



**Parahyangan Catholic University**  
**Faculty of Social and Political Sciences**  
**Department of International Relations**

*Accredited A*

*SK BAN –PT NO: 451/SK/BAN-PT/Akred/S/XI/2014*

**TERANG Project by HIVOS and Its Impact on  
Women Empowerment in Rural Sumba**

Thesis

By

Valentina Sari Kirana

2015330153

Bandung

2019



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Supervisor

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Bandung

2019

## Letter of Statement

With this letter of statement, I,

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Major : International Relations

Title : TERANG Project by HIVOS and Its Impact on Women Empowerment in Rural Sumba

Hereby state that this thesis proposal is made based on an original idea and is a result of individual research without copying or plagiarizing from any other theses in order to obtain an academic title.

Any quoted journal or opinion used in this dissertation has already been cited using the standard requirements of research.

This statement is fully made by acknowledging all the responsibilities which will be carried while also willing to take any consequences in accordance with the existing rules when mistakes are made.

Bandung, August 7<sup>th</sup>, 2019

Valentina Sari Kirana

## Abstract

Name : Valentina Sari Kirana  
NPM : 2015330153  
Title : TERANG Project by HIVOS and Its Impact on Women Empowerment in Rural Sumba

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*The issue of gender and energy—whether about access and lack of it or sources of its supply—have always been intertwined. This is more visible in rural areas, which more often than not still heavily differentiate between the roles of men and women in both the community and the household. With the progress of time, the connection between the access to sustainable renewable energy and women empowerment in developing communities are being explored in different countries and different ways, and the TERANG project by HIVOS in Sumba is one such case.*

*This research aims to see the connection between women empowerment and access to renewable energy in rural communities—specifically, how the TERANG project, in providing access to renewable energy sources and tools, has impacted gender dynamics and women empowerment in rural Sumba. Using institutional liberalism as its foundation and Margaret Skutsch's 2005 gender analytic approach model as a framework, this research analyses how TERANG impacted women in rural Sumba. It is found that access to renewable energy helped in several ways: lowering levels of drudgery in women; improving their financial independence through opportunities for solar-based business microenterprises; improving the health of local women, albeit indirectly through access to solar-based energy services; and the application of the GALS approach as a methodology in the project itself helped in raising awareness in gender imbalances in the community, which consequently shifted gender dynamics to a more equal standing between men and women, beginning at the household level.*

**Keywords:** HIVOS, renewable energy, Sumba, women empowerment, gender

## Abstrak

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NPM : 2015330153  
Judul : Proyek TERANG oleh HIVOS dan Pengaruhnya Terhadap  
*Women Empowerment* di Kawasan Rural Sumba

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Masalah gender dan energi —baik mengenai akses dan kekurangannya maupun sumber dari energi tersebut— selalu terjal. Hal ini lebih terlihat di daerah pedesaan, yang lebih kentara dalam membedakan perlakuan antara peran laki-laki dan perempuan di masyarakat dan rumah tangga. Seiring berjalannya waktu, hubungan antara akses ke energi terbarukan yang berkelanjutan dan pemberdayaan perempuan dalam pengembangan di masyarakat rural sedang diteliti di berbagai negara dan berbagai cara, dan proyek TERANG oleh HIVOS di Sumba adalah salah satu kasusnya.

Penelitian ini bertujuan untuk menganalisa hubungan antara pemberdayaan perempuan dan akses ke energi terbarukan di masyarakat pedesaan — khususnya bagaimana proyek TERANG, dalam menyediakan akses ke sumber energi terbarukan dan alat-alat, telah memengaruhi dinamika gender dan pemberdayaan perempuan di pedesaan Sumba. Dengan menggunakan liberalisme institusional sebagai landasannya dan model pendekatan analisis *gender* oleh Margaret Skutsch yang dibuat tahun 2005 sebagai kerangka kerja, penelitian ini menganalisis bagaimana TERANG berdampak pada perempuan di pedesaan Sumba. Penelitian ini menemukan bahwa akses ke energi terbarukan membantu dalam beberapa cara: menurunkan tingkat pekerjaan membosankan pada wanita; meningkatkan kemandirian finansial mereka melalui peluang untuk usaha mikro bisnis berbasis surya; meningkatkan kesehatan wanita lokal, meskipun secara tidak langsung melalui akses ke layanan energi berbasis matahari; dan penerapan pendekatan GALS sebagai metodologi dalam proyek itu sendiri membantu dalam meningkatkan kesadaran akan ketidakseimbangan gender di masyarakat, yang akibatnya mengubah dinamika gender ke posisi yang lebih setara antara laki-laki dan perempuan, dimulai dari tingkat rumah tangga.

**Kata Kunci:** HIVOS, energi terbarukan, Sumba, pemberdayaan perempuan, *gender*

## Preface

As a requirement to graduating and obtaining a Bachelor Degree in International Relations in the year of 2019, the author is obligated to produce a thesis as final assignment, and so proudly presents “**TERANG Project by HIVOS and Its Impact on Women Empowerment in Rural Sumba**” as the title of that very thesis.

This research aims to examine HIVOS’ TERANG project under the Sumba Iconic Island Initiative, and more specifically, how the TERANG project itself has impacted women empowerment efforts in Sumba’s rural communities. In doing so, this thesis will expound further on the connection between access to sustainable energy in development and gender, especially in rural areas.

This thesis would likely not have gotten to the point of completion without the extensive and patient guidance of the author’s thesis advisor, **Dr. Sylvia Yazid**, who helped ensure the timely completion of this thesis. Even so, as perfection is unattainable and the notion of flawlessness in an undergraduate thesis is not feasible to say the least, the author welcomes further assessments and recommendations in order to improve this research.

Bandung, August 7<sup>th</sup>, 2019

## Acknowledgements

This thesis would not have gotten to this final point without the help of many people, directly or otherwise. Therefore, the author would like to thank:

1. Mba Syl, the thesis advisor who took the time to guide me through this thesis even with a busy schedule week after week, often during the early hours between 8 and 10 A.M, who let me sit in her office when I needed a quiet place to panic. You were absolutely right, Mba. Thank you.

2. Mas Mangadar, whose perhaps off-hand words, “don’t worry so much; it doesn’t have to be a masterpiece” kept my friends and I from collectively spiraling into an unproductive perfectionist rut for too long.

3. Mum, for her support, her connections, and her willingness to lend an ear (and a hand). Especially the connections, without which this thesis would have taken far longer than I intended it to. Also to Dad, for his support, for giving just the right amount of push. And of course, kisses and thanks to my siblings, Kak Ester and Mas Agil, for being there even through phone calls and chats, for the virtual hugs and the distractions at just the right time.

4. My high school sweethearts Dea, Lisa, and Dhisa, whose support surpassed even the distance of two islands and four different cities.

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6. Myself, for actually finishing this on time. Good job, me.

7. Bu Maya and Bu Rita from HIVOS, who were *so* helpful in answering questions about the SII project. Warmest of thanks to *Tante* Intan Darmawati, the GALS expert who patiently took the time to explain to me the learning system so that I could understand it enough to confidently write about it in this research.

8. God. He knows what He did.

Bandung, August 7<sup>th</sup>, 2019

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## List of Abbreviations and Acronyms

<b>APBD</b>	<i>Anggaran Pendapatan dan Belanja Daerah</i>
<b>Bappeda</b>	<i>Badan Perencanaan Pembangunan Daerah</i> (Regional Planning and Development Board)
<b>BIRU/IDBP</b>	<i>Biogas Rumah/ Indonesia Domestic Biogas Programme</i>
<b>BPS</b>	<i>Badan Pusat Statistik</i>
<b>GALS</b>	Gender Action Learning System
<b>HDI</b>	Human Development Index
<b>HIVOS</b>	<i>Humanistisch Instituut voor Ontwikkelingssamenwerking</i> (Dutch: International Humanist Institute for Cooperation with Developing Countries)
<b>IO</b>	International Organization
<b>MCA-I</b>	Millenium Challenge Account – Indonesia
<b>NGO</b>	Non-Governmental Organization
<b>PLN</b>	<i>Perusahaan Listrik Negara</i> (Bahasa: State Electricity Company)
<b>PV</b>	Photovoltaic
<b>RE</b>	Renewable Energy
<b>RESCO</b>	Renewable Energy Service Company
<b>SEHEN</b>	<i>Super Ekstra Hemat Energi</i>
<b>SII</b>	Sumba Iconic Island
<b>SNV</b>	<i>Stichting Nederlandse Vrijwilligers</i> (Dutch: Foundation of Netherlands Volunteers)
<b>TERANG</b>	the Investing in Renewable Energy for Rural, Remote Communities

# CHAPTER I:

## INTRODUCTION

### 1.1. Research Background

The face of gender exists in every aspect of life, whether or not one realizes it. How women's positions are considered in society affects how they are treated in economic, social, and educational aspects, and even their roles in society differ. From Indonesia to the US, Sweden to Nigeria, this is a human issue visible in any country, any nation in the world, transcending national borders, languages, and governments. Gender dynamics affect everything, from income to welfare to who raises the children in the household.

The needs of women and men in various communities differ due to the roles thrust upon them in their societies. Of course no matter what gender and role, human rights is a basic standard which must be afforded to everyone—equity, one could say, is the name of the proverbial game. Unfortunately, the simple fact that women both exist as the equals of and deserve as much consideration as men is regularly denied in various ways. In many places, many of which are rural (though certainly not all, as misogyny runs rampant still in large cities), women are seen as the subordinate 'class', to the extent that much of society holds the false belief that women are, by nature, less intellectually and physically capable than men, leading to discrimination against women in the academy, the forum, and the town hall (Tong 2014).

They are not given voice when and where they should be; their opinions and voices considered to hold less weight than men because they are women. This is visible in fields such as education and economics, and is particularly relevant for this thesis, energy.

When one considers the issue of energy – that is, clean green renewable energy, access to it, and distribution of that energy— it is not uncommon for even experts to assume that it is a gender-neutral issue. After all, the usage of energy is not limited to one gender class alone. Yet even the matter of energy is gendered. In many parts of the world, overall socio-economic development is limited by the lack of availability of modern energy services. This lack of access to energy services is known as “energy poverty”, (UNDP 2004) a condition that often has disproportionate effects on women and girls especially in developing countries and rural areas, in large part due to the traditional roles they are bound to, household responsibilities, and low social and political status (UNDP 2004).

Taking these considerations into account, it should (and does) make perfect sense to include gender as an integral part of the energy issue, especially when planning, implementing, and evaluating renewable energy programs. Without that consideration, a program cannot reach its full potential as up to half the people who could have benefited from it have their particular needs ignored. One such program is in the works courtesy of HIVOS Southeast Asia (a SEA branch of HIVOS, which is a development aid NGO headquartered in the Netherlands) in Indonesia; specifically, in Sumba Island.

## 1.2. Problem Identification

HIVOS is an international non-governmental organization which prides itself in providing aid for development of A large part of the focus on gender in renewable energy is on addressing gender efforts at the household and community levels; this is done through attempts of improving women's access to renewable energy for cooking, lighting, and enhancing women's economic benefits and opportunities for entrepreneurship (Nelson and Kuriakose 2017). Sumba as a region is a beneficiary to the Sumba Iconic Island (SII) Initiative, and subsequently The Investing in Renewable Energy for Rural, Remote Communities (TERANG) project, started by HIVOS SEA. This is partially due to Sumba being counted as one of the most remote and disadvantaged islands of the Indonesian archipelago, despite its geographical proximity to Java. Population-wise, Sumba's four districts—*Sumba Timur* (East Sumba), *Sumba Tengah* (Central Sumba), *Sumba Barat* (West Sumba), and *Sumba Barat Daya* (Southwest Sumba)—are home to almost 750,000 people, with *Sumba Timur* as both its largest and most sparsely populated district, housing 227,835 people in an area of 7,000 km<sup>2</sup>—33 people per square kilometer (HIVOS 2017:32). In contrast, *Sumba Barat Daya* is home to 283,818 people living in just 1,447 km<sup>2</sup> (HIVOS 2017:32). Sumba is one of the more disadvantaged parts of Indonesia's provinces. The 2014 HDI score for Nusa Tenggara Timur placed the province 31st out of 34 provinces, and all Sumba districts received scores below the provincial average (HIVOS 2017:37).

Lack of access to electricity has long been an issue in Sumba; with an already sparse population scattered all across the island, it has been both difficult and expensive for the national government to install a properly functioning and robust electrical grid. A kilometer of electrical extension alone costs 300 million Rupiahs (Jakarta Globe 2015), and the spread of villages and residences seen in rural Sumba means that due to the lack of access to electricity, most of lighting in households depended on kerosene lamps, which are both expensive and as it is largely the cause of acute respiratory infections in Sumba (HIVOS 2016). In the face of little to no electricity, Sumbanese people who live in rural areas had few choices besides relying on the costly and health-damaging fuel, which does no favours in their development.

In addition to the challenges they face due to lack of access to proper electrification, gender-wise, women's roles in Sumba's rural communities are imbalanced in comparison to men's in terms of power, capacity, and decision-making. Their roles are greatly defined by marriage, reproduction and domestic work – since Sumba culture follows patrilineal lines, women do not inherit or own land except as dowry, and for them, ownership of land, business, or assets, emerge through marriage (HIVOS 2017:38). Women are revered as carriers of a family's bloodline, but at the same time often still treated as little more than means to an end to secure alliances.

The SII Initiative, which began in 2012 and is set to end at 2025, aims to “provide access to reliable and 100 percent renewable forms of energy for the 750,000 inhabitants of Sumba Island, ending their dependency on fossil

fuels and supporting gender-balanced development and economic activities of the people” (HIVOS Southeast Asia n.d.). TERANG itself began in March 2015 and was set to end in December 2018. It’s noted that SII’s aim explicitly mentions gender-balanced development, meaning that ideally, they have taken into account gender-sensitive aspects in the program, and have anticipated the effects the program will have on gender dynamics and efforts of women empowerment in the parts of Sumba’s rural communities where the program would be implemented. Seeing as TERANG is a project under SII, gender-balanced development would also be included in its aim. This brings us to the research question for the (currently proposed) thesis: **How does HIVOS SEA’s TERANG project impact women empowerment in rural communities in Sumba Island?**

### **1.3. Research Focus**

Considering the wide range of possibilities of what could be studied in the subject of gender and renewable energy, the scope of this research will be limited to focus on the solar energy and areas connected to it within HIVOS’ TERANG project. TERANG itself in the side of SII revolves around solar energy and aspects of the project relevant to it, such as agro-processing mills and solar lamp businesses. Solar-based energy is also the renewable energy-source type with the biggest potential in Sumba (Direktorat Jenderal EBTKE 2017). The timeline set for the research will be for the years between 2015 and 2018. This is due to the fact that those three years span the length of the TERANG project itself.

## **1.4. The Aim and Contribution of the Research**

### **1.4.1. The Aim of the Research**

The background and issue identification has been discussed in the above pages. Thus without further ado, this research aims to find how HIVOS SEA's TERANG project has impacted women empowerment effort in Sumba's rural communities.

### **1.4.2. The Contribution of the research**

The author hopes that this research will contribute in providing more knowledge for the readers interested in the topics of renewable energy and its relation to gender. The author also hopes that this research will pass muster as a final undergraduate project, and provide an insight into the issue of renewable energy access and its necessity to rural communities, and in this case, rural Sumba.

## **1.5. Literature Review**

The topic of gender and renewable energy is no longer as uncommon as it once was; there have been several other researches into links between renewable energy and women empowerment in rural areas. Wenguang Ding's research in 2014 looked into how access to renewable energy impacted women in rural areas of north-west China, and concludes that in addition to the women benefiting in terms of health, access to renewable energy was also economically profitable, as it results in less time needed to gather firewood



(the previous energy source) and more time for other productive activities (Ding, et al. 2014). Over a decade before that in another continent, Wendy Annecke in 2003 had researched the nuances of gender and renewable energy in South Africa, especially in how different men and women's ease of access to energy was (Annecke 2003). Achudume, not long after, had delved into the environmental health, development, and economic empowerment of rural women in Nigeria (Achudume 2009). While Achudume's work in this particular case was more focused on the health of the rural community and environmental health, it did also touch on solar power and women empowerment, as it is focused more on how women in rural areas have a larger role than previously expected in the emission of greenhouse gases.

In research, topics of renewable energy development in itself has also drawn some interest within the past years. In 2010, Qiang Wang had published their research on effective recommended policies for China's solar power industry, drawing inspirations of possible improvements from China's other renewable energy industry – wind power (Wang 2010). More recently, Siddharth Sareen and Sunila Kale published their research on Socio-political dynamics of infrastructural development in two Western Indian states, Rajasthan and Gujarat; this research was focused on the development of the solar power industry within the two states, comparing their development within the same timeframe (Sareen and Kale 2018).

Unfortunately, it seems there has yet to be any preceding research that specifically delves into gender empowerment, Indonesia, *and* renewable energy in one research paper. However, there is a preceding thesis written by

Raden Hasbi Rasyidi in 2015 as his final undergraduate thesis which does explore topics of both Sumba and renewable energy (Rasyidi 2015). However, Rasyidi's paper does not make any mention of the human security aspect of women empowerment in Sumba and is instead more focused on HIVOS as a non-governmental organization. This research aims to fill in the gap and explicitly focus on the aspect of women empowerment and how it connects to access to renewable energy in Sumba.

### **1.6. Theoretical Framework**

The main theory which will serve as the basis of this research will be the international relations theory of institutional liberalism, a theory developed by Robert Keohane and his colleagues in the 1980s as a response of sorts to the regime theory, which he deemed too limiting for his conditions (Viotti and Kauppi 2012, 147). In institutional liberalism, Keohane developed a broader concept of 'institutions' which he defined as, "persistent and connected sets of rules (formal and informal) that prescribe behavioral roles, constrain activity, and shape expectations" (*ibid*). Following this definition, Keohane further differentiates international organizations into three forms: (i) Formal Inter-governmental or Cross-national, Non-governmental Organizations; (ii) International Regimes; and (iii) Conventions (*Ibid*). For the purposes of this research, the main focus will be on the first form, since HIVOS qualifies and identifies as an international non-governmental organization (INGO).

One of the higher ‘selling points’ of institutional liberalism is the assumption that international institutions do have significance in the international system, in spite of the neorealist criticisms of international organizations being at the mercy of strong states (Jackson and Sørensen 2013). On the contrary, institutional liberalism maintains that institutions do what states could not do by themselves (Viotti and Kauppi 2012), which is essentially to garner some measure of trust between states and provide guidelines, if not international laws and treaties, to which states could hold themselves accountable to. NGOs are especially capable and often relatively eager to provide aid in the form of technological assistance, advocacy and knowledge in order to fill their mandate, their purpose and mission. In the case of HIVOS and the TERANG project, a NGO worked with several other IOs and created opportunities and lent aid where the local government – Sumba’s, and by extension, Indonesia’s—had yet to succeed in providing. In the process of the program’s implementation, both government and organization benefit; the Indonesian government partnered in the program and is able to provide for its citizens more adequately, while HIVOS fulfils further one of their focus area, which is women’s empowerment.

The term ‘women empowerment’ is often thrown around when one speaks on the topic of gender, and feminism. But the concept itself could sometimes be considered quite vague, as the range it encompasses is broad and it is more difficult to measure than gender equality. When put simply, women empowerment is “the process of upliftment of economic, social and political status of women [...] (Dandona 2015, 36)”. This means an effort, or

a movement, to give women and girls a chance to hold control over their own lives, to let them have the safety and rights often denied from them simply due to their gender, to the gender roles they were thrust into. This means that women empowerment is also women working towards and having a platform in which they could finally voice out their needs and concerns and be heard instead of dismissed for something lesser, or outright ignored. In other words, “empowerment can be seen both as a means to reach equality and a result of achievement of equality; it is a process as well as a state.” (Skutsch 2005, 39) Gender dynamics in many urban areas are still skewed in favour of the patriarchal system, and often even more so in rural communities. Sumba, in this case, is no exception.

The concept of energy, and subsequently energy poverty, is also necessary to discuss in this research. In the current era, the matter of energy is not one to be taken lightly— access to it, the resources that produce it, and even distribution of it are all aspects of a single issue which affect billions every day. Energy is vital to any nation’s welfare, and a state that still housed communities where electricity is lacking or near-nonexistent cannot in good conscience call itself ‘developed’. A lack of access to modern energy resources could negatively affect the economy and development of any part of society regardless of where it is (Habtezion 2013, 6). This lack of access to energy is part of poverty, meaning ‘a lack of what is necessary for material well-being’ – that is to say, energy poverty (*Ibid*, 7). Electricity in some rural areas are treasured commodities too expensive or just plainly inaccessible to many groups: the rural communities in Sumba are one such community. Lack

of access to electricity, to *energy* in general, contributes to the state of poverty, which contributes to lower levels of economic capability.

While the theory of institutional liberalism does explain HIVOS' presence in Sumba, it does little to help in proving that it proves effective, if that it does at all, in impacting gender dynamics or women empowerment in its quest to provide reliable access to renewable energy and facing energy poverty. Therefore, in addition to institutional neoliberalism, Margaret Skutsch's 2005 gender-analytic approach model will also be used as a framework for this research to ensure that the project in question fulfils its goals to apply gender sensitivity beginning from the planning stage. Skutsch's model was developed as a response after it is found that many framework models used in energy-planning projects are seen as lacking in different areas. The model is a framework which could be used for the first stages in the energy project planning cycle, and essentially covers problem formulation and appraisal (Skutsch 2005, 47), and fits this proposed research since it assumes that at least the outlines of a project is already a known variable.

**Framework for mainstreaming gender questions into first phase of energy project plan**

<b>Identifying stakeholders and gender goals</b>
Who are the stakeholder groups to be consulted? This should include different groups (men/women) within the community but also agencies to be involved in the project
Are the proposed supporting agencies sufficiently gender-sensitive to respond to gender needs in a positive way?
What obstacles might impede the participation of certain stakeholders (particularly women)?
What are the gender goals of the stakeholders and what consensus on goals can be established?
What indicators can be used to measure achievement of gender goals?
<b>Genderised context definition</b>
What services can the proposed energy interventions provide: - To substitute new energy services for energy forms already used for particular activities/end-uses

- To make possible new activities/end-uses
Who is principally involved (or is likely to be involved) in these activities/end-uses (men/women) and can be considered the main user of the energy for these activities? ( <i>access</i> )
Who (men/women) is responsible for the current energy supply for these activities? ( <i>control</i> ): - For provision of the basic energy technology utilised - For provision of the fuel - For purchase of appliances and related equipment - For maintenance of the energy system/service
What priority is accorded to the changes in energy service, compared to other investment and spending priorities, by men/women?
<b>Gender appraisal of (proposed) energy services</b>
Who (men/women) are envisaged as the primary users of the energy service?
Who (men/women) have control over the key resources (financial, but possibly others) that are necessary to access and use the energy services to be provided?
Who (men/women) will make the decision to adopt this energy service?
Who (men/women) will be expected to pay for any related equipment or appliances?
Do they have the financial means to do this?
Who (men/women) will be involved in maintenance of the energy systems/services?
Who (men/women) will be involved in overall management of the energy service delivery?
How far does the proposed energy intervention appear likely to succeed in achieving the gender goals, as measured by the indicators already identified?

*Framework for mainstreaming gender questions into first phase of energy project plan*  
(Source: Skutsch, 2005)

Skutsch's model consists of three stages, or three sets of questions. The first stage are questions related to the identification of the stakeholders and gender goals of the project in which the stakeholders would include different groups within the host community of the project, as well as the promoting, implementing and supporting agencies involved (Skutsch 2005, 47). Gender goals in this case refers what broad kinds of impacts should the project or program aims to have on women (*Ibid*, 39), prioritizing the women's needs since theirs are still often neglected in this area. The second set of questions aim to better understand the gender facets of how energy is used and produced in the area, in order to predict more accurately how the energy services

provided by the project would affect it (*Ibid*, 48). This stage is crucial in determining if and where women's needs are ignored, in case men are in charge of most, if not all of, energy-related decisions. The third stage of the model addresses the likely conditions attending the proposed new energy services (*Ibid*, 49), meaning that unlike the first two stages it is more predictive in nature. In other words, this stage predicts who will be in charge of the relevant aspects of the proposed energy service/project. In the case of this research, since the project in question has actually reached evaluation stage instead of still in its planning stage, the third stage would be based on existing data, modifying the questions slightly towards the present and recent past instead of the projected future. It should also be noted that many of these questions are initially suited for field work; as this research will be based on reports instead of field research, the questions will be modified accordingly.

### **1.7. Research Method and Data Collection Technique**

This research aims to explore the impacts of access to renewable energy to Sumba's rural communities, with a focus on the women of the community. As such, the most fitting approach to use in this research is the qualitative research method. The nature of the qualitative approach is one which best explores the nuances and complexities of human and social problems (Creswell 2013, 206), one of which is the issue of gender, and women empowerment.

In terms of data gathering in order to analyse and answer the research question, data collection is conducted through desk study of relevant reports,

journals and other reading materials in order to gather the necessary primary and secondary data. In addition to desk study, a phone call-based interview with two key staff members involved in the HIVOS SII Initiative as a whole, and a separate phone call-based interview as with GALS expert was also conducted.

### **1.8. Thesis Structure**

The contents of this research will be divided into five main chapters. **Chapter I** contains introductions to the topic of research, including background, problem identification and scope, the aims and contributions of the research, as well as literature reviews and the theoretical frameworks to be used in the next chapters.

Next, **Chapter II** further explores Sumba's culture and the gender dynamics within it, and provide further insight on the daily challenges Sumbanese in rural communities must face with their lack of electricity, especially by the women, and examine the nature and relationship of energy poverty and unequal gender dynamics in Sumba.

**Chapter III** focuses on discussing HIVOS as a non-government organization working in the fields of renewable energy and women empowerment and their involvement in Indonesia. This chapter will also discuss the Sumba Iconic Island Initiative as an overarching programme above TERANG and how it came to Sumba.

**Chapter IV** examines the details of TERANG as a project: the approach used, as well as the actors and beneficiaries involved. This chapter



contains research results and discussions of the impact of TERANG on women and women empowerment. This is where the research aims to fully answer the research question through data analysis from data collected and organized within the previous chapters.

To conclude, **Chapter V** will contain conclusions and possible recommendations on the future of gender-sensitive renewable energy development in rural areas.