BIO4AFRICA

Diversifying revenue in rural Africa through circular, sustainable and replicable biobased solutions and business models

Research and Innovation Action (RIA)
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D1.5: Suitable modes of finance and funding for bio-based technologies in Africa

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Abbreviations

GII	Global Innovation Index
FDI	Foreign Direct Investment
OECD	Organization for Economic Cooperation and Development
AUDA-NEPAD	African Union Development Agency
PIDA	Programme for Infrastructure Development in Africa
PQL	PIDA Quality Label
UNDP	United Nations Development Programme
ESG	Environmental, Social and Governmental
SIB	Social Impact Bond
AfDB	African Development Bank
GSGDA	The Ghana Shared Growth and Development Agenda
METASIP	Medium-Term Agriculture Sector Investment Plan
LOASP	Agro-Sylvo-Pastoral Orientation Law
GOANA	National Agricultural Development Programme, the National Livestock Plan and the Grand Agricultural Offensive for Food and Abundance
SCA	Accelerated Growth Strategy
SNDES	National Strategy for Economic and Social Development
PSE	Emerging Senegal Plan
PRACAS	Accelerated Programme for Agriculture in Senegal
PNIA	National Agricultural Investment Programme
CNDPF	National Development Planning Framework policy
NDP	National Development Plans
DSIP	Agriculture Sector Development Strategies and Investment Plan
NAP	National Agriculture Policy
SACCOS	Savings and Credit Cooperative Societies
ACCOSCA	African Confederation of Cooperative Savings and Credit Associations
FO	Farming Organizations
CUA	Ghana Co-operative Credit Unions Association
UCSCU	Uganda Cooperative Savings and Credit Union
ANAC-CI	Association Nationales Des Crep Et Coopec de Cote d'Ivoire
OHADA	Organization for the Harmonization of Business Law in Africa
RNCPS	National Network of Seed Producers' Cooperatives
M-SAWA	Equitable Prosperity – Maendeleo Sawa

MEDA	Mennonite Economic Development Associates
GAC	Global Affairs Canada
VSLA	Village Savings and Loan Association
FCFA	Central African Franc
FAFCI	Fonds d’Appui aux Femmes de Côte d’Ivoire
PGNFNFD	Fonds National Femme et Développement

Executive summary

This report presents the work on available funding supporting schemes for the stakeholders targeted within the execution of BIO4AFRICA H2020 project (Contract no. 101000762) corresponding to D1.5 (M10), led by SIE. This report presents the results on detecting and evaluating existing available sources of funding and other financing schemes, facilitating the future scale up and deployment of bio-based technological solutions in Africa.

The results provided on this report are primarily based on direct consultation with European and African partners, additionally supported by desk research and prior feedback from Task 1.1 and Task 1.4 results.

The report contains a comprehensive analysis of both public and private programmes and organisations boosting bio-based solutions raised and aimed to be deployed across the African continent. Each programme is detailed in terms of call, topic, potential funding amount and participant type. From a business perspective, these mechanisms target a wide range of stakeholders, most of them entrepreneurs, and medium and small businesses. The study is accompanied with testimonials from African partners on the usefulness and adoption of current schemes on the targeted regions.

The conclusions shown on this report aim to serve as complementary materials to support WP5 and WP6 activities. More specifically, the future BIO4AFRICA Accelerator programme and the business plan activities could find a way how to benefit on the detailed initiatives and include them as a potential service to participants.

1. Motivations for the identification of suitable modes of finance for bio-based technologies in Africa

The results described in D1.1 *Contexts and needs of African rural communities*, where a total sample size of 168 respondents was gathered for the study (30 from Senegal, 15 from Ghana, 18 from Uganda, 105 from Côte d'Ivoire), showed a general awareness of the existence of bio-based solutions and approaches in agriculture, with most respondents already implementing a more bio-based traditional approach employing food components for compost and biofertilizers. The sample of respondents comprised different target groups, including farmers, Agri-entrepreneurs and national agricultural associations and supporting organizations.

A general acceptance was shown towards the potential adoption of bio-based approaches targeted in BIO4AFRICA. However, these should meet the high-quality price ratio to face a considerably high initial investment in machinery and training of workforce, so it can be widely accepted into the daily farm's operative.

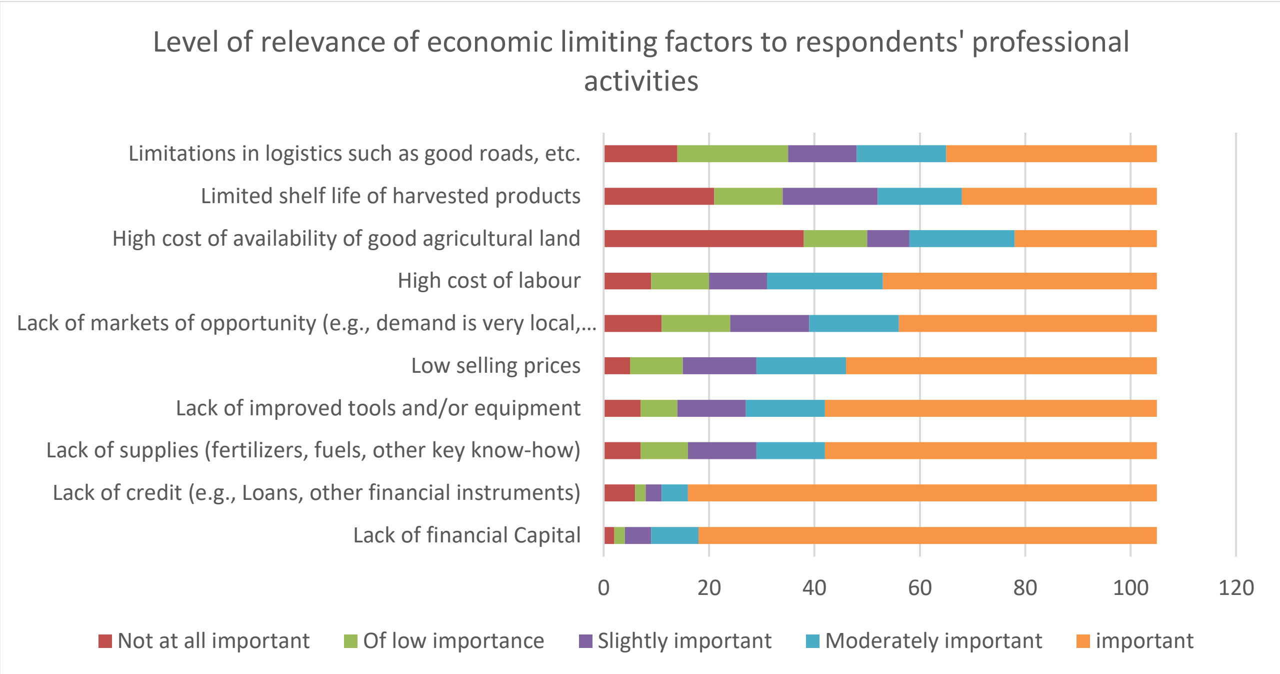


Figure 1. Relevance of economic factors limiting business activity of sample addressed in Ivory Coast. Extract D1.1.

In parallel, the exercise showed that, nowadays, some of the most important limiting factors across the regions surveyed were i) the lack of direct supporting schemes (e.g., loans,) provided by the government, ii) indirect supporting schemes (e.g., tax breaks, incentives), iii) missing access to mechanization services on equipment and tools, and iv) present low supply prices for raw materials.

Lack of financial capital and credit are the main challenges to face, in a weak governmental support scenario. Therefore, stakeholders should identify alternatives sources to finance the viability of these business, sometimes to consolidate the activity and others to scale up the business

From a policy perspective, a few recommendations were brought up showing an overview on the financing needs of the regions targeted and interviewed under the study:

- There is a **need of more extended, precise, national public programmes** focused on the elimination of barriers and fulfilling some basic needs. For instance, the improvement of storage conditions for harvested products for better quality seeds, and subsistence and better welfare conditions of community members.

- **Supranational initiatives (such as the BIO4AFRICA project) are necessary to encourage national schemes to empower a more competitive primary industry**, through the mechanization of the agricultural sector. National government authorities are responsible for improving communication and delivery of improved tools and solutions to facilitate scale up and replication in community.

- **Direct government subsidies should concentrate in setting up plans to not only deliver improved tools and equipment for bio-based practices, but a complete training programme** involving community heads to confront the current lack of knowledge on the subject.

These conclusions are fully aligned with recent outlooks on the financing and funding potential of African entrepreneurship. A recent study on African entrepreneurship has shown that West African countries (particularly Nigeria) have more motivations embedded in profit-oriented language (the so-called “business mindset”), while in Central and Eastern Africa entrepreneurs are more oriented to social justice and community development (Tony Elumelu Foundation, 2019). Eastern and Western Africa are projected as the regions showing a greater emphasis on entrepreneurial projects focused on farming and agriculture.

This study, supported by Stanford University, involved a pool from approximately 140,000 African entrepreneurs applying to the Tony Elumelu Foundation Entrepreneurship Programme between years 2015 and 2017.

It concluded that the development of a more disruptive and growth-oriented business ecosystems is being driven by actions emphasizing (i) the raising roles of training and mentorship, and (ii) the access to funding from regional governments and private organisations.

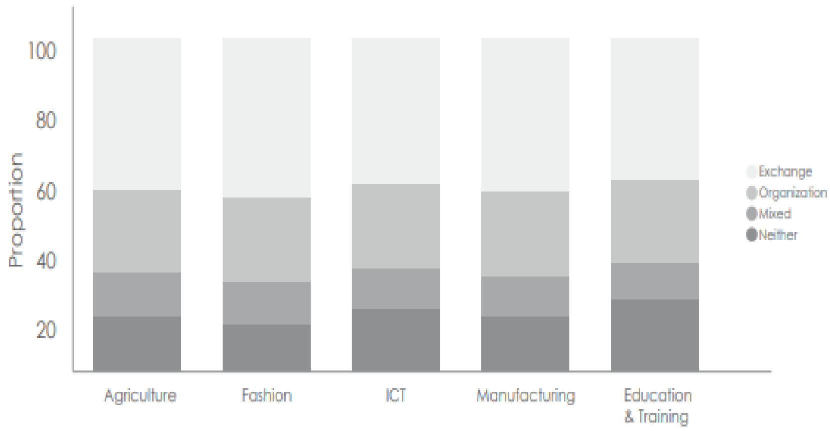
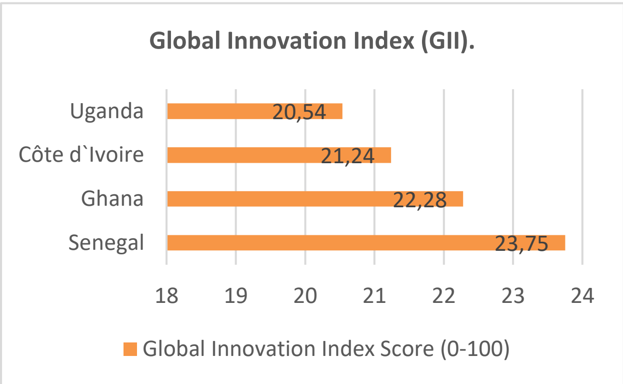


Figure 2. Breakdown of entrepreneurial mindset proportion across industries. TEF study (2015-2017).

As seen in Figure 2, those entrepreneurs within the agricultural sector had in proportion a more exchange-oriented mindset. From a gender lens, the study also showed that women are less likely to have an organizational mindset, where higher revenues are a key driver for business development and success. It was suggested that these differences in entrepreneurial mindsets could have a strong influence on the business outcomes between men and women's led businesses.

Additionally, conserving macroeconomic factors such as the Global Innovation Index (GII), D1.1 shed a light on the urgency for African countries to boost competitiveness across national R&D industries.



In 2020, South Africa scored 32.67 out of 100 in the Global Innovation Index (GII), ranking first in Africa and 60th globally. In the case of the target countries Uganda scored: 20.54, Ivory Coast: 21.24, Ghana: 22.28 and Senegal: 23.75. Moreover, Guinea, with a score of 17.32 index points, ranked last in Africa and 130th out of 131 countries worldwide. (Statista, 2020).

Figure 3. Global Innovation Index score in Africa 2020, by country. (Statista, 2020).

Additionally, the OECD's background paper developed for establishing priority actions for Africa's sustainable development after COVID-19 in the run-up to the *Summit on Financing African Economies* on May 18th 2021, (EIB, 2021), provided insights on the recent efforts made by African governments considering alternative financing sources to counter public budget contraction due to COVID-19. African governments finance through public resources the largest share of infrastructure, at above one third of total commitments ($31.6 billion on average between 2015 and 2018). In contrast, the private sector committed $6 billion annually between 2015 and 2018 compared to $33.3 billion in East Asia. ICT infrastructure represents the only category of infrastructure that was mostly privately financed (80% of ICT financing in 2018). Increased fiscal expenditure to support health and economic activities during COVID-19 risks diverting resources from government and international partner's infrastructure development projects.

When it comes to large investment projects, the COVID-19 outbreak had a great impact on project cycles, triggering large capital outflows, totalling $5 billion in sub-Saharan Africa between February and March 2020 alone. Overall, Foreign Direct Investment (FDI) flows to Africa dropped by 18% between 2019 and 2020 through a rebound in FDI flows in the second half of 2020. In comparison, FDI inflows contracted by 4% in developing Asia and 37 % in Latin America. Greenfield project announcements, an indication of future FDI trends, fell by 63%. In addition, low prices and low demand for commodities amplified COVID-19's negative impact on FDI.

As of today, private financing represents a minor share of infrastructure financing, with the poorest countries struggling to attract private investors. (Fay and Straub, 2021).

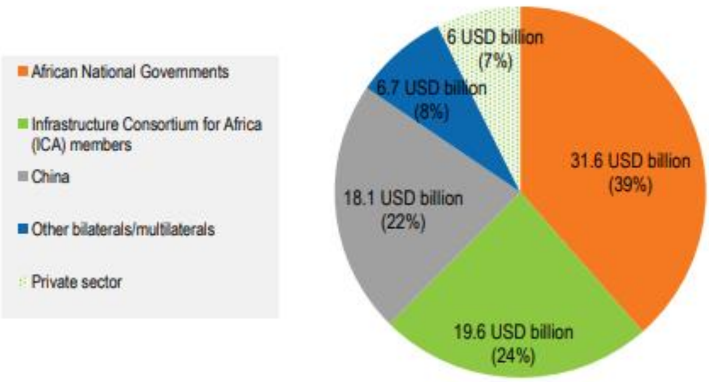


Figure 4. Infrastructure financing in Africa, by source, 2015-18 average (in USD billion)

Key collaborative platforms such as the Continental Business Network launched by the African Union Development Agency (AUDA-NEPAD) in 2015, aim to crowd-in financing for infrastructure projects and fill the current gap between the public and private sectors (AUDA-NEPAD, 2015).

Its current agenda aims to increase up to 5% institutional investors and pension fund's contributions to infrastructure financing from its low base of approximately 1.5%. African sources of private capital, including institutional investors are also worth considering. In this deliverable, a summary of both public (funding) and private (financing) sources will be provided (Section 3 of this document), distinguishing between African and foreign-sourced.

It is believed that accelerating and scaling up quality infrastructure investment will require capacity to provide an enabling environment for investment through solid regulatory frameworks and institutions while integrating quality issues. One example is the PIDA Quality Label (PQL), a quality recognition developed by AUDA-NEPAD, and awarded to PIDA projects (Programme for Infrastructure Development in Africa), a framework that finances projects boosting the development of regional and continental infrastructure. ESGs (environmental, social and governance factors) are also being considered within public projects and governmental agendas. Nevertheless, despite the good practices identified recently, several bottlenecks can still be found in present large infrastructure projects in Africa, where can become very specific at certain stages of project cycles.

Figure 5 below shows more specific examples of these bottlenecks.

Project cycle	Bottlenecks	Good practices
Overarching or transcending factors	Political economy, structure and co-ordination within government, institutional capacity constraints, capabilities within government, varying standards, constrained access to finance and development partner requirements	Professional development, intra-governmental continuity, standardisation, digital platforms, transparent systems, insulation of regulators, project prioritisation, financial source optimisation and negotiations with development partners
Early stage	Changing political priorities and project development inadequacies	Peer learning mechanism and incentives to ensure commitments to projects
Pre-development	Unsatisfactory feasibility studies, delays in ESIAs and complications in land acquisition and resettlement	Support for feasibility studies, continuously involving key stakeholders and effective dispute resolution systems
Procurement	Inefficient procurement process, complex regulatory framework and negotiation complications	Sound managerial system, focus on value for money and internal controls to improve transparency and fairness
Private sector investment	Unfavourable conditions for private finance, institutional framework, lack of risk protections, complex negotiations and sub-optimal prioritisation by financing source	Strong project sponsor, streamlined interface with government, institutional reforms that facilitate private finance, risk protections by development partners and ESG standards
Construction and operation	Institutional procedures, logistical processes, technical capacity, sub-contractor performance, design changes and inadequate maintenance resources	Competent general contractor, sub-contractor co-ordination, adoption of digital technology, logistical focus and innovation-friendly environment

Figure 5. Impediments in infrastructure project cycles in Africa. Source: OECD/ACET 2020.

2. The funding scope and stakeholder ecosystem

2.1 Funding schemes approach and recent trends

During the identification phase of funding and financing sources, a differentiation from private and public finance structures has been primarily given, in order to facilitate the classification of information sourced and collected.

Private financing sources correspond to those entities and organizations boosting potential of businesses by means of an equity-based model, where investees (entrepreneurs, SMEs, small businesses) are lent financing in return of a proportional part of the ownership of the investee's business activity. This model is supported on the positive returns these private institutions foresee within a specified period. Public funding sources correspond to those entities and organizations' contribution to the development and growth of businesses by means of a loan-based model, where investees may receive a lump sum funding amount to finance their business activity, charging interests amounts in some cases. Both sources are considered business enablers as they become facilitators for a successful scaling up of a product or service at market entry level.

However, it has been considered that, when focusing on the type of institution (public or private) certain mismatches can arise, as the nature of "funds" without high economic return can come from both public (e.g., grants) and private institutions (e.g., donations).

Therefore, the following diagram in Figure 6 shows the two types of schemes (public/private), defined in groups according to their investment focus, but also classified according to the type of *return* (Social, Traditional/Economic and Impact) they provide in the context of BIO4AFRICA.

Impact return, also called the "double return" approach, refers to those investments made expecting high returns economically, but also at an environmental and social level (Credit Suisse, 2022). In this specific case, economic returns can be expected to be lower than in those investments where financial profitability is considered the only investment criteria (traditional returns). When investments are only considered the social benefits as the only criteria, these are considered investments seeking only social returns.

In this landscape, one of the main benefits from impact return and social return-based investments is the guarantee of a more traceable and precise measurement of the social and environmental impacts of those investments, which serves as endorsement, and a key cornerstone for many action plans within CSR practices and national sustainability agendas. Consequently, social return investments can come not only from public institutions, but also from private bodies (foundations, venture philanthropy firms).

Figure 6 aims to provide a classification of the differences between traditional, social and impact return-based schemes. In Section 3, the different groups of schemes will be displayed.

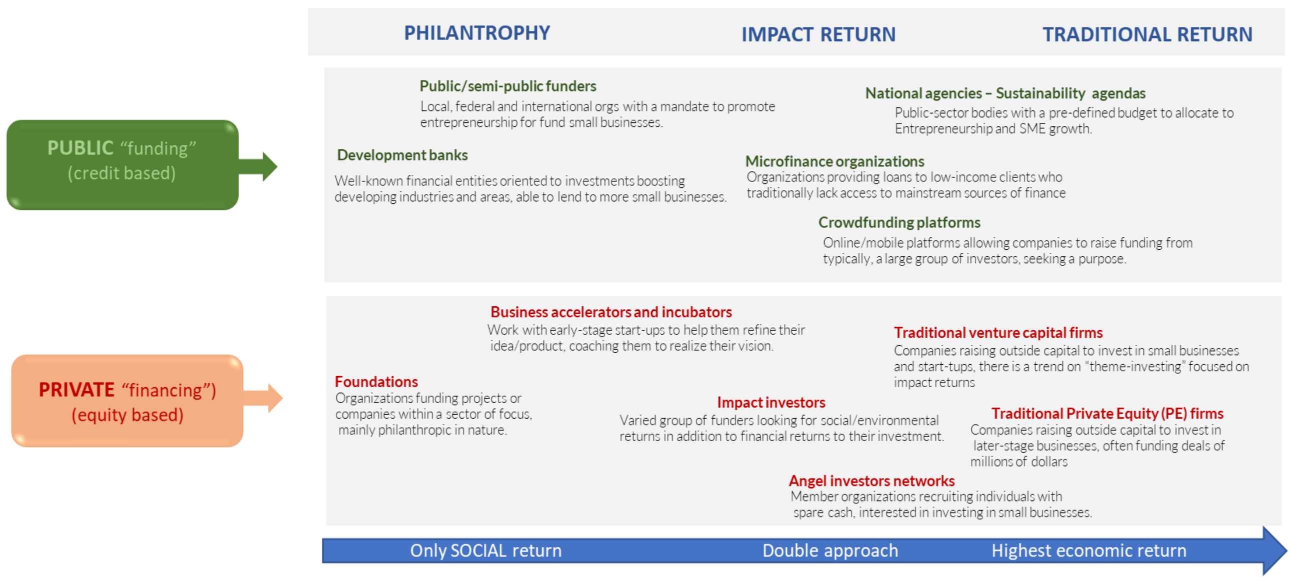


Figure 6. Analysis of private and public financing schemes. Elaborated by the author. Based on Investment Guide Africa. (IGF, 2022)

2.2 Potential impact investment strategy for the future BIO4AFRICA Accelerator

Among the different sources, impact investment has raised as one of the main instruments for financing in the last decade. According to the United Nations Development Programme (UNDP) report UNDP's report "*Impact investing in Africa: Trends, Constraints and Opportunities*", the total development financing gap in Africa is estimated at least at €90 billion annually until 2030. To date, approximately US $8 billion has been invested in African impact investment. (UNDP, UNDP: Africa, 2022).

The profile of Africa's impact investors primarily includes fund managers and asset management funds development finance institutions and donors, as specified in Figure 6. However, Impact Investment also presents opportunities for the public sector actors, with pay-for-success type models of Social Impact Bonds (SIBs). Impact investment needs to differentiate from philanthropy, facilitating measurable social and environmental impacts alongside with financial return. When investment actors can go through a "negative screening" assessment, excluding those investments not compliant with ESG factors and acknowledging financial returns linked to such practices, the term is called *Socially Responsible Investment* (SRI), (AVPA, 2022).

It is considered within the consortia that participants of the BIO4AFRICA Accelerator program could have more chances to access investors/funds with impact sensibility than investors/funds looking for a high return or only with bio-based focus.

Therefore, when adjusting to the financing needs of accelerator participants during the programme, a differentiation among two typologies of business will be made: (1) P&L positive and interesting profit, able to be invested for scale up; and (2) P&L positive with small profit or even non-profit, able to be financed for consolidate the activity. Number (1) can access to equity or other investments with return (payback), while number (2) must look for soft loans, microcredits, grants, or donations. This strategy will be later developed and explained in more detail under WP6 workplan.

2.3 Regional landscape

A preliminary screening of available funding and financing sources has been conducted, outlining certain characteristics per region. Contributing partners have provided testimonials about some of the most popular finance and funding sources already available in Africa. Most entities gathered own extensive presence across the African continent. Any regional specifications will be pointed out.

Government support schemes within the targeted BIO4AFRICA countries

In D1.1, a PESTEL analysis was carried out, aiming to show broadly the present funding schemes devoted to boost R&D on agricultural practices across the targeted regions.

The target countries within BIO4AFRICA have regulations regarding agriculture practices and sector development, with these regulations being the result of last year's politics and recent mandates taken to drive the agri-food industry growth. Among the most significant are the following:

- African Development Fund (AfDB) Strategy for 2013-2022.
- The national economic plan, known as "Ghana Vision 2020", 1995. (Ghana).
- The Ghana Shared Growth and Development Agenda (GSGDA 2010-2013). (Ghana).
- Sector Development Policy (FASDEP II, 2007). (Ghana).
- The Medium-Term Agriculture Sector Investment Plan (METASIP 2010-2015). (Ghana).
- Agro-Sylvo-Pastoral Orientation Law (LOASP). (Senegal).
- The National Agricultural Development Programme, the National Livestock Plan and the Grand Agricultural Offensive for Food and Abundance (GOANA). (Senegal).
- The Accelerated Growth Strategy (SCA), adopted in 2008. (Senegal).
- The National Strategy for Economic and Social Development (SNDES). (Senegal).
- The Emerging Senegal Plan (PSE). (Senegal).
- The Accelerated Programme for Agriculture in Senegal (PRACAS), 2014. (Senegal).
- National Agricultural Investment Programme (PNIA). (Senegal).
- National Development Planning Framework policy (CNDPF), 2007. (Uganda).
- Uganda Vision (2040, 2013). (Uganda).
- National Development Plans (NDPs). (Uganda).
- Agriculture Sector Development Strategies and Investment Plan (DSIP). (Uganda).
- National Agriculture Policy (NAP), 2013. (Uganda).
- National Agricultural Investment Programme (PNIA) II (2018-2025). (Ivory Coast).

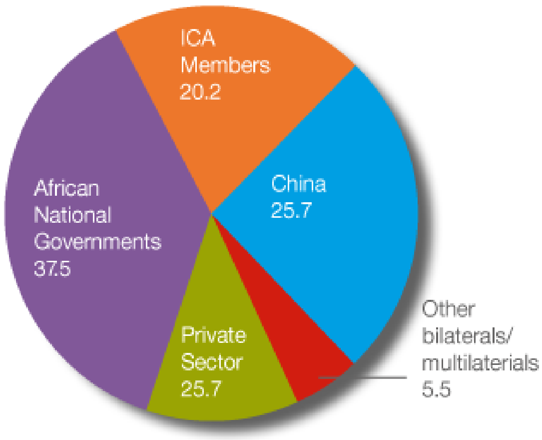
Most of these public investment regulations and policies present concrete guidelines and programmes to accelerate growth by means of public funding mechanisms at regional level. This summary of schemes should be taken into consideration by BIO4AFRICA's exploitation activities and serve as potential sources for external contribution when developing the BIO4AFRICA accelerator.

Impact investment support schemes based in targeted BIO4AFRICA countries

From an impact investment perspective, there are many organizations already present in Africa seeking for simultaneous positive financial and environmental and social returns on their companies' portfolio. Although most of these organizations are equity-based private entities, institutional investors such as banks are also shifting to this investment criteria.

In 2021, the value of equity funding deals closed in Africa amounted to around €2.4 billion. The top region for agriculture-related equity financing deals in Africa was East Africa, with up to 44% of total deals in the continent. Southern and Western Africa followed with 28% and 18% of the total deals, respectively. (Magnitt, 2021).

As of January 2021, foundations and non-governmental organizations represented the leading source of funding to support the response to COVID-19 pandemic in Africa, allocating nearly €87 million (around €70 million have been spent).



Within the business ecosystem, tech startups raised over €1.9 billion in 2021, with a special focus on the fintech sector, which received the largest market share in 2020 with a 31% of overall funding received, followed by startups in the cleantech sector, owning a 22% of total funding amount, and the healthcare sector, comprising a 9% of startup funding. (Statista, s.f.).

Figure 7. Distribution of infrastructure funding in Africa as of 2018 (%), by Infrastructure Consortium of Africa (ICA)

In relation to infrastructure projects, most recent public figures as of 2018 shown that national governments surpassed the market of €90 billion in 2018, a 24% increase from 2017. National governments represented a share of 37% of the total, followed by China, contributing with 25% of the amount allocated to infrastructure projects in the continent.

In recent years, private impact investment has started to be perceived as a consolidated financing criteria for many private funding actors across Africa. Foreign private organizations such as Open Value Foundation, a Spanish-based for-profit association seeking to invest in profitable projects which can be measured in terms of impact, have been thriving, by means of engaging these new investment practices within the continent. For Impact Investing to happen, both private and public investors need to rethink the eligibility criteria of their investees in terms of the positive impact they bring to environment and society, while providing positive financial returns simultaneously (Figure 8).

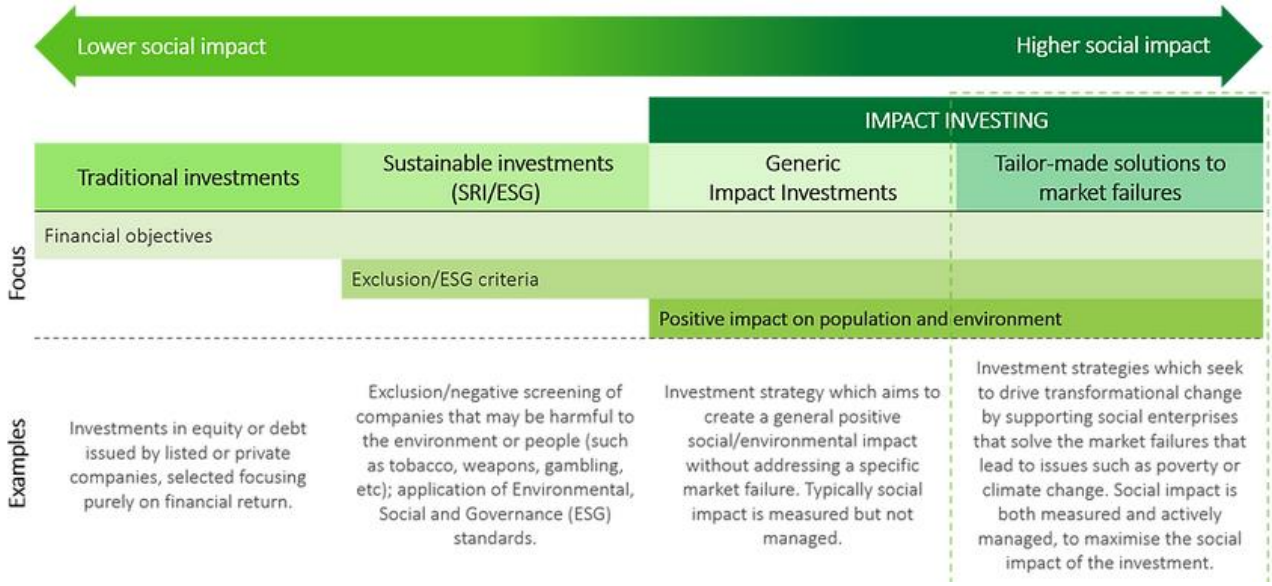


Figure 8. Open Value Foundation approach on Impact Investing

Additionally, Figure 9 shown below provides a table summarizing a characterization of the different types of impact investments actors that can be found in the African continent, classified by organization type and industry focus.

Organization Type	Typical Financial Products	Typical Sector Focus in Africa	Estimated investment in 2013	Examples
Dedicated Early Stage Impact Funds	Equity, debt, quasi-equity, inventory finance, and grants for relatively early stages of enterprise. Typical deal size: US$50,000- US$2 million.	Access to basic services (food, health, education, water, energy) and social/ human development	81 funds accounting for US$600 million[54]	▪ Acumen Fund ▪ Tony Elemulu Foundation ▪ LGT Philanthropy ▪ Root Capital ▪ Gatsby Charitable Trust
Private Equity (Impact) Funds	Equity investment SMEs in growth stage – deal size: US$5-80 million	Infrastructure projects, Agriculture, Telecom, Retail, Financial Services,	86 funds, US$1. 8 billion[55]	▪ Abraaj Africa ▪ Phatisa ▪ Ariya Capital ▪ Harith
Development Finance Institutions	Equity, debt, mezzanine quasi equity, and guarantees. Fund investments: US$50-200 million. Direct investment: US$5-50 million.	Infrastructure, Agriculture, social – governmental and environmental initiatives,	18 DFIs, estimated US$7 billion[56]	▪ IFC ▪ CDC ▪ Sifem ▪ AfDB ▪ FMO ▪ AFD
Foundations	Equity, debt, grants, quasi equity for seed stage and market building. Typical deal size (direct investment) US$50,000- 1 million.	Access to basic services (food, health, education,) social/ human development, and market creating initiatives (associations, accelerators, competitions, networks, etc.).	N/A	▪ Gatsby Charitable Foundation ▪ Omidyar Network ▪ Shell Foundation ▪ Africa Enterprise Challenge Fund ▪ Bill & Melinda Gates Foundation
Institutional Investors	Direct investment: providing co-investments through debt (banks) or invest in funds (pension and insurance funds). Deal size: US$1-200 million[57]	Projects (agriculture, energy, water, transportation, telecom) and growth stage of financial services, retail, real estate.	N/A	▪ South Africa PIC ▪ TIAA CREF ▪ Equity Bank ▪ JP Morgan

Figure 9. Impact investment actors with presence in Africa. Extracted (UNDP, IMPACT INVESTING IN AFRICA: Contraints, trends and opportunities, 2020)

Some of these entities will be defined in more detail in Section 3, according to regional exposure and potential for exploitation and further dissemination of the BIO4AFRICA project.

Savings and Credit Cooperative Organization/society (SACCOs)

As part of one of the outcomes in Task 1.1, the cooperative movement showed to be taking effect in Africa. These cooperatives are stakeholder groups usually consisted of farmer producers, which, following registration and forming producer-based partnerships among them, upgrade to the so-called Savings and Credit Cooperative Societies (SACCOs).

SACCO members are entitled to request specific services, such as business plan development services (market access linkages, business diversification training, etc) mainly provided by trade officials from Government or private firms (as the ones shown in Figure 9). They also identify model champions /farmers who are tasked with recruiting additional members.

SACCOs, as part of the present group of farming associations boosting SME and smallholder agriculture growth across the African countries, have demonstrated to have an impact on business activities under specific studies conducted, (Bizikova & Nkonya, 2020). The International Institute for Sustainable Development conducted a scoping review of 239 studies on Farming Organizations (FO) across 24 countries, published between 2000 and 2019 (80% of the total since 2010). 67% of studies (161) reported only cases of improvement (in one of more impact categories, see Figure), associated with FO membership, where 58% of the total identified positive impacts linked to income.

However, a recent study conducted by Feed the Future, underlines that SACCOs are currently missing contingency plans, to prevent loss of potential in products generated and loans granted. The African Confederation of Cooperative Savings and Credit Associations (ACCOSCA), the Pan-African confederation of national associations of savings and credit cooperatives representing SACCOs from twenty-seven different countries across Africa, has emphasized in the recent years the need to strengthen National Associations and policies driven to improvements in data management and innovation inclusion to boost sustainable growth in SACCOs. (AMFIU, 2022).

For the countries targeted within the BIO4AFRICA project, the main members representing the SACCO ecosystem within the ACCOSCA committee and recognized as organisation of reference by the country of origin are the following:

- Ghana Co-operative Credit Unions Association (CUA)
- Uganda Cooperative Savings and Credit Union (UCSCU)
- Association Nationales Des Crep Et Coopec de Cote d'Ivoire (ANAC-CI)

No representation for Senegal has signed up as member for the ACCOSCA as of today.

More specifically for the agricultural sector, a recent rising trend on Seed-producing Cooperatives has been observed in Western and Central Africa, regions where the adoption rate of quality seeds remains relatively low. These cooperatives' aim is mainly focused in seeking funds to improve current solutions that can boost seed quality.

Below, Table 1 displays a classification of main farm cooperatives focused on seed raising, number of producers and farmers reached both in Senegal, Côte d'Ivoire and Côte d'Ivoire regions targeted within BIO4AFRICA. The results correspond to a study conducted by the AFD in 2018, with a total sample of 54 seed-producing cooperatives reached.

Table 1. Classification of key farmer cooperatives related to feed raising

COUNTRY	NAME	No. members	No. Seed producers	Crop type
Côte d'Ivoire	Société Coopérative des Producteurs de Riz de Yamoussoukro (COPRORIZ COOP SA)	298	93	Rice
	Société Coopérative Chongagnigui	4236	160	Rice, Maize, Vegetables
	Société Coopérative Womiengon de Korhogo	2000	120	Rice
Ghana	Seed Producers Association of Ghana (SEEDPAG)	197	110	Maize, Rice, soybean, cowpea, sorghum, groundnut
	Peasant Farmers' Association of Ghana (PFAG)	38,740	260	Soybean, cowpea
Senegal	Coopérative Agricole de Kelle Guèye (COOPAKEL)	5,217	500	Cowpea, millet, sorghum, groundnut
	Coopérative agricole de Diendé (COOPAD)	5,212	60	Maize, rice, groundnut, fonio, sorghum
	Coopérative de Kahi	800	800	Groundnut, sorghum, millet, maize
	Coopérative de Paoskoto	794	794	Groundnut, maize

In Côte d'Ivoire, the legal basis for cooperatives was established in the 1970s. Further formalization came with the 1997's Organization for the Harmonization of Business Law in Africa (OHADA) Act on Cooperatives that introduced governance conditions and an audit system. This study focused on seed and crops produced within cooperatives comprised that, in 2017, there were 3,867 formally recognized agriculture cooperatives, of which 77% produce coffee and cocoa. Only 6% produce staple crops such as rice, maize, and cassava.

In Ghana, prior to 1990, the public sector dominated the seed sector in Ghana. The 2010 Plants and Fertilizer Act promoted the private sector's role in the seed industry. In contrast to surrounding countries, Ghana has limited, if any, seed farmer cooperatives, according to the National Seed Trade Association of Ghana (NASTAG, 2022). This is likely because of limited attention for the cooperative model in the 2010 Act. Many seed-producing farmers operate individually in out grower schemes, producing seed for local enterprises. These farmers can join the Seed Producer Association of Ghana ((SEEDPAG, 2022)) as well as the Peasant Farmer Association in Ghana (PFAG). These organizations have the potential to support further development of the cooperative model in Ghana.

In Senegal, farmer cooperatives are grouped under two major umbrella organizations: Association Sénégalaise pour la Promotion du Développement à la Base (ASPRODEB, 2022) and Réseau des Organisations Paysannes et Pastorales du Sénégal (RESOPP, 2022). ASPRODEB is the largest network and has set up 34 cooperatives producing certified seeds across the country. These cooperatives were regrouped in December 2009, to create the National Network of Seed Producers' Cooperatives (RNCPS), currently setting up a dozen seed-producing cooperatives across the country. ASPRODEB cooperatives hire technical teams from the umbrella organization and pay for their services themselves, whereas RESOPP's technical support teams are paid by the umbrella organization.

In the current context, credit unions have been benefitting from recent digitalization trends in Africa. For instance, the Kenyan fintech Kwara has designed a neobank app to help credit unions in the East African state shift to digital platforms, (Quartz Africa, 2022). This way, individuals can also be able to sign up with their preferred credit unions to access various financial services. The level of funds raised by these fintech start-ups demonstrates the level of interest and opportunity there exists in the sector and the future of digitization of cooperatives and SACCOs growth.

Table Banking

Table banking has been an extended practice in the recent years in the African continent. Table banking is usually consisted of a group-based funding strategy where members (most of them are comprised by women, in countries such as Kenya, this figure reaches the 97%), (Borgen project, s.f.). This practice is considered an informal way of financing, since members are not formally registered and trade is usually made based on trust and under member's own terms, subject to the regional conditions and community practices.

Contrary to SACCOs, most of table banking members lack training on business development. In most countries, the need of these groups is the consequence of the lack of access to formal banking due to limiting financial conditions set up by banks. Most of these women are habiting in rural areas with no access to land, so table banking represents an opportunity for them to organize repayment pipelines and access to low interest rate loans offered by banks, without the need to go through microfinance institutions. When a member of a table banking group gets into difficulties repaying an existing loan, group members assist them to overcome them, consequently making the loan repayment rate higher. Overall, table banking is thought as a "smart economics" approach, targeting the existing gender gap as well as the financial gap there currently exists across the African business ecosystem in rural communities.

In Kenya, table banking has raised popularity, considered as a proven method which is able to bring quantifiable impact on the entrepreneurship ecosystem across the country. Active projects such as the Equitable Prosperity – Maendeleo Sawa (M-SAWA), co-funded by Mennonite Economic Development Associates (MEDA) with funding Global Affairs Canada (GAC) have made over €16.5 million available to small and medium-sized enterprises, where more than 20,000 small entrepreneurs are benefitting – 52% of which are women, mostly organized in table banking groups, (Government of Canada, 2020). According to Joyful Women Kenya, table banking groups are circulating approximately 60-80 million Kenyan shillings (around €720,000), (MEDA, 2020).

In Ghana, according to the Savings Groups' Information Exchange (2019), there are 24,587 savings groups in Ghana comprised of 645,534 members (an average of 26 members per group). The Village Savings and Loan Association (VSLA, 2022) is one of the main organisations with presence in the country which provide simple savings and loan facilities for table banking groups and rural communities. These activities target mostly women, who constitute 76.4% or 493,188 members of the total membership of saving groups, (World Cocoa Foundation, 2020).

In the case of Senegal, a recent study conducted by the World Bank Finance and Markets workgroup in collaboration with the Ministry of Finance Economies and Plan of Senegal showed the Senegalese business population frequently use informal finance systems instead of formal financial instruments, 29% out of total sample surveyed claimed to be borrowing loans from funding and financing mechanisms, with a 19% coming from informal financing mechanisms (World Bank Group & Senegal Government, 2017). In Senegal, one of these mechanisms is "Tontine" (Resilient Digital Africa, 2020), a system which has raised popularity in the last decades to boost women entrepreneurship. The tontine system works as participants contribute sums of money and take turns to collect the "prize", that is, the funding amount. Consequently, this is considered a microfinance mechanism where interest rates can remain low for the beneficiaries while the loan repayment rates are high, since repayment is culturally based on social and community pressure, (GulfNews, 2017). In this new scenario and with the tontine system raising, companies such as E-tontine, an e-commerce Senegalese platform covering financing needs across rural communities is thriving. The company reported in 2018 to have gained a turnover of 50 million FCFA (nearly 77,000 €), with a current exposure of 2,500 members in Senegal, with a strong majority of women.

As for the cases of Côte d'Ivoire and Uganda, although recent efforts have been made both for national institutions and private sector companies, table banking is not considered a practice as extended as in the previously mentioned countries. For instance, in Uganda, the dfcuBank has designed land product for women to acquire land and build their collateral, the Women in Business programme (WIB), where female SME owners can trade as sole land proprietors holding 50% of shares and above, having lent over €18 million to women entrepreneurs. On the other hand, the Ivorian government has been boosting most of the women-led businesses across the country in recent years where omen self-employed individuals account for 61% of the total. However, they only represent one third of business owners. Therefore, the government has come with recent initiatives focused on financing women-led performing in rural areas, such as le Fonds d'Appui aux Femmes de Côte d'Ivoire (FAFCI) and le Fonds National Femme et Développement (PGNFNFD) to encourage entrepreneurship and reduce lack of access to formal banking instruments.

3. Financing and funding supporting schemes

In this section, a selection of private and public mechanisms has been identified and gathered, according to approximate funding amount, eligible country, and beneficiary. The different tables have been stored in an internal Excel file. The file will be updated on a regular basis by SIE and its know-how will be transferred to other WPs, for any potential upcoming opportunities arising from the stakeholders engaged around the pilot case regions, and other entrepreneurs and industry leaders participating in the future BIO4AFRICA Accelerator programme.

Table 2. Development banks and agencies and national organisations with funds for internationalisation

Name	Region coverage	Field focus	Funding details
[African Development Bank (AfDB) – Agriculture Fast Track Fund (AFT)]()	Mozambique, Côte d'Ivoire, Ghana, Tanzania, Ethiopia, and Burkina Faso.	The overall Bank Group Vision for Agriculture and Rural Development is to strive to become the leading development finance institution in Africa, dedicated to assisting African regional member countries in their poverty reduction efforts. Current initiatives in *Agriculture and Agro-industries* area leading the way for climate-smart agricultural adaption across Africa.	Among its many initiatives (mostly country-focused), a broader approach is the Fast Track Fund (AFT), approved by 2013 with an overall fund volume of US $23 million (grants between $500,000 and $1,000,000) with USA and Sweden as main financial contributors. The fund focus was mainly to contribute to food security and support smallholders.
[African Development Bank (AfDB) – Africa SME Programme]()	All Africa	The Africa SME Programme supports African local Financial Institutions (FIs) with long term liquidity (Lines of Credit) and with technical assistance to be able to successfully provide relevant financing to local small and medium sized enterprises (SMEs) and to build larger and good quality SME loan portfolios.	A multi-year programme to be extended, The Africa SME Programme is initially a 4-year Program but may be extended depending on its operational performance. It will seek to identify and process requests to support up to 25 Financial Institutions with a total Programme envelop amount of US $125 million. A portion will be dedicated to financial institutions focusing on women entrepreneurs.

[United States Agency for International Development-feed the future – USAID](#)	All Africa	In support of America's foreign policy, the U.S. Agency for International Development leads the U.S. Government's international development and disaster assistance through partnerships and investments that save lives, reduce poverty, strengthen democratic governance, and help people emerge from humanitarian crises and progress beyond assistance.	Financial intermediaries are ACDI/VOCA. Allocated fund of 72 $Million.
[Agence Française de Développement](#)	**All Africa**	AFD's aim is to facilitate the demographic transition through its financing. The objective is to strengthen everything that can promote social cohesion: sexual and reproductive health services, family, education, training policies, etc.	The agreement, which runs for five years, from 2021 to 2026, targets an indicative amount (€2 billion) in co-financing over its first three years. It will complement the current partnership between both institutions through mutual understanding, by facilitating staff exchanges, sharing knowledge, and jointly organizing events. The existing partnership already covers such key sectors as infrastructure, water and sanitation, agriculture, and the private sector. The new agreement supersedes an earlier framework agreement signed in November 2015
[Netherlands International Cooperation – NTF V Programme](#)	Senegal, Ethiopia, Ghana, Ivory Coast, Benin, Mali, Uganda.	The NTF V programme builds on the results achieved under the NTF IV programme (2017-2021), also funded by the Netherlands. NTF IV supported more than 8,000 jobs at beneficiary companies and generated more than $60 million in	The partnership, called the Netherlands Trust Fund V (NTF V), will contribute to this structural transformation in agribusiness and related value chains. It will support thousands of small businesses

		revenue in Guinea, Liberia, Senegal, Sierra Leone, and Uganda. More than 1,600 small and medium-sized enterprises and entrepreneurs made changes to their business operations to enhance competitiveness, and more than 1,200 market linkages were created.	and tens of thousands of jobs, thereby creating entrepreneurial opportunities for women, youth, and poor communities. NTF V, with a contribution of the Government of the Netherlands of $15 million, was signed by Steven Collet, Director for Sustainable Economic Development, Ministry of Foreign Affairs of the Netherlands, and Pamela Coke-Hamilton, the Executive Director of the International Trade Centre.
Denmark's Development Cooperation – Youth Entrepreneurship and Innovation Fund of AfDB	All Africa	Youth Entrepreneurship and Innovation Trust Fund was established in November 2018 to provide grant financing in support of the Bank's Jobs for Youth in Africa Strategy. The Fund for Countries in Transition was established in 2012 to support countries in transition that are undergoing deep institutional changes. The Sustainable Energy Fund for Africa provides technical assistance for the preparation of bankable renewable energy projects.	Initial contributions came from Denmark and Norway in 2017. In 2018, the Fund welcomed the Governments of Sweden, the Netherlands and Italy as additional donors, and now has nearly $40 million. The Fund's initial lifespan is from 2017 through 2025. Approved proposals will receive grant funding of more than $7.3 million to operationalize their activities, creating several new enterprises and an estimated 20,000 jobs for youth across the continent.

Ireland Policy for International Development – Ireland's Strategy for Africa to 2025	All Africa	As part of the Irish Government Foreign Affairs policy, Ireland will build stronger political partnerships with African countries to address national, regional, and global challenges.	An area of focus if the Africa Agri-food Development Programme, funding projects where Irish firms build meaningful partnerships with African companies and use expertise and resources for a strong development impact. Projects can receive funds up to €250,000 per company for a full project and up to €100,000 for a feasibility study.
EIB Global	All Africa	Combined all the past funding programs: EFSI, CEF Debt Instrument, CEF Equity Instrument, COSME, Innovfin, Private finance for Energy Efficiency Instrument, Natural Capital Financing Facility, EaSI capacity building investments, EaSI Microfinance and Social Enterprise Guarantees, Student Loan Guarantee Facility, Cultural and creative sectors Guarantee Facility	Trilateral alliance between World Health Organization (WHO) and the European Investment Bank (EIB), in close cooperation with the European Commission (EC) and the African Union, announced in 2022 a strong partnership aimed at mobilizing 1€ billion of investment to support countries in closing the health funding gap, building resilient health systems based on a solid foundation of Primary Health Care (PHC), to help them reach the health-related Sustainable Development Goals (SDGs).
Norwegian Agency for Development Cooperation	Angola, Democratic Republic of Congo, Ethiopia, Kenya,	Norwegian Ministry of Foreign Affairs and Norwegian embassies, eligible beneficiaries are organizations within civil	Grant-based programmes with not fixed amounts specified.

	Liberia, Madagascar, Malawi, Mali, Mozambique, Nigeria, Somalia, South Africa, South Sudan, Sudan, Tanzania, Uganda, Zambia, Zimbabwe	society, research, higher education, and private sector development that work with partners in developing countries.	
International RDI technological projects– CDTI (government of Spain)	Algeria, Cabo Verde, Ivory Coast, Egypt, Ghana, Mauritania, Morocco, Senegal.	Bilateral R&D projects in international technological cooperation with unilateral certification and monitoring are projects carried out by formally constituted international consortia, with the participation of one or more Spanish companies that effectively collaborate in an R&D project with the eligible beneficiaries.	The funding modality for the project will be Partially Reimbursable Aid, with financial cover of up to 75% of the total approved budget which, by way of exception, may amount to up to 85%. Such aid may comprise a non-reimbursable tranche (NRT) which shall depend on the characteristics of the project and the beneficiary. The minimum fundable budget is around €175,000. In the case of projects run by a consortium or an EIG, the minimum budget for the project will be around €500,000.
Spanish Ministry of Industry, Commerce and Tourism – FIEM fund	All Africa	Its purpose is to promote the export operations of Spanish companies, as well as Spanish direct investment abroad, by financing operations and projects. It is one of the instruments	Since 2011, 33 operations have been approved in Africa for an amount of €711.76m. In global terms, Africa accounts

		that make up the official support system for the internationalization of the Spanish economy based on the granting of direct financing.	for 34% of the total EMFF portfolio and Sub-Saharan Africa for 13.84%.
COFIDES: Fondo para Inversiones en el Exterior (FIEX)	All Africa	Contributing to the internationalization of Spanish companies and to development by financing private investment projects or supporting the management of development instruments, its activity in Africa accounts for 2% of its portfolio, with a high concentration in the North African region, and its main sectors of activity are water and sanitation, infrastructure, renewable energies, agribusiness, and agricultural and industrial value chains.	Available funding amount: €250.000-€30.000.000
COFIDES: Fondo para Operaciones de Inversión en el Exterior de la Pequeña y Mediana Empresa (FONPYME)			Available funding amount: €75.000-€5.000.000
COFIDES: Green Climate Fund (GCF).	All Africa	The Green Climate Fund is a body of the United Nations Framework Convention on Climate Change (UNFCCC) that finances climate change mitigation and adaptation projects in developing countries. The GCF is the main fund for climate finance, mobilizing $100 billion by 2020, promoting a significant shift to low-carbon and climate-resilient development pathways through country-driven programmatic approaches.	No data on funding amounts available
EIB – I&P African Entrepeneurs	Francophone Africa and Ghana	The Fund’s objective, boosted by the EIB, is to foster the development of the private sector by supporting micro, small and medium-sized enterprises with both funding and technical assistance, while applying high Environmental and Social standards in the selection and monitoring of the investments.	The target €50 million fund will take equity participations and lend to Small and Medium Sized Enterprises in francophone Africa and Ghana, and to Microfinance Institutions in Africa at large.

			In addition to capital, the Fund will bring technical, strategic, and operational support to the investee companies. EIB is financing up to €7 million.
[The global Forum on Agricultural Research and Innovation (GFAR) – DeSIRA Initiative]()	All Africa	GFAR's work is directed to meeting the needs of small farmers research and innovation needs. FAO and IFAD are facilitating partners. *DeSIRA* Initiative (The Development of Smart Innovation through Research in Agriculture) is a collective body funded by the European Commission (EC) formed to contribute to climate-relevant, productive, and sustainable transformation of agriculture and food systems in low and middle-incomes countries.	The European Commission allocates funding through the "Development of Smart Innovation through Research in Agriculture" (DeSIRA) initiative in the form of grants, representing around €300 million in total, to multiple organizations across diverse sectors.
[National Entrepreneurship and innovation Programme Ghana (EIP)]()	Ghana	The National Entrepreneurship & Innovation Programme (NEIP) is a flagship policy initiative of the Government of Ghana. Its primary objective is to provide an integrated national support for start-ups and small businesses.	Under the NEIP Business Support Programme, 45,000 businesses (7,000 in Window 1, 12,000 in Window 2 and 26,000 in Window 3) have received training and incubation services in the following areas: • Business Management • Financial Management & Basic Bookkeeping • SalesMarketing & Branding • Business Plan Writing • Organizational Management

			• Corporate Governance, etc.
[IFAD – Financing Facility for Remittances (FFR)]()	Gambia, Ghana, Senegal	Through its over US$60 million fund, the FFR works to reduce poverty and promote development by leveraging both international and domestic remittances and migrant capital in rural areas of developing countries. In this context, the FFR intervenes in Africa through the Platform for Remittances, Investments and Migrants' Entrepreneurship in Africa (PRIME Africa), a programme co-financed by the European Union, with the aim to reduce inequality and enhance financial inclusion in Africa through the reduction of remittance costs and the maximization of their impact.	Currently, National Calls for Proposals 2021 will finance grants from **€150,000 up to €500,000**.
[LEAP-RE: The Long-term Europe-Africa Partnership on Renewable Energy]()	All Africa	The LEAP-RE Joint Call 2021 will fund basic research, applied research and experimental development projects that are 12-36 months long. However, applicants should be aware that each funding agency participating to the Call will apply its own rules and regulations regarding eligibility and criteria (nationality, thematic, nature of project, TRL, rate of subsidy, etc.)	European Union´s Horizon 2020 Research and Innovation program under Grant Agreement 963530 (Funded under LC-SC3-JA-5-2020 - Long Term EU-Africa Partnership for Research and Innovation actions in renewable energy) €11 million provided by funding organizations + €6 million from EU contribution
[AECID – Agencia Española de Desarrollo]()	All Africa	The V Plan Director de la Cooperación Española is focused on drafting differentiated plans according to specific characteristics of countries: bilateral and regional.	In Africa, among the AECID regional-focused strategies are key regions such as West Africa and Sahel.

Table 3. European Commission supporting mechanisms: Coming European-African Horizon Europe Calls

Call Name	ID/ Topic of focus	Deadline
AU-EU Energy System Modelling **HORIZON-CL5-2022-D3-02-02**	[Sustainable, secure, and competitive energy supply (HORIZON-CL5-2022-D3-02)] Project results are expected to contribute to all the following expected outcomes: • Reinforce the activities in the long term the AU-EU HLPD CCSE Partnership. • Provide knowledge and scientific energy system modelling as evidence base including the environmental, social, and economic trade-offs to contribute to R&I strategy and policy making. • Increase clean energy generation in the African energy systems. • A permanent network of African experts and expertise in this area.	27 October 2022
Decision-making processes of (aspiring) migrants HORIZON-CL2-2022-TRANSFORMATIONS-01-04	[A sustainable future for Europe (HORIZON-CL2-2022-TRANSFORMATIONS-01)] Projects should contribute to all the following expected outcomes: • Enhance EU migration policy by shedding light on micro- and meso-level drivers of migration. • Assess how far policies consider behaviors of migrants when aiming at regulating migration. • Show how migration decisions change along the journey, and at what stage policies are more likely to play a role in shaping migration outcomes.	22 April 2022

Public policies and indicators for well-being and sustainable development	**A sustainable future for Europe (HORIZON-CL2-2022-TRANSFORMATIONS-01)** Projects should contribute to all the following expected outcomes: • An empirical analysis of different processes of economic growth, identifying the extent to which they are inclusive and sustainable (determinants of social, economic inclusion and environmental impacts). • A theoretical assessment of the linkages between the standard economic growth paradigm and the dimensions of sustainable development (social, economic, health and environmental). • Pave out possible avenues for the taking up of a novel growth framework to support inclusive and sustainable policies.	20 April 2022
Global governance for a world in transition: Norms, institutions, actors	**Reshaping democracies (HORIZON-CL2-2022-DEMOCRACY-01)** Projects should contribute to both of following expected outcomes: • Support the European Union's role in leading the transformation and defense of multilateralism by identifying and analyzing policy avenues for a more robust, democratic, and effective global governance. • Develop policy recommendations, institutional frames, toolboxes, narratives, and methodologies for supporting action towards transnational democracy.	20 April 2022
Improved impact forecasting and early warning systems supporting the rapid	**Disaster-Resilient Society 2022 (HORIZON-CL3-2022-DRS-01)**	23 November 2022

deployment of first responders in vulnerable areas	Projects' results are expected to contribute at least three of the following outcomes: • Comparison of measures and technologies to enhance the response capacity to extreme weather and geological events (including local measures and warning systems) affecting the security of people and assets. • Adjustments of warning and response systems in the light of cross-disciplinary cooperation, involving planning authorities and first responders, to better manage the rapid deployment of first responders and communication to citizens in vulnerable areas in the case of extreme climate events or geological disasters. • Timely operational forecasts of severe (short-term focus) extreme weather events (e.g. floods, hot waves, storms, storm surges) or geological hazards (e.g. volcanic eruption, earthquake, tsunami) to aid planning authorities, civil protection agencies and first responders in their decision-making. • European-scale multi-hazard platform to facilitate the identification of expected natural hazards with great specificity in time and space and improve science communication for boosting interactions between scientists, general media, and the public. • Methodologies to integrate innovative state-of-the art early warning systems into existing tools for decision-making and situation reporting already used by civil protection authorities from international to local level.	
Testing of the ERA Hub concept – pilot phase	HORIZON-WIDERA-2022-ERA-01-30 Projects are expected to contribute to the following outcomes: • Test the new ERA Hubs[1] concept across different geographies and structures in Europe, based on common compliance criteria; the process should act as an incentive for advanced ecosystems to seek recognition, and for less advanced ecosystems to reach the criteria facilitating support from European, national and regional level.	20 April 2022

	• Better coordinate relationships between the European Research Area and relevant national or regional stakeholders to ensure the smart directionality introduced in the new ERA. • Develop a common platform for collaboration and best practice sharing across borders, sectors and disciplines on knowledge production, circulation, and use, and facilitate cross-fertilisation and smart directionality among ecosystem actors to achieve transformative changes and advance Europe together. • Increase both the interoperability of the European ecosystems and the intra-operability within each territorial ecosystem, aiming to improve coordination, and foster excellence. • Facilitate a better circulation and absorption of talents in countries/regions, as well as improve knowledge circulation and uptake of research results. • Provide a toolbox of best practices for researchers, innovators, industry and institutions across Europe to cooperate.	
Gender and social, economic, and cultural empowerment	**A sustainable future for Europe (HORIZON-CL2-2022-TRANSFORMATIONS-01)** Projects should contribute to both of the following expected outcomes: • Achieve a better understanding of gendered power relations across the social and economic spheres, considering intersections between gender and other social categories such as ethnicity, social origin, disability and sexual orientation, and the cumulative effects of multiple forms of discrimination and disadvantages. Provide evidence base about the role of education and the media in perpetuating or breaking stereotypes.	. 20 April 2022

	• Help reverse socio-economic and cultural inequalities and promote gender equality, thus supporting the realization of the global 2030 Agenda's Sustainable Development Goal 5 on achieving gender equality and empowering all women and girls.	

Table 5. Private financing schemes

Name	Topic focus	Investment criteria
Foundation Grameen Crédit Agricole	The Foundation grants loans or guarantees to microfinance institutions, social impact enterprises. Present in Africa, Asia and Europe, the Foundation primarily funds organizations serving primarily women and rural populations.	Approx. funding amount: 78.4EUR million. At the heart of the Foundation's action is female entrepreneurship and the development of rural economies: of the 7 million clients of the microfinance institutions supported, 73% are women and 85% live in rural areas.
GAWA Capital	GAWA Capital has extensive investment in Ghana, where it has advised more than 48 investments in 16 countries around the globe, reaching over 9 million people in total.	Impact investment advisory firm focuses on building opportunities for low-income communities via investments in social companies. With EUR 204 million advised, businesses boosting socio-economic development in emerging countries whilst also providing a financial return to investors are the main target.
Acumen Fund	Founded in 2001 with seed capital from the Rockefeller Foundation, the Cisco Systems Foundation and individual philanthropists. The organization operates from offices in Accra, Karachi, Mumbai, Nairobi and New York.	Acumen focuses on early-stage debt or equity investments in enterprises that provide low-income customers with access to healthcare, water, housing, alternative energy or agricultural inputs. Today, commitments generally range from US$300,000 to US$2.5 million per investee with an expected payback time frame of five to

		seven years. Despite taking a minority stake in most of its investments, Acumen's provides extensive hands-on management support.
[Tony Elumelu Foundation]()	African-based, African-funded philanthropic organization. Founded in 2010, its mission is to support entrepreneurship in Africa by enhancing the competitiveness of the African private sector. TEF has recently begun placing impact investments, and currently has 3 investments in its portfolio.	TEF investment will affect up to 125,000 local smallholders by providing them with clean seed potatoes resulting in 3-5 times the current yields and stimulate farming a crop that has been neglected for over 30 years. In addition, MFL will improve local farmers' access to inputs and technology; create infrastructure to help bring their products to market; and contribute to the development of the Southern Tanzanian Highlands – one of the most promising underutilized areas of agriculture production in East Africa.
[Open Value Foundation]()	It's a small Spain-based fund focused on a Venture Philantrophy model, raising small funds for domestic projects in located areas across Africa.	It connects small businesses providing social economic returns with seed investors. It has an extensive network of investing actors and deep knowledge on impact measurement to improve investment eligibility.
[Melinda and Bill Gates Foundation]()	Working alongside national governments, local organizations, and other partners across Africa, we contribute funding and scientific expertise in support of their goals for change.	Blended finance (loans and venture capital) distributed into a 9.7$ billion funds. Areas of focus: Burkina faso, Ethiopia, Kenya, Nigeria, South Africa.
[UNICEF Innovation Fund]()	Since its establishment, the Innovation Fund has made investments in open-source solutions that have the potential to improve the lives of children. The Innovation Fund invests in technology start-ups from new and emerging markets and will continue to grow its portfolio. UNICEF Country Offices have also received investment leveraging significant co-funding from other sources.	Early-stage fund investing. Applications open in a bi-annual basis for tech-based start-ups and small businesses targeting developing areas. Usually, an average of 100k equity-free fund can be provided to sole beneficiaries.

MCE Social Capital	MCE was founded in 2006 on the belief that loan guarantees could potentially unlock millions of dollars in private sector capital for high-impact businesses and entrepreneurs tackling complex issues in developing countries around the world. Philanthropic guarantees enable MCE to leverage the excellent credit of high-net-worth individuals and foundations (our Guarantors) to borrow capital from U.S. and European financial institutions and accredited investors.	Loan and equity-based model with a special focus on investing targeted to women-lead and rural small businesses. Average funding is 1.8k.
Aceli Africa	Bridging the finance gap and unlocking the growth and impact potential of agricultural SMEs in Africa. Country representative in Uganda.	Community of transnational institutions as funding members (USAID, Netherlands Government, UN Feed the Future…) connects associations of smallholders with investing actors.
Council on smallholder agricultural finance (CSAF)	Facilitate market growth to meet a greater share of the vast financing need for agricultural SMEs globally	CSAF members lend to agricultural small and medium-sized enterprises (SMEs). These enterprises vary in size (annual revenues range from $250K to well over $10M) and structure (from producer organizations to private enterprises).
RSF's Social Investment Fund	Social investment fund offering loans to enterprises creating deep social impact in the communities they serve	Minimum investments of 1k.
Calvert Impact Capital	Nonprofit investment firm helping all types of investors and financial professionals invest in solutions people and the planet need.	Network connecting small businesses with individual and institutional investors, environmental impact and women-led focused.
Ceniarth	Single-family office focused on funding market-based solutions that benefit underserved communities	The largest allocation of future funds will be dedicated following a impact-led, capital preservation strategy. They maintain a pool of programmatic funds, deployed primarily in the form of PRIs

		(program-related investments) where the risk of capital impairment is particularly high. This pool funds interventions such as early-stage pilots or entry into new, high-risk markets.
Cordes foundation	Connect social entrepreneurs with the resources they need, convene events to strengthen the ecosystems of impact investing and social entrepreneurship, and catalyze 100% of our balance sheet for impact.	Their alternative investments are allocated among debt and equity managers of funds, fund-of-funds and in early-stage social ventures. Traditional investments are allocated among debt and equity managers with robust, integrated diligence processes that analyze financial, environmental, social, and governance factors in publicly traded companies.
Komaza	Carbon sequestration engine services company, promising to provide life-changing economic opportunities for farmers and delivering 80% cost disruption vs. traditional big plantation forestry and VC-worthy IRRs.	Funds are targeted to investees comprising local businesses and retailers looking for a solid source of structural and industrial timber, to foreign buyers on a mission to scale up large infrastructure projects.
One Acre Fund	Non-profit social enterprise that supplies financing and training to help smallholders grow their way out of hunger and build lasting pathways to prosperity.	In 2020, they served 1.3 million farmers directly through our full-service program in Eastern and Southern Africa. We work directly with farmers throughout the year, which generally includes the following: provide quality farm products on credit, which farmers repay over the full growing season, deliver these products within walking distance of farmers' homes, in time for planting and train farmers on the latest agricultural practices and how to sell any harvest surplus.
TechnoServe	Helping smallholder farmers improve the quality and quantity of their crops, linking them to more lucrative markets and training them in business skills.	With presence in over 30 countries, funds are targeting farming businesses related to impact on agriculture, specially in the cashew and cocoa crops industries,

[Injaro](#)	Africa-focused private equity and private credit fund manager. We efficiently deploy capital and solutions to create value for our investors	The Injaro Agricultural Capital Holdings Limited (IACHL) is their private equity fund, established with the aim of carrying out investment activities for advancing the social objectives of alleviating poverty and revitalizing distressed regions in West Africa.
IETP - Investisseurs & Partenaires	Impact investment group dedicated to African Small and Medium Enterprises. Since its creation in 2002, I&P has invested in more than 90 companies, located in 16 African countries, and operating in various sectors of activity	I&P has gradually extended its scope of intervention and now offers a continuum of investment ranging from several thousand euros to 3 million euros. I&P brings its perspective as an investor and develops acceleration programs, with the support of major donors, so that these projects can find the sources of financing necessary for their development and changing of scale.
Kosmos Innovation Center (KIC)	Fund investing in young entrepreneurs and small businesses who have big ideas and want to see their country grow. The center is focused on support Agro-business	With presence in Ghana. Senegal, Côte d'Ivoire and Mauritius, KIC has focused on innovation in agriculture – the country's most important sector and largest employer and has agro-oriented training programmes for farmers and agro-entrepreneurs across such countries.
Ignite Fund	The IGNITE Fund invests in small and growing businesses (SGBs) in fragile and conflict affected states. It is active in Burundi, Ivory Coast, Libya, Liberia, Mali, Rwanda, South Sudan, and Somalia.	It provides small business loans, supported by its partial risk guarantees and co-investments through local financing institutions, while also delivering business incubation and advisory services.
Pearl Capital Partners	A specialist agriculture investment firm that invests in small and medium sized agribusinesses in Mauritius, Uganda and Kenya. It has two funds: the African Agricultural Capital Fund and the African Seed Investment Fund.	Equity, quasi-equity, equity-related and debt investments

Root Capital	A non-profit social investment fund that generates rural prosperity in poor, environmentally vulnerable regions of Africa and Latin America. Root Capital began working in Africa in 2005 with loans to several coffee cooperatives. East Africa is now Root Capital's largest African portfolio, with clients in coffee and other growing areas, including cocoa, nuts, honey, fresh vegetables, and spices.	Lending capital, delivering financial training, and strengthening market connections for small and growing agricultural businesses.
Social Venture Capital Fund (SOVEC)	SOVEC is a fund that invests in local entrepreneurs and SMEs. Its focus countries are Ghana, Zimbabwe and Kenya.	Venture Capital
Willow Impact Investors	Willow Impact Investors is an impact investment firm that manages and advises sustainable social enterprises, SMEs and social impact funds. Its main areas of focus are North and Eastern Africa.	It offers access to capital, expertise, networks and business development services for early-stage growth companies.
The David and Lucil Packard Foundation	Large fund of funds with presence worldwide, targeting social impact investments mostly.	Currently, they have a 7.5Million fund to invest in farming businesses and agriculture smallholders in Ethiopia.
The Global Forum on Agricultural Research and Innovation (GFAR)	Open, collective movement shaping a new future for agriculture and food, to be more efficient, responsive, and equitable towards achieving Sustainable Developments Goals SDG.	Open data about services and datasets, that could be very useful for the participants of the accelerator program.
African Venture Philanthropy Alliance (avpa)	VPA is dedicated to unlocking new capital for social impact across Africa.	A Pan-African network for social investors interested in collaborating to increase the flow of capital into social investments in Africa and ensure that capital (financial, human and/or intellectual) is deployed as effectively and innovatively as possible for maximum social impact

4. Conclusions and next steps

This report intends to serve as preparation material for future BIO4AFRICA's exploitation plans, as well as any form of business replication generated as part of project results.

The funding and financing sources found in this deliverable, as well as the landscape analysis on available funding sources are part of a repository that will be updated upon request by partners and preserved for any material needed to planned activities within the targeted countries.

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