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**AN INTEGRATED ISLAMIC SOCIAL FINANCING
CROWDFUNDING MODEL FOR CLIMATE AND
DEVELOPMENT FINANCING CHALLENGES IN SOMALIA**

KHADAR AHMED DIRIE



**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
SEPTEMBER 2024**

**AN INTEGRATED ISLAMIC SOCIAL FINANCING CROWDFUNDING MODEL FOR
CLIMATE AND DEVELOPMENT FINANCING CHALLENGES IN SOMALIA**

BY



KHADAR AHMED DIRIE

UUM
Universiti Utara Malaysia

**Thesis Submitted to
College of Business,
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in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**



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Tandatangan
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: **Prof. Madya Dr. Norazlina Abd. Wahab
(IBS/UUM)**

Tandatangan
(Signature)

Tarikh : **31 Januari 2024**
(Date) **31st January 2024**

Nama Pelajar
(Name of Student)

: Khadar Ahmed Dirie (904395)

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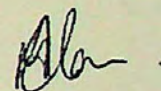
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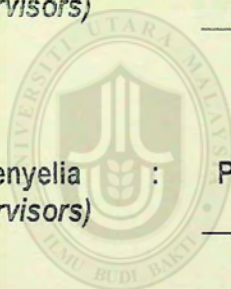
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Nama Penyelia/Penyelia-Penyelia
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ABSTRACT

Climate-induced disasters limit the development efforts in Somalia due to financing issues. Furthermore, the existing financial mechanisms are insufficient to effectively address these problems. Therefore, this study aims to propose and validate an integrated Islamic social financing crowdfunding (IISFC) model to address these financing issues. Interviews and surveys were utilised as a mixed-methods strategy. The interview data were analysed using content analysis to identify Somalia's climate and development financing issues and followed by the proposal of new viable alternative model known as IISFC model to address the identified issues. Furthermore, the proposed model is lastly validated via stakeholders and experts. Meanwhile a survey data were analysed using Structural Equation Modelling (SEM) to analyse Somali diaspora behaviour towards the proposed model. Based on interviews, this study identified climate and development financing issues as a result proposed an alternative IISFC model, in which Islamic social financing funds (zakat, awqaf, and sadaqat) will be collected in the form of cash via a web-based crowdfunding platform by a reputable institution under the Somalia government or other capable independent Islamic institution. After accumulating the funds, the institution divides funds into various categories to combat the reoccurring climate-related disasters in Somalia, which hinder the country's development efforts. Thus, the model is largely endorsed by the interviewed stakeholders and experts as an alternative comprehensive solutions to Somalia's climate and development financing issues, boosting the Sustainable Development Goals (SDGs) efforts in the country. In addition, the SEM results indicate that the usage of the IISFC model is significantly and positively influenced by the effort expectation, performance expectation, facilitating condition, and social influence of donors. The study's findings could assist Somalia government agencies mobilise climate and development funds from potential donor's such as the Somali diaspora and other potential contributors to address climate-induced disasters' and development challenges in Somalia.

Keywords: Integrated model, Crowdfunding, ISF instruments, Climate change Impacts, Sustainable Development Goals.

ABSTRAK

Bencana akibat iklim di Somalia telah menghadkan usaha pembangunan, malahan mekanisme kewangan sedia ada adalah tidak mencukupi untuk menangani masalah ini dengan berkesan. Oleh itu, kajian ini bertujuan untuk mencadangkan dan mengesahkan model pembiayaan awam sosial Islam bersepadu (IISFC) untuk menangani isu ini. Kaedah temu bual dan tinjauan digunakan sebagai strategi kaedah campuran. Data temu bual telah dianalisis untuk mengenal pasti iklim Somalia dan isu pembiayaan pembangunan. Model alternatif baharu, IISFC, kemudiannya dicadangkan untuk menangani isu ini, dan model ini kali terakhir disahkan oleh pihak berkepentingan dan pakar. Sementara itu, data tinjauan dianalisis menggunakan pemodelan persamaan struktur (SEM) untuk menganalisis tingkah laku diaspora Somalia mengenai model yang dicadangkan. Berdasarkan temu bual, kajian ini telah mengenal pasti isu berkaitan iklim dan pembiayaan pembangunan yang mencadangkan model IISFC sebagai alternatif. Oleh itu, dana pembiayaan sosial Islam (zakat, awqaf, dan sedekah) akan dikumpulkan dalam bentuk wang tunai melalui platform penjaan awam berasaskan laman sesawang oleh institusi terkemuka kerajaan Somalia atau institusi Islam bebas lain yang berkebolehan. Setelah dana dikumpulkan, dana dibahagikan kepada pelbagai kategori untuk menangani bencana berkaitan iklim yang berulang di Somalia, yang menghalang usaha pembangunan negara. Oleh itu, model itu disokong terutamanya oleh pihak berkepentingan dan pakar yang ditemu bual sebagai penyelesaian komprehensif alternatif kepada isu iklim dan pembiayaan pembangunan Somalia, meningkatkan usaha Matlamat Pembangunan Mampan (SDGs) negara. Di samping itu, keputusan SEM menunjukkan bahawa penggunaan model IISFC dipengaruhi secara signifikan dan positif oleh jangkaan usaha, jangkaan prestasi, keadaan yang memudahkan dan pengaruh sosial penderma. Penemuan kajian ini mampu membantu agensi kerajaan Somalia dalam menggerakkan dana iklim dan pembangunan daripada bakal penderma seperti diaspora Somalia dan penyumbang berpotensi lain untuk menangani bencana akibat iklim dan cabaran pembangunan di Somalia.

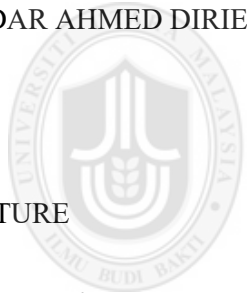
Kata kunci: Model bersepadu, Penjaan awam, instrumen ISF, Kesan perubahan iklim, Matlamat pembangunan mampan.

DECLARATION

I hereby affirm that this doctoral thesis is the outcome of my own research, except where otherwise indicated. I also affirm that it has not been previously or simultaneously submitted as a whole for any other degree at the University Utara Malaysia (UUM) or any other institution of higher learning.

KHADAR AHMED DIRIE

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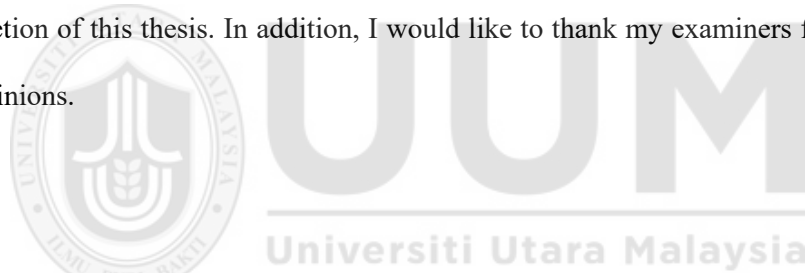


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LIST OF ABBREVIATIONS

Abbreviation	Description of Abbreviation
AVE	Average Variance Extracted
CO ₂	Carbon Dioxide
CH ₄	Methane
CB-SEM	Covariance-based Structural Equation Modelling
Covid 19	Corona Virus Disease 2019
CR	Composite reliability
EE	Efforts Expectancy
ES	Effect Size
FDI	Foreign Direct Investment
FC	Facilitating Condition
Fin-Tech	Financial Technology
GDP	Gross Domestic Product
H	Hypotheses
HTMT	Heterotrait-Monotrait
IISFC	Islamic Social Financing Crowdfunding
ISF	Islamic Social Finance
IDPs	Internally Displaced Persons
INT	Intention
IPCC	Intergovernmental Panel on Climate Change
LDCs	Least Developed Countries
LM	Linear Model
MAE	Mean Absolute Error

MDGs	Millennium Development Goals
N ₂ O	Nitrous Oxide
OIC	Organization of Islamic Countries
PPP	Purchasing Power Parity
PE	Performance Expectancy
PLS	Partial Least Squares
RMSE	Root Mean Squared Error
SDGs	Sustainable Development Goals
SEM	Structural Equation Modelling
SIF	Social Influence
SMEs	Small and medium-sized enterprises
SPSS	Statistical Package for the Social Sciences
SPEI	Standardized Precipitation Evapotranspiration Index
TAM	Technology Acceptance Model
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UK	United Kingdom
UN	United Nations
UNICEF	United Nations Children's Fund
USA	United States of America
UTAUT	Unified Theory of Acceptance and Use Technology
UUM	Universiti Utara Malaysia
VIF	Variance Inflation Factor
WHO	World Health Organization

CHAPTER ONE:

INTRODUCTION

1.1 Introduction

This chapter provides an overview of the study and the justifications for the importance of the study necessity. It includes the study's background, which discusses how climate change will affect efforts to achieve the SDGs in Somalia and the need to find alternative financing sources to help the Somali government deal with its financial difficulties. It also highlights the importance of Islamic social financing instruments and crowdfunding as alternative financing modes. Following this, the problem statement moves on to explain why this study has to be conducted and introduce the concerns that will be addressed in the following parts of the dissertation (the questions and objectives). This chapter also includes discussions of the study's significance, scope, and the thesis's overall structure.

1.2 Background of the Study

1.2.1 Current world development agenda

For the first time ever, in 2015, every UN member country adopted and agreed to a accomplish Sustainable Development Goals (SDGs) by 2030. They also outlined primary objectives and the financing guidelines to achieve these objectives. The Sustainable Development Goals (SDGs) are a set of seventeen interrelated objectives endorsed by the General Assembly of the United Nations in 2015. The SDGs seek to

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APPENDIX -A- INTERVIEW QUESTIONS AND OUTPUT

Themes in Categories	Interview Queries
PART ONE IDENTIFYING EXISTING ISSUES	
Climate change impacts	d) What do you think about climate change impacts in Somalia? e) What is the root cause of the reoccurring climate events in the country? In your point of view f) How can we address this problem?
Development problems	b) How do these climatic events impact the SDGs efforts in Somalia?
Financial issues	e) What is the role of finance in addressing climate induced issues in Somalia? f) Why do you think that accessing financial resources is a major problem for the Somali government and people in addressing the climatic events? g) Does the government have adequate finance to develop climatic projects for addressing climate issues? h) What are the problems that lead to dependency on foreign aid for climate change financing?
Significance of alternative financing modes for Somalia	d) Do you think Islamic social financing instruments such as zakat, waqf and Sadaqat are suitable to generate funds to combat the reoccurring climate events like floods and draughts in Somalia? e) What is your view on the diaspora role as donors to finance climatic projects in Somalia? f) What is your view of crowdfunding as alternate way of raising funds to finance climatic projects? Do you think, this type of faith and community based alternate financing will enhance the SDGs efforts in Somalia?
PART TWO PROPOSAL OF AN ALTERNATIVE FINANCING MODEL	
PART THREE MODEL VALIDATION	
Importance of IISFC Model	What is your view about a proposed Integrated Islamic Social Financing Crowdfunding (IISFC) Model in addressing the problems of droughts and floods and SDGs financing efforts in Somalia?
Appropriateness of IISFC model	d) What is your view on overall appropriateness of the IISFC model in the Somalia context? e) What is your view on the Microfinance and Investment arrangements incorporated in the IISFC model? f) In order to materialize this model, should this model be managed by Ministry of Awqaf and Religious affairs or Ministry of Climate Change and Environment or an independent Islamic institution? Why?

Sustainability of IISFC model	b) In your opinion, what factors contribute to the sustainability of adopting the proposed IISFC model?
Potential Challenges of IISFC model	b) What are the possible challenges in implementation the proposed IISFC model?
Prospect of IISFC model and	c) In your opinion, do you think the proposal of this model can address the climate and development financing issues in Somalia?
Donor's Responsiveness	d) Since this model relies on Islamic social financing funds raised from the public, how can the donor's responsiveness and intention to use in this model can be endorsed?

Interviewed stakeholders and experts



INTERVIEW OUTPUT

Climate change impact

“My view about climate change impact in Somalia, is that it’s very clear and apparent issue. The impacts can be seen almost every year as droughts and flash floods appear on yearly basis causing conflicts, hunger, loss of livestock and agriculture resources

and displacements. From historical perspective even my parents mentioned the occurrence of these events in their time as well. This shows that the country hasn't experienced any major development needed to move away from the consumption of woods for example for cooking which causes deforestation. This is a local contribution to the impact of the worsening environmental issues in the country. Also, one of the major contributions of this impact can be attributed to the global raising temperatures which has direct impact on our country changed rain patterns and seasons. The changing pattern of the rain falls, and unprecedented flash floods experienced in the last few years isn't normal and is an apparent evidence of this changing climate situation globally. On the other hand, the reoccurrence of these events can be attributed to the following issues (a) deforestation activities (b) Increased global temperatures (c) governance and institutional failures, (d) lack of proper government interventions (e) lack of long-term plans to address these issues. Therefore, in order to tackle these issues Somalia need (i) to move away from paper-based plans for example the 9th National Development Plan (NDP9) and move to more Action based plans, (ii) Community based interventions, (iii) Awareness creation and Social change within the Somali citizens in understanding the threats of Climate change ” S1

“In my opinion, the impact of extreme climatic events can be seen in Puntland region and Somalia in general. Also, this is global phenomena. In this federal state, the impact can be seen from the nomadic pastoralists and farmers for example which lose a huge number of livestock due to drought events experienced in this region. Also, the rate of divorce rate among nomadic pastoralists has increased. Most nomadic families are moving to major cities too. Most water wheels have dried up in 2022 due to these extreme drought events. We have also seen some push fires in this year as well which has never happened in the region causing huge deforestation. These events also have impact on security as conflicts increased. It also has impact on the overall economic activities in region such as increased food prices and local commodities so I can say that the impact of climatic events is very apparent in Puntland region and Somalia in general. Unfortunately, these events occur regularly as a result of local and global human related activities such as (a) cutting trees for charcoal business locally, (b) increased livestock numbers which feed on the remaining trees in the region, (c) increased urbanization (d) increased other environmental degradation activities (e) increased greenhouse gases and temperature levels on global levels. In order to address these issues we must take strategic actions such as (i) development of water conservation projects (mitigation) (to store rain waters) (ii) income diversification projects (adaptation) for nomadic pastoralists, (iii) Awareness and educating the local communities about the threats of climate change (iv) provision of warning systems for drought prone regions” S2

“The climate change impact in Somalia is very real. This can be seen from the lack of food security in the country. Somalia used to feed itself with two major rivers in the country. Now we import most of food outside. Also, the number of internally displaced people moving to major cities are increasing as life outside of major cities isn't sustainable due increased climatic events and conflicts. In my opinion, the root

cause of these reoccurring events can be attributed to (a) governance and institutional failures, (b) lack of proper government interventions (c) lack of long term plans to address these issues. Therefore, in order to address these issues the following strategies are important (i) promotions of farming and food security initiatives (ii) utilization of clean energy (iii) Forestations projects to increase green initiatives in the country (iv) criminalizing deforestation and charcoal activities (iiv) adaptation and mitigation systems.” S3

“The impact of extreme droughts and flash floods in Somalia is reoccurring theme for last decades with no proper interventions in places. This causes the number of internally displaced people to increase. Increased water prone diseases and so on. Therefore, climate events are real issue the Somali government is struggling while dealing other major governance and political stability issues in the country. In my opinion, these reoccurrence of these issues can be attributed to (a) The country is in post conflict era therefore, the whole country still recovering from decades of conflict and civil war (b) lack of strong governance and institutional capability, (iii) lack of long term development strategies to address these issues (c) continues human activities that harm the environment both local and global level. In order to tackle these issue certain strategies are vital (i) Awareness (ii) resource mobilizing based on community effort and commitment.” S4

“To start with, as you maybe be aware, Somalis are mostly nomadic people who possess a lot of livestock for a livelihood. These people have always relied on rains for the survival of their lives and the lives of their livestock’s. Recently, the pattern of the rain falls in the country have gotten worse. The period between the sessional rains have shifted. This has caused so much conflict among the nomadic people in the countryside’s for resources. The nomadic pastoralists are the ones that suffer mostly from these pressing climate related issues. Recently, the extreme droughts have caused more nomadic families to move to big cities which has its own complications. This leads to social crisis in main cities like Mogadishu. This leads to unplanned urbanizations. Most of these families are poor so their kids might start doing illegal activities in the city. So, in my opinion, climate change impact is very apparent and needs urgent interventions. In my opinion, the reoccurrence of these events can be related to various issues. However, the honest truth is Somalia needs urgent funds to address these issues otherwise these events will continue to happen until proper adaptation and mitigation systems and initiatives are in place. I have a an article coming on this issue. I have also attended the COP26 in Glasgow Scotland representing Somalia from office of the prime Minister. We have raised this issue to the UN members to provide loss and damage for poor income countries like Somalia who are suffering the consequence of climate change. Between 2021 until 2030 Somalia needs 54 Billion U.S dollar to invest in climate adaptation and mitigations projects which means from now until 2030 we need 6 billion funds annually to meet 2030 agenda. Somalia needs to get alternative mode of financing. This gives the private sector to get involve and fill this financial gap needed. Therefore, to address these events, Somalia needs i) Urgent financing options both international community

and Somali stakeholders (ii) Adaptation interventions (iii) mitigation interventions (eg green Somalia initiative) (iv) strong regulations on environmental degradation activities.” S5

“In my opinion, climate change is a global phenomenon and it’s not something only Somalia is dealing with. However, if you look at our country situation, we are not high industrialized nation with huge population and so on. Therefore, our contribution to this phenomenon is very little to nothing. Last year, we have witnessed locust invasion in the country, this is the first time we are witnessing huge environmental changing patterns with delayed rains too causing prolonged droughts. Therefore, the climate change impacts in Somalia are very apparent and real. In addition, some of the underlying issues responsible for the reoccurrence of these events include (a) increased global CO2 emissions (b) governance and institutional failures, (c) lack of proper government interventions (d) lack of long-term plans to address these issues. Consequently, if we want to address these issues in Somalia certain strategies need to be put in place such as (i) address the security issues as it’s hard to reach climate impacted areas due to the security issues and so on (ii) provision of microfinancing options to climate impacted families (iii) work on long terms interventions and solutions (adaptation and mitigation).” S6

“Even though climate change is a global phenomenon, however it has a huge impact on low-income countries like Somalia in my opinion. Every year, the impact of climate related events is increasing with huge adverse negative consequences such as conflicts and food insecurity. In past, these events used to appear from time to time and weren’t so frequent. However, right now these events are happening more regularly with devastating consequences. In my opinion most of the impact is coming from global raise of CO2 emissions. Therefore, the impact of these events is real in the Somalia context. Therefore, the root cause for the reoccurrence of these events in the Somalia context in my opinion, can be attributed to mainly to (a) poor governance (b) lack of institutional capabilities to provide long term plans. In order to address these events Somalia needs (i) mitigation policies (ii) adaptation policies”S7

“In my opinion, Somalia is facing so many challenges. And most of these challenges the climate induced challenges are the most prominent ones which have long term effect. These events can be related to two phenomena (i) This is a test from Allah SWT (ii) Human activities (deforestation and pollution) both local and global level which is also mentioned in the Quran (7:31). In my opinion, the reoccurrence of these events in the Somalia context can be attributed to mainly to (a) lack of strong government regulations to criminalize environmental degradation activities in the country (b) high urbanization movements (c) pollution both local and global levels (d) leadership failure (e) lack of proper plans and strategies (g) lack of community driven financing efforts. Therefore, in order to address these issues Somalia need strategies such as (i) community driven initiatives (ii) change of mindset (iii) strong commitment from all stakeholders (iv) climate adaptation and mitigation systems.”S8

“In my opinion, the reoccurring drought and flash floods in the country, cannot all be

attributed to climate change. As you may be aware, the situation of our people back home is not that great as there is so much corruption (environmental degradation activities such as deforestations and leadership and institutional failures) and oppression (conflicts) happening. Therefore, these issues lead to these natural disasters. As Muslims we must take accountability of our actions. And certainly, this is a test from Allah SWT that he put us so that we reflect and change our conditions. Therefore, we have to repent to Allah SWT for our evil actions. In my opinion, the root cause of these events can be attributed to mainly to (a) lack of proper preparations (b) Poor infrastructure (c) lack of alternative financing resources. Therefore, to address these events (i) we should ask Allah SWT for forgiveness as these events are direct impact of poor actions (ii) awareness and change of mindset (iii) self-sufficient and community based initiatives” **S9**

“In my opinion, this is existing pressing issue in our the whole of our East African region particularly in Somalia. There are many issues happening simultaneously in the region that needs proper interventions and organization. Droughts are the common climate extreme that hinder many development efforts. This leads to the loss of a big number of livestock heads which is a source income to many nomadic pastoralists. In my opinion, these reoccurring disasters can be attributed to mainly to. (a) Lack of knowledge and awareness on this issue (b) lack of alternative financing options. Therefore, to address these reoccurring events strategies such as (i) Awareness and knowledge creations by the Islamic scholars (ii) change of mindset (iii) self-sufficient and community driven initiatives are very vital for the long-term impact.” **S10**

Development Problems

“In my opinion, climate events such as prolonged droughts and flash floods do hinder the progress of SDGs in various ways (i) increased internally displaced climate refugees (ii) high urbanization in major cities (iii) increased hunger and poverty rates (1v) increased climate induced conflicts” **S1**

“Yes, of course climate change impacts have a direct effect on the progress of SDGs in Somalia. As droughts happen on yearly basis, these lead to major issues in the country. Therefore, these events affect the progress of SDGs in number of ways (i) In major cities for example the number of internally displaced climate refugees is increasing (ii) we also have high urbanization activities happening in the city as more people leave life in the countryside as a nomad due to repeated droughts events (iii) Also there is food insecurity as a result of these events which lead to hunger, increased poverty rates and crimes in major cities (1v) Also in the country side conflicts happen due to grazing lands between tribes (vi) There is also increased divorce rates among nomadic families due to loss of livelihoods and income” **S2**

“As someone working with the government, I do see the impact of these climate

related events on daily basis. Yes, I do believe these events have direct effect in the progress of SDGs in Somalia because these events lead to (i) increased food insecurity in the country which cause poverty and hunger (ii) internal conflicts based on resources and high internal displaced climate refugees (iii) increased water prone related diseases due floods (iv) increased environmental degradation activities due to absence of government regulations and criminalization acts” S3

“To be honest, all people need to have basic human necessities such as food and shelter which a huge part of the climate refugees in Somalia don’t have. Therefore, of course these events do affect the SDGs efforts in Somalia in numerous ways (i) these events lead to health issues such as malnutrition for children and water prone diseases (ii) these events also increase the number of internal displaced refugees within the country (iii) increased poverty and hunger (iv) destroyed infrastructures due to flash floods” S4

“As you know Somalia’s whole GDP depends on livestock and agricultural activities. Therefore, most of climate change impacts is felt in these sectors which lead to major other development crisis in the country such as (i) increased internal displaced refugees due to reoccurring droughts events in the country (ii) increased unplanned urbanization (iii) Social crisis due to high IDPs in major cities (iv) high unemployment (v) Income inequalities (vi) increased poverty and hunger (vii) high crimes” S5

“Because farmers and nomadic people depend on rain for grazing and farming purposes, these events, in my opinion, have a significant influence on those groups of people. Hence, it is correct to say that these occurrences do impede attempts to achieve the SDGs in the country because they result in (i) an increase in the number of people living as refugees inside the country and (ii) the loss of lives and economic livelihoods (iii) poverty and hunger issues” S6

Financing issues

“The role of finance is very significant because it’s one of the key resources needed to provide climate adaptive and mitigation projects. Regarding financial accessibility, unfortunately the government is still in institutional building process in post-conflict Somalia. Also, the work between the federal states and central government is still under progress. The completion of the constitution is still under progress. Therefore, Until the government reaches the ability to collect revenues from the whole country this will be the existing financing situation which is very limited. Also, now the government is busy in prioritising security over delivering any other major public services due to financial constraints. The goal is providing a safe and secure Somalia that can attract foreign direct investment. On the other hand, regarding adequate financing if I give you a simple answer no, because there is huge budget constraints faced by the Somali government therefore the government doesn’t have adequate

finance to develop projects to address the climate change issues in Somalia. The government gets helped from international community in providing salaries of its own government workers. The government also collects taxes in one major city only (Mogadishu) thus government is still work in progress in delivering public services. Therefore, the government revenue that comes from one city isn't enough to tackle the climate related events. As for foreign aid dependency, Ideally any government should be independent and have its own financial resources. However, due to the various constrains that exist in Somalia, unfortunately the government still relies on external grants in delivering basic services in the country thus this shows the financial weakness in the government” S1

“of course, all the mentioned strategies need funding. Hence, finance is necessary and significant and has a substantial impact in addressing these issues.. The local government here tries it's best in addressing these issues however, the resources aren't always enough. Regarding financial accessibility, for Puntland state our budget isn't that big however, still the government tries in seeking financing assistance from outside and the federal government. As for having adequate finance to develop adaptation and mitigation projects no, the Puntland state budget is very limited. On the other hand, the dependence on foreign aid is caused by lack of adequate financial resources possessed by the local and federal government to address these issues. Besides no government wishes to be in this situation however, it's important to remember that Somalia is in post-conflict era and most of the institutions are just recovering and are being rebuilt. Therefore, the current weak financial situation will get better with time, so I don't see this situation changing any time soon unless something unexpected happens. However, for now we welcome all collaboration development with all types of stakeholders whether they are Somali or non-Somali” S2

“Yes, finance is necessary and important, therefore has big role in solving most of these climatic events. In addition, there is various funds that come into country in the form of climate financing directly and indirect however the government is working towards facilitating these funds to directly reach the government institution such Ministry of Finance. So far, these funds go through various NGOs and UN agencies which oversee the utilization of these funds. The government is trying to centralize these funds and oversee it's intended objective in providing emergency and resilient development projects. As for financial accessibility issue, the following factors make it difficult for the Somali government to get funding: restricted budgetary restrictions; limited revenue sources; misaligned goals; lack of public trust; and dependence on the international community for budget help. As for adequate finance, the government budget is very limited therefore, there is no adequate finance. The government main budget is currently going into security boosting initiatives in the country. However, there are other sources climate funds that reach the government from various local and international sources which mostly come in the form of food aid initiatives. In addition, the government has plans in tackling these climatic issues. The establishment of the Ministry of Climate Change and Environment is one of the ways the government wants to provide longer term solution to this issue. The government

also intends to initiate various climate related initiatives so that the international community and other UN agencies can directly invest these indicatives in the form development rather than providing emergency food aid which has a negative impact on the food security and farming efforts in Somalia. Regarding foreign aid dependency, I believe that this is as a result of a limited budget. Most of the government's essential services will not be provided this year due to the deficit in the budget. Also, the government has limited revenue sources. Therefore, this type of financial weakness from government should be expected as Somalia is just going the right direction for stability and development after decades of unrest and instability.”
S3

“In my opinion, all types of financial resources are very important and necessary in addressing the issues mentioned therefore, yes finance has the most significant role in this. As for the problem of financial accessibility, the government is still on nation building process after years of civil war therefore it will take time for the government to build confidence both in the public and the international community. As for adequate finance, the government budget is very limited so there is no adequate finance to address these issues. Insha Allah with time and as a result of the ongoing political and security stability efforts the government will be able to expand its revenue sources and have adequate finances to provide public services to all of its citizens. As for dependency on foreign grants and aid this is normal for a country just recovering from civil war, as the government has constrained budget and limited revenue sources.” **S4**

“In my opinion, finance has very important role in addressing these issues. Even this year 2022 Somalia has presented a case in COP27 in Egypt to seek “Loss and Damage” funds intended to be given to poor income countries that are heavily suffering climate change impacts. We hope to win this appeal and get funds for our people in providing development goals. Therefore, this shows how importance climate financing is to the government of Somalia in meeting its SDGs targets. Regarding the financial accessibility problem, Somalia in one of the poor indebted countries to IMF and world bank. Therefore, once the current ongoing debt relief process is success, Somalia can have access to finances and other financing modes from the international community to address the climate financing issues in the country. As for now the government is on national building journey with limited financing alternatives. As for the adequate finance, no, that is the simple answer on this issue to be honest. Even my upcoming articles is addressing this issue. This is an urgent matter for Somalia government. Somalia is facing many challenges and one of the major challenges is financial constraints and alternatives. Therefore, the Somali government is dependent on the international community for grants and aid because of this. To be honest, I am not against this reliance for now because as a nation we aren’t yet at the institutional capability needed. Before these disasters happen what are we doing? Exactly we aren’t prepared to address these events accordingly, so this forces us to seek help from outside. I have data from OECD regarding climate finance in Somalia. From 2006-2020 Somalia has received only 1.5 billion US dollar and most of these funds didn’t directly reach to the Somalia government and people but

rather various NGOs who used these funds for non-development related and emergence initiatives such as humanitarian food aids and so on. Therefore, this is not sustainable and doesn't help Somalia in the longer term. Thus, this is a discussion for another time but for now we need the help of all stakeholders including international community" S5

Significance of alternative financing modes for Somalia

"This idea is very needed and noble. Unfortunately, Muslims today need to build the right type of Islamic social finance projects that address the urgent needs of Muslims rather than just focus on building mosques for example. I think utilizing these instruments for the right development projects is a noble and innovative initiative hopefully this idea reaches the leaders and scholars of the country. This should be discussed in public, and Muslims should be aware of that Islam offers solutions to all of our problems including climate and development related issues. Regarding the diaspora, considering our situation in Somalia, the help of every stakeholder is urgently needed whether it's the diaspora or local private sectors. Every little effort helps in delivering development services in Somalia and saving lives and livelihoods. As for the utilization of crowdfunding-based platforms, this is innovative and urgently needed intervention to reach as many donors as possible. Lastly, yes faith and community-based intervention are a trending topic recently for many academics to address development issues in the world. A friend of mine from Canada published an article on this but from conventional perspective. Therefore, this type of faith and community-based intervention is very needed in Somalia. So far, the existing financing efforts don't provide any development projects but rather they are limited to emergence provision. Therefore, a large-scale faith and community-based effort has a great potential for sustainability and long-term impact" S1

"Of course, I am aware of the significance of these Islamic instruments, however I wasn't aware of that you could use these instruments to address our current financial constraints. Thank you for enlightening me. This type of alternate financing options is very much welcomed in our institution, and I will brainstorm this idea with our directors. Yes, I do believe these instruments can be utilized for the greater benefit of our society just like the companions of the Prophet did in their time. In fact, these funds from these Islamic instruments offer better development projects than our current financing modes. Regarding the diaspora role, I myself got educated with the help of my diaspora families to study abroad therefore, the diaspora community are always a vital organ in the existence of the Somali people without them none of us would have survived in Somalia after civil war therefore, the role of Somali diaspora as donors is always welcomed and in fact much needed. This shouldn't be limited to finances only but also human capital contribution as well. The country needs all the knowledgeable Somalis to return home and contribute their knowledge in the country's development efforts. As for the utilization of existing crowdfunding mechanisms, to be honest I wasn't familiar with this type of mechanism however it

sounds very innovative idea. So far, the only type of finances modes I am familiar with is one that comes from government institutions and international NGOs however, if funds can be directly raised from donor's regardless of their location in the world to directly finance climatic projects, then this is much needed alternative, and we welcome it. Lastly, regarding faith and community-based financing modes, yes, we welcome this type of efforts and collaborations. Of course, this type of financing has a good potential. In fact, our institution will try to even invest R & D on this issue and understand it's longer-term impact in addressing financial constraints faced by the institution. We thank you for bringing this issue into our attention.” S2

“Certainly, funds from Waqf, Sadaqat, and Zakat can support large-scale development initiatives that could deal with a variety of challenges in the country. The only problem I can identify with Somalia is the absence of trust. There is a brand-new community-based endeavour named Kobciye Corporate that offers development projects in Somalia now. However, the differences between this initiative and yours is that Kocbiye aims to make money, but the majority of Somali people today require development projects, and your model is faith-based and doesn't appear to aim to make money in doing so. Hence, I believe that the revival of these instruments to be used in resolving the issues the nation is facing is crucial and has a lot of potential. The Somali government must support this form of financing. Regarding the Somali diaspora role, as you maybe be aware, the diaspora has been a big part of this country survival. Therefore, their donations and participation in this climate financing effort is much needed. Right now, I am aware of few diaspora-based initiatives that are already happening in Somalia where the diaspora are microfinancing businesses and creating jobs for local youth and entrepreneurs. I am not sure if you are aware of this but some of the most prominent banks in the country are also diaspora founded. They also provide education opportunities to many local youths to study abroad. All of these efforts show how significant the diaspora is to the survival of Somali people and economy. Thus, indeed their role is vital and much needed. As for the crowdfunding mechanism, it's much needed alternate way of raising funds which could be very beneficial in addressing the financial constraints faced by the government. Finally, with regards to faith- and community-based interventions, I do think such collaboration is desperately needed. All forms of financial efforts are warmly appreciated because the situation in Somalia is grave and urgent action is required. I endorse the implementation of this idea.” S3

“Indeed, these instruments are essential and vital. But so far, in our ministry of Awqaf and religious affairs, we place the greatest emphasis on raising public awareness, fostering public trust, and contributing to the nation's peace-building process. There are currently no plans in place to utilise these instruments. But nonetheless, this is a welcomed model and concept, and we want to achieve this level very soon, insha'Allah, as the institution continues to expand and regain the public's trust. Regarding the diaspora role, the Somali diaspora have always been and will continue to be an integral component of Somalia's development efforts, making their contribution crucial and welcomed. As for the crowdfunding idea, it is a much-needed new and alternative method of obtaining funds that might be very helpful in resolving

our institution's budgetary constraints as well. Lastly, since Somalis are Muslims, our religion instructs us to work together and assist each other in performing good deeds. Absolutely, this form of faith- and community-based solutions is urgently required in Somalia given the country's current predicament.”S4

“Yes, there is huge need for alternate financing mode in addressing climate financing issues that exist in Somalia. as I mentioned earlier there is huge opportunity for the private sectors to get involved such as Islamic finance institutions. This is noble approach. Historically, Islamic financial systems had a role in Muslim society in the past this shouldn't be ignored at all. Islam has solutions for all our problems. I urge the Muslim scholars to issue fatawa regarding this issue to ask the public to get involved in donating their charitable zakat, waqf and Sadaqat to disaster related causes. Similarly, as I said earlier, the involvement of the diaspora in bridging the development gap is essential and can serve as an alternate means of obtaining finances. Therefore, Diaspora should not be the only source of potential donors. Even local enterprises and the private sector should participate as contributors. Somalia welcomes and urgently needs all forms of alternative financing. As for the crowdfunding mechanism, this type of raising funds is important as it allows the Somalia government to get funds from the diaspora citizens or any other donors that live outside of the country. This allows the government to build relationship with the diaspora community or other donors as well. So, this is a well needed platform to connect local issues to the outside world. Lastly, this type of faith- and community-based interventions and solutions is a crucial and much-needed endeavor that can help close the country's funding crisis.”S5

“Certainly, these noble mechanisms (Waqf, zakat and Sadaqat) can assist raise the additional revenues needed to confront Somalia's recurrent climatic catastrophes such as floods and droughts. As for the diaspora role and involvement, they are very important stakeholder in Somalia. However, all types of donors should be welcomed. As for the crowdfunding concept, this method of fundraising is extremely good. Nevertheless, there is a lack of structuring of these ideas into actionable stages in Somalia. I have recently come across crowdfunding-based initiatives in Somalia that address entrepreneurship and job creation, but they were equity-based rather than donation-based. All of these unique new concepts are, in my opinion, desperately needed in Somalia. Lastly the faith and community-oriented concept is desperately needed in Somalia. Because the existing financial initiatives are limited to emergency assistance and do not include any development projects. Thus, a large-scale faith- and community-based effort has tremendous potential.” S6

“Yes, the utilization these important instruments have been very popular and significant in many Muslim nations around the world specially, countries like Malaysia, Indonesia, Sudan and Kuwait. Therefore, in my opinion same success story can be achieved in Somalia specially in addressing pressing climate related events like droughts and floods in the country. Also, there is a great need in providing the right type of Islamic social financing projects which is designedly tailored to address the most pressing issues in the Somalia context. I think diaspora has an important role

to play in financing climatic projects whether its donation-based approach or investment-based approach. Both ways they can get involved and be vital donor in this effort. Regarding the crowdfunding mechanism, this is an alternative way of raising funds which can help the provision of timely emergency funds to climate impacted areas. This is innovative platform, which is not popular in Somalia unfortunately however, it should be welcomed. Lastly, i can see the potential in this faith- and community-based initiative, and it should be supported on a big scale, with participation from all stakeholders mentioned.” S7

“Indeed, the utilization of these vital instruments (zakat, waqf and Sadaqat) is excellent and has great potential. If we can find an institution that can handle this instrument competently, we are eager to get involved. I hope that this type of initiative is supported on a greater scale and that all Muslim donors are urged to partake. Being a Somali diaspora organisation, we have hosted a number of forums where this topic has been discussed. We even proposed collaborating with government officials. We recognise our responsibility to contribute to our nation's critical development efforts. Because, as a Somali community, we recognise that long-term residence abroad is unsustainable, and we aspire to return to Somalia in the near future. Thus, we are willing to participate in sustainable models and initiatives that merit investment and support. Nevertheless, some of us are suffering from compassion fatigue as a result of witnessing so many natural disasters in the country and providing only emergency aid, which does not provide long-term solutions. As a result, we are willing to contribute and engage so long as there are clear models and projects with enduring results. Regarding the crowdfunding concept, I am quite familiar with this type of mechanism, as I have personally raised funds for Somalia in the aftermath of prior natural disasters. This is an innovative way to reach a large number of contributors, making it an effective method for raising funds for Somalia's climate projects. Lastly, regarding the faith and community-based interventions, it's very similar to what I have said earlier. We need community-based interventions that provide long terms solutions.” S8

“Yes, the utilization of these instruments is suitable and has a good potential. Specially Waqf can be a good tool to address many of these development related issues. On the other hand, I do believe that the diaspora can play a crucial role in taking part on these issues. However, for a starter the diaspora themselves need to be educated about these Islamic social financing instruments. Most of them aren't actually aware of how important these Islamic instruments are in addressing pressing issues of Muslims around the world. Secondly, they should be given a clear role in how they can help the development projects needed in Somalia. Regarding the crowdfunding concept, it's an alternative platform which is a great way to reach many donors around the world. So, it's something that can be utilized to fulfill the realization of these projects. Lastly, the faith and community-based effort is a noble idea that as Muslims we can rectify our sins by taking part in charitable acts needed in our home country. These natural calamities occur due to our activities; thus, we must also work together to perform good deeds and correct our mistakes.” S9

“As someone who has worked in the Islamic finance industry for more than a decade, I've always advocated for the use of Islamic social financing instruments as an alternate approach to tackling numerous development concerns in the Muslim world. I have worked with numerous initiatives on this topic, including one in which I collaborated with a mufti in Perlis Malaysia on a project in Kenya including the use of Zakat in the form of dawah. I admired the concept's originality a lot. herefore, I believe similar consideration must be given to the use of similar Islamic social funding methods in addressing numerous critical concerns, such as recurrent climate catastrophes in Somalia. On the other hand, diaspora and any other potential donors are essential to the success of any social funding effort. Given the size of the global Somali diaspora, their involvement and responsibility should be inherently embraced and encouraged. Regarding the crowdfunding idea, yes crowdfunding platforms are innovative way to raise funds. However, in Somalia many other important components must be in place for this idea to succeed such as government and audit body that oversee how these funds are utilized. Lastly, regarding faith- and community-based action, this is something I have also advised previously, as the current finance gap is large, and many developing nations require alternative financing mechanisms to reach their financing goals. Therefore, this is noble and timely concept to materialize.” S10

Importance of IISFC model in the Somalia context

“In my perspective, this is a model that has been given a lot of attention and is really well designed and complete. The issues are laid out in a way that is very appealing to me, and the solution appears to be practical and effective. If it is put into action and made a reality, this model has the potential to solve the problems that have been caused by climate change in the country. This methodology seems like it might be used to solve a number of the SDGs in the country.” S4

“To be honest, this idea aligns closely to what I have mentioned earlier, for private sectors to fill the financing gap that exist in Somalia. However, this proposed model seems very appealing overall, noble, comprehensive, and innovative. I can see this model be implemented in Somalia with two ministries (ministry of Awqaf and Ministry of climate change and environment) becoming the beneficiaries of this idea in providing development projects in the country which at the moment highly needed.” S5

“The model is noble, innovative, implementable and effective. I can see it being very beneficial to the Somali people in general and addressing the development issues in the country. I wish trustworthy experts can implement this model for the greater benefit of the whole country as its timely needed.” S6

“Overall, this model is very noble, implementable, and suitable to the Somali context

and fills the knowledge gap missing. I endorse it and encourage the relevant stakeholders to materialize it as its urgently needed. Its noble initiative” S7

“I think this model is absolutely noble and innovative. I highly endorse it to be implemented and as diaspora community we would like to take part and direct all our charitable funds to this channeling for the greater good of our country” S8

“Allahuma barak, the model seems very well put together and innovative, however I do wish from sharia point of view to be developed further and the utilization of the ISF funds to be clearly defined in accordance with principles of Islam. Overall, this model is innovative and much needed alternative source of financing for Somalia context.” S9

“This model has so much potential and can address the pressing issues in Somalia in timely manner however, in my opinions the donors should be broader and should include all Muslims around the world so that the benefit is greater. All big multinational Muslim companies should get involved in the participation of this model as well. Overall, it’s very innovative and noble model.” S10

The appropriateness of IISFC model in the Somalia context

“Overall, this model is very suitable to be adopted and implemented in Somalia. It will provide a timely needed financing option to the Somali government and people as for the innovative microfinancing arrangement will provide financial help needed by climate impacted farmers, nomadic pastoralists, SMEs and refugees in the country. Microfinance is something only banks offer in Somalia at the moment so if this model can offer (debt-free) financing options to climate impacted businesses and climate refugees in reestablishing their lives again then this is very noble and welcomed initiative. On top of that, the investment mechanism incorporated in the model also gives some sort of sustainability for the idea which is unique and commendable. In addition, as for the managing authority, i endorse and recommend that this model should be adopted and only managed by our Ministry of Awqaf and Religious affair. We are rightful institutions for holding Islamic social financing instrument and will make sure to provide transparent operations in fulfilling these ideas. In this ministry, we are in much need of innovative ideas to develop the ministry operations. Besides, this model could actually help us in providing proper development programs and reconnect and collaborate with the Muslims on these projects. We are thankful for developing this model and wish to materialize the adoption of this model in real life. Please do keep in touch with us” S4

“The proposed IISFC model is very appropriate and applicable to Somalia context for sure. The incorporation of microfinancing option is innovative and commendable approach to help climate impacted refugees, SMEs etc. This approach also promotes financial inclusion without taking loans from traditional banks. In addition, the investment idea helps the institution to stand on its feet without needing to use the

donated funds for their expenses. As for the managing authority of this IISFC model, in my opinion, I suggest that you propose this model to the Somalia government without mentioning any specific ministry. The government will then assign the model to the suitable ministry to handle its implementation therefore for now just mention Somalia government as the main managing authority as they are the main entity responsible for all our affairs. Overall, the way the model is proposed is excellent regardless of which entity adopts it” S5

“The model is appropriate considering how Somalia is struggling to finance its climate induced development issues. So yeah, its commendable model overall. In my opinion, this is the investment idea is noble approach because when I first heard this model idea, I was thinking how is this model is going to be sustainable? But after seeing the investment idea incorporated it made sense why this idea will work. Without operational costs it’s hard to deliver any services. Therefore, the investment mechanism will facilitate for the success of this model. Also for the microfinance arrangement is commendable approach as this type of financing is important to the recovery of SMEs and other climate impacted individuals. Overall, this model is innovative. thus, whether this model will be successful or not will depend on who manages it. There is big trust issue among Somalis. Therefore, all stakeholders should have representative in any of the institutions that decides to manage this noble idea. The scholars and reputable individuals in the country should lead this initiative too. This is important so that all donors can see someone that represent them in the board of this managing authority this will build public trust.” S6

“In opinion, considering our long discussion about climate change impacts and the development issues in Somalia, I think the proposed IISFC model is very appropriate and applicable to the Somalia context. In facts is well needed idea and model hopefully its materialized. In addition, the incorporation of microfinancing and investment idea in this model makes it more commendable. It’s very appropriate approach considering how lack of financial inclusion affects climate impacted businesses and refugees. Similar, the investment helps the institution to be independent financially and not rely on the donors’ funds. Overall, the whole arrangement is very unique, easy to implement and commendable. On the other hand, for the managing authority, considering how sensitive Somali people are, I suggest the managing authority of this model to be an independent institution which comprises the most reputable scholar of the country. This will build confidence in the public trust and other donors because so far, there is trust issues among the public and government due to corruption fears and so on. Therefore, this should be taken into consideration” S7

“Like I said earlier the proposed IISFC model is very noble and very suitable to Somalia context. In my opinion, looking at from the donor’s perspective the microfinance idea is very innovative which boosts the confidence in the public as the model targets various vulnerable groups in providing microfinancing financing options. This sort of selfless microfinancing approaches should be endorsed and encouraged in a Muslim country like Somalia which have high percentage of its

population under poverty line. As for the investment mechanism also boosts the trust of donors regarding the proposed IISFC model in sustaining itself. This is innovative idea as well that makes donors to worry less about the donated funds. On the other hand, the managing authority should be inclusive which has all stakeholders represented including women. Secondly, there is a huge need for integrity and transparency. Failure to provide that will complicate the realization of this noble integrated ideas therefore, in my opinion a strong independent Islamic social financing institution with trusted scholars is more suited to adopt this model and the Somali government and its respective relevant ministries can be beneficiaries in the implementation of the projects.” **S8**

“In my view, the proposed IISFC model has the potential to address many Somalia challenges for many years to come therefore, its surely appropriate model considering how 99% of the Somalia population are Muslims. In my opinion, the incorporation of microfinancing and investment option is very innovative idea which modernizes the model. Nowadays sustainability and being inclusive is highly endorsed and these options contribute to that debate therefore, this is commendable and implementable approaches. On the other hand, this model should be adopted by an independent Islamic institution. And people working under these institutions should be vetted based on integrity. To eliminate anything that will put doubt in the minds of donors.” **S9**

“In my opinion, so far, the proposed IISFC model seems very suitable and applicable to the Somalia context however, it needs further development to strengthen its implementation once the possible institutions adopt it. On the other hand, as you know microfinancing is very trending topic now. It’s amazing to see this concept incorporated in a charitable model like this which is intended to alleviate the suffering of Somali Muslims because of global climate consequences. This innovative and noble idea. In addition, the investment idea also helps donors to have confidence in the proposed IISFC model as this gives the managing authority to be independent financially thus promoting sustainability for the long term. On the other hand, in my opinion, this type of work can’t be done without government involvement. However, it’s possible the model to be adopted by an independent private entity who have collaboration with the government. Also, an auditing body is important in this the same environment which is independent from both bodies mentioned above. Eventually, this will solve the issue of trust and minimize fraud activities.” **S10**

Sustainability of IISFC model

“Overall, this model has its own way of generating extra finances to cover the operational costs needed. The model also has its own finance in maintaining the assets in the institutions collected from the public. This creates a sense of sustainability which helps in delivering projects in timely manner. Because the institutions don’t need to use the collected funds for their own personal expenses.

Therefore, in my opinion this model is very sustainable. To maintain this level of sustainability, a continues funds from donors is needed. This can be achieved by constantly promoting and advertising the projects listed under IISFC. This will lead to attract more donors.” S4

“Overall, the sustainability of the model is very good. However, to maintain it needs donors to continuously give funds which requires a lot of engagement needed from the institutions such as promotions of projects by scholars and social influencers. Collaboration between stakeholders is also important to enhance the development and sustenance of the IISFC model.” S5

“I think this model is sustainable, because without the investment arrangement incorporated, I would have questioned how sustainable its but so far, I can only see so much potential that can come out from this project. Hopefully, its adopted and implemented. And for the IISFC to maintain it, the following factors must be considered; continues engagement of funds, campaigns to promote projects, scholars’ participation to build confidence and trust among the public” S6

“Overall, the IISFC model shows high sustainability due to the investment mechanism incorporated however in order to maintain the sustainability aspect of the IISFC model, the following needs considerations; Muslim scholars’ participations to endorse the model, continues funds from donors, continues investment, advertainment of projects that needs funding on social media platforms such as Facebook, Twitter, WhatsApp, telegram etc.” S7

“In general, the IISFC model shows a sign of sustainability to work in real life if its implemented. However, more sustainability can be achieved if the ideas are shared with all stakeholders, more awareness is created, continues efforts and collaborations and donations are achieved, more development projects are initiated and completed. Therefore, Somali scholars needs to get behind these noble initiatives and endorse it by issuing fatawas and mentioning in mosque events” S8

“To be honest, the proposed IISFC model looks very presented however, in order to implement and materialize the ideas shown here, the funds must be continuing, more promotions is needed to attract more donors, effective collaborations of various stakeholders, completion of projects to build the trust in donors” S9

“Having been in the Islamic finance industry for many years, I would recommend the following to maintain the success of the IISFC model: more awareness is needed from scholars for the endorsement of the model and its benefits, all stakeholders must be included in the decision making efforts to build trust, donors giving attitude of donating and giving must be taken into account, and IISFC must be promoted on social media so that more donors are attracted into the model to donate..” S10

Potential Challenges of IISFC model

“In your model I don’t see anything worth mentioning at the moment. So far, the model seems perfectly designed however, my concern is findings the right reputable knowledgeable people and institution to help in the implementation of this noble and innovative model. On top of that, Somalia is still very unstable country in terms of politics this should also be considered” **S4**

“So far, the only challenges I can see from here is that how to maintain trust and be transparent with donors. Presently, the Somalia government wants all funds entering the country to go through under the central bank of Somalia (for security reasons) so maybe all crowdfunding donations must be supervised by the central bank of Somalia for auditing and regulation purpose to prevent fraud activities. And other suggested managing authority should be the beneficiaries of these funds. In addition, the political uncertainty in Somalia is also worth mentioning, however we ask Allah to continue giving us more stability.” **S5**

“Even though, the overall structure of the IISFC model seems well thought, the only concern I can see it in terms of implementation is related to public trust, transparency and identification of reputable managing authority. If all these concerns are addressed and dealt with, I can see the success of the IISFC model” **S6**

“In terms of hurdles, the trust between donors and managing authority needs huge consideration. Transparency and accountability that is needed from the managing authority is also something to remember. It’s important to remember also that Somalia is still unstable country politically so this can have impact on the IISFC model implementation.” **S7**

“The only issue I can see is how realistic it’s to implement this model. Is it feasible yes, however the only challenge I can see arising from this model is who can be trusted and will materialize this model into functioning model? I encourage you to make this model as personal projects until its implemented. Make sure to discuss with all relevant stakeholders, if possible, present it in front of government officials. Further development of the model and its realization is needed. Also, it’s important to remember that transparency is key to build donor’s trust so anything fraud potentials should be eliminated.” **S8**

“It’s important to know that Somalia is still recovering from years of political instability and corruption. Therefore, one of the challenges in fraud. There should be a separate independent entity that audits this institution and its operations. And there should no relationship between the auditing entity and the managing authority of this model to enhance transparency and accountability to build donors trust” **S9**

“Considering how corruption is so high in developing sub-Saharan African countries, the only issue I have is related to Trust. Somalia government for example still doesn’t

have strong institutions that combat corruption so how can the managing authority of IISFC model build good trust in donors' attitude of giving. This is the biggest hurdle that needs to be considered strongly" **S10**

Prospects of IISFC model

"Yes 100%, I believe this model has the potential to provide the financing alternative needed in Somalia particularly in our institution. The model has the potential to alleviate poverty and hunger, promote peace and development in Somalia" **S4**

"Yes, this model has a great prospect in filling the development and climate financing gap that exist in Somalia. It's clear example of climate action (SDG13) needed in Somalia as most of our development related issues is climate change induced. I can see this model filling many gaps notably the poverty alleviation efforts in the country. Therefore, this commendable idea that is worth following up and implementing." **S5**

"This model has so much potential and prospect in Somalia context. Somalia is struggling with many issues and the direct financing of climate induced issues will have greater impact on the rest of other SDGs such as poverty and hunger alleviation efforts, promotion of peace and stability in the region and son on. So, this is a model that worthy endorsing. Hopefully, the Somalia government takes it seriously and adopt it." **S6**

"Somalia. The government or any other relevant bodies should consider implementing it and endorsing it. I can see the model having huge potential in addressing many SDGs such as SDG1,2,3,4,5,6,8 and 10." **S7**

"Definitely this model has huge potential and can address many challenges in our country such the alleviation of climate change impacts which will have huge spill over impact on the SDGs efforts in the country. This sort of community and faith-based initiatives should be encouraged because it promotes self-sufficient." **S8**

"Yes, I can see this model working so well. Hopefully the model becomes a cash flowing model where a huge funds are raised so that more development projects are achieved to address the development issues in Somalia such as mitigation climate change impact and poverty alleviation and other development related efforts in the country" **S9**

"In my opinion, this model has a good prospect however, the raised concern should be addressed if this model has to succeed. Other than that, the model has the potential to solve many Somali issues such as the fight against poverty, poor infrastructure, peace building efforts and other development related issues in the country. I highly recommend policy makers to consider it as alternative climate and development financing mode" **S10**

Donors' responsiveness

“Donors shouldn't have any concerns, in my opinion, if the IISFC model's management authority has strong accountability to demonstrate transparency and competence. Therefore, significant commitment is required from managing institutions to demonstrate accountability in managing these funds. Additionally, there is a need for effective marketing and campaigns for the displayed initiatives seeking funding” S4

“The donor's responsiveness can be promoted via strong marketing tactics. Because this model needs continues funds to make projects feasible in accomplishing. Therefore, the managing institution should invest in strong marketing campaigns.” S5

“To be honest, the managing institutions should deploy educated and competent people in this institution who have the knowledge and skills needed to success the IISFC model into actionable. Therefore, with competent people in place and strong marketing skills the donor's engagement to the IISFC can be alleviated.” S6

“When the model is implemented, it should be easy to use for everyone. The managing institution should learn from other established in terms of how donors are responsive to their campaigns and so on. Having strong marketing department should be considered too that promote the projects that need funding.” S7

“As far as my experience with CF goes, it should be as simple to use as other crowdfunding-based platforms, whether the IISFC is implemented on a website or an application that donors can access regardless of their location. In addition, institutions must market and promote their initiatives so that donors are aware of them.” S8

“There is a need for accountability and trust between the IISFC model's donors and administering authority, in my opinion. This enables the donor's response to be encouraging and positive.” S10

APPENDIX -B- QUESTIONNAIRE



Dear Somali diaspora respondents,

I am a doctoral student at the Universiti Utara Malaysia. I am conducting a research thesis titled **“AN INTEGRATED ISLAMIC SOCIAL FINANCING CROWDFUNDING MODEL FOR CLIMATE AND DEVELOPMENT FINANCING CHALLENGES IN SOMALIA”**. The aim of this survey is to assess the Somali diaspora's intention in using an Integrated Islamic Social Financing Crowdfunding (IISFC) based model to finance adaptive and resilient climatic and development projects in Somalia.

As you may be aware, climate disasters such as floods and extreme draughts are very common in Somalia and there are problems of financial constraints faced by the Somali government and people in Somalia in general to finance and develop adaptable and resilient climatic projects to reduce the impact of climate induced disasters in Somalia. With that in mind, the Somali diaspora contributes significantly to the Somali economy. Each year, Somalia receives over \$2 billion in remittances from the diaspora to support families' livelihoods and other development projects. Considering this, as a viable solution for the climate induced issues in our country, an integrated Islamic Social Financing Crowdfunding (IISFC) based model has been proposed in this research. The model aims to direct all charitable contributions from the Somali diaspora, such as Zakat, Waqf, sadaqat, and so on, to sustainably finance climatic projects in Somalia. Therefore, the purpose of this particular survey is to examine your opinions regarding the proposed model to gauge your level of intention to participate and use it. This survey will be part of my PhD thesis which I am currently pursuing at UUM under the supervision of Assoc. Prof. Dr Selamah Maamor and Assoc. Prof. Dr Md. Mahmudul Alam.

Please respond to all the questions, as your responses are crucial to the accuracy of this survey. If you cannot provide an exact response to a question, please provide your best judgment. All responses to this questionnaire will be held in absolute confidence. I would like to express my sincere appreciation for your cooperation and contribution in this survey. Thank you

Khadar Ahmed Dirie,
PhD Candidate,
College of Business (COB)
School of Islamic Business studies (IBS),
Universiti Utara Malaysia (UUM)
06010 UUM Sintok, Kedah, Malaysia
H/P: +60147008070

e-mail: Qadarqaadi143@gmail.com

Section A
Socio-economic profile of diaspora respondents

Please tick (✓) for your answers

1- Gender

Male ☐ Female ☐

2- Age _____

3- Marital Status: Single ☐ Married ☐ Divorced ☐

4- Educational Level

No education ☐ Primary/Secondary ☐ College Diploma ☐

Bachelor's degree ☐ Postgraduate Masters/PhD ☐

5- Residential country: _____

6- Monthly income in \$: _____

7- Are your relatives dependent on you for regular income? _____

8- The total remittance income per month you send to your relatives in Somalia

\$ _____

9- Do you have drought/flood impacted relatives in Somalia? _____

10- Are you aware about the climate change and development issues in Somalia?

11- Do you have any previous knowledge about financing for climatic and development projects in Somalia?

Section B

Instructions

This section aims to assess the behavioural intention of the Somali diaspora to participate and use a proposed **Integrated Islamic Social Financing Crowdfunding Model known as (IISFC)** using theory-based constructs.

Based on the given scale, please read each statement carefully and indicate your degree of strength agreement/disagreement on the following statements.

Note: IISFC refers to Integrated Islamic Social Financing Crowdfunding Model

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

Behavioural intention		SD	D	N	A	SA
INT1	I intend to use to use the IISFC model in the future	1	2	3	4	5
INT2	I predict I would use the IISFC model in the future	1	2	3	4	5
INT3	I plan to use the IISFC model in the future	1	2	3	4	5
INT4	I am interested in using the IISFC model	1	2	3	4	5
INT5	I will strongly recommend the IISFC Model to others.	1	2	3	4	5
Performance Expectancy		SD	D	N	A	SA
PE 1	Using the IISFC proposed model can make my donation transactions more efficient	1	2	3	4	5
PE 2	Using the IISFC model can save me time when processing a donation transaction.	1	2	3	4	5
PE 3	Using IISFC model can make my donation transactions more convenient	1	2	3	4	5
PE 4	Using IISFC model can be useful in managing my donations records	1	2	3	4	5
Effort Expectancy		SD	D	N	A	SA
EE 1	Learning to use the proposed IISFC model is easy for me	1	2	3	4	5
EE 2	Becoming skilful at using IISFC model is easy for me	1	2	3	4	5
EE 3	Interaction with IISFC model is easy for me	1	2	3	4	5
EE 4	Overall, I think IISFC model is easy to use	1	2	3	4	5
Social Influence		SD	D	N	A	SA
SI 1	I think, my peer group will use the IISFC model	1	2	3	4	5
SI 2	I think, my community will use the IISFC model	1	2	3	4	5
SI 3	I think, people in general will use the IISFC model	1	2	3	4	5
SI 4	It is trendy to use the proposed IISFC model	1	2	3	4	5
Facilitating Conditions		SD	D	N	A	SA
FC 1	I have the knowledge necessary to use IISFC model	1	2	3	4	5
FC 2	I have the resources necessary to use IISFC model	1	2	3	4	5
FC 3	Using IISFC model suits my living environment	1	2	3	4	5
FC 4	Using IISFC model is compatible with my transactions	1	2	3	4	5

If you have any comments and suggestions about this survey, please leave them in the box below.

APPENDIX -C- THE INDICATOR CROSS-LOADING

Cross-loadings		Effort Expectancy	Facilitating Condition	Intention to Use	Performance Expectancy	Social Influence
Effort Expectancy	EE1	0.821	0.558	0.598	0.611	0.630
	EE2	0.863	0.568	0.566	0.596	0.620
	EE3	0.818	0.538	0.526	0.526	0.557
	EE4	0.860	0.565	0.563	0.558	0.608
Facilitating Condition	FC1	0.618	0.795	0.577	0.616	0.593
	FC2	0.525	0.851	0.574	0.496	0.526
	FC3	0.535	0.901	0.567	0.529	0.559
	FC4	0.540	0.866	0.531	0.503	0.530
Intention to Use	INT1	0.503	0.545	0.783	0.586	0.610
	INT2	0.583	0.572	0.828	0.556	0.594
	INT3	0.595	0.667	0.854	0.590	0.579
	INT4	0.520	0.639	0.759	0.558	0.578
	INT5	0.591	0.609	0.882	0.571	0.643
Performance Expectancy	PE1	0.639	0.556	0.643	0.900	0.638
	PE2	0.597	0.597	0.607	0.890	0.588
	PE3	0.608	0.534	0.609	0.882	0.623
	PE4	0.607	0.615	0.622	0.894	0.582
Social Influence	SIF1	0.691	0.600	0.676	0.662	0.901
	SIF2	0.612	0.586	0.645	0.574	0.898
	SIF3	0.655	0.556	0.628	0.622	0.869
	SIF4	0.597	0.586	0.633	0.550	0.867