



# Tanzania SDG Investor Map

## Handbook Report

[This report only features high-level summaries of the Investment Opportunity Areas (IOAs) for Tanzania. For the full market intelligence of the Tanzania SDG Investor Map, please visit the country page on the global SDG Investor Platform via <https://sdginvestorplatform.undp.org/country/tanzania>.]



## Table of Contents

I.	Foreword: By Permanent Secretary / MIIT .....	iv
II.	Message from UNDP and UNCDF Leadership .....	v
III.	UNCDF Foreword .....	vii
IV.	Acknowledgements.....	viii
	List of Abbreviations and Acronyms .....	ix
1	Situation Analysis .....	1
1.1	Development and financing landscape in Tanzania.....	1
1.2	Implications of financing landscape for SDG financing .....	2
1.3	SDG Investor Maps .....	2
1.3.1	Methodology and conceptual framework .....	2
1.3.2	Relationships between SDG Investor Maps and the INFF.....	4
1.3.3	Synergies between the INFF and the SDG Investor Map .....	5
1.3.4	The INFF Process in Tanzania and the Completed DFA.....	6
1.4	Process followed to complete the Tanzania SDG Investor Map .....	7
1.4.1	Secondary literature review.....	7
1.4.4	IOA Longlisting Workshop.....	8
1.4.5	Fact finding outreach.....	8
2	Priorities to Address Development Needs.....	9
2.1	Agriculture (food & beverage) .....	9
2.1.1	Sectoral development needs.....	9
2.1.2	Policy priorities .....	10
2.1.3	Overlapping themes, opportunities and challenges .....	10
2.1.4	White spaces in the agriculture (food & beverage) sector .....	11
2.1.4.1	Efficient storage infrastructure to manage post-harvest losses.....	11
2.1.4.2	Digital agri-transaction platforms .....	11
2.1.4.3	Physical functions in the marketing systems .....	12
2.2	Renewable and Alternative energy .....	13
2.2.1	Sectoral development needs.....	13
2.2.2	Policy priorities .....	14
2.2.3	Overlapping themes, opportunities and challenges .....	14
2.2.4	White spaces in the renewable and alternative energy.....	15
2.2.4.1	Affordable funding opportunities and risk mitigating measures .....	15
2.2.4.2	Specialized technical courses in renewable energy .....	15
2.3	Infrastructure .....	16

2.3.1	Sectoral development needs.....	16
2.3.2	Policy priorities .....	16
2.3.3	Overlapping themes, opportunities and challenges .....	17
2.3.4	White spaces in the infrastructure sector .....	17
2.3.4.1	Use of low cost, local building materials, innovative technologies .....	17
2.4	Education .....	18
2.4.1	Sectoral development needs.....	18
2.4.2	Policy priorities .....	18
2.4.3	Overlapping themes, opportunities and challenges .....	19
2.4.3	White spaces in the education sector .....	20
2.4.3.1	Digital education.....	20
2.5	Services.....	20
2.5.1	Sectoral development needs.....	20
2.5.2	Policy priorities .....	21
2.5.3	Overlapping themes, opportunities and challenges .....	21
2.5.4	White space in the services sector.....	22
2.5.4.1	Package Tourism.....	22
3	IOA Close Ups .....	23
4	Conclusion and Next Steps .....	37
5	References .....	38

**List of figures**

Figure 1: Four-stage process to develop SDG Investor Maps.....	3
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## **I. Foreword: By Permanent Secretary / MIIT**

The Ministry of Investment, Industry, and Trade (MIIT) in collaboration with UNDP developed the SDG Investor Map for Tanzania. The Investor Map is presented at a time when resources for innovative ideas and solutions that advance the achievement of the SDGs are more critical than ever. The Covid 19 pandemic has severely disrupted the lives of many countries and businesses across the globe, and Tanzania was not an exceptional. The Investor Map will become very handy and critical to address current and post COVID-19 challenges and most importantly, harness the opportunities for building a more sustainable and resilient economy.

The Government of Tanzania is honored to have partnered with UNDP to develop the first-ever, SDG Investor Map for Tanzania. This is indeed a memorable milestone in our economic development history. The SDG Investor Map offers an integrated and functional lens to respond to Tanzania's by showcasing 13 Investment Opportunity Areas (IOAs) across five (5) priority investment sectors: Agriculture, Renewables & Alternative Energy; Infrastructure; Services, and Education. This is consistent with the strategic priorities of the National Development Plan which places utmost priority on "Transformative Partnerships" between the public sector, private sector, and civil society.

We firmly believe the identified investment opportunities will create powerful signals to both foreign and domestic investors to leverage the lucrative market forces in Tanzania, aid the nation to realize its SDG targets and impact lives of millions of Tanzanians. The data backed research and insights behind this powerful market intelligence tool will serve as useful blueprints to understand how best the SDG financing gap can be narrowed in Tanzania for the foreseeable future.

The Government recognizes the role of the private sector in meeting the UN's Sustainable Development Goals (SDGs) and has continued to take various reforms aimed at creating an enabling environment for trade and investment. Accordingly, the SDG Investor Map has documented a number of initiatives spearheaded by the government on that front. Such initiatives have created a strong momentum for investment. The SDG Investor Map is therefore an ideal launching pad for realizing the opportunities presented by the improved business climate in Tanzania. Going forward, it will undoubtedly become a perfect springboard for harnessing further investments.

The Tanzania Government firmly believes investment is about building both relationships and trust. The kind of investments Tanzania is looking for is not a single event but is mutual, and hopefully long-term partnerships. This is Tanzania's current approach to creating a strong economy while at the same time creating social benefits for everyone. SGD Investor Road Map is expected to create such partnerships and help Tanzania realize this dream.

The Tanzanian government is very grateful to UNDP and other stakeholders for their efforts to help create this investor map which is important in developing investment facilitation efforts. The Ministry of Ministry of Investment, Industry, and Trade (MIIT) looks forward to working with UNDP and other partners to support the implementation of the Tanzania SDG Investor map. We stand ready to play a convening role in mobilizing the private sector, and other development actors to help the government establish a sustainable development financing architecture that will accelerate the achievement of the SDGs.

Finally, I would like to sincerely thank everyone who has provided their invaluable inputs to this exercise. My sincere gratitude is extended to UNDP for spearheading this noble endeavor for Tanzania.

Permanent Secretary, Ministry of Investment, Industry and Trade

## II. Message from UNDP and UNCDF Leadership

### UNDP – Foreword

Achieving the Sustainable Development Goals (SDGs) will create a world that is more sustainable, equitable, and prosperous. Businesses and investors have increasingly taken an active role in their social responsibility and in their contribution to the Global Goals. However, this Decade of Action has shown us that to achieve the 2030 agenda we need to rapidly accelerate efforts and investments in the SDGs. In order to get there, investors must adapt their strategies to deliver not only financial results, but positive social and environmental outcomes as well.



COVID-19 has further challenged development models and businesses in myriad ways and have significantly impacted the gains that were made towards SDGs. UNDP estimates show that global human development a combination of education, food supply chain, Tourism, healthcare and living standards could be adversely affected. Tanzania, like many peer economies, has its task cut out to boost economic growth at least to its pre pandemic levels and also ensure inclusivity in its recovery measures. Accelerating the recovery will require directing capital flows into sectors and businesses that scaffold the overall development of people and planet. These are notably sectors like Agriculture (to address food security issues), Healthcare (to ensure access to universal healthcare), Education (to ensure high quality human capital) and industrial sectors to create jobs and gainful entrepreneurial opportunities.

The SDG Investor Map is a market intelligence product that is produced by countries through the support of UNDP and partners. It seeks to help private investors to identify investment opportunities in key areas of the economy and to make clear actionable data that combines impact and profit. Through this SDG Investor Map for Tanzania, UNDP seeks to assist and collaborate with government in accelerating investment into Tanzania, thus achieving both national and Global Goals. UNDP Tanzania and UNCDF are therefore thrilled to have worked with the Ministry of Industry, Investment and Trade to develop the SDG Investor Map.

The SDG Investor Map report makes a concerted effort to identify sectoral opportunities that are responsive to key development challenges, while being economically viable and scalable. The Map has been developed by deploying a robust research methodology and a highly consultative approach that involved over 40 structured interviews, highlights investor sentiment in subsectors and broad opportunity areas, while also suggesting viable business models that can be supported.

Investing in the SDGs should not only be desirable but a practical decision which contributes to a sustainable future for us all. By providing and showcasing market opportunities for investors seeking to make not only a profit but also an impact, we are responding to the identified needs of impact investors and delivering market intelligence aligned with the SDGs. By connecting development needs to investment opportunities, we are seeking to direct financing flows toward Tanzania and contribute to reaching the SDGs.

The SDG Investor Map for Tanzania identifies sectoral opportunities that responds to key development challenges in Tanzania and connects them to key investment possibilities. The Map has been developed

through a rigorous methodology. Through stakeholder consultations with private sector and government gaps and areas of promise have been identified. 13 Investment Opportunity Areas (IOAs) across 5 sectors have been highlighted. These sectors are Agriculture, Renewable and Alternative energy, Infrastructure, Education and Services.

We hope that this results-oriented, data-driven approach that highlights high impact and innovative business models leads to a greater flow of capital and pathways for collaboration.

We are thankful to Ministry of Industry, Investment and Trade, Tanzania Investment Center, Tanzania Private Sector Foundation, European Business Group, UNCDF and many other Stakeholders for their collaboration on this important initiative and we are looking forward to work with them all to realize this noble initiative.

It gives us immense pleasure to share with you this report which summarizes the investment opportunities. We hope that this data-driven, market intelligence tool will accelerate investments into the SDGs in Tanzania.

*Christine Musisi*

*Resident Representative*

### III. UNCDF Foreword

Tanzania has adopted and developed the “SDG Investor Map” in close collaboration with UN Capital Development Fund (UNCDF) and UNDP. The SDG investor map is an important and essential platform for identification of investment opportunities in critical sectors such as Agriculture, Renewables & Alternative Energy; Infrastructure; Services and Education that are aligned with the national development agenda and priorities. Furthermore, Tanzania is blessed with abundance of natural resources in form of prime lands, water, forestry, tourism attraction, minerals and other endowments with limited or no utilization. These resources and raw materials require significant and appropriate investment to fast track the achievement of sustainable development goals.

UNCDF commends the Government for propelling robust economic growth that is complimented by stable macroeconomic policies despite setbacks posed by Covid-19 pandemic. Notwithstanding the achievements, investment capital and appropriate technologies have not trickled down fast enough to reach the local level where majority of the populations are, to build local industries and key productive sectors for development. This challenge is further fueled by increasing rural and urban migration not absorbed by the level of public and private investment, industrialization and gainful activities in service sectors.

The bigger picture of the SDG Investor Map exercise provides an opportunity for UNCDF to apply its investment mandate, investment expertise and its financial instruments such as seed capital grants, access to capital markets both debt and equity, subnational, municipal, and thematic bonds, blended finance instruments and guarantee facilities to complement the work of the government in promoting investment in priority economic sectors. Furthermore, we call for opportunities to work with other development partners, public and private sector finance to support the implementation of sustainable development agenda in Tanzania. It is a way of bringing in a new global framework to finance development by aligning all financing flows and policies with national economic, social and environmental priorities.

*Peter Malika*

*Head of UN Capital Development Fund Tanzania*



## IV. Acknowledgements

The SDG Investor Map development process for Tanzania has been a work of deep collaboration and participation from multiple stakeholders. We are thankful to the 50+ government officials, investors, think tanks and enterprises who took the time to speak with us through in- depth consultations and contributed with their insights and deep experience.

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### **Specialist Interviewees**

A number of interviews and validation sessions were conducted during the development of the Tanzania SDG Investor Map. This involved a number of government officials, industry experts, business owners, and international development agencies. We sincerely acknowledge their insights and experiences shared at different stages of the assignment.

A particular thanks is directed at Tanzania Investment Center (TIC) for housing this map and being at the forefront for its development.

Our Special thanks are also extended to, Professor Godius Kahyarara, Permanent Secretary-PMO Investment for taking time to go through the SDG methodology and providing initial comments. On the same vein we would also like to record our specific acknowledgment to the following persons: Ms. Lilian Mwamdanga – Program Specialist - Women’s Economic Empowerment- UN Women; Mr Gerald RUNYORO – National Programme Officer - UNIDO, Mr. Francis Nanai- Executive Director, TPSF; Mr. Andrew Mahiga - Director for Policy, TPSF; Mr. Sirili Akko – Executive Secretary – TATO, Cikay Richards – Executive Director – EUBGTZ, Mr. Girson L. Ntimba – TIC, Mr. Gaudence Mmassy – TIC, Mr. Aristides Mbwaswi – PMO Investment; and Mr. Godfrey Lugongo – PMO Investment.

## List of Abbreviations and Acronyms

AAAA	Addis Ababa Action Agenda
CAGR	Compound Annual Growth Rat
CAHF	Centre for Affordable Housing Financing in Africa
CIT	Corporate Income Tax
CMSA	Capital Market and Security Authority
DFA	Development Finance Assessment
DGP	Gross Domestic Product
DSE	Dar es salaam Stock Exchange
FiT	Feed in Tariff
FYDP-III	Five Year Development Plan-III
GOT	Government of Tanzania
HCI	Human Capital Index
INFF	Integrated National Financing Framework
INFS	Integrated National Financing Strategy
IOAs	Investment Opportunity Areas
IRR	Internal Rate of Return
LPGs	Liquefied Petroleum Gas
NGOs	Non-Governmental Organisations
NHC	National Housing Corporation
OECD	Organisation for Economic Co-operation and Development
ODA	Official Development Assistance
PAYGO	Pay as You Go
PHLs	Post-Harvest Losses
PPPs	Public Private Partnerships
REA	Rural Energy Agency
SDGs	Sustainable Development Goals
TAHA	Tanzania Horticulture Association
TBA	Tanzania Building Agency
TANESCO	Tanzania Electric Supply Company
TPSF	Tanzania Private Sector Foundation
TIC	Tanzania Investment Centre

TVET	Technical and Vocational Education and Training
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
VAT	Value Added Tax
WHC	Watumishi Housing Compan

# 1 Situation Analysis

Throughout the world, there is now a renewed urgency for rallying private sector participation and strengthening private and public sector networks for achieving sustainable and inclusive economic growth. The prevailing situation of volatility, uncertainty, complexity and ambiguity together with the general political instability (VOCA) presents countries in the world with an unprecedented challenge for “achieving” and “sustaining” their projected economic growth rates necessary to achieve sustainable and inclusive economic growth. Indeed, the validity of the key assumptions which are ordinarily used in computing growth projections are severely disrupted by such challenges and hence a need for a new thinking.

## 1.1 Development and financing landscape in Tanzania

The Government of Tanzania (GoT) has domesticated the SDGs into its National Development Plan (FYDP III) and one of the current major efforts is to secure its financing and monitoring. The extent to which the country is able to achieve this depends largely on progress made towards achieving its development objectives and the 2030 Agenda. Overall, there is a mixed picture - situations where the country has made significant strides and others where there has been a poor achievement. These are presented in turn below.

Tanzania has continued to register robust economic growth coupled with a stable macroeconomic environment and GDP has been growing at an average rate of 6.9 percent from 2014 to 2019. On the fiscal side, government revenues to GDP ratio is estimated at 15.14 percent of GDP in 2019/20 and the capital budget's share of the total budget has increased from 25.4 percent in 2015/16 to 37 percent in 2019/20, higher than the target figure included in FYDP II of 32.8 percent for 2020/2021. Total revenue collections, however, have fallen short of the expected targets by 7.5 percent, with tax revenue surpassing its target by 1.6 percent, while non-tax revenue fell short by 22.1 percent.

A comprehensive analysis of public financing flows shows that Government budget revenues, in current terms, has been steadily growing from around TZS 4 trillion in 2008 to close to TZS 18 trillion by the end of the period.<sup>1</sup>Tanzania's revenues to GDP ratio, however, does not compare well with other economies.<sup>2</sup>

Historically, Tanzania has been one of the largest recipients of ODA in Africa. Since 2011, however, the actual inflows have been showing a significant decrease and the percentage of ODA grants relatively to GDP shows a declining trend throughout the period from 4.7 percent in 2010 to 0.3 percent in 2018. External debt inflows to Government have fluctuated over the years under study. During the period, the total amounts disbursed have gone from TZS 1.3 trillion in 2010 to TZS 1.19 trillion in 2019 while peaking at TZS 2.49 trillion in 2014. The unpredictability and untimely disbursement of loans in recent past have resulted in Government issuing the “Guidelines for Project Planning and Negotiations for Raising Loans, Issuing Guarantees and Receiving Grants.”

Actual resource mobilization from climate funds has not met the expectations and recent estimates indicate that by 2020 only a total of TZS 24,7 trillion equivalent to USD 10,7 million were mobilized during FYDP II which was only 3.6 percent of the targeted amount. Over the past decade, FDI inflows in Tanzania have decreased by 45.4 percent from USD 1.8 billion in 2010 to under a billion (USD 0.96 billion) in 2019. Consequently, FDI as percentage of GDP also declined from 5.7 to 1.8 percent over the

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<sup>1</sup> The main categories (in 2018/19) of Government revenues were taxes on imports, income taxes and taxes on local goods.

<sup>2</sup> Tanzania ranks well below its peer countries (Mozambique, Rwanda and Kenya) as well as other emerging economies (Brazil and South Africa) though it is slightly better than Ethiopia and several other low-income Sub-Saharan Africa economies. At 15.14 percent of GDP in 2019/20, Tanzania is above the average for low income developing economies (12.97 percent) but well below the emerging G-20's (24.21 percent) and advanced economies (34.78 percent).

same period. In terms of remittances, these flows do not have a profound impact on the overall financing flows into the country.<sup>3</sup>

## 1.2 Implications of financing landscape for SDG financing

From the foregoing, it is evident that Tanzania does not have necessary resources to sustainably finance activities to achieve its national development outcomes and in particular the SDGs. Achieving Tanzania's development goals and the SDGs rooted in the 2030 Agenda requires mobilizing a diverse range of public and private financial resources. Furthermore, for Tanzania to achieve Vision 2025, sustainable finance will need to be utilized as a driving force for social and economic resilience.

The government is keen to identify opportunities to mobilize additional sources of finance and use existing financial resources more efficiently to achieve the SDGs by 2030, coupled with the Development Finance Assessment (DFA). However, currently, there is a missing link between national development plans and the financial resources needed to achieve them.

National resource mobilization and increased commitments from private investors and enterprises will be increasingly needed for recovery, while maintaining progress towards the achievement of the SDGs by 2030. More importantly Tanzania will need “**SDG aligned investments**” to trigger the envisaged economic transformation. Tanzania will also need “**innovative financing models**”, including the Integrated National Financing Framework (INFF) which is a tool to strengthen its planning process and finance sustainable development.

Against the above background, UNDP is working with the Government of Tanzania in order to come up with new modalities and business models which will assist the country to “fastrack” the achievement of the Sustainable Development Goals (SDGs) through catalyzing investments from both private and public sector amid the existing volatilities in the global economy. The proposed modalities are presented in the form of “**SDG Investor Map**”.

## 1.3 SDG Investor Maps

An SDG Investor Map is a market intelligence product produced by UNDP Country Offices (COs) to help private investors (funds, financiers, corporations) identify investment opportunities and business models that advance the SDGs.<sup>4</sup> The SDG Investor Maps provide the insight and tools needed by the private sector to translate country-level SDG gaps and priorities into investment opportunities and thereby increase their investments towards the SDGs. Furthermore, Maps provide insights into local market conditions, local SDG investment opportunities, highlighting the business opportunity as well as the expected development impact of such investment. They can make a significant contribution to filling the financing gap by mobilizing private capital for the SDGs.

### 1.3.1 Methodology and conceptual framework

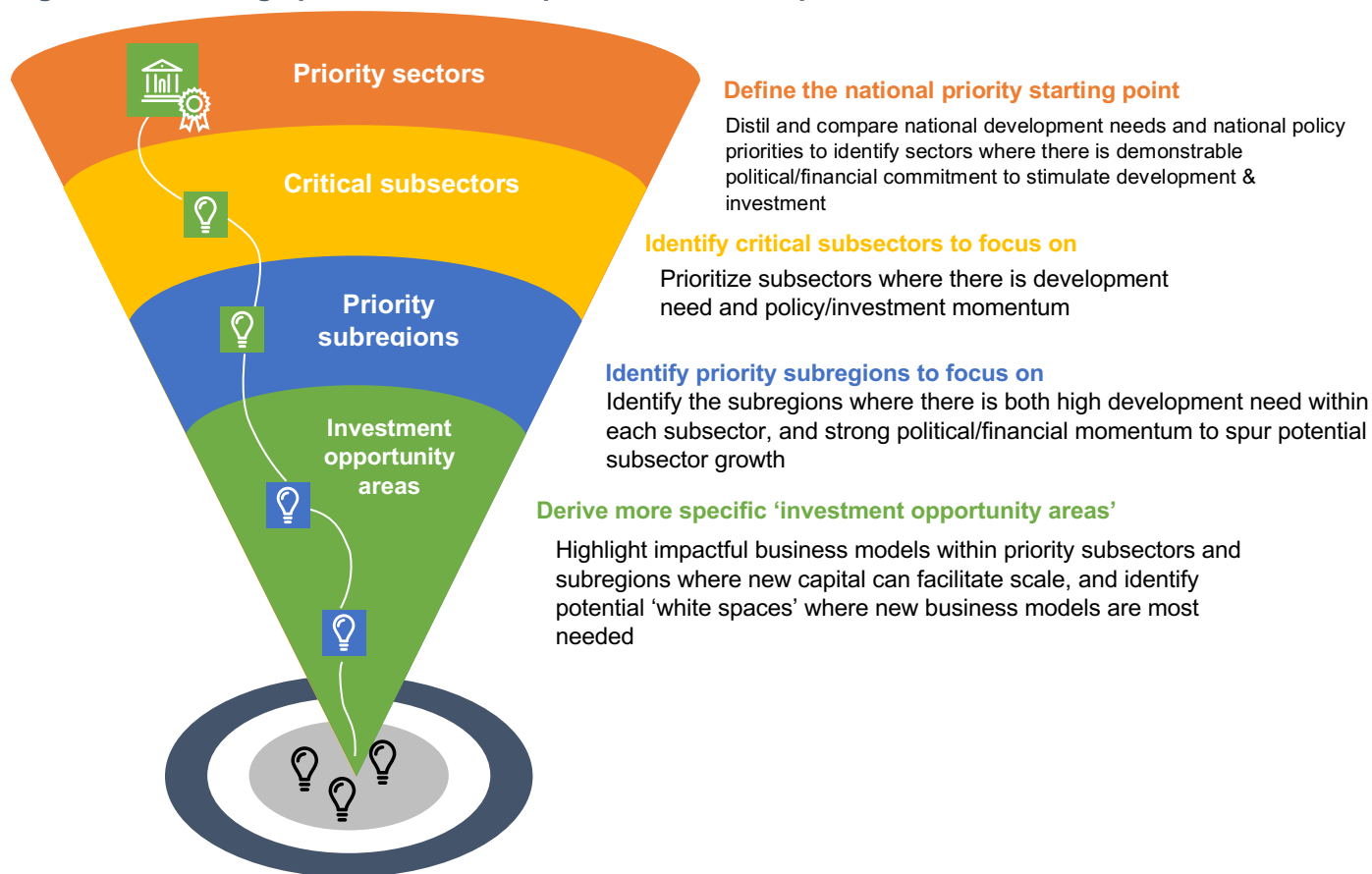
Developing an SDG Investor Map requires filtering down from National Priorities to derive ‘**Investment Opportunity Areas**’ (IOAs). The figure below presents the filtering down process from national priorities to derive Investment Opportunity Areas (IOAs)

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<sup>3</sup>-ibid-

<sup>4</sup> Around 40 countries will have used the Investor Maps service by the end of 2021

**Figure 1: Four-stage process to develop SDG Investor Maps**



The SDG Investor Map first conducts a needs analysis to generate hypotheses around the key development needs at the intersection with policy priorities. It then develops private sector responses to those needs that involves an in-depth assessment of the IOAs based on 20 key data points across economic and impact consideration that investors need to conduct private sector due diligence and prepare for an SDG investment. The SDG Investor Maps provide a key bridge between private capital in search of impactful investment opportunities and the need to mobilize new private investments at national levels. They translate opportunities into investment-friendly language and meet data gaps that are commonly identified by investors as a key barrier to investment, while also identifying needed policy and regulatory changes. The SDG Investor Maps serve as the basis to drive change in capital deployment, the enabling environment and impact management for SDG investments. This includes, among others, impact facilitation events - investor convenings and policy dialogues - to bring the knowledge to decision-makers and direct investment capital where it is needed most.

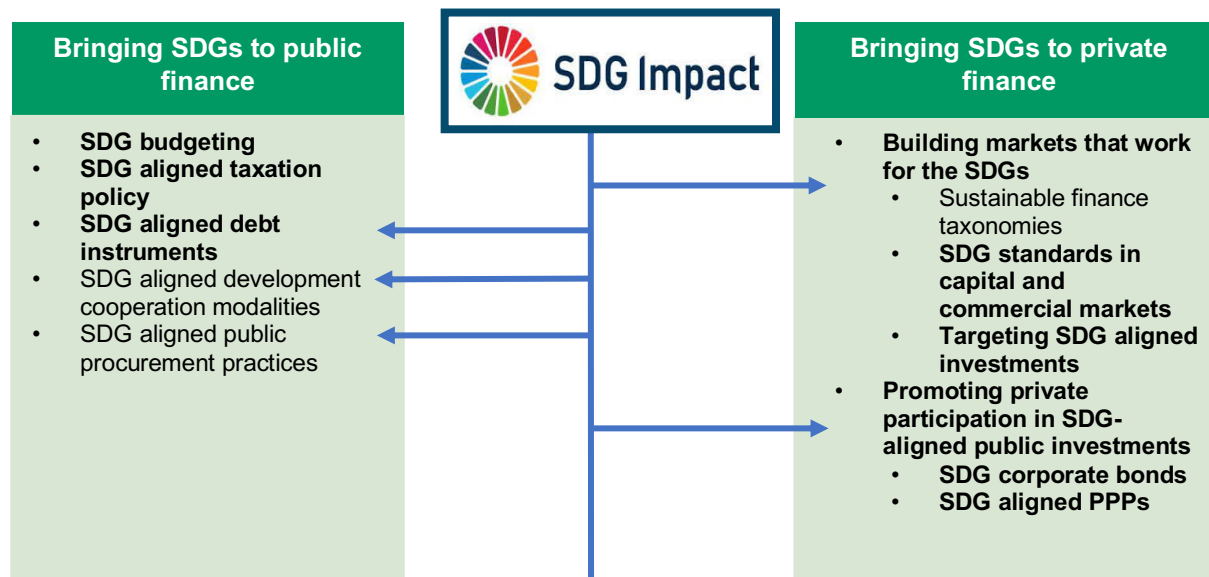
SDG Investor Map is a useful tool for helping the achievement of Government priorities, Development Finance Assessment (DFA) / Integrated National Financing Framework (INFF)<sup>5</sup> and other related

<sup>5</sup> An integrated national financing framework (INFF) can support a government in taking a holistic approach to managing and mobilizing all types of financing—domestic, international, public, private—for sustainable development results. An INFF has six building blocks, which together provide a structure and a prompt for governments to assess their financing framework as a whole, and to guide thinking about reforms to implement a strategic, holistic, results-driven approach to financing their development objectives

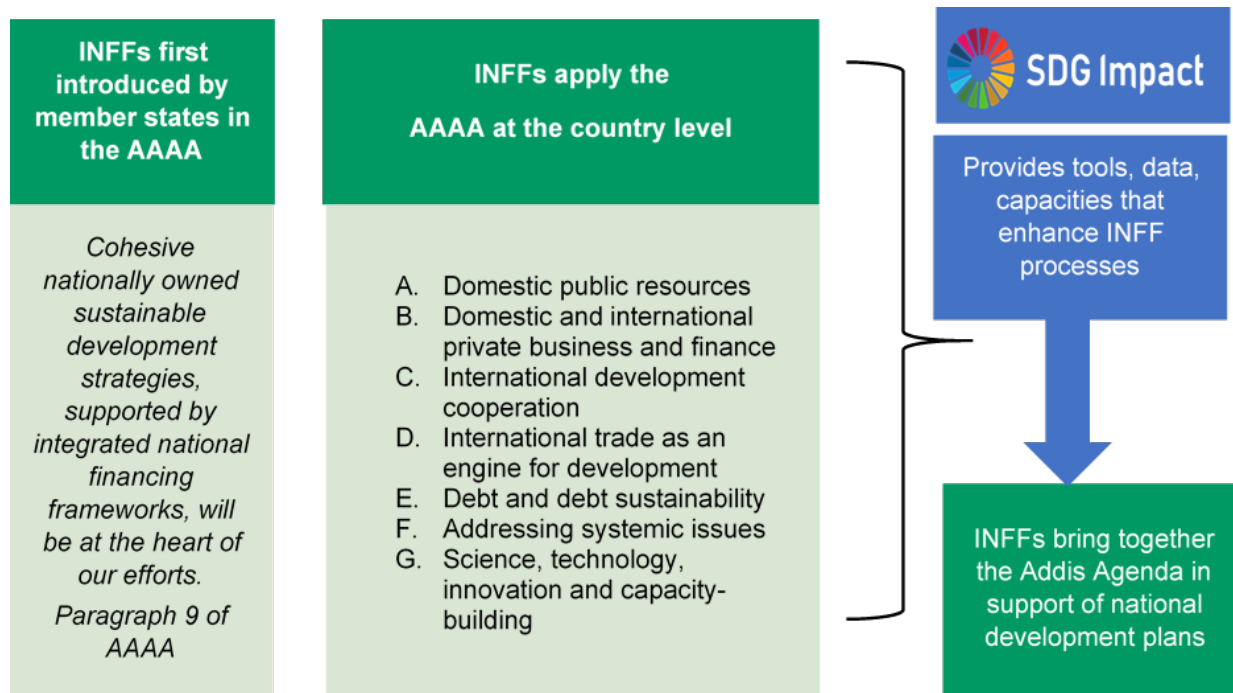
processes in Tanzania. Relationship between SDG Investor Maps and other processes is presented below.

### 1.3.2 Relationships between SDG Investor Maps and the INFF

The Integrated National Financing Framework (INFF) provides a framework to help governments think about how they can bring together **existing policies and institutions** within a **more integrated, holistic approach to financing for sustainable development**.



Based on the Addis Ababa Action Agenda (AAAA), the Integrated National Financing Frameworks help policymakers map the landscape for financing sustainable development and lay out a strategy to increase and make the most effective use of investment for sustainable development and the achievement of their national development priorities across all sources. INFFs offer an “integrated” solution not only regarding the planning and financing as well as approaches across governments and partners, but also the public and private (domestic and international) financing required to realize national development priorities.



### 1.3.3 Synergies between the INFF and the SDG Investor Map

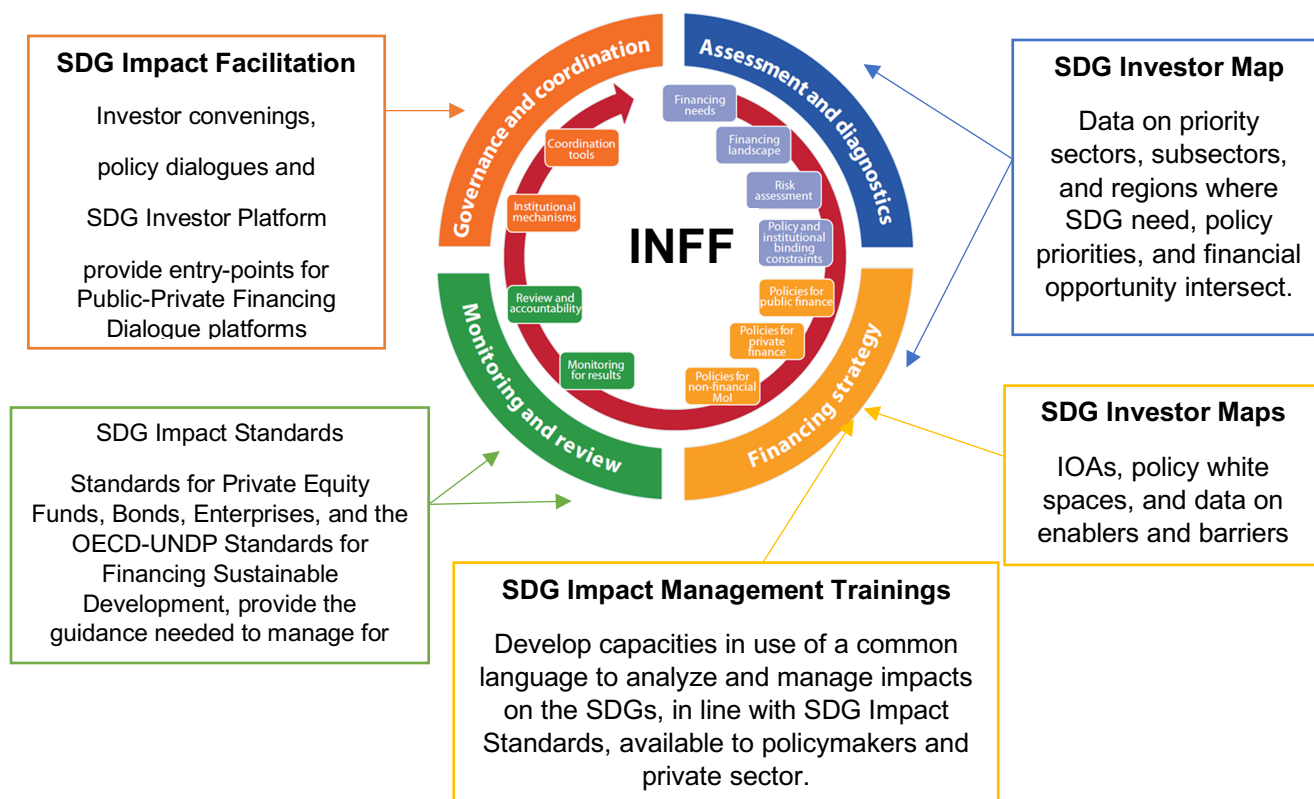
There is a strong interconnection between the INFF and SDG Investor Maps in informing the private finance policies component of the INFF and financing strategy. SDG Investor Maps provide valuable information to feed into the INFF process and Financing Dialogues.

A key aim of the INFF processes is to help government build a more holistic public and private approach to financing sustainable development priorities, and supporting the development of tangible steps forward.<sup>6</sup> An Investor Map can make an important contribution in this shift by identifying concrete investment opportunity areas and providing market intelligence data to enable private investors to direct capital towards investments that advance the SDG-outcomes the government is prioritizing. It can also provide an insight on impactful private-public or blended finance investment opportunities relevant to actors within government such as a Ministry of Commerce or Investment promotion and facilitation agency.

The INFF and the SDG Investor Map can add value to each other in the following ways:

- An SDG Investor Map can make use of this scoping exercise within its research in order to ensure alignment of identified investment opportunity areas with national development plans.
- Within the INFF's financing strategy, the SDG Investor Maps can inform the resource mobilization efforts for a country's national development plan, and the tool's market intelligence provides evidence, data and concrete recommendation on viable business models enhancing the DFA and INFF processes.
- Through SDG Impact's investor outreach and facilitation support, the SDG Investor Maps provide entry points for public-private financing dialogue platforms that translate SDG oriented national development plan priorities into investor language, which contributes to the INFF's financing strategy.

<sup>6</sup> SDG Investor Maps and DFAs can happen in parallel or in any chosen sequence, depending on the country context and identified needs.



### 1.3.4 The INFF Process in Tanzania and the Completed DFA

Achieving Tanzania’s development goals and the SDGs rooted in the 2030 Agenda requires mobilizing a diverse range of public and private financial resources, and through this process Tanzania hopes to achieve both. On the private financing side, the SDG Investor Maps play a key role in supporting the INFFs’ objective of financing development priorities and benefit from the assessment of a country’s financing landscape undertaken as part of an INFF. The first step is using the information acquired through the Development Finance Assessment (DFA), which is the first exercise undertaken in the inception phase of an INFF. It establishes a holistic picture across public and private finance and the policy and institutional framework, including identification of required policy reforms for more integrated financing.

As a first step towards the development of the integrated financing strategy, Tanzania completed the Development Finance Assessment (DFA) in 2021. This DFA was planned to coincide with FYDP III and provides recommendations to mobilize private, public, domestic, and international financing resources, as well as recommendations for setting up monitoring and governance tools to implement the INFF.

By analyzing financing policies and partnerships some practical observations have emerged:

- A need to review the possibility for issuing several different types of social, and SDG impact bonds. And to start with soon will be the issuing of Municipal Bonds.
- The Islamic Based Financial Instruments (SUKUKs) was one of these, and we included dialogues with government counterparts in Indonesia to ensure high learning and south-south cooperation.
- To further support this exploration, we have observed that a maiden SUKUK bond was released in the Tanzania financial market in August 2021 c and immediately oversubscribed by almost 36

percent.<sup>7</sup> As well UNDP has undertaken a successful collaboration to issue Green Sukuks with Indonesia.

- The Government intends to finalize the sovereign credit rating process to facilitate access to international financial markets through issuance of sovereign bonds or Eurobonds. A sovereign credit rating will help increase the availability of information (and hence transparency) about the country's creditworthiness, reduce uncertainty over investment allocation decisions and help increase capital inflows from all types of investors (not just bondholders).

Based on the completed DFA, an Integrated National Financing Strategy (INFS) for FYDP III has been drafted and under finalization to be aligned with the INFF building blocks: (i) Assessment and Diagnostics, (ii) Financing Strategy, (iii) Monitoring and review; (iv) Governance and coordination. It will outline both traditional and innovative financing pathways in terms of domestic revenue, non-traditional domestic sources, external grants, external borrowing, climate change fund, domestic savings, bank financing, PPP, venture capital, corporate bonds, private equity, private sector investment, and FDI, as well as relevant monitoring and governance approaches. The key for all these financing pathways is to unlock resources to achieve the FYDP III. SDG Investor Map is part and parcel of financing the FYDP III and will contribute to diversifying and de-risking Tanzania's sources of financing.

#### **1.4 Process followed to complete the Tanzania SDG Investor Map**

At the beginning of the assignment, an agreement was made that the Prime Minister's Office (PMO) should be the lead institution in coordinating and championing the SDG Investor Map process in Tanzania. The local counterparts would be selected from the Prime Minister's Office – Investment; Ministry of Finance and the Tanzania Investment Centre (TIC). These would serve as major custodian of the SDG Investor Map for Tanzania. The main objective was to develop local ownership and buy-in.

The development of SDG Investor Map involved extensive stakeholder consultations. The objectives of the consultations were to confirm findings and provide additional data and information. Stakeholder interviews took place throughout the mapping process in order to validate and complement the findings. Key stakeholders interviewed in this process included: industry experts and representatives of key public and private institutions e.g., the Prime Minister's Office – Investment; Ministry of Finance, Tanzania Investment Centre (TIC), Tanzania Private Sector Foundation (TPSF), and National Business Council. Relevant UN agencies were also consulted including; European Business Council, UN-Women, and UNEP.

##### **1.4.1 Secondary literature review**

The assignment started with extensive literature review. The team did an extensive review of 21 documents comprising of Internationally recognized data sources from reputable organizations (UNDP, UN, World Bank, OECD, NGOs, think tanks etc.) and key national policy and development documents, including; National development plans (e.g. FYDP III); National budgets, Investment Promotion plans, National investment strategies, Industry sector reports, Voluntary National Reviews, and a number of investment mapping reports.

A total of 32 themes emerged consistently across multiple documents reviewed. These essentially represented the areas where SDG needs, and national policy priorities overlapped. Through a series analyses and interviews, the themes were subsequently narrowed down to the top five (5). The main criteria was the degree of overlap between SDG needs and policy priorities. The themes which emerged more frequently were selected for consideration. These were (i) Human Capital Development; (ii) Agriculture Transformation (iii) Service Provision; (iv) Infrastructure Development; (v), Natural Resources and Tourism and (vi) Gender and Women Empowerment. The diverse themes were subsequently grouped into sector clusters labelled in line with SASB taxonomy. This resulted into a short list of five sectors: **Agriculture, Renewables & Alternative Energy, Infrastructure, Education and Services.**

The identified sectors were further subjected to a deeper analysis to derive a shortlist of subsectors to be accorded high priority. The list was arrived at through a two-stage process. The first stage involved identification of critical development needs in each sector and the corresponding policy priorities. The second stage focused on gauging the degree of alignment between the development needs and policy priorities at that level. The themes which showed a higher degree of alignment were selected as priority subsectors to focus on (based on SASB taxonomy). The emerging subsectors in brackets are (i) Food& beverage (agricultural products, meat, poultry & dairy and processed foods) (ii) Infrastructure (real estate, infrastructure and waste management); (iii) Services (hospitality & recreation and consumer services); (iv) Education (formal education, education Infrastructure and education technology); (v) Renewable and alternative energy (solar technology and wind technology).

Using the SDGs needs drawn from the priority list selected in the earlier analysis at national level and the corresponding investment policies, sub-regions were ranked according to highest potential development need. Regions in which there were more overlaps were selected for each priority sector. The idea was to determine the degree to which SDG needs cascade at sub-regional level. This was preceded by a two-stage process i.e., building a simple database aggregating relevant datapoints at sub regional level and ranking sub-regions against selected indicators to allow easy comparison. In view of the large geographical size of Tanzania, the 25 regions were grouped into seven (7) zones i.e., Northern, Central, Eastern, Southern, Southern Highlands Western, and Lake Zone.

#### **1.4.4 IOA Longlisting Workshop**

The second phase of the SDG Investor Map focused on solutions and identified investable and scalable business models that could address the identified needs. After developing a draft long list of the business models, a “virtue” workshop was held on November 22, 2021 to brainstorm about potential investable solutions responding to themes, informed by initial proposals provided by consultant, and considering both business and impact dimensions of possible solutions. The workshop participants were broken up into sector working groups or in the plenary

A key condition for selecting Potential IOAs is that they must meet pre-defined business criteria (marketable, specific, at-scale, proven; and impact criteria (act to avoid harm, benefit stakeholders, contribute to solutions). The workshop was followed with private sector consultations to test the IOAs and refine the longlist to a definite shortlist of 10-15 final IOAs. This was followed by collection of supporting information for population of data in the standard data set.

#### **1.4.5 Fact finding outreach**

Besides the internal workshops, the Project Team also conducted an extensive local fact-finding interview with impact-focused investors, private companies and industry experts. The objective of the interviews was to refine the preliminary list of IOAs either by; developing a new shortlist; discarding unviable IOAs; or adding emerging IOAS. The interviews were also used to fill data gaps in the already identified IOAS.

## 2 Priorities to Address Development Needs

A review of Tanzania's development needs and policy priorities identified a number of themes which led to the prioritization of five (5) sectors with highest potential to propel the country towards attaining the prioritized SDGs. The priority sectors are: Agriculture, Renewables & Alternative Energy; Infrastructure; Services and Education.

Attainment of the development needs requires supportive policies at national level. Several policies were identified for each priority sector and comparisons made to assess the degree to which they correspond to development needs. In addition, a number of themes have come out in the analysis which show a highest degree of overlap between sectoral development needs and policy priorities. Within these themes, there are opportunities as well as challenges which need to be considered as a basis for identifying viable Investment Opportunity Areas (IOAs).

As part of the analysis, an effort was made to identify policy “white spaces” which essentially refers to an investment area that serves a strong development need in a specific national context but has not recorded a strong policy momentum by way of government commitments or has not seen significant private sector momentum due to absence of viable business models, or both. This analysis was undertaken so as to provide the basis to engage on policy changes needed to drive private capital into these areas.

Principally, there are two types of White Spaces:

- **Policy White Space:** Opportunity areas that serve a development need but experiences absence of private sector momentum due to policy and regulatory gaps.
- **Business Model White Space:** Opportunity areas that serve a development need but experiences absence of private sector momentum in spite of a favorable policy and regulatory momentum.

Respective sector level findings in respect to the above parameters are presented in turn below.

### 2.1 Agriculture (food & beverage)

#### 2.1.1 Sectoral development needs

Tanzania's economy has continued to be dominated by Agriculture which employs about 66.3 percent of Tanzania's workforce. The sector represents almost 30 percent of the country's GDP with three quarter of the country's workforce involved in this sector. Tanzania benefits from a diverse production base that includes livestock, staple food crops and a variety of cash crops.

Tanzania's agricultural sector is characterized by limited value addition. For example, the share of fruits and vegetables in manufacturing is very small at only 4-12%.

While Tanzania is largely food secure and at times a commodity exporter, there are occasional pockets of food shortages at the regional, district and household levels. This is mainly due to dependence on rain-fed agriculture and limited use of modern farming techniques.

Tanzania imports significant amounts of food with an estimated value of USD 1.13 billion per year. Edible oil imports alone drain a lot of scarce foreign exchange for the country. The average import bill for animal or vegetable fats and oils and their by-products is USD 126 million per year (14, 18, 21, 23). In addition, malnutrition remains high in Tanzania despite the steady economic growth over the past decade. 16.8 million Tanzanians are chronically undernourished. Over 34% of children under the age of five are stunted and nearly 45% of women of reproductive age are anemic.

Overall, agriculture productivity is low with modest progress over the past two decades. The sector is dominated by smallholder farmers dependent on rainfall for irrigation. Farmers and other sector stakeholders face considerable challenges in modernizing the industry to increase yields, exports and value-added processing. Slowing export revenues; land acquisition hurdles; and smallholder farmers struggling to access economically viable technology, adequate storage facilities, markets and credit have affected the sector.

Tanzania needs to promote the growth of medium scale farmers due to its catalytic role of transforming the agriculture sector. The recent rise of medium-scale farms has helped commercialize smallholder farmers. It offers an excellent opportunity to catalyze private investment and raise the incomes of the poor. Achieving the government's development goals for the next five years will require strategic focus in (i) accelerating the growth of labor productivity in agriculture and agribusiness value chains; (ii) attracting private investment in adding value to agricultural products, including the processing and export of food and cash crops; and (iii) ensuring equitable employment access for low-skilled workers, youth, and women. Increasing the productivity of agriculture through investments in rural infrastructure, production systems, and distribution networks, while bolstering the sector's resilience to natural shocks, could facilitate the growth of a labor-intensive manufacturing sector that utilizes excess rural labor and adds value to agricultural commodities.

### 2.1.2 Policy priorities

Policy	Main emphasis
National Five-year Development Plan (FYDP III)	Value addition in agriculture in order to increase the overall sector competitiveness
	Use of science technology and innovation / research and development (STI/R&D) to improve agriculture productivity and quality
	Explore opportunities afforded by the adoption of Climate Smart Agriculture approaches (CSA)
Agricultural Sector Development Strategy Phase II (ASDS II), 2019	Key investment priorities including (i) the role of science and technology (research, extension, fertilizer use by small-scale commercial farmers); (ii) irrigation, finance, mechanization, agro-processing and access to markets.
Tanzania Agriculture and Food Security Investment Plan, TAFSIP) 2011	Agriculture transformation through: (i) irrigation development, sustainable water resources and land use management; (ii) productivity enhancement and rural commercialization; (iii) rural infrastructure, market access and trade; (v) food security and nutrition
	Increased productivity and profitability of priority commodities such as sunflower, livestock, fisheries and horticulture.
	Gender equity - ensuring that women and other vulnerable groups have equitable access to resources.
Tanzania Horticultural Development Strategy 2012–2021. (Published 2010)	Exploit the vast potential of horticulture industry in Tanzania so as to make it grow tenfold and become a billion-dollar industry.
National irrigation Policy 2009	(i) Promote demand-driven commercial irrigation schemes (ii) promotion of appropriate technologies and innovations in irrigated agriculture and (vii) technical support services, develop and disseminate new practices, innovations and technologies.

### 2.1.3 Overlapping themes, opportunities and challenges

Themes	Opportunities	Challenges
Increased productivity in agricultural products	Good soil and climatic conditions providing a source of livelihood for the majority (70%) of the population.	Poor utilization of productivity enhancing practices. small, fragmented production, smallholder dominated agriculture sector with low yield per acre as well as low productivity.

Improve exports—through improved market access and trade facilitation	Horticulture industry in Tanzania is the fastest growing subsector within the agricultural sector with annual average growth of about 11 per cent per annum	The industry lacks coordinated efforts in expanding the market share at the domestic, regional and international levels
Promote value addition for agriculture products	A number of business opportunities for transforming the sector which can create positive spillover effects. These include: promoting commercialization activities in the key value chains; promote medium and large-scale processing and value addition activities for crop and animal products	The sector suffers from limited processing technologies for value addition. The sector has not attracted significant private sector investments in processing activities

## 2.1.4 White spaces in the agriculture (food & beverage) sector

### 2.1.4.1 Efficient storage infrastructure to manage post-harvest losses

Currently, the agriculture sector in Tanzania is challenged by high incidences of post-harvest losses (PHLs), a situation which makes it difficult for the country to optimally reap the opportunities in the sector. Depending on a situation and the crop in question, the PHLs may reach 35-60 percent. One of the major causes of PHLs is lack of inadequate storage (warehousing and cold-storage) facilities. This leads to heavy losses for Tanzanian farmers due to wastage of perishable farm products. To meet Tanzania's policy priority to deduce PHLs by 50% by year 2025, it is imperative to capture a greater value of agri-produce through storage and processing, among other key factors. The demand in the food segment, particularly fruits and vegetables is expected to grow as a result of expansion of the middle class, increased urbanization and rising per capital incomes.

Cold chain storage facilities could be set-up using alternate energy technologies like solar-powered systems and players could explore chemical treatments to extend the shelf-life of produce and set up pack houses and reefer transport systems. There is a need to not only optimize the usage of existing cold-storage facilities by allowing storage of multiple crops but also deploy cold storage at the farm gate level, which can work in off-grid conditions, to support farmers in growing fruits and vegetables.

Since farmers prefer to immediately sell off their produce to gain liquidity, instead of storing the same, demand for storage infrastructure in Tanzania is low and businesses in this space struggle with achieving scale. Moreover, cold-storage is a capital-intensive segment which requires funds for implementing innovative hardware. As a result, the majority of warehousing players focus on large markets and only expand into rural markets after achieving financial stability. However, as per experts, rental cold storage models can be marketable, if the demand-supply mismatch is addressed. Many emerging players also bundle post-harvest finance at the farm gate level, thereby facilitating the farmers to utilize warehouse services economically.

The Government of Tanzania has taken several measures to uplift this area including setting up over 3,864 warehouses with estimated capacity of 22,000 metric tons largely catering for the grains and cereal crops. Not horticulture sector. These were developed in collaboration with several donor funded projects. However, these storages are very few compared to the demand of the warehouses in the country and partly explain the relatively high levels of PHLs. It should be noted that although some players have invested in this space, business models are still in an experimental stage. Given its strong potential to meet Tanzania's development need and growing policy momentum, we expect private investment in this space to pick up. Thus, "warehousing" is recognized as a white space.

### 2.1.4.2 Digital agri-transaction platforms

The agriculture sector in Tanzania lacks coordinated efforts to expand the market share at the domestic, regional, and international levels. This is due to a number of factors, including: low level of service

provision in the sector; large number of intermediaries along the chain; and limited access to the information and data necessary for making informed decisions. Several studies have documented that market information within the sector is not well integrated with other information systems – public and private. For this reason, information is not reaching the masses and at times the information is also not very useful. Furthermore, the capacity of smallholders is limiting in terms of access and use.

Creation of agribusiness platforms (agri--platforms) in selected horticultural zones is in line with the objective of using “innovation” as a vehicle to fast-track the transformation of the horticulture sector in Tanzania.<sup>8</sup> Small scale horticulture producers can be “platformised” through provision of breadth of services that substitute for or complement the traditional functions and processes in a horticultural value chain.<sup>9</sup> Horti-platform-related apps offer multiple value creation and capture opportunities as compared with traditional value chains. A number of models have been developed which could be replicated in the context of the Tanzania horticulture. These include: Output exchange (information services); Trading and sharing (information services, (production and harvest services) and guarantee purchase and logistics (information services).

In Tanzania, this business model has been successfully tested through small scale initiatives. The model, is driving e-commerce and the servicification of agriculture in developing regions. Côte d’Ivoire, Ghana, Kenya, Nigeria, Senegal, South Africa, Uganda and Zimbabwe have been described as hotspots for digital-tech solutions. Of these, Agplatforms, or farming apps, are some of the most common forms through which farmers have been ‘platformised’ in agricultural value chains. Given its strong potential to meet Tanzania’s development need and growing policy momentum, we expect private investment in this space to pick up. Thus, “digital agri-transaction platforms” is recognized as a white space.

### 2.1.4.3 Physical functions in the marketing systems

Physical functions of the value chain are essential due to their direct impact on product handling. Improvement of these not only ensures good quality products but also addresses post-harvest losses as well as ensuring timely arrival of products to markets. In large measure agriculture sector in Tanzania is challenged by absence of supporting physical functions in the marketing systems. Establishing service-oriented collection centers / satellite collection centers and pack houses is one way of providing these facilitating services. It will build a supply sub-sector that guarantees consistent and continuous supply of fresh horticultural products. The collection centres are essentially part of “upscaling” and “replication” interventions. The main services provided by the centers will include: information dissemination<sup>10</sup> cooling, grading, and sorting. Capital services like pick-up and delivery can also be provided. The latter would enable farmers to meet customers quality requirements and allow appropriate planning for planting. The grading services will create and enforce strict quality standards on all produce agreed to with the buyers. Finance and admin support services will also be offered.

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<sup>8</sup> Agricultural digital platforms (such as farming apps) are driving e-commerce and the servicification of agriculture in developing regions. The growth of the platform economy, within agriculture, is increasingly becoming an important pathway to development. In the context of Sub-Saharan Africa, this is critical as, about 65% of the population relies on farming and about 20% on the non-agricultural informal sector; only around 15% are wage earners working in services and less than 3% are employed in industry. Agricultural digital platforms (such as farming apps). A research paper on ‘AgriTech Disruptors in East Africa’ shows that, of a sample of 70 AgriTech innovative firms (e.g., Ag biotech, Precision Ag and robotics, innovative food and data-connected agriculture) in 2018 in the East African Community (EAC), between 66% and 86% of firms specialized in data-connected agriculture – that is, farming apps or providing enabling services for app development.

<sup>9</sup> A traditional value chain is defined as an arm’s-length structure wherein there are physical interactions with middlemen, brokers, agents and other actors. Differences exist between ‘traditional value chains’ and ‘platformised value chains. For instance, in a platformised/digital chain, there is a bundling of information (codification), which potentially reduces the effort expected to search for information compared with a traditional chain. Information, can be used to customize the product to suit farmer-specific needs. While data are collected in a traditional value chain, especially for traceability, much of the supporting data, such as on financial situation, are not collected.

<sup>10</sup> Information on: price, quantities needed, quality, transport availability. These can be provided through mobile phones;

The centers can also provide a series of “embedded” services to value chain operators. The expanded services could include: marketing of produce; training for farmers on quality and management; information collection and dissemination; finance/credit lines and collateral provision; common sourcing of supplies; bulk buying of inputs; seeds and packaging and engaging technical (national/regional/international) consultants in the field of growing and post-harvest handling. The longer-term functions may include: Increase overall volume and integrate independent farmers, empower farmer community bargaining skills, maximize efficiency by working together and sourcing commonly, share market and buyer demand information, encourage first stage food processing etc. The proposed centers will be run on commercial basis to ensure sustainability. Ideally, the centers should be managed by farmer associations and / or a private sector operator.

Although some players have invested in this space, business models are still in an experimental stage. One such experiments was conducted by the Tanzania Horticulture Association (TAHA) at Njia Panda and Lyamungo in Moshi rural – and Tengeru and Midawe in Arumeru District in Arusha. Over 1,000 farmers have benefited from using these structures. Given its strong potential to meet Tanzania's development need and growing policy momentum, we expect private investment in this space to pick up. Thus, “improvement of physical functions in the marketing systems” is recognized as a white space.

## **2.2 Renewable and Alternative energy**

### **2.2.1 Sectoral development needs**

One of the critical challenges for Tanzania is the development of low-cost energy to make the country a destination for producing efficient and competitive goods and services as well as a source for competitive energy supplies within the region. Unreliable energy supply is a critical problem for Tanzania. Overall, Tanzania has low access to reliable electricity. Access to modern energy services is vital to agricultural productivity, income generation and education.

Tanzania faces a risk of disruption to generation and associated electricity price shocks due to the increasing unpredictability of hydropower. Changing rainfall patterns and recent droughts have dramatically reduced large hydropower output. At the moment, Tanzania is largely dependent on imported fossil fuels for its electricity. This represents a heavy burden on the country's socio-economic development and energy plans. This energy supply and end use structure reflects Tanzania's low level of development and contributes to the intensification and perpetuation of poverty.

There are a number of power projects currently underway which will have positive impact to the Tanzania power sector once completed. For example, the Nyerere Dam currently under construction will provide the country with excess power production capacity with potential for export. Other lined-up projects include: the Rusumo hydropower project, Ruhudji project, Kakono, Rumakali, Malagarasi Kikonge, Kinyerezi I Extension, and Mtwara.

Tanzania should begin to establish and expand its own national energy market. For example, the country is endowed with natural gas. Its exploitation would overdependence on imported fossil fuels. Opportunities to increase gas exports to Europe in the aftermath of Russia's invasion of Ukraine should not be overlooked. This is especially the case now that gas has been reclassified as sustainable. Deployment of renewable energy technologies has the potential to contribute to job creation, income generation and the improved livelihoods of marginalized social groups, particularly women and children in rural areas. Women, who shoulder a disproportionate responsibility for household fuel and water collection, food preparation and agriculture, are especially affected by an unreliable energy supply. In order for Tanzania to achieve SDG 7 there should be an increased commitment to provide affordable, reliable, sustainable, and modern energy for all Tanzanians by 2030. To achieve this goal, investments are required in the generation, transmission, and distribution of energy infrastructure.

## 2.2.2 Policy priorities

Policy	Main emphasis
National Five-year Development Plan (FYDP III)	Development of low-cost energy to make Tanzania a destination for producing efficient and competitive goods and services as well as a source for competitive energy supplies within the region.
Tanzania's Power System Master Plan 2020	Promote energy production through renewable resources available in Tanzania including solar, wind, geothermal, biomass and tidal waves.
Tanzania Investment Policy (TIC)	Strengthen the availability and reliability of electrical power by increasing generation capacity, transmission, and distribution networks; (ii) promote and develop renewable energy technologies and projects (Biogas, Geothermal, LPG, Solar and Wind Energies) particularly for rural households;
The National Rural Electrification Program, 2013	(i) increase access to electricity in rural areas; and (ii) scale-up the supply of renewable energy in rural areas. Key areas of focus are: grid extension; off-grid electrification; renewable technologies, including solar photovoltaic (PV), wind, biofuels, wind, and geothermal
National Energy Policy, 2015	(i) enhance power reliability and coverage of transmission and distribution networks; (ii) enhance utilization of renewable energy resources so as to increase its contribution in electricity generation mix; (iii) promote renewable energy sources and sustainable use of biomass for power generation; (iv) promote energy efficiency and conservation in all sectors of the economy

## 2.2.3 Overlapping themes, opportunities and challenges

Themes	Opportunities	Challenges
Access to efficient, low cost, sustainable modern and cleaner energy services	<p>-Tanzania is endowed with sufficient renewable energy resources to secure supply of 100 per cent renewable energy. The country is well-endowed with renewable energy resources, particularly solar and wind energy, and has the potential to meet a substantial proportion of its domestic energy demand through the utilization of this technology.</p> <p>-The growing economy requires a reliable power supply for small and medium businesses (SME's), industry and the transport sector. This is even more critical if we consider: (i) population growth prospects – expected to reach 87.2 million by 2030; (ii) increase in energy demand – growing at the rate of 9 to 10 per cent each year; and (iii) newcomers to the employment market – with approximately 800,000 youth entering the labour force every year, nurturing energy infrastructure to allow for productive jobs for them is critically important for the socio-economic development of the country.</p> <p>With increasing urbanization and growing middle class, households will increasingly use modern and energy-efficient applications according to the highest efficiency standards in order to slow down the power demand growth, and to allow the parallel expansion of energy infrastructure and the construction of renewable power plants.</p>	<p>-Poor infrastructure networks and high cost of energy service that allows more inflow of investments into the country.</p> <p>-The dominance of traditional biomass in energy share/pattern consumption among Tanzanians is linked to poverty and the lack of access to other fuels. Therefore, poverty and poor access to modern energy are linked and cannot be separated hence must be tackled together.</p>
Access to renewable energy, solar, wind,	<b>Solar energy:</b> The mean solar energy density is about 4.5kW per square metre per day, which indicates its potential use as an energy source.	<p>-Limited technical know-how.</p> <p>-High initial and investment costs for</p>

	<p>Some solar developers are seeking to set up large solar PV projects. Tanzania is in one of the major global solar belts, with 2800-3500 hours of sunshine per year and a global radiation of 4-7 kWh/m<sup>2</sup> per day.</p> <p><b>Wind Energy:</b> Potential areas for wind areas have been mapped by TANESCO. There are several areas in the country, predominantly along the coast, with attractive wind speeds.</p>	<p>the technologies.</p> <ul style="list-style-type: none"> <li>-Limited awareness and exposure to the existence and potential of the technology of Tanzanians.</li> <li>-Lack of financial facilities for energy investments.</li> <li>-Despite the potential, solar has not been utilized fully as energy source. It has predominantly been used only for drying process</li> </ul>
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## 2.2.4 White spaces in the renewable and alternative energy

### 2.2.4.1 Affordable funding opportunities and risk mitigating measures

Off-grid solar is still a growing sector in Tanzania, and business and financing models are still refining. The solar home system (SHS) segment shows great promise as a sustainable, commercially viable opportunity, but access to financing is a big challenge. Tools such as concessional financing, repayments grace periods, and longer repayment periods may help cater to renewable energy-financing needs. There is also a challenge of lack of in-house capacity for Pico/SHS companies to develop sound investment proposals which would necessitate a technical assistance in drafting business plans and loan applications.

There are a number financing institutions that have renewable energy credit lines. These include the Tanzania Investment Bank, a financing partner to the (Rural Energy Agency [REA]) and the Bank of Africa, a renewable energy facility of the French Development Agency (Agence Française de Développement [AFD]). Other banks have a direct relationship with off-grid companies (e.g., Mobisol's partnership with the Cooperative and Rural Bank [CRDB]). However, there are financial barriers related to "real" and "perceived" risks of investing in Pico/SHS companies. This would necessitate support to financing institutions and off-grid companies to develop sound risk mitigation mechanisms.<sup>11</sup>

It should be noted that although some players have invested in this space, business models are still in an experimental stage. Given its strong potential to meet Tanzania's development need and growing policy momentum, we expect private investment in this space to pick up. Thus, "providing affordable financing solutions and risk mitigation mechanisms" are recognized as a white space.

### 2.2.4.2 Specialized technical courses in renewable energy

There are a range of institutions offering technical courses in renewable energy, including solar trainings, through established curricula and short courses. However, discussion with industry experts have demonstrated that Development of skills to support the off-grid sector still remains a crucial challenge. Overall, the sector suffers insufficient skills in specialized areas such as: installation, operation, maintenance, and monitoring of renewable energy technologies. Given its strong potential to meet Tanzania's development need and growing policy momentum, we expect private investment in this space to pick up. Thus, "specialized technical courses in renewable energy" is recognized as a white space.

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<sup>11</sup> Risk instruments, such as guarantees and insurance, can help mitigate the real and perceived risks of investing in off-grid companies.

## 2.3 Infrastructure

### 2.3.1 Sectoral development needs

The growth rate of urban areas in Tanzania has often been higher than the capacity of authorities to cope with the provision of basic services including delivery of planned, surveyed, and serviced land for housing development. The urban population has already reached 21 million based on the 2020 data. With the urban population growing at 5% per annum, the number of people residing in Tanzania's urban areas is expected to continue grow significantly in the coming decades. This calls for targeted policy measures for enhancing the acquisition of low-cost housing and housing facilities. This will in turn attract more local property developers.

Tanzania like other developing countries, faces a serious concern and challenges on solid waste management, which is more pronounced in the commercial and marketplaces where most people visit to sell or buy goods without necessary infrastructures and quality social services. Urban solid waste management is at crisis levels in Dar es Salaam and many towns and cities in Tanzania, particularly in low-income settlements. A large amount of solid waste that is being generated by the Municipality, such as markets, is left generally unmanaged. The waste collection and disposal does not contend with the amount of waste generated per day as a result garbage are scattered. Market areas produce not only a large quantity of solid waste but also generate different types of waste. In order to avoid the detrimental effects to the environment solid waste needs to be managed efficiently sites. This includes among others, recycling technologies.

There is urgent need for investments in infrastructure for supporting development in a variety of sectors. Improvement of the port infrastructure could for example promote smooth flow of perishable horticulture products to the final consumption markets. Investment in solid The growth rate of urban areas in Tanzania has often been higher than the capacity of authorities to cope with the provision of basic services including delivery of planned, surveyed, and serviced land for housing development. The urban population has already reached 21 million based on the 2020 data. With the urban population growing at 5% per annum, the number of people residing in Tanzania's urban areas is expected to continue grow significantly in the coming decades. This calls for targeted policy measures for enhancing the acquisition of low-cost housing and housing facilities. This will in turn attract more local property developers.

infrastructure will address health and environmental challenges in major cities and towns. The increasing population and urbanization rate will also require quality low-cost residential properties.

### 2.3.2 Policy priorities

Policy	Main emphasis
Intended Nationally Determined Contributions (NDCs)	(i) Promote sustainable land management systems and climate sensitive human settlement developments. (ii) facilitate provision of, and access to adequate, affordable and climate sensitive shelter to all income groups and (iii) construct and rehabilitate drainage systems in respond to frequent and high intensity floods
Ministry of Works and Transport Strategic Plan, 2021/22 – 2025/26	(i) develop a quality and reliable infrastructure that promotes socio-economic development of Tanzania with particular emphasis in overseeing the provision of quality, reliable and safe construction works of building roads, bridges, ferries, airports, mechanical, electrical and electronics in collaboration with stakeholders
National Construction Policy, 2003	Work with private sector in supporting the development of sustainable human settlements
	Public sector involvement in the enhancement of housing, infrastructure and other constructed facilities and mobilize financial resources as well as capital investment
	Promote application of practices, technologies and products which are not harmful to both the environment and human health
	Revive the establishment of plant hire facilities, hire purchase and other forms of credit arrangements.
	Promote the optimum use of low cost and local building materials, innovative technologies and practices

### 2.3.3 Overlapping themes, opportunities and challenges

Themes	Opportunities	Challenges
Solid waste collection and transportation systems / Develop viable alternatives to handle domestic and industrial waste	The increasing urbanization (estimated at 35.2%) and growth in urban population (estimated at 5%) and growing middle class, households will increasingly require solid waste collection services	Solid waste management in Tanzania's cities and towns is a serious environmental issue. Most sources of solid waste are domestic, industries, commercial activities, streets and markets. The management of waste products in cities is very poor due to lack of proper places where to keep waste products
Develop Quality residential and commercial properties in the urban centers	Urban population growth (annual %) in Tanzania is estimated at 5%. The rapid growth in the population will lead to increase in demand for quality accommodation.	-Most people living in urban areas of Tanzania, particularly Dar es salaam have limited access to housing, thus end up living in unplanned, marginal and hazardous areas. The current housing deficit in Tanzania is estimated at about 3 million units and growing at a rate of 200,000 units per annum.  -Rapid urbanization rate (estimated at 35.2%) and fast-growing population (2.93% pa) present a challenge to the Tanzania's housing sector. The systems for providing sustainable human settlements including affordable housing needs to be strengthened.

### 2.3.4 White spaces in the infrastructure sector

#### 2.3.4.1 Use of low cost, local building materials, innovative technologies and practices in urban areas

It has been widely documented that Tanzania's housing demand far outstrips supply. The demand has been increasing by about 200,000 units annually, with the current housing deficit estimated at about 3 million units. Over the next five years, the number of households in rural areas will increase by 255 000 a year and urban households by 1300 000 per year. This rapid urbanization, coupled with a reducing average household size, will require consistently larger numbers of smaller, more affordable housing units to satisfy urban housing demand from rural-urban migrants and newly formed families in urban areas.<sup>12</sup>

According to research conducted recently by the In Centre for Affordable Housing Financing in Africa (CAHF), the cost of building a basic 55m<sup>2</sup> mortgageable house in Dodoma (the new capital for Tanzania) to the benchmarked cost in the major cities of five other African countries<sup>13</sup> shows that Dodoma has the second-highest cost after Nairobi, Kenya. The cost in Dodoma is US\$60 689, compared to South Africa (the lowest at US\$40 199) and Nairobi (the highest at US\$65 300). Developing this standard house in Dodoma is therefore 51 percent more expensive than in Pretoria, while in Nairobi (the most expensive of the five cities) it is 7.5 percent more expensive than in Dodoma.

In recent years, the costs of raw materials for construction have increased drastically, with some reported to have gone up by 400 percent. In March 2022 alone, the cost of some imported raw materials for

<sup>12</sup> Tanzania has a population of 59.7 million people in 2020, and its population is expected to exceed 60 million during 2020. With a growth rate of over 3 percent a year, Tanzania has the 14th fastest rate of population growth in the world. By 2030, the number of people in Tanzania is projected to increase to over 79 million and by 2050 it could exceed 129 million people. Tanzania had 12.3 million households in 2018 of which 8.2 million (66 percent) are in rural areas and 4.2 million (34 percent) are in urban areas.

<sup>13</sup> Pretoria, South Africa; Lagos, Nigeria; Kampala, Uganda; Dodoma, Tanzania and Nairobi, Kenya

reinforced bars climbed up to \$750 per metric ton (about Sh1.7 million) compared to \$420 (about Sh966,000) in the previous two months. This has put the real estate sub-sector under tremendous pressure.<sup>14</sup>

The critical mass of low-income communities cannot afford the high cost of building materials. This largely explains why over 40% of Tanzania's population in urban areas live in informal settlements, which are often associated with poor basic amenities. More than 1.2 million houses in Tanzania, particularly in the urban centres, are built informally, often in unplanned settlements. This translates into a critical need for promoting the use of low-cost building materials to meet the need of the growing population, particularly in the urban areas.

The plight of low-income people in terms of lack of shelter has been a subject of concern in Tanzania for many years. The attempts to absorb and utilize advanced construction technologies to meet the demand for shelter for their low-income population have not been very successful. At the moment, most building regulations and codes make reference to foreign standards. This has had a negative impact on the promotion of locally produced and low-cost building materials. Using same standards for the construction of simple houses for low-income population is not relevant. There is every good reason to focus on improving and upgrading traditional technologies - backed by appropriate building codes, regulations and standards - so that people can build their houses using local resources and skills.

Given its strong potential to meet Tanzania's development need, we expect private investment in this space to pick up. Thus, "Use of low cost, local building materials, innovative technologies and practices in urban areas" is recognized as a white space.

## 2.4 Education

### 2.4.1 Sectoral development needs

To achieve the SDGs, prioritizing human development is critical for Tanzania. However, growth rates of access to quality education have been undermined by a faster rate of population growth. Challenges to establish an effective and stable education system still persist.

Tanzania needs to achieve higher gross enrolment rates by year 2030. The aim should be on reaching universal rates for all primary and secondary enrollment and graduation/completion levels of education by 2030 while keeping or reaching gender parities at all levels. Tanzania has introduced free primary and secondary education, but concerns of access and quality remain. There are skills gaps and mismatches between graduating students and employers. One of the major persisting challenges is the high number of children out of school due to long distances they have to travel. In some districts school children are expected to cover more than six kilometers per day. Introducing a school transportation programme (school buses) can partially address accessibility issues in those areas.

Tanzania's skills development system faces the challenge of training 800,000 young people who enter the labour market each year. The total capacity of the formal TVET system is about 400,000 to 500,000 trainees. Non-formal and informal training therefore represent the only option available to most young people, especially those living in rural areas, or school drop-outs

### 2.4.2 Policy priorities

Policy	Main emphasis
	-Improve the quality of learning at the pre-primary level. The pre-primary curriculum has been revised alongside development of teacher's guides and textbooks focusing on preparing the learner with prerequisite reading, writing and basic mathematic skills.

<sup>14</sup> The demand for construction materials is increasing forcing the government to allow importation of these products and in some cases to waive duties on the importation of capital goods.

Education Sector Development Plan (2016/17 – 2020/21	-Train teachers with specific skills for teaching at the early childhood level
	Increase enrolment of age-appropriate children and construction of classrooms and teacher allocation to keep pace with the rapid increase
	Provide twelve years of free and compulsory basic education to the entire population, leaving no one behind
	Progressively expand Technical and Vocational education and training so as to have the pool of skilled human resources needed to advance to becoming a semi-industrialized middle-income country by 2025.
National Five-year Development Plan (FYDP III)	Strengthen technical and vocational education and training (TVET) with a view to create a new crop of super-technicians
The National Employment Policy (NEP), 2008	Acquisition of demand driven skills and competencies for wage and self-employment through developing a demand driven Vocational and Technical Education and training system.
	Intensify on the job training to enhance employability and productivity of the national labor force

### 2.4.3 Overlapping themes, opportunities and challenges

Themes	Opportunities	Challenges
Increase primary and secondary school enrolment rate to reach universal rate	The Government has made primary and secondary education level universal. The priorities included equitable participation and completion of fee-free basic education for all, with particular attention to marginalized groups, children with disabilities and out-of-school children and completion of twelve years of education through universal access up to lower secondary education.	-Tanzania's Human Capital Index (HCI) remains well below the LMIC average. Access to education is highly unequal, and a lack of qualified teachers undermines learning outcomes
		Although the national average net primary enrollment rate is high, it varies across regions, and about 2 million children, mostly from rural areas, are not in school.
		Tanzania's net secondary enrollment is the lowest in the world, and its lower secondary school completion rate is the fourth lowest in the world. At 27 percent, net secondary enrollment is less than half the LMIC average of 74 percent and a full 10 percentage points below the LIC average
Promote TVET system, that is relevant to the market demand and flexible to accommodate changing dynamics	Technical and Vocational Education Training (TVET) provides alternative educational and training opportunities after primary, ordinary secondary (O-Level) and advanced secondary (A-Level) education levels, aimed at producing artisans, technicians skilled workers, and professionals to be engaged in fields such as construction, manufacturing agriculture, mining, transport, energy and information and communication technology (ICT).	-A shortage of skilled workers in the labour market -Skills mismatches, slows income growth and constrains employment opportunities

## **2.4.3 White spaces in the education sector**

### **2.4.3.1 Digital education**

The digitization of education has long been a much-discussed topic the world over, more so following the Covid 19 pandemic where most schools were closed down and children had no option, but to adopt digital learning. Tanzania has now opened all schools, colleges and universities, and we are hopefully going to stay in this post coronavirus (Covid-19) world. If we want technology to really revolutionize education the post Covid-19 world is a good time to make that happen. Technology can solve the challenges of rising pupil teacher ratio, a lack of infrastructure, slow communication to teachers, and a changing curriculum with limited training.

Mobile phones can be used to simplify the curriculum for parents and accountability: parents can assist when they know what their child is supposed to be learning. Bitesize texts sent to parents, summarizing the week's classes for the child could be a way of ensuring the parent knows what has been taught at school. However, access to technology is limited, with a negative correlation to the poorest groups. There is also a serious challenge of equity in ed-tech and technological revolution offers opportunity to ensure mass use, and mass value. In a post Covid-19 Tanzania need to: (i) place equity at the heart of ed-tech; (ii) better utilize mobile phones; (iii) create space for teachers to lead; and (iv) improve adult literacy.

There are a number of successful pilot schemes in digital education technology in Tanzania. Tigo Tanzania, a local telecom firm, has been taking an active role in the field since 2015. By August 2020, Tigo had provided over 64,000 students with free internet access across Tanzania. These efforts need to be replicated and upscaled for optimum impact, and the private sector has role to play in this regard.

## **2.5 Services**

### **2.5.1 Sectoral development needs**

The Tanzanian economy has progressively become more diversified with the service sector being dominant in terms of GDP contribution led particularly by tourism, construction, transport, (mobile), finance and ICT, fueled by a higher than continental average rate of urbanization. However, when compared with the regional benchmarks, the service sector seems to be still underrepresented in the national economy. Tanzania needs to promote investments in the services sector.

Tourism is the sector with the highest employment generation potential. However, Tanzania has mostly performed at a fraction of its potential. The sector is poorly managed, underinvested, under-resourced, and lacks a coordinated all-of-government approach and vision. Developing new areas and products that can expand the tourism value proposition (for investors, tourists, and citizens) are significant challenges that require concerted political will and collective vision, policy, strategies, reforms, and both public and private sector investments.

Tanzania needs to diversify its tourism sector in terms of product offering geography. Currently tourism activities are highly concentrated in two locations: the Northern circuit, (which includes Serengeti, Ngorongoro, and Mount Kilimanjaro; and the beaches of Zanzibar). The Southern Tourism Circuit is largely underexploited. Tanzania could diversify its tourism industry through the development of a range of new tourist activities. Tanzania needs to develop innovative solutions to build its tourism industry so that it is both competitive and sustainable. There is need to develop linkages with local communities for the purposes of; (i) preservation of the natural resource base (ii) optimizing tourism gains e.g., product diversification and (iii) promote back ward linkages with local business enterprises depends in key sectors such as agriculture, construction and light manufacturing. This in turn will help develop local supply chains.

There are adverse effects of COVID 19 pandemic which Tanzania needs to deal with. The crisis severely impacted Tanzania's tourism sector, as the disruption of global travel and tourism activity resulted in job losses and business closures. Tourism was one of the first sectors to be deeply impacted by the pandemic, as measures introduced to contain the virus led to a near-complete cessation of tourism activities worldwide. Between 2019 and 2020, Tanzania experienced a 72 percent drop in tourism

revenue, and the full consequences for workers and firms, especially small and medium enterprises, are still unknown.

## 2.5.2 Policy priorities

Policy	Main emphasis
National Five-year Development Plan (FYDP III)	Promote tourism as one of the sub-sectors that integrates more than one services – notably – transport, accommodation and food, information and communication.
Budget Speech 2021-2022	Promote priority projects in the service industry. These include: The Natural Resource Development and Promotion of Tourism on priority areas – REGROW
Tanzania Tourism Policy 2021 – Under review	Promote diversified tourism products e.g., conference tourism, historical and cultural heritage sites, Eco-Tourism, Beach Tourism and tourism supply chain)
Tourism Master Plan, 2002	Diversify tourism products. It is widely recognized that the Northern Safari Circuit is overcrowded and is fast reaching the limits of acceptable use based on the region's carrying capacity. The government's strategy is to promote the potential of beach and cultural tourism as well as eco-tourism in the Southern Circuit as a result of the saturation of the Northern Circuit.

## 2.5.3 Overlapping themes, opportunities and challenges

Themes	Opportunities	Challenges
Promote new (diversified) tourism products for development and sustainable growth	With 1.28 million tourist arrivals per year (prior to the pandemic), Tanzania is one of the most visited destinations in Sub Saharan Africa. Tanzania has a competitive advantage of being the first in Africa and 12th worldwide for the quality of its community- nature-based tourism resources, and 32nd in Africa and 112th in the world for its cultural resources.	The COVID-19 crisis has severely impacted Tanzania's tourism sector, as the disruption of global travel and tourism activity resulted in job losses and business closures. Tourism was one of the first sectors to be deeply impacted by the pandemic, as measures introduced to contain the virus led to a near-complete cessation of tourism activities worldwide. Between 2019 and 2020, Tanzania experienced a 72 percent drop in tourism revenue, and the full consequences for workers and firms, especially small and medium enterprises, are still unknown.
	Tanzania's nature-based tourism attracts more than a million visitors per year and contributes more than 13% of gross domestic product (GDP).  Tanzanian tourism exports are significantly higher than those of other EAC countries. Between 2014 and 2018 the number of non-African tourists rose by 31.1 percent, and in 2018 Tanzania became one of the 10 most-visited countries in SSA, attracting more than 1.5 million visitors for the first time. Tanzania tourism operators are concentrated in Dar es Salaam, Zanzibar, Arusha, and Moshi, and over half are in the accommodations sector	Despite its endowment of assets, overall, the tourism industry in southern Tanzania is relatively underdeveloped and attracts a low volume of visitors. Southern Tanzania, however, accounts for less than 10% of all visitors to Tanzania's national parks and less than 1.5% of park revenue. Occupancy rates in many southern lodges are below 50%. When compared to northern Tanzania and Zanzibar, southern Tanzania's products, including accommodation options and activities, are fewer in number, limited in variety and have poor market penetration.  Tanzania needs to diversify its tourism base to include the Southern Circuit. The transformation of the tourism sector could address longstanding issues around destination planning and management, product and market diversification, the inclusiveness of local value chains, and the weak business and investment climate.

## **2.5.4 White space in the services sector**

### **2.5.4.1 Package Tourism**

The COVID-19 pandemic has profoundly influenced tourism demand, as traveler preferences and behaviors have shifted toward the familiar, predictable, and trusted. Consumers have increasingly preferred package tourism. Package tours are a vital segment of the global tourism industry. According to the World Travel and Tourism Council, package tours generate US\$25 billion annually in the United States, US\$18 billion in Europe, US\$19 billion in Britain, and US\$21 billion in Asia. In 2019, package tours represented 50 percent of all leisure travel sales worldwide. Consumers often regard package tours as cheaper, safer, and more efficient than independent travel. For Tanzania, uncertainty around COVID-19 will likely strengthen the appeal of package tourism, as consumers will place greater value on information and security. Package tourism also offers governments a very efficient means of collecting fiscal revenue from the tourism sector.

Package Tourism is an opportunity area with potential for strong development impact of the tourism sector in Tanzania albeit with unproven commercial viability as a standalone business and have been highlighted as a white space.

### 3 IOA Close Ups

Within the above-discussed priority sectors, highlighting Tanzania’s key development needs and policy priorities, the SDG Investor Map presents Investment Opportunity Areas (IOAs) with investable, scalable business models that address these needs. They serve as guidance to the private sector on the potential to contribute to national development priorities and support the achievement of the SDGs.

The information captured in the present IOA close ups is a summary of the full data set available on the [SDG Investor Platform](#). Individual sources for the quoted information are available online.



#### IOA 1: Fruit and Vegetable Processing

Agriculture is the main stay of the Tanzanian economy, contributing about 24% of GDP. As a key driver for the economy, it can contribute towards major national priorities. Despite the potential, the sector suffers from a number of challenges including low productivity and limited value addition.

Investments in processed fruits and vegetables has significant development outcomes. The sector can improve food security and nutrition to the Tanzanian population and provide jobs for some of the 800,000 youth that enter the workforce each year.<sup>15</sup> Attracting investment in fruits and vegetable processing will contribute the Tanzania’s aspiration to become a semi-industrialized country by 2025.

<b>Business Model</b>	Provide and operate machinery and technology for the commercial processing of fruits and vegetables, such as mangoes, oranges, pineapples and avocados, into high value-added products, such as juices concentrates, organic pulps and purees, with raw material supply from smallholder farmers through a contract farming model
<b>User or Beneficiary</b>	The investment would directly benefit low income and poor Tanzanians through enhanced access to cheaper and more diverse food products. The sustainable processing of horticulture products reduces the negative impact of the food industry on the environment
<b>Economic Factors</b>	The market size for the processed F&Vs products is estimated as ranging between <b>USD 100 million and USD 1 billion</b> and is projected to register a <b>CAGR of 6.7%</b> during the forecast period, 2021-2026. The average <b>capital outlay (ticket size)</b> is estimated at <b>USD 500,000 - USD 1 million</b> <b>Medium Term:</b> The indicative timeframe of this model is between 5 to 10 years, based on the payback period for a canned green beans processing facility at Tengeru, Arusha which present a <b>Net Profit Margin of 18.3%</b> and <b>13.8%</b> respectively.
<b>Enabling Factors</b>	Attractive <b>fiscal and non-fiscal incentives offered to investors including:</b> Zero percent (0%) import duty on project capital goods, 100% capital expenditure to agricultural sector and ten percent (10%) - import duty for semi-processed/semi-finished goods.
<b>Risk Factors</b>	Supply chain constraints such as inability to guarantee a consistent and continuous domestic supply of raw material due to poor quality infrastructure (e.g., cold chain facilities). This leads to high post-harvest losses, almost (45%) which may need targeted interventions to manage.
<b>Impact Management</b>	<b>IMP Classification C:</b> Investments are likely to contribute to solutions as this model promotes agricultural value addition and enhanced nutrition status for Tanzanians
<b>Gender and Marginalization</b>	Increased employment opportunities for women and low-income groups across different segments of the processing continuum, such as cleaning, grading sorting and packaging. In

<sup>15</sup> . Currently the sector employs about 4 million people, which makes the industry a major employer within the agriculture sector.

<b>Impacts</b>	addition, they get an opportunity to learn and upgrade their skills in these areas, offering further growth potential
<b>Policy Opportunities</b>	The government needs to have “targeted” initiatives to establish dedicated Special Economic Zones along the corridor of the national “flagship” infrastructure development projects in particular, the New Standard Gauge Railway. This will ensure commercial scale production and reliable and rapid transport of the critical mass of perishable products to the exit points.
<b>Case Studies</b>	Already there are a number of actors in the F&Vs processing space. Darsh Industries Ltd (DIL), is the biggest tomato processor in Tanzania, with a 60% share of the market for purchased tomatoes in the Iringa area. In 2014 DIL began the implementation of a USD 5.1 million project to increase their tomato processing capacity with tomato paste concentrate and ketchup being the primary products.

## IOA 2: Edible Oil Processing

Tanzania has large local demand for edible oil. The demand stands at 500,000 tonnes, whereas the country can supply only 180,000 tonnes, forcing it to import 320,000 tons each year. This is almost 60% of total demand. The average import bill for animal or vegetable fats and oils and their by-products is around \$126 million per annum. With an annual output of around 350,000 tons of sunflower oilseeds, Tanzania is one of the top ten sunflower oilseed producers in the world.

The proposed processing activities can take advantage of such opportunities to foster import substitution and also address nutrition related challenges besetting the country. The government has also identified edible oil as a strategic subsector for reducing food imports and promoting domestically produced food commodities.

<b>Business Model</b>	The investor will provide and operate machinery and technology for the commercial processing of high value field crops, such as marula, sunflower, avocado and palm, into refined and double refined edible oil for local consumption and export through a public-private partnership model. The public sector will allocate suitable land for installation of processing facilities together with relevant infrastructure (e.g., roads, power and water utilities) and requisite incentive package structure to encourage local value addition.
<b>User or Beneficiary</b>	The investment would directly benefit low income and poor Tanzanians through increased access to cheaper edible oil source. Sustainable processing of edible oil will reduce the negative impact of the food industry on the environment.
<b>Economic Factors</b>	The market size for edible oil is estimated as ranging between <b>USD 100 million and USD 1 billion</b> , with <b>CAGR</b> of between <b>5% and 10%</b> . The average <b>capital outlay (ticket size)</b> is estimated at <b>&lt; USD 500,000</b> with <b>Internal Rate of Return (IRR) of &gt; 25%</b> .  <b>Short Term:</b> The indicative timeframe of this model is around three (3) years, based on the payback period for a Marula Oil Processing Industry Mvomero District in Mwanza region
<b>Enabling Factors</b>	Attractive <b>fiscal and non-fiscal incentives offered to investors including:</b> Zero percent (0%) import duty on project capital goods, 100% capital expenditure to agricultural sector and ten percent (10%) - import duty for semi-processed/semi-finished goods.
<b>Risk Factors</b>	The main barriers to expansion of local production are low yielding seed and poor agricultural methods, which limit production and drive-up costs.
<b>Impact Management</b>	<b>IMP Classification C:</b> Investments are likely to contribute to solutions as this model promotes agricultural value addition and enhanced nutrition status for Tanzanians
<b>Gender and Marginalization Impacts</b>	Increased employment opportunities for women and low-income groups across different segments of the processing continuum, such as cleaning, grading sorting and packaging.
<b>Policy Opportunities</b>	Need for targeted policy measure in (i) improve seed increase yield at least three times the current production volumes (ii) fast-track land acquisition for investors looking to set up plantations (ii) VAT zero-rate for refined edible oil to make it price-competitive in domestic and export markets and (iii) tax exports of oily seedcake to incentivize local aggregation and solvent extraction
<b>Case Studies</b>	East Coast Oils and Fats is a state-of-the-art facility for the manufacture of edible oils in Tanzania. The plant has a refining capacity of 600 tons per day (220,000) tons per annum) and has introduced new product lines including palm oil, sunflower oil, soya oil, margarine and soap.

### IOA 3: High Value Leather Product Manufacturing

Tanzania has the third largest livestock population on the African continent. Despite the huge capacity on raw material base, Tanzania is currently processing leather up to wet blue stage which is considered a raw product in international trade. The transformation to finished leather or crust is very minimal between 5-10 percent. Tanzania has potential to produce about 90 million square feet of leather with the entire raw material available. If two thirds of this amount was to be further processed at least 20 million pairs of shoes and over 2.5 million pieces of assorted leather goods could be locally generated.

Leather sector is labor-intensive. The proposed processing activities can provide strong job-creation benefits. The processing potential could particularly be harnessed through development of footwear clusters / industrial parks. The move from hides and skins to finished products, the value is multiplied by a factor of 12. This means that countries like Tanzania that export raw hides and skins forego adding or raising the value of their hides and skins 12 times. Furthermore, the sector has huge scope for innovation to cater for fast changing customer needs in the footwear and other leather products. The leather sector is therefore a basic “starter” sector for industrialization in Tanzania.

<b>Business Model</b>	Provide and operate machinery and technology for the manufacturing of high value leather and leather products, such as footwear, upholstery and accessories, in designated industrial parks where the Government provides infrastructure, such as effluent treatment systems and power, through a PPP model.
<b>User or Beneficiary</b>	The investment would directly benefit the critical mass of low to middle income earners through improved access to cheaper, durable and high-quality footwear and other leather products while profiting the environment through reduced pollution resulting from efficient effluent treatment processes
<b>Economic Factors</b>	<p>The Tanzania footwear industry has a production capacity of 300,000 pairs per annum, while the footwear demand is estimated at 46.8 million pairs per annum. The gap between production and demand is filled by imports, mostly from China, Kenya, the United Arab Emirates, South Africa, and India. Tanzania’s total value of imports for all types of leather and leather products is estimated at US\$ 13,330,000. This figure has grown at a CAGR of 8% between 2016-2020.</p> <p>The average market size for leather and leather products is estimated at <b>USD 50 million</b> growing at a <b>CAGR of between 5% and 10%</b>. The average <b>capital outlay (ticket size)</b> is estimated at <b>USD 1 million - USD 10 million</b> with the <b>Internal Rate of Return (IRR) of 5-10%</b>. The return on investment (ROI) in the livestock sector is very attractive. For all species and commodity value chains, the IRR is greater than 10%. Processing animal products (leather) to finished products the value is multiplied by a factor of 12</p> <p><b>Medium Term:</b> The indicative timeframe of this model is between 5 and 10 years based on recent large leather processing facility in Moshi.</p>
<b>Enabling Factors</b>	Attractive <b>fiscal and non-fiscal incentives offered to investors including:</b> Zero percent (0%) import duty on project capital goods, 100% capital expenditure to agricultural sector and ten percent (10%) - import duty for semi-processed/semi-finished goods.
<b>Risk Factors</b>	Two major risks are envisaged (i) Most of the value chain actors are unable to guarantee good quality leather due to lack updated technical skills and knowledge in handling animals, slaughtering and management of hides and skins thus leading to production of poor-quality hides and skins and (ii) the massive importation of cheap, low-quality second-hand shoes and other leather products into Tanzania. These could present unfair competition with the proposed facilities.
<b>Gender and Marginalization Impacts</b>	As a labor- and technology intensive industry, high value leather manufacturing builds the productive capacities of women and increases their representation and participation in science and technology
<b>Impact Management</b>	<b>IMP Classification C:</b> Investments are likely to contribute to solutions as this model promotes value addition for agriculture products
<b>Policy Opportunities</b>	Targeted measures to establish Industrial Parks dedicated to leather industry – to allow shared effluent treatment infrastructure and hence reduce potential large-scale pollution
<b>Case Studies</b>	Two Italian companies, Toscana Machine Calzature (TMC) and ItalProgett have invested US\$ 24.5 million for two leather factories in Moshi area. Benefiting from large quantity of raw hides and skin produced in the country, the plant will produce 1.2 million pairs of shoes per year. The

companies will provide both finances and technology for production of quality leather products for export.

## Renewable Resources and Alternative Energy

**7 AFFORDABLE AND CLEAN ENERGY**



**9 INDUSTRY, INNOVATION AND INFRASTRUCTURE**



### IOA 1: Solar-Powered Irrigation Pumps

Tanzania is among the 20 largest producers of fresh horticultural produce in the world. However, most of the production systems are rain-fed with limited technological use. The unpredictable weather has also significantly affected the rainfed farming systems. The limitations associated to the access and use of technology in the farming systems have had a compounding effect in reducing crop productivity.

The above situation necessitates the search for cheap and affordable power source to promote commercial agriculture. Tanzania gets plenty of sunshine in an average year, ranging between 2,800 and 3,500 hours. With the horizontal solar radiation being **between 4 and 7 kWh per m<sup>2</sup> (each day)**, Tanzania is naturally suited for using solar power to generate high amounts of electricity which could be tapped and used for irrigation purposes. Solar Water Pumps (SWPs) are reliable irrigation systems in remote areas, particularly when grid power is erratic or not available, or during periods of fuel scarcity or price volatility. Low rural household electrification rates in Tanzania (16.9%) also present a strong value proposition for SWPs.

Investments in irrigated horticulture supply chains in Tanzania have the potential to positively contribute to raising household incomes, and improved food and nutrition. SWPs can increase the productivity of agriculture sector hence reducing food imports which takes the largest share (80 percent) of total merchandise imports.

<b>Business Model</b>	Manufacture, distribute and install affordable solar-powered irrigation pumps utilizing modern technologies for the production of high value crops throughout the year and sale of products to high end export markets.
<b>User or Beneficiary</b>	The investment would directly benefit small holder and rural farmers through increased ability to grow crops in more than one season hence increasing their food security and incomes. The sustainable utilization of solar irrigation systems will also promote optimal utilization of marginal lands.
<b>Economic Factors</b>	<p>The market size for all types of irrigation technologies in Tanzania was estimated to be US\$86.2 million in 2018 and expected to grow to US\$151.3 million by 2022.</p> <p>The average market size for SWPs is estimated at <b>USD 50 million - USD 100 million</b> growing at a <b>CAGR of between 5% and 10%</b>. The average <b>capital outlay (ticket size)</b> is estimated at <b>USD &lt; USD 500,000</b> with the <b>Internal Rate of Return (IRR) of 20-25%</b>.</p> <p><b>Short Term:</b> The indicative timeframe of this model is less than 5 years based on empirical studies which show small-scale irrigation technology presents excellent IRR—in some cases as high as 28% within a short term (less than 5 years) to generate return.</p>
<b>Enabling Factors</b>	The government has given targeted incentives to the industry, including the exemption of import duty and VAT on some solar components, e.g., panels, batteries, inverters and regulators. This will assist industry development.
<b>Risk Factors</b>	Low penetration of this technology may be a potential risk factor. This is due to high level of capital expenditure required as initial investment. This may particularly discourage adoption by smallholders that have limited resources.
<b>Impact Management</b>	<b>IMP Classification C:</b> Investments are likely to contribute to solutions as this model promotes the availability of affordable and cost-effective technologies to raise the productivity and competitiveness of agriculture value chains in Tanzania
<b>Gender and Marginalization Impacts</b>	Women and youth obtain employment opportunities in the irrigated farms because of expanded production potential and in other farm and non-farm activities, such as sorting, grading, processing and transportation
<b>Policy Opportunities</b>	Need for requisite advisory and technical assistance services to support farming practices and agronomy knowledge, such as regarding water use, the impact of renewable energy irrigation

	may be limited
<b>Case Studies</b>	Surface pumping system for irrigation in Iringa: Built in 2014 by Power Providers, this solar water pumping system pumps surface water for irrigation purposes in Iringa. With a total dynamic head (TDH) of 30 m and solar generator of 18.7 kWp, the flow rate of the pump amounts to 450 m3 per day. This pumping system greatly helps agricultural activities in the Iringa region.

## IOA 2: Roof top solar energy systems where grid does not reach

About 45% of the electricity in Tanzania comes from hydro but with poor rains experienced in the past few years, Tanzania needs to embark on measures to forge an energy mix which involves promotion of increased use of renewable energy technologies including solar power. Despite its large abundance and reliability, solar power still constitutes a small share of installed energy capacity in Tanzania. Out of the total electrified households, 74.9% and 24.7% are electrified with national grid and solar power, respectively. Lack of access to modern energy services creates a vicious cycle of poverty for Tanzanian communities due to continued limited production opportunities and social facilities.

Investing in renewable energy systems such a roof top solar systems could play a significant role in meeting the country's energy needs and poverty reduction initiatives at large. Solar photovoltaic can play a key role in the provision of affordable, sustainable and locally generated electricity. Promoting renewable energy sources in Tanzanian will reduce over-reliance on imported fossil fuels particularly given the growing energy needs.

<b>Business Model</b>	Develop and operate roof top solar energy systems to provide lighting and energy for other domestic and industrial uses (e.g., refrigerators, water heaters and other appliances) by residential and industrial consumers specifically in areas where the national grid does not reach
<b>User or Beneficiary</b>	The investment would directly benefit poor households with no access to grid electricity who can get cheaper and alternative power source for lightening and conducting their various economic activities. The environment would benefit from reduced over dependence on biomass (e.g., wood for cooking energy)
<b>Economic Factors</b>	<p>The solar energy market in Tanzania has drastically grown and increased over the last few years. Currently, there are more than 1,000,000 solar-powered homes in Tanzania, with solar photovoltaic panels ranging from 10 to 100 kW per home.</p> <p>The <b>market size</b> for roof top solar energy is estimated at <b>&lt; USD 50 million</b> growing at a <b>CAGR of 5%</b>. The average <b>capital outlay (ticket size)</b> is estimated at <b>&lt; USD 500,000</b> with a positive <b>NPV and IRR between 5% and 25%</b> respectively which is attractive to investors.</p> <p><b>Medium Term:</b> The Economic evaluation of off Feed in Tariff (FiT) roof top solar energy system indicates that investments can yield positive results for investors for a period of 15 years starting from year 7.</p>
<b>Enabling Factors</b>	The government has given targeted incentives to the industry, including the exemption of import duty and VAT on some solar components, e.g., panels, batteries, inverters and regulators. This will assist industry development
<b>Risk Factors</b>	Potential risk factor includes (i) Lack of dedicated renewable energy policies in the country (i.e., policy and regulations that directly target the Pico & Solar Home Systems (SHS) segment (ii) A combination of lack of affordable funding opportunities targeting Pico/SHS and low awareness and lack of understanding of available funding opportunities targeting Pico/SHS companies; and (iii) The presence of large quantities of low-quality Pico/SHS products in the market.
<b>Impact Management</b>	<b>IMP Classification C:</b> Investments are likely to contribute to solutions as this model promotes the availability of affordable and cost-effective energy for undertaking various economic activities
<b>Gender and Marginalization Impacts</b>	Communities without access to the grid obtain a reliable and affordable energy source for consumptive and productive purposes. Energy solutions to women and other marginalized groups by reducing the drudgery of collecting wood for cooking.
<b>Policy Opportunities</b>	Need for supportive policies to promote availability of accessories and spare parts so as to foster the efficiency of rooftop solar systems and optimize impact
<b>Case Studies</b>	MOBISOL is a private company selling roof top solar systems for homes, installation in hospitals, schools, businesses and health centers. Mobisol has electrified more than 30,000 off-grid households in Rwanda and Tanzania, resulting in 3 MW of installed solar capacity and a reduction of 15,000 tonnes of CO2 per year. The company serves different market segments by

selling products through cash or PAYGO business models. The inclusion of mobile banking technology allows for effective microcredit and radically increases the affordability of a high-quality solar systems.



### IOA 1: Affordable Housing Finance

Over 40 percent of the population in urban areas live in informal settlements, which are often associated with poor basic amenities. Around 1.2 million houses in Tanzania, particularly in the urban centres are built informally, often in unplanned settlements. Rapid urbanization rate (estimated at 35.2%) and fast-growing population (2.93% pa) present a challenge to the Tanzania’s housing sector and will continue to put pressure on the need to adequately meet surging demand for affordable housing and basic services across Tanzania’s cities. The systems for providing sustainable human settlements including affordable housing needs to be strengthened. There is also critical need for making serviced land available for shelter and human settlement development and providing requisite infrastructure and social services.

Investing in affordable housing schemes have a significant role to play in meeting the country’s goal for promoting sustainable human settlements and good shelter to all citizens.

<b>Business Model</b>	Provide project financing for the development and purchase of residential estates and commercial buildings through affordable and flexible mortgages targeting low-income communities outside of the formal banking system. The public actor (government) shall promote a conducive investment environment including allocating suitable land and fastrack the issuance of necessary permits including title deeds.
<b>User or Beneficiary</b>	The investment would directly benefit poor households living in unplanned, unsafe and unhealth settlements through increased access to new financing mechanisms for affordable and decent houses. The planet will benefit from well-planned human settlements which eventually reduces environmental degradation.
<b>Economic Factors</b>	Housing demand in Tanzania far outstrips supply. The demand is increasing by about 200,000 units annually, with the current housing deficit estimated at about 3 million units.  The market size for real estate financing in Tanzania is estimated at <b>USD 1 billion</b> growing at a <b>CAGR of between 5% and 10%</b> . The average <b>capital outlay (ticket size)</b> is estimated at <b>&lt; USD 1 million - USD 10 million</b> with <b>IRR estimated at between 5% and 10%</b>  <b>Medium Term:</b> The indicative timeframe for this model is between 5 and 25 years. In the Tanzania real estate sector, typical mortgage term is 20 years with some banks offering shorter or longer payment periods, between 10 years and 25 years.
<b>Enabling Factors</b>	Companies that are newly listed on the Dar es salaam Stock Exchange (DSE) get an incentive of a reduced Corporate Income Tax (CIT) rate for the first three years from 30% to 25%, provided at least 30% of shares are publicly listed. Other incentives include Zero percent (0%) Import Duty on Project Capital Goods.

<b>Risk Factors</b>	The government participates in property development mainly through the National Housing Corporation (NHC) or Tanzania Building Agency (TBA), especially in providing social housing, which may be considered risky by the private sector.
<b>Impact Management</b>	<b>IMP Classification C:</b> Investments are likely to contribute to solutions as this model promotes the availability of affordable housing finance to low-income Tanzanians, particularly those living in unplanned areas
<b>Gender and Marginalization Impacts</b>	Women, the urban poor communities and other marginalized groups including the youth are able to access affordable, flexible and low cost housing options.
<b>Policy Opportunities</b>	Need for targeted policy measures to ensure the middle and upper class, which already have access to other means of financing, do not oversubscribe and crowd out the low-income communities and hence reducing the expected impact
<b>Case Studies</b>	Watumishi Housing Company (WHC), a public entity established in 2013 is a property developer and a licensed fund manager for management of the WHC Real Estate Investment Trust (WHC-REIT). WHC-REIT was licensed by the Capital Market and Security Authority (CMSA) in 2015 and became the first fully-fledged REIT to be established in Tanzania and East Africa.

## IOA 2: Solid and E-Waste Management

Over 4.6 million tons of solid waste are produced in major cities of Tanzania per year, out of which only 52% (equivalent to 2.4 million tons) is collected, one of the main causes of the eruptive health hazards and depletion of authorized land-fill sites.

Investing in solid and waste management (SWM) can accelerate the achievement of the national mandatory objective for protecting human health for each citizen. All Tanzanians are entitled to a healthy environment.

<b>Business Model</b>	Develop and operate commercial dumpsites for the collection, storage and utilization of solid and e-waste from residential, commercial and industrial sources utilizing modern equipment, such as self-loading trucks, mixers and sorters, through a public-private partnership model. Recycling activities shall accompany waste disposal processes with possibility of biogas or energy production. The public actor will invest in infrastructure (e.g., land for carryout the operations), systems and logistics for collection, sorting and recycling the waste. The private actor will build, operate and manage recycling plants and systems for reuse, making a profit from the provision of service, sale of recycled and re-used material.
<b>User or Beneficiary</b>	The investment would directly benefit communities in the urban centers through increased access to clean and unpolluted living areas hence reducing incidences of diseases which will subsequently improve their well-being.
<b>Economic Factors</b>	<p>Municipal solid waste recycling plants can capitalize on the existing waste recycling investment potential available in the country which is estimated at US\$ 8,300,000 split between plastics (US\$ 2m); paper products (US\$2m); e-waste (US\$ 1m); used oil (US\$ 3m) and lead from used lead acid batteries (US\$300,00). Solid waste generation in Dar es Salaam alone increased by approximately 80 tons every year from 2006–2017.</p> <p>The market size for solid and e-waste is estimated at <b>USD 50 million</b>. The average <b>capital outlay (ticket size)</b> is estimated at <b>USD 1 million - USD 10 million</b> with IRR between <b>20% and 25%</b>.</p> <p><b>Short Term:</b> The indicative timeframe for this model is around 5 years based on the economic analysis study for solid waste management conducted in Morogoro Municipality under assumption that at year three (3) the benefits or outputs and cost of the management options can easily be tracked like biogas, compost manure and recycled products.</p>
<b>Enabling Factors</b>	The government has put in place fiscal incentives such as Zero percent (0%) import duty on project capital goods and import duty and VAT exemption on <i>deemed capital goods</i> . These include; building materials, utility vehicles, equipment etc
<b>Risk Factors</b>	(i) Poor accessibility of some places particularly along the valleys; (ii) potential lack of cooperation among the existing solid waste management organs and (iii) constraints on cost

	recovery levels despite reduction of solid waste collection fees in some instances.
<b>Impact Management</b>	<b>IMP Classification C:</b> Investments are likely to contribute to solutions as this model promotes the accessibility to clean and safe living environments for Tanzanian communities particularly in urban areas
<b>Gender and Marginalization Impacts</b>	Women, the urban poor communities and other marginalized groups including the youth secure employment opportunities in waste collection, transportation, storage and in the recycling plants. Women enjoy secondary benefits in terms of reduction on the daily drudgery of collection and burning household waste.
<b>Policy Opportunities</b>	Local governments should be willing and ready to mobilize communities in domestic waste collection in order to increase expected impact. Need to promote enforcement of local by-laws. Special incentives to encourage participation of low-income earners due to fee barriers, alongside suboptimal distribution and logistics infrastructure, which may limit the expected impact especially in informal settlements.
<b>Case Studies</b>	The Recycler Ltd is a waste management company specializing in recycling and tailor-made waste solutions. The company offers a professional and comprehensive waste recycling service in Tanzania by collecting, processing and exporting recyclable material.

### IOA 3: Storage and transport infrastructure for perishable horticulture products

The Tanzania's horticulture sector wastes about 50 to 70 percent of products after harvest due to lack of efficient infrastructures such as transport, collection and storage centers. Poor transport and logistic infrastructure lead to significant levels of post-harvest losses (PHLs) which are estimated at 35-60%. Horticulture industry employs about 4 million people, which makes the industry a major employer within the agriculture sector. The sector could provide jobs for some of the 800,000 youth that enter Tanzania's workforce each year.

Investing in storage and transport infrastructure will increase linkages between Tanzania's productive hinterlands and markets, increasing productivity, lowering costs of doing business and ultimately the competitiveness of key value chains, particularly for perishable horticulture products.

<b>Business Model</b>	Develop and operate storage and transport infrastructure systems (e.g., packhouses and cold storage facilities for transit products) to handle perishable horticulture products destined for domestic and export markets through public private partnership model. The public actor (government will establish special Infrastructure and dedicated zones (e.g., green belts) at the port to fastrack clearance of products.
<b>User or Beneficiary</b>	The investment would directly benefit producers' horticulture products through improved access to appropriate cold storage facilities and infrastructure to cater for the perishable horticulture products destined for the local and export market.
<b>Economic Factors</b>	There are significant economic incentives for investment of transport and transport infrastructure in Tanzania, particularly for high value horticulture products. Total importation of various cold storage facilities averaged US\$ 25,908,000 per year between 2016 and 2020 growing at CAGR of 5.2%.  The <b>market size</b> for cold infrastructure facilities is estimated at <b>USD 50 million</b> growing at a <b>CAGR of 5% per year</b> . The average <b>capital outlay (ticket size)</b> is estimated at <b>USD 500,000</b> with <b>Indicative Gross Margin</b> of more than <b>25%</b> .  <b>Short Term:</b> Based on the Feasibility Study conducted by TAHA indicating that positive retained earnings (in terms of EBITDA) for cold storage technology to preserve horticulture produce kicks in progressively from the second year of investment due to increase in sales from farmers (i.e., due to economies of scale which reduced unit operating costs)
<b>Enabling Factors</b>	The government has put in place fiscal incentives such as Zero percent (0%) import duty on project capital goods and import duty and VAT exemption on <i>deemed capital goods</i> . These include; building materials, utility vehicles, equipment etc
<b>Risk Factors</b>	The main barrier to the optimal utilization of economic opportunities presented by the Tanzanian horticulture sector is the inability of small-scale actors to guarantee a consistent supply of

	products due to poor quality infrastructure which leads to post harvest losses. The losses may reach up 40-50%. This may need targeted interventions to manage
<b>Impact Management</b>	<b>IMP Classification C:</b> Investments are likely to contribute to solutions as this model promotes the availability appropriate transport infrastructure to cater for perishable agriculture goods particularly fresh fruits and vegetables.
<b>Gender and Marginalization Impacts</b>	Employment opportunities for women and youth in various segments of the value chain. In turn, they also get a chance to improve their skills in these areas through technology transfer for example for the construction packhouses.
<b>Policy Opportunities</b>	Need for the development of Code of Conduct for handling horticulture products on transit and exit points so as to reduce quality deterioration
<b>Case Studies</b>	Construction of a pack-house in Njombe by the Tanzania Horticulture Association (TAHA) triggered improvement of quality of avocados and stimulate demand in the export market. To the farmers the increase in quality and demand influenced increase in prices, which doubled from TZS 600 (US\$ 0.26) per kilo in 2015 to TZS 1,225 (US\$ 0.53) per kilo in 2017. This has contributed to stimulating investment in avocado production.



### IOA 1: Low- to Mid-Fee Private Schooling

The free basic education system has resulted into primary education gross enrolment rate becoming universal (96.9%) with net enrolment at 84%, and more than 70% of the primary school leavers transit to secondary education. This has put pressure on the country's public education system. The population structure in Tanzania also places a premium on the cost of education and other social services. By 2025 the system will have to cater further 6.3 million pupils of which 4.7 million will be enrolled in basic education. Tanzania, therefore, needs to invest substantially in education. Accommodating 6.3 million additional pupils anticipated by 2025 while simultaneously improving the quality of learning outcomes will present a major challenge for Tanzania. There are increasing concerns about the quality of education and learning outcomes especially at basic education levels.

Research has shown that private schools have excess capacity that can allow for absorption of additional students at relatively low cost through PPPs. Investing in Low- to Mid-Fee Private Schooling presents a cost-effective option for improving access and equity in education in Tanzania. Private schools can fill a supply gap when there is demand to expand faster than public infrastructure can support.

<b>Business Model</b>	Establish or acquire and operate independent and cost-effective private school chains on the primary and secondary level targeting the growing middle class in the urban centres. The schools will either run as commercial entities where a private actor will own and operate the entity or via a public-private partnerships where the entity will be government owned but managed and operated by the private sector. For the latter case, the government will provide the necessary infrastructure e.g., repurpose abandoned and/or underutilized buildings and rent them to users in order to make the investments attractive and more cost effective.
<b>User or Beneficiary</b>	The investment would directly benefit the working poor and lower middle-income families through improved access to cost effective primary and secondary private schools.
<b>Economic Factors</b>	The <b>market size</b> for the Low- to Mid-Fee Private Schooling is estimated at between <b>USD 50 million - USD 100 million</b> . The average <b>capital outlay (ticket size)</b> is estimated at <b>USD 500,000</b> . Such an investment can yield <b>IRR of 15% - 20%</b> . <b>Short Term:</b> Empirical studies have shown that the Returns on Investments (ROI) for a year of schooling by world region are highest in Sub-Saharan Africa (12.4 percent), significantly above the global average (9.7 percent). Returns for Tanzania are estimated at 19.2 percent. Other studies have documented that the global private rate of return to schooling is 10% for every year of schooling. This recent

	estimate comes from data from 139 economies. The returns are highest in Sub-Saharan Africa, namely in Ethiopia, South Africa and Tanzania.
<b>Enabling Factors</b>	The government has put in place fiscal incentives such as Zero percent (0%) import duty on project capital goods and import duty and VAT exemption on <i>deemed capital goods</i> . These include; building materials, utility vehicles, equipment etc
<b>Risk Factors</b>	The private sector's role in provision of education exists mainly at the secondary level as a result government policies restricting private sector involvement in primary education. Potential interference from the government or unclear policies regarding the operations of private schools at primary level
<b>Impact Management</b>	<b>IMP Classification B:</b> Investments are geared to providing "Benefits to Stakeholders" as this model promotes access to education. targeting the growing middle class in the urban centres.
<b>Gender and Marginalization Impacts</b>	Female students, particularly from middle income families acquire basic knowledge and skills, which prepares them to provide services needed in the competitive job market and in return receive higher incomes to improve their livelihoods.
<b>Policy Opportunities</b>	Need for deliberate efforts to develop a required pool of qualified teaching staff locally.
<b>Case Studies</b>	Silverleaf Academy has built a network of high-quality, pre and primary schools affordable and accessible to children of the working poor and lower middle-income families across Tanzania. The Academy has adapted the use of tablet technology, student-centered instruction, interactive videos and other tech-enabled means of improving children's understanding.

## IOA2: Affordable Day Care Centers

The net enrolment for pre-primary education in the public education system in Tanzania is estimated to have reached 44.6 percent, which is one of the highest in the Sub-Saharan African region. Total enrolment has grown from 1,562,770 in 2016 to 1,738,843 in 2021 at an estimated growth rate of 2% annually. There is need to bring in private sector players to reduce government pressure on provision, promote access and increase education quality. Greater attention should also be given to construction of more classrooms and teacher allocation to keep pace with the rapid increase. Options for the construction of satellite centres to bring services near children's homes should also be considered.

Investing in early child education lays the foundation for promoting a well-educated and learning society.

The early childhood period plays a critical role in a child's life, since any developmental and growth domain gaps at this time can have a lifelong impact, restricting children's ability to realize their full potential later on in their lives.

<b>Business Model</b>	Establish or acquire and operate day care centers providing quality and affordable childhood education to low- to mid-income communities unable to afford high-end day care facilities currently available. The facilities will either run as commercial entities where a private actor will own and operate the entity or via a public-private partnerships where the entity will be government owned but managed and operated by the private sector. For the latter case, the government will provide the necessary infrastructure e.g., repurpose abandoned and/or underutilized buildings and rent them to users in order to make the investments attractive and more cost effective
<b>User or Beneficiary</b>	The investment would directly benefit parents, particularly working mothers through the availability of viable options for accessing quality care and education services for their young children
<b>Economic Factors</b>	The <b>market size</b> for day care centres is estimated at <b>USD 50 million</b> . The average <b>capital outlay (ticket size)</b> is estimated at <b>USD 500,000</b> . Such an investment can yield <b>IRR of 10% - 15%</b> .  <b>Short Term:</b> Empirical studies have shown that the Returns on Investments (ROI) for a year of schooling by world region are highest in Sub-Saharan Africa (12.4 percent), significantly above the global average (9.7 percent). Returns for Tanzania are estimated at 19.2 percent. Other studies have documented that the global private rate of return to schooling is 10% for every year of schooling. This recent estimate comes from data from 139 economies. The returns are

	highest in Sub-Saharan Africa, namely in Ethiopia, South Africa and Tanzania.
<b>Enabling Factors</b>	The government has put in place fiscal incentives such as Zero percent (0%) import duty on project capital goods and import duty and VAT exemption on <i>deemed capital goods</i> . These include; building materials, utility vehicles, equipment etc
<b>Risk Factors</b>	Policy and curriculum documents for pre-primary school education holds extremely low status among actors' education stakeholders. There is a potential risk for investor not finding appropriate curriculum for children under the age of five and younger.
<b>Impact Management</b>	<b>IMP Classification B:</b> Investments are geared to providing "Benefits to Stakeholders" as this model promotes access to education. Services targeting the growing middle class in the urban centres.
<b>Gender and Marginalization Impacts</b>	Women and single households get an opportunity to pursue income generating opportunities while their children are in the pre-primary education institutions, contributing to greater independence and stronger livelihoods.
<b>Policy Opportunities</b>	Need for deliberate efforts to develop a required pool of qualified teaching staff locally. Improvement of physical infrastructure to serve communities at scale, so as to optimize impact
<b>Case Studies</b>	The Aga Khan Nursery School located in Dar es Salaam aims at providing students with well-rounded education which allows them to discover and nurture their creativity and develop into independent critical thinkers with a love for lifelong learning. The school curriculum has been modified to ensure compatibility with the National Curriculum of Tanzania and the Tanzanian culture

### IOA3: Technical and Vocational Education and Training Center

The education system in Tanzania has a number of gaps in responding to the dynamics of market demands for employability. TVET education has a role to play in filling such gaps but they are yet to develop stronger partnership with workplaces in order to enhance training relevance. The TVET system graduates have increased by 64% in recent years. The system has a lot of potential for growth in accommodating the low-skilled workforce which stands at 85% and the medium skilled workforce at 12%.

Investing in technical and vocational education prepared and orients young Tanzanians towards the world of work. The delivery system is well placed to train the skilled and entrepreneurial work force that Tanzania needs to create wealth and emerge out of poverty.

<b>Business Model</b>	Establish or acquire and operate technical and vocational education and training (TVET) and Polytechnique institutions offering targeted demand driven skills (both technical and managerial) required by specialized industries. The skills set will differ by industry hence a need for tailor-made-courses to address specific demand by the industry.
<b>User or Beneficiary</b>	The investment could directly benefit young graduates entering the labour market each year. Employers and industry would also get workforce with requisite problem-solving skills
<b>Economic Factors</b>	The <b>market size</b> for Technical and Vocational Education and Training Centers is estimated at USD 50 million growing at a <b>CAGR of 25%</b> . The average <b>capital outlay (ticket size)</b> is estimated at <b>USD 500,000 - USD 1 million</b> . The estimated <b>RoI</b> is around <b>25%</b> .  <b>Short Term:</b> Analysis of technical and managerial skills development program for women entrepreneurs engaged in manufacture and distribution of cleaner cookstoves technology in shows that it takes at least two (2) years for such projects to break even.
<b>Enabling Factors</b>	The government has put in place fiscal incentives such as Zero percent (0%) import duty on project capital goods and import duty and VAT exemption on <i>deemed capital goods</i> . These include; building materials, utility vehicles, equipment etc.
<b>Risk Factors</b>	Analysis of technical and managerial skills development program for women entrepreneurs engaged in manufacture and distribution of cleaner cookstoves technology in shows that it takes at least two (2) years for such projects to break even.
<b>Impact Management</b>	<b>IMP Classification B:</b> Investments are geared to providing "Benefits to Stakeholders" as this model promotes access to technical and vocational education to young graduates entering the labour market

<b>Gender and Marginalization Impacts</b>	Increased opportunities for women, youth and other marginal groups, including people with disabilities, to access decent jobs which can subsequently secure their livelihoods.
<b>Policy Opportunities</b>	Need to reduce overdependence on traditional training delivery, by considering tailor-made courses, and adapt to the needs of the informal sector.
<b>Case Studies</b>	Rhino Technical Secondary School & VTC is located in Gonja Maore ward in the district of Same Kilimanjaro region of Tanzania. It is a vocational training institution whose curriculum is tailored towards giving students practical skills preparing them expeditiously for employment. The institution was established in collaboration with private sector partners and foundations.



### IOA1: Community-Based Tourism Services and Activities

The travel and tourism sector's contribution to GDP is estimated at US\$ 6,577.3 million, equivalent to 10.7% of the country's GDP. However, even around the most visited areas, poverty is prevalent, indicating that strong linkages with local communities have yet to be established. The tourism has been the most severely affected sector from the COVID-19 pandemic due to travel restrictions. Between 2019 and 2020, Tanzania experienced a 72 percent drop in tourism revenue, and the full consequences for workers and firms, especially small and medium enterprises, are still unknown. The return to pre-crisis levels is expected to take some time.

The investment could directly benefit the poor communities living adjacent to the natural attractions by utilizing their rich traditional cultures. The country could also benefit through increased diversity of tourism offerings, meeting the demands of international tourists.

<b>Business Model</b>	Development of tourism products and associated services focused primarily on generating supplementary incomes for poor rural communities by utilizing their rich traditional cultures and diverse natural assets to create unique and unparalleled ecotourism experiences (such as tours of traditional ways of life, fishing, ziplining and parachuting) through community, public, private partnerships. This provides opportunities for private capital to invest in tourism assets (hotels/lodgings, leisure and recreational activities, technology, logistics and marketing) where the public sector provides the supporting infrastructure (roads, electricity, water and sanitation) and the community provides the land, labour, local expertise and cultural experiences
<b>User or Beneficiary</b>	The investment would directly benefit business owners and employees in the tourism industry, such as hotels and restaurant, local and foreign tourists, population living in touristic regions.
<b>Economic Factors</b>	<p>Tanzania is 1st in Africa and 12th worldwide for the quality of its nature-based tourism resources, and 32nd in Africa and 112th in the world for its cultural resources. As the Tanzanian tourism industry grows and pressures to diversify increase, there is a growing demand for CBT in collaboration with local communities.</p> <p>The <b>market size</b> for community-based tourism services and activities is estimated at <b>USD 1 billion</b>. The average <b>capital outlay (ticket size)</b> is estimated at <b>USD 1 million - USD 10 million</b>. The estimated <b>IRR</b> is in the range of between <b>20% and 25%</b>.</p> <p><b>Short Term:</b> The pilot initiative developed by SNV-Netherlands Development Organization on CBT led to increased tourist numbers within a space of five-year period. This can be taken as a proxy to short time frame for a project to generate returns.</p>
<b>Enabling</b>	The government has put in place fiscal incentives such as Zero percent (0%) import duty on

<b>Factors</b>	project capital goods and import duty and VAT exemption on <i>deemed capital goods</i> . These include; building materials, utility vehicles, equipment etc.
<b>Risk Factors</b>	Community Based Tourism (CBT) investments have been faced by numerous conflicts among stakeholders over control of and access to the lands and natural resources that are used as tourism products
<b>Impact Management</b>	<b>IMP Classification B:</b> Investments are geared to providing "Benefits to Stakeholders" as this model promotes increased income to communities through utilization of diverse cultural and natural heritages
<b>Gender and Marginalization Impacts</b>	Inland and rural populations benefit from the integration into the tourism industry, which brings about economic opportunities. Spread of community-based tourism products and activities across the country, particularly the Southern Circuit, which is economically marginalized and consequently offer income generating opportunities.
<b>Policy Opportunities</b>	Promote the capacity of local communities on best practices for environmental management and socially responsible tourism. Need to take into account communities' interest and priorities so that touristic activities may experience a significant uptake and also benefit the communities.
<b>Case Studies</b>	Ololosokwan village In Loliondo District entered into a deal with a South African ecotourism company to jointly operate a large commercial ecotourism development project. Through the joint venture, the villages' annual income from the joint venture increased from US\$ 25,000 in 1999 to US\$ 37, 640 in 2003. It now constitutes more than 30% of Councils income

## IOA 2: Sustainable Tourism Infrastructure

The travel and tourism sector's contribution to GDP is estimated at US\$ 6,577.3 million, equivalent to 10.7% of the country's GDP. However, even around the most visited areas, poverty is prevalent, indicating that strong linkages with local communities have yet to be established. The tourism has been the most severely affected sector from the COVID-19 pandemic due to travel restrictions. Between 2019 and 2020, Tanzania experienced a 72 percent drop in tourism revenue, and the full consequences for workers and firms, especially small and medium enterprises, are still unknown. The return to pre-crisis levels is expected to take some time.

Development of tourism infrastructure such as hotels, lodges and campsites create multiplier effects through generated incomes and a guaranteed expansion and development of new economic sectors especially those linked to tourism.

<b>Business Model</b>	Provide and operate eco- and community-based tourism infrastructures, such as hotels, lodges and camp sites, that rely on the local value chain. The facilities will be run through community-private-public partnerships, with private actors managing the facilities, the public actor providing support infrastructure (roads, water and power utilities). The communities will supply various products such as vegetables, fruits, meat, eggs, etc. through supply contract arrangements
<b>User or Beneficiary</b>	The tourists could benefit from improved and new destinations, and local communities obtain additional income generation opportunities.
<b>Economic Factors</b>	<p>With 1.28m tourist arrivals (prior to the pandemic) Tanzania is already one of the most-visited destinations in sub-Saharan Africa. Overall room revenue in Tanzania rose 7.4% in 2018, up from the 1.9% increase in 2017, principally reflecting a 15.4 percentage point turnaround.</p> <p>The <b>market size</b> for the sustainable tourism infrastructure is estimated at <b>USD 100 million - USD 1 billion</b>. The average <b>capital outlay (ticket size)</b> is estimated at <b>USD 1 million - USD 10 million</b>. The estimated <b>IRR</b> is in the range of between <b>20% and 25%</b>.</p> <p><b>Short-Term:</b> The indicative time-frame for this investment is around five (5) years, based on the payback period for a Nature Camp located in the Mkomazi National Park.</p>
<b>Enabling Factors</b>	The government has put in place fiscal incentives such as Zero percent (0%) import duty on project capital goods and import duty and VAT exemption on <i>deemed capital goods</i> . These include; building materials, utility vehicles, equipment etc.
<b>Risk Factors</b>	The COVID-19 crisis severely impacted Tanzania's tourism sector, as the disruption of global travel and tourism activity resulted in job losses and business closures. Between 2019 and 2020, Tanzania experienced a 72 percent drop in tourism revenue.

<b>Impact Management</b>	<b>IMP Classification B:</b> Investments are geared to providing "Benefits to Stakeholders" as this model promotes increased income to the owners of community-based infrastructure.
<b>Gender and Marginalization Impacts</b>	Inland and rural populations benefit from the integration into the tourism industry, which brings about economic opportunities. Spread of community-based tourism products and activities across the country, particularly the Southern Circuit, which is economically marginalized and consequently offer income generating opportunities.
<b>Policy Opportunities</b>	There is a need to create an efficient, reliable, and transparent business environment. Tanzania's tourism sector has long suffered from mutual distrust between the government and private firms, with the former complaining of widespread tax evasion and the latter citing government inefficiencies and misunderstanding of the way the sector functions. The pandemic has created an opportunity to reset this relationship, finally implement long-discussed reforms, and send a strong signal to the market of Tanzania's improving climate for business and investment
<b>Case Studies</b>	Mkomazi Nature Camp is a new accommodation facility established at Mkomazi National Park. It takes advantage of the new rhino project in the national park. This gives the national park uniqueness in tourism activities. The exclusion of 13 square kilometers unique for rhino tourism completely changes the look of Mkomazi National Park. The park is 200 km from Arusha to the same town and 6 km from the park gate.

Note: The individual sources of the data points in the tables above are available on the SDG Investor Platform, which offers the full data sets of the IOAs.

## 4 Conclusion and Next Steps

The SDG Investor Map presents 13 Investment Opportunity Areas (IOAs) that can direct private capital towards achieving sustainable and inclusive economic growth for Tanzania. It has been developed through an extensive literature review and stakeholder consultation process. The Prime Minister Office (PMO) was the Lead Government Institution in coordinating and championing the process. The objectives of the consultations were to confirm findings and provide additional data and information. Stakeholder interviews took place throughout the mapping process in order to validate and complement the findings.

A total of 32 themes emerged consistently across multiple documents reviewed. These essentially represented the areas where SDG needs and national policy priorities overlapped. This resulted into a short list of five sectors: Agriculture, Renewables & Alternative Energy, Infrastructure, Education and Services. The identified sectors were further subjected to a deeper analysis to derive a shortlist of subsectors to be accorded high priority. The emerging subsectors in brackets are (i) Food & beverage (agricultural products, meat, poultry & dairy and processed foods) (ii) Infrastructure (real estate, infrastructure and waste management); (iii) Services (hospitality & recreation and consumer services); (iv) Education (formal education, education Infrastructure and education technology); (v) Renewable and alternative energy (solar technology and wind technology).

The identification of priority subsectors was followed by “deep-dive” analysis of solutions and investable and scalable business models that could address the identified needs. These were shared with stakeholders for validation as well as filling data gaps in the already identified IOAS.

The information and findings derived from the SDG Investor Map process will be operationalized under four (4) thematic areas summarized below.

- 1) Originate a project pipeline for SDG investment:** engage on and deepen investment opportunities for private sector uptake, identify enterprises to deliver on investment opportunities and support their investment readiness, and develop portfolios in partnership with financiers and intermediaries.
- 2) Access public and private capital for SDG investment:** facilitate networking with capital providers, and develop innovative financing instruments and modalities.
- 3) Support enabling policy environment for SDG investment:** address policy opportunities, deliver evidence for policy reforms, and provide solutions for effectively resourced sustainable development priorities.
- 4) Ensure impact integrity of SDG investment: support enterprises and investor towards the alignment** of business operations with SDGs, disclosure of impact and delivery of SDG reporting, and impact measurement and management learning opportunities.

The full market intelligence of the Tanzania SDG Investor Map is available on the global SDG Investor Platform, which will increase global investor outreach. The information in the SDG Investor Map will continuously be updated. UNDP will host annual Public Private Dialogue Forums with the view to: (i) review progress on the investment opportunity areas and stimulate further action; and (ii) facilitate exchange of best practices, and policy development for the replication and implementation of successful business models and innovative financing mechanisms. Through this report, industry experts, government partners, investors, and concerned citizens are all invited to continue the discussion and engagement on sustainable **investment** opportunities. UNDP has already launched a process for the Zanzibar chapter of the SDG Investor Map, in cooperation with ZIPA. This too will be uploaded on the global website. Continuous efforts are being made to share updated investment opportunities across the United Republic of Tanzania, and an investor convening will be held as this Map is launched.

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