project, their visiting board members, who were on a field visit, required that all the local carpenters must wear appropriate Personal Protective Equipment (PPE). This resulted in heavy work boots, work gloves, and hard hats being distributed to all workers. However, the result was completely opposite to the desired effect. Workers who had never worn heavy boots before were insecure when climbing bamboo scaffolding and became clumsy when walking on the roof beams. Unfamiliar with the protective headwear, many workers became uncomfortable with the hardhats complaining of decreased visibility and increased temperature around their head. The result was one local carpenter jokingly asking, "Are they [the visiting board] trying to kill us?" and a return to the previous PPE<sup>3</sup>. It was with this knowledge that we determined that what PPE the worker was most comfortable and familiar with was safest, in this context. However, PPE was provided if villagers did choose to use it, but it was not enforced.

To circumvent any inequality or unfair distribution of labor, SBK always utilized the village civil structures to appropriately delegate responsibilities. In Mae Wae, a committee was created to be responsible for the project in the end and oversee the village's contribution to the project. The committee consisted of local residents selected by the villagers themselves. Representatives from every household attended the multiple community meetings we held to inform and get feedback on the process and progress of the project. Labor was divided into two categories, skilled and unskilled. Examples of unskilled labor were activities such as the digging of pipelines or lines to bury electrical wires. This unskilled labor was not always paid and only households that could contribute an ablebodied person were expected to, in line with the local customs. The committee oversaw this dispersion of labor and it was essential for the longevity of the project that as many members of the community as possible were involved in the project. By having each household involved in the project, in any way that they could, gave them a sense of ownership over the project. Ultimately, it would be the village who would be responsible for this project, and repeatedly, from experience, the projects where villagers were the most involved and contributed the most either with labor or ideas, were the projects that were the most well-maintained and lasted the longest. That being said, while there were periods where unskilled labor was required, in the Mae Wae project, we relied heavily on skilled labor. Skilled labor was paid and included activities such as the construction of the powerhouses, the installation of the solar panel frame, cement works, and simple electrical works. A small group of individuals worked continuously alongside SBK for the electrical works throughout the project. They received both an income and training that allowed them to fix minor electrical issues later after the project was

<sup>&</sup>lt;sup>3</sup> This anecdote is from a personal communication with the director/founder of Gyaw Gyaw from 2015

completed. It can be determined that although this project had labor requirements, they were not enforced by SBK, and even if they were, it is doubtful they would have affected the project outputs or outcomes.

The Mae Wae School/MWW was also the only project that had Transportation Requirements. They were expressed in the TOR and were as follows (please note that Mae Ve means Mae Wae):

- Organize transportation from supplier storage to Mae Ve.
- Include in transportation quotation insurance, in case of transportation damages.
- Check quality and conformity of supplies in the supplier storage.
- Check damages in Mae Ve, if any.
- Organize storage in Mae Ve in safe conditions for the villagers during unloading and supplies (HDPE/ PVC accessories, pipes, cement, etc).
- Involve villagers as guards for children safety. For theft if any risk: to be discussed with villagers...
- Organize transportation by villagers from village storage to works areas.
- Organize transportation of the pico hydro turbine and generator, control panels from Bangkok to Mae Ve... (Caillette, 2015, p. 18)

SBK was able to comply with all of these transportation requirements except for two, the purchase of transportation insurance as this was non-existent with the shipping service we procured and the transportation of the pico (micro) hydro turbine as that was not applicable. The rest of the requirements for transportation were commonplace for SBK as we routinely inspected materials before purchase, organized all transportation of materials and workers, inspected materials upon arrival, and insured safe storage of materials with the community. The donor requirements for transportation did not affect the outputs or outcome of the project and the one requirement SBK was unable to conform to was a non-issue as there was no damage of solar equipment when being transported from Bangkok to Mae Sot. Mae Sot was the nearest city that shipping companies would deliver too and all materials were then shipped to Mae Wae using unofficial means such as hiring drivers from the village to transport materials with their pick-up trucks.

The Procurement Requirements for the Mae Wae School/MWW project was a constant issue that has a lasting impact on the output and outcome of the project. As this project was presented to us as micro-hydropower project and was predesigned, the supplier was already chosen by the donor. This was because the donor had a relationship with the supplier and could purchase products that were earmarked for development work at a reduced cost. While seemingly beneficial to all involved, this caused us many problems as the supplier was located in Italy and the shipping and customs importation fees into Thailand for a large turbine offset any discount received on the initial purchasing price. Additionally, when SBK was first approached with the EDF contract that contained the four projects, Mae Wae School, Mae Wae Workshop, Porbalki, and Hoi Nam Yen, in September 25th of 2015, we had not done any feasibility studies yet for the Mae Wae School/MWW project so it was still considered a hydropower project. In January of 2016 we began our feasibility surveys for the Mae Wae School/MWW project while simultaneously implementing the Hoi Ham Yen water access project. That project was completed in May of 2016 and it was not until the 13<sup>th</sup> of October 2016 that EDF accepted our decision to switch the Mae Wae School/MWW project from a micro-hydropower system to a solar power system. Effectively, it took us nearly 10 months to convince the donor that solar power was a better and more feasible solution. The reasons for this are mostly technical and are further developed in the conclusion of this paper. The result of this change of output, from micro-hydro power to solar, was that the outcome of the project was also changed. It was no longer possible to meet the outcome of supplying households with power, as suggested in the TOR. However, while the procurement requirement for the micro-hydro project was no longer applicable, a new procurement requirement, the purchase of solar components from a specific supplier were enacted. This is expanded upon further in conclusion section.

One of the categories under donor technical requirements is the Predesigned Specifications. This is where the technical design aspects of the project are already determined, leaving no room for the implementing partner to adjust the design. As mentioned, this is how the Mae Wae School/MWW project was initially presented to SBK. However, with the change from a micro-hydro to solar energy system, SBK was able to work with the donor and an external electrical engineering consultant to design the solar energy system together with the restriction that products had to be sourced from a specific supplier. In this way, there were Predesigned Specifications from the donor, but they were avoided when the project output changed from micro-hydro to solar. Therefore, it can be determined that this donor requirement did not affect the output and outcome of the project as it became not applicable. While designing the solar energy system in conjunction with the donor's engineer was beneficial to SBK, the technical design period was immensely complicated as discussed in the next section.

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There was an abundance of Novel SOPs in the Mae Wae School/MWW mostly revolving around the technical demands of the project. As the technical aspects of this project were designed in conjunction with the donor, the electrical code needed to be met was determined by them and were similar to technical standards in France. This was a departure from SBKs previous solar projects which adhered to Thai standards, which notably, were more lax. This did not mean that they did not function as well or were dangerous, but the high safety electrical standards set by EDF were not easy to meet in the remote setting of Mae Wae. It required a whole new line of circuit breakers and a different electrical design than local staff were familiar with. It required sourcing products, while not unique in the West, that were unique and hard to find in the SE Asia. The integration of a System Control Panel and a Battery Monitor were new additions to the SBKs previous solar designs and required a steep learning curve. The computerized interface and the myriad of specialized setting that had to be adjusted to the location and climatic data also had to be learned. The time spent sourcing materials and translating technical information between languages was immense and slowed down the implementation of the project. Similar to the other donor requirements, while not affecting the outputs of the project, meaning the project still installed a solar energy system, this donor requirement did affect how the outputs were achieved.

### 4.4. Summary of Findings

In this section, each category of donor requirement, administrative, financial, logistical, technical, and temporal are summarized in relation to the three specific projects analyzed, Kaw Lai Hai School, Kler Deh School, and the Mae Wae School/MWW.

The donor's administrative requirements varied significantly between the three projects. For the Kaw Lah Hai school, the only requirement was Media Reporting, and this in itself was an outlier to all other projects. It did not have any impact on the outputs or outcomes and only resulted in the project being completed ahead of schedule. For the Kler Deh School project, the administrative requirements were Final Narrative Reporting, Financial Reporting, and Field Visits. The Final Narrative Reporting was light and non-burdensome, the Financial Reporting straight forward and uncomplicated, and the Field Visits logistically simple as the donor, TBC, was local. None of these donor requirements affected the outputs or outcomes of the Kler Deh School project. For the Mae Wae/MWW project, the administrative requirements were a Final Narrative Report, Financial Reporting, and Field Visits. For this project, the Final Narrative Report was very taxing as it held a two-fold purpose of both reporting to the donor and providing information to any future system maintenance personnel. The Financial Reporting, while not difficult, was unconventional as SBK's administrative and labor invoices were submitted at the end of every month and budgets detailing material costs were submitted separately when ready. The Field Visits for the Mae Wae School/MWW projects were an intensive process that required a lot of time and logistical planning but did provide feedback and guidance on technical issues.

For donor financial requirements, of the three analyzed projects, only the Kler Deh School project had any, and that was Earmarked Funding. As explained in the project's analysis, this requirement did not impact the project's outputs or outcomes as the project costs matched the original budget in the proposal.

For logistical requirements, both the Kler Deh School project and the Mae Wae School/MWW project's donors required them. However, for Kler Deh, the donor's procurement requirements were not applicable as they were only initiated when single purchases over 60,000 THB were made. There were no single purchases over that amount for the Kler Deh School project. For the Mae Wae School/MWW project, there were Labor, Transportation, and Procurement requirements. The Labor requirements did not affect the project's outputs or outcomes as it was not enforced by SBK. Weight carrying limits were not enforced, verification of age of workers was not pursued, and PPE, while provided, was/were not mandatory. The Transportation requirements also did not affect the project's outputs or outcomes as they were standard or not applicable. The only Transportation requirement that SBK was unable to adhere to, the purchase of insurance for products via transportation, was fortunately a non-issue as items were not damaged via transport. The procurement requirements for this project created constant challenges. By having specified suppliers who were not in country, technical assistance and the shipping of products was time consuming and complicated. These procurement requirements also influenced the final design of the solar energy system as it had to be designed within the framework of the products available by the supplier. This requirement did affect the original outcome as well as influence the outputs.

Of the three projects analyzed, only the Mae Wae School/MWW project had technical requirements. The Predesigned Specifications requirement was only applicable in the beginning of the project when it was originally intended to be a micro-hydro project. After switching to a solar project this requirement became nullified and thus had no impact on the output or outcome of the project. However, it is important to note that the original procurement requirement, that the micro-hydro turbine had to be sourced from a specified supplier in Italy, and the complications that surrounded that requirement, changed the projects outcomes. The second technical requirement, Novel SOPs, while not

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impacting outcomes or outputs did increase the time it took to complete the project. This is because many of the electrical procedures and designs were new to SBK's electricians and the components were unfamiliar. This resulted in a mixed interpretation of Thai-French electrical standards for the project.

The Kler Deh School project was the only project to have temporal requirements. This was a Hard Deadline for reporting, not project completion and did not impact the project's outputs or outcomes.

#### 5. Assessment of Study Limitations and Trustworthiness

In the original paper proposal, the analysis section was to proceed one step further. Each project was to be revisited to see its current status. The goal was to determine if the projects were still operational, and if not, determine why the project was no longer running. If the project was not operational, for example water pumps were not working or solar power was not being generated, and the cause was known, I could see if the project failure was linked to a donor requirement. A hypothetical example would be the following:

A donor has a procurement requirement that stipulates that a water pump must be sourced from a specific company. This company is not regional, therefore they did not have any maintenance personal in country, and the pump functions in a different way than with those local mechanics are familiar. When revisited, the project is not operational because the water pump is broken. When asked why the pump has not been fixed it is because that there are no qualified mechanics for that specific pump available in country. If the pump had been locally sourced, it could have been replaced or fixed by a local person. In this way, for this hypothetical example, the donor procurement requirement of sourcing an out of country product directly led to the failure of the project.

This idea of following up on the status of each of the fifteen projects was unfortunately sidelined by the COVID-19 pandemic that began in December of 2019 and continues now as this paper is being written. The project data status was unable to be collected for two reasons. First, most of SBK's projects were coordinated through schools with the main point focal point being the headmaster or senior teacher. The school year for Thai, Burmese, and Burmese migrant schools in Thailand (these are three totally separate educational systems) starts in July and ends in March. During this break from April to May, school staff often return to their home villages, not to come back to the school compound until the start of the next school year. Therefore, it is unlikely that the key staff and previous focal points who collaborated on the project would be available during this time. This is especially true for migrant schools in Thailand where the teachers are often from villages in Myanmar.

Second, with the majority of SBK projects being in rural and remote areas that almost never have any cell phone service, traveling to the village in person is the only reliable option to gather information. However, due to the movement restrictions put in place to combat the spread of COVID-19, access to many villages was not possible. Villagers were also unable to travel between communities as government guidance had forbade unnecessary travel. In an area where longstanding checkpoints are ubiquitous, this is an enforceable measure as well. It was therefore after discussion with previous SBK staff, that this idea was dropped from the paper as it would be unethical to ask them to risk health and go against government guidelines. Admittedly, however, if the request for project status updates had been sent before March of 2020, it is possible that the data could have been gathered.

Another issue that posed challenges was the categorization of some donor requirements. Donors can have very different requirements and their names for requirements are not standardized. This is especially true when comparing a grant agreement with a commercial contract where the entire legal language is different. It was problematic to compare some of the official requirements with informal ones requested by email. For example, in the Mae Wae School/MWW project, there was no formal agreement for a Narrative Status Report but weekly or bi-weekly status updates by email were expected. These were often quite detailed requiring complicated technical measurements or indicators. These were often time consuming and often felt out of sync with the project process. Possibly these informal narrative status updates should have been considered a Narrative Status Report as they were often much more of a technically intensive reporting process than a formal Narrative Status Report. Similarly, categorization of procurement requirements proved to be difficult. For this paper it was categorized as a logistical requirement because depending on the specifics, it could necessitate additional shipping procedures and international customs interactions. However, it could equally have been categorized as a financial requirement. This is because procurement requirements can identify specific suppliers for certain materials or require special reporting if the cost of a product is over a certain limit. For the latter, there is then additional financial reporting on a procurement requirement.

Another limitation to this paper is how the research question, *how do donor requirements affect project outputs and outcomes*? restricts the analysis to the donor' requirements' impact on a project. Instead of focusing on how donor requirements affect project outputs and outcomes, it could have been more useful to examine how they affect the project process. The reason that outputs and outcomes

were chosen for this paper is that they are commonly a measurable metric that is standard in almost all development projects. For an INGO that conducts large multiyear projects and has a dedicated M&E team, donor requirements' effect on outputs and outcomes could be quantified and used to influence clauses within grant agreements. For example, knowing that Earmarked Funding usually results in an X% drop in project effectiveness as derived from indicator data could be remarkably useful. However, for a small NGO such as SBK, without the capacity to conduct thorough M&E processes, the data is more qualitative. Without baseline or follow-up data gathered, neither the project's effectiveness nor the donor's impact on it can be proven empirically. If for example, it was known that the MWW had five workers who produced two garments a day per person on non-electrical sewing machines, then the baseline data for the indicator number of garments produced a day would be ten. If after the installation of the solar energy system and the purchase of five electrical sewing machines each worker produced three garments a day resulting in fifteen, it could be empirically proven that the solar energy system increased production by 50%. In this theoretical example, if a donor had a technical requirement that did not allow for more than three sewing machines connected to the solar energy system for safety reasons, then the amount of garments produced would be thirteen, approximately 86% of the original target. Therefore, it could be determined that the donor's technical requirement directly affected the project by reducing the MWW project's potential production by 14%. Without this project baseline data, clear indicators of success, or thorough M&E, analysis of outputs and outcomes do not offer significant insight into how a donor requirement affected the project. This idea is further explored in the following section.

#### 6. Conclusion

After briefly examining twelve of SBKs projects and thoroughly investigating three of them, it is possible to come to the conclusions that donor requirements only affected one of SBK's project's outputs and outcomes. How this conclusion was reached as well as answering the research question *how do donor requirements affect project outputs and outcomes,* is included in this section.

As explained in section 3.4 Research Process: Outputs and Outcomes of this paper, it was necessary to identify the outputs and outcomes of each project in order to see how donor requirements affected them. This was not as straightforward a process as first envisioned as many projects had vague or general project outcomes. This is counter to many humanitarian and development proposals where the implementing organization will identify several concrete outcomes that have measurable indicators. For all the SBK projects, measurable indicators for the project outcomes were not determined. This was not because it could not be done but because it was not requested by the donor. For example, the outcome for the Kaw Lah Hai school project was "an enhanced learning environment and a safe living area" (SBK, 2015a). If required, indicators for the enhanced learning environment outcome could have been an increase in number of hours teachers spent using electronic teaching aids or the number of students who reported studying at night before and after the installation of lights. However, for a small organization implementing small projects, it may not be necessary to have these measurable indicators. At such a scale, it can be clear that having a free and safe light source as opposed to no light source or an unsafe light source enables more students to study at night. However, with the understanding that it was not possible to measure how donor requirements affected project outputs and outcomes quantitatively, this study was able to recognize how they affected projects qualitatively.

The only project to have its outcome affected by a donor requirement was the Mae Wae School/MWW project. It was a logistical requirement, specifically the Procurement Requirement, that altered one specific aspect of the outcome. As noted in the TOR, the micro-hydropower system was to supply power to the entire village, with the school and workshop as the highest priority structures to receive it. As previously explained, after a feasibility survey which included surveying two potential water sources, generating enough power using a micro-hydro turbine at the donor's specifications was not feasible. This is not saying that hydropower generation was not possible, it is saying that matching the donor's outcome of powering the entire village with their specified turbine, and their specified design, was not feasible. The reasons for this are as follows.

There were two potential water sources to power the turbine, the first was southeast of the village, with a low variable flow rate and on property belonging to the Mae Wae village. The second location was northeast of the village, with a high flow rate, but on property belonging to a farmer from a different village. At the second location the high flow rate, which translates to higher power generation potential, matched the donor's specified turbine. In the early 2000s, a micro-hydropower system was installed there that required partially damming the river to funnel water to the turbine. During the first rainy season of that year, the water overflowed the dam, flooded the farmers' rice and tobacco fields which caused erosion of the farmland and land loss. The result was a loss of income for the farmer due to decreased arable land, which is of high value in the mountainous area. Therefore, it was understandable that the farmer was adamant that no works were to be done on the river near his field. After much discussion with the village leaders of Mae Wae, it was decided not to push for the second location and keep the good relationship with the farmer from the neighboring village. This meant that

the micro-hydropower system had to be moved to the first location, that was owned by the Mae Wae village, but had a lower flow rate that was less compatible with the donor specified turbine.

If the hydropower system were to be installed at the first location, to bring the electricity from the turbine located near the water source to the village, a transmission line more than a kilometer long would have been necessary. To not lose electrical power from the resistance within the transmission line, transformers would be necessary to drastically increase the voltage of electricity at the turbine and decrease the voltage to a usable level at the village. This would have resulted in a very dangerous high voltage transmission line, though buried, that would have run through a beetle nut orchard, along a rice field, and over a river. As the area is prone to flooding and landslides, both of which have the potential to disrupt a buried transmission line, it was deemed too dangerous for the villagers to make the transmission line. Additionally, SBK could not find any transformers in the region that would be compatible with the turbine's power output. Importing the custom or specialized transformers, would have added a significant budget increase. The requirement to use the preselected turbine made it unfeasible to do a micro-hydropower project as specified in the TOR. The turbine could only be used at the location with the high flow rate, but this was not possible due to village relations. At the other location, the water flow rate was low making it doubtful a turbine of that size would run during the dry season. Even if installed there, the distance from the village necessitated a high voltage transmission line which was deemed dangerous to the villagers and the purchase of specialized transformers that were unavailable in country and costly to import. It can therefore be determined that the Procurement Requirement of purchasing the turbine specified by the donor shifted the project outcome from delivering power to the village households, to providing power only to the school and workshop as a solar energy system installed within the same project budget could only provide power to those structures. Similar to the outcome, only the Procurement Requirement for the Mae Wae School/MWW project affected the project's output. This was because once the outcome had changed from providing power to the school, workshop, and households to providing power to only the school and workshop, the output necessary to do this also changed from micro-hydropower to solar power.

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Picture 29: Densely forested steep terrain created difficulty for the potential micro-hydro installation



Picture 30: Beetle nut farm where the transmission line was to be located is located to the right of this small stream



Picture 31: Part of the river that the high voltage transmission line would have needed to cross

Examining how donor requirements affect project outputs and outcomes only allows for a rigid analysis of how donor requirements affect projects as a whole. There are many nuanced impacts donor requirements had on the project process outside of the confines of outputs and outcomes. This study therefor reiterates a concern from Bakewell and Garbutt that a log-frame "tends to be one-dimensional and fails to reflect the messy realities facing development actors" (2005, p. 12) as discussed in this paper's literature review. Even positive feedbacks can be lost if only using the indicators from logframes. Drawing from the projects examined in this study, the following are impacts of how donor requirements affected the project, outside of the outputs and outcomes.

The time and energy needed to complete the Final Narrative Report for the Mae Wae School/MWW project was immense. This was also compounded by the fact that I had begun to study in Norway and had a four-hour roundtrip commute from where I live to the university. When trying to manage a project from abroad for the first time as well as integrate into a new country, completing such a large administrative job was a difficult task to undertake. However, by making such a thorough portfolio, I felt more comfortable in handing over the project's maintenance to MEP. This was one of SBK's last projects as the organization officially closed in December of 2018. It would be a shame to see a project of that scale fail, purely because no one could take care of it. SBK worked hard to find a solar energy company to oversee maintenance of the project and put them in contact with MEP. While one company, located in the north of Thailand ultimately did agree, it was the portfolio that provided all the information they needed to ensure the longevity of the project. However, the technical specifications for this project were very advanced and it is doubtful that the company hired can keep the project running at its intended capacity. This is based on previous interactions with this company, where SBK had been requested to troubleshoot and fix, some of their solar installations. So, while hopeful that the portfolio would allow for a smooth transition of technical maintenance of the project, there is insecurity that it will do so.

Field Visits, while time consuming and taxing for international donors, were an easy way to prove project completion and functionality to regional or local donors. This was evident by the Kler Deh project where the TBC representative was Karen, could easily cross the Thai – Myanmar border, and could communicated directly with the beneficiaries. For international donors, field visits were much more logistically complicated. Additionally, depending on the donor representative, they could either be socially/culturally compatible with the local population or be unintentionally offensive due to lack of understanding of the local culture and society. For the Mae Wae School/MWW while time consuming and resource demanding, the solutions provided by the visiting donor representative to practical problems possibly expedited the implementation timeline. In this way, for this project, I would conclude that the benefits from the guidance and feedback received during those donor visits outweighed the time lost conducting them.

Overall financial reporting requirements were not a burden for SBK. We kept a much more extensive expense overview then was ever requested by a donor. What did cause SBK difficulties, for the Mae Wae School/MWW project, was the funding disbursements for administration and labor costs that had to be submitted at the end of each month. This meant that if we were in the field working for two weeks straight, and we came back on the on a date very close to the end of the month, we had to submit our invoice immediately to receive payment in a timely fashion. SBK did not have a lot of capital and could not afford a delay of funding for more than a month. This caused undue stress for SBK and could have been improved upon by receiving one or several lump sum payments.

To integrate Novel SOPs into projects was time consuming, frustrating for local staff and technicians, required extensive detailed email exchanges with suppliers, distributors, and technical support staff in many countries and between many languages. This was only applicable to the Mae Wae School/MWW project, but it drastically increased the amount of time it took to implement the project. Objectively, when the project was first brought to us, SBK did not have the capacity to implement the project to the specifications requested in the TOR. However, with the help of an external electrical engineering consultant and constant dialogue with the donor's project manager, we were forced to

increase our technical knowledge, become more familiar with new products, and forge relationships with new suppliers. When the project was completed, SBK was undoubtedly a much more technically sophisticated and experienced organization who could better handle small-medium development projects.

As already discussed in the conclusion, Procurement Requirements affected both the output and outcome of the project. Mae Wae procurement requirements affected the outputs, micro hydropower to solar power, which affected the outcomes, the whole village receiving power to only the school and workshop. Noticeably, it was the logistical and technical requirements for the Mae Wae School/MWW project that had the most impact and which elicits a larger question. Is installing a more robust, technically advanced, safer, higher-quality renewable energy system with out-of-country components that cannot be repaired by local staff and replacement parts not readily available in country, better than a less robust, less advanced, less safe, and lower quality local system that can be fixed by local staff and have replacement parts sourced in country?

I would argue that the answer is contextual. If the maintenance and logistical infrastructure surrounding the project is intact and the responsible organization is training local staff on not just how to fix but also how to order preplacement parts, then a higher quality and more robust system can be implemented with great results. It would not only increase local technical knowledge and familiarity with new products and systems, but also elevate the standards of the project itself. However, this is rarely the case and I would therefore make the argument that systems, without this surrounding maintenance and logistical infrastructure, should be designed to the level of the local knowledge and products should always be sourced as locally as possible.

The benefits of sourcing products in country, especially complex electrical machinery or computer components, are many. First, it makes economic sense since there are no international transportation costs or custom's import fees. Second, they will have staff that speaks the local language and can answer technical questions in that language. Third, the company will have technical staff that can visit the project site and either fix or replace non-functional components. Fourth, local technicians will be familiar with the products and know how to install and do minor maintenance on the products. Fifth and possibly the most important, a local person can call the company and order a replacement product. It would be extremely difficult for a Karen Burmese villager in Thailand to order replacement part for an Italian micro-hydro turbine. Therefore, it was a relief when EDF accepted SBK's proposal for a solar power system as SBK already had a network of solar component suppliers that were in country and had products that were in stock and could get technical support on. However, as with the microhydro system, EDF also had a relationship with a solar energy supplier, who were headquartered in Germany. Therefore, all major solar products had to be sourced from that supplier as mentioned in the analysis. While this was not as potentially problematic as with the Italian supplier because there was a distribution center located in Bangkok, where SBK could order products, they were routinely out of stock and could not answer technically specific questions. This necessitated the interaction with their regional service center, which was located in Singapore.

Ultimately, donor requirements are necessary to ensure the accountability of the implementing organization but need to be on a level that does not hinder the project process. This is a balancing act in which the implementing organization and the donor must negotiate during the proposal process. It was often more burdensome to be approved for funding than it was to meet the donor requirements after funding approval. This reflects the discussion from the literature review regarding the donor's power when forming funding eligibility requirements. For the Kler Deh project funded by TBC, in addition to the initial proposal and supporting documents, which is already a large undertaking coordinating three organizations, Gyaw Gyaw, KED, and SBK, a financial capacity assessment, management capacity assessment, and grant agreement obligations needed to be completed. So, while this paper focused on donor requirements after a proposal or contract had been signed, it was actually the application for funding and proposal acceptance where donor requirements were most hindering.

This paper has shown how donor requirements affected the outputs and outcomes of three projects implemented by the NGO SBK. It highlights the fact viewing a project through the lens of outputs and outcomes analysis may in fact not be the best way to understand how donor requirements affect and shape projects. This paper also underscores the fact that while many donor requirements can be burdensome to the organization or hinder project progress, they can also help create more robust systems, push an organization to develop, and support a project in a positive manner. Aside from one project, the Mae Wae School/MWW project, donor requirements did not significantly affect SBKs project outputs or outcomes. This may be due to the fact that SBK as a small NGO implementing small projects, donor requirements were more relaxed. This study found that while donor requirements did affect project processes, they were not measurable in the outputs or outcomes, with the exception of the Mae Wae School/MWW project.

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# 7. Appendixes

## 7.1. Appendix One: Donor Requirements by Project table

Donor Requirements by Project														
	Administrative				Financial		Logistical			Technical		Temporal		
Project	Narrative Status Reports	Final Narrative Report	Financial Reporting	Field Visits	Media Reporting	Earmarked Funding	Budget Adjustments	Labor	Transport	Procure ment	Pre - designed	Novel SOPs	Hard Deadline	Bench marks
Hoi Nam Yen	No	Yes	Yes	Yes	No	No	No	Yes	No	Yes	No	Yes	Yes	No
Kah Lay Hai	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No
Kle Moe Kee	Yes	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No
Kler Deh	No	Yes	Yes	Yes	No	Yes	No	No	No	Yes	No	No	Yes	No
Lay Wah	No	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No
Mae Kai	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mae Poe Kee	No	Yes	No	No	Yes	No	No	No	No	No	No	No	No	No
Mae Tari	No	No	Yes	Yes	No	Yes	No	No	No	No	No	No	No	No
Mae Wae	No	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No
Maw Kwee	No	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No
Minmahaw	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No	No	No	Yes	Yes
Nah Lay Ah Tah*	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No
Nah Lay Ah Tah	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No
Pah Loo Poe	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No

\*SBK conductd two projects in Nah Lay Ah Tah, one for a clinic and one for a school

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