



D4D - AU-EU D4D Hub project

# SUPPORTING DIGITAL TRANSFORMATION IN AFRICA

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## SUMMARY OF ACTIVITIES 2022-2024

JUNE 2024

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### Programme

African Union – European Union Digital for Development Hub (AU-EU D4D Hub)

### Projects

- providing cybersecurity training for key stakeholders in Cabo Verde's digital ecosystem;
- building capacity for public and private institutions in Cabo Verde for the operationalisation of Security Operations Centers (SOC);
- defining a roadmap for setting up a GovTech Lab in Cabo Verde;
- supporting innovation and digital entrepreneurs in the agriculture sector in Senegal;
- exploring technological innovation for climate action in the financial inclusion sector.

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## INTRODUCTION TO THE AU-EU D4D HUB PROJECT

The AU-EU D4D Hub project is the first regional operationalisation of the D4D Hub and preceded the establishment of the African branch of the D4D Hub. This pilot project, implemented from 2020 to 2024, aimed to foster inclusive and sustainable digital transformation in Africa by supporting African institutions through demand-driven technical assistance, knowledge sharing, and multi-stakeholder dialogues, while promoting Europe-Africa collaboration.

The project's objectives have been to promote dialogue between digital ecosystems in Africa and Europe to support participatory policy-making and foster new partnerships in the service of a shared digital future. It promoted exchanges of experience, skills and expertise between African and European stakeholders, in particular through technical assistance aimed at strengthening the capacity of regional and national institutions to draw up and operationalise digital transformation plans, and thus support a human-centred digital journey that meets the challenges of sustainable development.



As the project's implementing partner, LuxDev has developed exchanges with its international partners not only to implement concrete actions, but also to identify areas of intervention for its bilateral cooperation and develop new sustainable partnerships. By supporting efforts in cybersecurity and e-governance in Cabo Verde, support to the AgriTech ecosystem in Senegal, and bringing together experts from both continents to study the role of technological innovation for climate action in the financial inclusion sector, LuxDev has fulfilled its mission of promoting cooperation between Africa and Europe for a human-centred digital transformation.

### COFINANCING

The AU-EU D4D Hub project is co-financed by the European Union (EU), Enabel, the French Development Agency (AFD), the German Federal Ministry for Economic Cooperation and Development (BMZ), the Luxembourg Directorate for Development Cooperation and Humanitarian Affairs within the Ministry of Foreign and European Affairs, and the Estonian Ministry of Foreign Affairs (MFA Estonia).

### IMPLEMENTATION

The implementing partners are Enabel, AFD, Expertise France (EF), the German Agency for International Cooperation (GIZ), LuxDev, MFA Estonia, the e-Governance Academy (eGa), and the Estonian Information Technology and Telecommunications Association (ITL).

This document presents the four projects (one comprising two activities), focusing essentially on technical support and capacity building, implemented by LuxDev as part of the AU-EU D4D Hub project.

# PROVIDING CYBERSECURITY TRAINING FOR KEY STAKEHOLDERS IN CABO VERDE'S DIGITAL ECOSYSTEM



## CYBERSECURITY



### National support action

**Country:** Republic of Cabo Verde

### Technical partner

Luxembourg House of Cybersecurity

**Period:** 01 September 2023 to 31 May 2024

### Details of activities

- training and workshop on managing cybersecurity risks and incidents;
- study visit to Luxembourg's cybersecurity ecosystem for a delegation from Cabo Verde.



Cabo Verde has identified digital transformation as a transversal enabler of sustainable economic and social development. In its 2022-2026 development plan, the country positions itself as a provider of reliable and secure digital products and services for the African continent. As such, governance and security of information and telecommunication systems are priorities to strengthen the country's resilience to cyber attacks.

As part of the AU-EU D4D Hub project, and in partnership with the Cape Verde's Ministry in charge of the Digital Economy, LuxDev organised a cybersecurity training course for professionals from public and private organisations in Cabo Verde. From 30 October to 03 November, 2023, in the capital of Cabo Verde, participants in this training course were able to acquire modern skills in cybersecurity risk assessment. In particular, the course helped to improve understanding of the security incident management process as it relates to information systems management, and to master the techniques and software tools used in responding to cybersecurity incidents. The expertise of the trainers involved, the participative approach to teaching, and the practical and directly applica-

ble nature of the knowledge imparted were particularly appreciated by the participants. This capacity-building initiative was implemented with the support of centres of expertise in the two partner countries, the Luxembourg House of Cybersecurity (LHC), as main partner, and the Cabo Verde Technology Park (TechParkCV), as logistics partner. In addition, a study visit was organised from 11 to 15 March, 2024 in Luxembourg. Aimed at a delegation of managers and directors in charge of cybersecurity from key institutions in Cabo Verde, this tour fostered exchanges with several key players in the Luxembourg cybersecurity ecosystem, complemented by a training course on the protection of critical digital infrastructures, and a crisis simulation exercise in the event of a cyber attack.

These activities have played a crucial role by enhancing cybersecurity skills and knowledge among Cabo Verdean professionals, supporting the Cabo Verdean government's efforts to improve its cybersecurity capabilities and aiming to position the country as a regional centre for digital expertise. For LuxDev, this initiative offered a valuable opportunity to collaborate with a new partner, fostering bilateral cooperation that benefits both Luxembourg and Cabo Verde.



## CYBERSECURITY



### National support action

**Country:** Republic of Cabo Verde

**Logistics partner**  
TechParkCV

**Period:** 15 February 2024 to 31 May 2024

### Details of activities

- specification of requirements in terms of cybersecurity and systems governance;
- formulation and implementation of quick-wins;
- roadmap for the creation of sectoral cybersecurity operational centres in Cabo Verde.



As a key player in digital administration and responsible for many critical infrastructures, the government of Cabo Verde is fully aware of the risks that accompany an increasingly digitised society. This exposure is likely to increase with the imminent arrival of fibre optic submarine cables and the ongoing analysis of the deployment of 5G mobile networks. In this context, cybersecurity is a priority theme in Cabo Verde's digital economy strategy, and the country is relying on its international partners to support its investments in this area.

As part of the AU-EU D4D Hub project, LuxDev has provided Cabo Verde with technical assistance in operating SOC, i.e. setting up teams of IT security professionals who constantly monitor an organisation's entire IT infrastructure and are able to remedy any cybersecurity incident in real time.

Under its technical assistance programme, LuxDev has deployed a team of cybersecurity experts to carry out two field missions with private and public stakeholders in Cabo Verde, in particular regulators and public administrations working in the digital and information management sectors, as well as major companies in the financial and telecommunications sectors. The telecommunications sector was recently hit by a cyber attack that paralysed all mobile services, underlining the urgency and relevance of this international cooperation activity.

The first field mission was an opportunity to conduct a series of interviews and workshops to gain a better understanding of the specific needs of the sectors in question, the current threats and vulnerabilities to IT security, and to discuss the advantages and opportunities for setting up SOC. A detailed analysis was carried out of the challenges associated with the implementation of SOC, coordination at national level, and the provision of human, technical and financial resources. Based on these field studies, the team of experts mobilised by LuxDev drew up a proposal for a comprehensive strategy for the operationalisation of the SOC in Cabo Verde. This framework document was supported by action plans for each sector, including recommendations for quick-wins.

A second field mission was organised from 6 to 10 May 2024 to present the results, and to carry out a series of capacity-building workshops with the stakeholders in order to facilitate the quick-wins implementation at the organisational, operational and systems levels.



# DEFINING A ROADMAP FOR SETTING UP A GOVTECH LAB IN CABO VERDE



## E-GOVERNANCE



### National support action

**Country:** Republic of Cabo Verde

### Logistics partner

TechParkCV

**Period:** 15 February 2024 to 30 May 2024

### Details of activities

- specifying e-governance needs and requirements;
- benchmark of GovTech Labs in five countries;
- roadmap for setting up a GovTech laboratory in Cabo Verde.



Cabo Verde has been recognised as one of the four most advanced African countries in terms of the digitalisation of public services. Since 2003, the government of Cabo Verde has been innovating by adopting a holistic approach to developing digital solutions for government and citizens. The government of Cabo Verde has put in place a set of actions prioritising the digital transformation of the country with a set of strategic frameworks dealing with the digitalisation of public services, including several objectives specifically linked to innovation and e-governance.

These include integrating advanced digital technologies into public services, investing in open innovation, and running pilot projects to test emerging technologies. To achieve its ambitious strategic objectives, Cabo Verde is keen to build the capacity of public and private actors by setting up a GovTech innovation laboratory. As an international partner, LuxDev has mobilised the necessary expertise to provide technical assistance, mainly to the Ministry of the Digital Economy and the Ministry of State Modernisation, but also to other public and private actors.

LuxDev assisted with a comparative study on the requirements for co-creating e-governance solutions, strengthening the innovation process in the public sector, and supporting the growth of the digital industry in Cabo Verde. GovTech Lab Luxembourg was among the examples of best practice and shared its experience with stakeholders in Cabo Verde during capacity-building webinars. These discussions helped to put forward scenarios for setting up the Cabo Verde GovTech innovation laboratory, capitalising on the identified key success factors and the existing resources of the Cabo Verde ecosystem. This initiative opens up promising prospects for cooperation, both nationally and internationally, as well as between the public and private sectors.

## SUPPORTING INNOVATION AND DIGITAL ENTREPRENEURS IN THE AGRICULTURE SECTOR IN SENEGAL



### DIGITAL INNOVATION | IN THE AGRICULTURE SECTOR

#### National support action

**Country:** Republic of Senegal

#### Technical partner

*Délégation générale à l'entrepreneuriat rapide des femmes et des jeunes (DER/FJ)*  
(General Delegation for Rapid Entrepreneurship for Women and Young People)

**Period:** 02 October 2023 to 31 May 2024

#### Details of activities

- capacity building for a cohort of 50 innovators in the agricultural sector;
- acceleration of 10 innovation champions at different levels of the agricultural value chain;
- organisation of a Forum for cooperation between European and Senegalese companies.



Confronted with today's demographic and climate challenges, agriculture is a strategic pillar of national resilience. With the development of mobile networks and the Internet of Things, digital technology is gradually becoming the driving force behind sustainable performance in the agriculture sector. Senegal is part of this dynamic through its Emerging Senegal Plan (PSE), which gives priority to agriculture in the broadest sense, combining it with modern growth drivers such as the digital sector. This plan is steered by DER/FJ, and supported by the national 'Digital Senegal 2025' Strategy. As a result, more and more entrepreneurs are putting the power of digital technology to work to meet the challenges of the agriculture value chain, creating an emerging AgriTech ecosystem in Senegal that is improving crop production, farm resilience and the living conditions of the people who depend on it.

The partnership between LuxDev and DER/FJ has already been successful in the past. For this reason, LuxDev has once again joined forces with DER/FJ to build the capacity of Senegalese women and young entrepreneurs, who are developing high-impact digital solutions to support the agricultural value chain in Senegal and Africa. The aim of this technical and financial support is to create jobs and improve food security by strengthening the start-up ecosystem in Senegal.

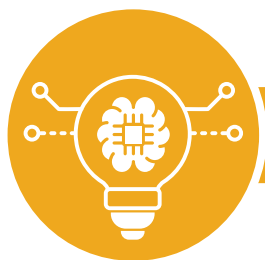
To achieve the objectives set with its partners, LuxDev mobilised international expertise to support the DER/FJ's activities in building the capacities of a group of 50 innovative Senegalese companies active in the agricultural sector. In partnership with Concree and Deloitte for an incubation and acceleration programme, and the Senegalese platform CTIC for digi-

tal development, this support was provided to entrepreneurs selected in six target departments: Dagana, Podor, Saint Louis, Fatick, Gossas and Nioro.

These entrepreneurs participated in a programme co-hosted by the partners, combining training in digital marketing tools and the appropriation of specific software already existing in the agricultural sector in Senegal, made available to participants on this occasion. Within this group, 10 champions were selected for their innovation at different levels of the agricultural value chain. These start-ups received specific support to optimise their business models by taking full advantage of the power of digital technology, and to design viable prototypes for the development of their activities.

In addition to these activities, to promote these champions and highlight the dynamism of the AgriTech ecosystem in Senegal, LuxDev supported the organisation of the Digital Agriculture Forum on 7 and 8 May 2024. This 2-day event in Dakar provided an opportunity for exchanges between the Senegalese AgriTech ecosystem and international digital companies. It enabled participants to exchange experiences on the challenges and levers of access to digital technologies, and to study the key success factors for setting up high-impact strategic collaborations. The start-ups supported by LuxDev had the opportunity to present their solutions and to showcase the achievements of this capacity-building programme for the AgriTech sector in Senegal, implemented as part of the AU-EU D4D Hub project.

## EXPLORING TECHNOLOGICAL INNOVATION FOR CLIMATE ACTION IN THE FINANCIAL INCLUSION SECTOR



### DIGITAL INNOVATION | FOR CLIMATE ACTION

#### National support action

**Cooperation:** African Microfinance Week 2023, Lomé, Togo

#### Technical partner

ADA (*Appui au développement autonome*)

**Period:** 07 August 2023 to 21 december 2023

#### Details of activities

Organisation of a seminar on technological innovation for climate action on 16.10.2023



## TECHNOLOGIE INCLUSION CLIMAT

As a result of growing international awareness, and despite its low contribution to greenhouse gas emissions, the African continent and its people are particularly exposed to the effects of climate change. Drought is a serious threat to food security, and as such a potential source of international conflict. The continent's most vulnerable populations are already the most exposed to the consequences of climate change. The challenges faced by these populations are at the heart of the activities of the financial inclusion sector. Investors, financial institutions and microfinance service providers must now address the new risks arising from the climate crisis, to avoid undermining the social progress already achieved by the sector.

In this context, LuxDev enabled the AU-EU D4D Hub project to become part of the major event of the financial inclusion sector in Africa, the African Microfinance Week, which ADA has been co-organising with local partners since the first edition in 2013. During this event, LuxDev organised a 1-day multi-stakeholder participatory workshop on technological innovation for climate action. This one-day workshop allowed to guide exchanges and joint reflection between decision-makers and experts in financial inclusion, technology and sustainable development. This high-level event echoed the presentation of the results of the Catapult Inclusive Finance Africa Programme, implemented by Luxembourg House of Financial Technology (LHoFT).

Ahead of the African Microfinance Week held in Lomé, Togo, this workshop took place on 16 October 2023 and consisted of thematic discussions by expert panels on the role of technology in meeting the challenges associated with the effects of climate change, and on the innovative approaches to ensure the development of inclusive low-carbon economies in Africa.

These discussions were supported by an open dialogue between over 70 professionals, led by a team of facilitators applying the principles of collective intelligence. This event, designed to foster cooperation and innovation, provided an opportunity to share what was learned about the conditions and scenarios for a twofold green and digital transition in the financial inclusion sector.

The insights have been gathered and enriched by an international team of African and European experts attending the event, and compiled in a technical report, supported by a high-level set of recommendations. The report and recommendations are available via the D4D Access platform, which brings together the work of the AU-EU D4D Hub pilot project.





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Implemented by LuxDev, the Luxembourg Development Cooperation Agency



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