

EU-AFRICA COOPERATION ON EPIDEMIC PREPAREDNESS AND HEALTH SECURITY: SUCCESS STORIES AND LESSONS LEARNED FROM COVID-19

INTRODUCTION

COVID-19 has exposed many gaps and challenges in global epidemic preparedness. Tackling the current pandemic, increasing international cooperation on global health, and improving epidemic preparedness and health security are current [priority](#) of the European Union (EU), including providing support to low and middle-income countries. The EU and the African Union (AU) have sought to strengthen their [collaboration](#) in this field. This paper aims to provide policy recommendations to improve EU-Africa cooperation on epidemic preparedness and health security, in particular, in the fields of research and development (R&D) and health system strengthening (HSS).

Lessons learned from R&D cooperation on HIV, tuberculosis (TB), Ebola, and malaria have contributed to a faster, more efficient, and coordinated response to COVID-19, improving our understanding of infectious diseases and fast-tracking the development of key medical countermeasures. EU development and humanitarian aid with Africa before and during the pandemic have been instrumental in mitigating the impacts of the pandemic on the population, and in strengthening health systems in Africa. While EU-Africa partnerships, initiatives, and tools on infectious diseases have been vital in the response to COVID-19 and other epidemics, EU-Africa cooperation on epidemic preparedness and health security remains largely underdeveloped.

EU-AFRICA SUCCESS STORIES ON EPIDEMIC PREPAREDNESS AND HEALTH SECURITY

Combination therapies



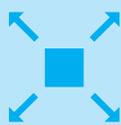
Combination therapies reduce the risk of drug resistance and are often the gold standard for treating complex infectious diseases. Some notable EU-Africa success stories are [CHAPS](#) and [PrEPVacc](#) (to prevent HIV infection), [PanACEA2](#) (to develop shorter, simpler and more effective treatments for TB), and [MAMAH](#) (to prevent malaria infection in pregnant women with HIV).

Repurposed vaccination platforms



HIV vaccine platforms have been [instrumental](#) in accelerating the development of COVID-19 vaccines (with at least five COVID-19 vaccine candidates using platforms from HIV). Ebola vaccine research project [EBOVAC](#) generated data for COVID-19 vaccines (e.g. [AdVac platform](#), also used for Zika and HIV candidates).

Capacity building and coordination



Humanitarian health experts and epidemiologists have been deployed to respond to epidemic outbreaks and train local teams. [EMLab](#) has built laboratory capacities for the detection and diagnosis of Ebola and COVID-19 in Africa. The [JPIAMR](#) has supported Africa-EU initiatives to curb antimicrobial resistance (AMR); e.g. [NEAR-AMR](#) or [MAD-tech-AMR](#).

Surveillance and detection



Projects such as [SORMAS](#) or [PROALAB](#) have contributed to develop stronger surveillance and digital management capacities in Africa and Europe against disease outbreaks.

Repurposed diagnostics



TB diagnostics (e.g. [GeneXpert](#)) and Ebola rapid diagnostic tests have been repurposed for COVID-19, contributing to a faster detection and control of the virus.



Epidemic preparedness R&D

Existing networks and collaborations (e.g. ALERRT and PANDORA-ID-NET) have contributed to a faster outbreak response, improved capacities for epidemic preparedness R&D, including data sharing and regulatory strengthening.



Flexible R&D funding initiatives

Although not originally designed to tackle outbreaks of new diseases, EU-funded R&D initiatives have activated contingency plans against COVID-19 and health security threats. The European and Developing Countries Clinical Trials Partnership (EDCTP) was designed to tackle epidemics and has played a pivotal role in strengthening EU-Africa R&D capabilities against infectious diseases generally, but has also contributed to the EU-Africa response against COVID-19, HIV&AIDS, TB, AMR and Ebola. The Innovative Medicines Initiative (IMI) has made a distinct contribution to the field through its Ebola+ programme, funding R&D for two of the most promising Ebola vaccines, and the EU Malaria Fund has supported the development of therapeutics and vaccine platforms on COVID-19.

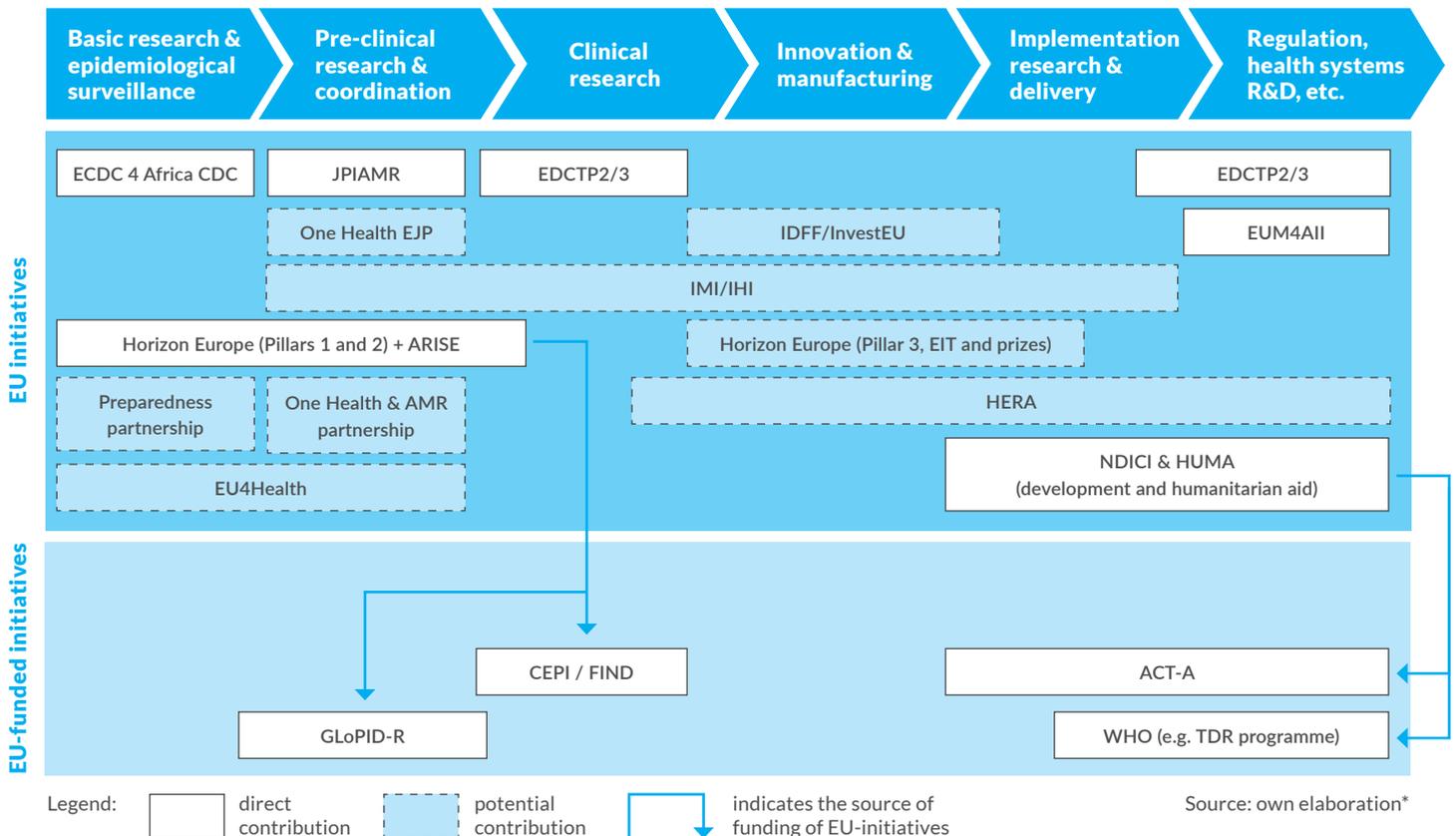


Partnership on HSS and access to medicines

EU support to Gavi, the Global Fund and the ACT-Accelerator (e.g. COVAX) has benefited millions through immunisation programmes, procuring lifes-aving treatments, and reinforcing health systems across Africa. The new AU-EU partnership on epidemic preparedness will further strengthen epidemiological capacities in Africa.

Source: How fighting diseases of poverty contributes to global health security (2021). Available [here](#)

EU TOOLS CONTRIBUTING TO EPIDEMIC PREPAREDNESS AND HEALTH SECURITY IN AFRICA



POLICY RECOMMENDATIONS: LESSONS LEARNED FROM COVID-19 FOR STRENGTHENING EU-AFRICA COOPERATION ON EPIDEMIC PREPAREDNESS AND HEALTH SECURITY

Despite many relevant success stories in the field, COVID-19 has demonstrated that both the EU and Africa remain ill-prepared to adequately respond to epidemics, and that the potential of their cooperation is largely untapped. Improved epidemic preparedness and response requires sustained and sustainable international collaboration driven by openness, equity and solidarity, and targeted towards building societal and institutional resilience. The new [momentum](#) in Africa-EU relations provides an opportunity to review and revamp this cooperation.

Promote One Health and a people-centred approach to prevention and preparedness



Outbreaks are unpredictable so prevention requires proactive and flexible approaches for expanding our understanding of epidemics. Promoting a One Health approach in epidemic preparedness would contribute to **improving the detection, prevention and control of zoonoses**, which are a major cause of epidemics, considering that human, environmental and animal health are interdependent. Stronger cross-disciplinary research among health and social sciences would also enhance **the legitimacy and effectiveness of public health interventions**: e.g. by fostering the uptake of scientific evidence in policy-making and by the general public, and addressing holistically the health and socioeconomic effects of epidemics. A people-centred approach on preparedness puts health education and community engagement at the centre of epidemic prevention, e.g. by ensuring that people's perceptions and perspectives on health and health service delivery are included in preparedness strategies. EU-Africa cooperation on health should therefore aim to consistently **promote more transparent and inclusive engagement of communities and stakeholders** in the prioritisation, implementation and monitoring of health programmes and projects. For that, better incentives for stakeholder and community participation, and increased visibility of EU-Africa health initiatives at all levels (continental, regional, local), are required.

Reinforce cooperation in health system strengthening and health system resilience



Disease outbreaks are more likely where public health systems are weak or fragmented. The 2014 Ebola crisis exposed the **need for improved surveillance and health crisis management in Africa** (resulting in the creation of an Africa CDC), and the COVID-19 pandemic evidences the **need for increasing Africa's manufacturing and regulatory capacities of medical countermeasures**. EU and African support to the Africa CDC has increased since the COVID-19 pandemic but a more long-term and strategic collaboration is needed. The implementation of the African Medicines Regulatory Harmonization Programme and the establishment of an **African Medicines Agency** have been a low priority of EU-Africa cooperation despite the potential for improved public health outcomes and the benefits for the pharmaceutical sector in Africa. Moreover, the EU should support the implementation of the Pharmaceutical Manufacturing Plan for Africa, in particular, to **develop local manufacturing** capacities, and help African countries to build up strategic stocks of critical medical countermeasures. Resilience is a critical feature of health systems when dealing with shocks such as epidemics. Although many factors contribute to resilient health systems, strengthening **human resources for health**, in particular in primary healthcare, and supporting health workers' ability to adapt and effectively address emerging challenges, are particularly crucial and should be reinforced in EU-Africa cooperation.

Build up and sustain a robust pipeline of medical countermeasures



Effective epidemic preparedness and response requires a robust pipeline of therapeutics, vaccines, diagnostics and other key health technologies. R&D on platform-based approaches (e.g. prototype-pathogen or pathogen-independent) that can be rapidly repurposed for different diseases, can provide much-needed flexibility during epidemics. However, **disease-specific R&D cooperation between the EU and Africa, in particular on poverty-related and neglected diseases, has been instrumental to accelerate the development of key medical countermeasures against COVID-19** (see section "EU-Africa success stories"). Stepping up this cooperation and promoting the active participation of African organisations in EU health research and innovation programmes and initiatives should remain at the forefront of the EU-Africa strategy on epidemic preparedness. EU-Africa cooperation should also **facilitate the exchange and dissemination of research and epidemiological data** (e.g. on pathogens, biological samples, genomics, etc) in particular through open access standards, as it would contribute to better risk and vulnerability assessment of sectors and faster R&D responses during epidemics.

Ensure the accessibility and affordability of medical countermeasures



Having swift access to quality, suitable and affordable medical countermeasures is essential to respond to disease outbreaks. To facilitate this, EU-Africa cooperation should **promote open, fair and flexible supply chains in healthcare**, including in public procurement and information systems. Africa-EU cooperation should adopt a more **comprehensive approach to improve the access of medical countermeasures, in particular, the affordability for patients and health systems, as a determinant for universal health coverage (UHC)**; e.g. by improving transparency of information on public funding; promoting pooled procurement to negotiate better prices; delinking prices from R&D costs; providing better and more sustainable incentives for R&D; or implementing trade flexibilities.

Enhance the coordination, alignment and synergies between initiatives



Demographic mobility between Africa and Europe is strong and likely to increase with the expansion of global transport networks and the demographic developments of both continents. An **Africa-EU strategy on epidemic preparedness and health security** that identifies priority interventions, urgent resources needed in the short and mid-term, and puts forward a clear implementation and evaluation framework, would be a major contributor to a faster and more effective response to epidemic outbreaks in both continents, especially since there are numerous EU-Africa initiatives on health. **EU-Africa cooperation should aim to create synergies and promote the alignment between existing and future health initiatives**, e.g. by exploring joint calls for proposals or facilitating the co-design of work programmes and strategic research agendas. This would contribute to maximising investments, creating new opportunities for collaboration and minimising duplications.

Increase investments in epidemic preparedness through collaboration



Sustainable, predictable and sustained funding mechanisms remain critical to addressing epidemics. **The EU should substantially increase development assistance for health in Africa, in line with Africa's priorities and domestic resource mobilisation efforts** (e.g. through flexible co-investments). Market mechanisms provide limited incentives for the participation of the private sector in epidemic preparedness, in particular in the R&D of medical countermeasures, yet their participation is essential. Therefore EU-Africa cooperation should also promote the creation of **equitable public-private collaborations to mobilise additional resources and expertise for increased public health impacts, e.g. by designing partnerships focused on bridging gaps in the preparedness pathway and achieving downstream impacts** such as UHC (see section "EU initiatives contributing to epidemic preparedness and health security in Africa") but also creating more certainty on benefit-sharing. For that, better push and pull incentive frameworks and increased trust through improved transparency, accountability and solidarity mechanisms is required; e.g. in order to clarify liabilities, ensure robust finance plans, etc.

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ECDC for Africa CDC: EU-AU partnership for health security in Africa. **JPIAMR:** Joint Programming Initiative on AMR. **One Health EJP:** One Health European Joint Programme. **EDCTP2/3:** European and Developing Countries Clinical Trials Partnership; **EDCTP3** is currently under negotiation. **IMI/IHI:** Innovative Medicines Initiative; the successor programme, **IHI** (Innovative Health Initiative) is currently under negotiation. **Horizon Europe:** is the EU programme for research; Pillar I: Excellent Science; Pillar II: Global Challenges and European Industrial Competitiveness; Pillar III: Innovative Europe. **Horizon prizes. EIT** is the European Institute of Innovation & Technology. **ARISE:** African Research Initiative for Science Excellence pilot programme. **IDFF/InvestEU:** The InnovFin Infectious Diseases Finance Facility; **InvestEU** is the new programme that will finance or replace the IDFF. **EUM4All:** EU medicines for All (former Article 58 procedure). **GLoPID-R:** Global Research Collaboration for infectious disease Preparedness. **One Health/AMR Partnership:** the European Partnership for One Health/Antimicrobial Resistance (AMR), currently under negotiation. **Pandemic preparedness partnership:** European Partnership on Pandemic Preparedness. **HERA:** Health emergency preparedness and response authority. **NDICI/HUMA:** Neighbourhood, Development and International Cooperation Instrument and EU humanitarian aid in health. **ACT-A:** Access to COVID-19 Tools Accelerator. **WHO** (e.g. **TDR programme**): the World Health Organisation; e.g. the Special Programme for Research and Training in Tropical Diseases. **CEPI / FIND:** Coalition for Epidemic Preparedness Innovations / the global alliance for diagnostics. **EU4Health:** EU programme for health.

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