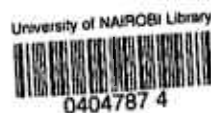


**THE IMPACT OF NGO DEVELOPMENT PROJECTS ON THE
LIVELIHOODS OF THE LOCAL COMMUNITY IN HARGEISA, NORTH-
WESTERN SOMALIA: A CASE OF THE ADVENTIST DEVELOPMENT
AND RELIEF AGENCY (ADRA)**

By

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THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS
IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI**




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DECLARATION

This research report is my original work and has not been presented for a degree in any other University.

Sign: 

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This research report has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This research study is dedicated to my family for their support through the years. My special dedication goes to my dear mother Rebecca Mumbua Kithyoma, who has encouraged me throughout my life and this project. May God bless you all immensely.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADRA: Adventist Development Relief Agency

DFID: Department for International Development

GAVO: General Assistance and Volunteer Organization

HIV/AIDS: Human Immuno-deficient Virus/Acquired Immune Deficiency Syndrome

ICG: International Crisis Group

MDG: Millennium Development Goals

NGO: Non Governmental Organisations

PV: Photovoltaic

SACB: Somalia Aid Coordination Body

SCPD: Somaliland Centre for Peace and Development

UNDP: United Nations Development Programme

UNDP: United Nations Development Programme

UNEP: United Nations Environment Programme

UN-OCHA: United Nations Office for the Coordination of Humanitarian Affairs

UK: United Kingdom

US\$: United States Dollar

USAID: United States Agency for International Development

US-GOA: United States Government Accountability Office

WSP: War-torn Societies Project

ABSTRACT

This research study was undertaken to assess the impact of ADRA's development projects on the livelihoods of the local communities in Hargeisa, a town in north-western Somalia. The study was guided by three objectives. The first objective was to review the performance and impact of training on the installation of solar electricity systems provided to local technicians in Hargeisa, Somaliland. The second objective was to evaluate the results and impacts of seed financing provided for local cookstove producers in Hargeisa, Somaliland. The third and final objective was to assess and document the expected and unexpected impacts of installation of solar electricity systems in schools, health centres and water points in Hargeisa, Somaliland. The study reviewed a sample of the ADRA's projects implemented over five years (2005-2010) based on a review of secondary literature and interview schedule administered to project beneficiaries. This study is important for the local communities in the north-western Somalia region of Somaliland, who are the intended beneficiaries of the development initiatives. The study is also important to ADRA and other local and international NGOs involved in the implementation of the projects in post conflict countries, and specifically in Somalia, as it will measure the results of their efforts. The findings of this study indicate that ADRA's projects in north-western Somaliland have recorded overall positive results and impacts on the livelihoods of beneficiaries. Skills have been positively improved, and incomes of local communities have also been improved. However, employment opportunities have not changed significantly as a result of ADRA's interventions. This means that majority of those who are in production continue to operate at the same scale, and have not been able to grow to a scale where they can expand and employ additional people. The most successful intervention by ADRA in terms of impact on livelihoods is the seed-financing for cookstove producers, which led to 100% positive impacts for local communities involved. The installation of electricity in schools, health centres and water points was the second most important intervention, as it achieved all its expected impacts and will continue to impact communities for a long time to come. As a result of the findings of this study, the following recommendations that could assist ADRA in designing future projects and ensuring that they have maximum positive benefits are proposed. A detailed pre-training skills analysis must be undertaken, to ensure that those who are selected for training will benefit from the training in terms of learning new skills. Communities should be mobilized to contribute in cash and kind, where possible, towards meeting the cost of solar electricity systems to ensure ownership in the long-term. The donation of these systems with no contribution from the community was likely to lead to dependency and uncommitted ownership. In order to ensure maximum impact of interventions in schools and health centres, ADRA could consider holistic support by not only providing the lighting system, but also supporting other needs of the schools and health centres. This can be done by forging partnerships between ADRA's various programmes and other donor and implementing organisations.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

For a long time, the global society has been grappling with the issue of improving livelihoods for the majority of the world's population who live in abject poverty. According to the World Bank (2005), Africa has the highest number of poor people, and the number is said to be growing with growth in population. It is for this reason that initiatives such as the Millennium Development Goals (MDG) were initiated, as a response from the global community to the growing levels of poverty and low levels of livelihoods.

The situation of poverty is more pronounced in the many African countries that have suffered armed conflict and are struggling to rebuild their nations. Estimates indicate that over half of the countries in Africa have faced armed conflict or civil wars (DFID, 2006). One of the longest conflicts witnessed in Africa is arguably the Somalia conflict, where the armed groups and insurgents are currently active in the south and central parts of the country. The conflict in Somalia is unique in the sense that it has led to the fragmentation of Somalia into three distinct and independent regions: Somaliland, Somalia and Puntland (See Appendix 3). After the fall of Siad Barre in 1991, the north-western part of Somalia ceded from Somalia and formed an independent state of Somaliland. The southern and central regions form Somalia – which receives the bulk of media attention and is currently unstable. Puntland is the third region, a state in the north eastern region of Somalia, which declared independence from Somalia in the mid nineties (SCPD, 1999).

The north-western region of Somalia, more popularly known as Somaliland, is not recognized as a state internationally (Shinn, 2002). However, the region has made significant strides in rebuilding itself after the conflict which completely destroyed infrastructure, systems and all sources of livelihoods (World Bank, 2006). Reliant mainly on remittances from Somalilanders living in the Diaspora, the country has made significant steps towards developing infrastructure, systems and giving the people of Somaliland opportunities to improve their livelihoods (Bryden, 2003). Since Somaliland is not recognized internationally, it has to rely on local and international

donor organizations' support for relief and development work. Over the past 19 years of its existence, Somaliland has witnessed a myriad of projects implemented all over the country by international and local Non Governmental Organisations. The bulk of the projects implemented by local and international NGOs have focused on development assistance and livelihoods, which is the focus of this research study.

The Adventist Development Relief Agency (ADRA) is an international NGO that has been operating in Somalia since 1992 implementing emergency relief and development interventions in different sectors. ADRA has implemented over 50 projects funded by different donors in 8 sectors namely: water; primary health care; education; food security; energy; institutional capacity building; micro-enterprise development and emergency response (ADRA, 2010). The projects have been implemented in various regions of Somalia, with more recent focus on the north-western region of Somaliland because of the growing peace and stability in the region. North-western Somalia (also referred to as Somaliland) has experienced a period of relative stability in the last nineteen years, with a relatively functional government and institutional framework. This is not the case in south and central Somalia, where rebel groups and insurgents have been engaging government backed troops in armed conflict for the past three years.

1.1 Statement of the Problem

Donor organizations have implemented a number of projects in various parts of Somalia, with mixed results. The majority of the projects implemented have targeted emergency relief services due to the prolonged conflict in the country. In a growing number of cases, donor organizations have implemented successful projects that have had significant impact on the livelihoods of local communities. One of the most prominent projects in Somalia has been emergency food relief. Donors have funded food aid more than for any other individual sector in Somalia. According to UN data, the international community, including the United States, provided at least \$1 billion in humanitarian assistance to Somalia from 2001 to 2007 (UN, 2005).

This assistance had significant impact in reaching the people of Somalia. The relative success of this project is a key driver for NGOs like ADRA to assess the impact of their activities.

This study reviewed the impact of ADRA's development projects on the livelihoods of communities in Hargeisa, a town in the North-western Somalia region of Somaliland. Poverty levels in Somaliland are a major challenge to the fragile Government, and it was important to assess the extent to which the projects implemented in the country have impacted the livelihoods of the people of Somaliland. In addition, ADRA's mission and vision encompasses improving the livelihoods of the people of Somalia by building their capacity to undertake self sustaining projects. In order for ADRA to understand progress made towards its mission and vision, an evaluation of the impact of ADRA's projects was required. The problem statement was that a comprehensive assessment of the impact of ADRA's development projects in on the livelihood of the local community in Hargeisa, north-western Somalia had not been undertaken. Therefore the government, donors, ADRA and international NGOs worked with incomplete knowledge of the impact of their actions on the lives of the local people. The findings of this study are instrumental in shaping ADRA's future development work.

1.2 Purpose of the Study

The purpose of this study was to investigate and record the impact of ADRA's development projects on the livelihoods of the local people in Somaliland, and to document the results for future development projects.

1.3 Objectives of the Study

The study was guided by the following objectives:

- i. To review the performance and impact of training on the installation of solar electricity systems provided to local technicians in Hargeisa, Somaliland.
- ii. To evaluate the results and impacts of seed-financing provided for local cookstove producers in Hargeisa, Somaliland.
- iii. To assess and document the expected and un-expected impacts of installation of solar electricity systems in schools, health centers and water points in Hargeisa, Somaliland.

1.4 Research Questions

The research questions were:

- i. What is the performance and impact of the training on the installation of solar electricity systems for local technicians provided by ADRA in Hargeisa, Somaliland?
- ii. What results and impacts have been attained by the local stove producers in Hargeisa, Somaliland as a result of the seed-financing provided by ADRA?
- iii. What are the expected and un-expected impacts of installation of solar electricity systems in schools, health centers and water points in Hargeisa, Somaliland?

1.5 Significance of the Study

It is important to assess whether ADRA's development projects are achieving their intended impact on local post-conflict communities for various reasons. The study is most important for the post-conflict communities in Hargeisa, north-western Somalia, who are the intended beneficiaries of the development initiatives.

The findings of the study are important to ADRA and other local and international NGOs involved in the implementation of the projects in post conflict countries, and specifically in Somalia, as it will measure the results of their efforts. Donors who fund development initiatives in Somalia and other post-conflict countries would also benefit from this study. They will gain useful findings on the nature and magnitude of impacts which they (donors) can utilize for evaluation of their assistance to post-conflict countries. The study is very important for the Government of Somaliland to gauge the extent to which progress has been made in developing the people of Somaliland.

Lastly, the study is significant because it is a useful addition to the scanty literature available on the impact of development projects in Somaliland.

1.6 Scope of the Study

The scope of this study was limited to ADRA's development projects in Hargeisa, north-western Somalia. This was due to the limited time frame and resources available for undertaking the

study. The findings of this study, therefore, are applicable to ADRA's development work in north-western Somalia. The aim of the study was to assess the impact of ADRA's development work from the view point of beneficiaries, and not from the viewpoint of ADRA Somalia.

1.7 Limitations of the Study

The major challenge to the study was the security situation in the greater Somalia. Although the north-western region of Somalia has recorded relative stability over the past 19 years, the possibility of influx of rebels from the south and central parts of Somalia was a possible threat to security. The researcher vigilantly monitored security in the region through regular briefings provided by the international NGO consortium. Based on security advisories during the presidential elections in June 2010, data collection was postponed, leading to some delays in finalizing the study.

A second challenge in the implementation of this study was the limited amount of published data available on development projects in north-western Somalia. Every effort was made to access available literature and collect primary data where possible. In addition, relevant studies on development projects in other post conflict countries in Africa were reviewed with a view to drawing relevant parallels with Somaliland.

The third challenge was the limited time and financial resources available for undertaking the study. The researcher efficiently utilized the time and resources available, and limited the scope to the area of study identified.

1.8 Delimitations of the Study

Due to the large number of potential participants in the target population, the sample population was drawn from beneficiaries of ADRA's projects located in the town of Hargeisa, Somaliland. The survey instrument was administered to beneficiaries of ADRA's projects only, and not to beneficiaries of other development projects.

1.9 Assumptions of the Study

The study assumed that the sample selected was a representation of the entire population. The study further assumed that development projects implemented in Somaliland by ADRA were implemented with the objective of having a positive impact on the livelihoods of communities in the region. This assumption is based on the priorities of ADRA and its donor organizations, which emphasize on initiatives geared towards improving the standards of living of the beneficiaries.

1.10 Definitions of Significant Terms

Development projects: This refers to any time-bound initiative that has been implemented with a view to improving the social and economic conditions of people, either by providing income generation opportunities or by providing access to social services necessary for improved living conditions.

Livelihood: This is a broad term which in the context of this study refers to the general social and economic well being of people. It refers to the nature of income, health, water education and other social services that are available to an individual and to a community.

Post conflict communities: This refers to communities that are rebuilding themselves after a civil war, and have settled in specific areas and share common resources and problems. In this proposal, the post-conflict community refers to the north-western region of Somalia, also referred to as Somaliland.

Impact: The term refers to positive and/or negative effects of projects measured some time after the completion of a project. Impact in this study will be measured using parameters such as income, health, environmental friendliness, and opportunities for gainful employment, among others.

Seed Financing: Where mentioned in this study, seed financing should be taken to refer to grants provided for the purchase of materials for the production of stoves. The grants were provided to revive cookstove production, based on production plans.

Solar Electricity Systems: Solar systems refer to a renewable energy technology which uses the sun's rays to generate electricity in a clean and economic way. Solar electricity systems referred to in this study comprise of solar panels, batteries, inverters, charge controllers and accessories such as wiring, bulbs and sockets, which are necessary for the utilization of solar energy to meet electricity needs.

Community projects: These refer to projects which are implemented with the intention of benefiting a group of people residing in a particular area with a common need. Examples of community projects in this study are schools, health centres and water points, which benefit a large number of people in a specific location.

Cookstove: The term cookstove as used in this study refers to an efficient cooking device, which uses charcoal as a fuel, and is manufactured using locally available materials. The cookstove comprises of an outer metal cladding; a ceramic liner which decreases loss of heat and therefore increases fuel efficiency; three iron pot rests and a metallic door.

Local technicians: Any person trained as an electrician is referred to as a local technician in the scope of this study.

Donor: Organisations which support development and humanitarian projects in Somaliland and other countries, by providing funds for these projects are referred to as donors in this project.

Implementing Organization: Implementing organizations is used to refer to institutions which do not fund projects but actually implement and undertake development or humanitarian work, with the support of funds from donor organizations. In some cases, donor organizations are also implementing organizations in this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Somalia has faced several conflicts for a long time (Africa Watch, 1990). As such, the bulk of publications on Somalia delve into the conflict and its effects. There exist a limited number of reports published on north-western Somalia's region of Somaliland, mainly on the conflict and the emergence of the nation from the conflict. This chapter reviews published literature that is relevant to study. The chapter is divided into sections that include the key characteristics of Somaliland, ADRA's Development projects in Somaliland, Development challenges of post-conflict communities, and the results and impacts of NGO development projects on post-conflict communities.

2.2 Somaliland – Key Characteristics

WSP (2001) provides perhaps the most comprehensive review of the historical development of Somaliland. In their publication they put together essays that provide a unique and insightful account of Somaliland's post-1991 reconstruction process from the perspective of Somalilanders themselves. The findings in the study are based on research work spanning three years from 1999 to 2002. Somaliland faces many challenges in its ongoing reconstruction process. The high level of poverty and hopelessness that grips the communities across Somalia as a result of the prolonged civil war is one of the major challenges highlighted.

Somaliland has not yet received international recognition and the rebuilding of Somaliland happened without assistance from the World Bank and the International Monetary Fund (Jhazbhay, 2003). The bulk of economic development has been supported largely by Somalilanders in the Diaspora.

In '*A Self-portrait of Somaliland*' the Somaliland Centre for Peace and Development (SCPD) provides a snapshot of Somaliland nine years after the rebuilding process began, from the perspective of Somalilanders. Somaliland has undertaken a number of political, social and economic rebuilding. This has seen the establishment of a fairly functional but weak institutional

structure, access to basic social amenities and a slowly growing economic sector comprising largely of small businesses. Somalilanders in the Diaspora have played a major role in the rebuilding process. International NGOs have also contributed, though donor programmes are largely sporadic, uncoordinated and often display rivalry between major donor agencies. The duration of donor programmes is also mentioned as a stumbling block to development. Short durations of 6months to 1year for development projects are not sufficient for impact and sustainability (SCPD, 1999; Bryden, 2005).

The main political challenge facing Somaliland is clan based politics which often causes instability in Government. Other problems facing Somaliland include poverty and unemployment that are the constant focus of central government (Collier, 2003).

Updated and reliable data on Somalia is difficult to come by, largely due to the lack of a functional system for data collection and safekeeping. UNEP (2005) reports that the last official census of Somalia in 1975 revealed that Somalia had a population of 3.2 million. This number was estimated to have grown to 9.5 million by 2002 (UN, 2002). The country is sparsely populated with an average population density of about 15 people per square kilometre (*ibid*).

Somalia's economy virtually collapsed as a result of the conflict and many people have turned to natural resource exploitation as a means of survival. Somalia has a higher proportion of pastoralists than any other country in Africa, and nomadic pastoralism is the traditional basis for the rural economy (UN, 2005). The majority of Somalis are nomads and semi-nomads, who are dependent upon livestock for their livelihood (ICG, 2006).

The major characteristic of poverty in Somalia is a severe lack of resources such as access to reliable information, and there are very few possibilities for citizens to impact their own lives and the development of their community. There is also a lack of more physical resources such as basic service providers, especially in rural areas. Malnutrition is rampant - about a quarter of all children under-five are underweight - and unemployment levels are soaring for both men and women in the formal, informal, and traditional economies (UNDP, 2003).

According to Forum Syd (2008), poverty is endemic in Somalia, with 73.4 % living in general poverty and 43.2 % in extreme poverty. For the last couple of decades Somalia has experienced a

series of man-made as well as natural disasters. Natural disasters include severe floods, droughts, sandstorms, famines and locust invasions. The man-made disasters are primarily armed conflicts over political power, land and other resources that flare up within and between clans and sub-clans; between and within South-Central Somalia, Puntland and Somaliland and Governments and opposition movements in these areas (UN, 2002).

Life expectancy levels in Somalia are similar to its neighbour countries Kenya and Ethiopia (UNDP, 2003). The causes for the low human development level in Somalia are government collapse, many years of civil war, recurring natural disasters and a lack of livelihood opportunities. Somalia has not been ranked on the UNDP Global Human Development Index in the past decade due to lack of statistical data. In 1996 it was ranked 172 out of 174 countries, placing it as the third least developed country globally (World Bank, 1996). According to World Bank classifications, Somalia is classified as a Highly Indebted Poor Country, Least Developed Country and Low Income Country Under Stress (HIPC/LDC/LICUS) (UN, 1998; UNDP, 1998; UNDP, 2001).

2.3 ADRA Projects in Somaliland

A number of development projects have been undertaken in Hargeisa by ADRA. ADRA implemented an Energy Project ‘Powering Economic Diversification’ in Somaliland and Puntland in 2005. The project had a broad goal of promoting peace and stability by stimulating the development of an enabling environment for economic diversification through promoting and facilitating access to conventional and alternative energy options (ADRA, 2010). The project assisted 72 businesses diversify their businesses, and trained 148 technicians with various technical skills. The project also facilitated fabrication of 2 wind mills for pumping water for domestic use and irrigation (*ibid*). All of these activities were expected to improve the livelihoods of the Somali people targeted by the project. However the impact has not been measured to date.

During implementation of the Project, various lessons were learnt. One of the most important lessons is that the local people are very enterprising and are ready to grab business opportunities as long as they can minimise risks and realise potential for profits. The key recommendation of

the project was that future projects should focus on income generation and economic development. However, this recommendation was not based on a comprehensive impact study, and this study proposes to provide the relevant information for considering this recommendation (*ibid*).

In another project, ADRA Somalia installed solar PV units in remote health clinics. The long term goal of the project was to contribute to ADRA's efforts of deliberately improving provision of health services in the north-western region of Somaliland through energy interventions. The project realized the provision of electrical energy through installation of solar PV energy systems in 11 rural health clinics. Based on the immediate results of the project, selected beneficiaries indicated that the project had led to some positive impacts. According to the head of one of the rural health centres, the clinic had a small generator that was used to power the radio communication equipment. The generator consumed 10 litres of petrol per day part of which was contributed by the beneficiary community, but was not working most of the time due to lack of fuel. The installation of a solar system by ADRA was used to power the radio communication equipment and to provide lighting for the health centre. The clinic was able to operate through the night and attend to emergencies. At another health clinic, the head of the clinic mentioned that the installation of solar PV at the remote health centre had lured staff to relocate to the area, because availability of electricity for lighting and powering the radio meant they could keep up with current affairs. Delivery of babies during the night time was also possible, which greatly enhanced the survival of infants in the area. These results and impacts are particularly relevant for the proposed study and will be explored further (*ibid*).

A third project dubbed 'Somalia Energy and Livelihoods Project (SELP)' with the overall objective of contributing to overall poverty reduction in selected districts of Somaliland was implemented in 2008. The project intended to strengthen livelihood strategies of Somali people in through promoting use of alternative energy options to meet growing energy needs (ADRA, 2007). As a result of installation of energy equipment, increased access to clean water, health and education services is expected to be achieved. This will be done by creating awareness on the effects of bad natural resource management and promoting the use of renewable energy options, such as wind, solar and modern biomass. Promotion of productive use of alternative energy

options for income generation and meeting communities' needs for improved livelihoods were promoted. The results and impacts of this project have not been recorded to date and this study will provide this useful information.

2.4 Results and Impacts of NGO Development Projects on Post-Conflict Communities

2.4.1 Development and Livelihood Challenges in Post-Conflict Communities

Nations trying to rebuild themselves after conflict face a number of development challenges. This is even more aggravated for nations that rely on natural resources. According to Collier (2003), this is because they are exposed to price shocks which even multinational finance institutions are not able to cushion against. In addition, due to weak systems, revenues are used inefficiently and corruptly.

Another major challenge facing post-conflict countries like Somalia is the inequitable distribution of natural resources. In fact, conflicts are often caused due to disagreements over natural resources. Scully (2006) provides an overview of conflicts over natural resources in Somalia. The publication is based on group discussions with decision makers, professionals, experts and civic leaders aimed at identifying the major causes of resource conflict in Somaliland. Disorganised land tenure systems in Somaliland, eroded traditional systems and extensive poverty are some of the factors that have provided the conditions for a scramble for dwindling natural resources.

Poverty figures for Somalia do not generally take into account remittances, which are mostly unrecorded and do not generate revenues. Remittances are sent from Somali's in the Diaspora and are estimated to reach 750 million to one billion US\$ annually (Forum Syd, 2008). They are vital for the Somalis who receive them, making up about a quarter of the household income. Once they reach Somalia, remittances are normally distributed to household members, extended family and other networks, such as business associates who may use them for community benefit, for example supporting a school, or for private investments such as starting up a small business. It is not generally the neediest, who directly receive remittances though, but mainly people within "urban, middle-class settings".

In post-conflict regions like north-western Somalia, Government resources are meagre and used for maintaining peace and security (Menkhaus, 2003). This leads to a gap which is best met by local and international NGOs. These institutions play a useful role in promoting investments in education, healthcare and other sectors. An interesting dimension of NGO projects is that while the projects may be well intentioned, they are often small scale and uncoordinated and at times operate at cross purposes. An example is given where a bee-keeping project by one agency was killed by another agency's overzealous distribution of pesticides in the neighbouring district (Scully, 2006).

Accurate statistics on aid allocations to the north-western Somalia region of Somaliland are difficult to come by as international donors do not report the share of aid going to the unrecognized country, but the gross figure appeared to be between \$30-\$43 million USD in 2002 (Eubank, 2010). However, a high proportion of the aid is spent on overhead costs, Nairobi offices or international personnel. Probably less than half of the total volume of aid is actually spent on the ground (*ibid*). More recently, in Human Rights Watch (2009), Somaliland's government estimates that the region receives approximately \$79 million USD per year. To put these numbers in context, Somaliland's population is estimated at 2-3.5 million people, earns around \$180 million USD a year in export earnings, and receives an estimated \$200 million USD a year in remittances according to that same report (ICG, 2006).

Even without international support, Somaliland's economy, which is built primarily around pastoral farming and animal husbandry, has largely recovered from the devastation of years of conflict. Somaliland has rebuilt many of the cities destroyed during Somalia's civil war, and economic activity in much of the country is thriving. As Bradbury (2008), has noted, over the past fifteen years, the cities, small towns, and villages have been substantially rebuilt and expanded. Commercial activity is vibrant. Utilities have been restored, telephone systems have been established linking Somaliland into the world-wide web, where numerous Somaliland websites can now be accessed, and Somali companies have established services throughout the country that facilitate financial transfers from anywhere in the world to the smallest village in Somaliland.

Johannsen (2001) records that a new name has been coined for the daunting challenge that donor agencies face in their work in post-conflict countries like Somalia. It is the term the "complex emergency". This term refers to the fact that increasingly, development work must be done in parallel with peacekeeping and emergency relief activities, due to increasing demands for the support of those displaced from their homes by conflict or famine. The three phases of aid-relief, peace keeping and development are intertwined, leading to a situation of competition for funds, duplication of efforts, and reduced impact (SABC, 2002).

The Department for and International Development (DFID) considers fragile states to be where government cannot or will not provide core services including security and service provision to the majority of its people including the poor (DFID, 2005). State weakness can result from lack of capacity and willingness, but it should be recognised that some states are weak but willing whereas others are strong but repressive. Somaliland can be classified as weak but willing state. The paper identifies several deficiencies related to donor responses in post-conflict countries, which include: aid to post-conflict states tends to last for less than three years which is precisely when it is most effective; external processes, such as humanitarian aid, can have negative effects on state structures; fragile states may not be able to meet the most stringent demands; excessive demands may exacerbate the situation.

DFID's strategy paper on Security and Development focuses on the effects conflict has on poverty through the lack of guaranteed security, slowing development (DFID, 2006). Without security, progress towards the Millennium Development Goals cannot be achieved. Further, development partners and communities need to take greater account of each other's objectives, as where development fails, the likelihood of conflict increases. There appears to be a causal linkage between development and security. Conflict generates social division and criminality, reverses economic progress, impedes sustainable development and results in human rights violations. It also increases population movements and poses a threat to international stability (World Bank, 2003). On the other hand, countries without conflict are more likely to attract foreign investment, trade and promote pro-poor strategies. Therefore, a way of approaching sustainable development within poor nations is to also address the issue of conflict as a trigger and sustainer of poverty. Within this context, DFID's approach has become one of '*working on conflict*', whereby '*conflict is actively and explicitly considered in order to develop activities that can help reduce or manage conflict, and promote, short, medium and long term peace-building processes*' (DFID, 2006).

2.4.2 Results and Impacts of NGO Projects on Livelihoods

Desmond (2005) provides an insight into the methodologies that most development agencies employ in undertaking evaluation of the impact of their activities. In evaluating the impact of the Pastoral and Environmental Network in the Horn of Africa, the methodology included desk review of the Project's proposal document and monitoring and progress reports on project activities; Field trips and small group discussions with participants and beneficiaries; The use of audio and visual aids to collect information, data analysis including comparative study of progress reports and evaluation information to measure the impact of the project's activities, an partnership and collaborative work and their impact.

An assessment of donor policy and development assistance towards Somalia and Somaliland was undertaken by the European Union, with the aim of providing information to Somali civil society on the nature of the international community, the provision of development assistance and the internal coherence of donor policies and implementation (Fahrenhorst, 2006). The European Union is collectively the largest donor to Somalia and Somaliland. Specifically with regard to development assistance, EU member states practice the "peace dividend" approach by providing the larger part of their assistance to Somaliland and peaceful parts of Somalia. Member states mostly channel their development assistance through international NGOs or UN organizations. It is noted that in conflict-ridden Somalia many decisions are made by the member states under conditions of uncertainty and are in practice greatly influenced by the physical insecurity in Somalia. The study recommends that mechanisms should be institutionalised to provide information to the EU member states and other international donors, on Somali internal development and on the needs and strengths of the development stakeholders. The proposed study will contribute to meeting this need.

The international community has sometimes done Somalia disservices, according to Forum Syd (2008). Rather than providing long-term development, international donor assistance tends to be funded through consolidated or humanitarian emergency appeals. Examples of this focus on 'quick fixes' is that from 1993/94 to 2003/04, UK assistance to Somalia was 74% emergency aid, with just 18% towards technical assistance (SACB, 2003). This type of emergency assistance does not target structural inequality and poverty in the same way that planned, longer-

term development assistance would. Instead, it risks contributing to making a country less resilient; causing increased external dependency, inequalities and poverty.

In overall terms, many projects implemented in Somaliland have had positive impacts on the communities living there. An interesting case study of an NGO working in Somaliland, known as the General Assistance & Volunteer Organization (GAVO) is summarized in Fried (2008). GAVO was started at the beginning of the 1990s, by a group of young men who wanted to do their part to help rebuild Somaliland. The group chose to work with the local residents suffering from war traumas. GAVO began by caring for patients at a local psychiatrist hospital, and expanded their services by approaching local government, local merchants and business people. With time donations to the work they were doing began to come in. Within four years, GAVO had managed to improve the conditions of patients at the hospital, to set up an outpatient clinic, and to help demystify mental illness.

OXFAM, an international donor, supported GAVO to scale up its activities. One important finding highlighted in the publication, which is of particular interest to this study, is that local resources are an integral part of development assistance that cannot be ignored. The role of OXFAM in this case was to provide much needed support for building the skills of GAVO members in management and leadership. This enabled GAVO to plan strategically for the growth and expansion of the programme. This case study demonstrates the crucial partnership needed between donors and local implementing agencies (*ibid*).

In terms of impact, US-GOA (2008) reports notes that the international community's humanitarian assistance to Somalia, which primarily consists of food aid, has not reduced the country's acute malnutrition rates, which have remained above the emergency threshold in some parts of the country. Donors have funded food aid than for any other individual sector. According to UN data, the international community, including the United States, provided at least \$1 billion in humanitarian assistance to Somalia from 2001 to 2007. This included \$745 million in assistance through the UN's annual appeals for funding to support humanitarian needs in Somalia from 2001 through 2007, of which roughly 47 percent, or \$349 million, was for food aid (UN-OCHA, 2008).

Most donor projects implemented in Somaliland are often completed and budgets fully expended. However, a number of issues have been raised with regard to the impact of these projects. An evaluation of an urban development project funded by European Union, UNDP, Government of Italy, DFID, UNHCR, UNDP/World Bank raised some of the pertinent issues facing international NGO projects. The project evaluation report points out that project goals were formulated without full opportunity being provided to field personnel to participate in the decision making process. This led to the goals being beyond the possibility of achievement. The relative uncertainty in Somaliland means that the intended outcomes and outputs need to be regularly updated in light of what needs to be or can be achieved in the field. However, this often does not happen and programme activities became disconnected from the reality on the ground (UNHCR, 2008).

Another major issue facing donor projects is the acutely short span for projects implemented in Somalia, from as short as 3 months to a maximum of 3 years. According to UNHCR (2008), a three-year time frame for programmes is too short to realize any meaningful impacts. This is normally as a result of policy that all aid to Somalia must be short term. It is likely that programmes would have been more useful and had greater impact if they had longer-term perspectives. Another issue with most programmes in post-conflict settings is that they are seriously understaffed, both in terms of numbers and quality of personnel. The recruitment of international staff is problematic. The procedures available are slow and post-conflict settings do not appear attractive duty stations to many applicants. Further, delays in programme implementation are experienced due to bureaucratic systems, contributing to reduced impacts. These issues undermine the credibility of the donor organizations in the eyes of government, local officials and local people.

Some recommendations for improving the impact of the projects in post-conflict settings are provided in literature. First the implementers must prioritize the need for operational planning and task management while working in a flexible, creative and participatory script. Next, baselines should be established and output targets agreed with all stakeholders (Scully, 2006). A careful analysis of risk and assumptions should be made. For the achievement of each output a budget and other necessary resources should be assigned. Thirdly, a work plan should be

formulated that is negotiated with all stakeholders, including with all members of the programme team and with relevant local counterparts. Lastly, an independent monitoring system should be appointed to track and report on project performance.

The UN emphasizes the need for more balanced funding among the humanitarian donors (UN-OCHA, 2008). According to UN officials, donors have typically funded stand-alone, short-term, visible interventions in Somalia, such as emergency food aid, rather than integrated, long-term, sustainable interventions (*ibid*). Further, donors have been reluctant to fully fund all humanitarian assistance sectors because of concerns that implementing partners in Somalia do not have the operational capacity or human resources to effectively use additional funding, as well as a desire for increased stability in Somalia before they provide additional funding (USAID, 2001).

2.6 Conceptual Framework

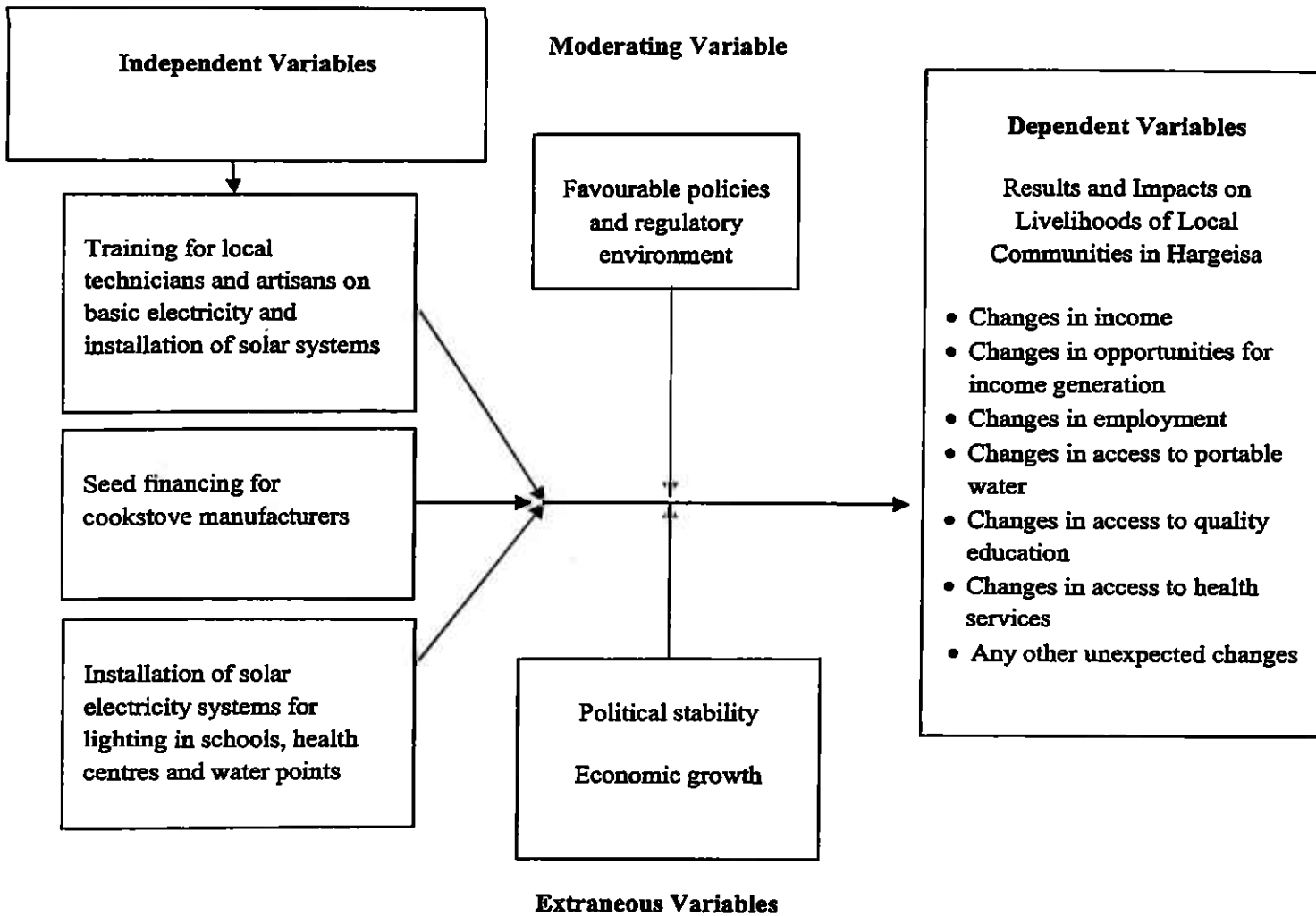


Figure 2.1: Conceptual Framework for the Study

The relationship between the various variables of this study based on the research questions can be conceptualised at a fairly general level, shown in Figure 2.1. The study identified the independent variables as the types of development projects implemented by ADRA in Hargeisa, Somaliland. These were the following: Training for local technicians and artisans on basic electricity and installation of solar systems; Seed financing for cookstove manufacturers and Installation of solar electricity systems in schools, health centres and water points. The

dependant variables were, therefore, the results and impacts that occurred as a result of the projects implemented. There were a number of expected results from the projects implemented by ADRA, which include changes in income, opportunities for income generation, employment, access to portable water, access to quality education, and access to health services. In addition, there were unexpected changes which the study would reveal.

The moderating variable was identified as a favorable policy and regulatory framework maintained by the government. This was necessary for the development projects to be implemented and for the impacts to be sustained. Extraneous factors, which were beyond the control of the researcher, included political stability and economic growth.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a description of the methodology that was be used in undertaking the proposed research study. The research design, methods of data collection and data analysis, validity and reliability of data are described in the following sub-sections.

3.2 Research Design

The research was conducted through the descriptive study method. The descriptive study method is defined as the process of gathering information about the present existing condition, in order to provide a report of only that which is happening. Descriptive studies describe a given state of affairs as fully as possible (Fraenkel and Wallen, 2008). According to Nyandemo (2007) descriptive research is used to give an accurate account of the characteristics of a particular situation. It includes an estimate of how frequently some event occurs or the proportion of people within a certain population sharing certain views.

Both primary and secondary data were gathered for this study. The selected methodology for this study was a combination of desk research, primary research (through quantitative and qualitative techniques and methods of data collection) to enable triangulation of findings and thus provide more reliable data for a better understanding of the impact of ADRA's projects on livelihood. Through the process of triangulation, the finding or conclusion were much more convincing and accurate as it was based on several different sources of information, which corroborated one another (Powell, 1996).

3.3 Target Population

The research study targeted the beneficiaries of ADRA's development projects in the north-western Somalia region of Hargeisa, Somaliland. A sample of these beneficiaries was the direct target of the research study.

3.4 Sampling Procedure

Simple random sampling was used in selecting the sample of individual household and community group beneficiaries for the research study. A simple random sample gives each member of the population an equal chance of being chosen. This method was particularly ideal for the proposed research study because the beneficiaries are well known. In addition, the sample population was located in one town, Hargeisa, therefore any sample selected was geographically accessible. The main benefit of simple random sampling was that it guaranteed that the sample chosen was representative of the population (Patton, 1990). This ensured that the statistical conclusions were valid. The simple random sample was obtained by using the lottery technique, where each unit of the population was placed in a bowl and the 'lucky numbers' drawn out to constitute the sample (Nyandemo, 2007).

For descriptive studies 10% of accessible population is a representative sample (Mugenda and Mugenda, 2003). Therefore, 10% of the population for each category of respondents formed the sample size.

Table 3.1: Sample sizes for Categories of Respondents

Category of respondents	Population size	Sample size	Percentage
Solar Electricity Trainees	208	21	10
Cookstove Producers	120	12	10
Community projects	100	10	10
Total	428	43	10

3.5 Methods of Data Collection

An initial desk study and analysis of ADRA's project's documents, including the original project proposals, project progress reports, and evaluation reports was undertaken. Other sources of information for the desk study review included unpublished reports, published reports (research studies/case studies); conference abstracts, poster presentations and materials on Compact Disc

(CD), other media coverage; information accessed through the internet; and any other authentic available sources of information that is documented. Project logical framework matrices were reviewed in detail and the achievement of results based on targets set out in the log-frame measured.

In order to have first hand information on the impact of ADRA's projects, the researcher carried out primary data collection using an interview schedule. Questionnaires were used in the interviews (Appendix 2). The questionnaires were administered over a span of one month, by the researcher assisted by trained research assistants, who were able to translate the questions into Somali language. An initial piloting of the questionnaire was undertaken prior to the collection of the data, and the questionnaire adjusted to make it clearer and more specific. The advantages of interview schedules included the fact that the researcher was be able to clarify any questions and get more in-depth responses where necessary (Fraenkell and Wallen, 2008).

In addition, observation method was used to corroborate responses from interviewees where relevant, especially on tangible aspects of livelihood. For example, where a respondent indicated that they had been able to employ more people as a result of the support received from ADRA, then the interviewer was able to observe whether the additional employees exist.

3.6 Validity and Reliability

3.6.1 Validity

Validity addresses whether the research explains or measures what it intended to measure or explain. It therefore deals with the appropriateness of the method to the research question (Mason, 1996).

The use of several data sources and different methods is called triangulation. The idea behind triangulation is that the more agreement of different data sources on a particular issue, the more reliable the interpretation of the data. By using multiple methods in the collection of data to corroborate data sources, the validity of the research was increased.

3.6.2 Reliability

Reliability addresses the extent to which the research methods and techniques produce accurate data. In other words, reliable methods ensure that any person using the same interview script (the research instrument) will not sway the answers of the interviewees (*ibid*).

To enhance the reliability of data collected from desk reviews, selected portions of literature were given to other researchers to interpret. This is known as peer debriefing, and colleagues provided objective interpretation of key reports and data from secondary sources. The analysis and interpretation of data was detailed, and included a description of the complexities – the variations as well as the commonalities in the data collected. Personal biases were avoided to the extent possible, and the analysis presented the diversity of perspectives among the research participants, leading to an interpretation that was more trustworthy. Research assistants were trained in these aspects to ensure conformance.

3.7 Operational definition of variables

According to Fraenkel and Wallen (2008), defining terms operationally is a helpful way to clarify their meaning. As mentioned earlier, the subject of this study is the impact of ADRA's projects on the social and economic livelihoods of the people in north-western Somalia. Impact can be both positive and negative, and was measured using a number of both subjective and objective indicators. Table 3.2 provides a summary of the operationalization of key variables in the study.

Table 3.2: Operationalization of Variables

Study Objective	Variable	Indicators
<p>1. To review the performance and impact of training on the installation of solar electricity systems provided to local technicians in Hargeisa, Somaliland.</p>	<p><u>Independent</u> Training programmes for local technicians</p> <p><u>Dependent</u> Performance and Impact of Training Programmes</p>	<p>Number of trainees Duration of training programmes Changes in skills of local technicians Changes in income for local technicians Changes in income generating opportunities Changes in employment Other unexpected changes</p>
<p>2. To evaluate the results and impacts of seed-financing provided to local cookstove producers in Hargeisa, north-western Somaliland.</p>	<p><u>Independent</u> Seed financing provided by ADRA</p> <p><u>Dependent</u> Results and impacts reported by local cookstove producers who received seed financing</p>	<p>Impacts on social and economic livelihoods through: Changes in income Changes in opportunities for income generation Changes in employment Other unexpected changes</p>
<p>3. To assess and document the expected and un-expected impacts of installation of solar electricity systems in schools, health centers and for water points in Hargeisa, Somaliland.</p>	<p><u>Independent</u> Installation of solar electricity systems in schools, rural health centres and water pumping sites</p> <p><u>Dependent</u> Expected and un-expected impacts reported by beneficiaries</p>	<p>Changes in level of access to water Changes in quality education Changes in health services</p>

In assessing the results and impacts of ADRA's projects on local communities, indicators used included changes in income, changes in opportunities for income generation, changes in employment numbers, changes in number of family members supported and any other changes that the respondents mentioned. An increase in any of these indicators indicated a positive impact, while a decrease was interpreted as an indication of negative impact. Other indicators that were used to assess impact included changes in level of access to water, based on a situation where previously the access to water was intermittent. If the respondent indicated that water was now available as and when needed, this was taken as positive change. Another indicator was with regard to quality education and health services. Where communities indicated that prior to the intervention by ADRA education and health facilities were limited in quality due to lack of lighting then this was taken as a positive impact. Where respondents indicated that lighting quality had improved in terms of duration and illumination, this was also recorded as a positive impact. In addition, where respondents indicated that they were able to use additional equipment with the electricity provided, this was a positive impact. Respondents were also expected to provide information regarding other unexpected impacts, which were recorded.

3.8 Data Analysis

The quantitative data was analyzed using Microsoft Excel. For the qualitative data, the data analysis method that was applied is the content analysis method. Content analysis is the systematic and qualitative description of the composition of the subject of study. It is a technique for making deductions by objectively identifying specific characteristics of data and thereafter using the information to draw out patterns or trends (Nachmias and Nachmias, 1996). The content analysis method is very appropriate considering the depth and detail of information required to answer the research questions. This method prevented subjective conclusions from being drawn, as it provided a rigorous application of reliability and validity. Given that both qualitative and quantitative data is expected from the respondents, the content analysis method ensured that quantitative data is backed by qualitative data and vice versa (Weber, 1990).

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTEPRETATION

This chapter presents the findings of the study. The findings are presented in line with the objectives of the study.

4.1 Progress and performance of ADRA's projects

A review of project documents and progress reports provided by ADRA indicated that a number of projects have been implemented in Hargeisa, North-Western Somalia. The projects targeted improving the livelihoods of the local people.

4.1.1 Powering Economic Diversification

ADRA implemented a Project dubbed "Powering Economic Diversification" in Somaliland, from 2001 to 2005. The project had a broad goal of promoting peace and stability by stimulating the development of an enabling environment for economic diversification through promoting and facilitating access to conventional and alternative energy or renewable energy technologies. The project specifically aimed at:

- i. Strengthening and developing local structures which include local business partners and Government representatives to manage and support conventional and alternative energy resources
- ii. Stimulating private investment by creating a supply/demand driven market around the local entrepreneurs, investors and Diaspora as well as consumers of conventional and alternative energy sources.
- iii. Increasing the human resource capacity to design, install and maintain alternative energy systems.

Project review documents indicate that the project was successful as it enhanced the capacity of participating organisations to develop and install alternative energy sources. The project assisted in creating awareness on energy issues by assisting 72 businesses to diversify into renewable energy products. In addition 148 technicians were trained on the installation and maintenance of

various renewable energy technologies. The project also facilitated the fabrication of 2 windmills for pumping water for irrigation (ADRA, 2010).

4.1.2 Powering Health Services

In another project, ADRA installed solar electricity units in health clinics in North-western Somalia. The long term goal of the project was to contribute to ADRA's efforts of deliberately improving provision of health services in Somaliland through energy interventions. The implementation of this project was based on the premise that rural health service is an important national and international priority. The project resulted in the installation of solar electricity systems in 11 health clinics. The installation of solar electricity systems was intended to improve the efficiency of health services in the health clinics, consequently benefiting approximately 10,000 families that depend on these health centres.

4.1.3 Energy and Livelihoods Project

A third project implemented by ADRA was the 'Somalia Energy and Livelihoods Project (SELP)' that aimed at contributing to overall poverty reduction in selected districts of Somaliland. Specifically, the Project aimed at increasing access to sustainable and reliable energy services for livelihood of the population in Somaliland. The project trained a total of 60 solar electricity technicians, and installed solar systems in 100 communities. In addition, the project provided seed financing to over 120 cookstove producers, organised in 8 producer groups. The expected results and performance of the project are summarized in Table 4.1.

Table 4.1: Performance of Somaliland Energy and Livelihood Project

Expected Result of the Project	Achievement
5 vocational training centers providing training in renewable energy to 175 people	Yes
At least 8,000 People benefit from 20 installed and rehabilitated windmills (electrical turbines, mechanical and windpumps)	Yes
9000 improved cookstoves produced and disseminated	Yes
At least 90% of people using improved cookstoves report reduction in charcoal use of 10%.	Partially
Reduced amount of firewood by 15% through the use of institutional energy saving cookstoves	Partially
At least 4000 people benefit from a total of 40 solar systems installed and functional in health facilities	Yes
40 schools installed with solar powered systems benefit a total of at least 4,000 students by the end of the project	Yes
At least 20 entrepreneurs engaged in energy related business enterprises	Yes
At least 240 people benefit from training and are able to design, install, manage, and maintain renewable energy installations.	Yes
Improved fish preservation and income for at least 100 fishermen	Yes
25% of targeted business enterprises in rural and peri-urban areas using alternative energy options	Yes

Source: ADRA, 2010

The project results were largely achieved. As a result of installation of energy systems, increased access to clean water, health and education services was achieved. The capacity of local business to install, manage and support alternative energy options was enhanced.

All projects implemented by ADRA have achieved the outcomes set out in the logical framework matrices. This was commendable. However, the impact analysis had not been carried out by ADRA, a gap that this study was expected to address. The impact and results assessment is presented in the following sections of the report.

4.2 Results and impacts of projects implemented by ADRA

4.2.1 Profile of Respondents

A total of 43 respondents living in Hargeisa participated in this study. Table 4.2 presents a summary of the occupation of respondents.

Table 4.2 Respondents by Occupation

Occupation	Number	Percentage
Electrician	21	48.86
Cookstove Producers	12	27.90
Teachers	4	9.30
Health Officials	3	6.97
Head of Water Committees	3	6.97
Total	43	100.00

4.2.2 Training for Local Technicians

There have been several efforts by ADRA and other agencies to stimulate use of solar PV for electricity in Somaliland through demonstration campaigns, training of technicians on solar installation and maintenance and organizing Trade Fairs, where international solar equipments suppliers and manufacturers exposed their products. Due to such efforts, various solar systems such as PV lighting kits, solar PV water pumps, solar PV system for telecommunication and solar PV refrigerator have been installed in the country.

Despite such gains, a baseline survey undertaken by the ADRA indicated existence of several constraints that limit increased penetration of solar PV in Somaliland. Key among them is the

insufficient numbers of trained personnel to meet the demand in the solar PV industry. Even among the trained technicians, the skills possessed are insufficient to effectively service and sustain the needs of the industry. A solar PV Training for Practicing Technicians was organised with the overall objective of the training was to improve the capacity of solar electricity practitioners to meet the needs of the solar PV industry in a sustainable manner.

A total of 208 technicians were trained by ADRA on various solar issues and installation techniques and it was expected that they would use the knowledge gained in carrying out quality solar installations in Somaliland. The sizing of the solar system was also expected to help them in determining the correct solar system configurations while the training on standards will enable them appreciate and practice acceptable local and international codes and standards in the solar installations carried out in Somaliland. Training workshops were conducted, which were intended to increase the number of skilled technicians in the solar electricity industry and to also improve the skills of the current practitioners to effectively meet the needs and sustenance of the solar PV industry.

The responses from a sample of local technicians interviewed during this study are summarized in Table 4.3.

Table 4.3: Impact of Training Programme

Indicator of Impact	Low level Change (%)	No Change (%)	Significant Change (%)	Total (%)
Skills	47	6	47	100
Income	45	37	18	100
Opportunities for income generation	41	31	28	100

Key: Low level change indicates that there was an improvement but not sufficient to lead to expansion of opportunities; No change indicates that the status quo remained; Significant change is an indication of a large change which leads to expansion of opportunities.

In terms of skills, 47% of respondents indicated that the training had led to a low level of improvement in their skills, while 6% indicated that there was no change. 47% indicated that their skills had significantly changed and improved as a result of the training provided by ADRA. Those who reported low level or no improvement in skills were those local technicians who had previously been trained on solar electricity. However, the training programme provided a significant improvement in the level of skills and expertise for the local technicians who had not been trained previously by ADRA. Local technicians who reported significant improvement mentioned that they were able to physically see the components of the solar electricity systems, which they were only aware of in theory prior to the training. They also mentioned that they were able to carry out actual connections and see the system working.

Thirty seven percent of respondents reported that there was no change in their incomes after the training provided by ADRA. However, a total of 63% reported an improvement in incomes, with 45% reporting modest improvement and 18% significant improvement. The improvement in income was as a result of local technicians being able to engage in installation and maintenance of solar systems in Hargeisa. Those who reported no change in income also mentioned that they were unable to get jobs for installation and maintenance of solar electricity systems.

Closely related to the issue of income was the creation of opportunities for income generation. Twenty eight percent of respondents indicated that the training had resulted in the creation of significant opportunities for income generation, while 41% indicated that a low level of opportunities had been created. The areas where respondents reported as sources of income generation were in installation and maintenance of solar electricity systems, sale of solar electricity equipment, and training of other local technicians on solar systems. About 31% of respondents did not realize any new opportunities for income generation as a result of the training.

There appears to be a correlation between the change in skills and income reported by respondents. It would appear that of the 47% of respondents who indicated that their skills had improved significantly, only about 18% report a significant increase in income.

Table 4.4: Impact on employment opportunities

Number of Additional People Employed	Percentage
0 additional employees	61
1 additional employees	16
2 additional employees	10
3 additional employees	10
4 additional employees	3
More than 5 additional employees	0
Total	100

Table 4.4 displays the findings of the respondents with regard to changes in employment. Majority of the respondents (over 61%) indicated that there had been no changes in employment patterns and they had not employed additional people. Thirty nine (39%) percent of respondents indicated that they had been able to employ additional people to assist with their income generation activities, ranging from 1-4 people.

4.2.3 Seed Financing for Cookstove producers

ADRA facilitated eight groups in Somaliland that were trained to produce and market energy efficient charcoal cookstoves. This was towards meeting the 9,000 cookstoves target which were supposed to be produced and marketed as indicated in the project document and log frame.

A total of \$3,753 was disbursed to the groups to produce 1,090 stoves per month. The money was used to buy cook stove production materials, such as metal sheet, clay, iron rods, rivets and paint. Before disbursing the funds, memorandum of understanding were signed between ADRA and the trained producer groups. The groups submitted their monthly stoves production and sales plans, which provided the basis for funds allocation to each group. After each month's sales, the money was expected to be re-invested in the more production.

Table 4.5 presents a summary of production plans and amount of seed funds allocated to each group based on the production plans.

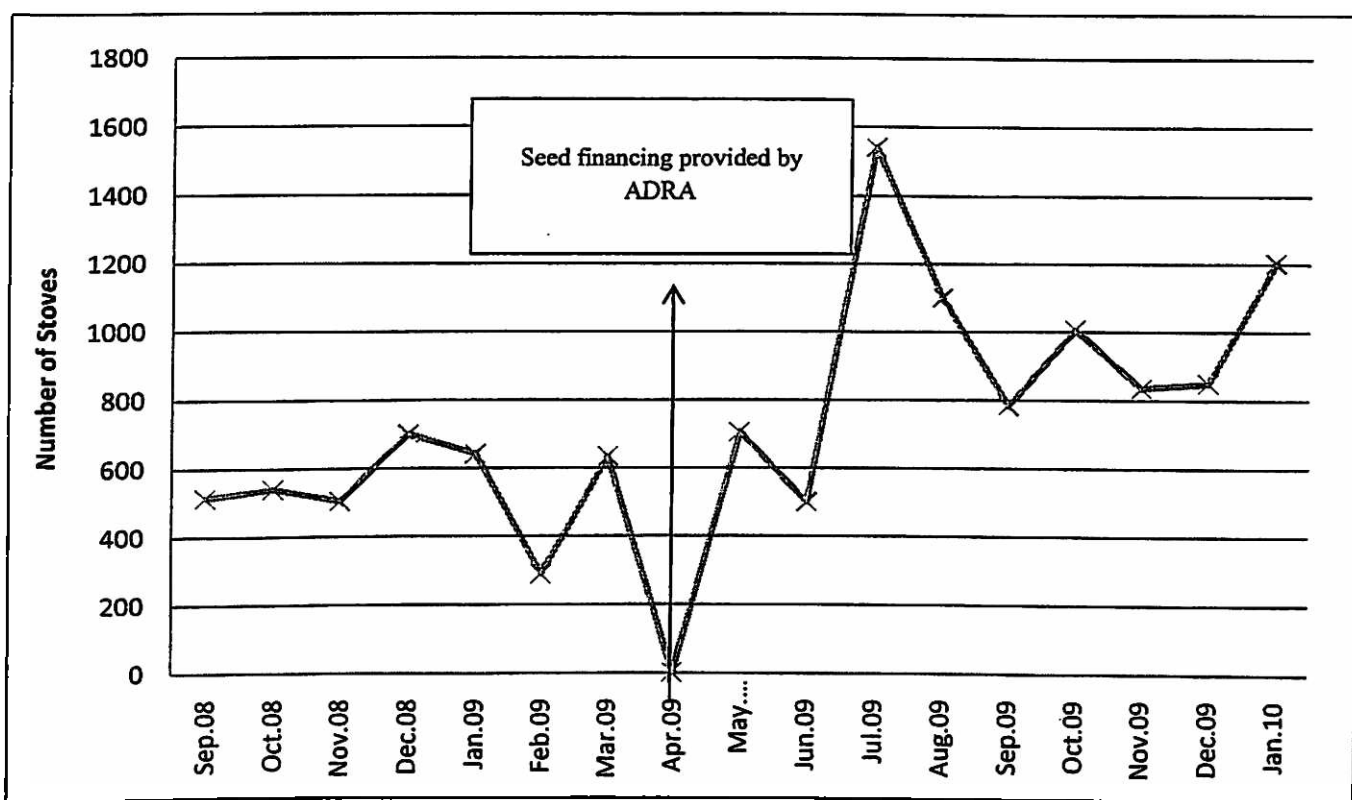
Table 4.5: Summary of production plans and seed capital support to producer groups in Somaliland

Name of Group	Number of stoves to be produced per month	Amount of Seed Financing(US\$)
1. Fadhii Group	180 stoves	607
2. Ambaro group	40 stoves	143
3. Awdal Group	100 stoves	349
4. Wajadir Group	150 stoves	489
5. Sahil/Berbera Group	120 stoves	412
6. Dhoobo Group	60 stoves	206
7. SEEPO enterprises	200 stoves	721
8. Allaamin Group	240 stoves	826
Total	1090 stoves	US\$ 3,753

Source: ADRA, 2010

ADRA carried out monthly monitoring to evaluate progress of cook stove producers after the training. Aspects monitored included: number of stoves produced; number of stoves sold; quality of stoves produced compared to the pre-training; challenges and possible suggestions. The monitoring of cookstove producers by ADRA indicates that there was an increase in the number of stoves produced after the training took place, as shown in Figure 4.1. This study sought to understand the impact of seed financing from the point of view of the recipients.

Figure 4.1: Production of Cookstoves before and after seed financing



Source: ADRA, 2010

Training was provided in February 2009 and in March 2009, production of stoves improved. However, in April 2009, stove production took a dip as the groups were unable to continue production due to an increase in the price of one of the raw materials for stove production. ADRA came in to provide seed funding for purchase of materials in April 2009, and the production has consistently increased from that time.

Table 4.6: Impact of Seed Financing for Cookstove Manufacture

Indicator of Impact	Low level Change (%)	No Change (%)	Significant Change (%)	Total (%)
Skills	0	0	100	100
Income	12.5	0	87.5	100
Opportunities for income generation	42.5	0	57.5	100

Key: Low level change indicates that there was an improvement but not sufficient to lead to expansion of opportunities; No change indicates that the status quo remained; Significant change is an indication of a large change which leads to expansion of opportunities.

As shown in Table 4.6, all respondents interviewed indicated that their skills had improved significantly as a result of the seed financing provided by ADRA, which enabled them to put into practice the skills they had learned in the training workshop. The respondents indicated that the new design of the stove was more efficient, leading to fuel savings and therefore environment friendly. This made the stove popular among end-users. One of the key skills highlighted was the use of moulds for stove production which lead to standard quality and size of stoves. It was observed that for 15% of respondents the skills had improved to the extent that they were able to train others and get paid for their skills and time. This is a clear indicator that the necessary skills and expertise for improved cookstove production are beginning to take root in Hargeisa, Somaliland.

Incomes for stove producers also positively changed as a result of the seed financing provided by ADRA. About 12.5% of respondents indicated low level of change in their income while 87.5% indicated that their incomes had changed significantly for the better. On further enquiry, those whose incomes increased by modest levels were those who did not reinvest the proceeds from the sale of their stoves into production of new stoves. Therefore, they only earned income once and were not able to earn more income. However, the bulk of the cookstove producers re-invested the earnings from the sale of stoves into the production of more stoves. Since the initial seed financing provided by ADRA was a grant, they were able to make a profit and therefore

earn an income. All the groups of cookstove producers reported that they were happy about the impact of the support from ADRA on their lives. The income from the sale of stoves has increased from \$200 to approximately \$600 a month. Half of the income is reinvested in the production of more stoves, and half goes to meeting household needs. Not only are they able to provide for their own immediate families, but they are also able to support others in the extended family. For example, they pay school fees and are even able to save some of the income to purchase assets such as land.

4.2.3 Installation of Solar Systems for Schools, Health Centres and Water Pumping

ADRA collaborated with community based committees to install and utilise alternative energy systems for community water supply, irrigation, livestock rearing, health and education. The systems installed comprised a combination of solar panel of between 120-240watts, battery 200AH, inverter 1500watts, charge controller, consumer unit, sockets, switches and circuit breakers. The beneficiary communities in most cases provided extra labor and materials like sand, cement during the installation process. Onsite training for local technicians and selected individuals from beneficiary institutions was also done during the installation process.

A review of the impact of the solar installations by the researcher revealed that the installations had largely achieved the expected results (Table 4.7). All respondents indicated a positive change in access to water and quality education. In health centres, all but one respondent indicated that they were enjoyed improved health services. The dissatisfaction with health services was reported in one health centre where the system was malfunctioning.

Table 4.7: Expected impacts of solar installations

Indicator	Yes (%)	No (%)	Total (%)
Changes in level of access to water	100	0	100
Changes in quality education	100	0	100
Changes in health services	90	10	100

In addition, respondents indicated that there was a definite positive increase in the number of people benefitting from improved services as a result of the installation of solar electricity systems. Overall there was increased awareness in the communities about solar electricity and its benefits.

As a result of provision of efficient lighting in schools, a total of 296 adult learners had enrolled in evening classes in various schools in Hargeisa. The adult learners were receiving quality education as they were able to read and write with the help of good lighting. Evening classes were undertaken for a longer period as there was now affordable lighting which could last for upto 8hours. The installation of solar electricity systems also replaced the use of kerosene lamps and lanterns which were previously used for lighting. In one of the schools, a computer was being used by teachers. Teachers interviewed indicated a higher sense of confidence in delivering lessons.

Health centres reported that they were now able to operate at night regularly and attend to emergency cases. In particular, heads of health centres reported that they were able to assist women to give birth irrespective of the time of delivery. Previously, when a woman went into labour during night time, the attendants had to rely on lamps or torches for lighting, which greatly compromised the birth process leading to infections. The lighting provided by the solar systems aided birth attendants in the process of delivery and greatly improved the birth conditions.

The cost of pumping water was significantly reduced with the installation of solar systems for pumping the water. Previously, diesel generators were used for pumping, which meant that there was a significant cost associated with the provision of water. Communities were sometimes unable to pay the price for water which meant that sometimes, the generator was not run so there was no water. Communities then had to rely on shallow wells or water provided by relief agencies. The provision of solar electricity for pumping meant that there was no cost of fuel and now communities could enjoy increased access to water.

In all communities where the solar electricity systems were installed, awareness on solar energy increased and people were willing to purchase solar systems for their homes. The installation of the solar electricity systems replaced the use of other forms of energy, which had a running cost associated to their use. The communities that received the solar systems were able to save the money that was previously used for fuel. Therefore there were some economic gains reported.

There were a number of unexpected impacts arising from the installation of the electrification systems, reported by the respondents surveyed. One major one was the use of electricity from the solar systems for mobile charging for staff members in the schools and health centres. In addition, local residents would charge their mobile phones at the schools or centres, and pay a modest fee which provided a source of income for the administrations to use in the maintenance of the systems. Some of the administrators reported that they used the money collected to subsidise the salary of the attendants who operated the systems.

Another unexpected impact observed was that the solar electricity systems installed around schools and health centres proved lighting at night time which enhanced the security of the surrounding area. Women especially mentioned that they enjoyed the lighting around the schools and health centres. This is notable because the majority of adult learners attending evening classes were women.

There were a few negative impacts reported by respondents, although a majority of respondents reported that they were not aware of any negative impacts (Table 4.8).

Table 4.8: Negative Impacts of ADRA projects

Negative Impacts of ADRA's projects	% of respondents
Yes	16
No	84
Total	100

One of the negative impacts reported was that the solar equipment that was installed in the various sites was supplied by international companies. Respondents felt that the sourcing of equipment from international companies denied local suppliers the opportunity to grow their businesses. In addition, respondents felt that it would have been useful to source the equipment locally, so that maintenance could also be sourced locally. In addition, the respondents indicated that they would not be able to provide replacements of the system components of the same models, since they stocked different models.

Another negative impact reported by respondents was that the manufacture of stoves though laudable, encouraged the use charcoal, which is produced in a process which is harmful to the environment. The long term effects of the stove on the environment were likely to be negative.

Lastly, respondents felt that in some cases the support provided by ADRA's support could lead to dependence, especially in cases where the community did not contribute in the cost of the intervention. The respondents felt that communities had the ability to contribute in part and should be allowed to do so, to enhance the ownership of the system within the community.

This chapter presented the findings and discussions of the study. The next chapter provides the summary, conclusions and recommendations of the study, based on the findings.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

The objectives of this study were threefold, namely, to review the performance and impact of Training provided to local technicians in Hargeisa, north-western Somaliland, on the installation of solar electricity systems; to evaluate the results and impacts of seed-financing provided for local cookstove producers in Hargeisa, north-western Somaliland; and to assess and document the expected and un-expected impacts of installation of solar electricity systems in schools, health centers and for water pumping in Hargeisa, north-western Somaliland.

Majority (63%) of the technicians reported that as a result of the training, they were able to earn additional income from the installation and maintenance of solar electricity systems. Further, majority of respondents (69%) reported that the opportunities for income generation increased positively following the training provided by ADRA. However, the respondents reported that the training did not result in significant improvement in the employment of additional people. Majority of the respondents did not employ additional people after the training.

The study revealed that by and large, the support provided by ADRA had led to overall positive impacts as reported by respondents. All respondents (100%) indicated that the seed financing had led to an increase in their skills in cookstove production. Similarly, 100% of respondents also indicated that their incomes had increased as a result of the support received from ADRA. Further, all respondents (100%) reported that the opportunities for income generation had increased as a result of the seed financing, where they were able to produce and sell stoves as well as sell related items such as cooking fuels and cooking utensils.

The installation of solar electricity systems was undertaken in schools, health centres and water points. The expected impacts of the installation were improved quality education, improved access to health services and improved access to water. All respondents (100%) reported that the expected impacts were achieved. A total of 296 adult learners from the surveyed schools had

enrolled in adult classes which took place in the evening and night and were powered using solar electricity. In addition, health centres reported that they were able to treat 30 patients during the night, as a result of the lighting provided by the solar systems. About 2,966 people were able to access water pumped using the solar electricity pumping systems. The study revealed that the installation of the systems had led to positive economic impacts, resulting from the savings that were made from the purchase of fuel. Previously water was pumped using diesel generators which was expensive for the communities.

In terms of unexpected impacts, the use of electricity provided by the solar systems for mobile charging was reported by respondents. In some cases, a modest fee is charged by the owners of schools and health centres for charging mobiles and these funds are utilized in maintenance of the system. Another unexpected impact was the increased sense of security due to the availability of lighting around schools and health centres. Women, who form the majority of adult learners, reported that they felt more secure when attending classes since there was good lighting.

The study revealed that the recipients of ADRA's projects felt that a system of dependence would be created if ADRA provided electricity systems with no contribution from the local communities. Respondents felt that communities were in most cases able to contribute to meeting the cost of systems and should be allowed to. In addition, the findings of the study showed that the respondents felt that the provision of solar electricity equipment from international companies rather from local companies had negative impacts. Local suppliers of solar equipment were denied the opportunity to grow their businesses and skills, which was likely to have negative impacts in the long-term.

5.2 Discussion

ADRA provided training for 208 local technicians in north-western Somaliland, which covered the design, installation and maintenance of solar electricity systems. The training provided was both theoretical and practical, and those who received the training were local electricity technicians. The training provided resulted in overall positive impacts as reported by the local technicians. There was an improvement in the skills of local technicians, through learning a new technology and practical application of the technology. In addition, there was a positive impact

on the incomes of the local technicians. However, the training does not seem to have had significant impacts on employment levels. The inability to employ more people was mainly due to the fact that local technicians are self employed and operate singly in competition with one another. Also, the scale of business was small and did not expand rapidly enough to necessitate more employment.

Local cookstove producers in Somaliland received a shot-in-the-arm from ADRA, by receiving seed-financing to revamp their production businesses, with overall positive impacts. However, the study revealed a negative impact related to the support for cookstove production, which was to do with the fact that the stoves were promoting the use of charcoal. Charcoal was seen as an environmentally unfriendly option and respondents felt that by promoting the stove, environmental degradation was expected to continue. However, it is important to note that the improved cookstove promoted by ADRA is efficient and reduces the amount of charcoal consumed by up to 50%, compared to other stoves in the market.

The key rationale behind the installation of the solar systems was to contribute to the alleviation of poverty through the provision of quality education, health services and water. Many schools in Somaliland operate classes for adult learners, which take place in the evening and night time. The classes usually take place using kerosene lamps or battery torches for lighting. In some cases, where the community can afford, a generator provides electricity for limited amount of time and at a cost. In most schools the evening classes take place without lighting, which greatly inhibits the quality of education provided. ADRA's intervention which installed the solar systems for schools was expected to provide a reliable and clean source of energy, and allow adult learners to access learning. It was expected that the number of adult learners in the schools that received solar electricity systems would increase. In addition, other expected outcomes were replacement of existing fuels; use of learning aids; higher retention of teachers; increased graduation of adult learners and increased awareness about solar electricity and its benefits in the community.

Health centres in Hargeisa also struggle with provision of electricity for lighting and powering of emergencies during the night time. In addition, most health centres lack energy for powering refrigerators which are useful for storing vaccines and perishable medicines. The installation of

solar electricity systems in health centres was expected to tackle these challenges in health centres. One of the main expectations was that emergency cases at night would now be attended to with the provision of lighting.

Energy services are needed in providing access to water especially in remote areas. Water pumping is mostly undertaken using diesel generators which results in high fuel costs for low income communities. ADRA's intention was to provide solar electricity systems that would reduce the reliance on diesel powered generators and eliminate the financial burden of local communities. Through the installation of these systems, community knowledge on renewable energy was expected to be enhanced. One of the problems facing most diesel powered water pumps is the limitation in terms of how long the generator can be run. With solar energy, the communities were expected to be able to pump water for longer to meet their needs.

5.3 Conclusions

From the results of this study, it can be concluded that ADRA's projects in north-western Somaliland have recorded overall positive results and impacts on the livelihoods of local communities. Skills have been positively improved, and incomes of local communities have also been improved. However, employment opportunities have not changed significantly as a result of ADRA's interventions. This means that majority of those who are in production continue to operate at the same scale, and have not been able to grow to a scale where they can expand and employ additional people.

The most successful intervention for ADRA in terms of impact on livelihoods is the seed-financing for cookstove producers, which led to 100% positive impacts for local communities involved. The installation of electricity in schools, health centres and water points was the second most important intervention, as it achieved all its expected impacts and will continue to impact communities for a long time to come. The training of local technicians had positive impacts, although a number of respondents indicated that they were not able to positively improve their skills and income.

The initiatives implemented by ADRA for communities have achieved all expected impacts, and have also led to a number of unexpected impacts. Awareness on solar electricity among local communities has increased significantly and is likely to impact the local solar energy market.

5.4 Recommendations

As a result of the findings of this study, the researcher came up with the following suggestions that could assist ADRA in designing future projects and ensuring that they have maximum positive benefits.

It appears that the training programmes for local technicians require further improvements in terms of design, to ensure maximum impacts. First and foremost, a detailed pre-training skills analysis must be undertaken, to ensure that those who are selected for training will benefit from the training in terms of learning new skills. The training programme could be divided into grades, to cater for different levels of expertise for local technicians. This would ensure maximum skills enhancement for all participants.

In addition, the training programme should be designed to include training on business skills, which would enable the trainees to grow their income generation opportunities. The inclusion of an aspect of business skills as part of the training programmes would be useful in assisting trainees to start companies where they could offer employment, and therefore increase the impact on employment numbers.

It would appear that the initial plan to have the trainees attached to industries did not materialize. A re-assessment of the attachment plan would be useful in future training programmes, and ADRA should include the potential companies that could offer the attachment in the entire training process. The companies would feel part of the process and their commitment to the attachment programme would be higher. They would also be able to interact with the Trainees before-hand, which could spur the trainees to perform due to the competitiveness.

Indications from this study are that while the cookstove production can be declared a success, the fuel used in the stoves is charcoal, which is produced in an environmentally unsustainable way. There is an urgent need to investigate more sustainable ways of charcoal production, to

complement the cookstove production process. The cookstove producers could be ideal candidates for participating in projects to produce charcoal in more environmentally friendly ways. In the short term, ADRA should support cookstove producers to raise awareness on the benefits of the efficient cookstove, which reduces fuel consumption by 50%. The improved cookstove is a short term solution to reducing charcoal consumption and should be widely disseminated so that it replaces the traditional inefficient stoves.

Communities should be mobilized to contribute in cash and kind, where possible, towards meeting the cost of solar electricity systems to ensure ownership in the long-term. The donation of these systems with no contribution from the community leads to dependency and uncommitted ownership. While it is recognized that local post-conflict communities face numerous challenges and might not be able to raise significant resources, it is useful to ensure that at least some contribution is received from the communities, according to their ability.

In order to ensure maximum impact of interventions in schools and health centres, ADRA could consider holistic support by not only providing the lighting system, but also supporting other needs of the schools and health centres. This can be done by forging partnerships between ADRA's other programmes, as well as with other implementing organisations. For schools, the support could extend to provision of learning materials and equipment which can be utilized using the electricity system provided. In rural health centres, equipment and medicines could be provided for the expanded operations to enable the centres cope with the cases they receive.

5.5 Suggestions for Further Research

Following the findings of the research study, the researcher identified areas that could be explored in future research.

This study revealed that one of the negative impacts of ADRA's support for cookstove producers is that charcoal used in the stoves leads to environmental degradation. There is need to investigate this issue further, and assess the possible options for ensuring sustainable production of charcoal. Another area of research could involve measuring the reported reduction in charcoal consumption using the improved cookstove supported by ADRA.

The study also revealed that so far, ADRA's interventions have achieved the expected impacts among local communities. An interesting area for further study would be to revisit the interventions after a few years to assess the long-term impact. This study would assess the sustainability of ADRA's interventions and provide useful findings for future interventions.

The findings of the study also showed that local technicians trained on solar electricity systems were undertaking installation and operation and maintenance of the systems. There is also need to further examine the quality and standards of installations being done by the local technicians trained by ADRA. This would be useful in identifying future training needs, and lobbying for the establishment of standards for installation to ensure high quality installations.

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APPENDICES

Appendix 1: Letter of Introduction

(Note: To be translated into Somali verbally by research assistants)

Waeni Kithyoma

P.O. Box 30035-00100

Nairobi

To Whom It May Concern

Dear Sir,

RE: REQUEST FOR COOPERATION IN RESEARCH STUDY

I wish to undertake a research study on the impact of ADRA's development projects in north-western Somalia, in partial fulfilment of the requirements of the degree of Master of Arts in Project Planning and Management at the University of Nairobi.

This letter is to request your kind cooperation in answering the questions that will be asked by me or my research assistant, as truthfully and to the best of your ability. The information that you provide will be important as it will enable me to conclude my study appropriately, and come up with positive recommendations and highlight areas for improvement for ADRA, and also create a basis for further research.

Please note that all information obtained will be regarded as highly confidential and will only be used for academic purposes. A copy of the final research report will be availed to you on request.

Your cooperation will be highly appreciated.

Yours faithfully,

Waeni Kithyoma

L50/72242/08

Appendix 2: Questionnaire for Beneficiaries of ADRA projects

(Note: To be completed by interviewer – researcher or research assistants)

- 1) Name of Respondent:
- 2) Residence:
- 3) Occupation:
- 4) Are you a beneficiary of any project implemented by ADRA? Yes/No
- 5) If yes, what project (s) have you benefitted from?

- Training for local technicians and artisans on basic electricity and installation of solar systems
- Seed financing for cookstove manufacturers
- Installation of Solar systems for lighting in schools
- Installation of solar and wind systems for water pumping.
- Installation of solar systems for lighting and refrigeration in health centres

- 6) What benefits have you received from the support given by ADRA?

- a) Have your skills improved?

- Somewhat improved
- No improvement
- Significantly improved

Comments: _____

b) Has your income increased?

- Somewhat increased
- No increase
- Significantly increased

c) Have the opportunities for income generation increased?

- Somewhat improved
- No improvement
- Significantly improved

Comments: -----

d) Are you employing additional people?

- 0 additional employees
- 1 additional employee
- 2 additional employees
- 3 additional employees
- 4 additional employees
- 5 and above additional employees

Comments: -----

e) What benefits has the community derived from the support given by ADRA? (Tick as appropriate)

Improved access to water?

Give details: -----

Improved access to quality education?

Give details: -----

Improved access to health services?

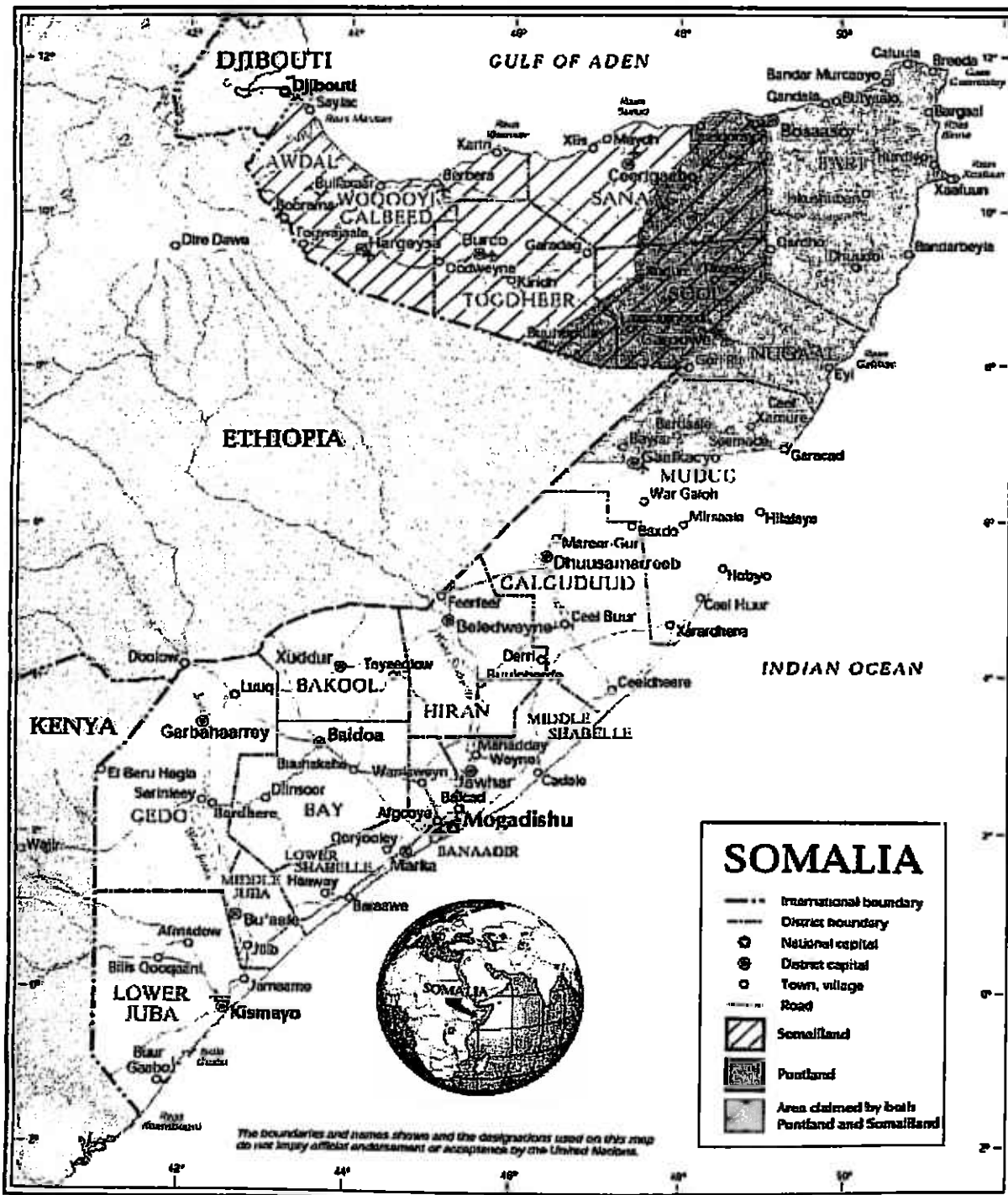
Give details: -----

f) Any other benefits?

7) Have there been any negative impacts from the projects implemented by ADRA?

8) What would you recommend to ADRA to consider in order to improve the impact of future projects?

Appendix 3: Map of Somaliland, Puntland and Somalia



Sources: United Nations, ICG interviews, February 2007.

Source: ICG, 2006