

Understanding the potential for the KJWA:
A critical analysis of the socio-economic
dimensions and ethical implications of
sustainable development financed by the
Financial Mechanism of the UNFCCC

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ABSTRACT

The aim of this work was to address the problem of lack of financial support for climate change related projects in the agricultural sector, by contributing to the research on the socio-economic dimension of sustainable development projects. Ethical considerations on measurement and justice in governance, and the definition of the socio-economic dimension built the basis to understand how the social and economic dimensions can be appropriately included in sustainable development projects funded by the Financial Mechanism under the UNFCCC. To identify evaluative criteria of the GCF and GEF a document analysis of the funding proposal forms of these was conducted. While both the GEF and the GCF address the social and economic dimensions of sustainable development somehow in their evaluative criteria, these can be improved. Transparency and accountability of the IFIs could be increased if clear guidelines to draft the funding proposals would be provided and the requirements would be formulated more clearly.

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Abbreviations and Acronyms

ADB	Asian Development Bank
AF	Adaptation Fund
AfDB	African Development Bank
AIIB	Asian Infrastructure Investment Bank
APICORP	Arab Petroleum Investment Corporation
AWG-LCA	Ad Hoc Working Group on Long-term Cooperative Action
CAF	Development Bank of Latin America
CBD	Convention on Biological Diversity
CBDR	Common but differentiated responsibilities
CBIT	Capacity-building Initiative for Transparency
COP	Conference of the Parties
DAC	Development Assistance Committee
EA	Enabling Activities
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EDA	Enhancing direct access
EIB	European Investment Bank
EIT	Economies in transition
ESS	environmental and social safeguards
EU	European Union
FA	Focal Area
FAO	Food and Agriculture Organisation of the United Nations
FP	funding proposal
GCF	Green Climate Fund
GDP	Gross Domestic Product
GHG	Greenhouse gas
GEF	Global Environment Facility
CSOs	Civil Society Organizations
HDI	Human Development Index
GHG	Greenhouse Gases
ICT	Information and Communication Technologies
IDB	Inter-American Development Bank Group
IDP	Information Disclosure Policy
IFI	Financial Institutions

ILO	International Labour Organisation
IPCC	Intergovernmental Panel on Climate Change
IsDB	Islamic Development Bank
iTAP	independent Technical Advisory Panel
IW	International Waters
KJWA	Koronivia Joint Work on Agriculture
LDCs	least developed countries
LDCF	Least Developed Countries Fund
LDP	lexical difference principle
MFS	mobilizing funds at scale
ML	Money laundering
MSMEs	micro small and medium-sized enterprises
M&E	monitoring and evaluation
NAMA	Nationally Appropriate Mitigation Action
NAP	National Adaptation Plan
NDB	New Development Bank
NDC	nationally determined contribution
NGO	Non-Governmental Organizations
OECD	Organisation for Economic Co-operation and Development
OFP	Operational Focal Point
PIF	Project Identification Form
PMF	performance measurement framework
PMC	Project Management Costs
RCP	Representative Concentration Pathway
RFP	Request for Proposals
SAP	Simplified Approval Process
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SCCF	Special Climate Change Fund
SCF	Standing Committee on Finance
SDG	Sustainable Development Goal
SIDS	Small Island Developing States
SSPs	shared socio-economic pathways
TF	Terrorist Financing
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification

UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations International Children's Emergency Fund
UNIFEM	United Nations Development Fund for Women
U.S.	United States of America
WBG	World Bank Group
WHO	World Health Organisation
WMO	World Meteorological Organisation

1. Introduction

“Climate change is [...] the greatest market failure in human history, with [...] disruptive implications on the social well-being, economic development, and financial stability of current and future generations: conservative estimates see unabated climate change leading to global costs equivalent to losing in-between 5 to 20% of global gross domestic product (GDP) each year, now and forever” (UNEP, 2019, para. 1). Climate-related investments are crucial to prevent these projections from turning out worse. Scientists are warning that “we are failing to provide the freedom of future generations to sustain their lives on this planet” and that we should take steps to change this (Annan, 2000, p. 55; IPCC, 2018).

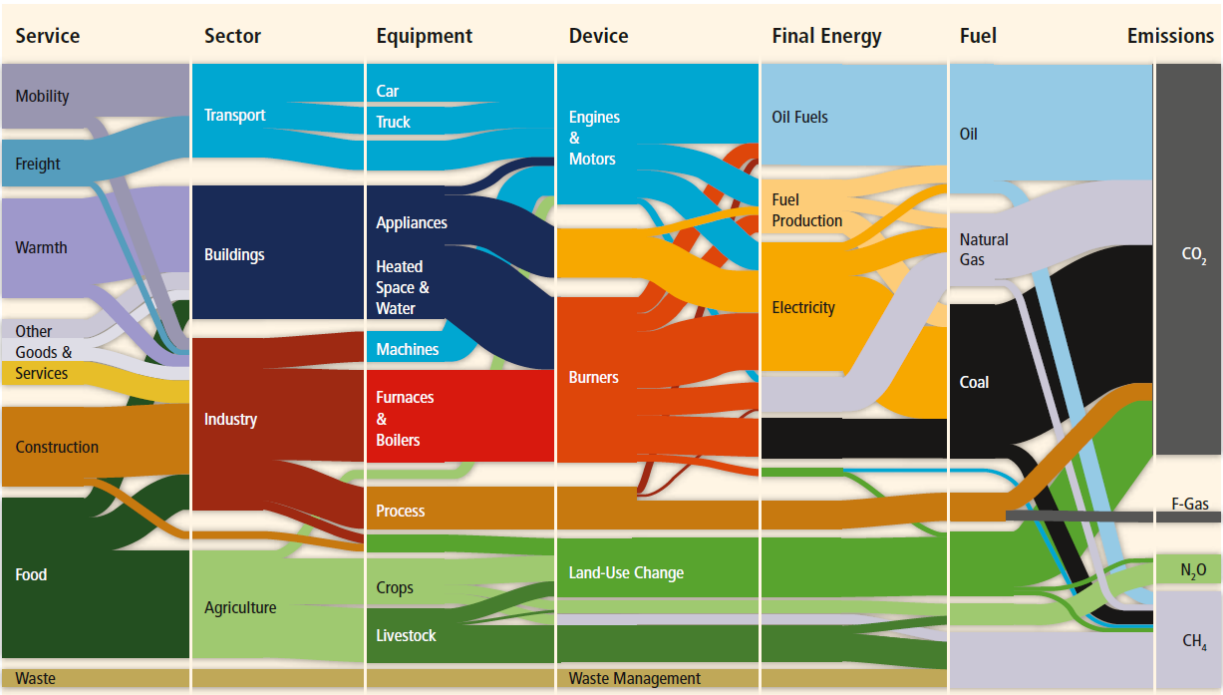
The aim of this work is to address the problem of lack of financial support for climate change related projects in the agricultural sector, by contributing to the research on the socio-economic dimension of sustainable development projects. The Koronivia Joint Work on Agriculture (KJWA) is a Conference of the Parties (COP) decision under the UNFCCC to better integrate agriculture in the international climate agreements. While the agricultural sector is strongly impacted by climate change and contributes to around a quarter of the global greenhouse gas emissions, financial investment in projects to mitigate and adapt to climate change in the agricultural sector is still too low (WBG *et al.*, 2016; CFLI, 2019).

Treating the member countries of the European Union (EU) as one country, ten large industrialised and developing countries account for 70 per cent of total emissions (IPCC, 2014b). In .

Figure 1 is visualised how global emission shares differ between service, sector, equipment, device, final energy and fuel production (IPCC, 2014b). To understand .

Figure 1, each column must be read similar to a pie chart, as each column presents 100 per cent of the system. The width of each line in Figure 1 is equal to the share of total GHG emissions released in 2010 (IPCC, 2014b).

Figure 1- Emission generation from human demand



Source: A Sankey diagram showing the system boundaries of the industry sector and demonstrating how global anthropogenic emissions in 2010 arose from the chain of technologies and systems required to deliver final services triggered by human demand (IPCC, 2014b, p. 745)..

Figure 1 demonstrates that most emissions are shared between the transport, buildings, industry and agricultural sector, which each contribute to around a quarter of total emissions. From .

Figure 1 can be understood that the agriculture sector, but also food production in general contribute to a large share of global emissions (IPCC, 2014b). Insufficient amount of food production is not the only problem that this sector is facing, in 2010 the agricultural sector contributed to around 47 to 58 per cent of total anthropogenic emissions of CH₄ and N₂O and simultaneously it is dramatically affected by global warming and climate disasters (IPCC, 2007, 2014b). The high share of total emission, in combination with billions of lives depending on the proper functioning of the agricultural sector, show the high potential investments in the sector have (IPCC, 2014b, 2018). People are starving and suffering from undernourishment all around the world (FAO, 2018d).

Climate change will alter ecosystems, food systems, infrastructure, coastal, urban and rural areas, human health and livelihoods determined by the rate and extent of change and the vulnerability and exposure of human and natural systems (IPCC, 2014c, p. 75, 2018).

To address the impacts of climate change, adaptation to climate change and mitigation of emissions causing climate change is crucial (IPCC, 2018). To ensure the reader will understand the discussions in this work, the definition of climate change mitigation and adaptation of the IPCC is stated in the following.

“Adaptation is the process of adjustment to actual or expected climate and its effects in order to either lessen or avoid harm or exploit beneficial opportunities. Mitigation is the process of reducing emissions or enhancing sinks of greenhouse gases (GHGs), [...] to limit future climate change (IPCC, 2014c, p. 75). While mitigation focusses on reducing human-induced global warming, the studies of climate change impacts usually focus on total global warming (IPCC, 2018). Mitigation and adaptation can lead to fundamental and transformational changes in systems, which can be beneficial but can also create additional risk (IPCC, 2014c). Since the social and economic dimension is strongly interlinked with environmental dimensions and has a massive impact on whether we can successfully reach the 1.5 degree Celsius targets set at the international level to prevent the current climate conditions from worsening (IPCC, 2018). The high rate of GHG emissions since the beginning of industrialisation has radically speeded up global warming (IPCC, 2018). A difference is made between temperature rise in the pre-industrial (1850-1900) period and industrial period to understand how much of the global warming is human-induced and natural change driven by geophysical or biosphere forces that have altered the Earth System trajectory in the past (IPCC, 2018). The human-driven change since 2000 is up to ten times faster than in then in the past 800,000 years (IPCC, 2018). The United Nations Framework Convention on Climate Change (UNFCCC) signed by the majority of the countries, set targets to decrease this human-driven change and limit global warming for this century to 2 degrees Celsius above pre-

industrial levels (IPCC, 2018). These are not only the objectives for all countries that ratified this agreement, but also for the Financial Mechanism (see section 1.3) established under the UNFCCC.

International financial institutions (IFI) play a crucial role in the fact that funding for the agricultural sector is so low, but also the fact that social and economic dimensions of human life have not been taken enough into consideration when making interventions to mitigate emissions or adapt to climate change. IFI are financial institutions that have been established by more than one country.

This work reflects how to make funding for the socio-economic dimension of sustainable development projects more accessible. Therefore, this work will analyse how funding for these dimensions can be accessed under the current requirements (evaluative criteria) of the IFI and how IFI can take the social and economic dimension of sustainable development better into account through changing their requirements (evaluative criteria). This work uses the definition for evaluative criteria as being a checklist to assess whether requirements are fulfilled, as used by Momtaz and Kabir (2018). This is a two-sided approach, first to allow project implementers to understand how under the current conditions they can better integrate the social and economic dimensions in their project. Second, to allow the IFI how they can introduce standards in their requirements to make the social and economic dimension an appropriately addressed part of every project that will be financed in the future. The requirements, and how IFIs assess whether a project fulfils these, is explained in the first sub-section of this introduction.

Demands are increasing to make ‘evidence-based’ measurement of successful funding quantifiable, preferred before the funding is disbursed. Evidence-based measurement means that the measurement relies on scientific evidence to form inductive or deductive arguments. To make measurement quantifiable means to turn qualitative data into quantitative data. Before the disbursement of funding is the period before a project is implemented, so in the identification, design and planning phase, when it is presented to the IFI in through the funding application. To understand this, one must review the principles that guide international organizations and the obligations that these organizations have. Financial institutions are international organizations that are led by the principles of transparency, integrity and accountability — which are the cornerstones of democratic governance (European Commission, 2001; Bianchini and Peters, 2013; United Nations, 2015b; WBG, 2017). The EU and the United Nations (UN), but also IFI, such as the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB) or the World Bank (WB), have in common that they represent and implement the interests of multiple countries on an international level (European Investment Bank, 2015). This requires a high level of transparency, accountability and integrity, to prove to the involved actors that the trusted resources are used conscientiously and effectively, and that agreements are upheld. Integrity is demonstrated through the fact that these organizations make decisions based on the interests of the governments of the member states, which represent the interests of the citizens of these. Furthermore, all international institutions are financially dependent on their member states or external financial bodies to support projects or policies that are being planned on a local, national or international level. Financial institutions try to focus on most cost-effective investment options, by calculating effectiveness based on

economic return on investment and the highest rate of emission reduction on investment (Rosga and Satterthwaite, 2009; Merry, 2011; IPCC, 2014b). Social return on investment and social costs need to be included in ex-ante assessments. Even though it was found that calculating the cost-benefit of climate change related interventions are difficult to justify due to the strong inter-linkages within the global social-ecological system, they are still used by IFIs to evaluate projects, see in this work and in the Annexes (IPCC, 2018). It has been clearly expressed by the international community that social, economic and environmental dimensions are crucial for successful sustainable development and to successfully limit global warming (IPCC, 2018). While economic measurement methods have been agreed upon and used since the middle of the twentieth century and agreements on how to harmonize the measurement of climate change mitigation are evolving (Sen, 1999; WBG, 2015; UNDP, 2019). There has barely any progress in developing measurement methods for the social dimension of projects and the international community is not discussing any agreements on harmonizing these (United Nations Task Team on Social Dimensions of Climate Change, 2011; Markkanen and Anger-Kraavi, 2018). This is strongly connected to the ethical implications (including the impact it might have in improving human rights standards in the specific contexts) that the social dimension of development projects has and the bias on from the climate change related governance perspective, that this dimension is not part of mitigating emissions (IPCC, 2014b, 2018).

The problem begins with the difficulty of providing a comprehensive account of the social and economic dimension to be able to take into consideration different (sometimes-conflicting) social and economic factors.

Disciplines such as climate change mitigation or disaster risk reduction define the social and economic dimension differently, and this leads to different implication on what needs to be measured and why (United Nations Task Team on Social Dimensions of Climate Change, 2011; IPCC, 2014a; FAO, 2017c). In the past progress of development has been mainly measured through an increase in a country's GDP (UNDP, 1990). By the end of the 1980s scientist became aware that the increase of a country's GDP is not the only and not the right measure for the livelihood of people on a household level, but since then, research for other methods to measure the benefits of development projects has progressed slowly (UNDP, 2019). While the GDP is a macro indicator at country level for overall economic well-being, disaggregated indicators are needed to measure economic dimensions of well-being on the household level (United Nations Task Team on Social Dimensions of Climate Change, 2011; IPCC, 2014c; FAO, 2017c; IPC-IG, 2019). However, Sen's capability approach has importantly informed new metrics based on human development vastly employed by the UN (Sen, 1988; UNDP, 1990, 2019; Sen and Anand, 1994a). The category of socio-economic measurement is included in assessment methods for projects since the beginning of the 21st century. However, there is no common and generally used definition of the socio-economic dimension. Often the dimension is named socio-economic but mainly reflects economic aspects, such as an increase in income, costs and increased number of jobs. The first step to improving ex-ante assessment methods in this dimension is to define the socio-economic dimension. Such definitions must always reflect an international consensus and the values and morals of the institutions working with the definition. Numerous actors play a great role in the acceptance of definitions and

practices on the international level. It is essential to review their roles and views when developing a definition of the socio-economic dimension and a method to assess it.

Indicators and measurement methods for a dimension can only be defined if it is clear what the ultimate aims are. These aims highly depend on what is considered as a just or fair society and which rights an individual has to specific resources or opportunities. Therefore, the chapter on justice will discuss what can be considered as just or fair in our society. These discussions will then be compared to the current requirements or guidelines of the IFI, to see how they overlap, or where gaps might need to be filled. This thesis will contribute to these major problems, by discussing the ethical implications that measurement in general but also explicitly of this dimension has, by proposing a definition of the socio-economic dimension of sustainable development projects and by assessing how financial resources for this dimension can be accessed and addressed through the Financial Mechanism of the UNFCCC.

It is necessary to understand why ex-ante assessments are needed for funding of projects and common definitions are highly relevant.

1.1. Requirements of international financial institutions

This thesis will demonstrate that currently, there are not enough and completely transparent standards to declare benefits of the social and economic dimension in sustainable development projects. Additionally, it is not straightforward to declare many aspects of the social and economic dimensions as the benefits of sustainable development interventions in applications for funding.

Nevertheless, this is essential to access funding for projects benefitting socio-economic dimensions of climate change, as IFI need to be transparent and accountable on how they decide which projects will be funded. Accountability, transparency and the obligation of Green Climate Fund (GCF) and Global Environment Facility (GEF) to finance projects aligned with the objectives of the agreements under the UNFCCC will be explained more in detail under the next sub-chapters of this introduction.

Accredited entities that can be private or public, non-governmental, sub-national, national, regional or international apply for funding from IFI to finance the implementation of projects. The ex-ante measurement of benefits or the impact of projects is crucial when applying for funding from IFI. To identify, design and plan a project/programme, the entity that implements the project, must conduct a feasibility study. For this study, the entity must assess which interventions are the most suitable to change the current baseline scenario and reach a desired final impact/result. This baseline scenario can be a climate, social, economic, or environmental scenario or a combination of different scenarios. To understand which intervention is the most appropriate the entity assesses the ‘problems’ that should be changed from different angles and assesses the risks that possible interventions can have. This type of ex-ante assessment is conducted in the form of desk research, questionnaires, calculations, meetings with involved stakeholders, and with theories such as the theory of change, to estimate the potential final impact that a project will have or the change it will drive. Based on these assessments, the logical framework or results-based monitoring and evaluation framework is built, which defines the concrete inputs, outputs, outcomes and impacts of the project. While some institutions

offer funding to prepare these materials, most institutions offer the possibility to apply for funding only after the project design and plan is complete.

To apply for funding of IFI, the entity must fill out funding proposal forms that are a sort of measurement framework or list of evaluative criteria of normative character. Normative character because by setting criteria that projects need to be aligned with, the financial institutions allow for specific interventions and not for other interventions, or for certain main impacts but not for other significant impacts. These requirements set specific standards, which the project implementer that applies for funding of a certain project must follow in the project design and plan in order to be applicable to receive funding.

For this work, the requirements of the two central financial bodies (GCF & GEF) of the Financial Mechanism of the UNFCCC will be analysed. These requirements are usually decided by the governance body of the financial institution, and in the case of the GEF and GCF, they should be aligned with the objectives formulated in the international agreements under the UNFCCC. How exactly these requirements are formulated, and which requirements are used by the GCF and GEF will be analysed in this thesis.

1.2. Need for increased transparency and accountability in climate finance

Transparency of international institutions, especially financial institutions and the distribution of voting power on their boards is becoming an increasingly relevant topic in recent years (Gomez-Echeverri and Müller, 2009). Transparency is an essential tool to increase trust and confidence between developing and developed countries and also between national governments, international organizations and international financial institutions (UNFCCC, 2016; European Commission, 2018d). Transparency of international institutions, especially financial institutions and the distribution of voting power on their boards is becoming an increasingly relevant topic in recent years (Gomez-Echeverri and Müller, 2009). Transparency is an important tool to increase trust and confidence between developing and developed countries and also between national governments, international organizations and IFI (UNFCCC, 2016; European Commission, 2018d).

Transparency and accountability are principles that need to be reflected in all stages of the funding cycle (Schalatek, 2019). Schalatek (2019) states that a transparent administration of public climate must publicly available and comprehensively provide - financial data, accurate and timely information on the funding structure, decision-making process, the structure of its board, project preparation documents, actual funding decisions, disbursements made, and implementation results (Schalatek, 2019). If this information is not available, it undermines the accountability of the financial institution to the intended beneficiaries (Schalatek, 2019). Accountability demands a procedural structure in place to allow affected citizens to challenge funding decisions or project implementation and strengthen the oversight by national legislators (Schalatek, 2019). Schalatek (2019)

For this work, transparency is defined according to the principle of transparency in law as “the quality of being clear, obvious and understandable without doubt or ambiguity” (Advocate General, 2004). These principles are also reflected in the Paris Agreement, in the Enhanced Transparency Framework which addresses the need for increased transparency of actions and of support (\$) and were later written down in a

clear framework at the Katowice conference (COP24), by adopting a detailed set of modalities, procedures and guidelines that make it operational (UNFCCC, 2015, 2016, 2018). These increase quality and ensure methodological consistency, but also avoid problems such as double counting (UNFCCC, 2015, 2016, 2018). To support the progress towards higher transparency on an international level, the Capacity-building Initiative for Transparency (CBIT) was established under the GEF, by a COP decision in 2015, to support developing countries in the capacity building for more transparent reporting practices and to build institutional and technical capacity (UNFCCC, 2016).

The EU, the UN and IFI are organized differently in terms of finances. Nevertheless, they share the need to be transparent and show the integrity of the investment of their financial resources and therefore they need to make detailed assessments on the potential impacts — such as socio-economic and environmental dimensions — before they implement new policies or projects (United Nations, 2015a). These assessments are called ex-ante assessments. The biggest IFI are the Asian Development Bank (ADB), the African Development Bank (AfDB), the Asian Infrastructure Investment Bank (AIIB), the Arab Petroleum Investment Corporation (APICORP), the Development Bank of Latin America (CAF), EBRD, EIB, the Inter-American Development Bank Group (IDB), the Islamic Development Bank (IsDB), the New Development Bank (NDB) and the WB Group. Even though climate change related to the agricultural sector is a highly relevant topic in the international political fora, most of these IFI do not finance in this sector. The EU is the biggest donor for climate finance to developing countries, and the relevant budget is planned to increase (European Commission, 2018c). As the currently most important IFI in climate change finances in the agricultural sector can be considered the AfDB, the ADB, the EBRD, the EIB, the CAF, the GCF, the GEF, the IDB, International Fund for Agricultural Development (IFAD), the International Finance Corporation (IFC), the IsDB, the WB (Climate Funds Update, 2019; Watson and Schalatek, 2019).

Even though some IFI already invest in working on climate change impacts in the agricultural sector, data and ex-ante assessment methods are still scarce. The 2018 Biennial Assessment and Overview of Climate Finance Flows of the Standing Committee on Finance raises the need to enhance the availability of granular country-level data on mitigation and adaptation finance in the agricultural sector (Standing Committee on Finance, 2018). The harmonization and development of ex-ante assessment methods are crucial in the process to increase the availability of granular country-level data on financial flows in the agricultural sector. First attempts are made, by IFI in the harmonization of standards for GHG accounting, and by the private sector in developing criteria for forestry-related assets and projects (UNFCCC, no date c; WBG, 2015; Climate Bonds Initiative, 2018). Nevertheless, sufficient tools are missing to be able to successfully deploy technical and financial solutions climate change, especially in the field of adaptation to climate change (UNFCCC, no date a).

As explained in the sub-chapter on the international climate agreements the Financial Mechanism of the UNFCCC plays a crucial role in the financial translation of the agreements in financed practices. The GCF and GEF are funding projects and programmes in the light of the objectives of the UNFCCC agreements. The

GEF has a unique position as being the Financial Mechanism for several multilateral environmental agreements, such as the Convention on Biological Diversity (CBD), United Nations Convention to Combat Desertification (UNCCD) UNFCCC, the Minamata Convention, the Stockholm Convention and the Montreal Protocol, while additionally targeting support for transboundary freshwater and marine (GEF, 2018b, p. 2). The GCF has the main objective of financing equally adaptation and mitigation projects and programmes under the objective of the UNFCCC to support paradigm shifts (GCF, 2019a).

1.3. The evolution of international agreements on climate change

The realisation that we need to protect the environment for our and future generations is reflected in the strong support and engagement in a trend that started around fifty years ago and was demonstrated by the great participation at the first World Climate Conference by the World Meteorological Organization (WMO) in 1979 (World Meteorological Organization, 2009). As a conclusion of this conference, ‘An Appeal to Nations’ was written. This appeal to nations stated that it was of urgent necessity: “(a) to take full advantage of man’s [sic] present knowledge of climate; (b) to take steps to improve significantly that knowledge; (c) to foresee and prevent potential man-made changes in climate that might be adverse to the well-being of humanity” (WMO, 1979, p. 12; World Meteorological Organization, 2009).

With the Resolution 38/161 of 19 December 1983, a special commission was established to “propose long-term environmental strategies for achieving sustainable development to the year 2000 and beyond;” as well as to recommend ways for greater cooperation on international level and potential solutions for the international community (General Assembly, 1983, p. 131). This special commission published the Brundtland Report in 1987, which is considered a major step in international development, as it developed the widely used definition of Sustainable Development as “development which meets the needs of current generations without compromising the ability of future generations to meet their own needs” (General Assembly, 1987). Furthermore, the report identified two major global risks. One risk mentioned in section ‘IV. A Call for Action’ is that all nations may suffer from the releases of “carbon dioxide and of gases that react with the ozone layer” (General Assembly, 1987, para. 103). The second significant risk mentioned in section 1 ‘Energy, Economy, and Environment’ is the “serious probability of climate change generated by the 'greenhouse effect' of gases” (General Assembly, 1987, para. 11). As a consequence, it expressed in section 3 ‘Assessing Global Risks’ the need of an institution, which is politically independent and scientifically highly regarded to be able to conduct an intergovernmental risk assessment (General Assembly, 1987, para. 59).

As highlighted by the Brundtland Report trusted scientific evidence was needed. In 1988, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC). It was later endorsed by the United Nations General Assembly to assess “on a comprehensive, objective, open and transparent basis the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts and options for adaptation and mitigation.” (IPCC, 2013, p. 1).

To establish a common ground for joint efforts, the United Nations Framework Convention on Climate Change (UNFCCC) was opened for signature at the United Nations Conference on Environment and Development in Rio de Janeiro. The “framework for international cooperation to combat climate change” had the main objective to limit the “average global temperature increases and the resulting climate change” as well as the resulting impacts (United Nations, 1992).¹ The objective was the stabilisation of greenhouse gas concentrations in the atmosphere at a level which would allow ecosystems to naturally adapt to climate change, “to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner” (United Nations, 1992).

Countries that signed the international climate treaty, UNFCCC, were divided into three main groups with different commitments (United Nations, 1992). Annex 1 parties include industrialised countries that were members of the Organization for Economic Co-operation and Development (OECD) in 1992 and (the EIT Parties) economies in transition (United Nations, 1992).² Annex 2 parties correspond to all Annex 1 countries without the EIT Parties; these are required to provide financial resources to ensure that developing countries can implement emission reduction activities and adapt to the impacts of climate change. Moreover, they are urged to transfer environmentally friendly technologies to developing countries (UNFCCC, no date d; United Nations, 1992).³ The funding provided by the Annex 2 countries is mostly governed by the Convention’s Financial Mechanism (United Nations, 1992). All countries not listed in Annex 1 are known as Non-Annex 1 Parties. They are mostly developing countries with different needs, and the Convention highlights activities which have the aim to meet the individual needs and concerns of these vulnerable countries, including investment insurance and technology transfer (UNFCCC, no date d). Of these countries, 49 are classified as least developed countries (LDCs) by the United Nations. The Convention raises special attention to their limited capacities to respond and adapt to climate change. It emphasises the need to take full account of their specifically vulnerable situation when considering funding and other activities (United Nations, 1992).

In the UNFCCC, the involved Parties did not solely commit with common but differentiated responsibilities (CBDR) to make their national inventories of anthropogenic emissions available to the public. Through the CBDR the countries also committed to the formulation, implementation and publication of programmes to mitigate and adapt to climate change. In these commitments, they highlighted the importance of the “energy, transport, industry, agriculture, forestry and waste management”⁴ sector (United Nations, 1992).

¹ The UNFCCC is one of three Conventions that were opened for signature at the Rio Earth Summit in 1992, the other two are the Convention on Biological Diversity and the Convention to Combat Desertification. The three objectives of these three conventions is closely linked and hence a Joint Liaison Group was set up to pool their efforts and pull together.

² The current 43 Annex 1 Parties are: Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, European Union, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland, and the United States of America.

³ The current 24 Annex 2 Parties are: Australia, Austria, Belgium, Canada, Denmark, EU, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland, and United States of America.

⁴ See Article 4 (c)

These CBDR of developed and developing nations, were strengthened to have legally binding targets for Annex I Parties with the adoption of the Kyoto Protocol in 1997 (United Nations, 1997). The first commitment period for the Annex 1 Parties of the UNFCCC with binding targets of the Protocol (Annex B of the Protocol) started in 2008 and ended in 2012. A second commitment period (2013-2020) was set in the Doha Amendment (UNFCCC, 2012a) to the Kyoto Protocol. However, the Doha amendment has not entered into force, to this day.

Another significant international landmark is the Paris Agreement, which was adopted in 2015 (UNFCCC, 2016). Its central aim is to strengthen the global efforts to keeping the “global average temperature to well below 2 °C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above preindustrial level” (UNFCCC, 2016). Furthermore, it aims to increase countries ability to cope with the impacts of climate change and to assist climate-resilient and low-emission investment decisions of financial institutions (UNFCCC, 2016). The Paris Agreement is innovative in many ways; one is that it has a bottom-up governance structure rather than a top-down approach. In contrast to the Kyoto Protocol, the Paris Agreement emphasizes consensus-building through voluntary nationally determined targets which are written down in nationally determined contributions (NDCs) that are chosen and submitted by the countries (UNFCCC, 2016). These NDCs are politically encouraged and not legally bound, but the countries are legally bound to assess and review progress on their set targets and plans (UNFCCC, 2016; United Nations, 2016).

The European Green Deal is much aligned with international ambitions defined in the Paris Agreement. Inspired by the European Council’s Strategic Agenda for 2019-2024 and discussions with political groups in the European Parliament, the new President of the European Commission, Ursula von der Leyen, has written the Political Guidelines for the next European Commission 2019-2024 (EC, 2019; European Council, 2019; von der Leyen, 2019). Von der Leyen highlights the importance of the Paris Agreement and the intention of the Commission to meet their targets for 2020 (Erbach, 2019; von der Leyen, 2019). The European Commission (EC) presented a new strategic plan to become climate neutral by 2050 in 2018 already, which was also envisioned by von der Leyen for the new Commission guidelines (European Commission, 2018a, 2018b; Directorate-General for Climate Action, 2019; von der Leyen, 2019). Furthermore, she plans to increase climate investments in climate finance and for that purpose to establish a European climate bank under the European Investment Bank (von der Leyen, 2019). The importance of the agricultural sector is stressed, and farmers shall be supported with a new “Farm to Fork Strategy” on sustainable food, by focussing on the whole value chain (von der Leyen, 2019). The European Green Deal, which is part of the package of changes envisioned by von der Leyen, will be planned by the Commissions Executive Vice-President Frans Timmermans (Erbach, 2019; von der Leyen, 2019). This Green Deal highlights the importance of better coordination of climate change adaptation measures and harmonised climate policies across the European Union and worldwide (Erbach, 2019). Additionally, a comprehensive framework strategy to implement the sustainable development goals (SDGs) in the EU, accompanied by a review mechanism to assess progress, is planned (Erbach, 2019). Part of the EU Green Deal will also be a Biodiversity Strategy for 2030 (von der

Leyen, 2019). To reach these ambitious goals of the new Commission, a greater consensus and harmonization of measurement practices is needed.

1.4. The Koronivia Joint Work on Agriculture

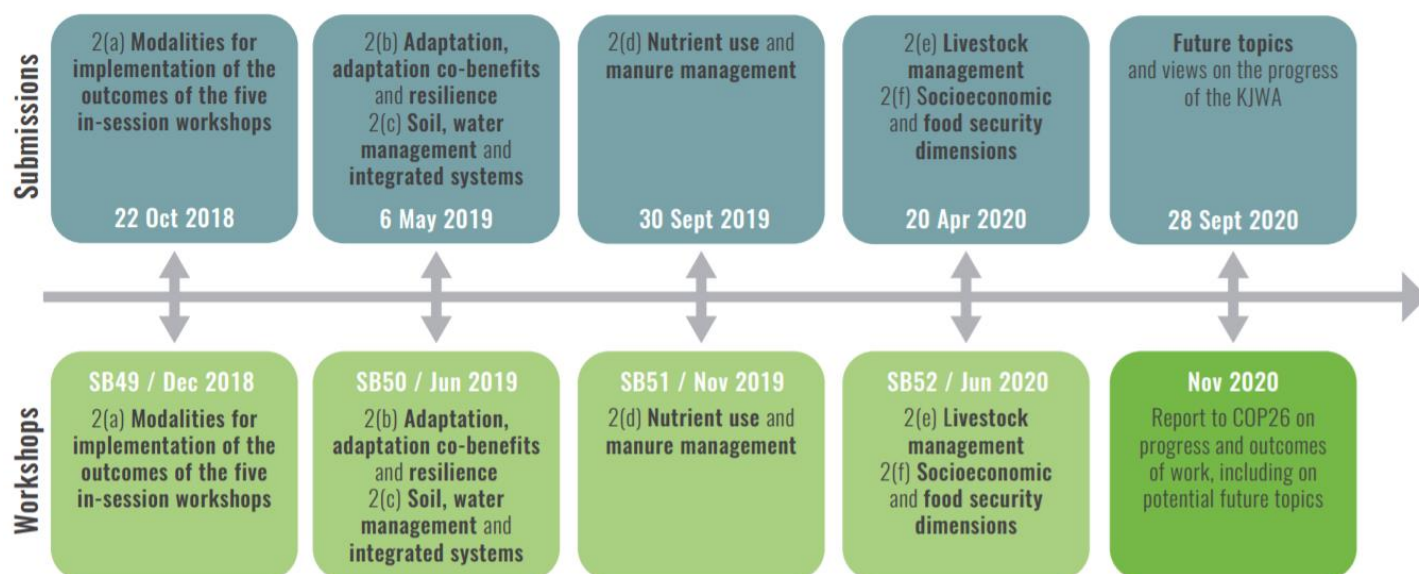
The Food and Agriculture Organization of the United Nations (FAO) together with the World Health Organization (WHO), the United Nations Development Fund for Women (UNIFEM) and the International Labour Organization (ILO) pushed for a stronger focus and discussion on impacts of climate change on food security and the agricultural sector. This happened primarily through a joint submission to the UNFCCC in 2009 (ILO, WHO, FAO, UNIFEM, 2009), which highlighted the need for climate strategies to address food security and sustainable development. Furthermore, the need for assessment of the social and economic impact of climate change mitigation and adaptation is stressed (ILO, WHO, FAO, UNIFEM, 2009). Through the development of the ‘FAO Strategy on Climate Change’ in 2017, the organization aimed to increase its support to member countries “in achieving their commitments to face climate change” (FAO, 2017b).

This momentum and other active processes on an international level lead to the Decision 4/CP.23 on the Koronivia Joint Work on Agriculture (KJWA) to address issues related to agriculture, while “taking into consideration the vulnerabilities of agriculture to climate change and approaches to addressing food security” (UNFCCC, 2017). It gives the joint responsibility to Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI), which are two permanent Subsidiary Bodies to the Convention and were established at the first Conference of the Parties (COP1) in August 1995 (UNFCCC, 2017; St-Louis, Schlickenrieder and Bernoux, 2018). The two subsidiary bodies are expected to report on the progress and outcomes of the KJWA at the COP26 in November 2020 (UNFCCC, 2017). In paragraph 2 of the decision, parties and observers are invited to submit their views on a list of topics until 31 March 2018. They should start with but not be limited to: “(a) Modalities for implementation of the outcomes of the five in-session workshops on issues related to agriculture and other future topics that may arise from this work; (b) Methods and approaches for assessing adaptation, adaptation co-benefits and resilience; (c) Improved soil carbon, soil health and soil fertility under grassland and cropland as well as integrated systems, including water management; (d) Improved nutrient use and manure management towards sustainable and resilient agricultural systems; (e) Improved livestock management systems; (f) Socioeconomic and food security dimensions of climate change in the agricultural sector” (UNFCCC, 2017; FAO, 2018c).⁵ Based on the submissions by the parties and observers, a roadmap for the forthcoming three years was created. This roadmap envisages in-session workshops on the topics listed in the Decision and also for future topics, as can be seen in the timeline below, see Figure 2 (FAO, 2018c).

⁵ The five in-session workshops mentioned in topic (a) took place between 2013 and 2016 as part of the Subsidiary Bodies sessions and covered topics in the agricultural sector such as capacity building, improvement of coherence and coordination of finance, early warning systems, technology support and transfer, adaptation and sustainable production (FAO, 2018c).

Figure 2 - Koronivia roadmap

KJWA ROAD MAP



Source: (FAO and CMCC, 2019, p. 4)

The secretariat of the UNFCCC is responsible for the organization of these workshops and the reporting after each workshop (FAO, 2018c, 2019c). The topics envisaged for discussion in the roadmap (see Figure 2) also refer to commitments made in the original UNFCCC convention. The UNFCCC convention of 1992 expressed the need to work on methodologies for “impact assessment”⁶ and to promote “socio-economic and other research”⁷, as well as to “cooperate in the full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change, and to the economic and social consequences of various response strategies”⁸ (United Nations, 1992).

As the United Nations organization working on food and agriculture, FAO is committed to “supporting the development and implementation of the KJWA” (FAO, 2019b). It collaborates closely with UNFCCC and other actors at international level and supports countries with technical support to adapt to and mitigate climate change through capacity development in form of webinars, workshops and knowledge products focussing on the agricultural sector. This allows experts under the UNFCCC to prepare their submissions and gives them a space to share their views informally — among other things at the Koronivia Dialogues held in FAO headquarters — on how to develop and implement the Decision on the Koronivia Joint Work on Agriculture and discuss challenges and opportunities when moving forward (FAO, 2019b).

As described earlier, the funding provided by the Annex 2 countries (industrialised countries), with the particular purpose to support the implementation of the commitments made in the Convention and the following Agreements, Protocols and Decisions that complement the Convention is mostly governed by the Convention’s Financial Mechanism. This Financial Mechanism consists of the Green Climate Fund (GCF) and the Global Environment Facility (GEF) —the operating entities (United Nations, 1992, Art.11, 1997,

⁶ See Article 4 (f)

⁷ See Article 4 (g)

⁸ See Article 4 (h)

Art.11; UNFCCC, 2015, p. Art. 9; FAO, 2019c). It is supervised by the Standing Committee on Finance (SCF), which is also part of the Financial Mechanism (United Nations, 1992, Art.11, 1997, Art.11; UNFCCC, 2015, p. Art. 9; FAO, 2019c). It is complemented by the Adaptation Fund (AF), the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) which also finance climate change related activities (FAO, 2019c). This means that the operating entities and funds provide funding and decide on priorities and eligibility criteria (FAO, 2019c).

The GEF and the GCF both play an essential role in international climate finance in line with the Paris Agreement, as they both must regularly report to the COP to ensure accountability. Adaptation and mitigation to climate change in the agricultural sector can be complex and costly. Projects cover not only the adaptation needs of one household but of many or a whole region, a country or even several countries. Therefore, it is not enough to have an uncoordinated effort of many individuals, but well-planned efforts on a large-scale need to be made to adapt to the consequences of climate change in the most cost-effective way.

1.5. Assessment of socio-economic dimensions

The way mitigation and adaptation measures are designed and appraised; they tend to emphasise environmental, economic and technological inputs or costs (United Nations Task Team on Social Dimensions of Climate Change, 2011; IPCC, 2014b; Markkanen and Anger-Kraavi, 2018). The issue continues to be raised, that without addressing socio-economic dimensions of climate change it cannot be fully addressed from a sustainable, equitable development perspective (United Nations Task Team on Social Dimensions of Climate Change, 2011; IPCC, 2014a). The need to address the socio-economic dimension is also raised repeatedly stated in international treaties, such as the UNFCCC. They are at the core of the UNFCCC as defined in Articles 1, 3 and 4 of the convention. Article 1.1 states that “changes in the physical environment or biota resulting from climate change which have significant deleterious effects on [...] the operation of socio-economic systems or on human health and welfare.”(United Nations, 1992). Article 3.4 states that: “The Parties have a right to, and should, promote sustainable development.”(United Nations, 1992). Article 4.1 states that Parties should minimise: “adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change;” (United Nations, 1992). Article 4.7 states that: “The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and [...] will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.”(United Nations, 1992). Special concern in addressing the adverse effects of climate change should be given to small island states and countries that — have low-lying coastal areas; have arid and semi-arid areas, forested areas and are liable to forest decay; have areas that are prone to natural disasters; have areas that are liable to drought and desertification; have areas of high urban atmospheric pollution; have areas with fragile ecosystems; are land locked and transit regions; and are highly dependent on income generated from fossil fuel income and production, processing or export, as well as

associated energy-intensive products, see Article 4.8. (United Nations, 1992). “Co-benefits, trade-offs and tough choices are at the heart of sustainable development but have not always been appreciated as such. Initial interpretations that emphasised three distinct dimensions of sustainability — economic, environmental and social — tended to reinforce decision-making in thematic silos.” (Independent Group of Scientists appointed by the Secretary-General, 2019, p. 3)

In Annex I of the UNFCCC biennial update reporting guidelines of March 2012, the necessity “to facilitate reporting by Annex I Parties of information on any economic and social consequences of response measures” is highlighted (UNFCCC, 2012b, p. 31). A similar wording replacing Annex I Parties with Non-Annex I parties can be found in Annex III of the same document (UNFCCC, 2012b). The need for socio-economic assessment is expressed even more detailed in ‘modalities, procedures and guidelines for the transparency framework for action and support’ also called the Enhanced Transparency Framework (UNFCCC, 2018). In paragraph 78 of this framework for transparency, Parties are specifically asked to provide information on socio-economic consequences of response measures, including information on specific sectors and activities, challenges and barriers, and actions to address the consequences (UNFCCC, 2018). Furthermore, Parties are asked to share information on the observed and potential impact of climate change on environmental, social and economic vulnerabilities (UNFCCC, 2018).

Despite the fact, that the importance of the socio-economic dimension is expressed in the Convention, several other Agreements, Protocols and the KJWA Decision, methodologies for socio-economic dimension are still underdeveloped. This also leads to low availability of statistical data on socio-economic impacts of climate change. The socio-economic impacts of climate change are not well understood, and there is no harmonised approach (United Nations Task Team on Social Dimensions of Climate Change, 2011; IPCC, 2014c, 2019). Progress on the measurement of this dimension is of great importance for two major reasons. First, for the development of statistics on the socio-economic impacts that climate change has, in order to justify governance decisions. Second, for the development of ex-ante assessments of socio-economic benefits of projects, which are crucial to increase the possibilities for project implementers to receive funding from financial institutions.

This will allow projects to be better modelled around well-defined short and long-term sustainability goals, which can be justified to democratic citizens and financial institutions.

Decisions and actions on the international level demonstrate that it is of great concern for countries that are part of the UNFCCC, the EU member states — as a major group of the Annex 2 countries and IFI to assess socio-economic dimensions of projects in the climate change field with a focus on the agricultural sector. The development of assessment methods of the socio-economic dimensions of projects, but also the definition of socio-economic dimensions as such, are a crucial contribution to the in-session workshop in April 2020, which is foreseen by the Koronivia roadmap (see Figure 2). Besides, it contributes to greater transparency and accountability on community, national and international level and the work of international organizations, such as the EU institutions, UN organizations and IFI. “Addressing climate change without reference to its

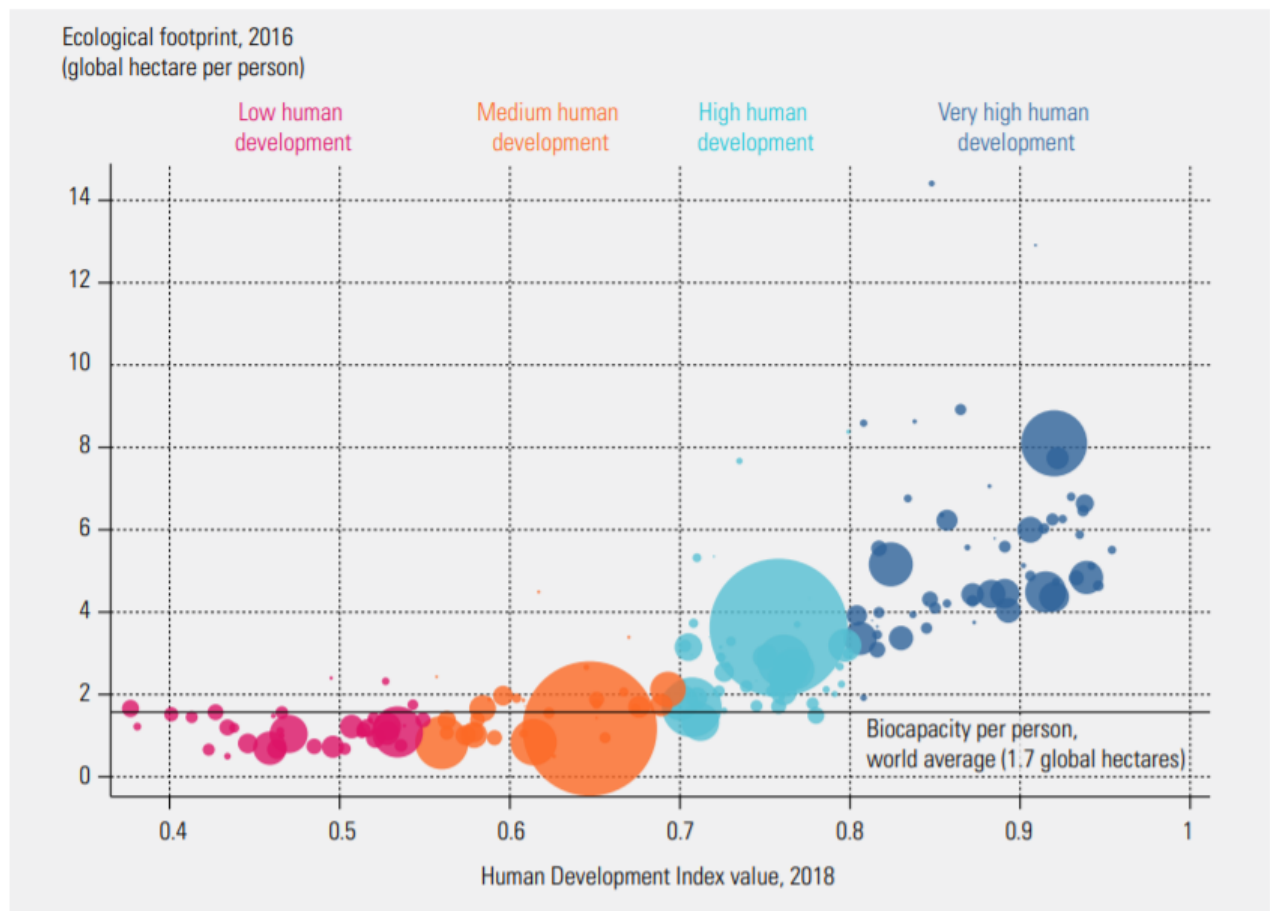
social dimensions is failing to address climate change at all” (United Nations Task Team on Social Dimensions of Climate Change, 2011, p. 4).

1.6.Social justice in the measurement methods for development projects

Justice is a complex concept which involves a concern regarding fair treatment of all human beings in both the social and the economic sphere and an account of responsibility. The international consensus of this ideal in relation to climate change is addressed by the UNFCCC and should be considered in international policy development (IPCC, 2014b). The objectives to be reached by the projects and programmes financed by the Financial Mechanisms, is set in the international agreements under the UNFCCC. The foundation for these objectives are ethical considerations such as the common but differentiated responsibility and the financial responsibility for the Annex 2 countries that arises from it, based on the responsibility of the industrialised countries that through their historical emissions have created a natural debt (IPCC, 2014b). This debt is felt stronger by developing countries which are more vulnerable to climate change impacts and have limited adaptive capacities (IPCC, 2014b). Substantial inequalities exist on a regional level, as marginalised groups, indigenous people or women and youth are even more vulnerable due to their social and economic circumstances and their role in the societal system (FAO, 2014; IPCC, 2014b). Economic cost-benefit and cost-effectiveness analysis do not satisfy equity considerations and ignore substantial interlinks between the economic, social, environmental and climate-related aspects (IPCC, 2014b). International agreements on climate should be seen from the perspective of how to fairly address collective action problems. They leave several ethical questions open for interpretation and discussion, such as how burden of climate change mitigation should be concretely shared among countries and to which extent adaptation practices need to be integrated in projects financed under the notion of common but differentiated responsibilities. Decisions of individuals, groups, political parties and international organizations on well-being should stem from specific widely shared political values, but also individual (personal) desires and or views of the good life, which might be based on specific cultural background (religion, customs, societal rules), and finally, particular identified needs. Traditionally the measurement for successful development projects and development of states has always been the increase in financial abundance — in this case; it was put on a level with the well-being of individuals — through the increase of GDP (Raworth, 2017). Already in the 20th century, it was found that more factors play a role to achieve a resilient and happy population (Sen and Anand, 1994a, 1994b; Anand and Sen, 1998; Sen, 1999). This recognition was paired with the realisation that we are undermining the ability of the earth system to support human development and that we need to pay attention to our behaviours towards the environment (WMO, 1979; General Assembly, 1987). These realisations raised two important questions. The first one is, more than monetary happiness is required, what is required, and who is entitled to it? The second question is if our current welfare system destroys the planet on which we are dependent upon, and resources are limited, on which basis and to what extent are we entitled to the use of resources and destroy the planet? The two questions are strongly interlinked, as also our well-being is strongly dependent on the

resources of our planet. This is of significant concern for the work of sustainable development. In the past human development was strongly linked to high greenhouse gas emission, see Figure 3.

Figure 3 - Human development and ecological footprints



Source: Ecological footprints expand with human development (UNDP, 2019, p. 18)

In Figure 3, each circle represents one country; the size of the circle is proportional to the country's population. The ecological footprint referred to in Figure 3 is a measure of how much area of biologically productive land and water a country requires (domestically and abroad) for waste absorption and production of the consumed resources (UNDP, 2019, p. 18). Developing countries shall try to develop within the margins of the planetary boundaries, while developed countries shall try to decrease their ecological footprint to stay within these boundaries (UNDP, 2019). Opportunities to address human development get more and more restricted as the biocapacity boundary per person shrinks with time due to an increase in population, even if no changes on the ecological footprint per person is made (UNDP, 2019). Imbalances in economic power can be translated into political dominance of those countries which are already beyond the planetary biocapacity boundaries per person, which in turn leads to less equality of opportunity for developing countries (UNDP, 2019). The longer we wait to intervene in the current social, economic and environmental systems and practices, the harder and more expensive interventions will be in the future (UNDP, 2019). From 2030 to 2050 climate change will cause the death of a quarter-million people a year dying from malnutrition, malaria, diarrhoea and heat stress, mainly dependent on peoples exposure and vulnerability that are both strongly determined by existing social and economic fault lines (UNDP, 2019). There are options to address social and economic inequalities of the climate crisis as an international community (including developed and developing

countries) that would move towards inclusive and sustainable human development (IPCC, 2014b, 2014c, 2019; UNDP, 2019). This can be addressed through the distribution of financial responsibility, by giving financial resources to those strongly affected by climate change and finance them through those that have crossed the per capita planetary boundary (IPCC, 2014b, 2019; UNDP, 2019). These decisions on, who is entitled to what, and what is happiness or well-being, are based at its core, first on basic needs for people's survival, and definitions of physical and psychological well-being and second, as we will see later in the discussion on justice in governance (Sen, 1999; Kymlicka, 2002; Merry, 2011; IPCC, 2019). Often decision-making is happening without reflecting on the values that are behind the taken decisions (WMO, 1979).

After the Second World War, governments — representing the world population — have made first attempts to maintain peace, develop friendly relations, achieve international cooperation and to harmonize actions to reach these goals by signing the United Nations Charter (United Nations, 1945, Art. 1). International cooperation was primarily envisioned for problems of social, economic, cultural, or humanitarian character and to respect for human rights and fundamental freedoms (United Nations, 1945, Art. 1). Thirty years later, first attempts were made to harmonize environmental efforts at an international level (WMO, 1979). These first attempts mainly consist of objectives of principles based on which decisions for action should be taken. Values and goals were added later to these objectives.

The social dimensions of climate change were addressed by a joint publication of 20 UN Agencies. This publication highlights the need to base the definition of social dimensions on the principle of equity and social justice to put people in the “centre of a successful transition to a world of far-reaching and balanced global reductions in emissions and enhanced resilience”, while “giving specific attention to the most vulnerable groups” (United Nations Task Team on Social Dimensions of Climate Change, 2011, p. 3).

This reflects the need to put the farmer at the centre of assessing human development, which is also expressed in the 2030 Agenda (Agriculture Directorate-General, 2001; General Assembly, 2015; FAO, 2018e, no date). The 2030 Agenda considers all three dimensions of sustainability — economic, social and environmental and commits to the global community in addressing these in a balanced and integrated manner (General Assembly, 2015, p. 3). It goes even further by stating that farmers need to be put into the centre in order to ensure resilience to external shocks and that if the well-being of farmers is not ensured, a farm cannot be sustainable (FAO, no date).

One case in which a normative approach has been successfully implemented/translated into an international measurement method to assess human development was the Human Development Index (HDI). It is highly valued for its human-centred approach, identifying people as “the real wealth of a nation”, as the “primary objective of development is to benefit people” (UNDP, 1990, p. 9). This human-centred approach was achieved by making a basic distinction between ‘needs’ and ‘ends’ of development and therefore focused on enhancing the achievements, freedoms, and capabilities of human beings (Sen, 1988, 1999; Sen and Anand, 1994a; Binder and Robeyns, 2019). It was the first internationally accepted index that did not solely use measures such as income, commodities and financial abundance as accounts for development. In the HDI, it

was openly declared that more than solely economic measures play a role in the well-being of a person (Sen and Anand, 1994a). The index measures persons' well-being along three key dimensions: a long healthy life, access to knowledge and a decent standard of living (UNDP, 2013). At the heart of these key dimensions and the calculations for the index of these are a philosophical reflection about justice, going back to Aristotle (UNDP, 1990). One of the most important personalities behind the philosophical theoretical framework for the HDI is Amartya Sen, an economist and philosopher who is famous for his contributions to welfare economics, social choice theory, economic and social justice, and economic theories of famines among others (Oxford Reference, no date; Comim, 2016). He was awarded the Nobel Prize for his research on fundamental problems in welfare, studies of social choice and poverty (Frängsmyr, 1999). Sudhir Anand, Martha Nussbaum and Mahbub ul Haq are other important contributors to the philosophical theoretical framework, the capability approach, of the HDI, which builds upon the philosophical discussions of many before them (Sen and Anand, 1994a; Stanton, 2007; Stewart, 2013). The capability approach has two major normative claims — first, the freedom to achieve personal well-being is of high moral importance and second, this well-being is understood in terms of individual capability (Robeyns, 2016). Sen brought human rights and development closer together, as he has triggered a shift to a rights-based approach to development (Merry, 2011). The most important alternative approaches on the measurement of the socio-economic dimension or the measurement of well-being build upon their work. While the HDI is still limited as it is a unique number assessing a complex issue. The SDGs could be identified as an improvement of the HDI as the SDGs are combining 17 topics, 169 targets and 232 indicators, that assess the well-being of humans around the globe (General Assembly, 2015).

1.7.Importance of the socio-economic dimension in climate change related projects in the agricultural sector

By linking adaptation and mitigation interventions with other societal objectives, implementation is made more efficient (IPCC, 2014c). The agricultural sector is expected to provide the greatest number of opportunities for adaptation mitigation synergies and social, economic and environmental co-benefits (FAO, 2016a). There are great opportunities to empower women and reduce their vulnerability to climate change through the agricultural sector (FAO, 2016a). The definition of vulnerability and resilience to climate change is provided in the chapter on the definition of the socio-economic dimension. The agricultural sector is one of the sectors most dramatically influenced by climate change (Field and Barros, 2014). Climate change impacts highly decrease water availability and supply, food, and agricultural incomes (Field and Barros, 2014). Poor people in rural areas, as for example female-headed households and those with limited access to education, modern agricultural inputs, infrastructure and land, will be disproportionately affected in their well-being (Field and Barros, 2014). With stronger climate change impacts economic growth is going to be slowed down, and poverty reduction measures will become more difficult (Field and Barros, 2014). Higher food insecurity, along with existing and new poverty traps, will exacerbate poverty in many developing countries and create increasing inequalities (Field and Barros, 2014). Addressing multidimensional inequalities and poverty

through insurance programs, social protection measures and disaster risk management might enhance the long-term resilience of poor and marginalised people (Field and Barros, 2014). Increased incidents of weather extremes, pests and diseases and the loss of biodiversity will lead to increased problematics and severe food insecurity (FAO, 2016a). Developing countries will be more affected by reductions in crop yields, the productivity of livestock, fisheries and forestry than developed countries with more temperate climates (FAO, 2016a). Rainfed agriculture is the most practiced throughout the world, and it is very dependent on rainfall. (Barrios, Bertinelli and Strobl, 2006). Henceforth, when the impact of climate hazards and extreme events is too important, food security is at risk and under those circumstances, rural households are at risk. (Barrios, Bertinelli and Strobl, 2006). Furthermore, there is strong evidence, that especially regions that produce crops are greatly affected by negative climate impacts (Field and Barros, 2014, p. 61). This is inter alia due to an increase in global warming, but also due to a decrease in regional crop yields and water availability (Field and Barros, 2014, p. 61). This tells us that especially the agricultural sector focussing on crops is highly vulnerable to climate change, and this has huge implications on food security. If we do not ensure that this sector becomes more resilient to climate change, we risk even more food insecurity. Socio-economic and technological development play a key role in addressing food security and climate change impacts on the agricultural sector, especially at the regional level (FAO, 2016a). Rural people living in poor social and economic conditions and countries that highly depend on the agricultural sector will be most affected by worsened social and economic conditions (FAO, 2016a). Indeed, climate change exacerbates variability, which in turn disturb natural cycles of meteorological events. Rainfall is altered in many developing countries leading to crop failure, which in turn pose an immediate threat to households whose livelihoods is mostly, if not solely based on agricultural returns. (Barrios, Bertinelli and Strobl, 2006). Large potential in the adaptation to current and expected changes is seen in the focus on smallholders and small-scale production systems (FAO, 2016a).

Youth plays a crucial role in the sustainable development of all sectors, but it is even more essential to address youth in the agricultural sector (FAO, 2014, 2019a; IFAD, 2019). The agricultural sector is characterised by an ageing labour force and increased food insecurity (FAO, 2019a). The engagement of young women and men is essential to ensure food security, reduce youth unemployment and unplanned migration (FAO, 2019a). According to the latest population estimates, around 1.2 billion people, equivalent to 15 per cent of the global population, were between ages 15 and 24 years, of which many were living in developing countries (UNDESA, 2019a). Of these 1.2 billion 56 per cent lived in Asia and around 18 per cent in Sub-Saharan Africa (UNDESA, 2019a). In 2020 the median age in Africa is 19.7 years and 32 years in Asia (UNDESA, 2019b). Eleven million young people will access the labour market in Africa every year in the next decade (FAO, 2016b). Even though there has been accelerated economic growth in many developing countries, this growth has not reduced the poverty of the vulnerable groups, such as youth, women, and marginalised or ethnic minorities (FAO, 2014). Youth unemployment rates are usually twice as high as adults unemployment rates (UN, 2019). Youth and the agricultural sector have a high potential for innovation, using new technologies and advancing new opportunities in emerging value chains (FAO, 2019). Innovation does

not need to be costly and can be very simple, as for example Banerjee and Duflo describe in their book *Poor Economics* a woman earning money, by collecting wet sand from the beach and drying it, by letting cars ride over it, to sell it later in the day for scrubbing dishes (Banerjee and Duflo, 2011). This potential of youth agri-entrepreneurs can tackle the challenges of feeding a growing population (FAO, 2019). Young people have a comparative advantage in flexibility and commitment (FAO, 2014). While many young people are better educated than their parents' generation, they often lack the relevant knowledge on policies concerning themselves (FAO, 2014). Investments in youth in the agricultural sector are essential to use this potential (FAO, 2019a). However, there is generally a low share of the agricultural sector of total investments (FAO, 2019a). Young people are often unable to finance needs to ensure that their farming or processing activities can be launched or expanded, while often not benefitting from opportunities in the agricultural supply provided by large-scale investments (FAO, 2019a). Access to finance is a major challenge for the starting of agricultural activities, as youth mostly do not own assets, such as land and are often perceived as a high-risk category by financial institutions (FAO, 2014). This combined with increased land degradation, land fragmentation and delayed inheritance of land makes it difficult for young people to get access to land to start an agricultural production (FAO, 2014). Lacking the capacity to produce in large quantities makes the access to markets for agricultural products particularly challenging (FAO, 2014). Although the agricultural sector possesses significant development potential in many countries, young people often do not perceive the sector as attractive as low agricultural-productivity is not a promising perspective of living (FAO, 2014). Therefore many young people migrate to cities in search of a better income (FAO, 2014). The enhancement of inclusiveness of effective policy processes is one of the main priorities to address the challenges faced by youth in the agricultural sector. Often youth are not included in coordination, collaboration and capacity development mechanisms (FAO, 2019a). Policies, legal and regulatory frameworks need to empower youth and youth need to be included in financial investment strategies, not as a silo dimension but need to be targeted in all sustainable development projects (FAO, 2014, 2019a). Rural youth, same as women of all ages often do not have an active role in the policies affecting them, as in most rural communities decision-making is the role of older men (FAO, 2014). These disadvantages affect young rural women even more than young men (FAO, 2014). It is often part of the culture that women have to help with domestic chores and their freedom of movement is restricted, which gives them less opportunities to attend learning activities and participate in other activities or access markets (FAO, 2014). Young rural women often do not have any rights to inherit or access land (FAO, 2014). For these reasons, it is important to strengthen the participation of youth in the policy dialogue and coordination mechanisms (FAO, 2019a). Financial products accessible for youth must be increased and agricultural capacity building activities should always be inclusive to youth and address the diverse knowledge gaps of the different generations (FAO, 2014, 2019a). Overall access to relevant information for young farmers has to be increased (FAO, 2014, 2019a). There is a great potential to empower youth through modern information and communication technologies (ICT), by using ICT as channel for knowledge transfer but also because young people often show great creativity and eagerness in exploring niche

markets and new sectoral opportunities (FAO, 2014, 2019a). The International Fund for Agricultural Development (IFAD) has recognised the great opportunity and need for investment in youth in the agricultural sector, and committed to youth sensitiveness in 50 per cent of all new projects (IFAD, 2019). Five major strategic directions were defined — business development services, investments in mechanisation and the use of modern technologies, including information and communications technology, vocational and technical training, and actions targeting youth including credit/equity financing (IFAD, 2019).

Among the root causes for migration are economic and social factors including poverty, food insecurity, lack of employment opportunities, limited access to social protection, natural resource depletion and various impacts of climate change (FAO, 2016b). More than half of the population in least developed countries lives in rural areas and three-quarters of the extremely poor earn their living with agricultural or rural activities (FAO, 2016b). The movement of people within a country or from one country to another is often motivated by substantial inequalities in opportunity (FAO, 2016b, 2018d). Dependent on whether these immigrants can be quickly absorbed by the social and economic system of their final destination, they are either perceived as benefit or burden to society (FAO, 2016b, 2018d). Migration can bring many positive changes, such as transfer of knowledge, skills, and technology or through cash remittances of migrants to their home communities (FAO, 2016b, 2018d). However, migration should be a choice and not a necessity (FAO, 2016b). Root causes and drivers for large group movements should be addressed, so people receive the opportunity to live in their homelands (FAO, 2016b). The investment in rural and agricultural sustainable development is crucial to address these root causes and drivers of migration (FAO, 2016b).

Social protection is an approach to address the vulnerability of people working in the agricultural sector to climate change and the inequalities that different vulnerabilities entail at community level (FAO, 2017a). By combining interventions in the agricultural with social protection, it can be ensured that sector structural constraints that limit the access of poor households to land, water, financial services, advisory services and markets can be successfully addressed (Slater *et al.*, 2016). This can be reached through inter alia through the increased participation in social networks, the investment in human capital development, better management of risks and the investment in agriculture and reallocation of labour to on-farm activities (Slater *et al.*, 2016).

Social protection will be discussed further in the sub-chapter on resilience and vulnerability to climate change.

1.8. Research question and structure of the thesis

The purpose of this work is to make funding for the social and economic dimension of sustainable development projects more accessible. This is twofold, first to make entities designing projects aware how social and economic dimensions of sustainable development projects can be appropriately addressed under the current requirements of the funding mechanism of the UNFCCC. Second, to analyse how the requirements of the Financial Mechanism of the UNFCCC can be improved to ensure that the social and economic dimensions are appropriately addressed in sustainable development projects accepted for funding.

Therefore, the following question is asked: How can funding for the socio-economic dimension of sustainable development projects be made more available through the Financial Mechanism of the UNFCCC?

The answer to this question can be by first responding to the following four sub-questions:

1. What ethical considerations should accompany socio-economic measurement?
2. How can the socio-economic dimension of sustainable development projects be defined?
3. What are the current requirements (evaluative criteria) of IFI that focus on climate change related projects, based on the example of GCF and GEF?
4. Do the GCF and GEF address the socio-economic dimension of sustainable development as defined in this work?

The following chapters will be testing two major hypotheses. The first hypothesis is that IFI have evaluative frameworks. The second hypothesis is that the social and economic dimensions of sustainable development are not reflected in the requirements (evaluative criteria) of the IFI.

It was found that there are two major challenges to measure the socio-economic dimension for sustainable development projects. First, there is no common definition of what accounts for the socio-economic dimension. Second, the measurement method and definition of indicators for this dimension have strong political and ethical implications and these need to be transparent (IPCC, 2018; Schalatek, 2019).

The first literature review on ‘Justice and measurement’ will address the first two questions. The second literature review on defining socio-economic dimensions in sustainable development projects — will address the third question, by discussing current definitions used for the socio-economic dimension and defining it for the purpose of this work. Through this chapter, the reader will understand which different aspects of well-being are considered as part of sustainable development work and therefore need to be considered in the measurement of the socio-economic dimension of such projects.

The chapter on the findings of the project evaluation criteria by GCF and GEF — will address the fourth question by analysing, which evaluative criteria are currently in place. The discussion chapter will answer the research questions and hypothesis. The conclusion and recommendation section will propose both:

- standards to best include the socio-economic dimension in the design and project management frameworks of sustainable development projects
- standards to assess the integration of socio-economic dimensions in projects management frameworks for IFI

2. Literature review

The purpose of this work is to make funding for the socio-economic dimension of sustainable development projects more accessible. Three major aspects need to be understood in order to discuss how funding for the socio-economic dimension of sustainable development projects can be addressed better and made more accessible. These three aspects are the requirements of the financial institutions, ethical considerations about measurement and justice and the definition of the socio-economic dimension. This work is multidisciplinary in the sense of academic disciplines it combines, but also in the sense of combining

different reasoning techniques. Philosophy can be a normative and empirical field of study, most theories about ethics are mainly focused on experiments of reasoning, but there are several studies combining ethical reasoning with studies of behavioural science of psychology and other fields. This work combines the disciplines of economics, social science, natural science and philosophy. The literature review was conducted in two parts. For each of these two parts databases such as 'Google Scholar', 'ResearchGate', 'Elvesier', 'JSTOR', 'Microsoft Academic' and the library websites of LUISS University and the University of Salzburg were used for data collection.

The first part of the literature review focusses on ethical aspects which need to be considered in the design of projects and the definition of the social and economic dimension of sustainable development in order to understand how these dimensions should be ideally addressed as part of sustainable development projects. As described in the introduction, this work is written in the context of the KJWA, which is an international negotiation procedure to better address agriculture under the UNFCCC framework. The social and economic dimension play a great role in the sustainable development of the agricultural sector, as well as in adaptation and mitigation interventions as financed by the Financial Mechanism of the UNFCCC - of which GCF and GEF are part.

The first part of the literature review focuses on normative ethics literature. The literature was reviewed to understand the major perspectives of equality and fair or just approaches of governance and measurement. The literature review on justice and measurement has two major aspects.

Firstly, literature on ethical aspects of measurement was reviewed, to understand what needs to be considered when measuring or assessing social and economic of projects/programmes. The measurement of benefits or impacts of projects is crucial when applying for funding from IFI. Nevertheless, measurement practices have impacts on the equal treatment of people and communicate ideas of equal treatment that should be included in setting standards for the socio-economic dimension, which mainly focuses on the well-being and equality of opportunity of people.

Secondly, the literature review on justice and measurement focused on justice in governance and different accounts for equal treatment or equal consideration of people. It was found that the normative philosophy on the ethics of development and governance is broad, but most theories derive from or answer to three major approaches to equal treatment utilitarianism, liberal equality and libertarianism. Scholars have different ways of interpreting these theories. Therefore, it was decided to explain the major concepts of these theories. The most relevant aspects of these theories are then combined with sustainable development to considerations in the discussion to determine priorities that can be set. These theories of justice present different ideas on which responsibilities we have in our society and vice versa. Additionally, they support they can provide a normative framework for the major standards that need to be considered in international development work. For the description of the three major theories of justice the book 'Contemporary Political Philosophy: An Introduction' was used as a basis to ensure consistency in the point of view from which the

theories are analysed and to make them more comparable. Where necessary, the explanations of these theories were complemented with discussions from other Authors.

This approach is certainly limited, as it mainly demonstrates Kymlicka's interpretation of these theories, but it fulfils the purpose of this work to identify general approaches on how ethical considerations can be used in sustainable development work.

Keywords used to identify relevant literature for this part one were 'ethics of development', 'justice', 'equality', 'development', 'sustainability', 'justice of measurement', 'ethics of measurement', 'human development', 'capacity development', 'measurement of development', among others. These keywords were also combined to receive the desired results.

The second part of the literature review of this work focuses on empirical literature. The literature review on the social and economic dimension of sustainable development discusses the definition of these dimensions and identifies major aspects that are part of these dimensions. The publication databases were used to identify the latest academic findings and combine these findings with the practices of international institutions. The publication section of the UNFCCC was used as a reference point for practices related to climate change. The publications section of the FAO was used as a starting point for publications, as FAO is the leading organization of the UN in the field of agriculture and climate change and supporting the KJWA Dialogues. The search function of the 'United Nations System — Chief Executive Board for Coordination' was used to find cross-sectoral practices on the socio-economic dimension by United Nations institutions (Chief Executives Board Secretariat, no date). Keywords used to identify relevant literature in part two of the literature review were 'socio-economic measurement', 'development', 'sustainability', 'human development', 'capacity development', 'measurement of development', 'socio-economic', 'social dimension', 'vulnerability', 'resilience', 'economic dimension', 'social impact measurement', 'sustainable development', 'development work', 'social protection', among others. These keywords were also combined to receive the desired results. Justice and measurement

It is increasingly important that the benefits of sustainable development projects are measurable. International Financial Institutions mainly commit evidence-based funding, that is comparable on an international level (Merry, 2011). The use of indicators or evaluative criteria for public governance, in theory, allows decision-making to be more transparent, by giving the public access to the basis for decision (Porter, 1995; Merry, 2011). Measurement is not solely a tool for transparency and accountability, but it is a normative tool which uses criteria for right and wrong, which equal the baseline and objective, to assess whether how humans or nature behave within these margins (Toshkov, 2016, pp. 107–144). It is increasingly important that the benefits of sustainable development projects are measurable. IFI mainly commit evidence-based funding, that is comparable on an international level (Merry, 2011). The use of indicators or evaluative criteria for public governance, in theory, allows decision-making to be more transparent, by giving the public access to the basis for decision (Porter, 1995; Merry, 2011). Indicators help countries or NGOs to know what is expected from them to receive funding and gives the donors a seemingly 'objective' scale to assess and compare

performance and potential risks (Merry, 2011). Unfortunately, as soon as physical science intervenes with human well-being there is no impartiality or objectivity on how this can be done most appropriately. While we know that we must mitigate emissions and adapt to climate change impacts, how this should be done is not impartial or objective, while some scientists try to present it this way, when trying to solve it with cost-benefit analysis (IPCC, 2018). When scientists decide to calculate cost and benefits of an intervention in the ‘human world’, there are always ethical decisions involved based on which they decide which costs and which benefits are considered in the calculation (Sen, 1988; IPCC, 2018). How emissions should be mitigated and which adaptive interventions are financed by whom, for whom are ethical questions, highly depending on considerations about equal treatment, just governance and equity (Sen, 1999; Kymlicka, 2002; IPCC, 2014b, 2018; UNDP, 2019). Tushkov and O’Leary propose that there is no objectivity in empirical research, as there is no research purely removed from aspects of politics and power (O’Leary, 2004; Toshkov, 2016). This means every empirical research has subjective aspects and there is no such thing as complete objectivity in the study of living things. Instead, the researcher is responsible for shaping the character of the knowledge he produces and is responsible to create awareness of the ethical and political implications that his research has (O’Leary, 2004; Toshkov, 2016). Nevertheless, there are certain standards that can be followed to make research ‘objective’ (O’Leary, 2004; Andersen and Hepburn, 2016; Toshkov, 2016; Reiss and Sprenger, 2017). How we should treat human beings as equals in a complex world, where the social and economic behaviours of humans are strongly interlinked with the changes in the environment and climate is an ethical question (Sen, 1988, 1999; IPCC, 2018; Binder and Robeyns, 2019). In practice, all types of measurement have many ethical or politically motivated implications, that are mostly not publicly discussed (Merry, 2011)..

Even though the three main dimensions of sustainable development have been determined as economic, social and economic already in the 20th century, only little progress has been made in the measurement of specifically the social or socio-economic dimension. In the introduction, it was mentioned that this is strongly connected to the fact that there are no common concrete definitions of this dimension, but another problem in measuring the three broad dimensions of sustainable development is that measurement, and the selection of indicators has strong ethical, moral and human rights implications (Porter, 1995; Green, 2001; Merry, 2011).

2.1.1. Transparency in political aspects of scientific work

The current turn to indicators as a governance mechanism and as a form of knowledge production has strong implications on power relations between rich and poor nations, and governments and civil society (Porter, 1995; Merry, 2011). This new system of compliance check through indicators leads to a change in who is held responsible and masks underlying power dynamics (Rosga and Satterthwaite, 2009; Merry, 2011). Instead of pressuring countries to commit to agreements, treaty bodies can replace their practice to check policies and actions by giving countries the responsibility to develop their own indicators for the policy field or propose a set of harmonised indicators (Rosga and Satterthwaite, 2009). Unfortunately, as a reaction to improve their score, what might happen is that the nations, regions, or groups measured by the indicators shift their behaviour to align with the indicators, not with the intention behind the indicators (Rosga and

Satterthwaite, 2009; Merry, 2011). In certain policy areas, this means trying to enhance the score, but not the envisaged objective (Rosga and Satterthwaite, 2009; Merry, 2011). Compliance with indicators becomes a game of scoring the most points instead of changing policies and actions to reach the overall aim (Rosga and Satterthwaite, 2009). Therefore, it is important to regularly reassess the functioning of indicators and if they still fulfil their purpose (Rosga and Satterthwaite, 2009).

2.1.1.1. Ethical implications of definitions, measurement techniques and benchmarking

There is a tendency to replace political debate with scientific evidence (Porter, 1995). Especially indicators that are based on ranks and numbers give the impression of objective truth and straightforward comparison (Merry, 2011). Nevertheless, the selection of indicators addressing humans has ethical as well as political implications (Merry, 2011). The selection of certain indicators strongly demonstrates the way individuals are perceived and understood in the current period (Merry, 2011). Scientists have had difficulties developing indicators for social or economic human rights, as indicators measure aggregates, but human rights are held by individuals (Green, 2001; Rosga and Satterthwaite, 2009).

Indicators are largely used as indirect mechanisms of reform and control by governments, international organizations, such as the United Nations, and other governmental or non-governmental agencies financing or implementing development projects (Merry, 2011). They have underlying theories of social change and activism (Merry, 2011).

“Indicators are part of the knowledge base needed to assist policy and decision-making. They help to raise awareness of an issue. Indicators, with their associated benchmarks, contribute to the monitoring of progress in achieving goals, and in policy evaluation. They enable an evidence-based comparison of trends over time, and within and between countries. Indicators [...] may also support the assessment of States’ exercise of their due diligence obligation to prevent and address [an issue], and the effectiveness of related policies and other measures.” (UN, 2007, p. 4)

Merry (2011) describes the discussion of UN staff which attempted to select indicators for the prevention of child marriage and they came across several problems, such as conceptual challenges of determining the age of marriage (Merry, 2011). The problem here was deciding whether the marriage begins at the age of the betrothal, the wedding ceremony, the first sex or the cohabitation (Merry, 2011). All these events would have different implications for human rights violations (Merry, 2011). However, how would they be measurable by public authorities? An early age of betrothal might be a signal of forced marriage, and not all societies have noticeable wedding ceremonies, nor do they lead to first sex or cohabitation (Merry, 2011). What could be a noticeable sign of the latter two for public governance? The selection of each of these aspects to account for the age of marriage has different consequences on how the life of the child will change (Merry, 2011). These discussions should be transparent in the purpose of this work defined as the quality of being clear, obvious and understandable without doubt or ambiguity to give the public the possibility to understand what the

number representing the indicator of “age at marriage” really means. Ideally, this type of transparency gives the public the possibility to discuss and influence this type of definitions and makes decision makers accountable. Definitions and moral considerations get lost behind the simplified title or description of the indicator (Porter, 1995; Merry, 2011). If this information is not openly accessible, interpretations of indicator-data can hardly meet the actual meaning, and a lot of ‘false’ knowledge can be created. Different systems of value that are the basis for this type of decisions should be made visible so they can be compared and evaluated, according to international consensus. Hence, is not solely the measurement method of the indicator that has strong implications on what is considered as ‘just’, but also the labelling of the indicator has a great impact on knowledge production and potential conclusions derived from the collected data (Merry, 2011).

Sabarwal and White highlight other ethical issues of practices in relation to the collection and use of data (Sabarwal and White, 2014). These include inaccurate or missing data, data corruption (errors in data that occur during the writing, reading, storage or transmission and processing of computerised data), data gaming (intentional distortion of the indicator to achieve performance results), and measuring what can be easily measured instead of measuring what matters (Sabarwal and White, 2014). All of these aspects can lead to false conclusions for policies, programmes and projects (Sabarwal and White, 2014).

Often when selecting certain indicators in order to reform or change a certain human behaviour or policies only the aspects with the highest priority or parts of the aspects that account for the phenomenon can be measured or reformed and to be able to fully reach the change that is needed indicators will have to be regularly revised (Merry, 2011). Quantitative indicators become an increasing method to measure and compare the world. This highlights the strong need to transparently differentiate the technical and the political dimension of measurement and to discuss ethical considerations when selecting indicators (Porter, 1995; Merry, 2011).

The following subchapters have two major purposes, first to help the reader understand how to make considerations about fairness in the use of indicators more transparent and second to help the reader build a more consistent and logic argument as a justification for the calculation and selection of indicators for measurement frameworks. This work does not aim to give the reader the solution to the right approach to just measurement, as the accounts for equality can be different depending on one’s morals and values, but this work aims to highlight the fact that all practices of measuring human behaviour or development have ethical implications. To be fully transparent on one’s measurement practices, one needs to be transparent about the philosophical motivations behind the selected measurement technique. Transparency often fails due to a low level of information on the issue that one needs to be transparent in. This work aims to help people to be more aware of their moral reasoning and to learn to use this awareness to communicate it when measuring human behaviour or development.

The next sub-chapter will briefly discuss justice in governance; the subsequent three sub-chapters will analyse the major theories of justice and their different accounts of equal treatment through which they aim to increase overall well-being.

2.1.2. What is justice in governance?

To understand what considerations of ‘justice’ imply for measurement, we shall first discuss what justice means. Therefore the question can be better presented as follows: what it means for governments, governing institutions, other parties intervening in a community or population to show equal concern and respect to every person (Kymlicka, 2002). Kymlicka (2002) divides contemporary normative political philosophy into two camps, the one that defends the basic tenets of liberal democracy and one which provides alternatives to liberal democracy. The second group of theories does not necessarily criticise liberal democracy itself but how it is constructed, or the lack of preconditions to implement appropriately (Kymlicka, 2002). These alternative theories to liberal democracy often criticise traditional theories, as according to them, they try to justify or obscure fundamental problems of society (Kymlicka, 2002). Such problems are: the exploitation and alienation of wage labours (Marxism), social atomism (communitarianism), the sub-ordination of women (feminism), cultural marginalization or assimilation (multiculturalism) or the political apathy (civic republicanism) (Kymlicka, 2002). Central to these accounts is the concept of responsibility. The theories differ over specific questions on individual and collective responsibility: are we responsible for our own choices, are we responsible for remedying the involuntary disadvantages that others find themselves in (such as disadvantages by undeserved and unchosen inequalities in life-chances), what are the responsibilities for myself and which responsibilities do I have towards others (Kymlicka, 2002, p. xi). These questions help to clarify points of disagreement across the different accounts.

According to Kymlicka (2002), ideals of justice, freedom and community are invoked when evaluating the adequate functioning of political institutions and policies. He presents how traditionally the debate in political philosophy was characterised by a dualism standardly seen as ‘left and right’. In this framework, the ‘left’ has been standardly seen as linked to the political value of equality, whereas the ‘right’ has been associated with the value of freedom (Kymlicka, 2002). Contemporary liberal thinkers could be somewhere in between this spectrum, hence endorsing equality and freedom at the same time (Kymlicka, 2002). Therefore, contemporary theories of justice also form their argument around ultimate values, such as contractual agreement (Rawls), the common good (communitarianism), utility (utilitarianism), rights (Dworkin)(Kymlicka, 2002). This collection of non-combinable ultimate values makes the quest to develop a single theory of justice impossible, as subordinating all values over one holistic value is impossible. A successful theory of justice will have to be pluralist to include part of the most fundamental claims of existing theories (Kymlicka, 2002).

In contrast with the traditional view that liberty and equality are conflicting values, Ronald Dworkin has famously suggested that at the core of every contemporary normative political theory is the ideal of moral equality. He defines this ideal as of the priority of treating people as equals (Dworkin, 2000). Liberal egalitarianism advocates for equal fundamental worth, equal dignity and equal moral consideration (Arneson, 2013). If we go back to the left and right example of socialism and libertarianism it can be understood that the ‘left’ seems to suggest that ‘treating people as equals’ should be understood as equality of income and wealth,

while the ‘right’ version suggests an equal right over property and resources (Dworkin, 1981b, 1981a; Newman, 2010). According to Dworkin, if any theory shares the same ‘egalitarian plateau’, hence is attempting to define the social, economic and political conditions under which the members of the community are treated as equals, then they can be seen as complementary rather than competing (Kymlicka, 2002).

The idea of moral equality is an abstract one. There are many different concepts of equal treatment that are quickly conflicting with each other (Kymlicka, 2002). Equal income can lead to unequal welfare, as some people have greater or more expensive needs (Kymlicka, 2002). Equal opportunities can lead to unequal income, as greater talent might lead to higher income (Kymlicka, 2002). Different theories of justice are not derived from the ideal of equality, but rather aspire to it (Kymlicka, 2002).

Kymlicka (2002) highlights that morals and political philosophy have a fundamental connection. This connection is also described by Nozick, when he writes that “moral philosophy sets the background for, and boundaries of, political philosophy” (Nozick, 1974, p. 6). According to Nozick (1974), the apparatus of the state is limited by what people may or may not do to each other and, therefore, the moral prohibitions the state is allowed to enforce are the source of the state’s coercive power. This means that we all have moral obligations to one another, some are public responsibility (enforced through institutions) and others are personal responsibility (enforced through personal conduct) (Kymlicka, 2002). “Political philosophy focuses on those obligations which justify the use of public institutions” (Kymlicka, 2002, p. 5). Any account of our own responsibilities must fit into the broader moral framework that is the foundation for our public responsibilities, and the same is true for the other way round (Kymlicka, 2002). Therefore, if any philosophical theory of justice matches our considered institutions and structures, by bringing out their internal logic then that is a compelling argument for that theory.

2.1.3. Utilitarianism

Utilitarianism claims that the morally right action or policy produces the greatest happiness for all members of society (Kymlicka, 2002). The theory of John Rawls ‘A Theory of Justice’ published in 1971 was meant to respond to what was considered a paradigm in political and moral thinking, namely utilitarianism (Kymlicka, 2002).

Two aspects of utilitarianism make it an attractive theory of political morality. The first aspect is that utilitarianism is promoting the pursuit of human well-being or utility (these terms can be used interchangeably in this context) should be impartially granted to every individual (Kymlicka, 2002). The second aspect has to do with its consequentialist structure, which demands to point out who is wronged and to which degree something is wrong (how many people are affected by it)—somebody’s life is made worse— when something is declared as morally wrong (Kymlicka, 2002). Consequently, morally right behaviour will make somebody’s life better. Consequentialism can hence serve as a tool to resolve moral questions. This aspect of consequences of moral rules is usually not taken into consideration by other theories (Kymlicka, 2002). Consequentialism can additionally serve as tool for institutions to differ between morality and other spheres (Kymlicka, 2002). To give an example how consequentialism works, one might say that punk rock is ‘improper’ and not

legitimate music, consequentialism would show that this is an aesthetic assertion not a moral one, as it is hard to prove that anyone suffers from it (Kymlicka, 2002).

2.1.3.1. The four main approaches to define utility

To understand how utilitarianism tries to enable the greatest happiness for all, utility must be defined. Different approaches can be taken to define what utility is, four common ones are welfare hedonism, non-hedonistic mental-state utility, preference satisfaction and informed preferences (Kymlicka, 2002).

The first, welfare hedonism, which is the most influential in the utilitarian tradition describes as the highest utility for human beings the experience or sensation of pleasure (Kymlicka, 2002). Welfare hedonism goes back to the classical utilitarian's, Jeremy Bentham and John Stuart Mill (Driver, 2014). The earliest utilitarian thinkers (Richard Cumberland and John Gay) were convinced that promoting human happiness was gods will and the criterion for happiness was virtue (Driver, 2014). When the religious aspect of welfare hedonism was removed, what remained was the experience of pleasure as the highest account of utility (Driver, 2014). This definition of utility was strongly promoted by Jeremy Bentham and Stuart Mill (Driver, 2014). However, it can be easily challenged when doing a thought experiment developed by Nozick 'experience machine' (Nozick, 1974). This 'experience machine' could bring the highest imaginable pleasures to us, by injecting drugs into our body (Nozick, 1974). The consequence of describing the experience of pleasure as the greatest utility for humans would be that humans would volunteer to be connected to this machine for a lifetime (Kymlicka, 2002). Nevertheless, only a small amount of people might volunteer for such a life (Kymlicka, 2002). The second, non-hedonistic mental-state utility is defined as many different kinds of experiences that are valuable and promote a range of valuable mental states (Kymlicka, 2002). An example of this is that writing poetry without enjoying can still be a rewarding experience (Kymlicka, 2002). This definition of utility can be objected with the same experiment of the 'experience machine' by adding other feelings to the repertoire (Kymlicka, 2002). What makes our lives happy is not solely the mental state, but being able to make choices and act upon (Kymlicka, 2002).

The third account of utility is 'preference satisfaction', which intends to increase overall utility by satisfying individual preferences (Kymlicka, 2002). However, satisfying preferences does not always contribute to our well-being (Kymlicka, 2002). People might lack adequate information when expressing preferences or miscalculate costs and benefits of a particular action (Kymlicka, 2002). What makes us happy in the end can be different from the preferences we currently have. Therefore, preference might be predictions about our good but do not define it (Kymlicka, 2002). People want to have or do things that are worth it, this does not always match their current preferences (Kymlicka, 2002). Another phenomenon supporting this argument are 'adaptive preferences', which means that people who are not able to achieve their aims (or preferences) as a consequence gradually lose their desire for it (Kymlicka, 2002). An extreme example of this phenomenon is the 'contented slave' who adapts to enslavement by not wanting freedom anymore (Kymlicka, 2002). Another present example is women claiming to be content with current gender roles as it would be too difficult for them to change them; consequently, they desire only goals that are consistent with these roles

(Kymlicka, 2002). The same goes for satisfying preferences in repressive societies that deny opportunities to a large number of their population, also here peoples adaptive preferences might be satisfied, but this does not account for the actual preferences they would have without the repressive system (Kymlicka, 2002). Repressive societies might even surpass democratic societies in satisfying their citizens' preferences, as democratic society's ultimate aim is to give the same freedom and opportunity to everyone, which gives more space for possibilities of not reaching preferences (Kymlicka, 2002). The phenomenon of 'adaptive preferences' creates a serious problem when trying to evaluate which policy changes are necessary to increase people's well-being by satisfying their preferences (Kymlicka, 2002). This fundamental is essential to keep in mind when evaluating the preferences of a target community for a development project. It can be learnt from this phenomenon that when evaluating the actual non-adaptive preferences of a community one needs to be able to make the community first aware of their gender roles or suppressive system.

This leads to the last of the four approaches to account for utility 'informed preferences', which tries to prevent the problem of adaptive preferences by defining welfare as the fulfilment of 'rational' or 'informed' preferences (Kymlicka, 2002). These rational preferences can be satisfied even without experiencing them (Kymlicka, 2002). There are many types of rational preferences, but no obvious way to aggregate them, as they are incommensurable (not measurable on a single scale) (Kymlicka, 2002). Richard Hare established the phenomenon of 'unexperienced' preferences, which describes that people's lives are less satisfying if their preferences are violated even without their awareness of it (Kymlicka, 2002). Keeping the truth from someone about something that is a decisive component of the make in life and might lead them to waste their time on living a lie (Kymlicka, 2002). One example is a biologist who enjoys the work in that field because he/she is convinced to be good in it. The preference of that person is to work in a field where he/she can contribute significantly, if that belief is wrong then that person would rather do something else. If the person would find out that the impression to be good in biology is wrong, time invested in this field would have lost its purpose to be able to contribute significantly to the field (Kymlicka, 2002). There is the possibility that our life is worse off without our conscious experience being unaffected (Kymlicka, 2002; Price, 2019). Richard Hare goes even further by including the preferences of dead people into the discussion (Price, 2019). A dead person might not be aware of a preference of them to be not fulfilled after their death, such as the rational preference not to have ones reputation ruined (Kymlicka, 2002; Price, 2019). Based on the considerations of 'unexperienced' preferences as part of 'informed' preferences it is hard to almost impossible to measure utility on the accounts of 'informed' preferences (Kymlicka, 2002). It is still impossible to measure if when two people are involved in a cause the disappointment of one person is stronger than the satisfaction in the other individual (Kymlicka, 2002). Therefore, it is not feasible for governments to make policy decisions based on preference satisfaction of each citizen of a country (Kymlicka, 2002). This would require massive amounts of data collected from people and it is most probably not their preference to share this data with their governments, as it would let them lose human rights such as the right to privacy. An alternative is to try not to satisfy specific preferences with policies or governance actions but to ensure reasonable preconditions for the genesis of those preferences.

Poor often miss essential knowledge or believe in effects of practices that are not true (Banerjee and Duflo, 2011). They might not know what the value of the first school years in school is, when fertilizer can damage the environment, how you can get easily infected with HIV or what politicians do when they are in office (Banerjee and Duflo, 2011). Information campaigns should have several characteristics to be successful (Banerjee and Duflo, 2011). First of all, the campaign should not repeat information that people already know, such as do not have before marriage (Banerjee and Duflo, 2011). Instead, the campaign should be attractive and simple, such as a movie and the information should be distributed by a credible source (Banerjee and Duflo, 2011). Surprisingly the press is considered by many people as a credible source and often has a strong impact even on practices of the government (Banerjee and Duflo, 2011). It is not attainable to identify which preferences are uninformed, unexperienced or adaptive preferences, but it is possible to give people access to information and opportunities to test alternative ways of life. Expectations of people on what they are able or unable to do often turn into self-fulfilling prophecies (Banerjee and Duflo, 2011). Students who are told by their teacher that they are not smart enough, will most likely not receive good grades in school and girls who are told that they have no other opportunities than to run the household, will most likely not become community leaders (Banerjee and Duflo, 2011). Sometimes, just presenting examples that alternatives are possible, such as presenting female leaders or farmers to a community can change the preferences of each individual (Banerjee and Duflo, 2011). In order to do so, we need to study the social, economic and cultural conditions under which people form and reassess their preferences.

These thoughts about preference satisfaction are relevant for the design of development projects. Unfortunately, it has often been the case that people with a different cultural background assumed that the expressed preferences of a community were adaptive or uninformed preferences. Consequently, change was enforced that should lead the community or country towards what is considered as a good livelihood or happiness in other community or countries but took away the chance of these communities to experience preference satisfaction or the impression of having chosen their own. Often this leads to unsuccessful development work and the reaction of rejection of a change rather than the appreciation. It might also be an example for the lack of sustainability of many development projects. Especially, the philosophical theories of communitarianism and feminism raise the point that appropriate background conditions are also important to generate our preferences (Kymlicka, 2002).

Another utilitarian approach to maximise the fulfilment of people's preferences is an indirect one, which increases the overall amount of goods available to be able to satisfy potential preferences (Kymlicka, 2002). This resource-oriented approach, which tries to avoid interpersonal comparability, is the most adopted by liberal theories of justice (Kymlicka, 2002).

From the discussion on the different accounts of utility, it can be understood that there are cases in which it is impossible to determine which act maximises utility and hence there cannot be a conclusion on what is "right" under utilitarian principles. Additionally, there is no clearly identifiable method to measure utility.

2.1.3.2. Utilitarian decision-making and utility maximisation

Action according to utilitarian principles, or acting morally right to maximise utility can be direct or indirect (Kymlicka, 2002). ‘Direct utilitarianism’ is the action, motive or policy taken by an agent who consciously decided how to act after making utilitarian calculations of how his different actions would contribute to the maximisation of the general utility, by satisfying the chosen value for utility for example informed preferences (Kymlicka, 2002; Brink, 2018). In indirect utilitarianism, maximising utility is only indirectly part of the agent’s decision-making. The main objective is to assess actions, motives or policies by following rules or habits (Kymlicka, 2002; Brink, 2018). The most common direct utilitarianism is the ‘act’ utilitarianism, which considers an act right when the consequences to maximise happiness/utility are at least as satisfactory as the alternative action (Brink, 2018). ‘Rule’ utilitarianism is typical for indirect utilitarianism, as it considers an action, motive or policy as the right one if its acceptance value for the general happiness is as least as favourable as any alternative rule (Brink, 2018).

The two main arguments for utility maximisation are two entirely different interpretation of what utilitarianism is — the equal consideration of interests and the mere counting of individuals as value of state affairs (Kymlicka, 2002). The first one, equal consideration of interests and wishes, which needs to calculate ‘fair’ trade-offs should consider every individual’s preferences (Kymlicka, 2002). The maximisation of utility is a by-product of it (Kymlicka, 2002). The second one, which is the mere counting of individuals as a value of state affairs defines the maximisation of utility as maximising the overall good instead of maximising each individual utility (Kymlicka, 2002).

Both ‘act’ and ‘rule’ utilitarianism have significant flaws, which might even lead to harmful or discriminative behaviours towards others. The two main objections are that the utilitarian decision-making excludes special relationships, namely certain stronger obligations that we owe to certain people; whereas the second objection is that utilitarianism might include illegitimate preferences (Kymlicka, 2002).

Our everyday morality tells us that we should not maximise happiness by taking away rights or belongings from people and break promises (Kymlicka, 2002). A society of non-utilitarians who believe in the importance of promises and rights will be better in maximising happiness (utility) than a society of act or rule utilitarians (Kymlicka, 2002). Utilitarianism has “misinterpreted the ideal of equal consideration for each person’s interests, and, as a result it allows some people to be treated as less than equals, as means to other people’s ends” (Kymlicka, 2002, p. 37). Showing equal consideration also means taking into account what rightfully belongs to others, when setting personal goals (Kymlicka, 2002). The initial appeal of utilitarianism based on its goal for equal consideration of human beings is not fulfilled under utilitarian decision-making, therefore an approach that includes fair shares might be more appropriate to achieve the aim of reaching equality (Kymlicka, 2002). This modification to exclude selfish preferences and prejudice would not conflict with the general principle of consequentialism, but it would be an outcome of consequentialist thinking (Kymlicka, 2002).

These finding of utilitarianism have important implications on measurement. It is difficult to predict the consequences that these will have. Even when these already resulted in an outcome, it is hard to measure these consequences.

2.1.4. Liberal equality

“If we are to treat people as equals, we must protect them in their possession of certain rights and liberties.” (Kymlicka, 2002, p. 53). Political philosophy in the last fifty years has been discussing the question, which rights and liberties need to be protected (Kymlicka, 2002). Mostly when philosophers propose a new theory to define what is just, they write it as an alternative to an already existing theory (Kymlicka, 2002; Maffettone, 2011). One of the first successful alternatives to utilitarianism has been John Rawls ‘A Theory of Justice’ first published in 1971 (Rawls, 1999; Kymlicka, 2002; Arneson, 2011). According to Rawls the only alternative available to utilitarianism was what he calls ‘intuitionism’ (1999).

Rawls (1999) describes intuitionism as having two main features: first, it may give contrary directives in certain cases, by consisting in a plurality of first principles which could, and second, it misses tools to weigh these principles against one another, hence they do not provide specific methods and priority rules (Rawls, 1999, p. 30). The different types of intuitionism can be distinguished inter alia by the level of generality of their principles (Rawls, 1999, pp. 31–32). Common sense intuitionism appears in groups of specific principles addressing particular problems of justice, such as taxation, fair wages or punishment (Rawls, 1999; Kymlicka, 2002). If we the concept of fair wage as an example, we will try to balance requirements of skill, training, effort or responsibility with hazards of the job, while taking into consideration needs (Rawls, 1999; Kymlicka, 2002). The outcome will be always a compromise in form of a weighting between the different requirements, hazards and needs (Rawls, 1999; Kymlicka, 2002). This weighting in theory is used as well for the determination of wages by existing institutions (Rawls, 1999; Kymlicka, 2002). Nevertheless, it is often influenced by demands of different social interests and positions of power and influence (Rawls, 1999; Kymlicka, 2002). Therefore, the determination of wages by institutions does not necessarily reflect any concept of fair wage; in fact, it is probable that people with different interests try to stress criteria which are to their own advantage (Rawls, 1999; Kymlicka, 2002). Rawls main critique of what he calls intuitionism is that it does not provide any criteria to judge the justice of custom itself and the legitimacy of these principles (Rawls, 1999). Therefore, these intuitionist approaches are considered as unsatisfying and even not helpful in practical matters (Rawls, 1999; Kymlicka, 2002). Mostly when intuitionist claims or principles conflict that we look to political theory for guidance (Rawls, 1999).

2.1.4.1. Rawls - lexical difference principle and social contract

Based on this motivation of providing guidance for decision-making Rawls tried to develop a system for decision-making that would help to establish priority amongst conflicting principles (Kymlicka, 2002). His theory has become the dominating theory in the field, in the sense that it has been much contested, commented or adjusted ever since its publication (Kymlicka, 2002; Arneson, 2011).

The central idea to Rawls conception of justice is that “all social values—liberty and opportunity, income and wealth, and the social bases of self-respect—are to be distributed equally unless an unequal distribution of any, or all, of these values is to everyone’s advantage” (Rawls, 1999, p. 54). Hence, we treat everyone as equal - not by removing all inequalities, but only those that are to the disadvantage of someone (Kymlicka, 2002). Inequalities are not allowed to invade my fair share, as in utilitarianism, but they can improve my initially equal share (Rawls, 1999; Kymlicka, 2002; Arneson, 2011). Still this general conception of justice can easily lead to conflict, as for example someone’s income may increase but on the cost of decreasing the same person of basic liberties (Kymlicka, 2002). Another example would be an unequal distribution of income that benefits everyone, but creates an inequality of opportunity only for those with less income (Kymlicka, 2002).

There are many theories that try to find a solution to fairly distribute benefits and burdens across society (Lamont and Favor, 2017). All of these fall under the category of ‘distributive justice’ (Lamont and Favor, 2017). The simplest solution would be Strict Egalitarianism, hence the equal allocation of material goods to all members of society (Lamont and Favor, 2017). There are many theories that try to find a solution to fairly distribute benefits and burdens across society (Lamont and Favor, 2017). All of these fall under the category of ‘distributive justice’ (Lamont and Favor, 2017). The simplest solution would be Strict Egalitarianism, hence the equal allocation of material goods to all members of society (Lamont and Favor, 2017).

Rawls solution is the “lexical difference principle” (Rawls, 1999, p. 72). The lexical difference principle (LDP) permits to diverge from strict equality, if it increases the material well-being of the least advantaged in society (Lamont and Favor, 2017). This can be interpreted as giving the less well off a veto over inequalities (Kymlicka, 2002). The intention of Rawls was to allow to prioritise between the different elements in the theory (Rawls, 1999). He establishes two principles and two priority rules. Principle one foresees that “each person is to have an equal right to the most extensive scheme of equal basic liberties compatible with a similar scheme of liberties for others” (Rawls, 1999, p. 53). Principle two establishes that “social and economic inequalities are to be arranged so that they are both (a) reasonably expected to be to everyone’s advantage, and (b) attached to positions and offices open to all” (Rawls, 1999, p. 53). These principles are governed by the following two priority rules: the priority of liberty and the priority of justice over efficiency and welfare (Rawls, 1999, pp. 266–267). The first priority rule —the priority of liberty- states that “The principles of justice are to be ranked in lexical order and therefore the basic liberties can be restricted only for the sake of liberty. There are two cases: (a) a less extensive liberty must strengthen the total system of liberties shared by all; (b) a less than equal liberty must be acceptable to those with the lesser liberty.” (Rawls, 1999, pp. 266–267). The second priority rule- the priority of justice over efficiency and welfare- states that “The second principle of justice is lexically prior to the principle of efficiency and to that of maximising the sum of advantages; and fair opportunity is prior to the lexical difference principle. There are two cases: (a) an inequality of opportunity must enhance the opportunities of those with the lesser opportunity (b) an excessive rate of saving must on balance mitigate the burden of those bearing this hardship.” (Rawls, 1999, pp. 266–

267). Rawls rules and principles give us specific guidance how to make decisions under the LDPs (Kymlicka, 2002). Under Rawls LDP equal liberties always precede over equal opportunity and the latter always precedes over equality of resources (Kymlicka, 2002). (Lamont and Favor, 2017). The most important rule is that decisions that increase inequality are only allowed if they benefit the least well off (Kymlicka, 2002). Together with special protection to ‘basic liberties’ — the right to vote, to run office, due process, free speech, mobility and others- they constitute Rawls answer to the question of justice (Kymlicka, 2002). Giving high importance to basic rights is something that Rawls theory of justice has in common with liberalism (Kymlicka, 2002).

As mentioned before, the concept of resource distribution is a concept that is inherent to many theories of justice. Rawls has two main arguments for his theory of justice. The first argument is that his theory better fulfils our intuitions about justice in terms of realising equality of opportunity. The second argument is that his principles are outcome of a hypothetical societal contract. He claims that in a state without any social contract, people would have the same ‘original position’ and all rationally choose his principles to follow as principles for governance of social collaboration. We will examine the two in the following.

According to the idea of ‘equality of opportunity’ inequalities are justified if there was fair competition in the awarding offices and positions that yield those benefits (Kymlicka, 2002). In consonance with the prevailing few of equal opportunity, removing social inequality leads to ‘equal opportunity, but natural talents or handicaps are not in this calculations(Kymlicka, 2002). Therefore, it is fair to pay someone a ₦100,000 if the national average is ₦20,000 when there is no disadvantage for people with a certain race, sex or social background (Kymlicka, 2002). The central idea of this view is that these unequal shares are ‘deserved’ if they are a product of the persons actions and choices (Kymlicka, 2002). The less well-off have no veto over these inequalities (Kymlicka, 2002). Whereas, conforming to Rawls ‘intuitive equality of opportunity’ the LDP, higher shares of resources may only be claimed if they can prove that it benefits those with smaller shares (Kymlicka, 2002). The LDP tries to take into consideration natural talents, when distributing goods, by only allowing for unequal distribution, when it gives benefits to the ‘worse off’ in the ‘natural lottery’ (Kymlicka, 2002). This is what makes the LDP complete in the view of Rawls (Kymlicka, 2002).

The premise of this argument is correct; we need to recognise that the distribution of natural talents is morally arbitrary, same as the distribution of social inequalities. While Rawls conclusion is that we can justify only those inequalities that benefit the least well-off while inequalities that stem from morally arbitrary factors should be eliminated. Consider being born with naturally little talent and not being born into a privileged social group and by your own choices and efforts you can secure a larger income than others, this might not be considered as fair distribution according to Rawls theory (Kymlicka, 2002).

2.1.4.1.1. Fair equality of opportunity

However, the first argument, of equal opportunities, must be considered after the second argument, of a social contract (Kymlicka, 2002). In this context the ‘social contract’ is the political morality that people would choose if they would set up society from zero (Kymlicka, 2002). This technique, of imagining a state of nature before any political authority, is a technique that many different theorists —such as Hobbes, Locke, Kant and

Rousseau - before Rawls used and they all thought of different answers (Kymlicka, 2002). The main criticism to this technique is that there was never such a state of nature before any political authority (Kymlicka, 2002). Dworkin says people cannot be held accountable for a hypothetical agreement which has nothing to do with an actual contract (2013). Based on these thoughts a social contract seems historically delusive and morally insignificant (Kymlicka, 2002; Dworkin, 2013). Nevertheless, the social contract can also be interpreted differently, hence, as reading out the implication of concerning people's moral equality (Kymlicka, 2002; Dworkin, 2013). Therefore, the idea of the state of nature is not considered as the origin of society but as idea of considering the moral equality of humans (Kymlicka, 2002). Part of moral equality is that nobody's will is subordinate to the will of others and nobody is born as the property of someone else (Kymlicka, 2002). Nevertheless, many groups were denied this equality, such as racial subordination during colonialism (Curtin, 1974; Kymlicka, 2002). "We are all born as free and equal" and the state of nature is claiming this moral equality and absence of natural subordination (Kymlicka, 2002, pp. 61–62).

This brings up the question how people who are born free and equal can be governed (Kymlicka, 2002). This is highly built on trust. Individuals will only give certain powers to the 'ruler' or 'state' if it uses these powers to protect and promote the interests of the people, these people will no longer be under an obligation to obey if this trust is broken (Kymlicka, 2002)..

2.1.4.1.2. Social and natural primary goods

Rawls identifies two types of primary goods that define a good life - the social primary goods and the natural primary good (Rawls, 1999; Kymlicka, 2002). Social goods are distributed by social institutions, such as income and wealth, opportunities and powers, and rights and liberties (Kymlicka, 2002). Natural goods are affected by social institutions but are not directly distributed by them, such as health, intelligence, vigour, imagination and natural talents (Kymlicka, 2002, p. 65). To equally distribute them among individuals Rawls advocates for a 'maximin' strategy, which means individuals would maximise what they get when considering to be part in the minimum group and therefore there will be no big difference between the maximum and the minimum (Rawls, 1999). The LDP helps individuals to weight out these choices (Rawls, 1999). The critique of this conclusion by Rawls is that the outcome of this decision depends on people's risk aversion (Kymlicka, 2002). A person could equally decide to 'gamble' on utilitarianism and risk to receive less if they result to be in the minimum category and push for a higher maximum in order to receive more if they result to be part of the people receiving the maximum (Kymlicka, 2002).

How can natural endowments be taken into consideration when outweighing between choices and circumstances? Natural talents and subsidising inequalities play a great role in this discussion. Natural talents when using the LDP are supposed to not influence equal treatment (Kymlicka, 2002). Rawls defines the position of people solely in terms of how many social primary goods they possess and does not consider natural primary goods for his calculation (Rawls, 1999; Kymlicka, 2002). According to this measure people who receive the same social goods are considered to be equally well even if one of them might be untalented, handicapped or mentally disabled (Kymlicka, 2002, p. 70). Rawls aim is to ensure a social system where "no

one gains or loses from his arbitrary place in the distribution of natural assets” (Rawls, 1999, p. 87; Kymlicka, 2002). Nevertheless, the LDP only ensures that the well-endowed do not receive more social goods because of their luck in the distribution of natural assets, but this does not “mitigate the arbitrariness of natural contingency and social fortune” (Rawls, 1999, p. 82; Kymlicka, 2002). Hence, the LDP does not ensure that the extra costs or burdens a handicapped person has to face are covered when social goods are distributed (Kymlicka, 2002). Even though Rawls major claim is that natural and social inequalities are equally undeserved his LDP does not recognise the desirability to compensate for these (Kymlicka, 2002). Rawls conception of justice is based on regulating inequalities that affect people’s life chances not their life choices, but unfortunately the LDP, does not make a distinction between chosen and unchosen inequalities (Kymlicka, 2002, p. 74). If we imagine having succeeded in equalising people’s social and natural circumstances it could still happen that people, by setting different priorities in life, arrive at different shares of resources (Kymlicka, 2002). Imagine two people, who have equal natural talent, come from the same social background (Kymlicka, 2002). One chooses to play tennis all day and work on a farm nearby to earn enough money to buy a tennis court and sustain his desired lifestyle (Kymlicka, 2002). The other chooses to use a similar amount of land to produce vegetables for personal and commercial use (Kymlicka, 2002). Initially goods are distributed equally between them, but the farmer, in a free market environment, will at one point be able to generate a bigger income than the tennis player, by working longer hours and saving the money (Kymlicka, 2002).

2.1.4.2. Dworkin - equality of resources

While Dworkin accepts the goal that motivates Rawls LDP, he tries to find a better approach to be ‘ambition-sensitive’ and ‘endowment-insensitive’ (Kymlicka, 2002). Dworkin uses a different experiment for his distributive scheme to fulfil the same ideal (Kymlicka, 2002). Dworkin imagines that all humans — we assume again that they all have the same natural talents — participate in an auction. In this auction every individual has the same purchasing power of $\pounds 100$ and with these every participant of the auction bids for the resources that best fit their life choices (Kymlicka, 2002). The auction is successful if everyone is satisfied about the results (Kymlicka, 2002). This can be tested with the ‘envy test’, hence every individual will prefer their own bundle of goods over the other bundle of goods (Kymlicka, 2002). The auction will be repeated until this is the case (Kymlicka, 2002). This ‘envy test’ expresses the liberal egalitarian view of justice and if it could be thoroughly enforced it would be able to achieve the three main aims of Rawls theory of justice: respecting the moral equality of persons, mitigating arbitrariness of natural and social contingencies and accepting responsibility for our choices (Kymlicka, 2002, p. 75) Nevertheless, this is not the case if one or some of the participants are disadvantaged in their natural assets (Kymlicka, 2002). In the case of a person having a handicap one option would be to compensate for this natural disadvantage — for example in terms of higher transportation costs, social insurance costs — before the auction takes place (Kymlicka, 2002). Unfortunately compensation is in many cases impossible and in extreme cases it might lead to no or barely any resources left for the other individuals (Kymlicka, 2002). A person who is severely disabled, no amount of resources will ever be able to put that person in a situation which is genuinely equal to the other individuals’

circumstances (Kymlicka, 2002). Hence, in equalising means people are prevented from reaching their aims, based on individual choices (Kymlicka, 2002). It seems to be impossible to include natural disadvantages into the calculation as it is impossible to equalise natural circumstances (Kymlicka, 2002). As a solution Dworkin proposes a modified veil of ignorance, where individuals do not know if they have a natural disadvantage before the auction, but have the possibility to spend a part of their $\$100$ on insurance for being disadvantaged or handicapped (Kymlicka, 2002). Based on how much percentage of their $\$100$ the participants are willing to spend on insurance during the auction, a tax system could be used to replicate these results (Kymlicka, 2002). Hence, an income tax is suggested to replicate this percentage and collect premiums that people hypothetically agreed to pay. This income tax would then finance various ways of welfare, medical care and unemployment schemes to cover for those who have disadvantages based on the outcome of the natural lottery (Kymlicka, 2002). Nonetheless, certain individuals would still be disadvantaged in undeserved ways under this scheme and the pure ambition-sensitive and endowment-insensitive distribution originally aimed for is also not reached through this method (Kymlicka, 2002).

If we cannot achieve this goal, then there must be a 'second best' alternative, based on fair decision-making procedure (Kymlicka, 2002). Dworkin considers his solution as this second best alternative (Dworkin, 1981b). Attempting to give the highest possible coverage to people who were less lucky in the 'natural lottery' we would end up in 'enslaving the talented' (Dworkin, 1981b; Kymlicka, 2002). Talents would become a liability that restricts the choices of individuals instead of a resource to increase their options (Dworkin, 1981b; Kymlicka, 2002). Equal consideration of natural well-off and less well-off requires another solution that maximal redistribution to the natural less well-off (Dworkin, 1981b; Kymlicka, 2002).

2.1.4.3. Real world equivalents

One might ask the question if you can measure original equal preconditions given to people. Unfortunately, there is no way of measuring what individual's relative advantages and disadvantages are. Nevertheless, autonomy is one of the basic ethic values that constitute the cornerstones for human right (Gumbis, Bacianskaite and Randakeviciute, 2010, 2011). An autonomous person must be able to freely take personal choices and set goals and this is closely related to being one's own agent (Gumbis, Bacianskaite and Randakeviciute, 2010, 2011). The degree of autonomy that a person has, gives essential information on the progressive nature of the human rights in the individuals home country (Gumbis, Bacianskaite and Randakeviciute, 2010, 2011).

The fact that people are able to choose to develop their talents can lead to different outcomes for individuals initially having the same natural talents (Kymlicka, 2002). As a consequence differences in talents will partially reflect talents and choices (Kymlicka, 2002). It is extremely difficult to measure which of the differences in talents need compensation (Kymlicka, 2002). "Individuals do not display responsibility scores on their foreheads and the attempts [...] to guess at the scores of people [...] would surely dissolve in practice into giving vent to one's prejudices and piques" and trying to get the necessary information of individuals would be a violation of privacy (Arneson, 2000, p. 97). These factors of learning and choices make it

impossible to determine necessary compensation before someone has started living (Kymlicka, 2002). Furthermore, certain skills are more or less valuable for some activities than others, so additionally people can influence their success if they choose activities that emphasise their strengths (Kymlicka, 2002). Coming back to the example of the farmer and the tennis player, the farmer might find themselves with a pest for several years and severely loose income (Kymlicka, 2002). This would be unforeseen natural contingency and if the farmer would have known this beforehand the farmer might have made another life choice (Kymlicka, 2002). We could try to compensate people for that with an insurance scheme similar to that of natural talents, but it would have the same shortcomings (Kymlicka, 2002). We would like to equalise initial starting points, but for this we would need to know about future events and choices, to be able to hold people responsible for the costs of their choices, but we do not have any of this information (Kymlicka, 2002). It seems that it is inevitable, that some people are undeservedly getting penalised for their unfortunate circumstances while others are undeservingly subsidised for the costs of their choices (Kymlicka, 2002). These are both equally serious deviations and focussing on one to the “exclusion of the other is unacceptable” (Kymlicka, 2002, p. 81). Dworkin proposes mainly ex-post solutions to these inequalities, such as taxing of people with higher income and transferring it to the disadvantaged, but this still leaves unaddressed the question how people can start with equal ex-ante endowments (Kymlicka, 2002).

Nevertheless, current ex-post mechanisms to protect the financial and social situation of individuals are in most countries mainly available and attractive for people that have a certain minimum income (Banerjee and Duflo, 2011). Often these markets do not appropriately address the needs of the poor, who would be most profiting from them (Banerjee and Duflo, 2011). Consequently, people have to have a certain minimum income to be able to afford social security services, which further enforces the gap between rich and poor people (Banerjee and Duflo, 2011). Examples for these markets are health insurance, crop insurance, or the availability of loans (Banerjee and Duflo, 2011).

If there would be more equality in the ex-ante opportunities to invest in their increase in skills and talents and capacity to produce assets, there might be less need to ex-post distribution of assets (Kymlicka, 2002, p. 82). Measures that could provide poor people with services needed to increase their well-being could be insurance premiums subsidized by the government, vouchers with which parents can send their children to any school, and the offer of ‘no frills’ saving accounts, so that these get accessible for poor people (Banerjee and Duflo, 2011). One possibility to enforce equality in ex-ante endowments in international sustainable development projects would be through ex-ante measurement.

Rawls makes a difference between the welfare state capitalism and property owning democracy, when analysing how liberal equality could be achieved by states (Kymlicka, 2002). Welfare state capitalism is commonly understood as accepting severe class inequalities and unequal distribution of human capital, while working with ex-post redistributive solutions (Kymlicka, 2002). The property-owning democracy instead focusses on greater investment in human capital and equality of opportunity and therefore, will need less ex-post adjustments (Kymlicka, 2002). Rawls is convinced that property-owning democracy is more suited than

the welfare state to reduce the need for ex-post redistribution and prevent relations of domination and degradation within society (Kymlicka, 2002). Another factor that plays a great role in equality of opportunity is the definition of social rules (Kymlicka, 2002). Unfortunately programmes that intended to promote equality often ended in stigmatisation of the poor or disproportionately benefitted the well-off (Kymlicka, 2002). Veto power could be given to the less well-off, similar to Rawls, by ensuring their inclusion in community meetings and other decision-making processes (Banerjee and Duflo, 2011). Furthermore, the 'new economy' increases the gap between college graduates and workers and executives and workers, which leads to a larger divide between rich and poor and certain social roles (Kymlicka, 2002). "To hold people responsible for their choices when society has not provided them with a decent education, for example would be 'a massive piece of bad faith'" (Kymlicka, 2002, p. 93). Unfortunately this is often happening in cases where the 'new right' tends to blame the victim of being disadvantaged of being responsible for their own misery (Kymlicka, 2002). Banerjee and Duflo argue that the poor bear the responsibility for much more than the better well-off (Banerjee and Duflo, 2011). While the rich profit from a system where decisions are 'made for them' the poor have to take more decisions, for example while the rich drink the cleaned water from the tap, the poor have to purify the water themselves (Banerjee and Duflo, 2011). Other examples are that the rich have retirement plans and social insurance, food is tested on unhealthy chemicals and they are advised on nutrient intake (Banerjee and Duflo, 2011). Poor people usually have to make all these decisions themselves and often do not have the necessary capabilities and information to take the 'right' decisions (Banerjee and Duflo, 2011). Jonathan Wolff even argues that liberal egalitarianism may be the best theory from a philosophical point of view but promotes the wrong 'ethos' of equality in practice, as it encourages the state to view its disadvantaged citizens with distrust and as potential swindlers (Wolff, 1998). This is demonstrated inter alia when they have to prove their suffering from involuntary disadvantage (Wolff, 1998). Trust plays an essential role in fruitful sustainable development and in successfully opening up markets for poor people (Banerjee and Duflo, 2011). Different studies tested the effects of unconditional and conditional cash transfers in rural communities to support agricultural transformation and increase consumption and productive activities (FAO, 2018b, 2018a). Contrary to the common mistrust against disadvantaged and vulnerable people it was found that unconditional cash transfers always led to positive effects within the community, while conditional cash transfers sometimes even worsened circumstances of community members (FAO, 2018b, 2018a). We should trust each other that every human being will be as responsible with their choices and demands as we are with ours (Kymlicka, 2002).

2.1.5. Libertarianism

Libertarianism is a branch of philosophy in which individual freedom or liberty has a strong value as account for well-being (Kymlicka, 2002; van der Vossen, 2019). This freedom of the individual is extended to its property and therefore needs to be protected (Kymlicka, 2002; van der Vossen, 2019). As a consequence, libertarians defend market freedoms, oppose to any redistributive schemes and insist that justice poses stringent limits to coercion (Kymlicka, 2002; van der Vossen, 2019). Nevertheless, not everyone who supports the free market is libertarian and not all supporters of the free market think it is inherently just (Kymlicka,

2002; van der Vossen, 2019). It has certain similarities to utilitarianism but also to liberalism in different aspects, which is depending on whether we speak of more left-wing or right-wing libertarian theories and sometimes this leads to favouring egalitarian redistributions (Kymlicka, 2002; van der Vossen, 2019). It helps to compare libertarianism to these theories and concept to understand the differences in these theories (Kymlicka, 2002; van der Vossen, 2019).

This comparison can be made by giving the example of the free market (Kymlicka, 2002). One argument often made in favour of the free market is that it increases social wealth by enhancing productivity through unrestricted capitalism (Kymlicka, 2002). If one takes a closer look at this statement, one will realise that the free market does not maximise productivity under any circumstances, as for example in the case of monopolies (Kymlicka, 2002). Some utilitarian's would argue that redistribution can lead to a gain in overall utility even if it decreases productivity (Kymlicka, 2002). Other theorists such as Hayek defend capitalism not on the basis of productivity but on its capability to minimize the danger of centralized power (Kymlicka, 2002). According to Hayek market regulations are the first step on 'the road to serfdom', as the government's power to regulate economic exchanges centralized power and power makes people corrupt (Kymlicka, 2002). Hence for him capitalism is a form of protecting our civil and political liberties (Kymlicka, 2002). Nevertheless, history shows cases in which unrestricted capitalism has led to poor human rights, such as the military dictatorships in Chile or Argentina (Kymlicka, 2002). Contrary to this some extensive welfare states have had excellent records in defending political and social rights, as for example in Sweden (Kymlicka, 2002). To maximise utility and protect civil and political rights are instrumental defences of the free market (Kymlicka, 2002). Therefore, the free market is an instrument to promote these (Kymlicka, 2002). Consequently people do not promote market freedom because people have rights to property, but they give individuals rights to property to increase utility and stabilise democracy; if these could be reached otherwise it would be legitimate to restrict property rights (Kymlicka, 2002). The conviction that redistributive taxation is a violation of people's rights, is what distinguished libertarianism from other right-wing theories (Kymlicka, 2002). This right to freely decide over one's goods and services is independent of its effects on overall productivity (Kymlicka, 2002). Therefore government interference in the form of taxation is interpreted as equal to forced labour (Kymlicka, 2002).

2.1.5.1. Entitlement

This central claim that everyone is entitled to their possession and that therefore, a just distribution is any distribution that results from free exchange, has been addressed by Nozick in his 'Entitlement Theory' (Kymlicka, 2002). According to Nozick the only legitimate taxation is to raise revenues to maintain the institutions sustaining the market freedom, hence the justice system and police needed to enforce individual free exchange (Kymlicka, 2002). Nozick's entitlement theory has three main principles the principle of transfer, the principle of just initial acquisition and the principle of rectification of injustice (Nozick, 1974; Kymlicka, 2002). The principle of transfer states that what was justly acquired can be freely transferred (Nozick, 1974; Kymlicka, 2002). The principle of just initial acquisition states defines how possessions are

initially acquired to be rightfully owned (Nozick, 1974; Kymlicka, 2002). The principle of rectification of injustice outlines how to act if a possession was acquired unjustly (Nozick, 1974; Kymlicka, 2002).

In the case of land ownership, this means that principle one allows the landowner to transfer the land or products produced from that land. The second principle of acquisition gives information on how the land was acquired and the last principle guides on what to do if principle one or two are violated (Nozick, 1974; Kymlicka, 2002). Nozick describes his theory as “a minimal state, limited to the narrow functions of protection against force, theft, fraud, enforcement of contracts, and so on, is justified; any more extensive state will violate persons' rights not to be forced to do certain things, and is unjustified” (Nozick, 1974, p. ix). This means that there would be no public education, no public health care, no public transport or roads, parks and other public facilities (Kymlicka, 2002). If we compare this to Rawls or Dworkins ideal governance system, it is similar in the aim to be sensitive to individual choices, but different in the way that Nozick system is only ambition-sensitive but not endowment sensitive (Kymlicka, 2002).

A system without any redistribution would lead to the naturally disadvantaged to starve because they have nothing to offer in free exchange and for children to live without education or health care when they are born into a poor family (Kymlicka, 2002). As the distribution of natural talents and social circumstances when we are born is an arbitrary distribution, and they are undeserved circumstances as we assume that we are all equal at birth, due to these undeserved differences some people will flourish while others will starve and children who are supposed to be equal to each other are given unequal opportunities in life (Kymlicka, 2002). This is not only true for state internal governance but also for inter-state governance; and it is what we are seeing currently all around the world: children born into circumstances in which they are starving and without or only very poor education, which makes it almost impossible for them to get out of their current situation in a free market system without redistribution.

Nozick says redistribution is unjust because people are entitled to absolute power over their possessions as long as they have acquired them without force or fraud (Nozick, 1974; Kymlicka, 2002). Nevertheless, there are some limits, the entitlement to my shovel does not entitle me to physically harm someone else with it (Nozick, 1974; Kymlicka, 2002). According to Nozick, one can decide to voluntarily give away their property for free to someone else, but they do not need to and especially cannot be forced to share their possessions by a government (Nozick, 1974; Kymlicka, 2002). Consequently, following Nozick's theory no one has the right to force someone to share their possessions with the disabled or starving (Nozick, 1974; Kymlicka, 2002). There are three major question to ask here. The first question is, what tells us that the person holding the possessions has acquired these justly and is therefore entitled to sole decision-making power (Kymlicka, 2002). The second question is, does the premise of self-ownership give us the right to property? (Kymlicka, 2002). The third question is, does the legitimate acquisition of something give us absolute power over the transfer of it? (Kymlicka, 2002).

First the question about legitimate power in transfer will be addressed. Nozick argues that his principle of transfer is more intuitive than the liberal principles of redistribution, by giving the Wilt Chamberlain

example. In this example he supposes that Wilt Chamberlain signs a contract with a team, that in each home game, twenty-five cents of ticket admission will be given to him (Nozick, 1974; Kymlicka, 2002). Therefore, from that point on viewers pay their price for the ticket and put the twenty-five cents that go to Wilt Chamberlain in another special box with his name on it. As a result of 1 million people attending his home games he earns \approx 250,000, which is considerably more than the average person (Nozick, 1974; Kymlicka, 2002). According to Nozick this is not unjust, as people chose to give these twenty-five cents to Wilt Chamberlain, while they could have chosen to do otherwise and go to the cinema or buy a magazine with the same money (Nozick, 1974; Kymlicka, 2002). The argument is that if originally the money was distributed rightfully to these people, then their decision to give twenty-five cents of their income to Wilt Chamberlain and the consequence that Wilt Chamberlain has more income than the average individual is also just (Nozick, 1974). While Nozick admits that it seems unfair that some people suffer from undeserved inequalities in their access to the freedom of social cooperation and exchange of transfers he is convinced that “no one has a right to something whose realisation requires certain uses of things and activities that other people have rights and entitlements over” (1974, p. 238). Others such as Mackie argue that rather than maximising preference satisfaction amongst each other, we could ensure everyone a fair go in life by guaranteeing everyone an adequate level of resources and liberties (Mackie, 1984). Nozick states that while the idea of a fair go is intuitively attractive “the particular rights over things fill the space of rights, leaving no room for general rights to be in a certain material condition” (1974, p. 238). He is convinced that these absolute property rights are an unavoidable consequence of the principle of self-ownership, which he considers as a much deeper principle we are greatly committed to (Nozick, 1974; Kymlicka, 2002).

2.1.5.2. Fair initial acquisition

Going back to the example of land ownership we can say that one cannot create land, one can only improve land, extract resources from land or use it to produce resources (Kymlicka, 2002). The principle of transfer presupposes that one can only transfer in this case ‘land’ if it was initially rightfully acquired, but if property rights depend on previous property rights, then we must assess if this land was rightfully acquired in the beginning (Kymlicka, 2002). As humans did not create land, the beginning of property of land is when it was first declared by an individual as private property (Kymlicka, 2002). Much like land also every other natural resource was at one point no one’s property and was claimed by humans to become their property (Kymlicka, 2002). Historically most natural resources became people’s property by force and not through rightful acquisition (Kymlicka, 2002). This way of using history as standard for assessing justice is why Nozick calls his theory a historical conception of justice (1974, pp. 153–154). From this fact can be drawn two different conclusions. One is that the use of force makes the initial acquisition illegitimate and therefore the current owner illegitimate, leading to no moral reason preventing the government to redistribute this property (Kymlicka, 2002). The other one is that if initial illegitimate acquisition through force is legitimate then use of force by the government to redistribute is also not necessarily illegitimate (Kymlicka, 2002). Nozick clearly states that the use of force for acquisition is illegitimate and therefore, current owners of scarce resources have

no right to deprive others of access to these resources and products or profits of these resources (Kymlicka, 2002). As a solution Nozick suggests a one-time redistribution of resources in accordance with Rawls lexical difference principle could rectify current illegitimacy's and after that libertarian principles of transfer can be put in place (Kymlicka, 2002). Valls argues that this type of rectification should also include reparation, preferably in the form of affirmative action programmes (Valls, 1999). Affirmative action involves “positive steps taken to increase the representation of women and minorities in areas of employment, education, and culture from which they have been historically excluded” (Fullinwider, 2018, p. 1).

To address the question of which initial acquisition of absolute rights over unowned resources would be aligned with the idea of treating people as equals Nozick draws on John Locke's ideas (Nozick, 1974). Locke argues that we are entitled to certain bits of our external world if we leave enough and good for others (Nozick, 1974). Locke found that most acts of appropriation were not leaving enough and comparably good of the resource or object being acquired, but comes to the conclusion that overall everyone would benefit more (Kymlicka, 2002). This can be explained partly with the problem of the ‘tragedy of the commons’, which means that if a resource is commonly used and there is no owner who can be held responsible for it, there is little incentive for the individual to invest time and effort to develop the resource (Kymlicka, 2002). In the case of land ownership, the tragedy of the commons would mean that everyone uses the land how they need it, but no one invests the time and effort to develop the land to improve its productivity or ensure climate resilient practices and prevent depletion of resources (Kymlicka, 2002). As everyone can use the land there is no mechanism to ensure the individual that it will benefit from its investments to improve the land and to exclude ‘free-riders’ who could benefit from the rewards without contributing (Kymlicka, 2002). However, this would require someone receiving complete control over the land and taking it out of the commons, this can mean that others lose access or stop benefitting from it (Kymlicka, 2002). Another example for commons is the ocean (Kymlicka, 2002; Manuel, Figueres and Browner, 2014; Bindoff *et al.*, 2019). Even though the ocean is technically an international area, regulations are in place to divide the responsibility for different maritime areas, countries have control over pollution, fishing and other human impacts on the ocean in these areas, in the end the ‘whole’ ocean is affected by these decisions (Kymlicka, 2002; Manuel, Figueres and Browner, 2014; Bindoff *et al.*, 2019). Fishers all around the world on one side depend on the ‘health’ and ‘stability’ of the ocean, while overfishing and fishing very young fish —before they can reproduce- has become a common practice (Kymlicka, 2002; Manuel, Figueres and Browner, 2014; Bindoff *et al.*, 2019). This phenomenon seems irrational as people living from fishing undermine their own existence and the one of their offspring (Kymlicka, 2002). This is rational on the individual point of view, following the logic that there is no need to be environmentally responsible if ‘the others’ are neither, this leads to a race for depletion (Kymlicka, 2002).

2.1.5.3. Collective action and mutual advantage

Nozick defends his theory of justice with the Kantian egalitarian idea that we should treat people as ends in themselves, but if we try to reach this aim, then it does require other principles than the ones of Nozick to

achieve that (Kymlicka, 2002). It was demonstrated in the chapter on libertarianism as equality, that equality account of justice of the libertarian theory of Nozick (Kymlicka, 2002). In the following will be discussed whether mutual advantage can account for justice in Nozick's theory (Kymlicka, 2002). Both Rawls theory of justice and mutual advantage theories of libertarianism are frequently presented in contractarian terms (Kymlicka, 2002).

Contractarianism considers both a political theory of legitimacy of political authority and a moral theory about the origin or legitimate content of moral norms as possibilities for contractual agreement (Cudd and Eftekhari, 2017). The political theory of authority requires that authority of a government can only be legitimate if it is obtained through the consent of the citizens and this consent must originate from the idea of mutual agreement or contract (Cudd and Eftekhari, 2017). Whereas the moral theory or contractarianism argues that moral norms receive their normative force from the idea of contract or mutual agreement (Cudd and Eftekhari, 2017). As social contract theorists are considered political theorists such as Hobbes, Locke, Kant and Rousseau (Cudd and Eftekhari, 2017). Rawls is considered as the most outstanding social contract theorist in the second half of the 20th century, together with David Gauthier, who can be considered as primarily moral contractarian (Cudd and Eftekhari, 2017). It is not a requirement to be both political theory and moral theory contractarian, but most contractarian are both (Cudd and Eftekhari, 2017). Another theory of social contract is contractualism, which can be used in the broad sense to indicate that a certain view of morality is based on contract or agreement (Cudd and Eftekhari, 2017; Ashford and Mulgan, 2018).

In the following will be discussed how social contracts under Rawls liberalist theory of justice and mutual advantage theories of libertarianism are different (Kymlicka, 2002). The contract device in Rawls theory of justice is closely connected to our natural duty of justice, hence the duty to treat others fairly (Kymlicka, 2002). People matter because they are 'ends in themselves' and therefore matter from a moral point of view and as a consequence they are entitled to equal consideration, not because they can harm or benefit us in some way (Rawls, 1999). The contract device helps to specify what this natural duty of considering people as equals entails, as it requires each party to equally take into account the needs of others as free and equal beings (Rawls, 1999; Kymlicka, 2002). To ensure the equal consideration the contract device removes arbitrary differences in the original position (Rawls, 1999; Kymlicka, 2002).

Mutual advantage theorists use the contract device motivated by the opposite reasoning as they state that there are no natural duties or self-originating moral claims (Kymlicka, 2002). The claims of each individual considered as equal moral claims under the contract device of Rawls are considered as subjective preferences of individuals (Kymlicka, 2002). Hence there are no naturally right or wrong actions, even if they involve harming others (Kymlicka, 2002, p. 129). The argument is build up in the way even if there is nothing inherently wrong about harming another person, it is most probably better not to harm someone else as this could lead to others trying to harm oneself (Kymlicka, 2002). Consequently it is mutually advantageous to adopt a convention against injury and a stable cooperation can be easier established, without the need to spend unnecessary resources on self-defence (Kymlicka, 2002). In the short run it might in our interest to violate

such an agreement, but in the long run it would make mutual cooperation very unstable and therefore harm the long-term self-interest (Kymlicka, 2002). Accordingly, the content of such conventions will be subject to bargaining and each individual will try to protect their own interests, by trying to make as little as possible compromise on these personal interests (Kymlicka, 2002). Even though such a convention is not a contract this type of bargaining by the community to reach a mutually advantageous convention can be interpreted as an establishment of a social contract established by the community (Kymlicka, 2002). This contract, different from Rawls original position is not a reflection of traditional notions of moral and political obligation, while still including some of the constraints that are considered as natural duties by Rawls, such as the duty not to steal (Kymlicka, 2002). This is what Gauthier describes as ‘moral artifice’- an artificial method to assess what people are naturally entitled to (Kymlicka, 2002). ‘Artifice’ can be interpreted also in the sense that it requires the establishment of complex mechanisms to enforce these agreements against individuals if necessary (Kymlicka, 2002). This enforcement is needed, because contract it might not be in everyone’s interest to comply with it, even though it was in everyone’s interest to agree with it (Kymlicka, 2002). For example, as in the scenario of overfishing the ocean. Science shows that it is clearly in the interest of every involved party to agree to rules to limit fishing to an environmentally friendly level as peoples livelihood is in jeopardy in the case of extinction of fish (Bindoff *et al.*, 2019). Game theory argues that people have no reason to cooperate if they do not expect others to comply (Kymlicka, 2002). Besides this it might be even rational for an individual not to comply if the others in the cooperation can be trusted with compliance (Kymlicka, 2002). In the case of overfishing one fisher might think that the others will comply with fishing limits and therefore it won’t be that big of a harm if that person crosses its fishing limits, as that person alone won’t cause the extinction of fish (Kymlicka, 2002). On a moral point of view this is wrong, but from a mutual advantage position its unfairness is irrelevant as there is no morality in independent self-interest (Kymlicka, 2002). In fact if every individual is convinced that the personal non-compliance will not make a difference then the system fails (Kymlicka, 2002). If everybody follows solely their personal interest then this most probably leads to collectively irrational outcomes (Kymlicka, 2002). This is an example of a collective action problem (Kymlicka, 2002).

Another example scenario is the so called prisoners dilemma (Kuhn, 2019). The prisoner’s dilemma is a thought experiment, where you imagine that you and your partner in crime, after a bank robbery, are arrested and placed in separate isolation cells (Kuhn, 2019). Both prisoners are motivated more about their personal freedom than about the well-being of their partner in crime (Kuhn, 2019). The prosecutor makes the following offer: “You may choose to confess or remain silent. If you confess and your accomplice remains silent I will drop all charges against you and use your testimony to ensure that your accomplice does serious time [20 years]. Likewise, if your accomplice confesses while you remain silent, they will go free while you do the time [20 years]. If you both confess I get two convictions, but I’ll see to it that you both get early parole [5 years]. If you both remain silent, I’ll have to settle for token sentences on firearms possession charges [1 year]. If you wish to confess, you must leave a note with the jailer before my return tomorrow morning” (Kuhn, 2019, p. 1). Kymlicka lists the following options for the prisoners:

“1st-best outcome: I confess, partner doesn't confess (I go free, she gets twenty years)

2nd-best outcome: I don't confess; partner doesn't confess (we both get one year)

3rd-best outcome: I confess; partner confesses (we both get five years)

4th-best outcome: I don't confess, my partner confesses (I get twenty years, my partner goes free)”

(Kymlicka, 2002, p. 130). The most obvious option for the prisoners would be to have agreed in advance on not confessing, but if they didn't then the individual most rational outcome would be to confess (Kymlicka, 2002; Kuhn, 2019). Regardless of which decision the other person takes it will always be the most rational decision to confess if you do not know which decision your partner takes, as it leads to the least time in prison (Kymlicka, 2002; Kuhn, 2019). In order to reach the best collective rational outcome, we should prevent individuals from acting based on their rational self-interests (Kymlicka, 2002). Accordingly, it is not enough to agree on conventions in order to ensure rational collective outcomes (Kymlicka, 2002). The advantage to follow a particular convention highly depends on personal preferences and power, as who is strong and talented most probably will do better than the one who is weak and infirm, as they have more bargaining power (Kymlicka, 2002). No doubt that on our everyday view, exploiting the defenceless is injustice, mutual advantage theorists would still not consider any obligation towards the defenceless (Kymlicka, 2002). For the reason that mutual advantage theory rejects the idea that people have an inherent moral status the mutual advantage approach cannot be seen as an account of justice, but instead as an alternative to justice (Kymlicka, 2002). This is largely due to the fact that mutual advantage theory approves exploitation wherever the personal differences are sufficiently great and it does not offer an option to prefer justice over exploitation (Kymlicka, 2002).

But the major problem of implementing idealistic theories of justice in reality might be that people lack the motivation to implement them (Kymlicka, 2002). According to mutual advantage theorists people mainly act based on the desire to reach personal satisfaction and therefore justice must represent the interest of the agent (Kymlicka, 2002). Therefore philosophers argue that powerful people will only treat others as moral equals if they are motivated through internal ethical norms — the pre-existing disposition to act justly (Rawls, 1999; Kymlicka, 2002). A confirmation of this internal ethical norms of justice could be the human kind consistently demonstrating over history to care about the defensibility of actions in a way that does not solely call upon power (Kymlicka, 2002).

2.1.5.3.1. The freedom of capitalism

It was found that neither moralised, nor neutral or purposive definitions of freedom serve as a defence for capitalism as an ultimate freedom (Kymlicka, 2002). Nevertheless it is a common claim that libertarianism or capitalism protects individual freedoms through the absence of restrictions, while liberalism or the welfare state restricts freedom through restricting individuals (Kymlicka, 2002). This equation of capitalism is shared by some advocates for the welfare state who agree that it represents a balance between freedom and equality due to its redistributive policies (Kymlicka, 2002). This argument seems to be built based on a neutral non-moralised definition of liberty, as by removing the redistributive system of the welfare state legal constraints

on the disposal of individual resources are eliminated (Kymlicka, 2002). In the case of an extremely high tax on inheritance and capital gains this might prevent a person of giving their property to someone else and with the elimination of this tax a number of neutral freedoms are gained (Kymlicka, 2002). However, as there is most probably also a reason why someone wants to give their property to someone else, through the facilitation of this possibility also certain purposive freedoms are gained (Kymlicka, 2002). To be more specific on how liberty increased we must thus assess who if free to do what from which obstacle (Kymlicka, 2002).

In the case of elimination of inheritance tax, when asking the question who has the freedom, it becomes clear that the person owning becomes free to transfer it to someone else, while the ones originally profiting from the tax are deprived of the freedom to transfer property to someone else (Kymlicka, 2002). In brief, inheritance tax does not eradicate people's freedom to transfer property but is redistributes the freedom (Kymlicka, 2002). Conclusively, in this case, the free market legally restrains freedom for the average person and the welfare state increases it (Kymlicka, 2002). Private ownership always means that there is a distribution of freedom and unfreedom (Kymlicka, 2002). Both the free market as well the welfare state can only be sustained with continuous intervention in people's lives from the side of the state (Kymlicka, 2002). Nevertheless, some libertarians argue that the freedom acquired by property owners through the protection of their property is higher than the freedom taken from the others (Kymlicka, 2002). This is impossible to measure and would not be in line with the greatest equal liberty principle which requires people to have the most freedom comparably to the equal freedom of others (Kymlicka, 2002). Others argue with moralised definitions of freedom that the free market does not create unfreedom as it does not restrict the individual freedom and as a consequence it increases freedom (Kymlicka, 2002). Much of the popular debate on the free market is based on this logic (Kymlicka, 2002). As it was found beforehand that using a non-moralised definition one would come to the conclusion that every private property creates both freedom and unfreedom (Kymlicka, 2002). Using a moral definition, on the contrary, one would conclude that no restrictions on individual freedoms by the free market only prevent people from making use of other people's resources (Kymlicka, 2002). This argument based on the moral definition however, overlooks the fact that this is only true as long as we do not consider if people actually have a moral right to the property they own (Kymlicka, 2002). In the sub-section on initial fair acquisition it was shown that most people have historically no moral right to the property or resources they own and therefore the moral argument is not valid (Kymlicka, 2002). To build a logical argument, one must choose a definition and stick with it throughout the whole argument (Kymlicka, 2002).

For all the reasons discussed in the different sub-sections on accounts for liberty it was understood that none of the three definitions of liberty (neutral, purposive, moralised) supports the argument that libertarianism increases freedom, consequently, libertarianism is no liberty-based theory (Kymlicka, 2002). The commitment to certain liberties and not to others is not derived from a right to liberty but from the role they play in moral equality (Kymlicka, 2002). The idea of increased or decreased freedom as such does not contribute to political arguments, instead it is the value that certain liberties have for people and which distribution of these liberties is legitimate according to equal consideration or mutual advantage approaches (Kymlicka, 2002).

2.1.5.4. Changing people or circumstances

Where do we draw the line when deciding what it means to change circumstances of people or people themselves? In this chapter it was found that property cannot be considered as part of self-ownership, but where do we draw the line of what can be changed about us or around us, in order to reach more equality in the world (Kymlicka, 2002). Dworkin highlights this aspect by stating that there is a difference between changing circumstances so that people are treated as equals or changing people so that they are equal (Kymlicka, 2002). One might propose to change the DNA of people so that no one can be born anymore with certain disadvantages and everyone is born with the same natural talents, so that we all start from an equal point in terms of natural talents in life (Kymlicka, 2002). Or we could force people to transfer their second kidney to help someone else who was born with weaker organs (Kymlicka, 2002). Obviously once one starts discussing to change natural endowments, there are endless ways to violate people's human rights and physically harm people (Kymlicka, 2002). For this reason, it seems appropriate to draw an invisible line around the human body to prevent that the principle of equalising circumstances crosses the line to violating our person (Kymlicka, 2002).

2.2. Defining socio-economic dimensions in sustainable development projects

The socio-economic dimension can stand for many different areas of life in different disciplines, therefore in the following will be defined the relevant focus areas of development projects in the agricultural sector and the role the socio-economic dimension plays in these areas. After defining the role that the socio-economic dimension plays in these areas it can be understood how the socio-economic dimension can be assessed prior a project as a distinct dimension or if the assessment of the socio-economic dimension should be made from different angles to target all the objectives of development, sustainability, resilience and decreased vulnerability to climate change.

To be able to define the socio-economic dimension of development projects in the agricultural sector in an era where taking climate change into account is inevitable, it needs to be defined what sustainable development means and what is considered as a sustainable development project. As the interventions made by international organizations, governments or NGOs should always have the ultimate goal to improve the livelihood in the target community. This aim also needs to be kept in mind when formulating project proposals that also have the aim to influence the region's impact on global GHG emissions.

Several similarities can be found in the definition for a social and economic dimension or socio-economic dimension of sustainability and development, resilience, and vulnerability to climate change in development work. Therefore, in the following, the terms sustainability of development, resilience and vulnerability to climate change are going to be defined, to understand how these terminologies differ from and overlap with the socio-economic dimension of sustainable development in climate change related projects.

2.2.1. Sustainability and development

There is no common and precise definition of sustainability or sustainable development. In this section, the evolution of different concepts of sustainability and their applicability for this research will be discussed to be able to define sustainable development for this work.

The term sustainability was defined the first time by Hans Carl von Carlowitz in the 18th century in the context of forestry and as sustainable he considered the maintenance of a given status over a long time (Environment and Society Portal, no date; Vehkamäki, 2005). Furthermore, he introduced the three dimensions of sustainability as economic, social and ecological sustainability (Vehkamäki, 2005). Additionally, sustainability can be defined as a concept that tries to ensure the continuity of human societies and nature. The principles of sustainability are intending to ensure a secure future by controlling living systems, this aspect of sustainability can be considered as the dimension that tries to assess risks and vulnerabilities, to ensure the sustainability of human life and nature (Vehkamäki, 2005).

The science of sustainable development is an idea that emerged in the 1980s from the scientific perspectives on the relation between the economy, society and environment (Annan, 2000; Kates *et al.*, 2001). The most widely used definition of Sustainable Development is “development which meets the needs of current generations without compromising the ability of future generations to meet their own needs” (General Assembly, 1974, p. 54). This definition may give the impression that sustainable development is focussed mainly on intergenerational equity. In other paragraphs, of the same report, it highlights the role of social and environmental dimensions in sustainable development, but only vaguely defines them, when highlighting basic needs of humans and limits of environmental resources (General Assembly, 1987).

As a reaction to this ambiguity the Board on Sustainable Development of the United States (U.S.) National Academy asked three highly important questions: what is to be developed, what is to be sustained, the links between what is to be sustained and what is to be developed, and for how long (U.S. National Research Council, Policy Division, Board on Sustainable Development, 1999). The concept of sustainable development has the objective to link what is to be sustained to what is to be developed. To gain a better understanding of these links, they described them separately. Based on the distinction it can be also understood to which of the two aspects higher emphasis is given. An example for this distinction is given in

Figure 4.

Figure 4 - Sustainable development: common concerns, differing emphases

WHAT IS TO BE SUSTAINED:	FOR HOW LONG?	WHAT IS TO BE DEVELOPED:
	25 years "Now and in the future" Forever	
NATURE Earth Biodiversity Ecosystems		PEOPLE Child survival Life expectancy Education Equity Equal opportunity
LIFE SUPPORT Ecosystem services Resources Environment	LINKED BY Only Mostly But And Or	ECONOMY Wealth Productive sectors Consumption
COMMUNITY Cultures Groups Places		SOCIETY Institutions Social capital States Regions

Source:(U.S. National Research Council, Policy Division, Board on Sustainable Development, 1999, p. 24;
Kates, Parris and Leiserowitz, 2005, p. 11)

The Board on Sustainable Development found that what needs to be sustained is not necessarily, what
needs to be developed and vice versa (see

Figure 4). After making this distinction and reviewing the literature, they found that often an emphasis in the definition of sustainable development was put on extremes, such as “sustain only” or “develop mostly”. These differences in emphasis are highlighted by the category of ‘linked by’, see

Figure 4. Equally, the period of ‘current and future generations’, expressed by ‘now and in the future’ in the graph was interpreted differently by scientists, lasting from one generation (almost everything is sustainable) to forever (almost nothing is sustainable), see

Figure 4. The average life expectancy is estimated at 72.6 years (Roser, Ortiz-Ospina and Ritchie, 2019). Can any projects of which the impact lasts shorter be considered as sustainable? This shows the need to define for how long the impact of sustainable development project is supposed to last in order to be sustainable. This distinction can be helpful as well in the development of a measurement system for socio-economic indicators.

The UN established the three pillars of sustainable development, describing them as “economic development, social development and environmental protection — at local, national, regional and global levels” in the Declaration of the World Summit on Sustainable Development (United Nations, 2002). Although for many scientists in the field of sustainable development, this definition was too narrow and obscured their concerns for human development, equity, and social justice. Nevertheless, it is still the most known definition of sustainable development and is used as a basis for the Sustainable Development Goals (United Nations, no date). On their website, the United Nations specify, that “there must be promotion of sustainable, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems” (United Nations, no date). They add that these elements are interconnected and crucial for the well-being of citizens and eradicating poverty in all forms and

dimensions is a necessary precondition to reach the objectives (United Nations, no date; General Assembly, 1974, 1987). A study made in 2005 found that there was no universal agreement on what these three core categories mean in detail (Kates, Parris and Leiserowitz, 2005). The most divergences were found in the definition of social development; Kates et al. identified three major categories of the social dimension. The first focused on terms like “social” “social development” and “social progress”. The second had its focus on the human aspects by focussing on human development as opposed to economic development and the third highlighted justice and equity (Kates, Parris and Leiserowitz, 2005).

These challenges of the three pillars of sustainable development by the United Nations are also acknowledged in the latest report on science for achieving sustainable development (Independent Group of Scientists appointed by the Secretary-General, 2019). They found that the three distinct dimensions of sustainability often tended to “reinforce decision-making in thematic silos” and as a result typically immediate economic benefits were prioritised which lead to social and environmental costs (Independent Group of Scientists appointed by the Secretary-General, 2019, p. 38). Therefore, co-benefits and trade-offs of choices need to be taken into consideration in the decision-making processes.

The question is how we can reconcile conflicting interests and the co-benefits and trade-offs of choices. For this a clear set of values and morals is needed and these are represented in social norms and the political consensus on these norms on an international level, for example in UN agreements (Kates, Parris and Leiserowitz, 2005; Vehkamäki, 2005). The aim to meet the needs of the present generation without compromising the ability of future generations to meet their needs is hard to reach without considerations on common morals and values. These morals and values that are reflected in decision-making on an international level are based on the current prevailing knowledge and are often strongly influenced by distribution of power. Additional to morals and values strong scientific background on future scenarios is needed, ideally not only on the grounds of climate impacts and change of resource availability, as this is just one aspect of sustainability (Vehkamäki, 2005). In climate change scenarios as a basis for sustainable development there are many overlooked phenomena such as the introduction of new technologies and its economic, social, and ecological effects or political and social events such as wars, terrorism or migration (Vehkamäki, 2005). Hence, these scenarios should also take into consideration other changes that will be triggered by factors such as changes in political power, technological changes, social changes and scientific progress. Otherwise the aim to define sustainability while taking into consideration the needs of future generations is problematic (Vehkamäki, 2005). Therefore, the access to relevant knowledge and transparency of political processes are essential for sustainable development.

The definition of ultimate goals is another way to define sustainable development, which is an approach that was taken by the United Nations when defining the short term (15 years is less than one generation) sustainable development goals for the 2030 Agenda (Kates, Parris and Leiserowitz, 2005). The assessment of indicators that are measured with the aim to reach a goal of sustainable development gives further details about the definition of sustainable development used by the organization or institution, which set these goals and

therefore helps in further defining what sustainable development means (Kates, Parris and Leiserowitz, 2005). Kates et al. developed a tabular assessment method, that helps to assess implicit and explicit definitions of sustainable development in indices or indicators, see Figure 5 (Kates, Parris and Leiserowitz, 2005).

Figure 5 - Definitions of sustainable development implicitly or explicitly adopted by selected indicator initiatives

Table 1. Definitions of sustainable development implicitly or explicitly adopted by selected indicator initiatives					
Indicator initiative	Number of indicators	Implicit or explicit definition?	What is to be sustained?	What is to be developed?	For how long?
Commission on Sustainable Development ^a	58	Implicit, but informed by Agenda 21	Climate, clean air, land productivity, ocean productivity, fresh water, and biodiversity	Equity, health, education, housing, security, stabilized population	Sporadic references to 2015
Consultative Group on Sustainable Development Indicators ^b	46	Same as above	Same as above	Same as above	Not stated; uses data for 1990 and 2000
Wellbeing Index ^c	88	Explicit	"A condition in which the ecosystem maintains its diversity and quality—and thus its capacity to support people and the rest of life—and its potential to adapt to change and provide a wide change of choices and opportunities for the future"	"A condition in which all members of society are able to determine and meet their needs and have a large range of choices to meet their potential"	Not stated; uses most recent data as of 2001 and includes some indicators of recent change (such as inflation and deforestation)

Source: Examples for explicit and implicit definitions of sustainable development (Kates, Parris and Leiserowitz, 2005, p. 14)

With this assessment method, the concrete definition of sustainability could be defined by assessing the means of sustainability expressed through the indicators used by different actors. This type of assessment will be useful for the definition of the socio-economic dimension and the development of an ex-ante project assessment methodology of this dimension.

In the context of this work, sustainable development will be defined as follows:

- It has three major dimensions:
 - a. the dimension of **time** (how many future generations),
 - b. what needs to be **developed** and
 - c. what needs to be **sustained**
 - i. All these dimensions should include social, environmental and economic aspects, to fully be sustainable in and develop all of them
- Sustainability and development are ethical questions based on morals and values; and influenced by international consent, political power and societal norms
- The application of **sustainability is a constant process without end**, in order to achieve sustainability, it needs to be regularly reassessed
- The aim of sustainable development is to reach a better livelihood for all

2.2.2. Resilience and vulnerability to climate change

For the purpose of this work, we will rely on the definitions of the IPCC, as these represent the scientific consensus on climate change science. Resilience and vulnerability to climate change are the opposite ends of climate change impacts on people, communities or countries. Hence, in order to increase resilience, vulnerability needs to be decreased.

According to IPCC resilience is “The capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganising in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation.” (Field and Barros, 2014, p. 5).

The IPCC defines vulnerability as “The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.” (Field and Barros, 2014, p. 5).

The following graph explains how vulnerability, hazards and exposure are contributing to an increased risk of climate impacts, see Figure 6. In this context impacts are defined as “Effects on natural and human systems” (Field and Barros, 2014, p. 5).

Figure 6 - Assessment and Management of Climate Change Risks

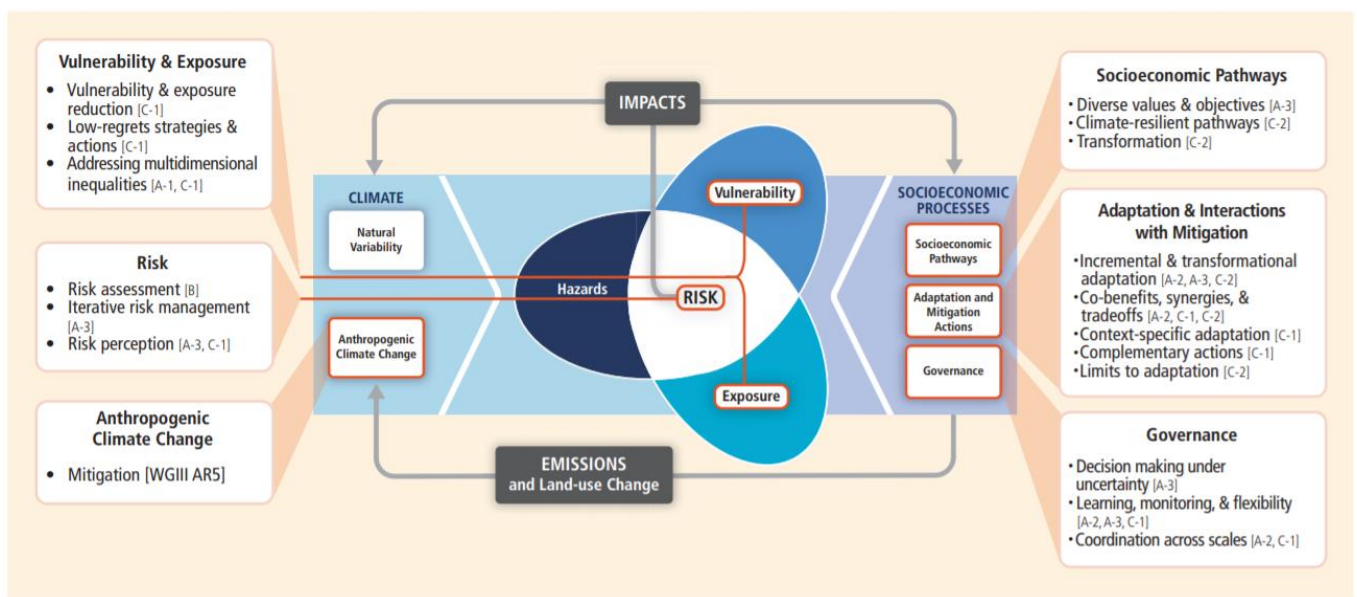


Figure TS.12 | The solution space. Core concepts of the WGII AR5, illustrating overlapping entry points and approaches, as well as key considerations, in managing risks related to climate change, as assessed in the report and presented throughout this summary. Bracketed references indicate sections of the summary with corresponding assessment findings.

Source: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects (Field and Barros, 2014, p. 85)

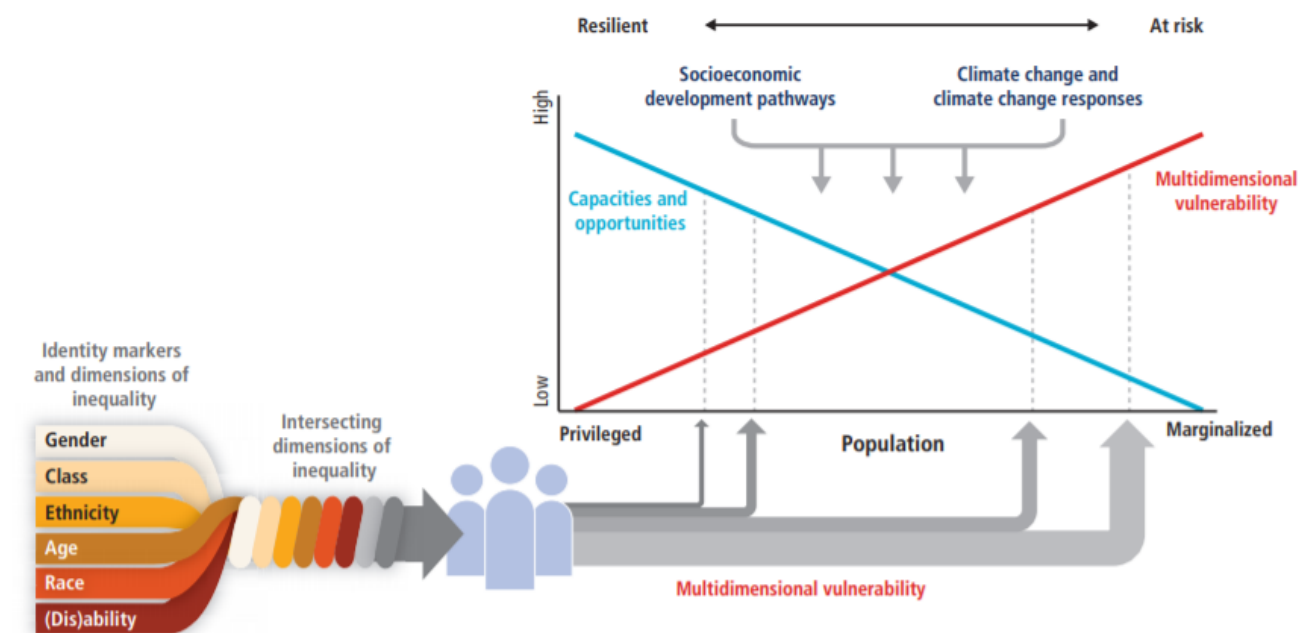
Figure 6 demonstrates how changes, both to the climate system on the left and to the socio-economic circumstances on the right—including mitigation and adaptation practices- are drivers of hazards, exposure or vulnerability (Field and Barros, 2014). However, it also shows the potential that changes in socio-economic circumstances have on absorbing climate impacts (Field and Barros, 2014).

The IPCC defines socio-economic scenarios as scenarios that describe a possible future and are calculated by combining prospects of population, gross domestic product (GDP), and other socio-economic

factors that are relevant to understand the implications of climate change (IPCC, 2014b). Shared socio-economic pathways (SSPs) are the current idea of potential combined emissions and socio-economic scenarios. Currently there is a collection of different SSPs that are each describing alternative futures of socio-economic development in the absence of interventions in form of climate policies. Combining SSP based socio-economic scenarios and Representative Concentration Pathway (RCP)- based climate projections can provide a useful basis for climate impact and policy analysis (IPCC, 2014b).

It was found that, “People who are socially, economically, culturally, politically, institutionally, or otherwise marginalised in society are especially vulnerable to climate change and also to some adaptation and mitigation responses (medium evidence, high agreement).” (Field and Barros, 2014, p. 50), see Figure 7.

Figure 7 - Societal-inequalities are connected to vulnerability to climate change



Box TS.4 Figure 1 | Multidimensional vulnerability driven by intersecting dimensions of inequality. Vulnerability increases when people’s capacities and opportunities to adapt to climate change and adjust to climate change responses are diminished. [Figure 13-5]

Source: Source: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects (Field and Barros, 2014, p. 49)

Therefore, climate risks are unevenly distributed, as disadvantaged people and communities in countries at all levels of development are higher affected of climate impacts than more well-off individuals, see Figure 7 (Field and Barros, 2014, p. 61).

Human development needs to be considered as an essential mediator of climate vulnerability (United Nations Task Team on Social Dimensions of Climate Change, 2011). Access to and control over economic, social and institutional resources is essential to climate resilience (United Nations Task Team on Social Dimensions of Climate Change, 2011). These resources include human capital (such as health, skills, education) , social capital (such as power to influence decision-making, voting rights, social connectedness to neighbours, civil society organization, businesses or government agencies), physical capital (shelter, farming tools, community infrastructure – health care facilities, dikes), natural resources (access to land and water) and financial capital (income, savings, credit) (United Nations Task Team on Social Dimensions of Climate Change, 2011). As we could learn above, adaptive capacity, exposure and sensitivity to climate change are at

their core shaped by non-climatic social and economic factors that strongly depend on rules, norms, services and policies shaping people's lives (United Nations Task Team on Social Dimensions of Climate Change, 2011). These rules, norms, services and policies are decided by governments and international agreement, therefore institutions have the power to mediate vulnerability (United Nations Task Team on Social Dimensions of Climate Change, 2011).

A way to approach vulnerability to climate change and the inequalities it entails on community level is called 'social protection', social protection addresses the especially vulnerable communities (FAO, 2017a). Social protection has the purpose to contribute to food security and improved nutrition; to protect before, during and after shocks; to promote resilient livelihoods and sustainable management of ecosystems; and to stimulate pro-poor growth and inclusive rural development (FAO, 2017a, p. 7). FAO developed a framework to embed social protection in rural development work, see Figure 8.

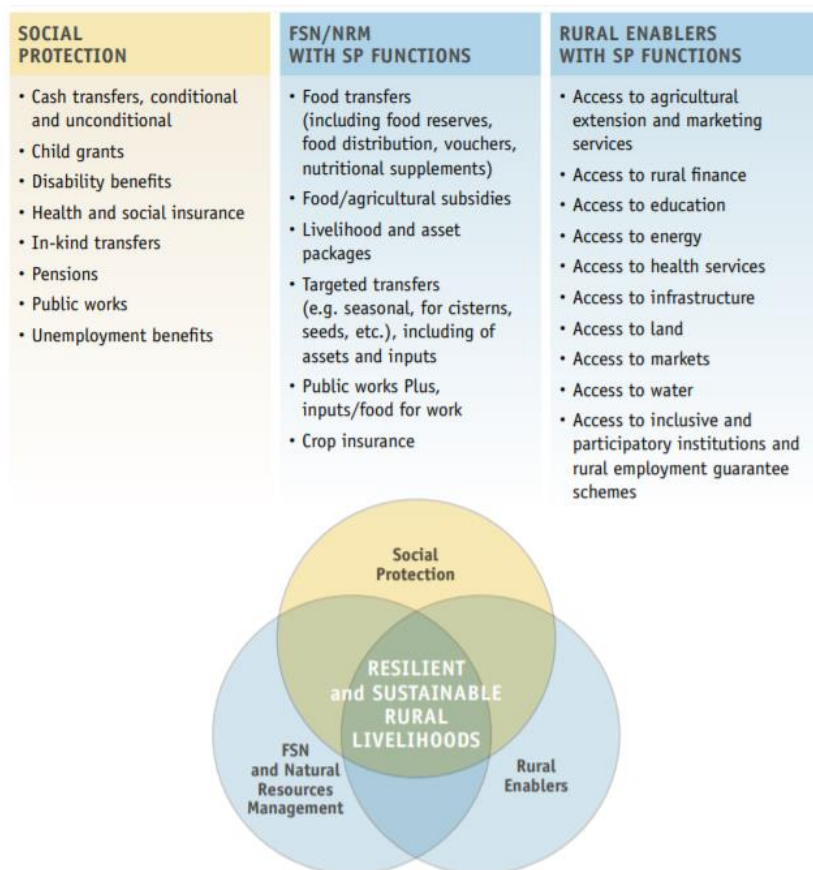
Figure 8 - Embedding social protection in rural development



Source: FAO Social Protection Framework (FAO, 2017a, p. 17)

Social Inclusion, gender equality and sustainability were identified as three crosscutting principles to increase social protection (FAO, 2017a). In the FAO Framework for Social Protection are also given some examples for indicators that influence vulnerability and can be addressed in sustainable development work (FAO, 2017a). These indicators are demonstrated in Figure 9.

Figure 9 - Examples for instruments and interventions to increase social protection



Source: FAO Social Protection Framework (FAO, 2017a, p. 30)

In the following sub-chapter, we will see that these ‘indicators’ for social protection overlap highly with the social dimension, but also with economic dimensions of climate change, proposed by the 20 Agencies that are part of the United Nations Task Team on Social Dimensions of Climate Change.

The framework for Tracking Adaptation in Agricultural Sectors (TAAS) the ‘socio-economic’ dimension is defined in three different places of the publication in different ways (FAO, 2017c, pp. x, 27). The main definition of the socio-economic dimension in this publication defined the dimension as contributing to vulnerability to climate risks (FAO, 2017c).

From the discussion in this chapter on the definition of the socio-economic dimension in sustainable development projects and the chapter on ethical considerations of measurement it is certainly problematic to majorly defining the socio-economic dimension as contributing to vulnerability to climate risks. This is due to the fact, that the socio-economic dimension plays a role not only in the vulnerability to climate risks. The social, economic and environment dimensions are each cross cutting pillars of sustainable development, which are each tightly connected to one another, and it would create a great bias to define two of the cross cutting pillars as mainly contributing to the other, while they are actually equally important to sustainable development.

In Annex of this publication is provided a list of indicators for the socio-economic dimension that were also identified as contributing to the vulnerability of climate change (FAO, 2017c). According to the definition of the socio-economic dimension of sustainable development of this work, this list is certainly not complete but a starting point.

Figure 10 - Indicators accounting for the socio-economic dimension in the TAAS framework

SOCIO-ECONOMICS CATEGORY AND ITS SUB-INDICATORS AND UNIT OF MEASUREMENTS AND INDICATIVE SOURCES OF DATA AVAILABILITY										
Sub-Category	Indicator	Unit	Source	Outcome/ Process	Agricultural Subsectors*					Gender Disaggregated
					C	L	FI	AQ	FO	
1. Food security and nutrition (vulnerability)	Indicator of (food) price anomalies	Index	FAO/SDGs	Outcome	X	X	X	X	X	n/a
	Percentage of moderate/severe food insecurity in the population based on food insecurity experience scale	%	FAO/SDGs	Outcome	X	X	X	X	X	n/a
	Cereal import dependency ratio	%	FAO	Outcome	X					n/a
	Prevalence of undernourishment	%	FAO/SDGs	Outcome	X	X	X	X	X	n/a
	Percentage of children under 5 years of age who are underweight	%	FAO	Outcome	X	X	X	X	X	n/a
	Percentage of adults who are underweight	%	FAO	Outcome	X	X	X	X	X	n/a
	Proportion of rural population malnourished	%	FAO	Outcome	X	X	X	X	X	n/a
2. Access to basic services	Rural access to electricity	% of rural population	WDI	Outcome	X	X	X	X	X	Y
	Rural access to improved water source	% of rural population	WDI	Outcome	X	X	X	X	X	Y
	Literacy rate, adult (rural)	% of males aged 15 and above	WDI	Outcome	X	X	X	X	X	Y
3. Access to credit, insurance and social protection in rural areas	Percent of rural population covered under microcredit schemes	% of rural population	New Source	Outcome	X	X	X	X	X	Y
	Strength of common-pool resources (e.g. community seed banks)	Qualitative	New Source	Outcome	X	X	X	X	X	n/a
	Number of active community level institutions	Per 1000 people	New Source	Outcome	X	X	X	X	X	n/a
	Percent of agricultural population covered by climate risk insurance mechanisms	% of AG population	New Source	Outcome	X	X	X	X	X	Y
	Percent of agricultural population covered by safety nets	% of AG population	New Source	Outcome	X	X	X	X	X	Y
	Share of hazard affected population reached by social protection schemes	% of hazard affected population	New Source	Process	X	X	X	X	X	Y
4. Agricultural value addition, income and livelihood diversification	Agriculture, value added	annual % growth	WDI	Outcome	X	X	X	X	X	n/a
	Average income of small scale food producers (including non wood forest products) by sex and indigenous status	USD	FAO/SDG	Outcome	X	X	X	X	X	Y
	Percentage of rural labour force employed in agriculture	%	WDI	Outcome	X	X	X	X		Y
	Rural poverty gap at national poverty lines	%	WDI	Outcome	X	X	X	X	X	n/a
	Percent of rural population trained in value addition to agricultural production	%	New source	Outcome	X	X	X	X	X	Y
	Volume of production/labour unit by classes of family/pastorals/ forestry enterprise size	USD	WB/FAO/SDG		X	X	X	X	X	Y

Source: Annex 4c: Socio-economics category and its indicators and units of measurement and indicative sources of data availability (FAO, 2017c).

2.2.3. What are socio-economic dimensions of sustainable development projects?

From prior analysis, it was found that the socio-economic dimension of climate change always includes social, economic and environmental considerations. This is also because impacts on the environment have a direct effect on social and economic conditions, but also because natural resources are fundamental for the survival of humankind. Based on this the socio-economic dimension plays also an important role when assessing resilience or vulnerability to climate change. This does not mean that the socio-economic dimension gives solely information on resilience or vulnerability to climate change in projects, but it is also essential to ensure the sustainability of development projects. Hence, the socio-economic dimension is the key to successful work in the development sector.

Even though the integration of the socio-economic dimension is vital to successful climate change measures, it has been barely integrated into measures in the past (FAO, no date). The lack of integration is inter alia based on a missing common definition of socio-economic dimensions. In the following first both the social and the economic dimension will be defined separately before defining the combined socio-economic dimension.

2.2.3.1. Social dimension

This sub-chapter will mainly refer to the joint paper on the Social Dimension of Climate Change by 20 different Agencies, which was published in 2011 by the United Nations Task Team on Social Dimensions of Climate Change⁹ reflects an overview of the common conception of this dimension (UNFPA, 2011; United Nations Task Team on Social Dimensions of Climate Change, 2011).¹⁰ The aim of the publication was to define a common ground on the topics raised by the UNFCCC, especially on the social dimension of climate change to take full advantage of potential to reach the SDGs (United Nations Task Team on Social Dimensions of Climate Change, 2011).

The joint report highlights the importance of a considerate definition of social dimensions and states that it should be built on social justice and principles of equity, especially considering the most vulnerable people, as this definition has both analytical and normative implications (United Nations Task Team on Social Dimensions of Climate Change, 2011). It should therefore be defined from a sustainable equitable development perspective (United Nations Task Team on Social Dimensions of Climate Change, 2011).

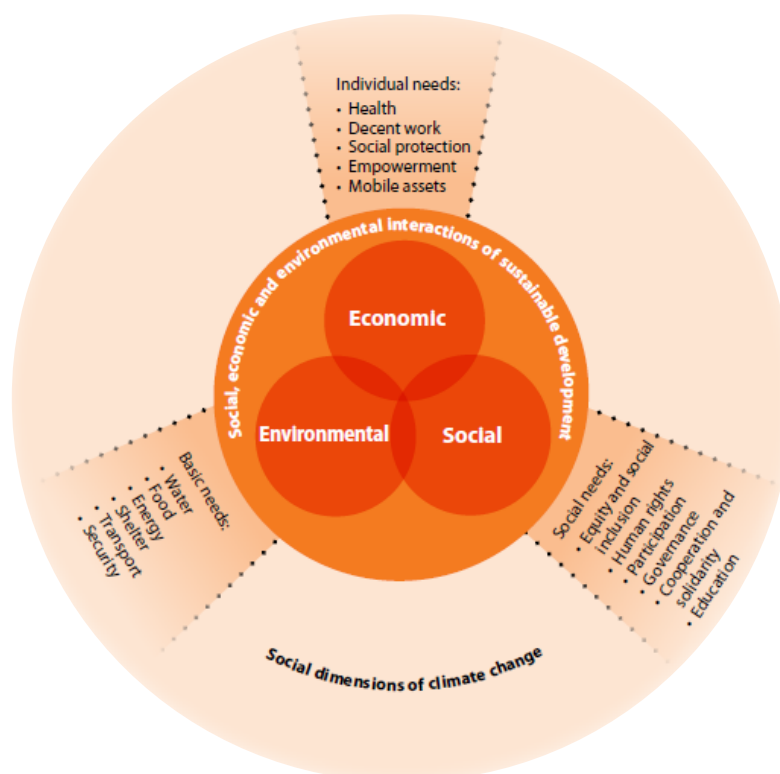
⁹ At the time of the publication it was composed of the following Agencies: Food and Agriculture Organization of the United Nations (FAO), International Labour Organization (ILO), International Organization for Migration (IOM), International Telecommunication Union (ITU), Office of the High Commissioner for Human Rights (OHCHR), Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Department of Economic and Social Affairs (UNDESA), United Nations Development Programme (UNDP), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Population Fund (UNFPA), United Nations Human Settlements Programme (UN-HABITAT), United Nations Children's Fund (UNICEF), United Nations Institute for Training and Research (UNITAR), United Nations International Strategy for Disaster Reduction (UNISDR), United Nations Research Institute for Social Development (UNRISD), United Nations University (UNU), UN Women, World Bank (WB), United Nations World Food Programme (WFP) and the World Health Organization (WHO). The Task Team is jointly convened by ILO, UNDESA and WHO.

¹⁰ This publication was written as preparation for a side event at the COP17, to highlight the need to integrate the social dimension into climate change measures and to push for its integration into the UNFCCC.

The social dimension should include the fulfilment of basic needs, enjoyment of human rights, health, equity, social protection, decent work, equal participation and good governance (United Nations Task Team on Social Dimensions of Climate Change, 2011). These basic needs that are part of the social dimension are both defined by analysing climate change impacts as a function of peoples' capacity to respond and by analysing which individual basic and social needs are decisive for sustainable development (United Nations Task Team on Social Dimensions of Climate Change, 2011).

It defines social dimensions as those that reflect the social, economic and behavioural aspects of human condition.

Figure 11 - Social dimensions of climate change in the framework of sustainable development



Source: (United Nations Task Team on Social Dimensions of Climate Change, 2011, p. 4)

As can be seen in the graph, in sustainable development in the field of climate change, certain environmental and economic indicators are highly linked to social aspects of development (United Nations Task Team on Social Dimensions of Climate Change, 2011). The necessity to maintain balance between social, economic and environmental indicators is also highlighted in the definition of sustainable agricultural development that is specified in the 2030 Agenda for the SDGs (Agriculture Directorate-General, 2001; General Assembly, 2015; FAO, 2018e, no date).

For the social dimension, it is either relevant to sustain this access to basic resources and services or develop it in case it has been already taken away from people due to the changing climate. In the definition of sustainable development, the environmental dimension can play different roles, such as in sustaining the environment for the main purpose of not intervening with nature or the purpose of life support. It will be further demonstrated in the following sub-chapter on the economic dimension, how the social, economic and environmental/ climate pillars of sustainable development are strongly interlinked.

The Task Team on Social Dimensions of Climate Change proposes three key steps to include the social dimensions into climate change policy or projects— the assessment of issues, the process of policy/project development and the results (M&E of impacts and the relevant restructuring of policy) (United Nations Task Team on Social Dimensions of Climate Change, 2011). The social dimension needs to be included in ex-ante assessments to identify and manage intended and unintended, positive and negative social consequences of climate change and interventions to mitigate and adapt to climate change (United Nations Task Team on Social Dimensions of Climate Change, 2011). Additionally transparent and inclusive participatory decision-making processes in all phases from the design of project/programmes/policies to the M&E, while ensuring inclusion and empowerment of vulnerable people (United Nations Task Team on Social Dimensions of Climate Change, 2011). When results show that concerns for the social dimension were inefficient or do not give equal concern for all groups of society, policies need to be readjusted (United Nations Task Team on Social Dimensions of Climate Change, 2011).

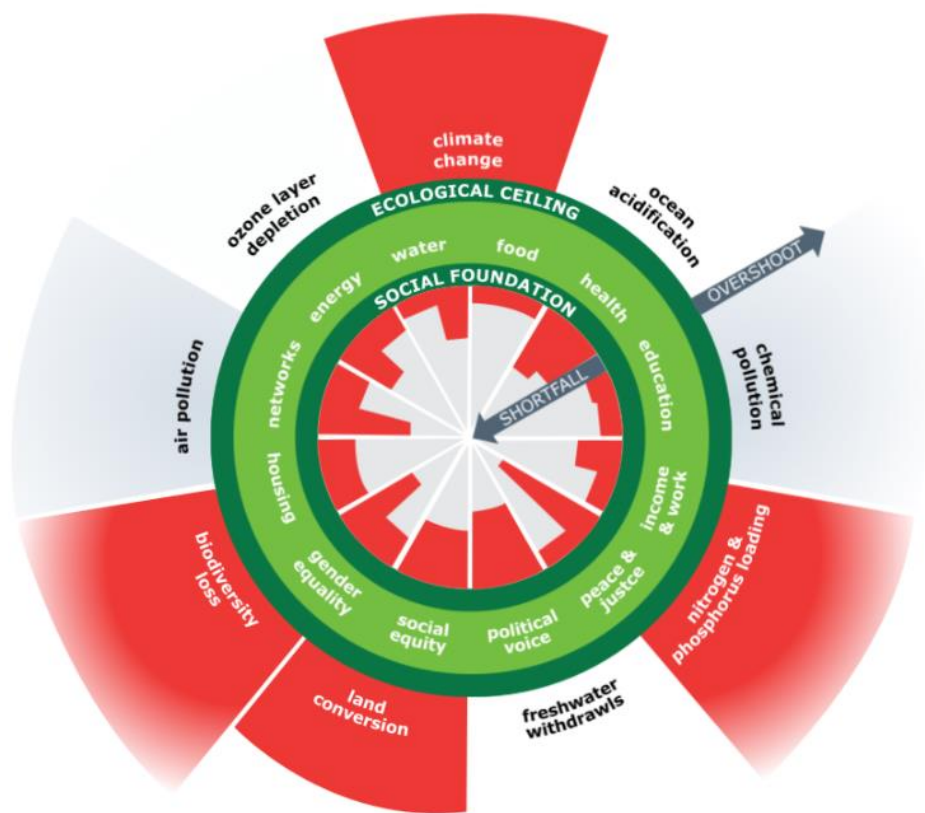
2.2.3.2. Economic dimension

It could be understood from the definition of sustainable development but also from the introduction of this work, that in the past development has been wrongly equated with economic growth. Originally the word economic comes from the Greek word *oiknomia* and is originally a noun denoted household management or the person skilled in this (OED, no date). Traditionally the measurement for successful development projects and development of states has always been the increase in welfare — in this case, it was put on a level with well-being of individuals — through the increase of gross domestic product (GDP) (Raworth, 2017). Scientific research has proven that economic growth is not the only driver of increase in well-being (UNDP, 1990; Sen and Anand, 1994b; Sen, 1999; Ranis, Stewart and Samman, 2006). When public policy prioritised investments in economic activity without considering the impact on natural resources, human or social capital, and negative externalities resulted from it. These negative results include pollution, emissions, waste and social clashes. Kate Raworth highlights the fact, that “we are the first generation to know that we are undermining the ability of the Earth system to support human development” (Raworth, 2017, p. 47). This realisation can be interpreted as an enormous and scary burden or as a great privilege and potential, as we are the first generation to know that we need to change the current economic system, social system and interaction with the planet to navigate towards a more sustainable future (Raworth, 2017).

In the Book *the Doughnut Economics*, Raworth (2017) argues that the traditional economic paradigm builds around a linear model that focusses on growth and ignores the interdependency between economic stability, functioning social systems (taking into account human rights) and the planetary biosphere. This linear growth model builds on a cycle of extraction for production for distribution for consumption to then dispose waste and ignores the planetary boundaries (Raworth, 2017). She is convinced that to change something you should not fight the existing reality but need to build a new model that makes the existing model obsolete. Motivated by this intention Raworth developed the doughnut economy model. The outer layer of the doughnut represents the “ecological ceiling” that she describes with nine planetary boundaries, which climate scientists

have identified as crucial to not violating the future hospitality and liveability of our planet (Raworth, 2017). These nine boundaries are climate change, ocean acidification, chemical pollution, nitrogen & phosphorus loading, freshwater withdrawals, land conversion, biodiversity loss, air pollution and ozone layer depletion (Raworth, 2017). If we ignore the signs of planetary limits, we will trigger an environmental overshoot. Raworth (2017) supports the idea that economics that focus on human beings so they can flourish without violating the ecological ceiling. Therefore, the inner layer of the doughnut is the “social foundation” which has the aim to provide a safe and just space for humanity. The inner layer —the social foundation—constitutes food, health, education, income and work, peace and justice, political voice, social equity, gender equality, housing, networks, energy, water (Raworth, 2017). Both the inner and the outer layer of the Doughnut economy are illustrated in the graph below.

Figure 12 - Inner and outer layers of the Doughnut economy



Source: (Raworth, 2017, para. 1)

The two dark green circles in the graph show the foundation and the ceiling of the economic model by Raworth (2017). According to this model, the economic system fails when it goes both beyond the outer layer of the Doughnut (ecological ceiling) or falls short in the inner layer, hence when it does not provide for the well-being of humans (Raworth, 2017).

On her website, Raworth provides what the exact planetary boundary is according to latest scientific findings and at what point we are right now. If we use the example of the indicator for the planetary boundary of climate change, this is defined by the Atmospheric carbon dioxide concentration, parts per million (ppm), the planetary boundary is set at 350 ppm (Raworth, 2017) and we are currently at 411.76 ppm (US Department of Commerce, 2020).

2.2.4. Definition of the socio-economic dimension in sustainable development

Based on the discussion of this chapter, for the purpose of this work, the socio-economic dimension of sustainable development will be defined separately. It was found that the term socio-economic is ambiguous and when put into practice often not giving equal weight to each dimension. It cannot be denied that the social, economic and environmental dimension of sustainable development are strongly interlinked, but to understand the clear focus of a project it is necessary to separately define what is sustained or developed and for how long. Therefore, the social dimension as well as the economic dimension can be each sustained or developed and this over a certain period of 'time' that must be clearly stated.

The environmental, social and the economic dimension of sustainable development have effects on the sustainment or development of well-being of people and these sustaining or developing practices have contributed to decrease vulnerability/increase resilience to climate change. Vulnerability of people is a result of power structures that influence social and economic differences between people as well as climatic impact that we face on this planet due to strong emissions and bad environmental practices in the past and present (United Nations Task Team on Social Dimensions of Climate Change, 2011; Field and Barros, 2014; IPCC, 2014b, 2014c). Social and economic dimensions in general can be a negative and positive driver (United Nations Task Team on Social Dimensions of Climate Change, 2011; IPCC, 2014b). Negative in the way that they are a driver of climate change and bad environmental practices (for example coal-fired energy production, open burning), positive in the way that they have great potential for being a driver of change (United Nations Task Team on Social Dimensions of Climate Change, 2011; IPCC, 2014b). A positive driver is the change of practices that harm the environment or strongly emit greenhouse gases, but for this change vulnerable people (not solely vulnerable to climate change impacts but also vulnerable in their social and economic system) need to be empowered in the social and economic dimension and this requires sustainable development projects that take all three pillars of sustainable development equally into account (United Nations Task Team on Social Dimensions of Climate Change, 2011). open burning

The social dimension is defined by a combination of needs and basic rights. Individual needs are health, decent work, social protection, empowerment and capacity building, and mobile assets. Other, basic needs are access to water, food, energy, shelter, infrastructure, transport and security. Social needs are equity and social inclusion, human rights, participation in governance, cooperation and solidarity, and education.

The economic dimension is also defined by a combination of needs and basic rights. As needs can be identified fair income, access to markets, access to finance, access to land and access to property.

To ensure that economic and social dimensions of sustainable development projects have equal effect on men and women data need to be disaggregated by sex.

3. Findings — Identification of the project evaluation criteria by GCF and GEF

3.1. Methodology applied in analysis and findings

As IFI are providing funding for sustainable development projects their normative practices in the decision-making of which projects will receive funding need to be studied. This work focuses on the analysis of these requirements to discuss how project implementers can access funding for the socio-economic dimension through these institutions and give recommendations to the institutions which standards might improve their evaluation criteria to improve the consideration of ethical aspects of measurement and the definition of the socio-economic dimension of this work.

For the empirical part of this research, the document analysis method was used. The document analysis was conducted according to a process set out in Bowen's paper on Document Analysis as a Qualitative Research Methods, who used this methodology as part of a multimethod approach to study Social Funds (Bowen, 2009). The analysis included the following major steps: skimming (superficial examination), reading (thorough examination) and interpretation (Bowen, 2009). This iterative process combines content and thematic analysis methods (Bowen, 2009). Content analysis is an approach that organises information into categories related to the central question of research (Bowen, 2009). Thematic analysis identifies patterns within data and the emerging themes then become the categories for the analysis (Bowen, 2009). To ensure quality of analysis the researcher must try to be, objective, by presenting the research material fairly and sensitive, by responding to subtle cues to meaning.

O'Leary divides the steps in document analysis into five different stages: planning, gathering data, reviewing, interrogating, reflecting and analysing (O'Leary, 2004).

The planning phase consists of six steps: creating a list of documents for analysis, asking for ethical approval if the content is sensitive, ensuring accessibility of the data, developing appropriate skills for research, developing an appropriate sampling strategy, and knowing what data is being searched for (O'Leary, 2004, p. 179).

The gathering phase includes the gathering of the documents and organising them (O'Leary, 2004).

The review phase includes ensuring authenticity and credibility of the texts, as well as the exploration of the agenda of the document, and potential biases. (O'Leary, 2004).

The interrogation phase foresees the steps, the first step is the extraction of the background information on author, audience, purpose and style (O'Leary, 2004). The second step of the interrogation phase is to explore the content. This exploration can be done in different ways, for example by occurrence or themes or issues (O'Leary, 2004). The third step of the interrogation phase is to gather written evidence and unwritten evidence. Written evidence are the messages that the document directly transmits and unwritten evidence is everything else that can be understood from the document (O'Leary, 2004).

The reflection phase highlights the need to view the document analysis as an iterative and ongoing process and that the plan might need to be adjusted based on the reflections. Additionally, additional documents should be analysed if needed.

The analysis of the data depends on all these aspects.

The following questions will be asked for the analysis of each case to complement the iterative approach described above.

To be able to identify the evaluative criteria of the GEF and GCF references will be made to international standards for results-based monitoring and evaluation. This work mainly refers to the World Bank Handbook for Development Practitioners, the DAC Guidelines and Reference Series for Quality Standards for Development Evaluation, the OECD glossary of key terms in evaluation and results based management, the FAO approaches to capacity development in programming, and the impact evaluation methodological briefs of the United Nations International Children's Emergency Fund (UNICEF) (OECD, 2010b, 2010a; Davidson, 2014; Peersman, 2014; Rogers, 2014b, 2014a; Sabarwal and White, 2014; FAO, 2015).

3.2. Identification of the relevant documents

As described earlier, the funding provided by the Annex 2 countries (industrialised countries), with the special purpose to support the implementation of the commitments made in the Convention and the following Agreements, Protocols and Decisions that complement the Convention is mostly governed by the Convention's Financial Mechanism. This Financial Mechanism consists of the Green Climate Fund (GCF) and the Global Environment Facility (GEF) —the operating entities— and is supervised by the Standing Committee on Finance (SCF), that is also part of the Financial Mechanism (United Nations, 1992, Art.11, 1997, Art.11; UNFCCC, 2015, p. Art. 9; FAO, 2019c). The Financial Mechanism is complemented by the Adaptation Fund (AF), the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) which also finance climate change related activities (FAO, 2019c).

The social and economic dimensions of sustainable development projects are highly relevant to any project related to climate change and environment.

Document gathering process

The GEF has a documents tab on its website, where if one clicks on it a new menu appears. In this new menu, there is a 'template' button through which one reaches the page, where all project templates are gathered (*GEF-7 Templates*, no date). For the purpose of this work full-sized project templates from the stand-alone full-sized project (FSP) category were selected, as they include all evaluative criteria of the institution for projects (*GEF-7 Templates*, no date). Whereas medium-sized projects (MSP) would be reduced to only two-steps (*GEF-7 Templates*, no date). The list also provides a how to fill the PIF field-by-field explanation, to which will be referred to better understand the evaluative criteria if needed.

On the GCF website, there is a projects and programmes tab, where if one clicks on it, a new menu appears, in which a project preparation category can be found. The process and documents button is the first

button right under the projects preparation headline (GCF, 2020f). To find the templates, one must scroll down until the end of the page (GCF, 2020f).

Both the GCF and the GEF provided documents with further instructions on how to fill the application forms. The GCF calls this the Concept Note User's Guide, which is confusing, because the Concept Note is indicated as optional submission, by skimming it was identified as providing more detailed information and definitions for the concept note. Definitions of subjects that are also requested in the full funding Proposal documents. Nevertheless, neither in the Funding Proposal nor on the page listing the documents is indicated that this Concept Note User's Guide is also the instruction for the Funding Proposals. As this document was identified as additional information to understand, the evaluative criteria in the funding proposal in the analysis will be referred to it if needed.

Document style

The application forms and their Annexes give information on the evaluative criteria of the financial institutions to understand which requirements a project must fulfil to be approved for funding (GCF, 2015; GCF Board, 2015). These application forms and annexes can be considered as performance measurement framework (PMF) to evaluate the PMF used, by the entity applying for funding, to design the project. Hence, the application forms should contain clear evaluative criteria how the PMFs of the entities applying for funding will be assessed. Therefore, analysing and understanding these documents is a crucial step in understanding how funding for the social and economic dimension of sustainable development can be accessed.

The following documents will be analysed as they are the project application form itself or one of the Annexes containing the evaluative criteria. In the case of the GCF, this does not constitute all 21 Annexes, but only the Mandatory annexes for which templates are provided, and that are not formality documents or tables that function as a template, but do not give additional information on the evaluative criteria. All the listed documents can be found in the Annex of this work.

GCF	GEF
GCF Funding Proposal	GEF 7 Project Identification Form (PIF)
GCF Annex 5 Implementation timetable	GEF 7 List of Focal Area/ Non-Focal Area Elements Dropdown Menu for Table A
GCF Annex 8 Gender Analysis	GEF 7 Core Indicator Worksheet
	GEF 7 Taxonomy

3.3.Global Environment Facility

Background information on the Author

The GEF reports on an annually basis to the COP to ensure accountability to it. These annual reports cover all activities financed by GEF to implement the Convention (UNFCCC, no date b). These activities are either carried out by GEF implementing Agencies, by its Secretariat or by executing agencies implementing GEF-financed projects (UNFCCC, no date b). This report should also incorporate an analysis on how the GEF

has implemented programme priorities and eligibility criteria established by the COP (UNFCCC, no date b). This information is relevant, as it shows that the programme priorities and eligibility criteria for project funding are established by the COP (UNFCCC, no date b). In addition, in this report information on the implementation and approval of projects by the Council in the climate change focal area and a detailed financial reporting must be included (UNFCCC, no date b). Furthermore, the Council has to report on monitoring and evaluation (M&E) activities with regard to the projects in the climate change focal area (UNFCCC, no date b).

Objective of GEF

The objective of GEF is to finance large-scale and sustained impact on the global environment, by collaborating with countries and other entities to implement country priorities for the global environmental objectives. Therefore, GEF focusses on the adoption of medium and long-term programs to allow countries to better plan the use of resources while focussing on a number of manageable objectives (GEF, 2009).

Target audience

The audience of the project forms are therefore project implementers on country level.

Purpose

The purpose of the project forms is to assess if the project proposed by the project implementer fits the evaluative criteria of GEF.

Style

The style of the text is a form of questionnaire in the format of tables and questions.

Evaluative criteria

For a good overview of the evaluative criteria used by GEF in its Project Identification Form (PIF) a table with the criteria was made and can be found at the end of this section.

The project form is divided into three major parts — ‘PART I’, ‘PART II’ and ‘PARTIII’. Right below the name of the document “GEF-7 Project Identification Form (PIF)” are the first two qualitative criteria to indicate: project type and type of trust fund, see Annex GEF. The document “GEF7 How to fill the PIF? Field by field explanation” in the following referred to as ‘GEF7 How to’ gives additional information on what is expected to be filled into these fields. The project type can be either a full-sized project for which funding is above \$2 million or a medium-sized project for which funding is up to \$2 million, see Annex GEF. The fund type can be one of the four GEF trust funds — GEF Trust Fund, Least Developed Countries Fund, Special Climate Change Fund or Capacity-Building Initiative for Transparency— or Multi-trust Fund can be selected if the project draws from more than one of the GEF trust funds, see Annex GEF.

PART I has the purpose of identifying project information, while PART II has the purpose of identifying the project justification, see Annex GEF. PART III has been identified as formality and will therefore not be analysed further for the identification of the evaluative criteria, see Annex GEF.

PART I has a hierarchical structure, first broad ‘project information’ is asked for and then more detailed descriptions are requested in sub-categories A, B, C, D, E, F and G, see Annex GEF.

Out of the seven categories (A, B, C, D, E, F, G) of PART I, four categories are focused on financial issues, whereas A is focussed on the GEF objectives by asking for the Focal Areas, F is focussed on the projects contribution to the GEF core indicators and G focussed on keywords to enhance project search and reporting, see Annex GEF. Each of the general ‘project information’ part, A, D, E and G refer to the GEF focal areas, therefore these areas, are a dominant criterion of the GEF. The financial questions addressed are not measuring the share of resources going into the different activities contributing to the focal areas.

The broad ‘project information’ part of PART I is divided in information on the project title, country/-ies, GEF agency/-ies, project executing entity/-s, GEF focal area, GEF project ID, GEF agency project ID, submission date and the project duration in months. The ‘GEF7 How to’ does not give further information on all fields to fill, but it informs that the project title should be clear and descriptive, while highlighting the main goals of the project, see Annex GEF. Furthermore, the ‘GEF 7 How to’ states that the project executing entity/-ies can be “organization(s) that executes a GEF project, or portions of it, under the supervision of an Agency. It can include national or sub-national government agencies, civil society organizations (CSOs), private sector entities, or academic institutions, among others”, see Annex GEF. It specifies on the GEF Focal Areas of the broad ‘project information’ part that they are Biodiversity, Climate Change, International Waters, Land Degradation, and Chemicals and Waste, see Annex GEF.

Major objectives of GEF

Part I-A asks for indicative focal/non-focal area elements, this have to be listed in a table, see 9.1 below. This table has three main headers — programming directions, trust fund and (in \$). In \$ is then split into the categories of GEF Project Financing and Co-financing, see Annex GEF. It seems like this table is asking to fill in the focal area or areas in which the project has impacts, see Annex GEF. The column of programming directions seems to be the column where the focal area description needs to be filled in, although it is not clear, see Annex GEF. In the original PIF (not possible in the version attached in the annex) one can click on the two ‘(select)’ buttons and for each ‘(select)’ different list of acronyms appear (*GEF-7 Templates*, no date). The first ‘(select)’ button lists the following acronyms: BD-1-1, BD-1-2a, BD-1-2b, BD-1-3, BD-1-4, BD-1-5, BD-2-6, BD-2-7, BD-3-8, BD-3-9, CCM-1-1, CCM-1-2, CCM-1-3, CCM-1-4, CCM-2-5, CCM-2-6, CCM-2-7, CCM-3-8, CCM-3-9. The second ‘(select)’ button lists the following acronyms: LD-1-1, LD-1-2, LD-1-3, LD-1-4, LD-2-5, IW-1-1, IW-1-2, IW-1-3, IW-2-4, IW-3-5, IW-3-6, IW-3-7, CW-1-1, CW-1-2, CW-2-3, CCA-1, CCA-2, CCA-3, SGP (*GEF-7 Templates*, no date). The ‘GEF 7 Focal Area/Non-Focal Area Elements Dropdown Menu for Table A’— in the following referred to as ‘GEF7 Focal Area List’— seems to serve as supporting document to this selection, although this is not clearly indicated in the form, but it is written the ‘GEF7 How to’, see Annex GEF.

In the ‘GEF7 Focal Area List’ each acronym is complemented with a focal area description, see Annex GEF. The ‘GEF7 Focal Area List’ and also other Focal Areas that cannot be selected in the dropdown menu, these are BD-EA, CCM-EA, LD-EA and CW-EA, Annex GEF. For the IW category international waters, no EA option is listed, see Annex GEF. If the EA versions are included in the number of Focal Area elements,

then the Focal Area of Biodiversity has ten elements, the Focal Area of Climate Change has thirteen elements — which can be divided in Mitigation (ten elements) and Adaptation (three elements) — the Focal Area of Land Degradation has six elements, the Focal Area of International Waters has seven elements and the Focal Area of Chemical Waste has four elements, see Annex GEF. It is not clear which Focal Area the element SGP belongs to, see Annex GEF. From this broad overview it can be understood that the highest emphases is given to Climate Change Mitigation (10 elements) and Biodiversity (10 elements), while the lowest emphasis is given to Climate Change Adaptation (three elements). In the same document, Annex GEF are also listed three impact programmes that are mapped to the Focal Area Elements in a table at the end. Neither From the ‘GEF7 Focal Area List’ nor from the ‘GEF 7 How to’ can be understood for which purpose these impact programmes are listed and what their purpose is or why they are mapped to the focal area elements, see Annex GEF. These impact programs do not need to be indicated in PART I of the GEF7 PIF, see 9.1 below Annex GEF.

To understand on which aspects the GEF puts most emphasis on in its Focal Areas, a word count was conducted and visualised in form of a word cloud. Numbers and common words were deleted from the sheet which served as input and the graph only portrays the number of words actually used in the ‘GEF7 Focal Area List’, also the impact programs information and the table mapping impact programs to focal areas was not included in the graph. The acronyms in column ‘FA Prefix’ representing the Focal Areas were removed, as the general distribution of numbers of elements per area was already understood by counting them. The word count can be found in Annex GEF — Word Count, see Annex GEF below. From Figure 13, which visualises the most used words, it can be understood that finance of the GEF has the main objective to sustain, manage, mainstream and enable, and biodiversity is a strong focus. Figure 13 demonstrates that sectors are important, unfortunately, the agricultural sector is not given emphasis to, see Annex GEF. Nevertheless, agriculture is once mentioned in the context of chemicals. Most emphasis is given to the Energy sector, but Landscapes, Seascapes, Innovation and Mitigation are only counted one time less, see Annex GEF.

Figure 14 - GEF focal area programming options

Table 1. Architecture of the GEF-7 Programming

Focal Areas	Biodiversity	Climate Change	Land Degradation	International Waters	Chemicals and Waste
	Programming Areas to be addressed through Focal Areas Investments				
	<ul style="list-style-type: none"> Biodiversity mainstreaming Global Wildlife Program Natural capital Agrobiodiversity Inclusive conservation Invasive species Protected areas Biosafety ABS Enabling Activities 	<ul style="list-style-type: none"> Innovation and technology transfer for sustainable energy breakthroughs NDC preparation and implementation Capacity Building Initiative for Transparency Enabling Activities 	<ul style="list-style-type: none"> Creating Enabling Environments for LDN LDN Target setting Enabling Activities 	<ul style="list-style-type: none"> Strengthening Blue Economy Opportunities Improving Management in ABNJs Enhancing Water Security in Freshwater Ecosystems 	<ul style="list-style-type: none"> Industrial Chemicals Agricultural Chemicals LDC/SIDS support Enabling Activities
	Objectives to be addressed through Impact Programs that promote convention priorities				
Food Systems, Land Use, and Restoration Impact Program	<ul style="list-style-type: none"> Manage biodiversity in production landscapes Harnessing biodiversity for sustainable agriculture Secure high conservation value forest (HCVF) areas in production landscape 	<ul style="list-style-type: none"> Land-based and value chain GHG mitigation (<i>sequestration and avoidance</i>) 	<ul style="list-style-type: none"> Sustainable land management Diversification of crop and livestock systems Restoration of degraded production landscapes 	<ul style="list-style-type: none"> Integrated Land and water management Prevention of nutrient pollution⁵ 	<ul style="list-style-type: none"> Replacement of POPs and relevant HHP's used in the global food supply chain Disposal of obsolete agricultural chemicals that are POPs.

⁵ Please note that even though there is a clear overlay of priorities and opportunities within the cross-section between Food systems, land use, and restoration Impact Program and the International Waters Focal Area, it is not possible at this stage to identify and develop specific targets for these investments due to the many unknown parameters.

Focal Areas	Biodiversity	Climate Change	Land Degradation	International Waters	Chemicals and Waste
Sustainable Cities Impact Program	<ul style="list-style-type: none"> Integrating biodiversity and ecosystem values in urban planning 	<ul style="list-style-type: none"> Urban-related GHG emissions avoidance 	<ul style="list-style-type: none"> Sustainable management of production systems in urban and peri-urban areas 	<ul style="list-style-type: none"> Shared water ecosystems (fresh or marine) under new or improved cooperative management 	<ul style="list-style-type: none"> Reduction of POPs, ODS, and Mercury in built infrastructure, industry and products and materials used in cities.
Sustainable Forest Management Impact Program	<ul style="list-style-type: none"> Protection of HCV forests Manage biodiversity in forest landscapes 	<ul style="list-style-type: none"> Protection of carbon-rich stocks Forest related GHG emissions avoidance 	<ul style="list-style-type: none"> Sustainable management of dryland landscapes 	<ul style="list-style-type: none"> Shared water ecosystems (fresh or marine) under new or improved cooperative management 	<ul style="list-style-type: none"> Eliminate mercury in forests where ASGM that uses mercury occurs

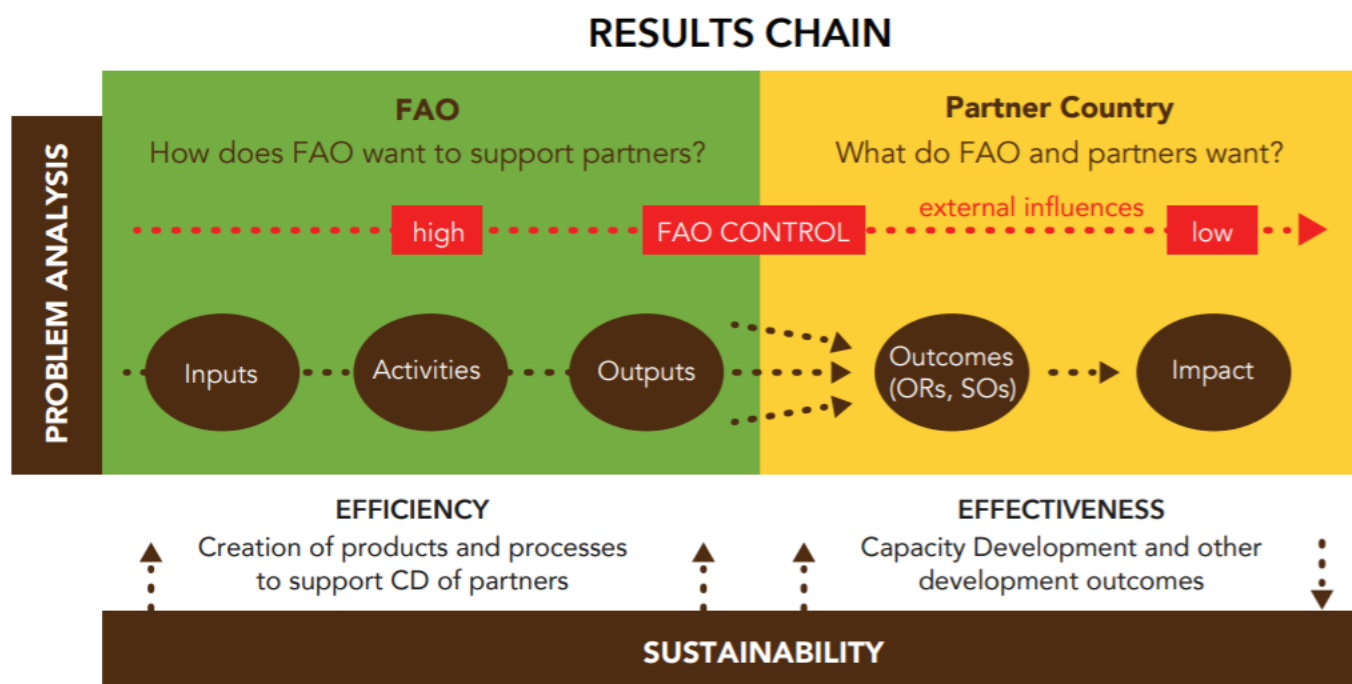
Source: GEF-7 Programming architecture (GEF, 2018b, pp. 25–26).

The Council document also gives additional information on the meaning of the Focal areas and how the description in the ‘GEF7 Focal Area List’ must be read (GEF, 2018b). It explains, that each focal area has major objectives and sub-objectives (GEF, 2018b). That Focal Areas belong to the same major objective is indicated by the same start of the sentence and by the first number in the FA Prefix column of the ‘GEF7 Focal Area List’ (GEF, 2018b). According to this logic there seems to be an error in the numbering of LD-1-4 of the ‘GEF7 Focal Area List’ as this must be LD-2-4 and the following listing then must be LD-2-5, see Annex GEF. To understand better the main objectives of GEF in the different Focal Areas of Biodiversity, Climate Change, International Waters, Land Degradation, and Chemicals and Waste, the descriptions were split in two

different columns according to main objectives and sub-objectives in Figure 17, which demonstrates the GEF Evaluative criteria.

Part I-B has the headline ‘project description summary’, also this part is created as a table. The first qualitative information to fill in which seems to be of highest value, as it is the header of the other columns is the Project objective, see Annex GEF. The other eight columns ask for the indication of the project components, the component type, project outcomes, project outputs, trust fund information, GEF project financing and co-financing shares in \$, see Annex GEF. Additionally, at the end of the table it asks for the subtotal, the Project Management Costs (PMC) and the Total Project Costs. Under the table is added that for multi-trust fund projects it must be indicated how the PMC is split among the different funds. The select button in the original document under component type gives the two options of ‘Investment’ and ‘Technical Assistance’. The ‘GEF7 How to’ document does not give much more information on the table, only that the table can be expanded if more than one focal/non-focal area is selected, see Annex GEF. A word search for ‘project component’ in the Council document did not show any results (GEF, 2018b). This makes it unclear which information expected to be filled in the column ‘project component’. Furthermore, it is not clear which information is expected to be filled in the fields under project outcome and project output of PART I-B of the PIF, see Annex GEF. No information is given in the ‘GEF7 How to’ document how one arrives at project outputs or outcomes. These are well known words from project management frameworks, although normally one first arrives as an output and then receives an outcome as part of results based monitoring and evaluation, see the example by FAO in Figure 15 (Rogers, 2014b; FAO, 2015).

Figure 15 - Understanding sustainable results chains



Source: Overview of a results chain embedding Capacity Development (FAO, 2015, p. 22).

The different order of the columns makes it unclear if the form really refers to these. In the Council document that the ‘GEF7 How to’ refers to under PART I-A an example for the use of the Theory of Change is given, where project outputs are formulated, thus increasing the possibility that also in the project form the

output refers to international standards of project management (GEF, 2018b, p. 96). The Annex of the same document gives examples for potential project outcomes of each of the objectives (focal areas) (GEF, 2018b, p. 156).

Part I-C of the PIF has the headline ‘indicative sources of co-financing for the project by name and by type, if available’, see Annex GEF. In this part, information needs to be filled into a table. The table has five columns sources of co-financing, name of co-financer, type of co-financing, investment mobilised and amount of \$, see Annex GEF. The select button in the original document, under in the column ‘sources of co-financing’ gives the following options: GEF Agency, Donor Agency, Recipient Country Government, Private Sector, Civil Society Organization, Beneficiaries, Bilateral Aid Agency (ies), Foundation, Local Government, Multilateral Agency (ies), National government, NGO, Private Sector, and Other. The select button in the original document; under in the column ‘type of co-financing’ provides the options: grant, soft loan, hard loan, guarantee, in-kind, and unknown at this stage. The select button under ‘investment mobilised’ lists the option investment mobilised and the option recurrent expenditures. The text under the table asks for information on how the ‘investment mobilised’ was identified and the ‘GEF7 How to’ document explains that investment mobilised exclude recurrent expenditures, see Annex GEF. The ‘GEF7 How to’ in addition clarifies that co-financing sources are not allowed to be sources also co-financing another GEF-financed project or program, see Annex GEF.

Part I-D of the PIF has the headline ‘indicative trust fund resources requested by agency(ies), country(ies), focal areas and the programming of funds’ the table under this section has eight columns of which three are indications of sums in \$, see Annex GEF. Part I-D has the following eight columns: GEF agency, trust fund, country/regional/global, focal area, programming funds, GEF project financing (a), agency fee (b) and total (c) = a+b, see Annex GEF. The select button in column ‘GEF agency’ gives the following options: ADB AfDB, CI, DBSA, EBRD, FAO, FUNBIO, IADB, IFAD, IUCN, UNDP, UNEP, UNIDO, WB, WWF-US, FECO, CAF and BOAD. The select button in column ‘trust fund’ lists these options: GEFTF, LDCF, SCCF-A and SCCF-B. The select button in the focal area column provides the options Biodiversity, Climate Change, Land Degradation, International Waters, Chemicals and Waste and Multifocal Area. The select as applicable button under ‘programming of funds’ provides the subsequent possibilities: BD STAR Allocation, CC STAR Allocation, LD STAR Allocation, BD Global Regional Set-Aside, CC Global Regional Set-Aside, CBIT Set-Aside, LD Global Regional Set-Aside, POPS, Mercury, ODS, SAICM, SGP and NGI. The ‘GEF7 How to’ gives additional information on this table, by referring to two different documents, for details on the agency fee, ‘the updating system for transparent allocation of resources (STAR)’ and to determine the country allocations for the biodiversity, climate change and land degradation focal areas (GEF Secretariat, 2018). The link to the guidelines for the project and program cycle policy to give additional information on the agency fee does not work, as an access denied page shows up. The acronyms listed in the select buttons of the different columns, are not explained in the ‘GEF7 How to’, see Annex GEF.

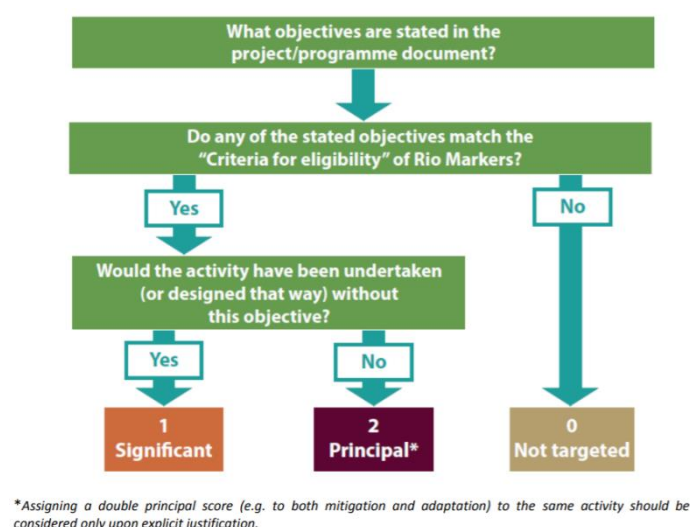
PART I-E of the PIF has the headline ‘project preparation grant (PPG)’, the section asks whether a grant for project preparation is needed or not and how much funding is provided for project preparation by other entities and for which focal areas.

PART I-F of the PIF ‘Project’s target contributions to GEF7 core indicators’ focussed on the indication of the sub-indicators used for the proposed project, while using the methodologies that are provided for in the Core indicators worksheet, see Annex GEF. The progress against these ‘targets’ needs to be reported at endorsement, midterm evaluation and terminal evaluation, see Annex GEF. Furthermore, it is specified, that projects focusing on climate change adaptation do not need to fill this table, if they are financed only through LDCF and SCCF, see Annex GEF. Under the table additional space is left for the applicant to provide additional explanation on targets, other methodologies used and other focal area specifications and justification in the case that the core indicators table is not filled. The table lists eleven indicators which focus on terrestrial protected areas, marine protected areas, land restored, landscapes under improved practices, marine habitat under improved practices, greenhouse gas emissions mitigated, number of shared water ecosystems, marine fisheries moved to sustainable levels, reduction and elimination of chemicals of global concern, POPs to air and direct beneficiaries disaggregated by gender as co-benefit of GEF investment. The ‘GEF7 How to’ explains that to be filled in are the results anticipated at the PIF stage. It additionally gives information on the information expected to be given for each indicator that is targeted by the project. The Indicators and indicator descriptions are listed in Figure 17 for further discussion in the next chapter. From a first analysis it can be understood that indicators 1-5 focus on biodiversity, indicator 6 on climate change mitigation, indicator 7-8 on international waters and indicators 9-10 on chemicals and waste, while indicator 11 attempts to measure the direct beneficiaries disaggregated by gender as co-benefit of GEF investments and therefore is an indicator for all focal-areas, see Annex GEF. This shows that the number of indicators per focal area does not correspond to overall weight given to this focal area five indicators biodiversity, one indicator climate change mitigation, two indicators international waters, two indicators chemical waste and one indicator identifying direct beneficiaries. The definition for direct beneficiaries given in the ‘GEF7 How to’ states that direct beneficiaries are all individuals receiving targeted support from a given project, see Annex GEF. Targeted support is defined by the same document as intentional and direct assistance of a project through individuals or groups that are aware that they receive support or/and use the specific resources, see Annex GEF. It is unclear why this selection of indicators was chosen for reporting and no other indicators; or why it is not left up to the project implementer, which indicators would best measure the outcomes contributing to the final impact in form of the focal areas.

PART I-F of the PIF ‘project taxonomy’, according to the description under the heading has the major objective to identify keywords/ topics/themes to describe the project. The ‘GEF7 How to’ refers to the GEF 2020 strategy for further information on the five main approaches used in GEF projects to achieve results, see Annex GEF (GEF Secretariat, 2015). Moreover, it is indicated that it is mandatory for all GEF-financed projects to use the Rio Markers. It therefore must be selected whether the project does not (0), targets as a

significant objective (1) or targets as a principal objective (2) climate change mitigation and adaptation. The OECD DAC Handbook is referred to for further information on the Rio Markers (OECD DAC, 2016). The GEF7 Taxonomy on the first glance is hard to understand, after a more detailed inspection of the table under Annex GEF it can be understood that the broadest category is indicated in column one and the more levels of information is provided the more detailed the information is. Nevertheless, it has been clearly indicated in the ‘GEF7 How to’ the taxonomy annex of the PIF and the PIF itself that the indications in the taxonomy table, except of the Rio Markers are not part of the evaluative criteria. The Rio Markers provide criteria to decide whether the focus of a project is on climate change mitigation or climate change adaptation and if the activity has a principal, significant or no focus on the climate change related objectives (OECD DAC, 2016). These criteria of the Rio Markers were listed for a better understanding in Figure 17 that gives an overview of GEFs evaluative criteria. The Handbook explaining the Rio Markers for climate provides a visualisation of a decision tree to help the project implementer decide whether the activities planned have a climate focus, see Figure 16.

Figure 16 - Decision tree for activity scoring against climate marker



Source: Decision tree for scoring an activity against a Rio marker (OECD DAC, 2016, p. 6).

The fact that the definition of climate change adaptation is much longer and detailed than the definition of climate change mitigation provided for in the Rio Marker Handbook indicates that the measurement of climate change adaptation objectives is much more complex than the measurement of climate change mitigation objectives, see Figure 17 Rio Markers for Climate (OECD DAC, 2016).

According to the Rio Marker criteria, an activity can be classified, as climate change adaptation is if it aims to reduce the vulnerability of human or natural systems to the current and expected impacts of climate change (OECD DAC, 2016, p.3). This includes climate variability, the increase or maintenance of resilience to absorb or adapt to climate change stresses or shocks and variability, and/or helps to reduce the exposure to these (OECD DAC, 2016, p.3). Two major evaluative criteria for this definition are provided to assess: if the climate change adaptation objective is indicated in the documentation of the activity or if the activity contains specific measures to target climate change adaptation as defined by the Handbook (OECD DAC, 2016, p.3).

An activity can be understood as climate change mitigation if it contributes to the objective to stabilise GHG concentrations in the atmosphere to prevent anthropogenic interference with the climate system, through

the promotion of efforts that reduce or limit GHG emissions or enhance GHG sequestration (OECD DAC, 2016, p.4). For climate change mitigation the handbook provides four major evaluative criteria. The project is activity is considered as contributing to the climate change mitigation objective if the activity:

- limits anthropogenic emissions of GHG, including gases regulated by the Montreal Protocol;
- protects and/or enhances GHG sinks and reservoirs;
- integrated climate change concerns in the countries' development objectives by way of institution building, capacity development, strengthening the regulatory and policy framework, research;
- developing efforts on country level to meet obligations under the Convention (OECD DAC, 2016, p.4).

Part II-1 of the PIF is divided in II-1-A and II-1-B. Part II-1-B asks the project implementer to specify on a map with coordinates, where the project interventions will take place. Part II-1-A provides a list of questions assessing the basis research to design the project. These questions ask to identify the following aspects: problems identified and root causes and barriers that need to be addressed, the baseline scenario, a proposed alternative scenario, alignment with the GEF focal area and impact program strategies, incremental/additional cost reasoning and contributions from baseline and impact program strategies, global environmental and adaptation benefits, innovation and sustainability and upscaling potential.

It is not indicated neither in the PIF nor in the 'GEF7 How to' which type of baseline scenario is requested, whether it should be economic, social, environmental or a combination of these. There is no additional explanation given in the 'GEF7 How to' on the first three points, but a reference to 'Operational Guidelines for the Application of the Incremental Cost Principle' that seem to be a Council decision document (GEF Council, 2007; GEF, 2018a). On innovation, sustainability and potential for scaling up, a set of questions is provided in the 'GEF7 How to' to be addressed:

- "Is the project innovative, for example in its: design; method of financing; technology; business model; policy; monitoring and evaluation; or learning?
- Is there a clearly articulated vision of how the innovation will be scaled-up - over time, across geographies or among institutional actors?
- Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?" (GEF, 2018a).

PART II-2 of the PIF requests information the stakeholders of the project. This section asks whether indigenous people and local communities, civil society organizations or private sector entities were involved in the project identification phase. If these stakeholders were not involved in the project identification phase, it asks for an explanation why. In the case of involvement, it asks for specifications on how these stakeholders were involved. The 'GEF7 How to' refers to a link on the stakeholder policy that is not existent anymore. Further reference is made by the 'GEF7 How to' to the Principles and Guidelines document on indigenous people (GEF, 2012b). These guidelines explain that there are several GEF policies that protect or relate to

indigenous people and these involve policies and minimum standards that are not anymore included in the PIF or ‘GEF7 How to’(GEF, 2012b, p. 9) . It also highlights the GEF Policy on Public Involvement, which is linked in the ‘GEF7 How to’ as mandating the involvement of indigenous people throughout the identification, development, implementation, monitoring and evaluation of projects financed by GEF, which involve or have an impact on indigenous people (GEF, 2012b, para. 18). It further explains that public involvement including indigenous or local communities involves the dissemination of information, consultation and stakeholder participation throughout the project cycle (GEF, 2012b, para. 18). The public involvement policy document states that the responsibility to assure public involvement rests within the country, normally the government or the executing agency and is supported by the GEF partner agencies (GEF, 2012a, para. 6). The same document states that effective public involvement can enhance the social, environmental and financial sustainability of projects (GEF, 2012a, para. 4). The reference on civil society organizations in the ‘GEF7 How to’ does not lead to any specific document or landing page where clear content on NGO relations can be identified.

PART II-3 of the PIF wants the reader to tell whether gender gender-responsive measures to address gender gap or promote gender equality and women empowerment were included and indicated three possible results areas. These results areas are closing gender gaps in access to and control over natural resources; improving women’s participation and decision-making; and/or generating socio-economic benefits or services for women, see PIF in see Annex GEF. Additionally, it asks whether gender sensitive indicators were included in the results or logical framework. The ‘GEF7 How to’ refers to two different sources for additional information on gender, the Gender Equality Policy and the Guidelines on Gender Equality (GEF, 2017a, 2017b). Both sources provide additional information on gender policy requirements, guidelines and definitions and refer to further documents for more information. The most important information needed from this document on gender is that there are mandatory requirements for mainstreaming gender throughout the GEF project cycle (GEF, 2017a, 2017b). Nevertheless, the gender guidelines document refers to an older version of the PIF and not all the requirements explained in that version are also in the newer version of the PIF (GEF, 2017a). The policy document states that “mandatory requirements in three areas: (A) Project and program cycle; (B) Monitoring, learning and capacity development; (C) Agency policies, procedures and capabilities; and (D) Compliance” have to be followed (GEF, 2017b, p. 7). Based on this it can be understood that all the questions asked in the PIF on gender must have been assessed at the design stage of the project (GEF, 2017b).

PART II-4 of the PIF assesses the engagement with the private sector. In the ‘GEF7 How to’ is indicated that information on the role of the private sector as part of the theory of change should be indicated. This is the first and only mention of the theory of change in the ‘GEF7 How to’. The person filling the PIF is further asked to describe the way to intervene with the private sector that was chosen to encourage investment. As examples are given:1) transforming policy and regulatory environments to encourage sustainable business investment, 2) deploying innovative financial instruments, 3) multi stakeholder alliances, 4) strengthening institutional capacity and 5) demonstrating innovative approaches, see Annex GEF. In the case of using non-

grant funding the applied financial instruments need to be explained and information on how the project attracts additional private sector investments must be given, see ‘GEF7 How to’ in Annex GEF.

In PART II-5 of the PIF climate, financial, social, environmental risks must be identified and possible measures to address these risks are expected to be proposed. The ‘GEF7 How to’ gives no additional information on this section.

PART II-6 of the PIF asks the applicant to give information on how the monitoring and evaluation is coordinated at project level and with other projects (GEF financed and non-financed). The ‘GEF7 How to’ gives no additional information on this section.

PART II-7 of the PIF asks whether consistency with national priorities is ensured, how and under which conventions the project plans or reports assessments. A list of example conventions is provided.

PART II-8 of the PIF asks the applicant to outline the knowledge management approach and explain how it will contribute to the overall project impact or plans to learn from relevant projects, initiatives or evaluations.

PART III of the PIF will not be addressed in the analysis as it includes only formalities on endorsement and approval by GEF Operational Focal Point (OFP) and GEF Agencies.

All the evaluative criteria found in the project identification form and other GEF templates are listed in Figure 17.

Figure 17 - GEF Evaluative Criteria

GEF Evaluative Criteria			
(all information listed in this table is either paraphrased or a direct quote of the documents in the Annex GEF, or other sources if explicitly cited)			
Criteria	Broad division (given in either the How to or the form directly)	details	
Project type	full-sized project	above \$2 million	
	medium-sized project	below \$2 million	
Type of trust fund	GEF Trust Fund	climate change mitigation	
	Least Developed Countries Fund	climate change adaptation	
	Special Climate Change Fund	climate change adaptation	
	Capacity-Building Initiative for Transparency		
	Multi-trust Fund	for projects that draw from more than one of the GEF trust funds	
Project title	should highlight the main goals of the project		
Country/-ies			
GEF Agency/-ies			
Project Executing Entity/-ies			
GEF Focal Areas/ major objectives	Biodiversity (10)	1 Mainstream biodiversity across sectors as well as landscapes and seascapes through:	1 biodiversity mainstreaming in priority sectors
			2 global wildlife program: 2a to prevent extinction of known threatened species 2b for sustainable development
			3 Natural Capital Assessment and Accounting
			4 Sustainable Use of Plant and Animal Genetic Resources
			5 Inclusive conservation
		2 Address direct drivers to protect habitats and species:	6 through the Prevention, Control and Management of Invasive Alien Species
			7 and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate
		3 Further development of	8 the Implementation of the Cartagena Protocol on Biosafety

		biodiversity policy and institutional frameworks through:	9 the Implementation of the Nagoya Protocol on Access and benefit sharing
			EA Enabling activities (national biodiversity strategy, national reports for CBD, CP, and NP)
	Climate Change Mitigation (10)	1 Promote innovation and technology transfer for sustainable energy breakthroughs for:	1 decentralised power with energy usage
			2 electric drive technologies and electric mobility
			3 accelerating energy efficiency adoption
			4 cleantech innovation
		2 Demonstrate mitigation options with systemic impacts for sustainable:	5 sustainable cities impact program
			6 food systems, land use and restoration impact program
			7 sustainable forest management impact program
		3 Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through:	8 capacity building initiative for transparency
			9 NDC preparation
			EA enabling activities
	Land Degradation (6)	1 Maintain or improve:	1 flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM)
			2 flow of ecosystem services, including sustaining livelihoods of forest-dependent people through Sustainable Forest Management (SFM)
			3 flows of ecosystem services, including sustaining livelihoods of forest-dependent people through Forest Landscape Restoration (FLR)
		2.4 Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape	
		3.5 Create enabling environments to support scaling up and mainstreaming of SLM and LDN	
		EA UNCCD enabling activities	
	International Waters (7)	1 Strengthen blue economy opportunities:	1 through sustainable healthy coastal and marine ecosystems
			2 through catalysing sustainable fisheries management

			3 by addressing pollution reduction in marine environments
		2.4 Improve management in the areas beyond national jurisdiction (ABNJ) through improved management and sustainable use of the open oceans	
		3 Enhance water security in freshwater ecosystems through:	5 advance information exchange and early warning
			6 enhanced regional and national cooperation on shared freshwater surface and groundwater basins
			7 investments in water, food, energy and environment security
	Chemicals and Waste (4)	1 Strengthen the sound management of	1 of industrial chemicals and their waste through better control, and reduction and/or elimination
			2 of agricultural chemicals and their wastes, through better control, and reduction and/or elimination
		2.3 Strengthen the enabling environments in LDCs and SIDs to manage harmful chemicals and waste	
		EA Strengthen the capacity of countries to report to the Minamata and Stockholm Conventions	
	Climate Change Adaptation (3)	1 Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation	
		2 Mainstream climate change adaptation and resilience for systemic impact	
		3 Foster enabling conditions for effective and integrated climate change adaptation	
Project management framework steps	PROJECT BASIS RESEARCH 1. Problem description, identification of root causes and barriers needed to address 2. Baseline scenario 3. Proposed alternative scenario 4. Alignment with GEF focal area and impact program strategies 5. Incremental/additional cost reasoning and contributions from baseline and impact program strategies 6. Global environmental or adaptation benefits 7. Innovation, sustainability and potential for scaling up B Map of the area where the interventions will happen including the geo-coordinates Stakeholders that participated in project identification phase: <ul style="list-style-type: none">Indigenous people and local communitiesCivil society organizationsPrivate sector entities - If they have not been included, justification is asked. Additional information on how they are included is required Gender equality and women's empowerment criteria: Are gender-responsive measures to address gender gap or promote gender equality and women empowerment included? Yes, no, tbd.		

	<p>If possible, include result areas:</p> <ol style="list-style-type: none"> 1. closing gender gaps in access to and control over natural resources; 2. improving women's participation and decision-making; and/or 3. generating socio-economic benefits or services for women. <p>Does the results framework or logical framework include gender sensitive indicators? Yes, no, tbd</p>	
	<p>Private sector engagement: yes, no</p> <p>Why?</p>	
	<p>Climate, financial, social, environmental risks identified</p> <p>-if possible, propose measures to address these risks</p>	
	<p>Coordination of M&E</p> <p>How is the monitoring and evaluation coordinated:</p> <ul style="list-style-type: none"> - At project level - With other projects (GEF financed and non-financed) 	
	<p>Consistency with national priorities? Yes/no</p> <p>Does it <i>plan or report assessments</i> under the following conventions and <i>how</i>: National Bio Strategy Action Plan (NBSAP), CBD National Report, Cartagena Protocol National Report, Nagoya Protocol National Report, UNFCCC National Communications (NC), UNFCCC Biennial Update Report (BUR), UNFCCC National Determined Contribution, UNFCCC Technology Needs Assessment, UNCCD Reporting, ASGM National Action Plan (ASGM NAP), Minamata Initial Assessment (MIA), Stockholm National Implementation Plan (NIP), Stockholm National Implementation Plan Update, National Adaptation Programme of Action Update , Others</p>	
	<p>Outline the knowledge management approach:</p> <ul style="list-style-type: none"> - Contribution to overall project impact <p>Plan to learn from relevant projects, initiatives or evaluations</p>	
	<p>Output</p> <p>Outcome</p>	
Co-financing	Co-financing source	Cannot be prior-identified or reported as co-financing towards another GEF-financed project or program
Indicative trust fund resources requested		
Project preparation Grant (PPG)	<p>Yes, no ?</p> <p>If yes, how much?</p>	

Target contribution to 11 GEF7 core indicators	1 Terrestrial protected areas created or under improved management for conservation and sustainable use (Hectares)	This indicator is an aggregate of the two Sub-indicators: <ul style="list-style-type: none"> • Terrestrial protected areas newly created • Terrestrial protected areas under improved management effectiveness
	2 Marine protected areas created or under improved management for conservation and sustainable use (Hectares)	This indicator is an aggregate of the two Sub-indicators: <ul style="list-style-type: none"> • Marine protected areas newly created • Marine protected areas under improved management effectiveness
	3 Area of land restored (Hectares)	This indicator is an aggregate of the four Sub-indicators: <ul style="list-style-type: none"> • Area of degraded agricultural land restored • Area of forest and forest land restored • Area of natural grass and shrublands restored • Area of wetlands (including estuaries, mangroves) restored <p>This indicator will be reported as an aggregate of the four Sub-indicators, for BD projects, in addition to explaining the project's consistency with the biodiversity focal area, also describe which Aichi Target(s) the project will directly contribute to achieving.</p>
	4 Area of landscapes under improved practices (excluding protected areas) (Hectares)	This indicator will be reported as aggregate total of four Sub-indicators , the reported hectares shall not overlap: <ul style="list-style-type: none"> • Area of landscapes under improved management to benefit biodiversity • Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations • Area of landscapes under sustainable land management in production systems • Area of High Conservation Value Forest (HCVF) loss avoided
	5 Area of marine habitat under improved practices (excluding protected areas) (Hectares)	Ideally, projects should provide GIS files showing the extent of the ocean under this improved management. Note that two additional Sub-indicators are available to provide any relevant context :

		<ul style="list-style-type: none"> • Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations • Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial
	6 Greenhouse Gas Emissions Mitigated (metric tons of CO ₂ e)	<p>it is reported as the aggregate of the first two Sub-indicators:</p> <ul style="list-style-type: none"> • Carbon sequestered or emissions avoided in the AFOLU sector • Emissions avoided <p>Two more sub-indicators are listed, but their results cannot be part of the aggregate indicator on mitigation, therefore they cannot be indicated in the table in the PIF, but only in the worksheet:</p> <ul style="list-style-type: none"> • Energy saved • Increase in installed renewable energy capacity per technology
	7 Number of shared water ecosystems (fresh or marine) under new or improved cooperative management	<p>Here it is not indicated how the indicator is calculated, as the sub-indicators ask for levels (1-4) and the main indicator asks for a number:</p> <ul style="list-style-type: none"> • Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation • Level of Regional Legal Agreements and Regional Management Institutions to support its implementation • Level of National/Local reforms and active participation of Inter-Ministerial Committees • Level of engagement in IWLEARN through participation and delivery of key products
	8 Globally over-exploited marine fisheries moved to more sustainable levels (metric tons)	<p>provide the name of the fishery targeted, the source for the estimate of the tonnage, and also the justification for considering the fishery to be overexploited initially</p>
	9 Reduction , disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)	<p>This indicator will be reported as aggregate total (in metric tons) of three Sub-indicators:</p> <ul style="list-style-type: none"> • Solid and liquid Persistent Organic Pollutants (POPs) and POPs containing materials and products removed or disposed

			<ul style="list-style-type: none"> • Solid and liquid Persistent Organic Pollutants (POPs) and POPs containing materials and products removed or disposed <p>Two additional Sub-indicators are also available to provide additional context:</p> <ul style="list-style-type: none"> • Number of countries with legislation and policy implemented to control chemicals and waste • Number of low chemical / non-chemical systems implemented particularly in food production, manufacturing and cities
	10 Reduction, avoidance of emissions of POPs to air from point and nonpoint sources (grams of toxic equivalent gTEQ)		<p>Two additional Sub-Indicators are available to provide any relevant context:</p> <ul style="list-style-type: none"> • Number of countries with legislation and policy implemented to control emissions of Pops to air • Number of emission control technologies/practices implemented
	11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment		<p>Direct Beneficiaries are all individuals who are receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources</p>
Rio Markers for Climate	<p>An activity should be classified as adaptation-related (score Principal or Significant) if:</p> <p>(OECD DAC, 2016, p. 3)</p>	<p>It intends to reduce the vulnerability of human or natural systems to the current and expected impacts of climate change, including climate variability, by maintaining or increasing resilience, through increased ability to adapt to, or absorb, climate change stresses, shocks and variability and/or by helping reduce exposure to them. This encompasses a range of activities from information and knowledge generation, to capacity development, planning and the implementation of climate change adaptation actions.</p> <p>(OECD DAC, 2016, p. 3)</p>	<p>CRITERIA FOR ELIGIBILITY An activity is eligible for the climate change adaptation marker if:</p> <ol style="list-style-type: none"> a) the climate change adaptation objective is explicitly indicated in the activity documentation; and b) the activity contains specific measures targeting the definition above. <p>Carrying out an assessment of vulnerability to climate variability and change, either separately or as an integral part of agencies' standard procedures, facilitates this approach. To guide scoring, a three-step approach is recommended as a "best practice", to justify for a principal score:</p> <ul style="list-style-type: none"> • Setting out the context of risks, vulnerabilities and impacts related to climate variability and climate change: for a project to be considered as one that contributes to adaptation to climate change, the context of climate vulnerability should be set out clearly using a robust evidence base. This could

			<p>take a variety of forms, including use of material from existing analyses and reports, or original, bespoke climate vulnerability assessment analysis carried out as part of the preparation of a project.</p> <ul style="list-style-type: none"> • Stating the intent to address the identified risks, vulnerabilities and impacts in project documentation: The project should set out how it intends to address the context- and location-specific climate change vulnerabilities, as set out in existing analyses, reports or the project's climate vulnerability assessment. • Demonstrating a clear and direct link between the identified risks, vulnerabilities and impacts and the specific project activities: the project should explicitly address risk and vulnerabilities under current and future climate change as identified in the project documentation. <p>(OECD DAC, 2016, p. 3)</p>
	<p>An activity should be classified as climate-change-mitigation related (score Principal or Significant) if:</p> <p>(OECD DAC, 2016, p. 4)</p>	<p>It contributes to the objective of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration. (OECD DAC, 2016, p. 4)</p>	<p>CRITERIA FOR ELIGIBILITY The activity contributes to</p> <ol style="list-style-type: none"> a) the mitigation of climate change by limiting anthropogenic emissions of GHGs, including gases regulated by the Montreal Protocol; or b) the protection and/or enhancement of GHG sinks and reservoirs; or c) the integration of climate change concerns with the recipient countries' development objectives through institution building, capacity development, strengthening the regulatory and policy framework, or research; or d) developing countries' efforts to meet their obligations under the Convention. <p>The activity will score "principal objective" if it directly and explicitly aims to achieve one or more of the above four criteria (OECD DAC, 2016, p. 4)</p>
	<p>Definition of significant, principal and not targeted</p>	<p>Principal = score 2</p>	<p>An activity can be marked as principal when the objective (climate change mitigation or adaptation) is explicitly stated as fundamental in the design of, or the motivation for, the activity. Promoting the objective will thus be stated in the activity documentation as one of the principal reasons for undertaking it. In other words, the activity would not</p>

			have been funded (or designed that way) but for that objective.
		Significant = score 1	An activity can be marked as significant when the objective (climate change mitigation or adaptation) is explicitly stated but it is not the fundamental driver or motivation for undertaking it. Instead, the activity has other prime objectives, but it has been formulated or adjusted to help meet the relevant climate concerns.
		Not targeted = score 0	The score “0” means that the activity was examined but found not to target the objective (climate change mitigation or adaptation) in any significant way. For activities that have not been assessed, the marker field should be left empty. This ensures that there is no confusion between activities that do not target the objective (score = “0”), and activities for which the answer is not known (score = “null”). This important distinction has implications for statistical presentations of Rio marker data.
Approval by GEF Operational Focal Point (OFP) and other GEF Agencies yes/no			

3.4. Green Climate Fund

Background information on the Author

The GCF is part of the Financial Mechanism of the UNFCCC and directly governed by the GCF Board (UNFCCC, 2019). The GCF is accountable to the COP and works under its guidance to support activities in developing countries, such as project, programmes and policies (UNFCCC, 2019). A temporary trustee (the World Bank) administers the assets of the GCF in line with the relevant decisions of the GCF Board until a permanent trustee is appointed (UNFCCC, 2019; GCF, 2020h). The World Bank has been appointed as permanent trustee since the foundation of the GCF and was reappointed in April 2019 for another four years (GCF, 2020h). The GCF is able to partner with private entities to mobilise institutional investors at scale (GCF, 2019a).

The GCF follows a country-driven approach (GCF, 2019b). This means that investments supporting countries are in line with the country's own aspirations for low-emission, climate-resilient development expressed in their NDC objectives and National Adaptation Plans (GCF, 2019b). To achieve this, the GCF works with developing countries and Accredited Entities and does not solely fund projects and programmes, but also provides support to countries and entities seeking accreditation (GCF, 2019b). This entails providing support in the formulation of National Adaptation plans and the identification of medium and long-term adaptation need, along with strategies and programs to address these needs (GCF, 2019b). For project design and implementation, the GCF works with a broad network of Accredited Entities that are responsible to present funding proposals to the GCF (GCF, 2019b, 2019a). Entities that submit proposals through the Requests for Proposals can be prioritised when applying for accreditation (GCF, 2020f).

When the Secretariat and an independent Technical Advisory Panel (iTAP) approve a funding proposal as aligned with the GCF's objective, then the proposal is submitted to the Board for final funding decision, see the User's Guide in the Annex GCF (GCF, 2016). The Board makes the final decision by taking into account different aspects, such as technical, financial, environmental, social, gender and legal aspects, see the User's Guide in the Annex GCF (GCF, 2016).

Objective of GCF

It is the objective of the GCF to balance investments equally between adaptation and mitigation, to support paradigm shifts in these approaches (GCF, 2019a). For this purpose eight results areas were developed to provide reference points for the GCF and its stakeholders (GCF, 2019a).

The GCF focuses on funding projects and programmes of different size micro, small, medium and large as well as readiness programs to help countries design and plan country strategies (GCF, 2020b, 2020e). At least 50 per cent of both the readiness support and the adaptation funding goes to the most vulnerable countries, these include Least Developed Countries (LDCs), Small Island Developing States (SIDS) and African States (GCF, 2020b, 2020a).

Target audience

The projects are implemented by Accredited Entities who are responsible for presenting funding applications to the GCF, therefore they are the target audience of the funding proposal forms (GCF, 2019a).

Purpose

The purpose of the project forms is to assess if the project proposed by the project implementer fits the evaluative criteria of GCF.

The GCF explicitly states this on its homepage and in Board decision B.09/05, that was summarized in the ‘Initial Investment framework: activity-specific sub criteria and indicative assessment factors’ document for better understanding of the public (GCF, 2015; GCF Board, 2015).

This investment framework seeks to reflect the GCF’s overall objectives by giving clear guidelines for investment decisions. Hence it is combining policies, strategies, targets, and criteria to guide the design, assessment, and approval of GCF funding decisions (GCF, 2020d). The framework has the aim to ensure transparency and consistency in the assessment process (GCF, 2020d). The investment criteria formulated in the investment framework are related to indicators that shall support the GCF stakeholders in the development, assessment and approval of projects (GCF, 2020d).

Style

The style of the text is a form of questionnaire in the format of tables and questions.

Evaluative criteria

The cover page of the funding proposal asks the Accredited Entity to indicate mainly administrative information the title of the project or programme, the country or countries where the project/programme will be implemented, the name of the Accredited Entity, the date of first submission, the date of the current submission and the number of the version, see Annex GCF. Instructions on the title state that it should make reference to the country(ies) where the project is implemented and it has to be less than 100 characters that equal approximately 10-15 words, see Annex GCF.

The Next page of the document provides the list of contents, from which can be understood that the form has eight sections A, B, C, D, E, F, G, H, see Annex GCF. Section A concentrates on the project/ programme summary. Section B concentrates on the project/programme information. Section C concentrates on the financing information. Section D concentrates on the expected performance against investment criteria. Section E concentrates on the logical framework. Section F concentrates on the risk assessment and management. Section G concentrates on GCF policies and standards, and Section H lists the Annexes. Under the list of contents, there is a box with a note to the Accredited Entities on the use of the funding proposal template. This box highlights that the entities should provide summary information in the proposal and refer to the Annexes. It must be ensured that the information in the different documents is consistent with the information provided in the funding proposal. The final version of the funding proposal should not exceed 60 pages and it is recommended to use the font Arial and the font size eleven. As, the final version of the funding proposal will be displayed on the GCF website, when it is submitted to the Board information that may not be publicly portrayed on the website must be declared in section G.4, see Annex GCF.

SECTION A that concentrates on the project/programme summary is divided in 21 aspects from A1 to A.21, on which information is expected. These aspects are A.1 Project or programme, A.2 Public or private sector, A.3 Request for Proposals (RFP), A.4 Results area (s), A.5 Expected mitigation impact, A.6 Expected adaptation impact, A.7 Total financing (GCF+ co-finance), A.8 total GCF funding requested, A.9 Project size, A.10 Financial instrument(s) requested for the GCF funding, A.11 Implementation period, A.12 Total lifespan, A.13 Expected date of AE internal approval, A.14 ESS category, A.15 Has this FP been submitted as a CN before?, A.16 Has Readiness or PPF support been used to prepare this FP, A.17 Is this FP included in the entity work programme?, A.18 Is this FP included in the country programme?, A.19 Complementary and coherence, A.20 Executing Entity information, and A.21 Executive summary (max. 750 words, approximately 1.5 pages), see Annex GCF. Many acronyms can be found in the headings of the different categories, all of these are explained in the ‘Concept Note User’s Guide’ in the following called ‘User’s Guide’, see Annex GCF.

A.1 allows the Entity to choose between project and programme. The User’s Guide gives further indication on what this distinction means. The Entity is requested to indicate if the funding proposal is filled for a project or a programme or both. In the case that the proposal refers to a combination of multiple projects, it is to be categorized as a programme.

A.2 lets the Entity choose between public and private sector. The User’s Guide further explains this categorisation as indication whether the proposal is associated with an organization from the public or private sector.

A.3. asks the applicant to indicate whether the proposal is submitted as a reaction to a specific GCF request for proposals (RFP) and requests indication on which specific RFP it is targeting. It additionally asks the Entity to note that a separate template for the simplified approval process and REDD+ is existing. As it is not clear how to identify whether a project can be categorized as such, we referred to the User’s Guide, there the Simplified Approval Process (SAP) is described as a process for small-scale low risk proposals and allows Entities and the GCF to invest less time and effort to get from project conception to implementation phase. The SAP have three main eligibility criteria GCF contribution up to \$10 million, an ESS category of minimal to none and a potential for scaling-up transformation and promotion of paradigm shift to low-emissions and climate-resilient development. To understand more about this process reference is made to the GCF webpage which lists the same three criteria with an encouragement for Direct Access Entities to take advantage of the opportunity, but for further information the GCF needs to be contacted directly (GCF, 2020g). It is not clear how it is evaluated whether a project fits the last criteria or not. To answer whether the proposal is submitted as response to an RFP, three options are given, when one pushes the ‘choose an item’ button not applicable, enhancing direct access (EDA), mobilizing funds at scale (MFS), and micro, small and medium-sized enterprises (MSMEs). Neither the proposal form nor the User’s Guide provide information on what these categories mean.

A.4 ‘results area(s)’ provides a link to the GCF webpage ‘s results area tab, which provides an explanation of what results areas are for the GCF, see Annex GCF. Furthermore, it is asked under this part of the proposal to indicate the percentage of the GCF budget that is devoted to each selected result area. The total sum of percentage has to be 100 per cent. The four results areas for reduced emissions from mitigation listed in the form are: energy access and power generation, low-emission transport, buildings, cities, industries and appliances, and forestry and land use. The four results areas for adaptation are increased resilience of most vulnerable people, communities and regions; health and well-being, and food and water security; infrastructure and built environment; ecosystem and ecosystem services.

In area A.5 expected mitigation of CO₂e over the total lifespan of the project/programme has to be indicated.

In area A.6 the total of direct and indirect beneficiaries of the adaptation impact have to be declared and the percentage that this number represents of the population.

Next to field A.7 the total financing GCF and co-financing needs to be indicated in the currency of Euro, Dollar or Yen.

Under this field corresponding to A.8 the total funding requested from the GCF needs to be indicated in the same currencies as in A.7 and a note is left for the applicant to additionally fill out annex 17 in the case of a multi-country proposal.

A.9 gives lets the Entity choose between different project sizes micro (up to \$10 million), small (up to \$50 million, medium (up to \$250 million) and large (over \$250 million).

A.10 asks the applicant to indicate how the amount of funding by the GCF declared in A.8 is requested to be divided between the categories of: grant, loan, guarantee, equity and results-based payment.

In area A.11. the number of years and months needs to be indicated that the project or programme is expected to take to be implemented. The User’s Guide notes that in this period both the disbursement and the repayment period must be included.

Area A.12.on the total lifespan of the project/programme asks the applicant to indicate the maximum number of years in which the investment will be effective. The User’s Guide gives the example of infrastructure and benefits invested for this purpose.

In the ESS category specification in A.14 options are given for A, B, C, I-1, I-2 and I-3. For further reference the Accredited Entity is referred to the safeguards policy of GCF and a link to the webpage is provided. A broad overview on the requirements of GCF ESS is given on this page. These requirements ask the Entities to avoid (where possible) to mitigate adverse impacts to people and the environment, enhance equitable access to development benefits, and give appropriate consideration to vulnerable individuals and groups and others that could be potentially affected by the activities (GCF, 2020c). The webpage refers to additional documents for further information. The User’s Guide refers to a Board Meeting document named ‘Guiding Framework and Procedures for Accrediting National, Regional and International Implementing

Entities and Intermediaries, Including the Fund's Fiduciary Principles and Standards and Environmental and Social Safeguards' for further reference (GCF Board, 2014).

A.15 to A.19 are yes or no questions asking whether the application has been submitted as a Concept Note before, has received readiness support, is included in the entity work programme, is included in the country programme and if it complements other climate finance funding. If the last point is answered with yes it needs to be further elaborated in section B.1.

A.20 asks information about the Accredited Entity(ies) on the country of registration, the ownership type, if it is a national designated authority and the definition of the Executing Entity in the Accredited Master Agreement.

A.21 asks the applicant to provide an executive summary of the project/programme including the climate rationale, proposed interventions and climate impacts and benefits of maximum 750 words.

SECTION B asks the Accredited Entity to describe further details on the project/programme B.1 climate rationale and context, B.2 theory of change, B.3 project/programme description, B.4 implementation arrangements, B.5 justification for GCF funding request and B.6 exit strategy and sustainability.

Under B.1 the climate rationale the context and related projects or interventions need to be described. For these descriptions the maximum use of 1000 words is allowed and approximately two pages. Major points highlighted to be described by the funding proposal (FP) are the following: climate change problem to be addressed (vulnerability and impacts), main causes and barriers to be addressed (social, gender, fiscal, regulatory, technological, financial, environmental, institutional, etc.), mitigation needs, adaptation needs, interventions to address adaptation and mitigation needs, the most likely scenario that would remain or continue in the absence of the interventions, baseline information, alignment with national priorities, level of country ownership during the implementation of the project/programme, contribution to national strategies and other plans such as NAMA and NAP. Additional remarks for this section are that methodologies used to derive the climate rationale and that for private sector proposals key characteristics and dynamics of the sector or market in which the project/programme is planned to operate need to be described. No further information on how one shall arrive at these conclusions to meet the GCFs criteria is given.

B.2 asks for a description of the theory of change with the maximum use of 1000 words and approximately two pages. There is no additional information on this question in the User's Guide, but the FP gives the instructions to provide on the theory of change: a description, how it serves to shift the development pathway towards low emission and/or climate resilience, a diagram of it (approx. 1 page), that it should include barriers that need to be addressed (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc., as relevant). Furthermore, it is requested to use a results chain of inputs, activities, outputs, outcomes, impact statements and to identify the how and why of causal relations affecting the project results.

Part B.3 on the project/programme description indicates that for this part a maximum of 2000 words is allowed and that it will approximately fill four pages. The applicant is asked to define the proposed set of components, outputs and activities that will result in the fund-level impact and outcome results. These

components should mirror the project/programme outcomes and be consistent with the financing by components in section C.2 and the results and performance indicators in section E.5 as well as the implementation timetable in annex 5. This implementation timetable has to indicate in which quarter of the project years which activity, output or outcome will be achieved and the interim and final impacts that can be understood from this timetable. By referring to the feasibility study the applicant is asked to describe why the set of interventions was chosen instead of potential alternative solutions and how needed support can be given sustainably. Further it is noted in this part that Enhanced Direct Access (EDA) proposals and projects/programmes with financial intermediation need to describe the selection criteria of sub-projects and types. The User's guide additionally asks the applicant to provide information of financial and operational risks.

Part B.4 on the implementation arrangements asks for any types of arrangements legal, contractual, institutional and financial to be described in maximum 1500 words and approximately three pages.

Part B.5 on the justification of the GCF funding request the applicant to explain why funding is requested by the GCF and not by any other private or public entity, which market failure is addressed and if there are any other sources of financing. Additional explanation is requested on the coherence between activities financed by grants and those financed by reimbursable funds, justifications for co-financing and concessionally of the GCF, as well as the risk sharing structure between the different entities involved.

Part B.6 on the exit strategy and sustainability of the project is requested to be answered with a maximum of 500 words in approximately one page. It asks the applicant to explain how financial, institutional, social, gender equality, environmental is ensured in the long run, even after project closure and how the results and benefits will be sustained. For this purpose, information on the long-term ownership, exit strategy, operations and maintenance of investments and which additional actions need to be made by public sector, private sector or civil society to scale up the project and continue best practices.

SECTION C is divided into three major parts asking for detailed information on the total amount of financing provided by the GCF and other financing arrangements and how they contribute to each component and the subsequent output of the project/programme. The last part C.3 first asks to yes/no questions on whether the funding finances capacity building and technology development or transfer and if yes to provide a short description and the amount of GCF funding going into these with a maximum of 250 words and approximately half a page of writing.

SECTION D on 'expected performance against investment criteria' is divided into six parts D.1 Impact potential, D.2. Paradigm shift potential, D.3. Sustainable development, D.4. Needs of recipient, D.5. Country ownership and D.6. Efficiency and effectiveness. Special reference is made in this part of the funding proposal to the GCF Initial Investment Framework (GCF, 2015).

Part D.1 on the impact potential asks for a description of maximum 500 words and one page. This description shall include potential contribution to GCF objectives and results areas (mitigation and adaptation), envisaged impacts for mitigation and adaptation, and how this contributes to sustainable development

pathways. Calculations that go along with these descriptions are asked to be put as an annex and should be consistent with the reporting made in part E.2 on the GCF core indicators.

Part D.2 on the paradigm shift potential of the project/program asks the applicant to describe with a maximum of 500 words in approximately one page to describe how the project can impact beyond the project or programme investment. It lists the following possibilities for impact catalysation upscaling/replication, knowledge sharing and learning, creating an enabling environment, contributing to regulatory frameworks and policies, and contributing to climate-resilient pathways consistent with national strategies/plans on adaptation.

D.3. on sustainable development must be described with a maximum of 500 words in one page. Here the applicant shall describe how the project/programme contributes to the SDGs and estimate potential environmental, social and economic co-benefits, as well as gender impacts. The following examples are given for co-benefits in the different dimensions in the User's Guide:

Economic co-benefits

- Total number of jobs created
- Amount of foreign currency savings
- Amount of government's budget deficits reduced

Social co-benefits

- Improved access to education
- Improved regulation or cultural preservation
- Improved health and safety

Environmental co-benefits

- Improved air and/or water quality
- Improved soil quality
- Improved biodiversity and ecosystem services

Gender-sensitive development impact

- Proportion of men and women in jobs created (GCF, 2016, p. 9).

Furthermore, the User's Guide encourages the applicants to design projects/programmes aligned with the GCF Policy on Gender, which includes the following objectives:

- (a) To achieve greater, more effective, sustainable, and equitable climate change results; and
- (b) To build equally women and men's resilience to and ability to address climate change; and
- (c) To address and mitigate against potential risks for women and men in projects; and
- (d) To help reduce the gender gap of climate change-exacerbated social, economic and environmental vulnerabilities. (GCF, 2016, p. 10).

Part D.4 on the needs of the recipients must be described with a maximum of 500 words in approximately one page. For this part the scale and intensity of vulnerability of the country and beneficiaries must be described, as well as how this is planned to be addressed. Gender issues must be also described in the case of adaptation activities. The current economic and social development level of the beneficiaries must be

described. The absence of alternative financial sources must be explained, such as “fiscal or balance of payments gap that prevents government from addressing the needs of the country; and lack of depth and history in the local capital market”, see Annex GCF. Additionally, needs to strengthen institutions and implementing capacities must be described.

Part D.5 on the country ownership asks the applicant to describe with a maximum of 500 words (approximately one page) how the country takes ownership based on the following aspects: existing national climate strategy, existing GCF country programme, alignment with existing policies such as NDCs, NAMAs, and NAPs, capacity of Accredited Entities or Executing Entities to deliver, role of National Designated Authority, engagement with civil society organizations and other relevant stakeholders, including indigenous peoples, women and other vulnerable groups.

In part D.6. on the efficiency and effectiveness focusses mainly on economic and financial cost-effectiveness. The Entity is asked to describe with a maximum of 500 words in approximately one page how the financial structure is adequate and reasonable in order to achieve the proposal’s objectives. This must include existing bottlenecks, barriers, and provide the minimum concessionally to ensure other public and private investments will not be driven out. Reference can be made to section B.5 on funding justification. Cost-effectiveness of mitigation and adaptation impact must be explained and compared to a suitable benchmark. The expected economic and financial return must be described and compared to the no-project/programme scenario. The decision-making process on the choice of the best available technologies and practices must be explained.

SECTION E with the title ‘logical framework’ is divided in seven parts E.1. Paradigm shift objectives, E.2. Core indicator targets, E.3. Fund-level impacts, E.4. Fund-level outcomes, E.5. Project/programme performance indicators, E.6. Activities, E.7. Monitoring, reporting and evaluation arrangements. This section asks for detailed information on each part of the results chain of the project (input, activity, output, outcome, impact) and how these are monitored and evaluated with the use of the GCF core-indicators. Under the header of this section reference is made to the GCF Performance Measurement Framework and the GCF Results Management Framework, the link to the last does not work anymore (GCF, 2014).

Part E.1 on the paradigm shift asks the applicant to indicate whether the paradigm shift focuses on a low emission or a climate-resilient sustainable development pathway, or both.

Part E.2 asks for more detailed information on the expected results against the GCF core indicators than was already given in SECTION A. The Entity is asked to provide an annual and a lifetime estimate of mitigated emissions in E.2.1. Furthermore in E.2.2. and E2.3. the applicant is asked to calculate the costs per CO₂eq emission mitigated and how these costs are split between the different financial contributors of the project/programme. In E.2.4. and E2.5 the Entity has to indicate the number and percentage of total population, of direct and indirect beneficiaries of the project disaggregated by sex.

Part E.3, E.4 and E.5 ask the Accredited Entity to match expected GCF level impacts, GCF level outcomes and Project/Programme results with indicators, means of verification, baselines, medium and final targets and assumptions.

For the Fund level impacts and outcomes, as well as for the indicators to which these shall be matched, lists with options to select from are provided.

Possible GCF level results in adaptation are (GCF, 2019d, p. 10):

- A1 increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions
- A2 increased resilience of health well-being, and food and water security
- A3 increased resilience of infrastructure and the built environment to climate change
- A4 increased resilience of ecosystems and ecosystem services

These adaptation results can be matched with the following indicators (GCF, 2019d, p. 10):

- A.1.1. Change in expected losses of lives and economic assets in \$ due to the impact of extreme climate-related disasters
- A.1.2. Number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options (including fisheries, agriculture, tourism, etc.)
- A.1.3. Number of GCF funded projects/programmes that supports effective adaptation to fish stock migration and depletion to climate change
- A.2.1. Number of males and females benefiting from introduced health measures to respond to climate-sensitive diseases due to the impact of extreme climate-related disasters
- A.2.2. Number of food secure households (in areas/periods at risk of climate change impacts)
- A.2.3. Number of males and females with year-round access to reliable and safe water supply despite climate shocks and stresses
- A.3.1. Number of physical assets made more resilient to climate change variability and change, considering human benefits
- A.4.1. Coverage/scale of ecosystems protected and strengthened in response to climate variability and change
- A.4.2. Value in \$ of ecosystem services generated or protected in response to climate change

Possible GCF level results in mitigation are (GCF, 2019d, p. 10):

- M1 Reduced emissions through increased low-emission energy access and power generation
- M2 Reduced emissions through increased access to low-emission transportation
- M3 Reduced emissions from buildings, cities, industries and appliances
- M4 Reduced emissions from land use, reforestation, reduced deforestation and through sustainable forest management and conservation and enhancement of forest carbon stocks

These mitigation results can be matched with the following indicators (GCF, 2019d, p. 10):

- M.1.1. Tonnes of carbon dioxide equivalent (t CO₂eq) reduced or avoided – gender sensitive energy access power generation
- M.2.1. Tonnes of carbon dioxide equivalent (t CO₂eq) reduced or avoided low emission gender sensitive transport
- M.3.1. Tonnes of carbon dioxide equivalent (t CO₂eq) reduced or avoided – buildings, cities, industries, and appliances
- M.4.1. Tonnes of carbon dioxide equivalent (t CO₂eq) reduced or avoided (including increased removals) forest and land use

Possible GCF level outcomes in adaptation are (GCF, 2019d, p. 10):

- A.5.0. Strengthened institutional and regulatory systems for climate-responsible planning and development
- A.6.0. Increased generation and use of climate information in decision-making
- A.7.0. Strengthened adaptive capacity and reduced exposure to climate risks
- A.8.0. Strengthened awareness of climate threats and risk-reduction processes

These adaptation outcomes can be matched with the following indicators (GCF, 2019d, p. 10):

- A.5.1. Institutional and regulatory systems that improve incentives for climate resilience and their effective implementation
- A.5.2. Number and level of effective coordination mechanisms
- A.6.1. Use of climate information products/services in decision-making in climate sensitive sectors
- A.7.1. Use by vulnerable households, communities, businesses and public-sector services of Fund-supported tools instruments, strategies and activities to respond to climate change and variability
- A.7.2. Number of males and females reached by [or total geographic coverage of] climate-related early warning systems and other risk reduction measures established/strengthened
- A.8.1. Number of males and females made aware of climate threats and related appropriate responses

Possible GCF level outcomes in mitigation are (GCF, 2019d, p. 10):

- M.5.0. Strengthened institutional and regulatory systems
- M.6.0. Increased number of small, medium and large low-emission power suppliers
- M.7.0. Lower energy intensity of buildings, cities, industries and appliances
- M.8.0. Increased use of low-carbon transport
- M.9.0. Improved management of land or forest areas contributing to emission reductions

These mitigation outcomes can be matched with the following indicators (GCF, 2019d, p. 10):

- M.5.1. Institutional and regulatory systems that improve incentives for low-emission planning and development and their effective implementation
- M.5.2. Number and level of effective coordination mechanisms
- M.6.1. Proportion of low-emission power supply in a jurisdiction market

- M.6.2. Number of households and individuals (males and females) with improved access to low-emission energy sources
- M.6.3. MWs of low-emission energy capacity installed, generated and/or rehabilitated as a result of GCF support
- M.7.1. Energy intensity/improved efficiency of buildings, cities, industries and appliances as a result of GCF support
- M.8.1. Number of additional female and male passengers using low-carbon transport as a result of Fund support
- M.8.2. Vehicle fuel economy and energy as a result of GCF support
- M.9.1. Hectares of land or forests under improved and effective management that contributes to CO2 emission reductions

In part E.5 on the project/performance expected results and indicators chosen to match with the results can be selected by the Accredited Entity.

Part E.6. on the activities requires the applicant to give details on which activities are planned, how they can be described, which sub-activities they include and what deliverables are part of these sub-activities.

In part E.7 on the monitoring, reporting and evaluation arrangements the applicant is allowed to use a maximum of 500 words equivalent to approximately one page to describe project/programme specific arrangements. Information must be provided on the type of interim and final evaluations and on how monitoring, reporting and evaluation is coordinated between the involved actors and to which entities reporting is planned. Details must be provided on the frequency of this reporting as well as on the indicators, implementation challenges and financial status of the project/programme.

SECTION F on the risk assessment and management asks the Entity to identify risk factors and mitigation measures and describe them on a maximum of three pages. A table is provided as an example on how to list risk factors, the description of the risk factor and to put them into categories that are matched with probabilities and impacts. The following risk categories are provided for selection: technical and operational, credit, forex, governance, legal, reputational, ML/TF, sanctions, prohibited practices and other. These risk categories can be matched to high, medium or low probability and impact. Furthermore, a description needs to be provided how the Entity plans to mitigate or manage the listed risk factor.

In SECTION G the compliance with GCF policies and standards must be described in four sub-sections on G.1. Environmental and social risk assessment, G.2. Gender assessment and action plan, G.3. Financial management and procurement, G.4. Disclosure of funding proposal.

In sub-section G.1. reference is made to the GCF information disclosure policy, the Environmental and Social Policy and the Indigenous Peoples Policy, which can all be found on the GCF website (GCF, 2019g, 2019h, 2020c). Additionally, the applicant is asked to attach relevant assessments and management instruments, for example ESIA, ESMP, ESMF, ESMS or environmental and social audits. A summary of the main outcomes of these instruments is to be provided. Key environmental and social risks and impacts and

measures to address or avoid these have to be described for each stage of the project in accordance with GCF standards. If financial intermediators are involved due diligence and management plans as well as the Entities oversight and supervision arrangements must be provided. Capacity for implementation and arrangements of compliance monitoring must be described. Information on the extent of multi-stakeholder consultations undertaken for the project design and planned for engagement throughout project implementation must be given. Information on timing and manner of disclosure of applicable safeguard reports following the requirements in the GCF information disclosure policy and the environmental and social policy have to be provided. An environmental and social risk category is to be assigned to the proposal. Potential impacts on indigenous people and measures to address these including an indigenous people plan and in accordance with the GCF indigenous people's policy have to be provided.

Part G.2 on Gender assessment and action plan provides for a maximum of 500 words equivalent to one page, to summarize the gender assessment and action plan in alignment with the GCF policy on gender. For this purpose, the document provides a link to the gender policy that does not work. It is asked to provide the full gender assessment and action plan in the annex. For this section details on the process used to develop both documents is necessary and a summary of the key findings on who is vulnerable and why as well as key recommendations on how these vulnerabilities can be addressed is asked. Indications on stakeholder consultations for the design of the action plan and key inputs that resulted from these have to be given, for example on how equal participation and benefits from investments can be ensured or expected results related to project/programme target.

Annex 8 lists the following questions to be addressed in the gender assessment(project planning/preparatory stage) (GCF, 2019e, pp. 1–2):

- What is the maternal mortality rate, infant mortality rate, educational status of girls and boys, adult literacy rate (disaggregated by sex), poverty rate, labour force participation rate (disaggregated by sex), employment rate (disaggregated by sex), unemployment rate (disaggregated by sex), political participation rate (disaggregated by sex), life expectancy (disaggregated by sex) in the country of intervention and/or the project/program footprint area?
- What is the legal status of women in the country of intervention?
- What are commonly held beliefs, perceptions, and stereotypes related to gender in the project/program footprint area or the country of intervention?
- What is the division of labour among women and men in the project/program footprint area and/or the country of intervention?
- What is the participation between women and men in the formal/informal economy in the country of intervention or in the project/program footprint area?
- What is the situation of women and men in the specific sector of intervention or in the project/program footprint area?

- In terms of the proposed project/program, will there be any anticipated differences in men's and women's vulnerability and adaptive capacity to climate change? If so, what are these?
- Are there existing gender inequalities that may be exacerbated by climate change impacts in the proposed project/program footprint area?
- What are some of the inequalities that exist between different social groups in the project/program footprint area? How do these inequalities affect people's capacity to adapt to climate change?
- What roles women and men are anticipated to play in the context of the project/program? What will these entail in terms of time commitment and need for mobility?
- What resources (economic, financial, physical, natural, other assets) do women and men have access to? Who manages or controls access to these resources?
- Do women and men from vulnerable communities have equal access to information and opportunities necessary to participate and benefit fully from the anticipated outcomes of the project/program?
- Do women have equal access to education, technical knowledge, and/or skill upgradation?
- Will services and technologies provided by the project/program be available and accessible to both women and men?
- To what extent do women and men from vulnerable communities participate in decision — making processes? What type of decisions are made by women? What are the constraints (social, cultural, economic, political) that restrict women's active participation in household and community level decision — making processes?
- Are there any opportunities to promote the leadership of women in local governance/political systems and formal/informal institutions? If not, what are some of the constraints that hinder women from assuming leadership roles?
- What are the differential needs/priorities of women and men in the context of the project/program? Will the project/program be able to address their respective needs and priorities? If so, how?
- Have the needs of specific (and vulnerable) sub-groups been taken into account by the project/program (e.g. children, girls, women and men with disabilities, the elderly, widows)?
- Has the project/program recognised the distinct vulnerabilities of women and men and developed specific response strategies for each target group?
- Are the specific knowledge and skills of women and men, especially from vulnerable groups, being utilised to contribute to project/program outcomes and solutions?
- Has the project/program identified opportunities to challenge gender stereotypes and increase positive gender relations through equitable actions? If so, what are these opportunities and actions?

Annex 8 lists the following aspects to be addressed for the gender action plan (GCF, 2019e, pp. 1–2):

- Preparatory work undertaken to address gender issues in the project/program;

- Quotas, targets, design features, included in the project/program to address gender inclusion and facilitate women's involvement and/or ensure tangible benefits to women;
- Mechanisms to ensure implementation of the gender design elements;
- Gender monitoring and evaluation indicators.

In part G.3. a summary of the project/programmes financial management and procurement is requested to be written, while using a maximum of 500 words equivalent to one page. This summary must include information on the financial management including the monitoring system, accounting, auditing, disbursement structure and methods. The applicant can refer to section B.4. on implementation arrangements as necessary. A detailed procurement plan must be provided in annex 10.

Part G.4. on the disclosure of the funding proposal asks for an indication whether or not the funding proposal includes confidential information. It is noted that the Information Disclosure Policy (IDP) of the GCF provides that disclosure is favoured for all information and documents relating to the GCF funding activities.

SECTION H refers to 14 mandatory annexes and seven more annexes to be used if applicable. These annexes provide additional information on the information given by the applicant in the funding proposal and therefore will not be analysed for the purpose of this work to identify the evaluative criteria of the GCF.

Evaluative criteria

(all information listed in this table is either paraphrased or a direct quote of the documents in the Annex GCF, or other sources if explicitly cited)

Criteria	Broad division	details
Results areas = impact	Mitigation through reduced emissions from: <ul style="list-style-type: none"> energy access and power generation, low-emission transport, buildings, cities, industries and appliances, and forestry and land use 	Funding allocated to each of the four options
		Co2eq emissions mitigated over lifespan during and after the project
	Adaptation through increased resilience of: <ul style="list-style-type: none"> most vulnerable people, communities and regions; health and well-being, and food and water security; infrastructure and built environment; Ecosystem and ecosystem services. 	Funding allocated to the four options
		number of total direct and indirect beneficiaries (percentage of total population)
Time	implementation period	Number or years and months needs to be indicated that the project or programme is expected to take to be implemented. Both the disbursement and the repayment period must be included.
	total lifespan	Indicate the maximum number of years in which the investment will be effective. For example: infrastructure and benefits invested for this purpose.
	Exit strategy to ensure sustainability after project closure	long-term sustainability in: <ul style="list-style-type: none"> Finance/ economic Institutions Social gender equality environmental
Finance	financing contribution of GCF and co-financing entities in terms of total and percentage of:	<ul style="list-style-type: none"> component project/programme output project programme result/project programme level impact/result GCF level

		<ul style="list-style-type: none"> outcome GCF level
	institutions overseeing finance: <ul style="list-style-type: none"> main responsible Entity intermediaries 	<ul style="list-style-type: none"> Risks Reliability Capacity for financial management based on history
	financial management and procurement	Financial <ul style="list-style-type: none"> monitoring systems accounting auditing disbursement structure disbursement methodology
Country ownership	on government level	<ul style="list-style-type: none"> Involvement in implementation Involvement in project design Alignment with existing national climate strategy Alignment with existing GCF country programme Alignment with existing policies such as NDCs, NAMAs, and NAPs Capacity of Accredited Entities or Executing Entities to deliver Role of National Designated Authority
	on civil society level	engagement with: <ul style="list-style-type: none"> civil society organizations and other relevant stakeholders indigenous peoples, women and other vulnerable groups
logical/ results framework	Baseline compared to impact	<ul style="list-style-type: none"> GCF-level results GCF-level outcomes

		<ul style="list-style-type: none">• Project level results• Project level outcomes		
	theory of change	<p>explain the following aspects in detail:</p> <ul style="list-style-type: none">• <u>the development pathway</u>: how does it change towards a low-emission or climate-resilient direction• <u>barriers addressed</u>: gender, social, fiscal, regulatory, technological, financial, ecological, institutional or other• <u>diagram of the theory of change</u>• <u>use results chain of</u>: input, activities, outputs, outcomes, and impacts• <u>identify causal relations</u> that lead to the expected results		
	implementation timetable	<p>in which quarter of the years/months will the following be achieved:</p> <ul style="list-style-type: none">• activity• output• outcome <p>Further, indicate which of the above listed will be achieved at interim stage and which at final stage of the project.</p>		
	monitoring & evaluation GCF-level results	<table><tr><td><u>GCF-level results adaptation:</u><ul style="list-style-type: none">• A1 increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions• A2 increased resilience of health well-being, and food and water security• A3 increased resilience of infrastructure and the built environment to climate change• A4 increased resilience of ecosystems and ecosystem services</td><td><u>GCF-level adaptation result indicators:</u><ul style="list-style-type: none">• A.1.1. Change in expected losses of lives and economic assets in \$ due to the impact of extreme climate-related disasters• A.1.2. Number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options (including fisheries, agriculture, tourism, etc.)• A.1.3. Number of GCF funded projects/programmes that supports effective adaptation to fish stock migration and depletion to climate change• A.2.1. Number of males and females benefiting from introduced health measures to respond to climate-sensitive diseases due to the impact of extreme climate-related disasters• A.2.2. Number of food secure households (in areas/periods at risk of climate change impacts)</td></tr></table>	<u>GCF-level results adaptation:</u> <ul style="list-style-type: none">• A1 increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions• A2 increased resilience of health well-being, and food and water security• A3 increased resilience of infrastructure and the built environment to climate change• A4 increased resilience of ecosystems and ecosystem services	<u>GCF-level adaptation result indicators:</u> <ul style="list-style-type: none">• A.1.1. Change in expected losses of lives and economic assets in \$ due to the impact of extreme climate-related disasters• A.1.2. Number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options (including fisheries, agriculture, tourism, etc.)• A.1.3. Number of GCF funded projects/programmes that supports effective adaptation to fish stock migration and depletion to climate change• A.2.1. Number of males and females benefiting from introduced health measures to respond to climate-sensitive diseases due to the impact of extreme climate-related disasters• A.2.2. Number of food secure households (in areas/periods at risk of climate change impacts)
<u>GCF-level results adaptation:</u> <ul style="list-style-type: none">• A1 increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions• A2 increased resilience of health well-being, and food and water security• A3 increased resilience of infrastructure and the built environment to climate change• A4 increased resilience of ecosystems and ecosystem services	<u>GCF-level adaptation result indicators:</u> <ul style="list-style-type: none">• A.1.1. Change in expected losses of lives and economic assets in \$ due to the impact of extreme climate-related disasters• A.1.2. Number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options (including fisheries, agriculture, tourism, etc.)• A.1.3. Number of GCF funded projects/programmes that supports effective adaptation to fish stock migration and depletion to climate change• A.2.1. Number of males and females benefiting from introduced health measures to respond to climate-sensitive diseases due to the impact of extreme climate-related disasters• A.2.2. Number of food secure households (in areas/periods at risk of climate change impacts)			

			<ul style="list-style-type: none"> • A.2.3. Number of males and females with year-round access to reliable and safe water supply despite climate shocks and stresses • A.3.1. Number of physical assets made more resilient to climate change variability and change, considering human benefits • A.4.1. Coverage/scale of ecosystems protected and strengthened in response to climate variability and change • A4.2. Value in \$ of ecosystem services generated or protected in response to climate change
		<u>GCF-level results mitigation:</u> <ul style="list-style-type: none"> • M1 Reduced emissions through increased low-emission energy access and power generation • M2 Reduced emissions through increased access to low-emission transportation • M3 Reduced emissions from buildings, cities, industries and appliances • M4 Reduced emissions from land use, reforestation, reduced deforestation and through sustainable forest management and conservation and enhancement of forest carbon stocks 	<u>GCF level mitigation result indicators:</u> <ul style="list-style-type: none"> • M.1.1. Tonnes of carbon dioxide equivalent (t CO2eq) reduced or avoided – gender sensitive energy access power generation • M.2.1. Tonnes of carbon dioxide equivalent (t CO2eq) reduced or avoided – low emission gender sensitive transport • M.3.1. Tonnes of carbon dioxide equivalent (t CO2eq) reduced or avoided – buildings, cities, industries, and appliances • M.4.1. Tonnes of carbon dioxide equivalent (t CO2eq) reduced or avoided (including increased removals) – forest and land use
	monitoring & evaluation GCF-level outcomes	<u>GCF-level adaptation outcomes:</u> <ul style="list-style-type: none"> • A.5.0. Strengthened institutional and regulatory systems for climate-responsible planning and development • A.6.0. Increased generation and use of climate information in decision-making 	<u>GCF-level adaptation outcome indicators:</u> <ul style="list-style-type: none"> • A.5.1. Institutional and regulatory systems that improve incentives for climate resilience and their effective implementation • A.5.2. Number and level of effective coordination mechanisms • A.6.1. Use of climate information products/services in decision-making in climate sensitive sectors

		<ul style="list-style-type: none"> • A.7.0. Strengthened adaptive capacity and reduced exposure to climate risks • A.8.0. Strengthened awareness of climate threats and risk-reduction processes 	<ul style="list-style-type: none"> • A.7.1. Use by vulnerable households, communities, businesses and public-sector services of Fund-supported tools instruments, strategies and activities to respond to climate change and variability • A.7.2. Number of males and females reached by [or total geographic coverage of] climate-related early warning systems and other risk reduction measures established/strengthened • A.8.1. Number of males and females made aware of climate threats and related appropriate responses
		<p><u>GCF-level mitigation outcomes:</u></p> <ul style="list-style-type: none"> • M.5.0. Strengthened institutional and regulatory systems • M.6.0. Increased number of small, medium and large low-emission power suppliers • M.7.0. Lower energy intensity of buildings, cities, industries and appliances • M.8.0. Increased use of low-carbon transport • M.9.0. Improved management of land or forest areas contributing to emission reductions 	<p><u>GCF-level mitigation outcome indicators:</u></p> <ul style="list-style-type: none"> • M.5.1. Institutional and regulatory systems that improve incentives for low-emission planning and development and their effective implementation • M.5.2. Number and level of effective coordination mechanisms • M.6.1. Proportion of low-emission power supply in a jurisdiction market • M.6.2. Number of households and individuals (males and females) with improved access to low-emission energy sources • M.6.3. MWs of low-emission energy capacity installed, generated and/or rehabilitated as a result of GCF support • M.7.1. Energy intensity/improved efficiency of buildings, cities, industries and appliances as a result of GCF support • M.8.1. Number of additional female and male passengers using low-carbon transport as a result of Fund support • M.8.2. Vehicle fuel economy and energy as a result of GCF support • M.9.1. Hectares of land or forests under improved and effective management that contributes to CO2

	monitoring & evaluation project/programme level	Results	results indicators
		Activities (+description)	sub-activities (+deliverables)
	coordination of monitoring and results reporting	interim	<ul style="list-style-type: none"> • Responsible entity • To whom will be reported • Frequency • Exact dates
		final	<ul style="list-style-type: none"> • Responsible entity • To whom will be reported • Frequency • Exact dates
Paradigm shift potential	potential for paradigm shift in terms of <ul style="list-style-type: none"> • Scaling up and replication • Knowledge sharing and learning • Contribution to the creation of an enabling environment • Contribution to the regulatory framework and policies • Overall contribution to climate-resilient development pathways consistent with national adaptation strategies and plans 		
Sustainable development potential	SDGs co-benefits		
	environmental co-benefits	estimation of impact potential in for example: <ul style="list-style-type: none"> • Improved air and/or water quality • Improved soil quality • Improved biodiversity and ecosystem services 	
	social co-benefits	estimation of impact potential in for example: <ul style="list-style-type: none"> • Improved access to education • Improved regulation or cultural preservation • Improved health and safety 	

	economic co-benefits	<p>estimation of impact potential in for example:</p> <ul style="list-style-type: none"> • Total number of jobs created • Amount of foreign currency savings • Amount of government's budget deficits reduced
	gender co-benefits	<p>estimation of impact potential in for example:</p> <ul style="list-style-type: none"> • Proportion of men and women in jobs created • Resilience build equally for men and women • mitigate against potential risks for women and men in projects • reduce the gender gap of climate change-exacerbated social, economic and environmental vulnerabilities
needs assessment	vulnerability to climate change	<ul style="list-style-type: none"> • Identify vulnerable groups • Include gender aspects
	current state of economic and social development	<ul style="list-style-type: none"> • Of country • Affected population
	absence of alternative finance	<ul style="list-style-type: none"> • Fiscal or balance payments gap of government • Lack of depth and history in the local capital market
	institutional needs	<ul style="list-style-type: none"> • implementation capacity • strengthening of institutions
Efficiency and effectiveness	cost-effectiveness	<ul style="list-style-type: none"> • Of mitigation • Of adaptation • Risks, barriers • Adequacy of the financial structure to achieve objectives • Economic rate of return on investment (compared to without) • Financial rate of return on investment (compared to without) • Of technologies

Risks and risk management	<p>RISKS (high medium, low impact/probability):</p> <ul style="list-style-type: none"> • financial, • technical, • operational, • macroeconomic • political, • money laundering(ML) • terrorist financing (TF), • sanctions, • prohibited practices • environmental • social 	MEASURES TO ADDRESS AND PREVENT THESE RISKS	
Compliance with GCF policies and standards	Environmental and social risk assessment	<p>three major requirements</p> <ul style="list-style-type: none"> • avoid (where possible) to mitigate adverse impacts to people and the environment, • enhance equitable access to development benefits, and • give appropriate consideration to vulnerable individuals and groups and others that could be potentially affected by the activities 	
	Gender assessment and action plan	gender assessment	<p>questions to be addressed at the project planning/preparatory stage:</p> <ul style="list-style-type: none"> • What is the maternal mortality rate, infant mortality rate, educational status of girls and boys, adult literacy rate (disaggregated by sex), poverty rate, labour force participation rate (disaggregated by sex), employment rate (disaggregated by sex), unemployment rate (disaggregated by sex), political participation rate (disaggregated by sex), life expectancy (disaggregated by sex) in the country of intervention and/or the project/program footprint area? • What is the legal status of women in the country of intervention? • What are commonly held beliefs, perceptions, and stereotypes related to gender in the project/program footprint area or the country of intervention?

			<ul style="list-style-type: none"> • What is the division of labour among women and men in the project/program footprint area and/or the country of intervention? • What is the participation between women and men in the formal/informal economy in the country of intervention or in the project/program footprint area? • What is the situation of women and men in the specific sector of intervention or in the project/program footprint area? • In terms of the proposed project/program, will there be any anticipated differences in men's and women's vulnerability and adaptive capacity to climate change? If so, what are these? • Are there existing gender inequalities that may be exacerbated by climate change impacts in the proposed project/program footprint area? • What are some of the inequalities that exist between different social groups in the project/program footprint area? How do these inequalities affect people's capacity to adapt to climate change? • What roles women and men are anticipated to play in the context of the project/program? What will these entail in terms of time commitment and need for mobility? • What resources (economic, financial, physical, natural, other assets) do women and men have access to? Who manages or controls access to these resources? • Do women and men from vulnerable communities have equal access to information and opportunities necessary to participate and benefit fully from the anticipated outcomes of the project/program? • Do women have equal access to education, technical knowledge, and/or skill upgradation? • Will services and technologies provided by the project/program be available and accessible to both women and men? • To what extent do women and men from vulnerable communities participate in decision — making processes? What type of decisions are made by women? What are constraints (social, cultural, economic, and political) that restrict women's active participation in household and community level decision — making processes?
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			<ul style="list-style-type: none"> • Are there any opportunities to promote the leadership of women in local governance/political systems and formal/informal institutions? If not, what are some constraints that hinder women from assuming leadership roles? • What are the differential needs/priorities of women and men in the context of the project/program? Will the project/program be able to address their respective needs and priorities? If so, how? • Have the needs of specific (and vulnerable) sub-groups been taken into account by the project/program (e.g. children, girls, women and men with disabilities, the elderly, and widows)? • Has the project/program recognised the distinct vulnerabilities of women and men and developed specific response strategies for each target group? • Are the specific knowledge and skills of women and men, especially from vulnerable groups, being utilised to contribute to project/program outcomes and solutions? • Has the project/program identified opportunities to challenge gender stereotypes and increase positive gender relations through equitable actions? If so, what are these opportunities and actions?
		gender action plan	<ul style="list-style-type: none"> • Preparatory work undertaken to address gender issues in the project/program; • Quotas, targets, design features, included in the project/program to address gender inclusion and facilitate women's involvement and/or ensure tangible benefits to women; • Mechanisms to ensure implementation of the gender design elements; • Gender monitoring and evaluation indicators.
	Disclosure of funding proposal	<ul style="list-style-type: none"> • declare confidential information • favour is given to disclosure if possible 	

4. Discussion of the findings

The purpose of this work is to make funding for the social and economic dimension of sustainable development projects more accessible.

How can funding for the socio-economic dimension of sustainable development projects be made more available through the Financial Mechanism of the UNFCCC?

The findings of both, the literature review and the document analysis indicate that there are opportunities to access funding for social and economic dimensions of sustainable development projects, by defining social and economic dimensions as crosscutting pillars of sustainable development, as defined in this work.

While this is embedded in the UNFCCC convention under Article 1, 3 and 4 as described in the introduction, it does not seem to be fully reflected in the work of the Financial Mechanism. Following the social and economic dimensions of sustainable development that are strongly interlinked with the environment dimension of sustainable development, each project aiming to mitigate or adapt to climate change has to also assess the social and economic influences this change will have and which were the social and economic drivers for the development of these practices or circumstances.

Four sub-questions were asked to understand how the principle research question of this work could be answered:

1. What ethical implications does socio-economic measurement have?
2. How can the socio-economic dimension of sustainable development projects be defined?
3. What are the current requirements (evaluative criteria) of IFI that focus on climate change related projects, based on the example of GCF and GEF?
4. Do the GCF and GEF address the socio-economic dimension as defined in this work?

The combination of answers to these four questions are the answer to the main research question. Question number two will be answered in the following section on the definition of the socio-economic dimension. Question number three will be answered in the section of hypothesis 1 and question four will be answered in the section on hypothesis two. Question number one will be answered in the section on ethical implications of socio-economic measurement.

4.1. Definition of the socio-economic dimension

To define the socio-economic dimension of sustainable development projects several different concepts were discussed and defined.

The three pillars of sustainable development are the environmental, social and economic pillar. Each of these pillars can be sustained and/or developed. These three pillars/dimensions are strongly interlinked and therefore, an intervention in one of the three mostly has impacts on the other two. Time plays a crucial role for sustainable development, as each act of sustaining or developing will last for a certain time. Environmental resources for example can be sustained for one generation, two generations or more. Building an infrastructure to sustain health has a certain aspect of development, but also of sustaining. Measures need to be taken to

ensure that this standard can be hold over a longer time. The dimension of time of sustainable development is often measured in terms of generations, as the ultimate goal of sustainable development is to ensure the stability and well-being of current and future generations. These three pillars of sustainable development are strongly influenced by the impacts of the climate and vice versa. Therefore, climate change vulnerability or resilience is influenced by high or low standards of these dimensions.

The following aspects were identified as crucial to develop and sustain the social and economic dimension in the agricultural sector. The diversification of income possibilities for the agricultural sector was understood as crucial when building resilience to climate change. This means crop diversification needs to be promoted to ensure food security and socio-economic well-being. Especially crop intensive agricultural systems need to diversify income generating activities, but also food production possibilities, to ensure more food security and a better economic stability. Youth plays an extremely important role in the sustainability of practices but also in ensuring food security and socio-economic stability. Youth should be targeted by any intervention in the agricultural sector for reasons of increasing sustainability (multi-generational approach) and to decrease socio-economic instability in the future that is strongly linked to vulnerability to climate change. Women, youth and other marginalised groups or minority ethnic groups should ideally be included in project identification, design and implementation face to ensure that their needs are met and that they can be empowered through the project/programme and equality of opportunity is increased. For the same reasons, different generations should be equally included in project beneficiaries and knowledge transfer activities same as men and women should be equally included. Ideally, indicators should not solely be disaggregated by gender but also by age groups. Potential future needs to welcome migrants to the community should be addressed and necessary measures should be taken to ensure that migration away from the community does not need to happen due to a lack of opportunities in the community for youth or due to food insecurity or the lack of other life sustaining resources. Access to energy should be given if possible, to allow further development regardless of the project activities, due to the new opportunities that are provided through the access to energy. Inside fireplaces should be replaced with more environmentally friendly and less health damaging solutions. If child labour or child marriage practices are detected, measures to address drivers of these circumstances should be taken. Education is crucial for human development, therefore a schooling for a minimum of nine years should be provided, as this is also the average standard in developed countries. The growth of the network of the community through other communities, civil society organizations or the government is essential to ensure social protection. The introduction of early warning mechanisms for extreme climate events or other negative impacts such as pests and diseases. The development and sustaining of the following aspects defining the social and economic dimension are essential to sustainable development. The social dimension is defined by a combination of needs and basic rights. Individual needs are health, decent work, social protection, empowerment and capacity building, and mobile assets. Other, basic needs are access to water, food, energy, shelter, infrastructure, transport and security. Social needs are equity and social inclusion, human rights, participation in governance, cooperation and solidarity, and education. The economic

dimension is also defined by a combination of needs and basic rights. As needs can be identified fair income, access to markets, access to finance, access to land and access to property. To ensure that economic and social dimensions of sustainable development projects have equal effect on men and women and multiple generations, data collected need to be disaggregated by sex and different age groups.

4.2. Hypothesis 2: No reflection of the social and economic dimension

The second hypothesis is that the social and economic dimensions of sustainable development are not reflected in the requirements (evaluative criteria) of the IFI.

To understand how and if the social and economic dimensions of sustainable development are integrated into the evaluative criteria of the two IFI a difference needs to be made between the objectives that are set, formulated impact/results areas and in the way the institutions measure progress against these results areas through mandatory indicators for projects/programmes. The analysis indicates that the GCF makes a difference in addressing the three dimensions of sustainable development in mitigation and adaptation in the objectives as well as in the indicators for results and outcome areas. The GCF differentiates in the way that mitigation is defined as solely addressing the environmental dimension of sustainable development and adaptation as only addressing social and economic dimensions of sustainable development — highly dominated by vulnerability to climate change, see Figure 18 (results areas and logical/results framework M&E of GCF level results and outcomes).

The results areas (focal areas) of the GEF are not divided between mitigation and adaptation, but between biodiversity, mitigation, land degradation, international waters, chemicals and waste, and adaptation. Climate change adaptation is formulated as mainly reducing vulnerability through mainstreaming and fostering enabling conditions for a large-scale impact. It is not defined how vulnerability should be reduced or how vulnerability is defined under the GEF. The only measure mentioned in the results area formulation for the reduction of vulnerability is technology and innovation transfer.

While the PIF does not mention the word development, it focuses on sustaining the environment in the list of core indicators. The word count of the focal areas suggests that the focus of GEF is to sustain, manage, mainstream and enable. The GEF addresses parts of the social and economic dimensions in the formulation of the focal areas (results areas) for biodiversity, mitigation, land degradation, international waters, and chemicals and waste. Parts of the focal areas are formulated to “sustain food production and livelihoods”, “sustain livelihoods of forest-dependent people” (land degradation), “strengthen blue economy opportunities” (International Waters), “advance information exchange and early warning” (international waters), “investments in water, food, energy [...] security” (international waters), “strengthen the sound management of agricultural chemicals” (chemicals and waste) or “promote innovation and technology transfer” (mitigation). According to this wording, GEF wants to sustain livelihood but development is not considered, if it is not sufficient. Furthermore, GEF plans to invest in water, food and energy security in the context of freshwater ecosystems and water security, but not in other contexts. Management of agricultural practices shall be changed, and innovation and technology shall be transferred. All these actions intervene with the social and

economic conditions of human beings, but the humans affected by these changes, do not seem to be taken into consideration. Hence, all these aspects interfere with social and economic dimensions of sustainable development, but this does not seem to be taken into consideration in the PIF.

Nevertheless, in the GEF ten out of eleven mandatory core indicators —not mandatory for projects focussing on climate change adaptation—to measure project/programme results focus on environmental dimensions of sustainable development. Such as hectares of land and water restored or protected, marine habitat increased, and emissions mitigated.

The eleventh core indicator, which is measuring the number of direct beneficiaries disaggregated by gender of the project, is the only indicator measuring the affect that GEF projects have on people. The definition of this indicator is broad by stating that direct beneficiaries are all individuals who are aware of receiving targeted support from a project. Only the last indicator considers that people are affected by the interventions of these projects or programmes. Nevertheless, the eleventh indicator does not evaluate what aspects of the social or economic dimensions of the ‘beneficiaries’ lives have been sustained, developed or even worsened through the intervention. There are always certain trade-offs in intervening into people’s lives and these are not evaluated by the PIF.

The GCF uses similar main indicators for mitigation and adaptation as the GEF. For mitigation, this is tonnes of CO₂ equivalent emissions mitigated at GCF-level results indicator and for adaptation, this is the number of direct and indirect beneficiaries in numbers and the percentage of the population this represents.

The GEF seems to consider social aspects of projects mainly through the inclusion of different stakeholders and groups during the project identification stage. In contrast to this, the GCF provides a way to assess effects on the beneficiaries more appropriately, by breaking down adaptation into four major dimensions that can be matched with eight detailed indicators for GCF-level results and outcomes.

The GCF includes social and/or economic dimensions in different parts of the project design and implementation. Social and economic aspects of the project assessed in different parts of the funding proposal of the ESS category and assessment, the climate rationale, the theory of change, the exit and sustainability strategy, the capacity building and technology transfer, the impact potential, paradigm shift potential, sustainable development, needs of recipient, the civil society inclusion of country ownership, efficiency and effectiveness, the risk assessment, the gender assessment and action plan and the disclosure form.

While the GCF provides quite clear evaluative criteria for the administrative, environmental and financial assessments of the project, less clear evaluative criteria are given on how economic and social dimensions should be included in projects. Ex-ante assessments are requested but no methodology or approach for these is provided and no minimum standards are specified.

The PIF of GEF asks the applicant to identify social, environmental, climate and financial risks but does not provide clear criteria or standards on how this should be done. While the GCF provides a list of financial, economic and social risks that should be taken into consideration and a table to put these risks into categories

and assign probability and possible impacts to these risk categories. GCF does not provide a technique to assess these risks but starting points of what could be identified as risks.

It seems as if both the GEF and GCF do not consider social return on investment when analysing costs and benefits of projects.

The main evaluation for the gender criteria of GEF is whether the gender gap is addressed or measures to empower women and promote gender equality are included in the project. Three possible results areas are proposed: the closing of the gender gap in access and control over natural resources, the involvement of women in decision-making and the generation of socio-economic benefits or services for women. In addition, it is asked whether the project includes gender sensitive indicators and whether there are plans to address gender in project design. It is not clear whether these questions are asked because a certain consideration of gender is mandatory or to give the applicant the opportunity to state this aspect of a project. The option of to be defined suggests that this is not a mandatory criterion for funding decisions. A mandatory use of gender sensitive indicators would be an effective way to force the Accredited Entity to consider gender at project design but does not imply any improvements in gender equality. It is confusing that it is asked whether there are plans to address gender in the project design, as this project design has already happened at the stage of application for funding. The criteria of including measures to promote gender equality or empower women is easily fulfilled when one woman is empowered, or gender equality is reached at one meeting. Therefore, also this indicator most probably not fulfilling its purpose.

The GCF adds an additional dimension to sustainable development, which is gender co-benefits and the context of the wording indicates that it mainly focuses on improving, hence developing and not sustaining.

Gender is considered by GCF as a crosscutting issue and an assessment approach for this is provided, so gender equality will be addressed, but no approach to identify and take into consideration other vulnerable groups, such as children, youth, elderly, disabled and ethnic minorities is provided. This gives the Accredited Entity the possibility to overlook these groups, based on a lack of awareness of the need of empowerment, potential and special consideration of these.

Both institutions integrate gender into their evaluative criteria. The GCF asks for a detailed gender assessment and gender action plan and refers the institutions gender policy and to an annex that gives instructions on how this analysis and assessment should be made. The GEF asks the applicant to include briefly relevant gender dimensions and refers to three different documents for further information. No instructions on how these dimensions can be identified are given in the PIF or 'GEF7 How to'.

In general, evaluative criteria for the ex-ante assessment of social and economic dimensions of projects are ambiguously indicated and both institutions refer to some documents for assessment instructions instead of providing clear criteria that need to be met to ensure good quality assessments. Reference is made by both institutions on policies on indigenous people, gender and other local communities, they both ask which other stakeholders are involved in the project, but no clear instructions are given on which criteria need to be fulfilled and how.

The analysis confirms that social and economic dimensions as defined in this work are not fully integrated in the evaluative criteria of the GCF and GEF. Nevertheless, many aspects of the social and economic dimensions of climate change are reflected in the evaluative criteria of the GCF. The institution, while not clearly requiring all aspects that are part of the social and economic dimensions as defined in this work, requires broad consideration of the social and economic dimensions, so that the Accredited Entities receive enough freedom to include the social and economic dimensions as defined in this work.

The findings indicate that social and economic dimensions are barely integrated in the evaluative criteria of GEF, while there are clear indications that the evaluative criteria in form of results areas and core indicators will affect the social and economic dimensions of sustainable development. However, because the evaluative criteria of GEF are formulated so ambiguously it gives space for integrating these dimensions while still addressing the core indicators and focal areas of the IFI.

While leaving options open to include social and economic dimension as defined in this work into project proposals, improvements need to be made to integrate fully social and economic dimensions into the requirements of the analysed IFI.

4.3.Hypothesis 1: IFI have evaluative frameworks

The first hypothesis is that IFI have evaluative frameworks.

The findings of the document analysis indicate that the design of funding proposal forms of the GCF and GEF is strongly aligned with measuring progress against institutional objectives and reporting of allocation of financial resources at institutional level. Hence, a major part of the funding proposal forms asks for information on the exact spending of the funding by the institution and other co-financial resources per output, outcome and impact of the project/programme. These results areas or impact areas are based on the objectives set for the GCF and GEF by the governing body of the Financial Mechanism. As the work of the Financial Mechanism is to allocate the financial resources paid under the agreements of the UNFCCC, the objectives of the GCF and GEF must be aligned with the objectives of the UNFCCC. When the institutional objectives were defined for the GEF and GCF, the agreements made through the COP were interpreted differently. While the GEF and the funds that it manages — SCCF and LDCF— have an overall major focus on climate change mitigation, the GCF has the aim to allocate resources equally for climate change adaptation and mitigation. This different focus of the GCF on equally adaptation and mitigation is transparently communicated on the website and in policies, as well as the project proposal form. It is not clear why two institutions working for the same objective of allocating funding according to the objectives of the UNFCCC agreements give different weight to the aspects contributing to these objectives.

Overall, the GCF provides more detailed and transparent evaluative criteria than the GEF and is more transparent in decision-making, by disclosing all funding proposals on its website. Both institutions would highly profit from a more detailed step by step guide that provides definitions, clear standards or minimum criteria and clear standards on how the different assessments necessary to fill out the form should or can be

done. Tools that must be or can be used for calculation and information on how they can be accessed, should be provided directly in this document.

In general, it was not transparent based on which evaluative criteria the GEF assess whether a project is eligible for funding or not. The results areas (focal areas) are formulated ambiguously and the mandatory core indicators measure only small aspects of the formulated expected results. No guidance is given how quality of projects is assessed and ensured. Part I is organised in different tables, that ask the applicant to fill in information. These tables are not always clear, as for example Table B with the headline to fill in the indicative project description summary. A project objective, project components, project outcomes and project outputs need to be provided, but it is not clear what information is exactly expected in these columns or how one should obtain this information. No further guidance on this is given in the 'GEF7 How to'.

While Part I of the PIF mainly focusses on the project's alignment with focal areas and core indicators and the financial allocation to focal areas, part II focusses on the 'project justification'. While it can be guessed, which core indicator could be matched to which broad focal area (biodiversity, mitigation, land degradation, international waters, and chemicals and waste) it is not clear how they can be matched to the different sub-areas and if there is an indicator for each sub-area. Even though an architecture of mapping the impact programs to the focal areas was found in one of the documents to which the 'GEF7 How to' refers, it is not clear how information on these overlaps is supposed to be filled into the PIF. One of the questions of Part II asks for the project/ programme with impact programs or focal areas, which makes it seem like the applicant can choose between aligning with the impact program or the focal area, but in the other parts of the form only the focal areas can be indicated, as in the allocation of funding. Questions in the project justification part are broadly formulated and no guidance is given on how these can be answered to demonstrate that the project fulfils the evaluative criteria of GEF. It is not clear based on which criteria GEF will decide whether a project receives funding or not or how quality is ensured. It is unclear how the institution wants to evaluate whether the baseline scenario is complete, if the theory of change is reasonable and if the logical or results framework follows a certain standard that can ensure quality outcome.

The 'GEF7 How to' is the document to which the applicant is referred to for additional information on how to fill out the PIF, unfortunately it barely gives additional information and makes reference to different types of documents for further information instead of providing clear guidelines on what is expected from the applicant. Many of these linked documents (some links are not available anymore) are outcomes of meetings, which makes it hard for external users to identify the relevant information. Reference to policies such as the indigenous people policy is made but no instructions on how this policy is appropriately implemented are given.

For these reasons, it is unclear how the projects will be evaluated. The criteria identified were that focal areas need to be addressed and that the project needs to use the core indicators, but it is not indicated how many indicators must be used in order to fulfil the evaluative criteria of GEF. Country ownership is a clear criterion for GEF, and it is defined by the alignment of the project with national plans and strategies and by

the fact that projects and programmes are on country level. It seems that it is assessed whether, the Rio Markers for Climate, risks, innovation, sustainability, potential for scaling up, gender, private sector, coordination, other stakeholders and consistency with national priorities were taken into consideration, but it is not clear how GEF will evaluate whether they were appropriately taken into consideration. The exact location of the project interventions seems to play an important role, as the map and geo-coordinates of the area need to be provided. Global environmental and/or adaptation problems, root causes and barriers need to be addressed, but no criteria on how this is done according to the evaluative criteria of GEF are given.

The GCF provides much more transparent evaluative criteria and guidelines to ensure quality of project design. Nevertheless, the GCF is clearer for some evaluative criteria than for others. The GCF gives clear indications on the wording and page number within which answers must be given. For each headline, a list of questions and keywords that must be addressed is provided. The User's Guide for the Concept Note provides definitions mainly for acronym and gives additional information for some parts of the funding proposal form to understand better the evaluative criteria.

The core evaluative criteria identified were results areas, the dimension of time, financial aspects, country ownership, the logical/results framework, the paradigm shift potential, sustainable development potential, needs assessment, efficiency and effectiveness, risks and risk management, and compliance with GCF policies and standards.

Mandatory results areas of the GCF are clearly matched to indicators that are broken down in outcomes that can be matched to outcome indicators at GCF-level.

Detailed information on the results framework and logical framework is asked and the use of a theory of change is mandatory. Different results and outcomes combined with indicators can be provided for GCF-level than for the project level, which makes it easier to differ between these two and allows the applicant to be more transparent on how the project level results contribute to the GCF level results. An implementation timetable needs to be provided and the coordination on interim and final reporting needs to be explained.

The criterion of time evaluates the implementation period, the total lifespan in which the project will be effective and the exit strategy and insurance of long-term sustainability after project closure. This would normally be considered a dimension of sustainable development.

The criteria of finance assess the allocation of funding to each step of the logical/results framework, the trustworthiness of the entity overseeing finance and the financial management and procurement system.

Country ownership is evaluated based on the ownership on government level and the ownership on civil society level, which adds another dimension to country ownership than the one GEF uses.

Transparency for the purpose of this work was defined as the quality of being clear, obvious and understandable without doubt or ambiguity. Evaluative criteria were defined as being a checklist to assess whether requirements are fulfilled.

To answer the main part of the hypothesis it was analysed whether evaluative criteria are transparently communicated by the two analysed IFI, by trying to identify the evaluative criteria. It was found that the evaluative criteria of the GEF provided in the project application document are ambiguous. Nevertheless, some criteria could be identified, as for example the need for alignment of the project with the institutional objectives that are reflected in the focal areas and the mandatory use of core indicators. Other criteria were identified, but only ambiguous ways on how they might be evaluated. Definitions for words are not always clear, as they are used differently by institutions. The guidance in form of the 'GEF7 How to' that refers within documents to other documents that lead the reader to other documents, make it hard to identify more concrete criteria and key aspects that need to be addressed and do not make evaluative criteria transparent.

The GCF provides more detailed guidance and criteria on how the different questions need to be answered and is in some respects detailed and concrete on what is to be addressed in the answer and how detailed it must be. Nevertheless, in some requirements such as the environmental and social risk assessment, no clear guidance is given in the funding proposal or User's Guide on how this can be appropriately assessed and reference is made to the website that provides no key insights but refers to other documents for more details. Therefore, the hypothesis can be partly confirmed. The decision-making of the GCF is transparent in the way that it makes approved funding proposals publicly available, while the GEF does not do so. Therefore, the GCF is transparent in decision-making and the GEF is not transparent in decision-making.

4.4. Ethical considerations to accompany socio-economic measurement

This work does not aim to give the reader the solution to the right approach to just measurement, as the accounts for equality can be different depending on one's ethical framework, but this work aims to highlight the fact that all practices of measuring human behaviour or development have ethical implications. To be fully transparent on one's measurement practices one needs to be transparent about the philosophical motivations behind the selected measurement technique. The chapter on the ethical implications of socio-economic measurement discussed several different aspects that are crucial for suggesting how funding for the socio-economic dimension of sustainable development projects can be best addressed. First, there are some major points to make how the ethics are strongly interlinked with sustainable development work and the decision-making of IFI. Measurement and its findings are not solely a tool to increase trust through transparency and accountability of decision-making, but measurement in the context of requirements of IFIs is a normative tool. It uses criteria to assess whether an objective is achieved or not, and these criteria equal what is considered right or wrong. Wrong equals the lowest baseline and right equals the objective to be achieved. Requirements for standards of project applications on social and economic measurement of projects set standards for actions and practices. Different practices of measurement can have different ethical implications that are not always visible when someone looks at the results of the measurement.

In the following discussion, different ethical aspects that need to be considered when addressing the socio-economic dimension are addressed. Different theories of justice in governance plays a great role, to give priority to certain, and not other measures in sustainable development interventions, as well as in the priority

that should be given to different accounts of well-being to achieve the best trade-off between them and if inequalities in these different accounts should be addressed with ex-ante or ex-post adjustment. These considerations will be addressed later more in detail.

The literature review of this work introduced different theories of justice based on which governance decisions can be made to increase overall well-being. These theories — utilitarianism, liberal equality and libertarianism — all build on a different premise of what well-being is and provide different methods to reach the highest overall well-being.

The account for well-being of utilitarianism is utility and the method used by utilitarian's is utility maximization. The morally right action will therefore be the action that produces the greatest overall well-being for all members of society. This means morally right actions that lead to more happiness or well-being for the majority of society, independent if they were enjoying a better or less good level of livelihood before that action.

Libertarians see individual freedom as both, the major priority and the main account for individual well-being. Therefore, they defend free markets and oppose redistributing resources between members of society. The method to achieve the highest well-being of people is hence to lower restrictions and government interventions to the minimum, so that the focus of these will be solely on protecting individual freedoms and resources. To transfer the resources from one individual to another in the context of this theory should be solely based on the decision of the individual.

The role of the individual in a state governed by a libertarian government, corresponds to the role of countries in libertarian international governance in relation to climate change and market restrictions. Without international agreements, each country can use its own resources and land in sustainable or unsustainable manners, without paying attention to the effects this will have on the planet and the potential use of resources of other countries. In both systems where the individual or the country has unrestricted power over its fairly or unfairly acquired resources, it leads to great differences in power and wealth, between individuals or countries, and uncoordinated collective actions.

Unrestricted actions of countries do not provide the right approach to govern a tragedy of the commons such as climate change. International agreements are necessary, to ensure that each country makes the same effort to stay within the planetary boundaries and therefore the greatest individual liberty (of the country) cannot be the right measure to achieve the common objective. This leads to the need to consider the common well-being and a sort of equal treatment to achieve just distribution of responsibility and actions to save our planet. This need for equality also leads to a need to consider current inequalities and capabilities in approaching climate change, which makes redistributive measures to countries with less political power and financial resources to equally tackle the problem of climate change, necessary. This additionally excludes libertarianism as a solution for international governance in a time where climate change and the planetary boundaries are undeniable. The fact that international governance of property and ownership are not restricted

or governed unless an international agreement is made shows that there are similarities and potentially similar flaws between barely restricted international governance and libertarianism.

The libertarian approach to international actions has led to great differences in political and economic power of certain industrialized states, which received this power due to the free market and not necessarily fair acquisition of resources and land. Currently a small number of countries have great power in international decision-making and the negotiation of international agreements. This leads to the fact, that these countries can use their power to stay powerful and make decisions that are more favourable to their own interests and less to the interests of the poor and less developed countries which are mostly more vulnerable to climate change. Before international agreements were in place, many industrialised nations have highly profited from minimally restricted markets and international unrestricted use of the resources of the common planet earth. Nevertheless, this has led us to one of the gravest tragedies of the commons – climate change.

This work will not analyse more in detail how these inequalities in international decision-making can be addressed, but how international agreements combined with theories of justice can provide standards for decision-making in sustainable development interventions.

Contrarily to libertarianism many countries' governments have clearly recognised that certain redistribution and restriction mechanisms are necessary to address collective action problems that lead to tragedies of the commons. International initiatives under the UN reflect objectives of equal treatment and consider human rights that do not support the implementation of extreme libertarian accounts for well-being on an international level. International agreements regarding climate change try to solve the problems that were created by putting too high emphasis on the liberty of each country to decide on its use of resources. The example of the prisoner's dilemma gives us an understanding of why collective action without agreements and enforcement mechanisms can fail. Liberty as sole account for equal treatment, without 'mandatory' international redistribution of resources (money etc.) is not feasible for international governance in the Anthropocene, as it would lead to aggravation of current problems. These problems are *inter alia* that people in poor socio-economic circumstances are most vulnerable to climate change, but poor socio-economic circumstances are also strong drivers for practices that aggravate climate change. Therefore, redistribution is unavoidable when addressing climate change. International agreements under the UNFCCC lay down how responsibilities and resources can be differently distributed so that climate change can be properly addressed. The Financial Mechanism under the UNFCCC plays a crucial role in this redistribution to allow for more successful climate change mitigation and adaptation also by developing countries, who are overall most vulnerable to climate change.

Before addressing other ethical considerations, the use of vulnerability in the context of climate change needs to be discussed. Dividing countries or social and economic aspects by their vulnerability to climate change impacts is ethically problematic, as it 'brands' certain people or communities and aspects of human life (social and economic) as more vulnerable. But a coin has always two sides, these individuals, communities or countries also can develop and sustain and therefore are not only vulnerable, they are also capable. Yes,

vulnerability is one aspect of climate change and some individuals are more vulnerable than others and therefore need to increase their capacity to develop and sustain social, economic and environmental aspects to become more resilient or less vulnerable. Branding people as vulnerable could give the impression that they are not capable of changing circumstances and are fully dependent on the 'less vulnerable' nations, but this is just a question of perspective. Nevertheless, it also indicates differences in power, hence the vulnerable depending on the less vulnerable, which always comes with a risk of the powerful exploiting these powers and trying to reform the vulnerable in a way that is of more benefit to the less vulnerable. People become aware of their capabilities if they become aware of their circumstances through knowledge.

Liberal equality tries to give equal concern to liberty and equality. Rawls and Dworkin both developed theories to address this objective of providing people with liberal equality. In Rawls theory of justice, the aim is to distribute all what he calls social primary goods, such as liberty and opportunity, income and wealth, and social bases of self-respect, equally between individuals, unless an unequal distribution of any or all of these is to the advantage of the most vulnerable. This can be interpreted as giving the less well-off a veto power over community decision-making. This approach suggests that justice can be implemented by applying the two principles to the main institutions by using priority rules. The first principle states that each person should enjoy the most extensive liberties compatible with similar liberties for the others. The second principle argues that social and economic inequalities should be to the advantage of all. Nevertheless, the greatest priority must be given to liberty and justice and second to welfare and efficiency. Rawls' social primary goods are distributed by social institutions, such as income and wealth, opportunities and powers, and rights and liberties. Natural goods are affected by social institutions but are not directly distributed by them, such as health, intelligence, vigour, imagination and natural talents. His system aims to ensure that no one gains or loses from his arbitrary place in the distribution of natural assets. The main aim of Rawls is to give people equal opportunities in life, by giving people born with different natural talents and backgrounds the resources they need to take similar opportunities. Dworkin tries to supplement this aim by, adding social insurance schemes to the idea of equality of opportunity, so that natural talents or natural disadvantages can be additionally balanced. How decision-making, for projects, to sustainably develop can learn from these different theories of justice will be explained in the following. The last sub-chapter in the literature review on justice of governance stated that justice theories agree upon the fact, that we should not try to intervene in human lives by directly changing human body, through for example changes in the DNA or other changes in the human system, but that we should only try to change what surrounds the human body, to allow equal opportunities. Therefore, we should not modify human genes, so that they are not hungry, but we should provide food so that people are appropriately nourished.

Both Rawls and Dworkin, but also other philosophers such as Kant, Locke, Rousseau and Hobbes base their theories on the idea of a social contract, where societies agree on a moral basis of living together trying to give equal concern to all people born with different natural talents in different circumstances. This social contract should provide the basis to decide how the similar opportunities can be given to people that were

borne into less well-off or better circumstances. While Dworkin and Rawls both thought that ideally the world would need a 'reset' to fully ensure that such a social contract can be made without any bias in favour of the conditions of the people agreeing on the contract. International agreements can be seen, not as a 'reset' but a contract between international actors to ensure that the agreed upon, international consensus on equal concern and prioritisation of actions, is implemented. These contracts or agreements are used to address societal imbalances and problems.

The international consensus of the ideal of equal concern in sustainable development regarding climate change is laid down in international agreements under the UNFCCC.

These agreements represent an international consensus of what is considered as just an unjust and set priorities, which can be concretised with the help of additional justice theories and ethical considerations. Hence, what lays the foundation for giving priority to certain measures (adaptation/mitigation) in sustainable development interventions under the UNFCCC framework are the 'social contracts' that were made in the form of international agreements by the international community to resolve the tragedy of the commons. The planet earth, even if divided in continents and countries with different governments is a common space that we all share. Every individual living in this world depends on the health and stability of this common space for survival. Nevertheless, we destroy the planet we live in by consuming more resources per capita than this planet can support and through the vast amounts of greenhouse gases we emit we accelerate the process in which the world turns into a common space that will be uninhabitable for human beings. To resolve this tragedy of the commons international agreements were made under the framework of the UNFCCC. These agreements have the ultimate aim to mitigate emissions to a level where greenhouse gas concentrations in the atmosphere are stabilised so that dangerous anthropogenic interference with the climate system is prevented. As countries recognise their common but differentiated responsibilities in this tragedy, developed countries have other responsibilities than developing countries for overstepping the planetary boundaries as well as in mitigating emissions to return into the planetary boundaries. Therefore, developing nations receive support in form of funding for adaptation and mitigation project and programmes to promote sustainable development.

Access to land and resources play a crucial role in the well-being of especially rural people. Much like land also every other natural resource was at one point no one's property and was claimed by humans to become their property. As it was stated in the sub-chapter on libertarianism historically most natural resources became people's property by force and not through rightful acquisition. A system without any redistribution would lead to the naturally disadvantaged to starve because they have nothing to offer in free exchange and for children to live without education or health care when they are born into a poor family. Therefore, organizations such as the UN are working towards goals such as more equality and zero hunger. International agreements provide frameworks within, which to equalize rich and poor, people that. In the case of the UNFCCC, the focus is set on the inequalities in the capacity to adapt to and mitigate climate change. Climate change can be explained partly with the problem of the 'tragedy of the commons', which means that we, must

find collective responses in order to preserve common resources from depletion and prevent negative externalities.

As mentioned before, the concept of resource distribution is a concept that is inherent to many theories of justice. The concept of paying for the mitigation of and adaption to climate change by the developed countries for developing countries can be interpreted as a form of redistributive justice, as the polluters (which made the profit of economic growth) pay for the damages, but also reflects the ethic idea of collective responsibility. The involved parties must minimize the adverse effects the economy, public health and the quality of the environment when taking measures to mitigate or adapt to climate change in developing countries. The convention also states that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties. Consequently, when allocating funding to projects in the light of the objective of the UNFCCC, the Financial Mechanism should give priority to social and economic development and the eradication of poverty. These objectives are expressed in the convention. We have learned before, that the social and economic dimension of sustainable development projects is always impacted when mitigating or adapting to climate change. However, social and economic development and the eradication of poverty, as well as the promotion of public health can only be fully ensured when equal emphasis is put on adaptation to and mitigation of climate change. This formulation in Article 1, 3 and 4 of the UNFCCC convention provides us with a way of prioritizing aspects that sustainable development projects funded by the Financial Mechanism should have. This prioritization should be also demonstrated in the allocation of funding that goes to these aspects of projects. Therefore, “overriding priority” of funding should be allocated to the outcomes affecting the social and economic dimensions of sustainable development and a comparative smaller share of funding should go to the outcomes of projects influencing the environmental dimension of sustainable development. The literature reviewed to define the social and economic dimension showed that the environment plays a great role in many aspects of the social and economic dimension, especially in the agricultural sector and in rural areas. Examples for the impacts that the environment has on the social and economic dimensions are access to clean water, access to fertile land, access to ecosystem services, nutrition and food security (depends on inter alia biodiversity, fertile land, water access, infrastructure and diversification of agricultural production). From this can be learnt, that the impacts on social and economic development should be put first in measures taken by projects and programs, but never by worsening aspects such as long-term access to clean water, access to fertile land, access to ecosystem services, nutrition and food security. Similarly, this is applicable for the environmental dimension of sustainable development, which means that environmental development never should make the community in which the environment is developed, or emissions are mitigated socially and/or economically worse-off than before. If changes in practices are needed that will decrease the income of the community or household then other ways of generating income need to be established, to ensure economic stability. These findings show that cost-effectiveness of mitigation practices is not in the interest of neither the target community nor the Financial Mechanism of the UNFCCC if it leads to worsening economic or social conditions. Another aspect of the

social contract made in form of an international agreement under the UNFCCC by countries is the problem of collective action. While in the short term, it might be in the interest of countries to violate such an agreement to get the most benefits of a common space \rightarrow the planet \rightarrow in the long run all involved parties' profit most from complying with it. An important variable in the willingness to comply with an agreement in which there are no drastic legal enforcement mechanisms is trust, as it was learned from the game theory that people have no reason to cooperate when they do not expect the other involved parties to comply. It was learnt that trust could be gained through transparency in decision-making. Here the dimension of time might help the prioritization of decision-making. We will discuss this dimension more in detail at a later stage.

It was found that there is no empirical research free from normative considerations, as there are no objective metrics/ways to assess certain values, which indicates that there are no objectively chosen measurement methods of human beings. As it was said beforehand, there is not objective or simple solution to measuring what the best intervention for mitigation of or adaptation to climate change is. If this information is not openly accessible, interpretations of indicator-data can hardly meet the actual meaning and a lot of 'false' knowledge can be created. Different systems of value that are the basis for this type of decisions should be made visible so they can be compared and evaluated, according to international consensus. This makes transparency of why a certain evaluative criterion was defined and is measured to represent a certain aspect of human life essential in international governance.

Being transparent about decision-making and measurement on which decision-making builds, is considered as ethically correct, as it allows involved stakeholders to intervene, it shows political and power implications, and it decreases the chance for corruption and manipulation of people. Often the motivation for measurement is to make circumstances more comparable, but the same circumstances can be different in varying cultural backgrounds and the same indicator might need to be measured differently in different societies to measure a similar circumstance. Not solely the measurement method of an indicator has ethical implications, but also the labelling. Other ethical issues of practices in relation to the collection and use of data are missing data, data corruption, data gaming and measuring what can be easily measured instead of measuring what matters.

The findings of this work on the evaluative criteria of financial institutions show that they measure how many beneficiaries a project has directly and indirectly. Beneficiaries are defined as individuals who are aware of receiving targeted support from a project. This is a typical example of measuring what can be easily measured instead of measuring what matters. This measurement might give us an idea of how many people have been affected by the project interventions, but it does not provide any further information on how they have been affected by the project. It is assumed that everyone that is a beneficiary benefits from the project but being targeted does not always mean that there will be an actual gain in terms of quality of life and well-being of that person. Being targeted by a project can also have negative impacts on the person, which might outweigh the positive benefits that this individual might receive.

Another example is, evaluating practices of mitigation of emissions by their cost-effectiveness has the implication that it is more important to sustain the environment to the maximum possible under the lowest financial costs, than to sustain the environment to possible maximum under the lowest costs of human well-being. Practices to measure the cost-effectiveness of a mitigation on a global scale follow utilitarian decision-making in which the greatest utility for all can be achieved independent from the effect it has on the individual level. Low financial costs mostly have social costs. Deciding for the most cost-effective solution can have negative social impacts, as for example the support of a too low salary keeping the worker that produces the machinery on the edge of survival, which is used to mitigate emissions from agricultural practices. In the context of this work, two major approaches show that this is not in the interest of international agreements to do so. First, if equality and equity are considered as ex-ante mechanisms in form of equality of opportunity such as in the theories of justice of Rawls and Sen, then this practice deprives the worker of his freedom to be the agent of his own life and is therefore unjust. Second, the social, economic and environmental dimension of sustainable development must be considered equally to allow all individuals in developing countries to develop sustainably. If priority is given to the sustainment of the environment on the cost of the worker living from the low salary, which keeps him on the edge of survival, this is not in the interest of sustainable development. It would neither sustain or protect (well-being) nor develop or progress his social or economic circumstances, but further drive social and economic inequalities, which were demonstrated to be drivers of bad environmental practices. This shows that emissions would be cheaply mitigated on one end and on the other end; this would drive bad emission practices. This demonstrates that financial cost-effectiveness is not in the interest of international climate agreements, nor a just practice, and additionally it breaches the human right of being one's own agent. Autonomy is one of the basic ethic values that constitute the cornerstones for human rights. An autonomous person is defined as free to make personal choices and set goals. Another closely related value is to be your own agent. One must be able to act according to the personally set goals, if people do not have the capacity to be an active agent in their life projects; they are lacking basic human rights. It is the aim of human rights to defend the right for a basic degree of material well-being and security, for the vulnerable people before the authorities. Another example is the negative impact on the farmer that changed agricultural management practices to be more environmentally friendly, but now produces less amounts of food or has a lower income which can put his own and the survival of the community for which he produces at risk. Therefore, if cost-effectiveness analysis is made for interventions they should always be combined with a social and economic cost analysis of the people impacted by the intervention. One way to do this analysis is directly asking the 'beneficiaries' of the project how they will be socially and economically positively and negatively impacted by the intervention. Considering cheaper products, which are supporting exploitation of labour for sustainable development projects is an ethical question. The financial institution funding the project but also the Accredited Entity should ask themselves, whether it is really in the interest of sustainable development to support sustainable development in one community, region or country, while supporting negative unsustainable practices in another country.

Another important area of ethics for international development work is the topic of responsibility for people's circumstances and the degree to which people can be held responsible for their own circumstances. On the question on what we need to be able to hold people responsible for their own life situation theories of justice provide different answers. One is, that even if we equalize the initial starting point from which people have equal opportunities and they make certain decisions based on these opportunities, still nobody has the ability to know about future events and how they will lead to a different outcome of the choices, than it seemed in the beginning. Don't people need to have this information to be fully held responsible for their life choices? This is why philosophers such as Dworkin think that it is not solely important to provide equality of opportunity as a starting point in life, but also to provide social insurance mechanisms as safety nets if decisions are affected by unpredicted future events in a way that the outcome was unforeseeable.

The measurement of socio-economic dimensions for improving their well-being, as it is in the case of ex-ante measurement of projects, creates several normative questions:

- What is well-being?
- Which level of well-being is to be achieved?
- How can different accounts for well-being under the socio-economic definition be prioritised to help in the decision-making for project implementers?

Rawls, believed that in order to achieve justice, different accounts of well-being need to be taken into consideration, but it also implies to renounce to consider the increased wealth of the society as the only feature that we should take into consideration. In fact, Rawls second principle states that what matters is that the distribution of economic and social gains should never be to the detriment of the worst-off in society. The worst-off in this case of climate change impacts are those most vulnerable to climate change. It was understood from the definition of the socio-economic dimension that this vulnerability is highly due to multidimensional inequalities in social and economic factors... Extending Rawls's idea, we could say that when we think about sustainable development projects related to climate change, we should also be sure that the activity implemented will empower those most vulnerable in the community. The dimension of time of sustainable development can help to understand when the environmental pillar is compromised and for how long certain environmental aspects of well-being need to be ensured to comply with the criteria of sustainable development. Sustainable development has the aim to develop and sustain without compromising future generations, which means that certain standards of well-being should be ensured in the long term. To take justice and sustainable development considerations into account the right balance needs to be found between the needs of future, young and older generations. However, which period and measurable standards need to be set to follow this principle in projects? Long-term impacts of projects need to be made mandatory, by setting a minimum standard of generations that need to be positively impacted by the project. The minimum standard could be set at 70 years, which is slightly below the average life expectancy. However, if multiple generations should be tackled, for example a family of four: one new-born baby, father and mother 35 years old and a ten-year-old child, then multiple generations would have to be at least 90 years to have minimum two generations fully

profit, and 110 years for three generations. Therefore, it is suggested that an indicator for long-term sustainability of projects is introduced to measure the aspect of time of sustainable development. As it is unknown, which changes will happen in the future this would have to be measured based on the lifetime a project impact can have in the current circumstances. For these reasons, it is suggested to set a minimum standard of one human lifetime for project sustainability and give two other options to indicate the impact on several generations by allowing choosing 90 or 110 years of project lifetime as alternative to 90 years. This will give an idea on the long-term impact a project can have, however reasoning for the selection of the lifetime must be given.

The highest priority of well-being of every individual is living, therefore, the highest priority of any sustainable development should be to ensure that all needed resources for survival of human beings and ideally the interventions made in the project should lead to a higher life expectancy. However, what is the standard for a high life expectancy. International average life expectancy is about 70 years. This can represent a 'fair' aim for the development of developing communities. A high rate of child mortality highly decreases average life expectancy and is often due to a lack of minimum resources for survival. This increase of life expectancy and securing of minimum resources for survival might not be in the interest of maximising well-being through utility, but it is in the interest of liberal equality, which tries to ensure equality of opportunity. An extreme example of utility maximisation would favour a high child mortality rate and a lower world population, as it would allow individuals to emit higher rates of greenhouse gases per capita while staying in the planetary boundaries. The UN under which the framework convention of climate change was agreed, however is not a utilitarian institution, but promotes the SDGs, which are aiming at standards such as no poverty, zero hunger or good-health and well-being. Therefore, it would be in the interest of the UN and the member states signing the agreements under the UNFCCC to give the increase in life expectancy highest priority. In the chapter discussing the definition of the social and economic definition of sustainable development, different areas or aspects of life were identified, that need to be addressed to ensure certain standards of well-being and to understand what needs to be developed or sustained to increase well-being. It was highlighted, that they need to be accounted for separately to ensure that equal weight is given to both dimensions. Both the social and the economic dimension were identified at the end of the literature review as representing a mixture of needs and basic rights. Important needs are health, decent work, social protection, empowerment and capacity building, and mobile assets. Other, basic needs are access to water, food, energy, shelter, infrastructure, transport and security. Social needs are equity and social inclusion, human rights, participation in governance, cooperation and solidarity, and education. As economic needs can be identified fair income, access to markets, access to finance, access to land and access to property

A way to assess whether the needed standard of well-being in all dimensions of sustainable development is achieved, or if different aspects of these dimensions should be developed is a needs assessment. This needs assessment can be done by consulting different stakeholders. For this purpose, a difference could be made between adaptive preferences and uninformed preferences, when conducting these assessments. Adaptive

preferences are preferences that are a consequence of people not being able to achieve their preferences and consequently they gradually lose their desire for the preference. Uninformed preferences are when people are not aware of the actual circumstances. Hence, they express a preference which is based on a certain premise, but this premise is not true. Additional information would let them prefer something else. It should be kept in mind, that satisfying preferences does not always contribute to our well-being. While people might want to have or do things that are worth it, this does not always match their current preferences or expressed needs. As an extreme example was mentioned the contented slave, who has adapted to enslavement by not wanting freedom, this is equivalent to women claiming to be content with their current gender roles, as change would be too difficult and consequently, they desire only goals consistent with these roles. The same is true for the satisfaction of preferences in repressive societies. Hence, the phenomenon of 'adaptive preferences' creates a serious problem when trying to evaluate policy changes that are necessary to increase people's well-being. The awareness of this phenomenon is important to be borne in mind when evaluating the preferences or needs of a target community. In most cases, it is not attainable to identify which preferences are uninformed, unexperienced or adaptive preferences. The best solution in these cases would be to give people access to information and opportunities to test alternative ways of life. To implement a project sustainably, awareness needs to be risen within the community for the problem leading to the adaptive preferences, before any change addressing these circumstances can be made in the long term. This informing or awareness rising should include information on the positive long-term effects this change will have. However, long-term effects will only be considered by people if in the short-term a certain standard of life can be ensured. It has happened in the past, that people with different cultural background assumed that expressed preferences of a community were adaptive or uninformed preferences. Consequently, change was forced on the target community in a direction that the 'outsider' considered as good livelihood, which often lead to unsuccessful development work and the reaction of rejection of a change rather than the appreciation. This can also serve an example for the lack of sustainability of many development projects.

To understand how inequalities of well-being in all three dimensions of sustainable development should be addressed we could use the philosophical discussions on ex-post and ex-ante solutions to inequality.

One of Rawls major arguments is that we must ensure equality of opportunity (ex-ante solution to inequality) and therefore, we should secure a certain starting point for people from which on they can make their own life choices. To allow this equality of opportunity the same or a similar starting position must be given to each member of the community. Therefore, all members of a community or representatives of each vulnerable group of a community need to be included in decision-making to allow the less well-off a certain veto power.

Rawls lexical difference principle would suggest that this is established, when the least well-off member of the community is made better off and only allowing unequal initial distribution when it is to the benefits of the worse off. A difference needs to be made in approaching inequalities ex-post and ex-ante, ex-post equals' equals' distribution of outcome and ex-ante equals' distribution of opportunity. If in a development project in

the ex-ante assessment inequalities of opportunity are identified, then these can be addressed in the project interventions, through empowering the most vulnerable in the community, which leads to more equality of opportunity in the future. We need to recognise that the distribution of natural talents is morally arbitrary, same as the distribution of social inequalities. While Rawls conclusion is that, we can justify only those inequalities that benefit the least well off while inequalities that stem from morally arbitrary factors should be eliminated. If people would have more equal ex-ante opportunities, they could increase their skills and talents and capacity to produce assets, there might be less need to ex-post distribution of assets. People can use these opportunities equally to make free choices in life and become an agent in their own life. This equality of opportunity can be complemented with social insurance schemes to prevent climate change from taking this equality of opportunity and the resources away from people. Such schemes can be crop insurance, microcredits but also unconditional payments and loans or asset transfers. But not only financial measures are needed to build an ex-post safety net for people, increased social networks and early warning systems are crucial for continuous knowledge sharing and capacity building but also to support people to prevent climate hazards from drastically taking away people's resources necessary for a minimum standard of well-being.

These discussions indicate that the following priorities should be set in sustainable development projects under the UNFCCC→ increase of life expectancy, impacts on social and economic development should be put first in measures taken by projects and programs, but never by worsening aspects such as long-term access to clean water, access to fertile land, access to ecosystem services, nutrition and food security. If changes in practices are needed that will decrease the income of the community or household then other ways of generating income need to be established, to ensure economic stability. Short-term positive impacts should never be prioritised over positive long-term effects, unless aiming for the positive long-term effects risks not being able to protect the current social and economic standards of the community. Further decisions on the prioritization of social and economic development should be made by the target community, but different adaptive, uninformed and unexperienced preferences need to be born in mind when making a needs assessment. Additional information needs to be given, and an opportunity to try unexperienced options should ideally be provided to allow informed and experienced preference formulation. No decision made for interventions should ever be to the detriment of the worst-off in the target community, region or country.

5. Limitations and suggestions for further research

To understand the evaluative criteria of the GCF and GEF the funding proposal forms, and related documents were analysed. Policies and Board documents that were referred to for further information on evaluative criteria were not assessed in detail, as the purpose of this research was to analyse the evaluative criteria that were transparently communicated (clear, obvious and understandable without doubt or ambiguity). Nevertheless, these documents if examined in detail, could provide additional information to complement the findings of this work. Additional evaluative criteria could be identified by analysing the funding proposals that the GCF discloses on its website for the public or the notes and decisions of Board meetings. By analysing project proposals focussing on the agricultural sector, it could be understood which evaluative criteria the GCF

and GEF use specifically for this sector. Furthermore, by calculating the percentage of accepted projects in the agricultural sector, the importance that the Financial Mechanism puts on this sector can be evaluated. Further research can address the question of why two institutions aiming to finance the objectives of the UNFCCC agreements take different approaches to fulfil the same objectives laid down in the agreements. This work did not address the question which indicators and impact areas can be used on the level of the financial institutions to treat all three dimensions of sustainable development equally to be fully effective in the financing of sustainable development. The aspect of time needs to be further researched, to decide on how many generations' impacts of projects need to last so that they can be considered as sustainable. The planetary boundaries per capita will decrease with an increase in populations, how will this be addressed by climate change mitigation and what this means for the countries that are already across the planetary boundaries.

6. Conclusions

This thesis aimed to understand the potential for the KJWA by analysing the social and economic dimensions and ethical implications of sustainable development projects/programmes financed by the Financial Mechanism of the UNFCCC. This is a twofold process which includes first, making entities designing projects aware of how social and economic dimensions can be addressed in sustainable development projects funded by the GCF and GEF. Second, analysing how the requirements of the Financial Mechanism of the UNFCCC can be improved to ensure that social and economic dimensions of sustainable development projects are adequately included in funded projects. For this purpose, the following research question was asked: How can funding for the socio-economic dimension of sustainable development projects be made more available through the Financial Mechanism of the UNFCCC? To better address the main research question, it was divided into the following four sub-questions:

1. What ethical considerations should accompany socio-economic measurement?
2. How can the socio-economic dimension of sustainable development projects be defined?
3. What are the current requirements (evaluative criteria) of IFI that focus on climate change related projects, based on the example of GCF and GEF?
4. Do the GCF and GEF address the socio-economic dimension of sustainable development as defined in this work?

Through this study several research gaps could be addressed. It is highly innovative in the way that it combines different disciplines to find the solution to the complex topic of socio-economic measuring. This thesis has a practical approach by identifying solutions to a work-related problem of international organisations and IFIs. It is also highly innovative in combining scientific findings with ethical considerations and practical knowledge to improve development interventions. Additionally, it highlights the importance of the socio-economic dimension for successful mitigation and adaptation practices in the agricultural sector. It defines the socio-economic dimensions of sustainable development projects in a way that can be applied to different types of projects/programmes. Furthermore, it contributes to the research on the socio-economic and food security topic of the KJWA roadmap to support international negotiators working on the KJWA.

Despite international commitments to support sustainable developments of developing countries in equally the economic, environmental and social dimension, the overall focus in the past has been on mitigating greenhouse gas emissions with the highest cost-effectiveness, the sustainment of the environment and economic well-being. These practices can hardly be justified, as they do not take into consideration the strong-interlinkages within the global social-ecological system. Additional to the fact that the agricultural sector contributes to about one quarter of total global greenhouse gas emissions, the sector is most vulnerable to the impacts of climate change. At the same time, millions of lives depend on the proper functioning of the sector for food security, funding for climate change related interventions in the agricultural sector is still extremely low. To successfully adapt to and mitigate climate change in this sector, social and economic factors need to be appropriately integrated into interventions. These dimensions can be appropriately integrated, by making social and economic dimensions of sustainable development projects a standard in the requirements of IFIs and by understanding how social and economic dimensions of sustainable development interventions can be addressed in projects under the current requirements of these IFIs. Setting transparent standards in the requirements of IFIs for the financing decisions of sustainable development, including social and economic dimensions, would make these institutions more accountable and increase trust in appropriate international decision-making to tackle the problem of climate change. IFIs are striving for more transparency and accountability in form of standards other aspects of projects such as a standardised calculation of greenhouse gas accounting. Still, barely any progress is seen in different standards for projects related to climate change.

The GEF and GCF are the main IFIs under the Financial Mechanism of the UNFCCC, and their requirements for funding are ideally most aligned with the objectives laid down in the international agreements under the UNFCCC. The primary aim of the UNFCCC is to stabilise greenhouse gas concentrations in the atmosphere at a level that allows ecosystems to adapt to climate change naturally and to ensure that food production is not threatened while enabling sustainable development. Under these agreements, the CBDR of developed and developing countries are recognised by acknowledging that all states have obligations to address climate change, but they have CBDR in doing so. These differentiated responsibilities among other things entail, that developed countries as listed in Annex 2 of the UNFCCC must provide financial resources for the mitigation of and adaptation to climate change of the developing countries.

The KJWA is a decision to address issues related to agriculture while taking into consideration the unique vulnerability of the sector to climate change and the consequence this has on food security. A roadmap was created to envisage workshops and discussions on the topics listed in the decision, as well as future topics, to develop and implement the KJWA decision. FAO supports the development and implementation of the KJWA by supporting countries with technical support to adapt to and mitigate climate change, as well as through capacity development through knowledge products, webinars and workshops. The importance of the social and economic dimensions and food security as the first priority of developing countries is mentioned in several articles of the Convention (UNFCCC) and in other agreements, protocols and the KJWA decision. The need for assessments of the socio-economic dimension is additionally, expressed in the Enhanced

Transparency Framework, which lays down modalities, procedures and guidelines for transparency under the UNFCCC.

Besides the already expressed international commitments to address the social and economic dimension, putting these agreements into practice is essential for successful interventions to adapt to and mitigate climate change. According to IPCC the agricultural sector is expected to provide exceptional opportunities for adaptation mitigation synergies and social, economic and environmental co-benefits. Furthermore, linking adaptation and mitigation interventions with other societal objectives, would make these more efficient. It is scientifically recognised that particularly in agriculture and food systems, social and economic dimensions are one of the strongest drivers for unsustainable practices and the greatest determinant for vulnerability to climate change. While the agricultural sector is dramatically influenced by climate change, these impacts will have the worst effects on poor people in rural areas, which will be disproportionately affected in their well-being. Higher food insecurity, along with existing and new poverty traps, will exacerbate poverty in many developing countries and create and/or increase inequalities.

Furthermore, there is strong evidence, that especially regions that produce crops are greatly affected by negative climate impacts. Youth and women play a crucial role in the sustainable development of all sectors, but it is even more essential to address youth and women in the agricultural sector. The agricultural sector is characterised by an ageing labour force and increased food insecurity. The engagement of young women and men is essential to ensure food security, reduce youth unemployment and unplanned migration. Social protection is an approach to address the vulnerability of people working in the agricultural sector to climate change and the inequalities that different vulnerabilities entail at community level. By combining interventions in agriculture with social protection, it can be ensured that sector structural constraints that limit the access of poor households to land, water, financial services, advisory services and markets can be successfully addressed. This can be reached inter alia through the increased participation in social networks, the investment in human capital development, better management of risks and the investment in agriculture and reallocation of labour to on-farm activities.

Climate change is one of the most significant collective action problems of all time. Human-induced global warming through unsustainable practices of industrialised countries since the industrial period after 1900 brought and continues to bring dramatic consequences. Therefore, the majority of countries has agreed through the UNFCCC to decrease human-driven change and limit global warming for this century to 2 degrees. While international agreements address the coordination to address this problem, they leave several ethical questions open for interpretation and discussion. A great question is how the burden of climate change mitigation should be concretely shared among countries and to which extent adaptation practices need to be integrated into projects financed under the notion of CBDR. What level of well-being and for whom it needs to be reached to implement sustainable development projects successfully is an integral part of this discussion. Options exist that would allow us to move towards inclusive and sustainable human development by addressing social and economic inequalities of the climate crisis as an international community (including

developed and developing countries). This could be addressed for example, through the distribution of financial responsibility, by giving financial resources to those strongly affected by climate change and finance them through those that have crossed the per capita planetary boundary. These decisions on, who is entitled to what, and what is happiness or well-being, are based at its core, first on basic needs for people's survival, and definitions of physical and psychological well-being and second, on justice in governance.

The literature was divided into two major topics, first ethical considerations that should accompany socio-economic measurement and second, the definition of the social and economic dimension of sustainable development projects.

The chapter on ethical considerations of social and economic measurement discussed several different aspects that are crucial for suggesting how funding for the socio-economic dimension of sustainable development projects can be best addressed. It was found that indicators as a governance mechanism and as a form of knowledge production has strong implications on power relations between developed and developing nations, and governments and civil society. This new system of compliance check through indicators leads to a change in who is held responsible and masks underlying power dynamics. Especially indicators that are based on ranks and numbers give the impression of objective truth and straightforward comparison. Nevertheless, the selection of indicators addressing humans has ethical as well as political implications. Different aspects such as the measurement method or the label of the indicator can have strong ethical implications. Definitions and moral considerations get lost behind the simplified title or description of an indicator or other measurement method and need to be made available for the public to be able to hold decision-makers accountable for their decisions.

Different theories of justice were introduced based on which governance decisions can be made to increase overall well-being. These theories — utilitarianism, liberal equality and libertarianism — all build on a different premise of what well-being is and provide different methods to reach the highest overall well-being. They were chosen for the purpose of this work because it was understood that most justice theories derive from or answer to these three major theories. While utilitarianism tries to maximise overall utility to produce the greatest well-being for all members of society, libertarians see individual freedom as both the highest priority and the main account for individual well-being. Both theories overlook that maximising overall utility and the greatest individual liberty can create bigger gaps between the well-off and worst-off in society. Whereas, liberal equality, such as in the theories by Rawls or Dworkin, tries to give equal concern to liberty and equality, to give people equal opportunities in life. This is reached through mechanisms of ex-ante or ex-post adjustment to people's potential relative advantages and disadvantages.

While in theory abstract mechanisms, such as the veil of ignorance or an imaginary auction to understand how equal concern can be given to people's needs, or universality applied by utilitarians to maximise utility, the translation of these mechanisms to real life is complicated. People do not wear responsibility scores on their forehead, that show to which degree they are responsible for their own misery and if they originally had equal opportunities as someone who is better-off now. An essential component to be able to hold people

responsible is to give them opportunities and autonomy to freely take personal choices and set goals. In order to be able to make choices individuals need the necessary information to be able to make choices responsibly. Especially poor people often lack this information, while being confronted with more decisions than better-off people, that might have drastic influences on their life. These are ethical considerations that need to be addressed by sustainable development projects/programmes which include social and economic dimensions.

To be able to discuss how these dimensions can be addressed in projects or programmes, the social and economic dimensions of sustainable development needed to be defined. For this purpose, it was first reviewed what sustainable development means. It was found that sustainable development means that social, economic or environmental dimensions can be either sustained or developed, and this sustainment or development lasts for a certain period. This period of time of sustainable development is mostly measured in generations of people that will be affected by this change. It cannot be ignored that resilience and vulnerability to climate change play a certain role in the potential of and need for sustainable development. Resilience and vulnerability to climate change are the opposite ends of climate change impacts on people, communities or countries. Hence, in order to increase resilience, vulnerability needs to be decreased. The vulnerability of people has a strong influence on what needs to be sustained or developed to make these people more resilient to climate change. Nevertheless, vulnerability or resilience to climate change is part of the components that define the social and economic dimensions of sustainable development and not the other way around. Therefore, higher resilience to climate change contributes to a higher well-being of the population, among other factors that determine the well-being of people. An overall high well-being of a population has a positive influence on more resilience to climate change and therefore, automatically decreases vulnerability to climate change.

This work defined the socio-economic and food security dimension in projects as the social and economic dimension of sustainable development, which means that they are strongly interlinked with the environment and therefore also with climate impacts. The social, economic and environmental pillars of sustainable development are strongly interlinked and therefore an intervention in one of the three will mostly have impacts on the other two. Time plays a crucial role for sustainable development, as each act of sustaining or developing will last for a certain time. These are considerations essential to be made in the design, planning and implementation of sustainable development projects, as envisioned by the UNFCCC.

To analyse how the integration of the social and economic dimension of sustainable development are currently required by the Financial Mechanism of the UNFCCC a document analysis was conducted, in which the funding proposal forms of the GEF and GCF were analysed. These documents were selected for the analysis, as they are considered to reflect the evaluative framework of the IFI. This analysis included the three major steps of skimming, reading and interpretation. The most relevant documents were described first, by giving a superficial overview, then more in detail and in the last step a table was created in which the identified criteria were split into sub-criteria with detailed explanations.

Two hypotheses were tested to answer the research question of this work. Hypothesis 1 was that IFI have evaluative frameworks. Hypothesis 2 was that the social and economic dimension as defined in this work

are not reflected in these evaluative frameworks. Four major findings were identified through the testing of these hypotheses. The first finding was that the design of the funding proposals of the GCF and GEF is strongly aligned with the need of these to report their progress against institutional objectives and how much money was spent for each objective or result area. These result areas are not the same for the GCF and GEF even though they both have the aim to fund the objectives of the agreements under the UNFCCC. The second finding was that there is a strong difference in the transparency of the evaluative framework of the GEF and GCF. While the evaluative criteria in the funding proposal form of the GEF are very ambiguous, the GEF additionally does not disclose the forms of the accepted proposals on its website, which makes it hard to hold the institution accountable for its decision-making. The GCF discloses all accepted funding proposals on its website, which increases accountability. Additionally, the GCF is more transparent than the GEF in points that need to be addressed in the funding proposal. Nevertheless, the information asked for is explained more concretely for some questions than for others. Third, both institutions are less transparent in standards that need to be met for the social and economic dimension of sustainable development. It seems that the institutions do not require an integrated approach of sustainable development where all three dimensions – environmental, social, economic – are equally addressed to ensure long-term impacts and effectiveness of the interventions. However, the ambiguous formulation of expected socio-economic assessments and other criteria related to social and economic dimensions of sustainable development leave space for the entity applying for funding to address these dimensions in the project/programme. Fourth, the guidelines provided by the two IFIs are not sufficient to ensure that questions can be successfully answered. The guidelines lack explanations of acronyms, concrete definitions of notions for which no standard definition is in place, step by step instructions of how assessments need to be conducted to meet the requirements, explanations of policies, expected minimum requirements to be met by the project/programme, and examples of good practices in the drafting of answers funding proposals.

To understand which standards for the social and economic dimensions could be introduced for project implementers but also in the requirements of the IFIs, ethical considerations of socio-economic measurement are crucial to be combined with scientific knowledge and the objectives set in the international agreements on climate change. Five major ethical considerations need to be implemented, when programming and funding sustainable development interventions. First, to allow equality of opportunity not only for project beneficiaries but also for entities drafting funding proposals, the evaluative framework of IFIs needs to be translated as transparent and concrete as possible into the funding proposal forms and guidelines. Second, inclusive decision-making should be part of every identification, design and identification of projects/programme. This means also giving a certain veto power to the most vulnerable and worst-off groups in the target community, to ensure that their well-being will not be additionally aggravated. Third, it is essential to include intergenerational considerations into interventions. Fourth, equal consideration needs to be given to all pillars of sustainable development (environmental, social, economic) to successfully reach long term mitigation and adaptation goals. Fifth, basing financial decision-making on economic cost-effectiveness or cost-benefit

analysis is hard to justify, as saved financial cost mostly have environmental, social or economic consequences for either the target community or other individuals.

Taking into consideration all findings of this work, standards to appropriately integrate the social and economic dimensions of sustainable development projects funded by the financial mechanism of the UNFCCC can be improved by addressing ten major issues. These issues are translated into more detailed recommendations in the following chapter. First, IFIs should increase their transparency and accountability in funding decisions. It could be considered by IFIs to revise the desired impact areas, according to the latest scientific research contributing to the objectives of the different agreements and conventions related to climate change. Standards for the design of M&E systems and logical frameworks should be introduced. Even though the agricultural sector is extremely important to address when mitigating or adapting to climate change, the sector is barely tackled by evaluative framework of the GCF and GEF. Alternatives to cost-benefit or cost-effectiveness analysis should be introduced to improve practices in the financial evaluation of projects. To increase effectiveness of projects, an integrated approach to sustainable development including social, economic and human rights dimensions should be promoted. Moreover, minimum standards for the inclusion of social and economic dimensions in projects financed by IFIs should be introduced. Intergenerational aspects of sustainable development should be better taken into account when drafting or funding projects. Inclusive decision-making should be promoted throughout projects to ensure sustainability and increase security through increased connectiveness. Finally, it must be ensured that through any intervention the most vulnerable are never made worse-off in any of the dimensions of sustainable development. Further research could focus on reviewing and comparing social and economic risk, as well as on the development of potential assessment methodologies to introduce standardised assessments of these dimensions in projects/programmes.

7. Recommendations for project implementers and IFIs

The sum of the recommendations provided for in this section are to ensure that the social and economic dimension of sustainable development can be adequately addressed in sustainable development projects funded by the Financial Mechanism of the UNFCCC.

Recommendations for increased **transparency and accountability** of IFI

- List distinct evaluative criteria, based on which the decision to accept a proposal is made
 - Introduce minimum standards that need to be reached for each criterion
- Clear organization and structure of documents to support the application process
 - All additionally needed sources should be indicated in the project form.
 - There should not be more than one layer to identify the needed information, therefore if a link is provided in a document for which the link was provided in another document, creates too much confusion.
 - Reference documents should not be summaries of negotiations, as they have a certain style for each agency and the reader will first have to learn to read this style before he can search for the needed information.
 - Ideally all needed information and templates for the project application process should be in either the application form itself, if they are indicated as annexes of the form or gathered in one additional document to the application form.
- Precisely define the meaning of words and acronyms in the document giving instructions to fill out the form
- Equally fund adaptation and mitigation projects
- Introduce standard methodologies for
 - Social and economic risk assessment
 - Environmental risk assessment
- Ideally all relevant information should be gathered in the guidelines supporting the drafting of the funding proposal
 - Explain assessment methodologies and provide examples how they could be done
 - Provide a detailed step-by-step guide for every step that needs to be done to gather all the necessary information for the funding proposal

Recommendations for **revision of impact areas of IFIs**

- To include result areas for the agricultural sector
- To include social and economic pillars of sustainable development
- To make co-benefits of adaptation and mitigation interventions visible
- To ensure that the focus is equally on sustaining and on developing

- To formulate them simple and smart so that desired impacts can be easily understood

Recommendations for IFIs to introduce standards in **results-based monitoring and evaluation and logical frameworks**

- Provide smart evaluative criteria for better reporting to the board and better understanding of the project implementing entity that has critical impacts
- Make the use of the theory of change mandatory
- Clearly indicate which mandatory indicator is related to which activity, output, outcome or result area
- Indicate which logical framework can be used as a basis for the proposal

Recommendations of crucial aspects to appropriately **address the agricultural sector**

- Include youth and women in all interventions, to ensure food security and longer sustainability of project and new practices can be ensured
- Include potential ingoing and outgoing migration in risk assessments for the agricultural sector
- Provide beneficiaries with information on alternatives when they experience a lack of access to resources for survival and agricultural production,
- Change production to an alternative food sources that are less vulnerable to the climate change impacts in the region
- Provide the beneficiaries with early warning systems or disaster strategies/scenarios in regions with strong climate impacts.
- Introduce results/impact areas focussing on crop diversification to increase food security and socio-economic well-being

Recommendations to introduce **alternatives to cost-benefit analysis**

- Simple allocation of funding to activities, to assess how much funding goes in which activity
- Ask for justification of cost allocation to these activities
- Ensure that costs are equally distributed between the three dimensions of sustainable development
- Ask for the social return on investments

Recommendations to set standards for the **social, economic and human rights dimensions**

- AO marker – assessing the poverty orientation of development measures -BMZ (BMZ, 2014)
- Include standards for early warning strategies to give the relevant information to each community in which an intervention happened
- Include standards for climate emergency scenario development that can be made together with the target community
- Include social and economic baseline scenarios next to climate baseline scenarios

- Assess needed services that would increase the resilience of the community
- Provide equality of opportunity for

Recommendations for **minimum standards for social and economic dimensions** of projects financed by IFI

- Consider all three pillars – social, environmental and economic – of sustainable development in projects and indicate trade-offs between these pillars
- Increase networks/connectivity of target community to other communities, NGOs, government agencies, and other stakeholders through inclusive decision-making to ensure knowledge exchange and better connectedness in the case of crisis
- Ask for exit strategy
- Ask for a minimum long-term impact of the project (70 years is one generation)
- Ask for a standardised social and economic risk assessments
- Ask for the degree of basic needs provided before and after the intervention
- Make it mandatory to include a certain percentage of youth in each activity
- Make a community needs assessment mandatory for each project

Recommendations to consider **intergenerational aspects** of sustainable development

- Include a share of youth (in accordance with the share of youth in total population) as obligatory to project participants to ensure sustainability but also equality in decision-making of decisions that will most likely affect them even more than their parents' generation.
- Suggestion indicator for project long-term sustainability as part of the dimension of time of sustainable development:
 - Choose between the three minimum impact expectancy options: 70 years, 90 years, and 110 years. This indicator should be combined with an explanation to ensure the choice is based on a logical and reasonable argumentation.
- Short-term positive impacts should never be prioritised over positive long-term effects, unless aiming for the positive long-term effects risks not being able to protect the current social and economic standards of the community
- Introduce indicators that are not solely aggregated by sex but by child/youth/adult to see how different generations are affected by the project

Recommendations for **inclusive decision-making** throughout the project phases

- Let the target community prioritise needs
- Ensure equally men and women, and youth, as well as vulnerable and marginalised groups are included in the decision making at project identification, design and implementation stage
- Provide target community with the necessary knowledge for decision-making

Recommendations to ensure that **most vulnerable are never made worse-off**

- Give veto power to the worst-off in the target community
- Include representatives of vulnerable and marginalised groups in decision-making in the identification, design and implementation phase of the project
- Consider the influence any action will have on the worst-off to decide whether this or another action should be taken to achieve the desired impact
- Ensure project ownerships in all groups of the target community

8. Annex GCF — Funding Proposal Form and Annexes

All sources of this annex were found in the Process and documents category on the GCF website (GCF, 2020f)

8.1. Annex GCF — Funding Proposal Form

Funding Proposal

Project/Programme title:	<u>Please indicate the project title. Ideally this should reference the country where the project/programme will be implemented and be less than 100 characters, approximately 10-15 words.</u>
Country(ies):	<u>List all the countries where the project/programme will be implemented.</u>
Accredited Entity:	<u>Indicate the Accredited Entity submitting this proposal.</u>
Date of first submission:	<u>[YYYY/MM/DD]</u>
Date of current submission	<u>[YYYY/MM/DD]</u>
Version number	<u>[V.000]</u>



Section A	PROJECT / PROGRAMME SUMMARY
Section B	PROJECT / PROGRAMME INFORMATION
Section C	FINANCING INFORMATION
Section D	EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA
Section E	LOGICAL FRAMEWORK
Section F	RISK ASSESSMENT AND MANAGEMENT
Section G	GCF POLICIES AND STANDARDS
Section H	ANNEXES

Note to Accredited Entities on the use of the funding proposal template

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time.
- The recommended font is Arial, size 11.
- Under the [GCF Information Disclosure Policy](#), project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4.

Please submit the completed proposal to:

fundingproposal@gcfund.org

Please use the following name convention for the file name:

"FP-[Accredited Entity Short Name]-[Country/Region]-[YYYY/MM/DD]"

PROJECT/PROGRAMME SUMMARY			
A.1. Project or programme	Choose an item.	A.2. Public or private sector	Choose an item.
A.3. Request for Proposals (RFP)	<p>If the funding proposal is being submitted in response to a specific GCF Request for Proposals, indicate which RFP it is targeted for. Please note that there is a separate template for the Simplified Approval Process and REDD+.</p> <p>Choose an itemChoose an item</p>		
A.4. Result area(s)	<p>Check the applicable GCF result area(s) that the <u>overall</u> proposed project/programme targets. For each checked result area(s), indicate the estimated percentage of <u>GCF budget</u> devoted to it. The total of the percentages when summed should be 100%.</p>		
	<p>Mitigation: Reduced emissions from:</p> <p><input type="checkbox"/> Energy access and power generation:</p> <p><input type="checkbox"/> Low-emission transport:</p> <p><input type="checkbox"/> Buildings, cities, industries and appliances:</p> <p><input type="checkbox"/> Forestry and land use:</p> <p>Adaptation: Increased resilience of:</p> <p><input type="checkbox"/> Most vulnerable people, communities and regions:</p> <p><input type="checkbox"/> Health and well-being, and food and water security:</p> <p><input type="checkbox"/> Infrastructure and built environment:</p> <p><input type="checkbox"/> Ecosystem and ecosystem services:</p>		<p>GCF contribution:</p> <p>Enter number%</p> <p>Enter number%</p> <p>Enter number%</p> <p>Enter number%</p> <p>Enter number%</p> <p>Enter number%</p> <p>Enter number%</p>
A.5. Expected mitigation impact	Indicate t CO ₂ eq over lifespan	A.6. Expected adaptation impact	Indicate total number of direct and indirect beneficiaries
			Indicate % of population
A.7. Total financing (GCF + co-finance)	___ Choose an item.	A.9. Project size	Choose an item.
A.8. Total GCF funding requested	___ Choose an item. For multi-country proposals, please fill out annex 17.		
A.10. Financial instrument(s) requested for the GCF funding	<p>Mark all that apply and provide total amounts. The sum of all total amounts should be consistent with A.8.</p> <p><input type="checkbox"/> Grant Enter number <input type="checkbox"/> Equity Enter number</p> <p><input type="checkbox"/> Loan Enter number <input type="checkbox"/> Results-based payment Enter number</p> <p><input type="checkbox"/> Guarantee Enter number</p>		
A.11. Implementation period	Indicate the number of years and months the project/ programme is expected to be implemented.	A.12. Total lifespan	Indicate the maximum number of years over which the impacts of the investment are expected to be effective.
A.13. Expected date of AE internal approval	This is the date that the Accredited Entity obtained/will obtain its own approval to implement the project/ programme, if available. Click or tap to enter a date.	A.14. ESS category	Refer to the AE's safeguard policy and GCF ESS Standards to assess your FP category. Choose an item.
A.15. Has this FP been submitted as a CN before?	Yes <input type="checkbox"/> No <input type="checkbox"/>	A.16. Has Readiness or PPF support been used to prepare this FP?	Yes <input type="checkbox"/> No <input type="checkbox"/>
A.17. Is this FP included in the entity work programme?	Yes <input type="checkbox"/> No <input type="checkbox"/>	A.18. Is this FP included in the country programme?	Yes <input type="checkbox"/> No <input type="checkbox"/>

A.19. Complementarity and coherence	<i>Does the project/programme complement other climate finance funding (e.g. GEF, AF, CIF, etc.)? If yes, please elaborate in section B.1.</i> Yes <input type="checkbox"/> No <input type="checkbox"/>
A.20. Executing Entity information	<i>If not the Accredited Entity, please indicate the full legal name of the Executing Entity(ies) and provide its country of registration and ownership type. Note that there can be more than one Executing Entity. Also indicate if an Executing Entity is the National Designated Authority. Refer to the definition of Executing Entity in the Accreditation Master Agreement.</i>
A.21. Executive summary (max. 750 words, approximately 1.5 pages)	
<i>Provide an executive summary of the project/programme including:</i> <ol style="list-style-type: none"> 1. <i>Climate rationale</i> 2. <i>Proposed interventions</i> 3. <i>Climate impacts/benefits</i> 	

PROJECT/PROGRAMME INFORMATION

B.1. Climate rationale and context (max. 1000 words, approximately 2 pages)

Climate rationale: Describe the climate change problem the proposal is expected to address. Describe the mitigation needs (GHG emissions profile) and/or adaptation needs (climate hazards and associated risks based on impacts, exposure, and vulnerabilities) that the proposed interventions are expected to address. Also describe the most likely scenario (prevailing conditions or other alternative) that would remain or continue in the absence of the proposed interventions. Include baseline information. The methodologies used to derive the climate rationale should be included in the feasibility study.

Context: In describing the mitigation and/or adaptation needs, briefly describe the target region/area of the proposed interventions including information on the demographics, economy, topography, etc.

Related projects/interventions: Also describe any recent or ongoing projects/interventions that are related to the proposal from other domestic or international sources of funding, such as the Global Environment Facility, Adaptation Fund, Climate Investment Funds, etc., and how they will be complemented by this project/programme (e.g. scaling up, replication, etc.). Please identify current gaps and barriers regarding recent or ongoing projects and elaborate further how this project/programme complements or addresses these.

B.2. Theory of change (max. 1000 words, approximately 2 pages plus diagram)

Describe the theory of change and provide information on how it serves to shift the development pathway towards a low-emission and/or climate-resilient direction. Provide the diagram of the theory of change (approximately 1 page).

The theory of change should include any barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc., as relevant) that need to be addressed. Use a results chain of inputs, activities, outputs, outcomes, and impact statements, and identify the how and why of causal relations to deliver the project's expected results.

B.3. Project/programme description (max. 2000 words, approximately 4 pages)

Define the project/programme. Describe the proposed set of components, outputs and activities that lead to the expected Fund-level impact and outcome results. Components should reflect the project/programme level outcomes.

This should be consistent with the financing by component in section C.2, the results and performance indicators provided in section E.5, and the implementation timetable in annex 5.

Referring to the feasibility study, describe why this set of interventions was selected instead of alternative solutions and how the project/programme can help unlock the needed support in a sustainable manner. Also identify trade-offs of the selected interventions, if applicable.

For Enhanced Direct Access (EDA) proposals and projects/programmes with financial intermediation (loans or on-granting), describe the selection criteria of the sub-project and types.

B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)

Provide a description of the project/programme implementation structure, outlining legal, contractual, institutional and financial arrangements from and between the GCF, the Accredited Entity (AE) and/or the Executing Entity(ies) (EE) or any third parties (if applicable) and beneficiaries.

- *Provide information on governance arrangements (supervisory boards, consultative groups among others) set to oversee and guide project implementation. Provide a composition of the decision-making body and oversight function, particularly for Enhanced Direct Access (EDA) proposals.*
- *Provide information on the financial flows and implementation arrangements (legal and contractual) between the AE and the EE, between the EE or any third party and beneficiaries. For EEs that will administer GCF funds, indicate if a Capacity Assessment has been carried out. Where applicable, summarize the results of the assessment.*
- *Describe the experience and track record of the AE and EEs with respect to the activities (sector and country/region) that they are expected to undertake in the proposed project/programme.*

Provide a diagram(s) or organogram(s) that maps such arrangements including the governance structure, legal arrangements, and the flow and reflow of funds between entities.

B.5. Justification for GCF funding request (max. 1000 words, approximately 2 pages)

Explain why the project/programme requires GCF funding, i.e. Why is the project/programme not currently being financed by public and/or private sector? Which market failure is being addressed with GCF funding? Are there any other domestic or international sources of financing?

Explain why the proposed financial instruments were selected in light of the proposed activities and the overall financing package. i.e. What is the coherence between activities financed by grants and those financed by reimbursable funds? How were co-financing amounts and prices determined? How does the concessionality of the GCF financing compare to that of the co-financing? If applicable, provide a short market read on the prevailing of the pricing and/or financial markets for similar projects/programmes.

Justify why the level of concessionality of the GCF financial instrument(s) is the minimum required to make the investment viable. Additionally, how does the financial structure and the proposed pricing fit with the concept of minimum concessionality? Who benefits from concessionality?

In your answer, please consider the risk sharing structure between the public and private sectors, the barriers to investment and the indebtedness of the recipient. Please reference relevant annexes, such as the feasibility study, economic analysis or financial analysis when appropriate.

B.6. Exit strategy and sustainability (max. 500 words, approximately 1 page)

Explain how the project/programme sustainability (financial, institutional, social, gender equality, environmental) will be ensured in the long run after project closure, including how the project's results and benefits will be sustained.

Include information pertaining to the longer-term ownership, project/programme exit strategy, operations and maintenance of investments (e.g. key infrastructure, assets, contractual arrangements). In case of private sector, please describe the GCF's financial exit strategy through IPOs, trade sales, etc.

Provide information on additional actions to be undertaken by public and private sector or civil society as a consequence of the project/programme implementation for scaling up and continuing best practices.

FINANCING INFORMATION

C.1. Total financing

(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)		Total amount		Currency		
		Enter amount		Options		
GCF financial instrument		Amount	Tenor	Grace period	Pricing	
(i)	Senior loans	Enter amount	Enter years	Enter years	Enter %	
(ii)	Subordinated loans	Enter amount	Enter years	Enter years	Enter %	
(iii)	Equity	Enter amount	Enter years		Enter % equity return	
(iv)	Guarantees	Enter amount				
(v)	Reimbursable grants	Enter amount				
(vi)	Grants	Enter amount				
(vii)	Result-based payments	Enter amount				
(b) Co-financing information		Total amount			Currency	
		Enter amount			Options	
Name of institution	Financial instrument	Amount	Currency	Tenor & grace	Pricing	Seniority
Click here to enter text.	Options	Enter amount	Options	Enter years Enter years	Enter%	Options
Click here to enter text.	Options	Enter amount	Options	Enter years Enter years	Enter%	Options
Click here to enter text.	Options	Enter amount	Options	Enter years Enter years	Enter%	Options
Click here to enter text.	Options	Enter amount	Options	Enter years Enter years	Enter%	Options
(c) Total financing (c) = (a)+(b)		Amount		Currency		
		Enter amount		Options		
(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)		Please explain if any of the financing parties including the AE would benefit from any type of guarantee (e.g. sovereign guarantee, MIGA guarantee).				
		Please also explain other contributions such as in-kind contributions including tax exemptions and contributions of assets.				
		Please also include parallel financing associated with this project or programme.				

C.2. Financing by component

Please provide an estimate of the total cost per component and output as outlined in section B.3. above and disaggregate by source of financing. More than one co-financing institution can fund a single component or output. Provide the summarised cost estimates in the table below and the detailed budget plan as annex 4.

Component	Output	Indicative cost Options	GCF financing		Co-financing		
			Amount Options	Financial Instrument	Amount Options	Financial Instrument	Name of Institutions
Click here to enter text.	Click here to enter text.	Enter amount	Enter amount	Choose an item.	Enter amount	Choose an item.	Click here to enter text.
	Click here to enter text.	Enter amount	Enter amount	Choose an item.	Enter amount	Choose an item.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Enter amount	Enter amount	Choose an item.	Enter amount	Choose an item.	Click here to enter text.

	Click here to enter text.	Enter amount	Enter amount	Choose an item.	Enter amount	Choose an item.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Enter amount	Enter amount	Choose an item.	Enter amount	Choose an item.	Click here to enter text.
	Click here to enter text.	Enter amount	Enter amount	Choose an item.	Enter amount	Choose an item.	Click here to enter text.
Indicative total cost (USD)		Enter amount	Enter amount		Enter amount		

This table should match the one presented in the term sheet and be consistent with information presented in other annexes including the detailed budget plan and implementation timetable.

In case of a multi-country/region programme, specify indicative requested GCF funding amount for each country in annex 17, if available.

C.3 Capacity building and technology development/transfer (max. 250 words, approximately 0.5 page)

C.3.1 Does GCF funding finance capacity building activities?

Yes ☐ No ☐

C.3.2. Does GCF funding finance technology development/transfer?

Yes ☐ No ☐

If the project/programme is expected to support capacity building and technology development/transfer, please provide a brief description of these activities and quantify the total requested GCF funding amount for these activities, to the extent possible.

EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section refers to the performance of the project/programme against the investment criteria as set out in the GCF's [Initial Investment Framework](#).

D.1. Impact potential (max. 500 words, approximately 1 page)

Describe the potential of the project/programme to contribute to the achievement of the Fund's objectives and result areas. As applicable, describe the envisaged project/programme impact for mitigation and/or adaptation. Provide the impact for mitigation by elaborating on how the project/programme contributes to low-emission sustainable development pathways. Provide the impact for adaptation by elaborating on how the project/programme contributes to increased climate-resilient sustainable development. Calculations should be provided as an annex. This should be consistent with section E.2 reporting GCF's core indicators.

D.2. Paradigm shift potential (max. 500 words, approximately 1 page)

Describe the degree to which the proposed activity can catalyze impact beyond a one-off project or programme investment. Describe the following, if applicable:

- *Potential for scaling up and replication*
- *Potential for knowledge sharing and learning*
- *Contribution to the creation of an enabling environment*
- *Contribution to the regulatory framework and policies*
- *Overall contribution to climate-resilient development pathways consistent with relevant national climate change adaptation strategies and plans*

D.3. Sustainable development (max. 500 words, approximately 1 page)

Describe the wider benefits and priorities of the project/programme in relation to the Sustainable Development Goals and provide an estimation of the impact potential in terms of:

- *Environmental co-benefits*
- *Social co-benefits including health impacts*
- *Economic co-benefits*
- *Gender-sensitive development impact*

D.4. Needs of recipient (max. 500 words, approximately 1 page)

Describe the scale and intensity of vulnerability of the country and beneficiary groups and elaborate how the project/programme addresses the issue (e.g. the level of exposure to climate risks for beneficiary country and groups, overall income level, etc.). Describe how the project/programme addresses the following needs:

- *Vulnerability of the country and/or specific vulnerable groups, including gender aspects (for adaptation only)*
- *Economic and social development level of the country and the affected population*
- *Absence of alternative sources of financing (e.g. fiscal or balance of payments gap that prevents government from addressing the needs of the country; and lack of depth and history in the local capital market)*
- *Need for strengthening institutions and implementation capacity*

D.5. Country ownership (max. 500 words, approximately 1 page)

Please describe how the beneficiary country takes ownership of and implements the funded project/programme. Describe the following:

- *Existing national climate strategy*
- *Existing GCF country programme*
- *Alignment with existing policies such as NDCs, NAMAs, and NAPs*
- *Capacity of Accredited Entities or Executing Entities to deliver*
- *Role of National Designated Authority*
- *Engagement with civil society organizations and other relevant stakeholders, including indigenous peoples, women and other vulnerable groups*

D.6. Efficiency and effectiveness (max. 500 words, approximately 1 page)

Describe how the financial structure is adequate and reasonable in order to achieve the proposal's objectives, including addressing existing bottlenecks and/or barriers, and providing the minimum concessionality to ensure the project is viable without crowding out private and other public investments. Refer to section B.5 on the justification of GCF funding requested as necessary.

Please describe the efficiency and effectiveness of the proposed project/programme, taking into account the total financing and mitigation/ adaptation impact the project/programme aims to achieve, and explain how this compares to an appropriate benchmark.

Please specify the expected economic rate of return based on a comparison of the scenarios with and without the project/programme.

Please specify the expected financial rate of return with and without the Fund's support to illustrate the need for GCF funding to illustrate overall cost effectiveness.

Please explain how best available technologies and practices have been considered and applied. If applicable, specify the innovations/modifications/adjustments that are made based on industry best practices.

LOGICAL FRAMEWORK

This section refers to the project/programme's logical framework in accordance with the GCF's [Performance Measurement Frameworks](#) under the [Results Management Framework](#) to which the project/programme contributes as a whole, including in respect of any co-financing.

E.1. Paradigm shift objectives

Please select the appropriated expected result. For cross-cutting proposals, tick both.

- ☐ Shift to low-emission sustainable development pathways
- ☐ Increased climate-resilient sustainable development

E.2. Core indicator targets

Provide specific numerical values for the GCF core indicators to be achieved by the project/programme. Methodologies for the calculations should be provided. This should be consistent with the information provided in section A.

E.2.1. Expected tonnes of carbon dioxide equivalent (t CO ₂ eq) to be reduced or avoided (mitigation and cross-cutting only)	Annual	Click here to enter text. t CO ₂ eq
	Lifetime	Click here to enter text. t CO ₂ eq
E.2.2. Estimated cost per t CO ₂ eq, defined as total investment cost / expected lifetime emission reductions (mitigation and cross-cutting only)	(a) Total project financing	____ Choose an item.
	(b) Requested GCF amount	____ Choose an item.
	(c) Expected lifetime emission reductions	____ t CO ₂ eq
	(d) Estimated cost per t CO₂eq (d = a / c)	____ Choose an item. / t CO ₂ eq
	(e) Estimated GCF cost per t CO₂eq removed (e = b / c)	____ Choose an item. / t CO ₂ eq
E.2.3. Expected volume of finance to be leveraged by the proposed project/programme as a result of the Fund's financing, disaggregated by public and private sources (mitigation and cross-cutting only)	(f) Total finance leveraged	____ Choose an item.
	(g) Public source co-financed	____ Choose an item.
	(h) Private source finance leveraged	____ Choose an item.
	(i) Total Leverage ratio (i = f / b)	____
	(j) Public source co-financing ratio (j = g / b)	____
	(k) Private source leverage ratio (k = h / b)	____
E.2.4. Expected total number of direct and indirect beneficiaries, (disaggregated by sex)	Direct	Click here to enter text. Click here to enter text.% of female
	Indirect	Click here to enter text. Click here to enter text.% of female
	<i>For a multi-country proposal, indicate the aggregate amount here and provide the data per country in annex 17.</i>	
E.2.5. Number of beneficiaries relative to total population (disaggregated by sex)	Direct	Click here to enter text. (Expressed as %) of country(ies)
	Indirect	Click here to enter text. (Expressed as %) of country(ies)
<i>For a multi-country proposal, leave blank and provide the data per country in annex 17.</i>		

E.3. Fund-level impacts

Select the appropriate impact(s) to be reported for the project/programme. Select key result areas and corresponding indicators from GCF RMF and PMFs as appropriate. Note that more than one indicator may be selected per expected impact result. The result areas indicated in this section should match those selected in section A.4 above. Add rows as needed.

Expected Results	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term	Final	
Choose appropriate expected results Choose appropriate expected results	Choose appropriate indicators Choose appropriate indicators					
Choose appropriate expected results Choose appropriate expected results	Choose appropriate indicators Choose appropriate indicators					
Choose appropriate expected results Choose appropriate expected results	Choose appropriate indicators Choose appropriate indicators					

E.4. Fund-level outcomes

Select the appropriate outcome(s) to be reported for the project/programme. Select key expected outcomes and corresponding indicators from GCF RMF and PMFs as appropriate. Note that more than one indicator may be selected per expected outcome. Add rows as needed.

Expected Outcomes	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term	Final	
Choose expected outcome	Choose appropriate indicators Choose appropriate indicators					
Choose expected outcome	Choose appropriate indicators Choose appropriate indicators					
Choose expected outcome	Choose appropriate indicators Choose appropriate indicators					

E.5. Project/programme performance indicators

The performance indicators for progress reporting during implementation should seek to measure pre-existing conditions, progress and results at the most relevant level for ease of GCF monitoring and AE reporting. Add rows as needed.

Expected Results	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term	Final	

E.6. Activities

All project activities should be listed here with a description and sub-activities. Significant deliverables should be reflected in the implementation timetable. Add rows as needed.

Activity	Description	Sub-activities	Deliverables

E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)

Besides the arrangements (e.g. annual performance reports) laid out in AMA, please give a summary of the project/programme specific arrangements for monitoring and evaluation. Please provide the types of interim and final evaluations. Describe Accredited Entity (AE) project reporting relationships, including to the NDA/Focal Point and between AE and Executing Entity (EE) as relevant, identifying reporting obligations from the EE to the AE. This should relate to the frequency of reporting on project indicators, implementation challenges and financial status.

RISK ASSESSMENT AND MANAGEMENT

F.1. Risk factors and mitigations measures (max. 3 pages)

Please describe financial, technical, operational, macroeconomic/political, money laundering/terrorist financing (ML/TF), sanctions, prohibited practices, and other risks that might prevent the project/programme objectives from being achieved. Also describe the proposed risk mitigation measures. Insert additional rows if necessary.

For probability: High has significant probability, Medium has moderate probability, Low has negligible probability

For impact: High has significant impact, Medium has moderate impact, Low has negligible impact

Prohibited practices include abuse, conflict of interest, corruption, retaliation against whistleblowers or witnesses, as well as fraudulent, coercive, collusive, and obstructive practices

Selected Risk Factor 1

Category	Probability	Impact
Select	Select	Select

Description

Please describe the risk to the best of your knowledge at this point in time.

Mitigation Measure(s)

Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?

Selected Risk Factor 2

Category	Probability	Impact
Select	Select	Select

Description

Please describe the risk to the best of your knowledge at this point in time.

Mitigation Measure(s)

Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?

Selected Risk Factor 3

Category	Probability	Impact
Select	Select	Select

Description

Please describe the risk to the best of your knowledge at this point in time.

Mitigation Measure(s)

Please describe how the identified risk will be mitigated or managed. Do the mitigation measures lower the probability of risk occurring? If so, to what level?

GCF POLICIES AND STANDARDS

G.1. Environmental and social risk assessment (max. 750 words, approximately 1.5 pages)

Provide the environmental and social risk category assigned to the proposal as a result of screening and the rationale for assigning such category. Present also the environmental and social assessment and management instruments developed for the proposal (for example, ESIA, ESMP, ESMF, ESMS, environmental and social audits, etc.). Provide a summary of the main outcomes of these instruments. Present the key environmental and social risks and impacts and the measures on how the project/programme will avoid, minimize and mitigate negative impacts at each stage (e.g. preparation, implementation and operation), in accordance with GCF's ESS standards. If the proposed project or programme involves investments through financial intermediations, describe the due diligence and management plans by the Executing Entities (EEs) and the oversight and supervision arrangements. Describe the capacity of the EEs to implement the ESMP and ESMF and arrangements for compliance monitoring, supervision and reporting. Include a description of the project/programme-level grievance redress mechanism, a summary of the extent of multi-stakeholder consultations undertaken for the project/programme, the plan of the Accredited Entity (AE) and EEs to continue to engage the stakeholders throughout project implementation, and the manner and timing of disclosure of the applicable safeguards reports following the requirements of the GCF [Information Disclosure Policy](#) and [Environmental and Social Policy](#).

Describe any potential impacts on indigenous peoples and the measures to address these impacts including the development of an Indigenous Peoples Plan and the process for meaningful consultation leading to free, prior and informed consent, pursuant to the GCF [Indigenous Peoples Policy](#).

Attach the appropriate assessment and management instruments or other applicable studies, depending on the environmental and social risk category as annex 6.

G.2. Gender assessment and action plan (max. 500 words, approximately 1 page)

Provide a summary of the gender assessment and project/programme-level gender action plan that is aligned with the objectives of GCF's [Gender Policy](#). Confirm a gender assessment and action plan exists describing the process used to develop both documents. Provide information on the key findings (who is vulnerable and why) and key recommendations (how to address the vulnerability identified) of the gender assessment. Indicate if stakeholder consultations have taken place and describe the key inputs integrated into the action plan, including: how addressing the vulnerability will ensure equal participation and benefits from funds investment; key gender-related results to be expected from the project/programme with targets; implementation arrangements that the AE has put in place to ensure activities are implemented and expected outcomes will be achieved, monitored and evaluated.

Provide the full gender assessment and project-level gender action plan as annex 8.

G.3. Financial management and procurement (max. 500 words, approximately 1 page)

Describe the project/programme's financial management including the financial monitoring systems, financial accounting, auditing, and disbursement structure and methods. Refer to section B.4 on implementation arrangements as necessary.

Articulate any procurement issues that may require attention, e.g. procurement implementation arrangements and the role of the AE under the respective proposal, articulation of procurement risk assessment undertaken and how that will be managed by the AE or the implementing agency. Provide a detailed procurement plan as annex 10.

G.4. Disclosure of funding proposal

Note: The Information Disclosure Policy (IDP) provides that the GCF will apply a presumption in favour of disclosure for all information and documents relating to the GCF and its funding activities. Under the IDP, project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Information provided in confidence is one of the exceptions, but this exception should not be applied broadly to an entire document if the document contains specific, segregable portions that can be disclosed without prejudice or harm.

Indicate below whether or not the funding proposal includes confidential information.

☐ No confidential information: The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.

☐ With confidential information: The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:

- ☐ full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and
- ☐ redacted copy for disclosure on the GCF website.

The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information.

ANNEXES

H.1. Mandatory annexes

- ☐ Annex 1 NDA no-objection letter(s) ([template provided](#))
- ☐ Annex 2 Feasibility study - and a market study, if applicable
- ☐ Annex 3 Economic and/or financial analyses in spreadsheet format
- ☐ Annex 4 Detailed budget plan ([template provided](#))
- ☐ Annex 5 Implementation timetable including key project/programme milestones ([template provided](#))
- ☐ Annex 6 E&S document corresponding to the E&S category (A, B or C; or I1, I2 or I3):
([ESS disclosure form provided](#))
 - ☐ Environmental and Social Impact Assessment (ESIA) or
 - ☐ Environmental and Social Management Plan (ESMP) or
 - ☐ Environmental and Social Management System (ESMS)
 - ☐ Others (please specify — e.g. Resettlement Action Plan, Resettlement Policy Framework, Indigenous People's Plan, Land Acquisition Plan, etc.)
- ☐ Annex 7 Summary of consultations and stakeholder engagement plan
- ☐ Annex 8 Gender assessment and project/programme-level action plan ([template provided](#))
- ☐ Annex 9 Legal due diligence (regulation, taxation and insurance)
- ☐ Annex 10 Procurement plan ([template provided](#))
- ☐ Annex 11 Monitoring and evaluation plan ([template provided](#))
- ☐ Annex 12 AE fee request ([template provided](#))
- ☐ Annex 13 Co-financing commitment letter, if applicable ([template provided](#))
- ☐ Annex 14 Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule

H.2. Other annexes as applicable

- ☐ Annex 15 Evidence of internal approval ([template provided](#))
- ☐ Annex 16 Map(s) indicating the location of proposed interventions
- ☐ Annex 17 Multi-country project/programme information ([template provided](#))
- ☐ Annex 18 Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
- ☐ Annex 19 Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity
- ☐ Annex 20 First level AML/CFT (KYC) assessment
- ☐ Annex 21 Operations manual (Operations and maintenance)
- ☐ Annex x Other references

** Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*

Source: Funding Proposal template (GCF, 2019d)

8.2. Annex GCF — Annex 5 Implementation Timetable

Annex 5 Implementation Timetable

Project/Programme Title:

COMPONENTS/OUTPUTS	20XX				20XX				20XX			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1												
Output 1.1												
Activity 1.1.1												
Activity 1.2.1												
Output 1.2												
Activity 1.2.1												
Activity 1.2.2												
Output 1.3												
Activity 1.3.1												
Activity 1.3.2												
Component 2												
Output 2.1												
Activity 2.1.1												
Activity 2.1.2												
Output 2.2												
Activity 2.2.1												
Activity 2.2.1												
Project Monitoring*		Inception Report			APR				APR		Interim Evaluation	

APR = Annual Performance Report

*In addition to this monitoring requirements, the Funded Activity is also subject to financial reporting per the AMA/FAA, such as Unaudited/Audited Financial Statements, Financial information reports, and other

Source: Snapshot of the Annex 5 Implementation Timetable (GCF, 2019f)

8.3. Annex GCF — Annex 6 Environmental and social safeguards

Environmental and social safeguards report form pursuant to para. 17 of the IDP

Basic project or programme information	
Project or programme title	[__]
Existence of subproject(s) to be identified after GCF Board approval	[Yes/ NoYes/ No]
Sector (public or private)	PublicPublic
Accredited entity	[__]
Environmental and social safeguards (ESS) category	Category ACategory A
Location — specific location(s) of project or target country or location(s) of programme	[__]
Environmental and Social Impact Assessment (ESIA) (if applicable)	
Date of disclosure on accredited entity's website	Tuesday, January 1, 2019Tuesday, January 1, 2019
Language(s) of disclosure	[__]
Explanation on language	[__]
Link to disclosure	[__]
Other link(s)	[__]
Remarks	[An ESIA consistent with the requirements for a Category A project is contained in the “__”.]
Environmental and Social Management Plan (ESMP) (if applicable)	
Date of disclosure on accredited entity's website	Tuesday, January 1, 2019Tuesday, January 1, 2019
Language(s) of disclosure	[__]
Explanation on language	[__]
Link to disclosure	[__]

Other link(s)	[]
Remarks	[]
Environmental and Social Management (ESMS) (if applicable)	
Date of disclosure on accredited entity's website	Tuesday, January 1, 2019Tuesday, January 1, 2019
Language(s) of disclosure	[]
Explanation on language	[]
Link to disclosure	[]
Other link(s)	[]
Remarks	[]
Any other relevant ESS reports, e.g. Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF), Indigenous Peoples Plan (IPP), IPP Framework (if applicable)	
Description of report/disclosure on accredited entity's website	Tuesday, January 1, 2019Tuesday, January 1, 2019
Language(s) of disclosure	[]
Explanation on language	[]
Link to disclosure	[]
Other link(s)	[]
Remarks	[]
Disclosure in locations convenient to affected peoples (stakeholders)	
Date	Tuesday, January 1, 2019Tuesday, January 1, 2019
Place	[]
Date of Board meeting in which the FP is intended to be considered	
Date of accredited entity's Board meeting	Tuesday, January 1, 2019Tuesday, January 1, 2019
Date of GCF's Board meeting	Tuesday, January 1, 2019Tuesday, January 1, 2019

Note: This form was prepared by the accredited entity stated above.

Source: ESS disclosure report: Annex 6 to Funding Proposals (GCF, 2019c)

Gender Analysis/Assessment Guide and Gender Action Plan Template

Part I: Gender Analysis/Assessment: Guide (Project/Program Level)

What is a gender analysis/assessment?

Gender analysis/assessment refers to methods used to understand relationships between men and women, their access to resources, their activities, and the constraints they face relative to each other. A comprehensive gender analysis/assessment entails the examination of the different roles, rights, needs, and opportunities of women and men, boys and girls in a given project/program context. It is a tool that helps to promote gender — relevant entry points, policies and identify opportunities for enhancing gender equality in a particular project/program. In the case of climate change projects/programs, a well done gender analysis/assessment helps to identify multiple causes of vulnerability, including gender inequality. It also helps to identify and build on the diverse knowledge and capacities within communities/households that can be used to make them more resilient to climate related shocks and risks.

When is a gender analysis/assessment used?

Gender analysis needs to take place early in the planning process so that an understanding of gender roles and power relations is built into the project. All projects/programs should include an analysis of gender and include data on gender issues within the overall situation analysis.

This template provides key questions to consider while developing a gender analysis/assessment for a particular project/program. Be sure to tailor these questions to the context of your project/program. Also, be certain to include quantitative data (i.e. sex — disaggregated) and qualitative data while developing the gender analysis/assessment.

Gender analysis/assessment questions that need to be addressed at the project planning/preparatory stage:

- What is the maternal mortality rate, infant mortality rate, educational status of girls and boys, adult literacy rate (disaggregated by sex), poverty rate, labour force participation rate (disaggregated by sex), employment rate (disaggregated by sex), unemployment rate (disaggregated by sex), political participation rate (disaggregated by sex), life expectancy (disaggregated by sex) in the country of intervention and/or the project/program footprint area?
- What is the legal status of women in the country of intervention?
- What are commonly held beliefs, perceptions, and stereotypes related to gender in the project/program footprint area or the country of intervention?
- What is the division of labour among women and men in the project/program footprint area and/or the country of intervention?
- What is the participation between women and men in the formal/informal economy in the country of intervention or in the project/program footprint area?
- What is the situation of women and men in the specific sector of intervention or in the project/program footprint area?
- In terms of the proposed project/program, will there be any anticipated differences in men's and women's vulnerability and adaptive capacity to climate change? If so, what are these?
- Are there existing gender inequalities that may be exacerbated by climate change impacts in the proposed project/program footprint area?

- What are some of the inequalities that exist between different social groups in the project/program footprint area? How do these inequalities affect people's capacity to adapt to climate change?
- What roles women and men are anticipated to play in the context of the project/program? What will these entail in terms of time commitment and need for mobility?
- What resources (economic, financial, physical, natural, other assets) do women and men have access to? Who manages or controls access to these resources?
- Do women and men from vulnerable communities have equal access to information and opportunities necessary to participate and benefit fully from the anticipated outcomes of the project/program?
- Do women have equal access to education, technical knowledge, and/or skill upgradation?
- Will services and technologies provided by the project/program be available and accessible to both women and men?
- To what extent do women and men from vulnerable communities participate in decision — making processes? What type of decisions are made by women? What are the constraints (social, cultural, economic, political) that restrict women's active participation in household and community level decision — making processes?
- Are there any opportunities to promote the leadership of women in local governance/political systems and formal/informal institutions? If not, what are some of the constraints that hinder women from assuming leadership roles?
- What are the differential needs/priorities of women and men in the context of the project/program? Will the project/program be able to address their respective needs and priorities? If so, how?
- Have the needs of specific (and vulnerable) sub-groups been taken into account by the project/program (e.g. children, girls, women and men with disabilities, the elderly, widows)?
- Has the project/program recognized the distinct vulnerabilities of women and men and developed specific response strategies for each target group?
- Are the specific knowledge and skills of women and men, especially from vulnerable groups, being utilised to contribute to project/program outcomes and solutions?
- Has the project/program identified opportunities to challenge gender stereotypes and increase positive gender relations through equitable actions? If so, what are these opportunities and actions?

When should information from the gender analysis/assessment be considered?

The information gathered from the gender analysis/assessment should be considered in all stages of the project cycle: design, formulation, implementation, and monitoring and evaluation. In each of these stages, project/program managers should keep a 'gender lens' in mind, looking at ways the project/program can address gender inequalities that emerge from the project/program; ensure the differential needs of women and men are addressed; ensure women and men have equal access to resources, services, and capacity development; ensure equal participation of women and men in management arrangements and as beneficiaries, partners and key stakeholders; and ensure women's equal participation in decision — making processes.

Part II: Gender Action Plan: Template (Project/Program Level)

Most often than not, projects/programs financed by the GCF will require the development of a gender action plan (GAP). A project/program-specific GAP is a tool used to ensure gender mainstreaming is explicitly visible in project/program design and implementation. The project/program GAP is not a separate component. It mirrors the project outputs and is an integral part of project/program design. GAPs include clear targets, quotas, gender design features and quantifiable performance indicators to ensure women's participation and benefits. Key aspects of the GAP are incorporated into project/program assurances to encourage buy-in from AEs and other partners.

The GAP presents:

- Preparatory work undertaken to address gender issues in the project/program;
- Quotas, targets, design features, included in the project/program to address gender inclusion and facilitate women's involvement and/or ensure tangible benefits to women;
- Mechanisms to ensure implementation of the gender design elements;
- Gender monitoring and evaluation indicators.

Below is presented a template of a GAP that the Mitigation and Adaptation and Private Sector Facility Divisions at GCF could share with AEs/other partners for their use. As the following template shows, the GAP should contain impact, outcome and output statements, gender — responsive activities, gender — performance indicators and targets, timeline, and responsibility lines. Guidance on what impact, outcome, output statements, gender — responsive activities, gender — performance indicators and targets should look like are provided in the GAP template.

Activities	Indicators and Targets	Timeline	Responsibilities
<p>Impact Statement: Write the project/program impact statement here (Note: an impact statement briefly summarizes, in lay terms, the difference the project/program will make. It also states the long — term gender, social, economic, environmental impacts to which the project/program will contribute. Examples of impact statements in, say, a climate change/energy efficiency project/program: increased resilience of vulnerable communities, including women and girls, to the negative impacts of climate change; improved clean/low — emission energy access for vulnerable and female — headed households; reduced time and labour required by women for household tasks; increase in time saving, recreation and economic activities for women).</p> <p>Outcome Statement: Write the project/program outcome statement here (Note: the outcome statement should be specific, measurable and let project managers know when project goals are achieved. An outcome statement describes specific changes in knowledge, attitude, skills, and behaviours that will occur as a result of actions undertaken by the project/program. Example of an outcome statement in, say, a gender — responsive energy efficiency MSME project/program: improved business opportunities for an estimated X no./percentage of women — led/owned energy efficiency enterprises).</p> <p>Output(s) Statement: Write the output statement here. In many cases, there will be more than one output for a particular project/program, therefore for each output statement a separate row should be created followed by associated activities, gender — performance indicators, sex — disaggregated targets, timeline and responsibilities. (Note: an output statement highlights what the project/program intends to achieve in the short term as a result of the project/program activities. Example of an output statement in, say, an energy efficiency project/program is: installed meters, new and subsidized service connections and improved supply quality).</p>			
<p>(This is the place where the project/program team inserts a brief list of activities. Activities are those that tell us what the project/program will do; sometimes referred to as interventions. Examples of activities associated with the above output are):</p> <p>(i) Poor female headed households (FHH) provided new meters (ii) Poor FHH provided with new service connections (iii) Increase in female-headed, start-up, energy-based microenterprises (iv) Women self — help groups (SHGs) trained as trainers for the implementation of gender-sensitive energy user awareness programs (v) Public awareness program implemented, targeting women's spaces and men, to include information on:</p> <ul style="list-style-type: none"> • provision of concessionary rates for households below the poverty line; • support for metering and easy payment systems; • safety issues related to risks of tampering with high voltage lines; <p>household energy efficiency.</p>	<p>Outline the indicators and targets here (Note: A good indicator should be able to measure the quantity, quality and timeliness of products (goods or services) that are the result of an activity, project or program. On the other hand, a target should — in the case of the GAP — be disaggregated by sex. Targets, disaggregated by sex, is an effective way to measure quantifiable [and differential] results for women, men, girls and boys. Examples of gender — performance indicators and sex — disaggregated targets are):</p> <ul style="list-style-type: none"> • X% FHH in project areas • X% FHH in project areas • X%, from 2011 baseline • Up to XX SHGs across X districts/provinces/prefecture s/municipalities/villages • X no. of newly connected consumers (of which 50% are females) 	<p>(This is the place where the project/program team inserts the timeline for each of the indicators/target s. Examples are shown below):</p> <p>By X year By X year By X year First 6 months and regular thereafter</p>	<p>(Highlight here which party/organization/entity/ partner will be responsible for ensuring the achievement of targets, as outlined in the indicator and targets column. Examples provided below):</p> <p>Accredited Entity/Executing Agency</p>

8.5. Annex GCF — Concept Note User's Guide

GCF DOCUMENTATION

PROJECTS

Concept Note User's Guide



GREEN
CLIMATE
FUND

Introduction

The objective of this user's guide is to assist Accredited Entities (AEs) and interested National Designated Authorities (NDAs) to develop a concept note to be submitted to the Green Climate Fund.

The concept note presents a summary of a proposed project/programme to the GCF in order to receive feedback from the Secretariat on whether the concept is aligned with the GCF's objectives, policies and investment criteria. The feedback will provide information to further develop and strengthen the project/programme idea.

Prior to the submission of the concept note, if applicable, but no later than submission of a funding proposal to the Secretariat, the accredited entity shall:

- a. Inform the NDA or, if applicable, the focal point about the proposed activity to be implemented in their country and commence consultations with a view to confirming it is in accordance with the country's strategic framework and priorities; and
- b. Inform the Secretariat that it has commenced consultations with the NDA or, if applicable, the focal point.

Kindly note that the feedback provided by the Secretariat does not represent acceptance or commitment to provide financial resources in respect of a specific project/programme. Funding decisions can only be made by the GCF's Board, taking into account various factors, including technical, financial, environmental, social, gender and legal aspects. The GCF Secretariat only submits to the Board for its consideration those funding proposals whose approval has been recommended by both the independent Technical Advisory Panel (iTAP) and the Secretariat.

Any feedback is intended to provide non-binding guidance to enable the accredited entity to initiate the next phase, the preparation and submission of the full funding proposal.

The concept note is not mandatory but strongly encouraged to promote early feedback from the GCF Secretariat, to streamline with the Project Preparation Facility (PPF), and to allow for a faster review process.

Glossary

Accredited entity (AE): An entity that is accredited by the GCF Board in accordance with the Governing Instrument and relevant Board Decisions. Please refer to the [accredited entity directory](#) to see the full list of AEs.

Accreditation Master Agreement (AMA): an agreement signed between an accredited entity and the GCF that is a pre-requisite for the disbursement of funds for a GCF-approved project. It contains the general terms and conditions applicable to all GCF-funded activities of the AE including conditions precedent to disbursement, fiduciary standards, and privileges and immunities.

Concept note (CN): A document which provides essential information about a proposal to seek feedback on whether the concept is aligned with the objectives, policies and investment criteria of the GCF. The [concept note template](#) can be downloaded from the GCF website.

Environmental and Social Safeguards (ESS): A reference point for identifying, measuring and managing environmental and social risks. The purpose of the ESS is to determine the key environmental and social risks the accredited entity intends to address in the conceptualization, preparation and implementation of funding proposals, and to provide guidance on how these risks are to be managed. ESS is based on the eight performance standards of the International Finance Corporation. Please refer to the [Interim Environmental and Social Safeguards](#) of the GCF for more detailed information about the performance standards.

Entity Work Programme (EWP): a document developed by accredited entities with support from the Country Programming Division of the GCF that provides an overview of the AE's areas of work, priority sectors and experience in implementing projects and programmes across the GCF's eight Strategic Impact Areas. It also summarizes their indicative projects as well as programmes and outlines an action plan for engagement with the GCF.

Executing entity (EE): An entity through which GCF proceeds are channelled for the purposes of a funded activity or part thereof; and/or any entity that executes, carries out or implements a funded activity, or any part thereof. An accredited entity may carry out the functions of an executing entity, though it is preferable if local and national actors execute projects/programmes.

Financial instruments: A total of six financial instruments in the GCF that can be utilized through different modalities and at various stages of the financing cycle: grants, reimbursable grants, senior loans, subordinated loans, guarantees, and equity investments. A project/programme may include one or multiple financial instruments.

Focal point: An individual or authority designated by a developing country party to the United Nations Framework Convention on Climate Change (UNFCCC) to fulfil all functions of a National Designated Authority (NDA) on a temporary basis, until it has designated an NDA.

Funding proposal (FP): A document that is submitted by entities who want to get access to GCF resources for climate change projects and programmes. Funding Proposals can be submitted to the GCF at any time or as a response to a Request for Proposals (RFP). Funding Proposals that are submitted to GCF are subject to a review process, culminating in a decision by the GCF Board as to whether to support the project.

Investment criteria: Six investment criteria adopted by the GCF Board, namely impact potential; paradigm shift potential; sustainable development potential; needs of the recipient; country ownership; and efficiency and effectiveness. There are coverage areas, activity-specific sub-criteria, and indicative

assessment factors that provide further elaboration. Please refer to the Board Decision on [Further Development of the Initial Investment Framework](#) which provides detailed explanation of the GCF's investment criteria.

Independent Technical Advisory Panel (iTAP): A panel responsible for conducting technical assessments of funding proposals after the internal review of the GCF Secretariat and before submission to the GCF Board.

National Designated Authority (NDA): A core interface and the main point of communication between a country and the GCF. The NDA seeks to ensure that activities supported by the GCF align with strategic national objectives and priorities, and help advance ambitious action on adaptation and mitigation in line with national needs. A key role of NDAs is to provide letters of nomination to direct access entities. Please refer to the [country directory](#) to see the full list of NDAs.

Project Preparation Facility (PPF): A funding window that supports AEs in project and programme preparation. It covers pre-feasibility and feasibility studies; project design; environmental, social and gender studies; risk assessments; and other project preparation activities, where necessary, provided that sufficient justification is available. The PPF is designed in particular to support Direct Access Entities for projects in the micro-to-small size category. Refer to the [PPF request template](#) for more information.

Request for Proposals (RFP): On occasion, the GCF Board may call for Requests for Proposals to guide the development of the GCF portfolio in specific areas in accordance with the initial strategic plan. RFPs have specific eligibility standards. Entities that are not yet accredited by the GCF can submit proposals to the Fund as a response to RFPs. It is possible to check ongoing [Request for Proposals](#) through the GCF website.

Result areas: Eight result/impact areas which will deliver major mitigation and adaptation benefits in the developing world to promote a paradigm shift towards low-emission and climate-resilient development. Mitigation includes four result areas, namely low-emission energy access and power generation; low-emission transport; energy efficient building, cities and industries; and sustainable land use and forest management. Adaptation covers the other four, namely enhanced livelihoods of the most vulnerable people, communities and regions; increased health and well-being, and food and water security; resilient infrastructure and built environment to climate change threats; and resilient ecosystems. All proposals must reflect one or more of the result/impact areas. More on these result areas can be found in this document: [Mitigation and Adaptation Performance Measurement Frameworks](#).

Simplified Approval Process (SAP): A process for small-scale low risk proposals which allots less time and effort from both the entity and GCF to go from project conception to implementation. The documentation to be provided is reduced while the review and approval processes are streamlined. The SAP has three main eligibility criteria including a GCF contribution of up to USD 10 million; an ESS category of minimal to none; and a potential for scaling-up, transformation and promotion of a paradigm shift to low-emission and climate-resilient development. Further information on the [Simplified Approval Process](#), including a SAP concept note template with an ESS checklist, is available on the GCF website.

User's Guide

Cover Page

The cover page of the concept note displays basic information about the proposed project or programme.

Project/Programme title: Provide the full title of the proposed project/programme.

Country(ies): Enter the country (or countries) in which the proposed project/programme will be implemented.

National designated authority(ies): Insert the name of the National Designated Authority or the focal point as a national-level interface with the GCF.

Accredited entity: Insert the name of the entity that has been accredited by GCF's Board.

Date of first submission: Insert date of the first submission of the concept note to the GCF.

Date of current submission/version number: Insert date of current submission of the concept note to the GCF followed by the version number which pertains to the number of times the concept note has been submitted to GCF.

A. Project/Programme Summary

Section A of the concept note intends to obtain essential information about the proposed project or programme.

A.1. Project or programme: Check appropriate box indicating whether the proposal is associated with a project or a programme. If the proposal refers to a combination of multiple projects, then it is considered a programme.

A.2. Public or private sector: Indicate whether the proposal is associated with an organization from the public sector or the private sector.

A.3. Is the concept note submitted in response to a Request for Proposals (RFP): Indicate whether the proposal was submitted in response to an RFP. If the answer is yes, write the specific RFP which the proposal is responding to (e.g. Micro-, Small-, Medium-sized Enterprises Pilot Programme).

A.4. Confidentiality: Indicate whether the proposal should be kept confidential. Concept notes not marked as confidential will be published in accordance with the GCF's Information Disclosure Policy and Review of the Initial Proposal Approval Process.

- A.5. Indicate the result areas for the project/programme:** Mark the result areas that are applicable to the proposed project/programme. As shown in the checklist, there are eight result areas: four mitigation and four adaptation. In some cases, proposed projects/programmes may bring multiple co-benefits and several result areas. For example, efforts to invest in climate-compatible cities may deliver impacts related to emission reductions from low emission transport as well as from buildings, cities, industries and appliances. They may also support adaptation, particularly by helping to strengthen the resilience of the livelihoods of urban people and communities; and to increase the resilience of urban infrastructure. In this case, a total of four boxes can be ticked. If the proposal aims to bring both mitigation and adaptation result areas, then it is considered a cross-cutting project/programme. Refer to the GCF's [Performance Measurement Frameworks](#).
- A.6. Estimated mitigation impact:** Provide an estimate of total tons of CO₂ equivalent to be avoided or reduced per annum. Refer to the GCF [Investment Framework](#) on how to calculate or measure this. The methodology for measuring the mitigation benefits should be mentioned in the concept note, and elaborated further in the funding proposal.
- A.7. Estimated adaptation impact:** Provide the expected total number of direct and indirect beneficiaries, and number of beneficiaries relative to total population.
- A.8. Indicative total project cost:** Specify the estimated total project cost that will cover all expenses for the successful implementation of the project including funding from the GCF and funding that will be co-financed.
- A.9. Indicative GCF funding request:** Specify the estimated funding to be requested from the GCF.
- A.10. Type of financial instrument requested for the GCF funding:** Check the appropriate box to indicate which type of financial instrument/s is requested from the GCF. The financial instruments are grants, reimbursable grants, subordinated loans, senior loans, equity and guarantees. The proposal may not be limited to one type of financial instrument.
- A.11. Estimated duration of project/programme:** Indicate the expected duration of the disbursement period and/or the repayment period for the project/programme.
- A.12. Estimated project/programme lifespan:** Indicate the expected lifespan of the proposed project/programme in years. This refers to the total period over which the investment (infrastructures or benefits) is effective.
- A.13. Is funding from the Project Preparation Facility (PPF) requested:** Stipulate whether the project intends to get project preparation support from the GCF's PPF. See [here](#) for more information on the PPF. Also enumerate other institutions from which financial support was received for project preparation.

A.14. Environmental and social safeguards (ESS) category: Select the ESS category of the project/programme. Refer to the [Interim Environmental and Social Safeguards](#) of the GCF for more detailed information.

A.15. Is the concept note aligned with your accreditation standard: Indicate whether the concept note is aligned to the Accredited Entity (AE) accreditation standard based on the total project size category in million USD: micro (≤ 10), small ($10 < x \leq 50$), medium ($50 < x \leq 250$), and large (> 250). Funding requested for the project/programme must not exceed the limit of the AE standard.

A.16. Has the concept note been shared with the National Development Authority (NDA): Specify whether the concept note has been shared with the NDA based on the location of the project/programme.

A.17. Accreditation Master Agreement (AMA) signed: If the concept note is submitted by an AE, indicate whether the AMA has already been signed. If not, specify the status of AMA negotiations and expected date of signing.

A.18. Is the concept note included in the Entity Work Programme (EWP): If the concept note is submitted by an AE, specify whether the programme/project is included in their Entity Work Programme. The Entity Work Programme is developed in collaboration with the Country Programming Division of the GCF. It is expected that projects/programmes submitted by AEs are aligned with their Entity Work Programmes.

A.19. Project/programme rational, objectives and approach of project/programme: Brief summary of the problem statement and climate rationale, objective and selected implementation approach, including executing entity(ies) and other implementing partners.

B. Project/Programme Information

Section B intends to collect information to assess the economic and technical viability of the proposed project/programme. Please provide relevant details while adhering to the maximum number of pages. The information will be helpful for the review and assessment of the concept.

B.1. Context and baseline: Describe the climate vulnerabilities and impacts, greenhouse gas emissions profile, and mitigation and adaptation needs that the prospective intervention is expected to address. Indicate how the project is aligned with the country's national priorities and level of ownership the country will take in the implementation of the project/programme. Explain the project/programme's contribution in national climate strategies and other plans such as Nationally Appropriate Mitigation Actions, National Adaptation Plans or equivalent. Describe which priorities identified in these documents the proposed project is aiming to address and/or improve. Describe the main causes and barriers (social, gender, fiscal, regulatory, technological, financial, environmental, institutional, etc.) that need to be addressed. Where relevant, and particularly for private sector proposal, describe the key characteristics and dynamics of the sector or market in which the project/programme will operate.

B.2. Project/programme description (including objectives): Describe the expected set of components/outputs and subcomponents/activities to address the above barriers identified that will lead to the expected outcomes. In terms of rationale, please describe the theory of change and provide information on how it serves to shift the development pathway toward a more low-emissions and/or climate resilient direction, in line with the GCF's goals and objectives. Explain the climate rationale by describing the benefits of the proposed investment relative to the consequences of not making any investments. Describe how activities in the proposal are consistent with national regulatory and legal frameworks, if applicable. Describe in what way the accredited entity(ies) is well placed to undertake the planned activities and what will be the implementation arrangements with the executing entity(ies) and other relevant partners. Provide a brief overview of the key financial and operational risks and any mitigation measures identified at this stage.

B.3. Expected project results aligned with the GCF investment criteria: Provide information that enables an understanding of the project/programme's expected performance against the GCF's investment criteria, namely: impact potential; paradigm shift; sustainable development; needs of recipients; country ownership; and efficiency and effectiveness. Accredited entities should provide a brief description of the expected impacts of the proposed project/programme aligned with these criteria. For example, indicators should have specific values (e.g. 5 million tCO₂eq to be reduced or avoided, or 500,000 expected direct beneficiaries) wherever possible. The GCF's Investment Framework also includes activity-specific sub-criteria and indicative assessment factors which may or may not be applicable or relevant for the proposed project/programme. Accredited entities are expected to respond to all six of the investment criteria but only the applicable and relevant sub-criteria and indicative assessment factors.

A detailed explanation of each criteria in the GCF's [Investment Framework](#) is provided below.

1. Impact potential:

Specify the climate mitigation and/or adaptation impact. The GCF's Investment Framework has four core indicators to which every concept note should respond, two of which are contained within the sub-section of impact potential, including:

- Mitigation core indicator: Total tons of CO₂ eq to be avoided or reduced per annum
- Adaptation core indicator: Expected total number of direct and indirect beneficiaries and number of beneficiaries relative to total population (e.g. total lives to be saved from disruption due to climate-related disasters)

The methodology used for calculating the above indicators and values should be provided. The GCF's [Investment Framework](#) details possible indicative assessment factors that may help entities to quantify impact potential. For example, a renewable energy project/programme may wish to provide the expected reduction of megawatts as a result of low-emission energy capacity installed, generated and/or rehabilitated. This is consistent with

an indicative assessment factor within the Investment Framework, which contains a range of mitigation and adaptation factors to consider.

In addition to the core indicators above, accredited entities are encouraged to provide specific values for other indicators as they see relevant. Accredited entities may also wish to supplement the concept with more qualitative information, such as the degree to which the proposed activity avoids lock-in of long-lived, high-emission infrastructure (mitigation) or long-lived, climate-related infrastructure (adaptation). The accredited entity therefore has significant leeway to respond to quantitative and qualitative factors that will strengthen their concept note.

Finally, the accredited entity should provide a benchmark in a comparable context (e.g. country, sector and/or technology) against which the indicator(s) can be compared.

2. Paradigm shift potential:

In terms of paradigm shift, the concept note may emphasize one or multiple factors below. Provide the estimates and details of the below and specify other relevant factors.

- Innovation: innovative ideas or elements should be highlighted and described. For example, fostering new market segments, creation of business models and/or the development or adoption of new technologies. Innovation is context-specific, and the concept note should specify the circumstances in which the innovation takes place.
- Potential for scaling-up and replication (e.g. multiples of initial impact size) for both mitigation and adaptation: the concept note should present specific values for scaling-up and replication (e.g. a 30 megawatt hydroelectric power station that can be replicated at four different specific sites in the region). A proposal with a high potential for scaling-up, for example an early warning system for an individual province that can be scaled up to several surrounding provinces, should present a concrete plan to do so. A proposal with high replication potential, for example a hydroelectric power station in a region with several potential sites identified in a supporting technical study, should also present specific replication opportunities that can be explored. Scaling up and replication potential will have a number representing the multiples of initial impact size combined with supporting justification.
- Potential for knowledge and learning: any potential for knowledge sharing or learning at a project or institutional level should be highlighted. For example, if the project/programme will generate useful lessons learned, a plan should be elaborated that specifies how those lessons can then be captured and shared with other individuals, projects or institutions, including through the monitoring and evaluation of the project/programme.
- Contribution to the creation of an enabling environment: the sustainability of outcomes and results beyond the completion of the intervention should be highlighted. The concept note may elaborate on the arrangements that provide for long-term and financially sustainable continuation of key outcomes and activities. In cases where the planned activities do not generate financial reflows, a thorough explanation of long-term financial sustainability is needed. Accredited entities may also wish to highlight the aspects of market development

and transformation in which the project/programme creates new markets and business activities at the local, national or international levels. If the project/programme addresses or eliminates systematic barriers to low-carbon and climate resilient solutions, or changes incentives by reducing costs and risks, these aspects can be highlighted.

- Contribution to the regulatory framework and policies: if the project/programme advances national/local regulatory or legal frameworks and is expected to bring significant benefits in this regard, please elaborate. Of particular interest is the shifting or alignment of incentives to promote investment in low-emission or climate-resilient development, and/or the mainstreaming of climate change considerations into policies and regulatory frameworks at all decision-making levels.
- Overall contribution to climate-resilient development pathways consistent with a country's climate change adaptation strategies and plans: show the degree to which the programme or project reduces proposed risks of investment in technologies and strategies that promote climate resilience in developing countries.

3. Sustainable development potential:

Provide the expected environmental, social and health, and economic co-benefits. Also provide the gender-sensitive development impact, which will aim to reduce gender inequalities in climate change impacts. These co-benefits and wider positive impacts may be drawn from an economic analysis of the proposed activities and can be strengthened with more qualitative factors. As with the impact potential indicators in a previous sub-section, quantitative sustainable development potential indicators are welcome and should be supported by an analysis or study. The calculation methodology should also be provided. Examples of sustainable development indicators include the following:

- Economic co-benefits
 - Total number of jobs created
 - Amount of foreign currency savings
 - Amount of government's budget deficits reduced
- Social co-benefits
 - Improved access to education
 - Improved regulation or cultural preservation
 - Improved health and safety
- Environmental co-benefits
 - Improved air and/or water quality
 - Improved soil quality
 - Improved biodiversity and ecosystem services
- Gender-sensitive development impact
 - Proportion of men and women in jobs created

The proposal should explain how project activities will address the needs of women and men in order to correct the prevailing inequalities. Accredited entities are strongly encouraged to create projects/programmes aligned with the objectives of GCF's [Gender Policy](#), which include:

- (a) To achieve greater, more effective, sustainable, and equitable climate change results; and
- (b) To build equally women and men's resilience to and ability to address climate change; and
- (c) To address and mitigate against potential risks for women and men in projects; and
- (d) To help reduce the gender gap of climate change-exacerbated social, economic and environmental vulnerabilities.

Accredited entities may propose their own indicators that highlight the sustainable development potential of the project/programme. In addition to the indicators above and any other indicators included, a strong narrative of the expected co-benefits may also supplement and further contextualize the concept note.

4. Needs of recipient:

Describe the scale and intensity of vulnerability of the country and beneficiary groups and elaborate how the project/programme addresses the identified needs. Examples include:

- Vulnerability of the country and beneficiary groups (adaptation only): address the scale and intensity of exposure to climate risks for the beneficiary country and groups, which could include the exposure of people, social or economic assets or capital to risks derived from climate change. Exposure could be expressed in terms of size of population and/or social or economic assets or capital. The proposed activities may support specific beneficiary groups which are identified as particularly vulnerable in national climate or development strategies, which should then be highlighted with relevant sex disaggregation.
- Economic and social development level of the country and affected population: describe the level of social and economic development (including income level) of the country and target population. Examples of the target population may include minorities, disabled, elderly, children, female heads of households, indigenous peoples or others.
- Absence of alternative sources of financing: describe the barriers that have created the lack of alternative funding sources for the project/programme.
- Needs for strengthening institutions and implementation capacity: describe the opportunities to strengthen institutional and implementation capacity in relevant institutions

5. Country ownership:

Country ownership is fundamental to all concept notes submitted to the GCF. Provide details of the below, plus other relevant factors:

- Coherence and alignment with the country's national climate strategy and priorities as well as other existing policies: detail how its objectives are aligned with the priorities in the country's national climate strategy. Accredited entities may reference nationally appropriate mitigation actions (NAMAs), national adaptation plans (NAPs) technology needs assessments (TNAs) or others, as appropriate. Also describe the degree to which

the activity is supported by a country's enabling policy and institutional framework, or includes policy or institutional changes.

- Capacity of accredited entities or executing entities to deliver: provide a brief description of accredited or executing entities (e.g. local developers, partners and service providers) and the roles these entities will play, respectively. The track record and relevant experience of the entities in similar or relevant project/programme circumstances can be elaborated.
- Stakeholder engagement process and feedback received from civil society organizations and other relevant stakeholders: emphasize the consultative process in the description of country ownership, both with the relevant national designated authority and with the wider group of stakeholders.

6. Efficiency and effectiveness:

Economic and financial analysis primarily drives the efficiency and effectiveness criterion, and the concept note should make the case for strong cost effectiveness and financial soundness. The efficiency and effectiveness of the proposed financial structure is particularly important, as the requested funding should be the appropriate amount necessary, and in the proper form (i.e. proposed financial instrument) to make the project/programme viable, but not more.

Efficiency and effectiveness includes two core mitigation indicators. Provide values and supporting justification, including the calculation methodology and citations of relevant studies, for these core indicators (if applicable):

- Estimated cost per tCO₂ eq. (total investment cost/expected lifetime emission reductions)
- Expected volume of finance to be leveraged as a result of the GCF's financing, disaggregated by public and private sources

In general, the economic and financial analysis, including the financial model if applicable, should guide the preparation of the response to this criterion. Accredited entities may specify the following factors as relevant, including:

- Financial adequacy and appropriateness of concessionality: along with the financial model and analysis, specify how the proposed financial structure (funding amount, financial instrument, tenor and term) is adequate and reasonable, and further demonstrates that the structure provides the appropriate concessionality to make the proposal viable.
- Amount of co-financing: the ratio of co-financing (total amount of the GCF's investment as percentage of project) should be provided and detailed. For projects/programmes that may not leverage a significant level of up-front co-financing, the accredited entity may instead demonstrate a significant level of indirect or long-term investment mobilized as a result of the proposed activities.
- Financial viability and other financial indicators: indicators of particular interest include the economic rate of return (with vs. without the project) and the financial rate of return (with and without the GCF's support). Other financial indicators, including the debt service coverage ratio, may be provided as applicable. A description of the financial soundness in the long term beyond the GCF's intervention may also be helpful for the reader.

- Application of best practices and degree of innovation: an explanation of how the best available technologies and/or best practices are considered and applied. Best practices may also take the form of indigenous knowledge.

B.4. Engagement among the National Designated Authority, Accredited Entity, and/or other relevant stakeholders in the country: Describe any engagement undertaken among the NDAs, AEs and/or other relevant stakeholders in the country for the creation of the concept. Also detail future engagement that may take place as the concept is developed into a full funding proposal.

C. Indicative Financing/Cost Information

Section III provides an overview of the financing/cost information for both the requested GCF amount and co-financing amount. The GCF uses six financial instruments: grants, reimbursable grants, senior loans, subordinate loans, guarantees and equity investments. Provide a breakdown of estimated costs according to the financing instrument, and specify co-financing information.

C.1. Financing by components: Provide an estimate of the total cost per component and disaggregate the source of financing.

- The '*Indicative total cost*' should be the sum of '*GCF financing*' amount and the '*Co-financing*' amount.
- On the '*GCF financing*', provide a breakdown by component and financial instrument. For each financing instrument, specify the amount. If you select '*senior loans*' and/or '*subordinated loans*', please specify tenor in years and pricing in percentage.
- On the '*Co-financing*' section, specify financial instrument; provide amount and indicate currency; list the name of institutions that provide support for the proposed project/programme.

C.2. Justification of GCF funding request: Explain why the project/programme requires GCF funding, i.e. explaining why this is not financed by the public and/ or private sector(s) of the country. Describe alternative funding options for the same activities being proposed in the concept note, including an analysis of the barriers for the potential beneficiaries to access to finance and the constraints of public and private sources of funding. Justify the rationale of the GCF financial instrument(s) as well as how this will be passed on to the end-users and beneficiaries. Describe in detail the mechanisms that will make this happen. Justify why this is the minimum required to make the investment viable and most efficient considering the incremental cost or risk premium of the project/programme. The justification for grants and reimbursable grants is mandatory. In the case of private sector proposal, concessional terms should be minimized and justified as per the guiding principles applicable to the private sector operations.

The concept note should include strong economic and financial justification for the grant elements and concessionality level that GCF provides. The concept note should describe – to the extent possible – how it will address all the guiding principles listed below:

- Grant elements should be tailored to incremental cost or the risk premium required to make the investment viable, or to cover specific activities such as technical assistance that cannot be financed otherwise.
- Seeking the right level of concessionality, so as not to displace investments that would otherwise have occurred, including for private sector investment and avoid crowding out commercial financing.
- Levels of indebtedness capacity of the recipient should be taken into account so as not to encourage excessive indebtedness.
- Structure terms on a case-by-case basis to address specific barriers.
- Leveraging of other financing, seeking to maximize potential leverage in the case of private financing.
- The grant element of concessional finance will be tailored to provide the appropriate incentive to facilitate the implementation of mitigation and adaptation activities.
- Concessional forms of finance will be designed to minimize market distortions and potential disincentives to private investment.
- The expertise and capacity of financial intermediaries and implementing entities in implementing similar projects successfully.
- The risk sharing between public and private investment, when relevant.
- The subsidy element provided through grants and/or concessional lending will be the minimum amount necessary to make the project or programme viable and help achieve the GCF's paradigm shift objective.
- Proposed financial structure (funding amount, financial instrument, tenor and term) is adequate and reasonable in order to achieve the proposal's objectives, including addressing existing bottlenecks and/or barriers.

C.3. Sustainability and replicability of the project: Explain how the project/programme sustainability will be ensured in the long run. Describe how this will be monitored after the project/programme is implemented with support from the GCF and other sources. For example, give a brief explanation of how the proposed activities will be continued after the grant has been fully disbursed. For non-grant instruments, explain how the capital invested will be repaid and over what duration of time. The monitoring procedures should comply with GCF requirements.

D. Supporting documents

Section D includes the documents which can be submitted with the concept note but are optional.

Map indicating the location of the project/programme

Diagram of theory of change

Economic and financial model with key assumptions and potential stressed scenarios

Pre-feasibility study

Evaluation report of previous project/s

Results of environmental and social risk screening

9. Annex GEF — Project Identification form and Annexes

All sources of this annex were found in the template category on the GEF website (*GEF-7 Templates*, no date)

9.1. Annex GEF — GEF 7 Project Identification Form (PIF)



GEF-7 PROJECT IDENTIFICATION FORM (PI

PROJECT TYPE: (choose project type)

TYPE OF TRUST FUND:(choose fund type)

PART I: Project Information

Project Title:			
Country(ies):		GEF Project ID:	
GEF Agency(ies):	(select) (select) (select)	GEF Agency Project ID:	
Project Executing Entity(s):		Submission Date:	
GEF Focal Area(s):	(select)	Project Duration (Months)	

A. INDICATIVE FOCAL/NON-FOCAL AREA ELEMENTS

Programming Directions	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
(select) (select)	(select)		
Total Project Cost			

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective:						
Project Components	Component Type	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
	(select)					
Subtotal				(select)		
Project Management Cost (PMC)				(select)		
Total Project Cost						

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ()

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount (\$)
(select)		(select)	(select)	
Total Co-financing				

Describe how any “Investment Mobilized” was identified.

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b)	Total (c)=a+b
(select)	(select)		(select)	(select as applicable)			
Total GEF Resources							

E. PROJECT PREPARATION GRANT (PPG)

Is Project Preparation Grant requested? Yes ☐ No ☐ If no, skip item E.

Project Core Indicators		Expected at PIF
1	Terrestrial protected areas created or under improved management for conservation and sustainable use (Hectares)	
2	Marine protected areas created or under improved management for conservation and sustainable use (Hectares)	
3	Area of land restored (Hectares)	
4	Area of landscapes under improved practices (excluding protected areas)(Hectares)	
5	Area of marine habitat under improved practices (excluding protected areas) (Hectares)	
6	Greenhouse Gas Emissions Mitigated (metric tons of CO ₂ e)	
7	Number of shared water ecosystems (fresh or marine) under new or improved cooperative management	
8	Globally over-exploited marine fisheries moved to more sustainable levels (metric tons)	
9	Reduction , disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)	
10	Reduction, avoidance of emissions of POPs to air from point and non-point sources (grams of toxic equivalent gTEQ)	

11	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	
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PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee (b)	Total c = a + b
(see	(see		(select)	(select as applicable)			
Total PPG Amount							

F. PROJECT'S TARGET CONTRIBUTIONS TO GEF 7 CORE INDICATORS

Provide the relevant sub-indicator values for this project using the methodologies indicated in the Core Indicator Worksheet provided in Annex B and aggregating them in the table below. Progress in programming against these targets is updated at the time of CEO endorsement, at midterm evaluation, and at terminal evaluation. Achieved targets will be aggregated and reported at anytime during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicators targets are not provided.

G. PROJECT TAXONOMY

Please fill in the table below for the taxonomic information required of this project. Use the GEF Taxonomy Worksheet provided in Annex C to help you select the most relevant keywords/ topics/themes that best describe this project.

Level 1	Level 2	Level 3	Level 4
Influencing Models	(multiple selection)	(multiple selection)	(multiple selection)
Stakeholders	(multiple selection)	(multiple selection)	(multiple selection)
Capacity, Knowledge and Research	(multiple selection)	(multiple selection)	(multiple selection)
Gender Equality	(multiple selection)	(multiple selection)	(multiple selection)
Focal Area/Theme	(multiple selection)	(multiple selection)	(multiple selection)
Rio Marker	(multiple selection)		

part ii: project justification

1a. *Project Description*. Briefly describe:

1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description); 2) the baseline scenario and any associated baseline projects, 3) the proposed alternative scenario with a brief description of expected outcomes and components of the project; 4) alignment with GEF focal area and/or Impact Program strategies; 5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 7) innovation, sustainability and potential for scaling up.

1b. *Project Map and Coordinates.* Please provide geo-referenced information and map where the project interventions will take place.

2. STAKEHOLDERS. SELECT THE STAKEHOLDERS THAT HAVE PARTICIPATED IN CONSULTATIONS DURING THE PROJECT IDENTIFICATION PHASE:

☐ **INDIGENOUS PEOPLES AND LOCAL COMMUNITIES;**

☐ **CIVIL SOCIETY ORGANIZATIONS;**

☐ **PRIVATE SECTOR ENTITIES;**

☐ **IF NONE OF THE ABOVE, PLEASE EXPLAIN WHY.**

IN ADDITION, PROVIDE INDICATIVE INFORMATION ON HOW STAKEHOLDERS, INCLUDING CIVIL SOCIETY AND INDIGENOUS PEOPLES, WILL BE ENGAGED IN THE PROJECT PREPARATION, AND THEIR RESPECTIVE ROLES AND MEANS OF ENGAGEMENT.

3. Gender Equality and Women's Empowerment. Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? yes ☐ /no ☐ / tbd ☐ ; If possible, indicate in which results area(s) the project is expected to contribute to gender equality:

☐ closing gender gaps in access to and control over natural resources;

☐ improving women's participation and decision-making; and/or

☐ generating socio-economic benefits or services for women.

Will the project's results framework or logical framework include gender-sensitive indicators? yes ☐ /no ☐ / tbd ☐

4. Private sector engagement. Will there be private sector engagement in the project? (yes ☐ /no ☐). Please briefly explain the rationale behind your answer.

5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved or may be resulting from project implementation, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

6. Coordination. Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

7. Consistency with National Priorities. Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes ☐ /no ☐). If yes, which ones and how:

- **NATIONAL BIO STRATEGY ACTION PLAN (NBSAP)**

- **CBD NATIONAL REPORT**

- **CARTAGENA PROTOCOL NATIONAL REPORT**

- **NAGOYA PROTOCOL NATIONAL REPORT**

- **UNFCCC NATIONAL COMMUNICATIONS (NC)**

- **UNFCCC BIENNIAL UPDATE REPORT (BUR)**

- **UNFCCC NATIONAL DETERMINED CONTRIBUTION**

- **UNFCCC TECHNOLOGY NEEDS ASSESSMENT**

- **UNCCD REPORTING**

- **ASGM NATIONAL ACTION PLAN (ASGM NAP)**
- **MINAMATA INITIAL ASSESSMENT (MIA)**
- **STOCKHOLM NATIONAL IMPLEMENTATION PLAN (NIP)**
- **STOCKHOLM NATIONAL IMPLEMENTATION PLAN UPDATE**
- **NATIONAL ADAPTATION PROGRAMME OF ACTION UPDATE**
- **OTHERS**

8. *Knowledge Management.* Outline the “Knowledge Management Approach” for the project and how it will contribute to the project’s overall impact, including plans to learn from relevant projects, initiatives and evaluations.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

(Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this SGP OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)

Annex A - PROGRAM/PROJECT MAP AND GEOGRAPHIC COORDINATES (when possible)

Annex B - GEF 7 Core Indicator Worksheet

Use this Worksheet to compute those indicator values as required in Part I, item F to the extent applicable to your proposed project. Progress in programming against these targets for the project will be aggregated and reported at anytime during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Annex C - Project Taxonomy Worksheet

Use this Worksheet to list down the taxonomic information required under Part I, item G by ticking the most relevant keywords/ topics/themes that best describe this project.

Source: 1. Project Identification Form (PIF) (March 2019) (*GEF-7 Templates*, no date)

9.2. Annex GEF — GEF 7 Focal Area/ Non-Focal Area Elements Dropdown Menu for Table A

GEF 7 Focal Area/Non-Focal Area Elements Dropdown Menu for Table A

FA Prefix	Description
BD-1-1	Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors
BD-1-2a	Mainstream biodiversity across sectors as well as landscapes and seascapes through global wildlife program to prevent extinction of known threatened species
BD-1-2b	Mainstream biodiversity across sectors as well as landscapes and seascapes through Global wildlife program for sustainable development
BD-1-3	Mainstream biodiversity across sectors as well as landscapes and seascapes through Natural Capital Assessment and Accounting
BD-1-4	Mainstream biodiversity across sectors as well as landscapes and seascapes through Sustainable Use of Plant and Animal Genetic Resources
BD-1-5	Mainstream biodiversity across sectors as well as landscapes and seascapes through Inclusive conservation
BD-2-6	Address direct drivers to protect habitats and species through the Prevention, Control and Management of Invasive Alien Species
BD-2-7	Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate
BD-3-8	Further development of biodiversity policy and institutional frameworks through the Implementation of the Cartagena Protocol on Biosafety
BD-3-9	Further development of biodiversity policy and institutional frameworks through the Implementation of the Nagoya Protocol on Access and benefit sharing
BD-EA	Further development of biodiversity policy and institutional frameworks through Enabling activities (national biodiversity strategy, national reports for CBD, CP, and NP)
CCM-1-1	Promote innovation and technology transfer for sustainable energy breakthroughs for decentralised power with energy usage
CCM-1-2	Promote innovation and technology transfer for sustainable energy breakthroughs for electric drive technologies and electric mobility
CCM-1-3	Promote innovation and technology transfer for sustainable energy breakthroughs for accelerating energy efficiency adoption
CCM-1-4	Promote innovation and technology transfer for sustainable energy breakthroughs for cleantech innovation
CCM-2-5	Demonstrate mitigation options with systemic impacts for sustainable cities impact program
CCM-2-6	Demonstrate mitigation options with systemic impacts for food systems, land use and restoration impact program
CCM-2-7	Demonstrate mitigation options with systemic impacts for sustainable forest management impact program
CCM-3-8	Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through capacity building initiative for transparency
CCM-3-9	Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through NDC preparation
CCM-EA	Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through enabling activities
LD-1-1	Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM)
LD-1-2	Maintain or improve flow of ecosystem services, including sustaining livelihoods of forest-dependent people through Sustainable Forest Management (SFM)
LD-1-3	Maintain or improve flows of ecosystem services, including sustaining livelihoods of forest-dependent people through Forest Landscape Restoration (FLR)
LD-1-4	Reduce pressures on natural resources from competing land uses and increase resilience in the wider landscape
LD-2-5	Create enabling environments to support scaling up and mainstreaming of SLM and LDN
LD-EA	UNCCD enabling activities

IW-1-1	Strengthen blue economy opportunities through sustainable healthy coastal and marine ecosystems
IW-1-2	Strengthen blue economy opportunities through catalyzing sustainable fisheries management
IW-1-3	Strengthen blue economy opportunities by addressing pollution reduction in marine environments
IW-2-4	Improve management in the areas beyond national jurisdiction (ABNJ) through improved management and sustainable use of the open oceans
IW-3-5	Enhance water security in freshwater ecosystems through advance information exchange and early warning
IW-3-6	Enhance water security in freshwater ecosystems through enhanced regional and national cooperation on shared freshwater surface and groundwater basins
IW-3-7	Enhance water security in freshwater ecosystems through investments in water, food, energy and environment security
CW-1-1	Strengthen the sound management of industrial chemicals and their waste through better control, and reduction and/or elimination
CW-1-2	Strengthen the sound management of agricultural chemicals and their wastes, through better control, and reduction and/or elimination
CW-2-3	Strengthen the enabling environments in LDCs and SIDs to manage harmful chemicals and waste
CW-EA	Strengthen the capacity of countries to report to the Minamata and Stockholm Conventions
SGP	Support the creation of global environmental benefits and the safeguarding of the global environment through community and local solutions
CCA-1	Reduce vulnerability and increase resilience through innovation and technology transfer for climate change adaptation
CCA-2	Mainstream climate change adaptation and resilience for systemic impact
CCA-3	Foster enabling conditions for effective and integrated climate change adaptation
FOLU IP	Promoting effective coordination and adaptive management for Food Systems, Land Use and Restoration
SC IP	Strengthening the Global Platform for Sustainable Cities
SFM IP	Promoting effective coordination for sustainable forest management

Focal Area Elements mapped to Impact Programs

IP	BD	CCM	LD
FOLU	BD 1-1	6	LD 1-1
	BD 1-4		LD 1-2
	BD 2-7		LD 1-3
			LD 1-4
SC	BD 1-1	5	LD 1-4
SFM	BD 1-1	7	LD 1-1
	BD 2-7		LD 1-2
			LD 1-3
			LD 1-4
			LD 2-5

Rev 4-8-2018

Source: Source: Full-Sized Project Templates — Focal Area/Non-Focal Area Objectives (April 2019)
(GEF-7 Templates, no date)

9.1. Annex GEF — GEF 7 Core Indicator Worksheet

Table B

Core Indicator 1	Terrestrial protected areas created or under improved management for conservation and sustainable use					(Hectares)	
				Hectares (1.1+1.2)			
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
Indicator 1.1	Terrestrial protected areas newly created						
Name of Protected Area	WDPA ID	IUCN category	Hectares				
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
		(select)					
		(select)					
		Sum					
Indicator 1.2	Terrestrial protected areas under improved management effectiveness						
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score			
				Baseline		Achieved	
					Endorsement	MTR	TE
		(select)					
		(select)					
		Sum					
Core Indicator 2	Marine protected areas created or under improved management for conservation and sustainable use					(Hectares)	
				Hectares (2.1+2.2)			
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
Indicator 2.1	Marine protected areas newly created						
Name of Protected Area	WDPA ID	IUCN category	Hectares				
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
		(select)					
		(select)					
		Sum					
Indicator 2.2	Marine protected areas under improved management effectiveness						
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score			
				Baseline		Achieved	
				PIF stage	Endorsement	MTR	TE
		(select)					
		(select)					
		Sum					
Core Indicator 3	Area of land restored					(Hectares)	
				Hectares (3.1+3.2+3.3+3.4)			
				Expected		Achieved	
				PIF stage	Endorsement	MTR	TE
Indicator 3.1	Area of degraded agricultural land restored						
				Hectares			

			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.2	Area of forest and forest land restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.3	Area of natural grass and shrublands restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 4	Area of landscapes under improved practices (hectares; excluding protected areas)					(Hectares)
			Hectares (4.1+4.2+4.3+4.4)			
			Expected		Expected	
			PIF stage	Endorsement	MTR	TE
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.3	Area of landscapes under sustainable land management in production systems					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided					
Include documentation that justifies HCVF			Hectares			
			Expected		Achieved	

		PIF stage	Endorsement	MTR	TE
Core Indicator 5	Area of marine habitat under improved practices to benefit biodiversity				(Hectares)
Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations				
Third party certification(s):		Number			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial				
		Number			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
Indicator 5.3	Amount of Marine Litter Avoided				
		Metric Tons			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
Core Indicator 6	Greenhouse gas emission mitigated				(Tons)
		Expected metric tons of CO ₂ e (6.1+6.2)			
		PIF stage	Endorsement	MTR	TE
	Expected CO ₂ e (direct)				
	Expected CO ₂ e (indirect)				
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector				
		Expected metric tons of CO ₂ e			
		PIF stage	Endorsement	MTR	TE
	Expected CO ₂ e (direct)				
	Expected CO ₂ e (indirect)				
	Anticipated start year of accounting				
	Duration of accounting				
Indicator 6.2	Emissions avoided Outside AFOLU				
		Expected metric tons of CO ₂ e			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE
	Expected CO ₂ e (direct)				
	Expected CO ₂ e (indirect)				
	Anticipated start year of accounting				
	Duration of accounting				
Indicator 6.3	Energy saved				
		MJ			
		Expected		Achieved	
		PIF stage	Endorsement	MTR	TE

Indicator 6.4	Increase in installed renewable energy capacity per technology					
		Technology	Capacity (MW)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
Core Indicator 7	Number of shared water ecosystems (fresh or marine) under new or improved cooperative management					(Number)
Indicator 7.1	Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.2	Level of Regional Legal Agreements and Regional Management Institutions to support its implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products					
		Shared water ecosystem	Rating (scale 1-4)			
			Rating		Rating	
			PIF stage	Endorsement	MTR	TE
Core Indicator 8	Globally over-exploited fisheries Moved to more sustainable levels					(Tons)
Fishery Details			Metric Tons			
			PIF stage	Endorsement	MTR	TE
Core Indicator 9	Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products					(Tons)
			Metric Tons (9.1+9.2+9.3)			
			Expected		Achieved	
			PIF stage	PIF stage	MTR	TE
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)					
POPs type			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
(select)	(select)	(select)				
(select)	(select)	(select)				
(select)	(select)	(select)				
Indicator 9.2	Quantity of mercury reduced					

			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.3	Hydrochlorofluorocarbons (HCFC) Reduced/Phased out					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.4	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.5	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
		Technology	Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.6	Quantity of POPs/Mercury containing materials and products directly avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	PIF stage	Endorsement
Core Indicator 10	Reduction, avoidance of emissions of POPs to air from point and non-point sources					(Grams)
Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 10.2	Number of emission control technologies/practices implemented					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 11	Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment					(Number)
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Female				
		Male				
		Total				

Source: Full-Sized Project Templates — Core Indicators Worksheet March 2019 (GEF-7 Templates, no date)

GEF 7 TAXONOMY**Annex C**

Please identify the taxonomic information required in Part I, Item G by ticking the most relevant keywords/topics/themes that best describe the project.

Level 1	Level 2	Level 3	Level 4
<input type="checkbox"/> Influencing models			
	<input type="checkbox"/> Transform policy and regulatory environments		
	<input type="checkbox"/> Strengthen institutional capacity and decision-making		
	<input type="checkbox"/> Convene multi-stakeholder alliances		
	<input type="checkbox"/> Demonstrate innovative approaches		
	<input type="checkbox"/> Deploy innovative financial instruments		
<input type="checkbox"/> Stakeholders			
	<input type="checkbox"/> Indigenous Peoples		
	<input type="checkbox"/> Private Sector		
		<input type="checkbox"/> Capital providers	
		<input type="checkbox"/> Financial intermediaries and market facilitators	
		<input type="checkbox"/> Large corporations	
		<input type="checkbox"/> SMEs	
		<input type="checkbox"/> Individuals/Entrepreneurs	
		<input type="checkbox"/> Non-Grant Pilot	
		<input type="checkbox"/> Project Reflow	
	<input type="checkbox"/> Beneficiaries		
	<input type="checkbox"/> Local Communities		
	<input type="checkbox"/> Civil Society		
		<input type="checkbox"/> Community Based Organization	
		<input type="checkbox"/> Non-Governmental Organization	
		<input type="checkbox"/> Academia	
		<input type="checkbox"/> Trade Unions and Workers Unions	
	<input type="checkbox"/> Type of Engagement		
		<input type="checkbox"/> Information Dissemination	
		<input type="checkbox"/> Partnership	
		<input type="checkbox"/> Consultation	
		<input type="checkbox"/> Participation	
	<input type="checkbox"/> Communications		
		<input type="checkbox"/> Awareness Raising	
		<input type="checkbox"/> Education	
		<input type="checkbox"/> Public Campaigns	
		<input type="checkbox"/> Behavior Change	
<input type="checkbox"/> Capacity, Knowledge and Research			
	<input type="checkbox"/> Enabling Activities		
	<input type="checkbox"/> Capacity Development		
	<input type="checkbox"/> Knowledge Generation and Exchange		
	<input type="checkbox"/> Targeted Research		
	<input type="checkbox"/> Learning		
		<input type="checkbox"/> Theory of Change	
		<input type="checkbox"/> Adaptive Management	
		<input type="checkbox"/> Indicators to Measure Change	

	<input type="checkbox"/> Innovation		
	<input type="checkbox"/> Knowledge and Learning		
		<input type="checkbox"/> Knowledge Management	
		<input type="checkbox"/> Innovation	
		<input type="checkbox"/> Capacity Development	
		<input type="checkbox"/> Learning	
	<input type="checkbox"/> Stakeholder Engagement Plan		
<input type="checkbox"/> Gender Equality			
	<input type="checkbox"/> Gender Mainstreaming		
		<input type="checkbox"/> Beneficiaries	
		<input type="checkbox"/> Women groups	
		<input type="checkbox"/> Sex-disaggregated indicators	
		<input type="checkbox"/> Gender-sensitive indicators	
	<input type="checkbox"/> Gender results areas		
		<input type="checkbox"/> Access and control over natural resources	
		<input type="checkbox"/> Participation and leadership	
		<input type="checkbox"/> Access to benefits and services	
		<input type="checkbox"/> Capacity development	
		<input type="checkbox"/> Awareness raising	
		<input type="checkbox"/> Knowledge generation	
<input type="checkbox"/> Focal Areas/Theme			
	<input type="checkbox"/> Integrated Programs		
		<input type="checkbox"/> Commodity Supply Chains (Good Growth Partnership)	
			<input type="checkbox"/> Sustainable Commodities Production
			<input type="checkbox"/> Deforestation-free Sourcing
			<input type="checkbox"/> Financial Screening Tools
			<input type="checkbox"/> High Conservation Value Forests
			<input type="checkbox"/> High Carbon Stocks Forests
			<input type="checkbox"/> Soybean Supply Chain
			<input type="checkbox"/> Oil Palm Supply Chain
			<input type="checkbox"/> Beef Supply Chain
			<input type="checkbox"/> Smallholder Farmers
			<input type="checkbox"/> Adaptive Management
		<input type="checkbox"/> Food Security in Sub-Saharan Africa	
			<input type="checkbox"/> Resilience (climate and shocks)
			<input type="checkbox"/> Sustainable Production Systems
			<input type="checkbox"/> Agroecosystems
			<input type="checkbox"/> Land and Soil Health
			<input type="checkbox"/> Diversified Farming
			<input type="checkbox"/> Integrated Land and Water Management
			<input type="checkbox"/> Smallholder Farming
			<input type="checkbox"/> Small and Medium Enterprises
			<input type="checkbox"/> Crop Genetic Diversity
			<input type="checkbox"/> Food Value Chains
			<input type="checkbox"/> Gender Dimensions
			<input type="checkbox"/> Multi-stakeholder Platforms
		<input type="checkbox"/> Food Systems, Land Use and Restoration	
			<input type="checkbox"/> Sustainable Food Systems
			<input type="checkbox"/> Landscape Restoration

			<input type="checkbox"/> Sustainable Commodity Production
			<input type="checkbox"/> Comprehensive Land Use Planning
			<input type="checkbox"/> Integrated Landscapes
			<input type="checkbox"/> Food Value Chains
			<input type="checkbox"/> Deforestation-free Sourcing
			<input type="checkbox"/> Smallholder Farmers
		<input type="checkbox"/> Sustainable Cities	
			<input type="checkbox"/> Integrated urban planning
			<input type="checkbox"/> Urban sustainability framework
			<input type="checkbox"/> Transport and Mobility
			<input type="checkbox"/> Buildings
			<input type="checkbox"/> Municipal waste management
			<input type="checkbox"/> Green space
			<input type="checkbox"/> Urban Biodiversity
			<input type="checkbox"/> Urban Food Systems
			<input type="checkbox"/> Energy efficiency
			<input type="checkbox"/> Municipal Financing
			<input type="checkbox"/> Global Platform for Sustainable Cities
			<input type="checkbox"/> Urban Resilience
	<input type="checkbox"/> Biodiversity		
		<input type="checkbox"/> Protected Areas and Landscapes	
			<input type="checkbox"/> Terrestrial Protected Areas
			<input type="checkbox"/> Coastal and Marine Protected Areas
			<input type="checkbox"/> Productive Landscapes
			<input type="checkbox"/> Productive Seascapes
			<input type="checkbox"/> Community Based Natural Resource Management
		<input type="checkbox"/> Mainstreaming	
			<input type="checkbox"/> Extractive Industries (oil, gas, mining)
			<input type="checkbox"/> Forestry (Including HCVF and REDD+)
			<input type="checkbox"/> Tourism
			<input type="checkbox"/> Agriculture & agrobiodiversity
			<input type="checkbox"/> Fisheries
			<input type="checkbox"/> Infrastructure
			<input type="checkbox"/> Certification (National Standards)
			<input type="checkbox"/> Certification (International Standards)
		<input type="checkbox"/> Species	
			<input type="checkbox"/> Illegal Wildlife Trade
			<input type="checkbox"/> Threatened Species
			<input type="checkbox"/> Wildlife for Sustainable Development
			<input type="checkbox"/> Crop Wild Relatives
			<input type="checkbox"/> Plant Genetic Resources
			<input type="checkbox"/> Animal Genetic Resources
			<input type="checkbox"/> Livestock Wild Relatives
			<input type="checkbox"/> Invasive Alien Species (IAS)
		<input type="checkbox"/> Biomes	
			<input type="checkbox"/> Mangroves
			<input type="checkbox"/> Coral Reefs
			<input type="checkbox"/> Sea Grasses
			<input type="checkbox"/> Wetlands
			<input type="checkbox"/> Rivers
			<input type="checkbox"/> Lakes

			<input type="checkbox"/> Tropical Rain Forests
			<input type="checkbox"/> Tropical Dry Forests
			<input type="checkbox"/> Temperate Forests
			<input type="checkbox"/> Grasslands
			<input type="checkbox"/> Paramo
			<input type="checkbox"/> Desert
		<input type="checkbox"/> Financial and Accounting	
			<input type="checkbox"/> Payment for Ecosystem Services
			<input type="checkbox"/> Natural Capital Assessment and Accounting
			<input type="checkbox"/> Conservation Trust Funds
			<input type="checkbox"/> Conservation Finance
		<input type="checkbox"/> Supplementary Protocol to the CBD	
			<input type="checkbox"/> Biosafety
			<input type="checkbox"/> Access to Genetic Resources Benefit Sharing
	<input type="checkbox"/> Forests		
		<input type="checkbox"/> Forest and Landscape Restoration	
			<input type="checkbox"/> REDD/REDD+
		<input type="checkbox"/> Forest	
			<input type="checkbox"/> Amazon
			<input type="checkbox"/> Congo
			<input type="checkbox"/> Drylands
	<input type="checkbox"/> Land Degradation		
		<input type="checkbox"/> Sustainable Land Management	
			<input type="checkbox"/> Restoration and Rehabilitation of Degraded Lands
			<input type="checkbox"/> Ecosystem Approach
			<input type="checkbox"/> Integrated and Cross-sectoral approach
			<input type="checkbox"/> Community-Based NRM
			<input type="checkbox"/> Sustainable Livelihoods
			<input type="checkbox"/> Income Generating Activities
			<input type="checkbox"/> Sustainable Agriculture
			<input type="checkbox"/> Sustainable Pasture Management
			<input type="checkbox"/> Sustainable Forest/Woodland Management
			<input type="checkbox"/> Improved Soil and Water Management Techniques
			<input type="checkbox"/> Sustainable Fire Management
			<input type="checkbox"/> Drought Mitigation/Early Warning
		<input type="checkbox"/> Land Degradation Neutrality	
			<input type="checkbox"/> Land Productivity
			<input type="checkbox"/> Land Cover and Land cover change
			<input type="checkbox"/> Carbon stocks above or below ground
		<input type="checkbox"/> Food Security	
	<input type="checkbox"/> International Waters		
		<input type="checkbox"/> Ship	
		<input type="checkbox"/> Coastal	
		<input type="checkbox"/> Freshwater	
			<input type="checkbox"/> Aquifer
			<input type="checkbox"/> River Basin
			<input type="checkbox"/> Lake Basin
		<input type="checkbox"/> Learning	
		<input type="checkbox"/> Fisheries	

		<input type="checkbox"/> Persistent toxic substances	
		<input type="checkbox"/> SIDS : Small Island Dev States	
		<input type="checkbox"/> Targeted Research	
		<input type="checkbox"/> Pollution	
			<input type="checkbox"/> Persistent toxic substances
			<input type="checkbox"/> Plastics
			<input type="checkbox"/> Nutrient pollution from all sectors except wastewater
			<input type="checkbox"/> Nutrient pollution from Wastewater
		<input type="checkbox"/> Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
		<input type="checkbox"/> Strategic Action Plan Implementation	
		<input type="checkbox"/> Areas Beyond National Jurisdiction	
		<input type="checkbox"/> Large Marine Ecosystems	
		<input type="checkbox"/> Private Sector	
		<input type="checkbox"/> Aquaculture	
		<input type="checkbox"/> Marine Protected Area	
		<input type="checkbox"/> Biomes	
			<input type="checkbox"/> Mangrove
			<input type="checkbox"/> Coral Reefs
			<input type="checkbox"/> Seagrasses
			<input type="checkbox"/> Polar Ecosystems
			<input type="checkbox"/> Constructed Wetlands
	<input type="checkbox"/> Chemicals and Waste		
		<input type="checkbox"/> Mercury	
		<input type="checkbox"/> Artisanal and Scale Gold Mining	
		<input type="checkbox"/> Coal Fired Power Plants	
		<input type="checkbox"/> Coal Fired Industrial Boilers	
		<input type="checkbox"/> Cement	
		<input type="checkbox"/> Non-Ferrous Metals Production	
		<input type="checkbox"/> Ozone	
		<input type="checkbox"/> Persistent Organic Pollutants	
		<input type="checkbox"/> Unintentional Persistent Organic Pollutants	
		<input type="checkbox"/> Sound Management of chemicals and Waste	
		<input type="checkbox"/> Waste Management	
			<input type="checkbox"/> Hazardous Waste Management
			<input type="checkbox"/> Industrial Waste
			<input type="checkbox"/> e-Waste
		<input type="checkbox"/> Emissions	
		<input type="checkbox"/> Disposal	
		<input type="checkbox"/> New Persistent Organic Pollutants	
		<input type="checkbox"/> Polychlorinated Biphenyls	
		<input type="checkbox"/> Plastics	
		<input type="checkbox"/> Eco-Efficiency	
		<input type="checkbox"/> Pesticides	
		<input type="checkbox"/> DDT - Vector Management	
		<input type="checkbox"/> DDT - Other	
		<input type="checkbox"/> Industrial Emissions	
		<input type="checkbox"/> Open Burning	
		<input type="checkbox"/> Best Available Technology / Best Environmental Practices	
		<input type="checkbox"/> Green Chemistry	
	<input type="checkbox"/> Climate Change		
		<input type="checkbox"/> Climate Change Adaptation	

			<input type="checkbox"/> Climate Finance
			<input type="checkbox"/> Least Developed Countries
			<input type="checkbox"/> Small Island Developing States
			<input type="checkbox"/> Disaster Risk Management
			<input type="checkbox"/> Sea-level rise
			<input type="checkbox"/> Climate Resilience
			<input type="checkbox"/> Climate information
			<input type="checkbox"/> Ecosystem-based Adaptation
			<input type="checkbox"/> Adaptation Tech Transfer
			<input type="checkbox"/> National Adaptation Programme of Action
			<input type="checkbox"/> National Adaptation Plan
			<input type="checkbox"/> Mainstreaming Adaptation
			<input type="checkbox"/> Private Sector
			<input type="checkbox"/> Innovation
			<input type="checkbox"/> Complementarity
			<input type="checkbox"/> Community-based Adaptation
			<input type="checkbox"/> Livelihoods
		<input type="checkbox"/> Climate Change Mitigation	
			<input type="checkbox"/> Agriculture, Forestry, and other Land Use
			<input type="checkbox"/> Energy Efficiency
			<input type="checkbox"/> Sustainable Urban Systems and Transport
			<input type="checkbox"/> Technology Transfer
			<input type="checkbox"/> Renewable Energy
			<input type="checkbox"/> Financing
			<input type="checkbox"/> Enabling Activities
		<input type="checkbox"/> Technology Transfer	
			<input type="checkbox"/> Poznan Strategic Programme on Technology Transfer
			<input type="checkbox"/> Climate Technology Centre & Network (CTCN)
			<input type="checkbox"/> Endogenous technology
			<input type="checkbox"/> Technology Needs Assessment
			<input type="checkbox"/> Adaptation Tech Transfer
		<input type="checkbox"/> United Nations Framework on Climate Change	
			<input type="checkbox"/> Nationally Determined Contribution

9.3. Annex GEF — GEF7 How to fill the PIF? Field by field explanation

Project Identification Form (PIF)	GEF Portal Hover tips (8/17/2018)
Project Type:	
Full-sized Project	Projects for which GEF funding is above \$ 2million
Medium-sized Project	Projects for which GEF funding is up to \$2 million
Type of Trust Fund:	
GEF Trust Fund	
Least Developed Countries Fund	Click link (https://www.thegef.org/documents/gef-programming-strategy-adaptation-climate-change-ldcf-sccf) to see LDCF eligibility criteria.
Special Climate Change Fund	Click link (https://www.thegef.org/documents/gef-programming-strategy-adaptation-climate-change-ldcf-sccf) to see SCCF eligibility criteria.
Capacity-Building Initiative for Transparency	
Multi-trust Fund	
Part I: Project Information	
Project Title	This is for projects or programs that draw from more than one of the GEF trust funds. Note that all project modalities are governed by the GEF Project and Program Cycle Policy and Guidelines documents. Give a clear and descriptive title that highlights the main goals of the project. If the title changes after submission, refer to the old title and agency ID in the new submission
Country(ies)	
GEF Agency(ies)	
Project Executing Entity(ies)	The organization(s) that executes a GEF project, or portions of it, under the supervision of an Agency. It can include national or sub-national government agencies, civil society organizations (CSOs), private sector entities, or academic institutions, among others.
GEF Focal Areas	These are Biodiversity, Climate Change, International Waters, Land Degradation, and Chemicals and Waste.
GEF Project ID	ID will be assigned and generated automatically when the project is officially submitted.
GEF Agency Project ID	Enter your Agency's internal project ID.
Submission Date	
Project Duration (months)	
Table A. Indicative Focal/Non-Focal Area Elements	Select the relevant code(s) from the GEF 7 Focal Area/Non-Focal Area Dropdown Menu for Table A. Refer to the Programming Document for the Seventh Replenishment of the GEF Trust Fund for additional details.

Trust Fund

GEF Project Financing

Co-financing

Total Project Cost

Table B. Indicative Project Description Summary

Project Objective

Project Components

Component Type

Project Outcomes

Project Outputs

GEF Project Financing

GEF Co-financing

For additional entries, expand the table by creating more rows if more than one focal/non-focal area is selected.

Project Management Cost

The Project Management Cost (PMC) is calculated as a percentage of the GEF grant. The PMC + the GEF grant equals the Total Project Cost. Note that for GEF Project Financing up to \$2 million, PMC can be up to 10% of the GEF grant; above \$2 million, PMC can be up to 5% of the GEF grant. PMC should be charged proportionately to focal areas based on the focal area project financing amount in Table D. For multi-trust fund projects, provide the total amount of PMC in table B, and indicate the split of PMC among the different trust funds.

Total Project Cost

Table C. Indicative Sources of Co-financing

Source of Co-financing

Refer to the Updated Co-financing Policy (GEF/C.54/10/Rev.01). As necessary, expand the table for additional entries by creating more rows.

Name of co-financier

Co-financing source should not have been previously identified or reported as co-financing towards another GEF-financed project or program.

Type of co-financing

Provide the name of co-financier if available.

Investment Mobilized

These are co-financing that exclude recurrent expenditures. Describe how they were identified.

Amount

Total Co-financing

Table D. Indicative Trust Fund Resources Requested

Refer to the Updating the System for Transparent Allocation of Resources (STAR) (GEF/C.54/03/Rev.01) to determine country allocations for biodiversity, climate change and land degradation focal areas. For additional entries, expand the table by creating more rows as needed.

GEF Agency

Trust Fund

Country/Regional/Global

Focal Area

Programming of funds

Country name. Otherwise, choose regional or global.

Select the focal area.

If the FA is selected as BD, CC, LD, or IW, leave the Programming of Funds blank.

If the FA is selected as CW, choose from POPs, Mercury, ODS or SAICM.

If the FA is selected as MFA, choose from SGP, or from any of the mentioned IPs.

GEF Project Financing

Agency Fee

Click [\[here\]](#) to see Annex 8 of the Guidelines on the Project and Program Cycle Policy on Agency Fees that define the revised fee structure to pay for the services provided by all GEF Partner Agencies that implement GEF projects.

Total

Total GEF resources

E. Project Preparation Grant

PPG amount requested by Agency(ies), Trust Fund, and Programming of Funds

For additional entries, please expand the table by creating more rows as necessary.

PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m.

GEF Agency

Trust Fund

Country/Regional/Global

Focal Area

Programming of Funds

These are set-aside funds for POPs, Mercury, ODS, SAICM, SGP, Non-Grant, FOLU IP, SC IP, and SFM IP. Select the appropriate fund, if applicable. Otherwise, leave the column blank.

PPG

Agency Fee

Total

Total PPG Amount

Table F. Project's Target Contributions to GEF-7 Core Indicators

As of July 1, 2018, Agencies, in collaboration with recipient country governments, executing partners and other stakeholders, should provide indicative, expected results across applicable core indicators and sub-indicators for all new GEF projects and programs submitted for Work Program entry or MSP PIF Approval. At CEO Endorsement/Approval, Agencies should provide expected results, with adjustments as required reflecting further analysis carried out during project preparation.

Core Indicator Worksheet

Use Worksheet to compute the indicator values as required in this section to the extent applicable to your proposed project. Refer to the Updated Results Architecture for GEF 7 (GEF/C.54/11/Rev.02) on Annex I - Guidelines on Core Indicators and Sub-indicators)

Project Core Indicators

These are the target results anticipated at PIF stage. They may be updated at the time of submission for CEO Endorsement/Approval.

Expected at PIF

Project Core Indicator 1: Terrestrial protected areas created or under improved management for conservation and sustainable use

This indicator is an aggregate of the two Sub-indicators.

Project Core Indicator 1.1: Terrestrial protected areas newly created

Indicate the name and size of the protected area(s) to be created. This sub-indicator captures the hectares of new protected areas that meet the Key Biodiversity Area Criteria and that result from projects' support. By mid-term or final evaluation, projects should indicate the IUCN protected area category (Categories I–VI), as well as the ID number from the World Database of Protected Areas (<https://www.iucn.org/theme/protected-areas/our-work/world-database-protected-areas>), if available.

Project Core Indicator 1.2: Terrestrial protected areas under improved management effectiveness

Indicate the name, WDPA ID, size, IUCN protected area category (I – VI) and METT score. To calculate the METT score, use the GEF-7 BD tracking tool (<https://www.thegef.org/documents/gef-7-biodiversity-protected-area-tracking-tool>). The Sub-indicator is calculated based on the protected areas that show an increase in METT score. In cases where the protected area does not fit the IUCN criteria (e.g. some Indigenous and Community Conserved Areas (ICCAs), 'Other Category' should be noted. Where the area in question was also newly protected through project implementation, hectares should only be reported under Sub-Indicator 1.1 rather than under Sub-Indicator 1.2.

Project Core Indicator 2: Marine protected areas created or under improved management for conservation and sustainable use

This indicator is an aggregate of the two Sub-indicators

Indicator 2.1 Marine protected areas newly created	Indicate the name and size of the protected area(s) to be created. This sub-indicator captures the hectares of new protected areas that meet the Key Biodiversity Area Criteria and that result from project's support
Indicator 2.2 Marine protected areas under improved management effectiveness	Indicate the name, WDPA ID, size, IUCN protected area category (I – VI) and METT score (https://www.iucn.org/theme/protected-areas/our-work/world-database-protected-areas). To calculate the METT score, use the GEF-7 BD tracking tool (https://www.thegef.org/documents/gef-7-biodiversity-protected-area-tracking-tool). The Sub-indicator is calculated based on the protected areas that show an increase in METT score. In cases where the protected area does not fit the IUCN criteria (e.g. some Indigenous and Community Conserved Areas (ICCAs), 'Other Category' should be noted. Where the area in question was also newly protected through project implementation, hectares should only be reported under Sub-Indicator 2.1 rather than under Sub-Indicator 2.2.
Project Core Indicator 3: Area of land restored	This indicator will be reported as an aggregate of the four Sub-indicators, to captures the hectares of new protected areas which meet the key Biodiversity Area Criteria and that result from the project's support. For BD projects, in addition to explaining the project's consistency with the biodiversity focal area, also describe which Aichi Target(s) the project will directly contribute to achieving.
Indicator 3.1: Area of degraded agricultural land restored	Indicate the hectares of agricultural land that was in a degraded state but is undergoing restoration through GEF funded interventions. Restoration here is defined as “the improvement of degraded land on a large scale that rebuilds ecological integrity and enhances people’s lives. It is suggested to provide GIS files showing the extent of the degraded land that is undergoing restoration and also indicate the relative state of the area prior to GEF activities.
Indicator 3.2: Area of forest and forest land restored	Indicate the hectares of forest and forest land undergoing ecological restoration through GEF funded interventions. This Sub-indicator intends to capture the area of forest and forest land in which best practices for ecological restoration are being applied
Indicator 3.3: Area of natural grass and shrublands restored	Indicate the hectares of natural grass and shrublands that are <u>undergoing</u> ecological restoration through GEF funded interventions. This sub-indicator intends to capture the area of natural grass and shrublands in which best practices for ecological restoration are being applied
Indicator 3.4: Area of wetlands (including estuaries, mangroves) restored	Indicate the hectares of wetlands, including estuaries and mangroves, that are undergoing ecological restoration through GEF funded interventions. This Sub-indicator intends to capture the area of wetlands in which best practices for ecological restoration are being applied
Project Core Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)	This indicator will be reported as aggregate total of four Sub-indicators. Ensure that the hectares reported under each Sub-indicator do not overlap
Indicator 4.1: Area of landscapes under improved management to benefit biodiversity	Indicate the landscape area that is being managed to benefit biodiversity, but which is not certified. Please provide qualitative description of the benefit provided to biodiversity through the change in management. It is also suggested to provide GIS files showing the extent of the land under this improved management (outside of protected areas).

Indicator 4.2: Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations

Indicator 4.3: Area of landscapes under sustainable land management in production systems

Indicator 4.4: Area of High Conservation Value Forest (HCVF) loss avoided

Project Core Indicator 5 Area of marine habitat under improved practices to benefit biodiversity

Indicator 5.1: Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations

Indicator 5.2: Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial

Project Core Indicator 6 Greenhouse gas emission mitigated

Indicator 6.1: Carbon sequestered or emissions avoided in the AFOLU sector

Indicator 6.2: Emissions avoided

Indicate the landscape area that achieves certification in which biodiversity considerations are being incorporated, including details of the third-party certification. Ideally, provide GIS files showing the extent of the land under this improved management (outside of protected areas)

Indicate the landscape area that is in production (e.g. agriculture, rangeland, forestry) and whose soil, air and water are managed in a sustainable way. Also include the details of the management practices and where possible provide GIS files showing the extent of the land under sustainable land management

Indicate the area of High Conservation Value forest (HCVF) that would be lost without implementation of the GEF project. Projects first must indicate the names and areas of HCVF that are targeted (ideally GIS files depicting these areas would be submitted). If not already recognized by the HCV network, projects should submit documentation that the targeted forests meet one or more of the HCV criteria

Indicate the hectares of marine habitat under improved management to benefit biodiversity and/or for which management plans have been prepared and endorsed and are under implementation. Ideally, projects should provide GIS files showing the extent of the ocean under this improved management. Note that two additional Sub-indicators are available to provide any relevant context.

Indicate the number and names of fisheries that are managed to benefit biodiversity, and which are certified through a third-party. In addition, provide details of the third-party certification

Indicate the names and number of LMEs that have achieved a reduction in pollution. These include reductions from nutrient loading that would otherwise lead to hypoxia, which is defined as a state in the oceans where oxygen levels are depleted to less than 2 - 3 ppm. Also provide the type and extent (qualitative or quantitative) of pollution reduction achieved through policy and infrastructure investments to address point and non-point sources

This Core Indicator refers to the total reduction of greenhouse gas (GHG) emissions and enhancement of sinks and reservoirs reported in tons of carbon dioxide equivalent (CO₂e). As such, it is reported as the aggregate of the first two Sub-indicators

Indicate the hectares and the quantity of carbon (tons CO₂e) stored or not emitted in forests and soils as a result of the project. The estimate must be based on widely recognized methodology to be clearly presented in the project document.

Indicate the amount of GHG emissions that are expected to be avoided through the interventions of the GEF project in sectors other than the AFOLU and thus may include GHG benefits from energy efficiency, renewable energy, transportation and urban projects or project components. All analyses are conducted in tons of CO₂e; emissions avoided reported are cumulative reductions, calculated for the lifetimes of the investments; and there is no discounting for future GHG emission reductions

Indicator 6.3: Energy saved	Use this sub-indicator to report projects that aim to achieve energy savings. This is calculated as the amount of energy use avoided by the intervention over the lifetime of the investment. Fuel savings should be converted to energy savings by using the net calorific value of the specific fuel. End-use electricity savings should be converted to energy savings by using the conversion factor for the specific supply and distribution system.
Indicator 6.4: Increase in installed renewable energy capacity per technology	Use this sub-indicator to report projects that aim to increase renewable energy generation or storage capacity, disaggregated by type of renewable energy technology (biomass, geothermal, ocean, small hydro, solar photovoltaic, solar thermal, wind power, and storage). This sub-indicator refers to the rated capacity of a heat or power generating plant or the aggregate potential output of a collection of such
Project Core Indicator 7 Number of shared water ecosystems (fresh or marine) under new or improved cooperative management	This indicator captures the commitment of countries to cooperatively manage a shared water system (e.g., river, lake, groundwater, or large marine ecosystem). Projects may cover one or more shared water systems
Indicator 7.1: Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation	Provide a rating from 1 to 4 based on a rating for the level of TDA or SAP formulation and implementation.
Indicator 7.2: Level of Regional Legal Agreements and Regional Management Institutions to support its implementation	Provide rating from 1 to 4 based on a rating for the level of Regional Legal Agreements or RMI formulation and implementation
Indicator 7.3: Level of National/Local reforms and active participation of Inter-Ministerial Committees	Provide rating from 1 to 4
Indicator 7.4: Level of engagement in IWLEARN through participation and delivery of key products	Provide rating from 1 to 4 based on a rating for the level of engagement in IW:LEARN.
Project Core Indicator 8 Globally over-exploited fisheries moved to more sustainable levels	provide the name of the fishery targeted, the source for the estimate of the tonnage, and also the justification for considering the fishery to be overexploited initially. Note that there is no strict relationship between the Sub-indicator 5.1. related to certified fisheries and this Core Indicator.
Project Core Indicator 9 Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products	This indicator will be reported as aggregate total (in metric tons) of three Sub-indicators. Two additional Sub-indicators are also available to provide additional context

Indicator 9.1: Solid and liquid Persistent Organic Pollutants (POPs) and POPs containing materials and products removed or disposed	Indicate the amount of POPs eliminated or reduced broken down by type of POP. For disposal projects, include information on the technology for disposal and location of disposal.
Indicator 9.2: Quantity of mercury reduced	Indicate the amount of mercury, along with details of the approach and the scale at which the figure is reported (project site, city, province, etc.). Projects should also provide the disaggregated information on the reduced amount of emissions from different sources or different activities.
Indicator 9.3: Number of countries with legislation and policy implemented to control chemicals and waste:	Indicate the number of countries targeted in the project that have new or improved legislation and policy related to the control of chemicals and waste as a result of GEF support
Indicator 9.4 Number of low -chemical / non-chemical systems implemented particularly in food production, manufacturing and cities.	Indicate the number of low-chemical or non-chemical systems implemented as a direct result of the GEF project.
project Core Indicator 10: Reduction, avoidance of emissions of POPs to air-from point and non-point sources	This indicator captures the reduction in emissions of POPs to air. At project submission, estimate reduction target based on the baseline calculation of emissions against the expected reductions from implementation of the project. Subtract a final emissions number, (in gTEQ), at project completion from the baseline emissions number to determine the reduction. Two additional Sub-Indicators are available to provide any relevant context.
Indicator 10.1: Number of countries with legislation and policy implemented to control emissions of Pops to air	Indicate the number of countries with legislation and policies implemented to control emissions of POPs to air. In projects that are developing new or improved legislation to control POPs emissions to air from unintentional sources, the project should indicate what legislation is being contemplated and what is the intended impact of it
Indicator 10.2: Number of emission control technologies/practices implemented	Indicate the number of emission control technologies or practices implemented as a direct result of the GEF project. Projects that reduce POPS emissions to air through BAT/BEP should provide information on the type and number of these technologies or practices being proposed in the project and the expected impact.
Project Core Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	Indicate the number of individual people who receive targeted support from a given GEF project and/or who use the specific resources that the project maintains or enhances. Direct Beneficiaries are all individuals who are receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources

Aichi targets in BD

G. Project Taxonomy

Influencing Models

Stakeholders

Capacity, Knowledge and Research

Gender Equality

Focal Area/Theme/Topic

Rio Markers

Part II: Project Justification

1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description);

2) the baseline scenario and any associated baseline projects,

3) the proposed alternative scenario with a brief description of expected outcomes and components of the project,

3) the proposed alternative scenario with a brief description of expected outcomes and components of the project,

4) alignment with GEF focal area and/or Impact Program strategies,

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing;

This new feature in the Portal enables you to tag proposals with keywords to enhance search and reporting. Select all relevant keywords for this project from the drop-down lists in the taxonomy table.

These are the five main approaches used in GEF projects and programs to achieve results (see the sub-categories). They are described in the GEF2020 Strategy [<http://www.thegef.org/publications/gef-2020-strategy-gef>]

This is a mandatory tag for all GEF-financed projects. Indicate whether the project targets climate change adaptation and/or climate change mitigation using the OECD DAC Rio Markers: 0=does not target; 1=targets as a significant objective, 2=targets as the principal objective. Please refer to the OECD DAC Handbook for further details:

https://www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook_FINAL.pdf

To see what STAP looks for in these sections, [please click here](#).

For biodiversity projects, please also describe to which Aichi Target(s) the project will contribute.

Refer to Operational Guidelines for Incremental Cost Principle

[https://www.thegef.org/sites/default/files/documents/C.31.12_Operational_Guidelines_for_Incremental_Costs-2007_0.pdf]

7) innovation, sustainability and potential for scaling up.

7) innovation, sustainability and potential for scaling up.

1b. *Project Map and Coordinates.* Please provide geo-referenced information and map where the project interventions will take place.

2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase:

... Indigenous Peoples and Local Communities

... Civil Society Organizations;

... Private Sector Entities;

... If None of the above, please explain why.

... In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.

Address the following: Is the project innovative, for example in its: design; method of financing; technology; business model; policy; monitoring and evaluation; or learning? Is there a clearly-articulated vision of how the innovation will be scaled-up - over time, across geographies or among institutional actors? Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?

Address the following: Is the project innovative, for example in its: design; method of financing; technology; business model; policy; monitoring and evaluation; or learning? Is there a clearly-articulated vision of how the innovation will be scaled-up - over time, across geographies or among institutional actors? Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?

Please enter the geolocation ID number from the geonames.org database, followed by a short description of the site. If there is more than one location or intervention site, please enter all corresponding geolocation ID numbers separated by a coma, followed by a short description of each. If you cannot find the geolocation ID, please enter latitude and longitude of one point in the project area.

Refer to the Policy on Stakeholder Engagement

(https://www.thegef.org/sites/default/files/documents/EN_GEF.C.53.05.Rev_.01_Stakeholder_Policy_3.pdf) that sets out the core principles and mandatory requirements for stakeholders. If applicable, please provide information on the type of organizations and individuals that took part in the project identification phase. If there were no consultations, please explain the reasons why this was the case.

For Indigenous Peoples, refer to the Principles and Guidelines document

(https://www.thegef.org/sites/default/files/publications/Indigenous_Peoples_Principle_EN.pdf).

For Local Communities, refer to the Policy on Public Involvement

(https://www.thegef.org/sites/default/files/documents/Public_Involvement_Policy-2012.pdf) in GEF projects.

Refer to the following link (<https://www.thegef.org/documents/relations-ngos>) for further guidance.

Refer to GEF Policy and Guidelines on Stakeholder Engagement

(https://www.thegef.org/sites/default/files/documents/EN_GEF.C.53.05.Rev_.01_Stakeholder_Policy_3.pdf). As part of this indicative information, please describe strategic communication to build awareness of problems and solutions, and to support behavior change.

3. Gender Equality and Women's Empowerment.

Refer to the GEF Gender Implementation Strategy (GEF/C.54/06) that provides detail on the practical steps and required actions to implement the principles and mandatory requirements specified in the GEF Policy on Gender Equality.

See here the link to the Policy on Gender Equality (GEF/C.53/04)

... Gender dimensions relevant to the project

Provide indicative information on how gender differences and gaps between men and women are relevant to the project objectives and context. This can draw on information from initial stakeholder consultations or on already existing sector/country analyses.

... Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment? (yes _ /no _ / tbd _)

This information can be revised at the CEO endorsement stage. Note that the GEF Policy on Gender Equality requires projects that have identified gender gaps to provide information on gender responsive measures.

For strategic entry points in GEF-7 programming, see GEF Gender Implementation Strategy (GEF/C.54/06)

... Indicate in which results area(s) the project is expected to contribute to gender equality __: access to and control over resources __; participation and decision-making __; and or economic benefits or services __.

These result areas correspond the three gender gaps most relevant to the GEF programming strategy (see GEF Gender Implementation Strategy (GEF/C.54/06). Note: you can leave this empty or choose one or more result areas. This information can be up-dated at the CEO endorsement stage

... Does the project's results framework or logical framework include gender-sensitive indicators? (yes __ /no __ / tbd __)

This information can be revised/ added at the CEO endorsement stage.

4. Private sector engagement. Will there be private sector engagement in the project?

As applicable, please explain what role the private sector plays as part of the project theory of change? This section should describe the intervention model(s) chosen to engage the private sector and encourage investment, such as: 1) transforming policy and regulatory environments to encourage sustainable business investment, 2) deploying innovative financial instruments, 3) convening multi stakeholder alliances, 4) strengthening institutional capacity and 5) demonstrating innovative approaches.

If the project is using non-grant funding, please also specify the applied financial instrument(s): e.g. loans, guarantees and/or equity investment. Please also explain how the project helps attract additional private sector investments, and its strategy/approach to avoid displacing of commercial investors, as appropriate.

5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved or may be resulting from project implementation, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable)

5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved or may be resulting from project implementation, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable)

6. Coordination. Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

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7. Consistency with National Priorities. Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no). If yes, which ones and how:

- National Action Plan for Adaptation (NAPA)
under LDCF/UNFCCC

- National Action Program (NAP) under
UNCCD

- ASGM NAP (Artisanal and Small-scale Gold
Mining) under Mercury

- Mercury Initial Assessment (MIA) under
Minamata Convention

- National Biodiversity Strategies and Action
Plan (NBSAP) under UNCBD

- National Communications (NC) under
UNFCCC

- Technology Needs Assessment (TNA) under
UNFCCC

- National Capacity Self-Assessment (NCSA)
under UNCBD, UNFCCC, UNCCD

- National Implementation Plan (NIP) under
POPs

- Poverty Reduction Strategy Paper (PRSP)

- National Portfolio Formulation Exercise
(NPFE) under GEFSEC

- Biennial Update Report (BUR) under
UNFCCC

- Others

8. Knowledge Management. Outline the
“Knowledge Management Approach” for the
project and how it will contribute to the
project’s overall impact, including plans to
learn from relevant projects, initiatives and
evaluations.

8. Knowledge Management. Outline the
“Knowledge Management Approach” for the
project and how it will contribute to the
project’s overall impact, including plans to

This will include processes to capture, assess and document, in a user-friendly manner, information, lessons, best practices, and expertise generated during implementation; strategic communications; and knowledge outputs to be produced and shared with stakeholders.

learn from relevant projects, initiatives and evaluations.

Part III. Approval/Endorsement by GEF OFP and GEF Agencies

A. Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

(Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this SGP OFP endorsement letter)
Name

For regional and/or global projects with identified countries, OFP endorsement letters are required from these countries

Click [\[here\]](#) for OFP Endorsement Letter, and [\[here\]](#) for SGP OFP Endorsement Letter. Has the project/program been endorsed by the country's GEF Operational Focal Point and has the name and position been checked against the GEF data base?

Position
Ministry
Date

GEF-7 Hover Tips PIF August 17, 2018

9.4. Annex GEF — Word Count

word	count				
Sustainable	16	Strategies	3	Known	1
Biodiversity	11	Maintain	3	Threatened	1
Management	10	Services	3	Capital	1
Enabling	9	Livelihoods	3	Assessment	1
Mainstream	7	Resilience	3	Accounting	1
Sectors	7	Environments	3	Plant	1
Development	7	Blue	3	Animal	1
Energy	7	Economy	3	Genetic	1
Strengthen	7	Opportunities	3	Inclusive	1
Well	6	Reduction	3	Conservation	1
Landscapes	6	Enhance	3	Prevention	1
Seascapes	6	Chemicals	3	Invasive	1
Innovation	6	Climate	3	Alien	1
Mitigation	6	Change	3	Financial	1
Mainstreaming	5	Adaptation	3	Sustainability	1
Global	5	Wildlife	2	Coverage	1
Program	5	Natural	2	Protected	1
Improve	5	Resources	2	Area	1
Technology	5	Address	2	Estate	1
Transfer	5	Direct	2	Cartagena	1
Forest	5	Drivers	2	Biosafety	1
Species	4	Protect	2	Nagoya	1
Ecosystem	4	Habitats	2	Access	1
National	4	Effective	2	Benefit	1
Promote	4	Implementation	2	Sharing	1
Breakthroughs	4	Protocol	2	Strategy	1
Systemic	4	Electric	2	Reports	1
Impact	4	Restoration	2	Cbd	1
Foster	4	Capacity	2	Cp	1
Conditions	4	Flow	2	Np	1
Ecosystems	4	Slm	2	Decentralized	1
Water	4	Including	2	Power	1
Security	4	Sustaining	2	Usage	1
Freshwater	4	Dependent	2	Drive	1
Use	3	People	2	Technologies	1
Control	3	Landscape	2	Mobility	1
Further	3	Reduce	2	Accelerating	1
Policy	3	Increase	2	Efficiency	1
Institutional	3	Support	2	Adoption	1
Frameworks	3	Marine	2	Cleantech	1
Activities	3	Environment	2	Cities	1
Demonstrate	3	Sound	2	Systems	1
Options	3	Waste	2	Building	1
Impacts	3	Better	2	Initiative	1
Food	3	Elimination	2	Transparency	1
Land	3	Priority	1	Ndc	1
Concerns	3	Prevent	1	Preparation	1
		Extinction	1	Agro	1

Sustain	1	Beyond	1	Wastes	1
Production	1	Jurisdiction	1	Ldcs	1
Sfm	1	Abnj	1	Sids	1
Flows	1	Improved	1	Manage	1
Flr	1	Open	1	Harmful	1
Pressures	1	Oceans	1	Countries	1
Competing	1	Advance	1	Report	1
Uses	1	Information	1	Minamata	1
Wider	1	Exchange	1	Stockholm	1
Create	1	Early	1	Conventions	1
Scaling	1	Warning	1	Creation	1
Up	1	Enhanced	1	Environmental	1
Ldn	1	Regional	1	Benefits	1
Unccd	1	Cooperation	1	Safeguarding	1
Healthy	1	Shared	1	Community	1
Coastal	1	Surface	1	Local	1
Catalyzing	1	Groundwater	1	Solutions	1
Fisheries	1	Basins	1	Vulnerability	1
Addressing	1	Investments	1	Integrated	1
Pollution	1	Industrial	1		
Areas	1	Agricultural	1		

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11. Summary

This thesis aimed to understand the potential for the KJWA by analysing the social and economic dimensions and ethical implications of sustainable development projects/programmes financed by the Financial Mechanism of the UNFCCC. This is a twofold process which includes first, making entities designing projects aware of how social and economic dimensions can be addressed in sustainable development projects funded by the GCF and GEF. Second, analysing how the requirements of the Financial Mechanism of the UNFCCC can be improved to ensure that social and economic dimensions of sustainable development projects are adequately included in funded projects. For this purpose, the following research question was asked: How can funding for the socio-economic dimension of sustainable development projects be made more available through the Financial Mechanism of the UNFCCC? To better address the main research question, it was divided into the following four sub-questions:

1. What ethical considerations should accompany socio-economic measurement?
2. How can the socio-economic dimension of sustainable development projects be defined?
3. What are the current requirements (evaluative criteria) of IFI that focus on climate change related projects, based on the example of GCF and GEF?
4. Do the GCF and GEF address the socio-economic dimension of sustainable development as defined in this work?

Through this study several research gaps could be addressed. It is highly innovative in the way that it combines different disciplines to find the solution to the complex topic of socio-economic measuring. This thesis has a practical approach by identifying solutions to a work-related problem of international organisations and IFIs. It is also highly innovative in combining scientific findings with ethical considerations and practical knowledge to improve development interventions. Additionally, it highlights the importance of the socio-economic dimension for successful mitigation and adaptation practices in the agricultural sector. It defines the socio-economic dimensions of sustainable development projects in a way that can be applied to different types of projects/programmes. Furthermore, it contributes to the research on the socio-economic and food security topic of the KJWA roadmap to support international negotiators working on the KJWA.

Despite international commitments to support sustainable developments of developing countries in equally the economic, environmental and social dimension, the overall focus in the past has been on mitigating greenhouse gas emissions with the highest cost-effectiveness, the sustainment of the environment and economic well-being. These practices can hardly be justified, as they do not take into consideration the strong-interlinkages within the global social-ecological system. Additional to the fact that the agricultural sector contributes to about one quarter of total global greenhouse gas emissions, the sector is most vulnerable to the impacts of climate change. At the same time, millions of lives depend on the proper functioning of the sector for food security, funding for climate change related interventions in the agricultural sector is still extremely low. To successfully adapt to and mitigate climate change in this sector, social and economic factors need to

be appropriately integrated into interventions. These dimensions can be appropriately integrated, by making social and economic dimensions of sustainable development projects a standard in the requirements of IFIs and by understanding how social and economic dimensions of sustainable development interventions can be addressed in projects under the current requirements of these IFIs. Setting transparent standards in the requirements of IFIs for the financing decisions of sustainable development, including social and economic dimensions, would make these institutions more accountable and increase trust in appropriate international decision-making to tackle the problem of climate change. IFIs are striving for more transparency and accountability in form of standards other aspects of projects such as a standardised calculation of greenhouse gas accounting. Still, barely any progress is seen in different standards for projects related to climate change.

The GEF and GCF are the main IFIs under the Financial Mechanism of the UNFCCC, and their requirements for funding are ideally most aligned with the objectives laid down in the international agreements under the UNFCCC. The primary aim of the UNFCCC is to stabilise greenhouse gas concentrations in the atmosphere at a level that allows ecosystems to adapt to climate change naturally and to ensure that food production is not threatened while enabling sustainable development. Under these agreements, the CBDR of developed and developing countries are recognised by acknowledging that all states have obligations to address climate change, but they have CBDR in doing so. These differentiated responsibilities among other things entail, that developed countries as listed in Annex 2 of the UNFCCC must provide financial resources for the mitigation of and adaptation to climate change of the developing countries.

The KJWA is a decision to address issues related to agriculture while taking into consideration the unique vulnerability of the sector to climate change and the consequence this has on food security. A roadmap was created to envisage workshops and discussions on the topics listed in the decision, as well as future topics, to develop and implement the KJWA decision. FAO supports the development and implementation of the KJWA by supporting countries with technical support to adapt to and mitigate climate change, as well as through capacity development through knowledge products, webinars and workshops. The importance of the social and economic dimensions and food security as the first priority of developing countries is mentioned in several articles of the Convention (UNFCCC) and in other agreements, protocols and the KJWA decision. The need for assessments of the socio-economic dimension is additionally, expressed in the Enhanced Transparency Framework, which lays down modalities, procedures and guidelines for transparency under the UNFCCC.

Besides the already expressed international commitments to address the social and economic dimension, putting these agreements into practice is essential for successful interventions to adapt to and mitigate climate change. According to IPCC the agricultural sector is expected to provide exceptional opportunities for adaptation mitigation synergies and social, economic and environmental co-benefits. Furthermore, linking adaptation and mitigation interventions with other societal objectives, would make these more efficient. It is scientifically recognised that particularly in agriculture and food systems, social and economic dimensions are one of the strongest drivers for unsustainable practices and the greatest determinant for vulnerability to climate

change. While the agricultural sector is dramatically influenced by climate change, these impacts will have the worst effects on poor people in rural areas, which will be disproportionately affected in their well-being. Higher food insecurity, along with existing and new poverty traps, will exacerbate poverty in many developing countries and create and/or increase inequalities.

Furthermore, there is strong evidence, that especially regions that produce crops are greatly affected by negative climate impacts. Youth and women play a crucial role in the sustainable development of all sectors, but it is even more essential to address youth and women in the agricultural sector. The agricultural sector is characterised by an ageing labour force and increased food insecurity. The engagement of young women and men is essential to ensure food security, reduce youth unemployment and unplanned migration. Social protection is an approach to address the vulnerability of people working in the agricultural sector to climate change and the inequalities that different vulnerabilities entail at community level. By combining interventions in agriculture with social protection, it can be ensured that sector structural constraints that limit the access of poor households to land, water, financial services, advisory services and markets can be successfully addressed. This can be reached *inter alia* through the increased participation in social networks, the investment in human capital development, better management of risks and the investment in agriculture and reallocation of labour to on-farm activities.

Climate change is one of the most significant collective action problems of all time. Human-induced global warming through unsustainable practices of industrialised countries since the industrial period after 1900 brought and continues to bring dramatic consequences. Therefore, the majority of countries has agreed through the UNFCCC to decrease human-driven change and limit global warming for this century to 2 degrees. While international agreements address the coordination to address this problem, they leave several ethical questions open for interpretation and discussion. A great question is how the burden of climate change mitigation should be concretely shared among countries and to which extent adaptation practices need to be integrated into projects financed under the notion of CBDR. What level of well-being and for whom it needs to be reached to implement sustainable development projects successfully is an integral part of this discussion. Options exist that would allow us to move towards inclusive and sustainable human development by addressing social and economic inequalities of the climate crisis as an international community (including developed and developing countries). This could be addressed for example, through the distribution of financial responsibility, by giving financial resources to those strongly affected by climate change and finance them through those that have crossed the per capita planetary boundary. These decisions on, who is entitled to what, and what is happiness or well-being, are based at its core, first on basic needs for people's survival, and definitions of physical and psychological well-being and second, on justice in governance.

The literature was divided into two major topics, first ethical considerations that should accompany socio-economic measurement and second, the definition of the social and economic dimension of sustainable development projects.

The chapter on ethical considerations of social and economic measurement discussed several different aspects that are crucial for suggesting how funding for the socio-economic dimension of sustainable development projects can be best addressed. It was found that indicators as a governance mechanism and as a form of knowledge production has strong implications on power relations between developed and developing nations, and governments and civil society. This new system of compliance check through indicators leads to a change in who is held responsible and masks underlying power dynamics. Especially indicators that are based on ranks and numbers give the impression of objective truth and straightforward comparison. Nevertheless, the selection of indicators addressing humans has ethical as well as political implications. Different aspects such as the measurement method or the label of the indicator can have strong ethical implications. Definitions and moral considerations get lost behind the simplified title or description of an indicator or other measurement method and need to be made available for the public to be able to hold decision-makers accountable for their decisions.

Different theories of justice were introduced based on which governance decisions can be made to increase overall well-being. These theories — utilitarianism, liberal equality and libertarianism — all build on a different premise of what well-being is and provide different methods to reach the highest overall well-being. They were chosen for the purpose of this work because it was understood that most justice theories derive from or answer to these three major theories. While utilitarianism tries to maximise overall utility to produce the greatest well-being for all members of society, libertarians see individual freedom as both the highest priority and the main account for individual well-being. Both theories overlook that maximising overall utility and the greatest individual liberty can create bigger gaps between the well-off and worst-off in society. Whereas, liberal equality, such as in the theories by Rawls or Dworkin, tries to give equal concern to liberty and equality, to give people equal opportunities in life. This is reached through mechanisms of ex-ante or ex-post adjustment to people's potential relative advantages and disadvantages.

While in theory abstract mechanisms, such as the veil of ignorance or an imaginary auction to understand how equal concern can be given to people's needs, or universality applied by utilitarians to maximise utility, the translation of these mechanisms to real life is complicated. People do not wear responsibility scores on their forehead, that show to which degree they are responsible for their own misery and if they originally had equal opportunities as someone who is better-off now. An essential component to be able to hold people responsible is to give them opportunities and autonomy to freely take personal choices and set goals. In order to be able to make choices individuals need the necessary information to be able to make choices responsibly. Especially poor people often lack this information, while being confronted with more decisions than better-off people, that might have drastic influences on their life. These are ethical considerations that need to be addressed by sustainable development projects/programmes which include social and economic dimensions.

To be able to discuss how these dimensions can be addressed in projects or programmes, the social and economic dimensions of sustainable development needed to be defined. For this purpose, it was first reviewed what sustainable development means. It was found that sustainable development means that social, economic

or environmental dimensions can be either sustained or developed, and this sustainment or development lasts for a certain period. This period of time of sustainable development is mostly measured in generations of people that will be affected by this change. It cannot be ignored that resilience and vulnerability to climate change play a certain role in the potential of and need for sustainable development. Resilience and vulnerability to climate change are the opposite ends of climate change impacts on people, communities or countries. Hence, in order to increase resilience, vulnerability needs to be decreased. The vulnerability of people has a strong influence on what needs to be sustained or developed to make these people more resilient to climate change. Nevertheless, vulnerability or resilience to climate change is part of the components that define the social and economic dimensions of sustainable development and not the other way around. Therefore, higher resilience to climate change contributes to a higher well-being of the population, among other factors that determine the well-being of people. An overall high well-being of a population has a positive influence on more resilience to climate change and therefore, automatically decreases vulnerability to climate change.

This work defined the socio-economic and food security dimension in projects as the social and economic dimension of sustainable development, which means that they are strongly interlinked with the environment and therefore also with climate impacts. The social, economic and environmental pillars of sustainable development are strongly interlinked and therefore an intervention in one of the three will mostly have impacts on the other two. Time plays a crucial role for sustainable development, as each act of sustaining or developing will last for a certain time. These are considerations essential to be made in the design, planning and implementation of sustainable development projects, as envisioned by the UNFCCC.

To analyse how the integration of the social and economic dimension of sustainable development are currently required by the Financial Mechanism of the UNFCCC a document analysis was conducted, in which the funding proposal forms of the GEF and GCF were analysed. These documents were selected for the analysis, as they are considered to reflect the evaluative framework of the IFI. This analysis included the three major steps of skimming, reading and interpretation. The most relevant documents were described first, by giving a superficial overview, then more in detail and in the last step a table was created in which the identified criteria were split into sub-criteria with detailed explanations.

Two hypotheses were tested to answer the research question of this work. Hypothesis 1 was that IFI have evaluative frameworks. Hypothesis 2 was that the social and economic dimension as defined in this work are not reflected in these evaluative frameworks. Four major findings were identified through the testing of these hypotheses. The first finding was that the design of the funding proposals of the GCF and GEF is strongly aligned with the need of these to report their progress against institutional objectives and how much money was spent for each objective or result area. These result areas are not the same for the GCF and GEF even though they both have the aim to fund the objectives of the agreements under the UNFCCC. The second finding was that there is a strong difference in the transparency of the evaluative framework of the GEF and GCF. While the evaluative criteria in the funding proposal form of the GEF are very ambiguous, the GEF additionally does not disclose the forms of the accepted proposals on its website, which makes it hard to hold

the institution accountable for its decision-making. The GCF discloses all accepted funding proposals on its website, which increases accountability. Additionally, the GCF is more transparent than the GEF in points that need to be addressed in the funding proposal. Nevertheless, the information asked for is explained more concretely for some questions than for others. Third, both institutions are less transparent in standards that need to be met for the social and economic dimension of sustainable development. It seems that the institutions do not require an integrated approach of sustainable development where all three dimensions – environmental, social, economic – are equally addressed to ensure long-term impacts and effectiveness of the interventions. However, the ambiguous formulation of expected socio-economic assessments and other criteria related to social and economic dimensions of sustainable development leave space for the entity applying for funding to address these dimensions in the project/programme. Fourth, the guidelines provided by the two IFIs are not sufficient to ensure that questions can be successfully answered. The guidelines lack explanations of acronyms, concrete definitions of notions for which no standard definition is in place, step by step instructions of how assessments need to be conducted to meet the requirements, explanations of policies, expected minimum requirements to be met by the project/programme, and examples of good practices in the drafting of answers funding proposals.

To understand which standards for the social and economic dimensions could be introduced for project implementers but also in the requirements of the IFIs, ethical considerations of socio-economic measurement are crucial to be combined with scientific knowledge and the objectives set in the international agreements on climate change. Five major ethical considerations need to be implemented, when programming and funding sustainable development interventions. First, to allow equality of opportunity not only for project beneficiaries but also for entities drafting funding proposals, the evaluative framework of IFIs needs to be translated as transparent and concrete as possible into the funding proposal forms and guidelines. Second, inclusive decision-making should be part of every identification, design and identification of projects/programme. This means also giving a certain veto power to the most vulnerable and worst-off groups in the target community, to ensure that their well-being will not be additionally aggravated. Third, it is essential to include intergenerational considerations into interventions. Fourth, equal consideration needs to be given to all pillars of sustainable development (environmental, social, economic) to successfully reach long term mitigation and adaptation goals. Fifth, basing financial decision-making on economic cost-effectiveness or cost-benefit analysis is hard to justify, as saved financial cost mostly have environmental, social or economic consequences for either the target community or other individuals.

Taking into consideration all findings of this work, standards to appropriately integrate the social and economic dimensions of sustainable development projects funded by the financial mechanism of the UNFCCC can be improved by addressing ten major issues. These issues are translated into more detailed recommendations in the recommendations section. First, IFIs should increase their transparency and accountability in funding decisions. It could be considered by IFIs to revise the desired impact areas, according to the latest scientific research contributing to the objectives of the different agreements and conventions

related to climate change. Standards for the design of M&E systems and logical frameworks should be introduced. Even though the agricultural sector is extremely important to address when mitigating or adapting to climate change, the sector is barely tackled by evaluative framework of the GCF and GEF. Alternatives to cost-benefit or cost-effectiveness analysis should be introduced to improve practices in the financial evaluation of projects. To increase effectiveness of projects, an integrated approach to sustainable development including social, economic and human rights dimensions should be promoted. Moreover, minimum standards for the inclusion of social and economic dimensions in projects financed by IFIs should be introduced. Intergenerational aspects of sustainable development should be better taken into account when drafting or funding projects. Inclusive decision-making should be promoted throughout projects to ensure sustainability and increase security through increased connectiveness. Finally, it must be ensured that through any intervention the most vulnerable are never made worse-off in any of the dimensions of sustainable development.

The following limitations and suggestions for further research could be identified. To understand the evaluative criteria of the GCF and GEF the funding proposal forms, and related documents were analysed. Policies and Board documents that were referred to for further information on evaluative criteria were not assessed in detail, as the purpose of this research was to analyse the evaluative criteria that were transparently communicated (clear, obvious and understandable without doubt or ambiguity). Nevertheless, these documents if examined in detail, could provide additional information to complement the findings of this work. Additional evaluative criteria could be identified by analysing the funding proposals that the GCF discloses on its website for the public or the notes and decisions of Board meetings. By analysing project proposals focussing on the agricultural sector, it could be understood which evaluative criteria the GCF and GEF use specifically for this sector. Furthermore, by calculating the percentage of accepted projects in the agricultural sector, the importance that the Financial Mechanism puts on this sector can be evaluated. Further research can address the question of why two institutions aiming to finance the objectives of the UNFCCC agreements take different approaches to fulfil the same objectives laid down in the agreements. This work did not address the question which indicators and impact areas can be used on the level of the financial institutions to treat all three dimensions of sustainable development equally to be fully effective in the financing of sustainable development. The aspect of time needs to be further researched, to decide on how many generations' impacts of projects need to last so that they can be considered as sustainable. The planetary boundaries per capita will decrease with an increase in populations, how will this be addressed by climate change mitigation and what this means for the countries that are already across the planetary boundaries. Further research could additionally, focus on reviewing and comparing social and economic risk, as well as on the development of potential assessment methodologies to introduce standardised assessments of these dimensions in projects/programmes.