



Participation of African researchers and innovators in COST Action

- mapping of current activities

November 2021

Report drafted with the contribution of COST Association and SFIC Africa Working Group





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Introduction

This report is a result of the joint work between SFIC Africa Working Group and the COST Association.

SFIC Africa Working Group is a group of the <u>Strategic Forum for International Strategic forum for international scientific and technological cooperation composed</u> by nine European countries¹ and the European Commission that works to enhance the collaborations between Europe and Africa.

<u>COST</u> (European Cooperation in Science and Technology) is a funding organisation for research and innovation networks. These networks, called COST Actions, offer an open space for collaboration among scientists across Europe (and beyond) and thereby give impetus to research advancements and innovation. COST also organises a series of thematic workshops, COST Connect to provide an open space for researchers, policy makers and research and innovation (R&I) stakeholders to network and grow their ideas and strengthen multi-stakeholder partnerships. The first COST Connect, "<u>Connecting continents – First COST Connect on Europe-Africa cooperation</u>" dedicated to global networking activities was organised in March 2021.

COST was invited as a special guest at the SFIC Africa WG meetings in summer 2021, where the idea of joint work to understand the COST networks and their engagement with African partners and activities in Africa was welcomed by both parts. Hence, this joint collaboration.

The report is structured as such:

- Firstly, an overview of the African participation is given under section "African participation in the COST Actions"

 $^{^{\}rm 1}$ Austria, Belgium, Finland, France, Germany, Italy, Norway, Spain and Portugal.



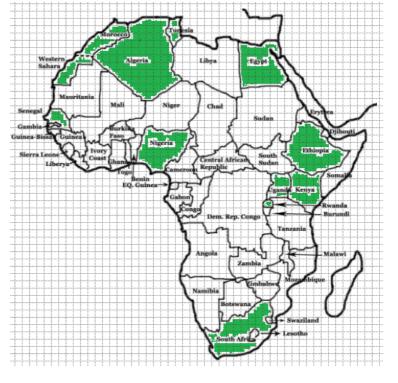
- Secondly, this participation will be mapped and analysed under the perspective of four broad political priorities, under section "Priorities"
- Thirdly, an overview of the participating stakeholders under section "Institutions"
- Fourthly, a summary of the use of COST networking tools is presented
- Finally, some conclusions will be brought forward in the last section "Conclusions". Detailed information on all the existing and running COST Actions will be given under "Annexes".

The document will be presented and discussed with stakeholders in the 30 November event "The Power of Networks on the European - African collaborations in research and innovation".

African participation in the COST Actions

Such as under the COST database, there are currently 70 COST Actions that involve African stakeholders from 11 countries. Algeria, Egypt, Ethiopia, Kenya, Morocco, Nigeria, Rwanda, Senegal, South Africa, Tunisia and Uganda. This is 24%² of the total running COST Actions.

At the present moment³, there are 40 COST Actions that are



² A total of 70 out of 292 actions running currently – November 2021.

³ November 2021.



being established, where the participation from African countries is not yet confirmed. In the case of these <u>new COST Actions</u>, there is an expected 6-month period to wait for confirmed data on participation.

Out of the 70 actions, three of them count exclusively with European and African countries only. It is in this case Tunisia. The rest of the actions (67 in total) count with

both African and non-African (other international participation) from all over the world. The World Cloud in the left shows these countries.



It is to be noticed that the African

countries have different status in the COST Programme:

- The "Near Neighbour Countries" are located on the Northern shore of Africa, and they are: Morocco, Algeria, Libya, Tunisia and Egypt;
- The "Partner Member" is South Africa since April 2019 at the EU-ZA Science Summit.
- "International Partner Countries" are the remaining African nations.

Priorities⁴

Such as established under the joint work with the SFIC Africa Working Group, the current section outlines the running COST Actions with the <u>established priorities under</u> four areas of cooperation, defined by the <u>EU-African Union Dialogue and the latest</u>

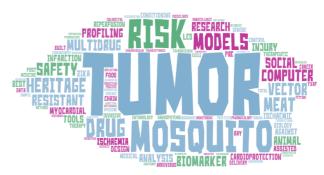
⁴ The provided data show the situation on 25 October 2021. As COST Actions are closing and starting on a continuous basis, the exact number of African participants as well as the number of countries involved can slightly vary even at two points close in time.

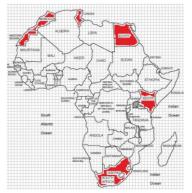


<u>Ministerial Conference</u>, and takes into account the actual topics dealt by running COST Actions.

The designed priorities as in the 2020 Ministerial Conference are:

Public health, focusing on equitable access to new COVID-19 diagnostics, therapeutics and vaccines, as well as on the role of the European and Developing Countries Clinical Trials Partnership (EDCTP; €1.4 billion joint investment) in building the capacity of Sub-Saharan-African countries to conduct robust clinical trials. In addition, in the framework of the COST Actions, all health-related actions have been taken into consideration. The African countries involved in these Actions are Egypt (2), Kenya (1), Morocco (5), South Africa (6), Tunisia (9).





Green transition, on the importance of investing into a green and sustainable economy through R&I Partnerships such as the EU-Africa R&I Partnerships on Food and Nutrition Security and Sustainable Agriculture (FNSSA; €381 million joint investment) and the EU-Africa R&I Partnership on Climate Change and Sustainable Energy (CCSE; €84 million joint investment). In the framework of this latter partnership a working group was launched on 15 July with the task to explore future avenues





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of cooperation notably on green/renewable hydrogen, circular economy, energy efficiency in buildings, climate-environment-health nexus and climate.

In addition, in the framework of the COST Actions, all green-related actions have been taken into consideration. The African countries involved in these Actions are Algeria (8), Egypt (3) Morocco (10), Nigeria (1), Tunisia (13), South Africa (4).

Innovation and technology, a more recent domain cooperation between the two continents, highly relevant in the recovery phase. It features successful initiatives such as the pilot Africa-Europe Innovation Partnership, the EU-Africa Digital innovation hubs (showcasing digital solutions with links to the Digital Education action plan), and support to the African Research and Education networks infrastructure through programmes such as AfricaConnect. In addition, in the framework of the



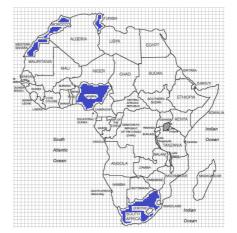


COST Actions, all innovation and technology-related actions have been taken into consideration. The African countries involved in these actions are Algeria (1), Morocco (2), South Africa (2), and Tunisia (5).



Capacities for science: on the role of: open science (open sharing and open access to scientific publications and FAIR - Findable, Accessible, Interoperable, Reusable – research data); active support to African scientific networks for enhanced science policy advising; gender equality (for and beyond COVID-19 related R&I); human capital development (including researchers' mobility and training). In addition, in the framework of the COST Actions, all innovation and technology-





related actions have been taken into consideration. The African countries involved in these Actions are Morocco (2), Nigeria (1), South Africa (2), Tunisia (2).

The mapping exercise looks at the priorities understanding them in a more open definition then given in the concept note and lists COST Actions addressing at least one of the priorities.

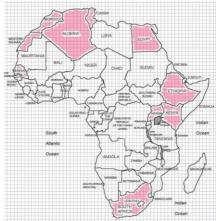
The data demonstrate that public health and green transition are the two priorities with highest number of partnerships established, having 18 COST Actions running on public health and 20 COST Actions running on green transition. For the green transition the number of countries (6) and institutions involved are higher than in public health (5) with much less institutions active.

The rest of the COST Actions do not fall in any of these categories and are classified as "other". A word cloud of the key words of these actions is given. The African countries



involved in these actions are Algeria (4), Egypt (3), Ethiopia (1), Kenya (1), Morocco (7), Rwanda (1), Senegal (1), South Africa (5), Tunisia (6), Uganda (1)





For more detailed information, Table 1 shows the list of priorities and the number of COST Actions active in the field of the priority. COST Actions must have at least one African partner active in the Action. The country of origin of African partners are also added. Next to the four priorities, there is also the category of "other" for those Actions that are running with at least one African partner but cannot be classified under any of the requested priorities. The detailed table showing all the COST Actions per priorities is provided in annex.

Table 1 List of priorities with running COST Actions

Priority	Number of COST Action,	Country of origin of African partners
	having at least one	(n of COST Actions)
	African partner active in	
	the field	
Public health	18	Egypt (2), Kenya (1), Morocco (5),
		South Africa (6), Tunisia (9)



Green transition	20	Algeria (8), Egypt (3) Morocco (10),	
		Nigeria (1), Tunisia (13), South Africa	
		(4)	
Innovation and	6	Algeria (1), Morocco (2), South Africa	
technologies		(2), Tunisia (5)	
Capacities for	4	Morocco (2), Nigeria (1), South Africa	
science		(2), Tunisia (2)	
Other	22	Algeria (4), Egypt (3), Ethiopia (1),	
		Kenya (1), Morocco (7), Rwanda (1),	
		Senegal (1), South Africa (5), Tunisia	
		(6), Uganda (1)	

Last but now least, there are 3 COST Actions covering more than one priority with the participation of one or more countries from Africa

- CA16226 public health, innovation and technology, Tunisia
- CA18102 Capacity for science, innovation and technology, Morocco, South Africa
- CA18210 green transition, innovation and technology, Morocco, Tunisia

Institutions

This section provides an overview by identifying African partners and clustering them per country and institution

The data demonstrate that Tunisia is the most active country having the highest number of institutions engaged with COST (25), followed by Morocco (17), Algeria (14) and South Africa (13).



The most frequent institutions are the following:



Table 2 shows the number of African institutions involved in a running COST Action per country. The full list of participating institutions per country is provided in annex.

It is important to mention that one institution can be engaged in multiple COST Actions and one COST Action can have partners from more than one African country or more institutions from the same country.

Table 2⁵ Number of African institutions engaged in a running COST Action per country

country	Number of institutions	Priority
Algeria	14	green transition, other
Egypt	9	public health, green transition, other
Ethiopia	1	other
Kenya	2	public health, other

-

 $^{^{5}}$ Names of the institutions provided as participants registered them in the online COST database, e-COST.



Morocco	17	public health, green transition, innovation
		and technologies, capacities for science,
		other
Nigeria	3	capacities for science
Rwanda	1	other
Senegal	1	other
South	13	public health, green transition, innovation
Africa		and technologies, capacities for science,
		other
Tunisia	25	public health, green transition, innovation
		and technologies, capacities for science,
		other
Uganda	1	other

Further analysis of the data is provided in table 3. Each priority is matched with the countries and institutions involved in a running COST Action.

Table 3 List of partners per priority and their institutions

Priority	List of partners per country ⁶
Public health	Egypt: National Research Centre, American University of Cairo
	Kenya: University of Nairobi
	Morocco : University Mohammed V in Rabat, Institut Agronomique et
	Véténrinaire Hassan II, Euro-méditerranéen University of Fes, Institut
	Pasteur of Morocco

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 $^{^{\}rm 6}$ Names of the institutions provided as participants registered them in the online COST database, e-COST.



South Africa: University of Stellenbosch, University of Cape Town, University of Pretoria / private veterinary practice

Tunisia: National Veterinary School of Sidi Thabet, Higher Institute of Applied Sciences and Technology of Sousse, ISAM of Sfax, Faculty of Dental Medicine of Monastir, Institut Pasteur de Tunis, University of Sfax, University of Gafsa

Green transition

Algeria: Institut National de Recherche Forestière, Office National de la Météorologie, Research Centre on Analytical Chemistry (CRAPC), University of Tlemcen, Ecole nationale polytechnique de constantine, Research Centre on Analytical Chemistry, SARL MIZRANA FISH of TIGZIRT, Faculty of Natural and Life Sciences - Department of Ecology and Environment - University of Batna 2, University Oran1-Department of Biotechnology

Egypt: Alexandria University, The Egyptian Meteorological Authority, Cairo University,

Morocco: Faculté des Sciences, Ministry of Health, Faculty of Sciences and Techniques, University Sultan Moulay Slimane, CHOUAIB DOUKKALI UNIVERSITY, COOPERATIVE AGRICULTURE FEMININE ADDOHA, Université Mohammed V, Ibn Zohr University, Cluster des Textiles Techniques Marocains; École Supérieure des Industries du Textile et de l'Habillement

Nigeria: Federal University of Agriculture Abeokuta

Tunisia: University of Sfax, Faculté des sciences humaines et sociales de Tunis, Institut des Regions Arides, Center of Biotechnology of Borj Cedria, Institut Supérieur des Arts et Métiers de Sfax, CERTE, Digital Research Center, Hanana Mohsen, Chaima Bouyahya, Université de la Manouba, INSTM, , Laboratoire de Génie Textile - Université de Monastir, Pôle de Compétitivié Monastir-El Fejja (mfcpole); FSGF



	South Africa: Stellenbosch University, University of Kwazulu-Natal,		
	University of Pretoria, University of Cape Town		
Innovation	Algeria: Annaba University		
and	Morocco: National Scool for forestry engineers, INRH		
technologies	South Africa: CSIR, Rhodes University		
	Tunisia: ISAM, University of Kairouan, Tunis El Manar University,		
	Université de Tunis El Manar, Higher Institute of Applied Studies in		
	Humanities, ISAM of Sfax in Tunisia		
Capacities for	Morocco: EmLyon Casablanca, INRH		
science	Nigeria: Lead City University, University of Ibadan		
	South Africa: University of Pretoria, Gordon Institute of Business		
	Science - University of Pretoria - Sandton-Johannesburg Campus,		
	South African Institute for Aquatic Biodiversity		
	Tunisia: Higher Institute of Arts and Crafts of Sfax, University of Sfax		
Other	Algeria: Semir Bechir Suheil Gaouar, Universite Alger 2, Research		
	Center in Applied Economics for Development		
	Egypt: Zewail City of Science and Technology, National Research		
	Centere, University of Minia, Bibliotheca Alexandrina		
	Ethiopia: Jimma University		
	Kenya: Kenyatta University		
	Morocco : ENSIAS, Ministry of Health - Direction de l'épidémiologie et		
	de la Lutte contre les Maladies, Mohammed V University in Rabat,		
	University Sultan Moulay Slimane, Euromed University of Fes,		
	University Hassan II Casablanca, ENSMR, MINES-RABAT, Ibn Zohr		
	University		
	Rwanda: University of Rwanda		
	Senegal: Institut Edtudes avancées in saint-Louis Sénégal		
	I .		



South Africa: University of the Witwatersrand, South African Astronomical Observatory, CSIR, Rhodes University, University of Witwatersrand Johannesburg, University of Pretoria, Stellenbosch University

Tunisia: Ecole Nationale de Médecine Vétérinaire de Sidi Thabet, University of Tunis, Gabes University, National Veterinary School of Sidi Thabet, University of Sfax, University of Tunis, University of Tunis el Manar

Uganda: Uganda Christian University

Summary of the use of COST networking tools

This section provides an overview on the use of the networking tools by participants from Africa. It gives an insight into their use from Africa as well as COST networking tools organised in Africa.

The data demonstrate that there were 531 individual participants from 19 African countries using COST networking tools organised in a COST country and 79 networking tool participations that happened at activities organised in 7 countries of Africa. Some of the countries took part in COST networking tools in a more continuous way (Algeria, Egypt, Kenya, Morocco, Nigeria, South Africa, Tunisia), while others had one or two participants throughout the 2011-21 period (Chad, Ethiopia, Ghana, Libya, Madagascar, Mauritius, Mozambique, Namibia, Senegal, Sudan, Tanzania, Uganda). As for organising networking tool activities, it was only South Africa that had activities taking place every year.

Tables 4 and 5 below provide the introduce the above data in detail.



Table 4. COST networking tools used by participants from Africa 2011-21

Algeria Meeting 34 Short term scientific mission 3 Training school 9 Egypt 77 Meeting 45 Short term scientific mission 7 Training school 25 Ethiopia Meeting 2 Ghana Meeting 1 Kenya Meeting 10 Libya Meeting 2 Morocco 111 84 Meeting 84 84 Short term scientific mission 15 Training school 12 Madagascar Meeting 1 Mozambique Meeting 1 Mozambique Meeting 1 Mozambique Meeting 4 Namibia Training school 1 Nigeria 6 6 Meeting 1 6 Sudan Meeting 1 Senegal Meeting 1 Chad	Country	Networking tool	Number of participants
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Egypt Meeting 45 Meeting 45 Short term scientific mission 7 Training school 25 Ethiopia Meeting 2 Ghana Meeting 10 Kenya Meeting 10 Libya Meeting 2 Morocco 111 11 Meeting 84 84 Short term scientific mission 15 Training school 12 Madagascar Meeting 1 Mozambique Meeting 1 Mozambique Meeting 4 Namibia Training school 1 Nigeria 6 6 Meeting 4 Sudan Meeting 1 Senegal Meeting 1 Chad Meeting 1 Tunisia 216 VIRTUAL GRANT 3 Meeting 119 Short term scientific mission 60		Short term scientific mission	3
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Table 5. Participants at COST networking tools organised in Africa 2011-21

Country	Networking tool	Number of participants
Algeria	Short term scientific mission	9
Egypt		5
	Conference grant	3
	Short term scientific mission	2
Morocco		26
	Conference grant	1
	Meeting	17
	Short term scientific mission	3
	Training school	5
Mauritius	Short term scientific mission	1
Mozambique	Meeting	1
Tunisia	Short term scientific mission	5
South Africa		32
	Conference grant	2
	Meeting	7
	Short term scientific mission	23



Conclusions and Recommendations

This report includes information on the African participation in networks funded by the COST Programme.

In brief, 24% of the running COST Actions count with African participation. This is done mainly in collaboration with other international actors. The priorities established by the EU-African Union Dialogue and the latest Ministerial Conference under four areas of cooperation are well represented in the work of the COST Actions, being 70% of running COST Actions with African partners are engaged in those fields.

The African partners that are from 11 countries and many institutions is considered an opportunity for research and innovation collaboration. Nevertheless, there is a lack of involvement of the rest of the African countries, especially the Sub-Saharan countries. More emphasis on the possibility of participation through COST Actions is needed through dissemination and awareness raising there.

The concept note that founded the collaboration between the COST Association and the SFIC Africa Working Group also describes to identify the networking instruments and mobility patterns followed by the COST Action participants affiliated to the African institutions (universities, research centres, private sector, SMEs, etc.). This step was performed and results added under the Summary of the use of COST networking tools section. The data and patterns introduced are clear indication that COST Actions can serve as a bridge from Europe to Africa and vice versa via participations to COST networking activities.

Due to the budget availability and budgetary rules, the COST Programme can only provide a limited funding to the talents participating from African countries. There is a need to search for more opportunities of provision. The established collaboration between European and African institutions could be built upon different mechanisms,



but for efficacity reasons the multilateralism and the multiplication effects of the already participating institutions and countries can be further exploited.

The enhancement of networks in research and innovation between Europe and Africa is a steppingstone in overall collaboration between the two continents, whilst the European Union and the African Union are preparing their joint Summit where the EU-AU Innovation Agenda will play a key role.

The report was drafted with the contribution of Katalin Alföldi, Elwin Reimink of the COST Association and Armela Dino of the SFIC Africa Working Group



Annex

List of running COST Actions⁷ with at least one African partners per priority.

	COST Action		Participating
Priority areas	number	COST Action title	countries from
	Humber		Africa
		Empowering the next	
Capacities for		generation of social	South Africa,
science	<u>CA16206</u>	enterprise scholars	Morocco
		Europe Through Textiles:	
		Network for an integrated	
Capacities for		and interdisciplinary	
science	<u>CA19131</u>	Humanities	Tunisia
Capacities for			
science	<u>CA19112</u>	Women on the Move	Nigeria, Tunisia
Capacities for			
science, innovation		The European Aquatic	Morocco, South
and technology	<u>CA18102</u>	Animal Tracking Network	Africa
		Impact of Nuclear	
		Domains on Gene	
Green transition	<u>CA16212</u>	Expression and Plant Traits	Tunisia
		Knowledge conversion for	
		enhancing management	
		of European riparian	Algeria, Morocco,
Green transition	CA16208	ecosystems and services	Tunisia

 $^{^{\}rm 7}$ Every COST Action number has a hyperlink leading to the webpage of the Action.



		International Network to	
		Encourage the Use of	
		Monitoring and	Tunisia, Egypt,
Green transition	CA16202	Forecasting Dust Products	Algeria, Morocco
		European Network to	
		connect research and	
		innovation efforts on	
Green transition	<u>CA17107</u>	advanced Smart Textiles	Tunisia, Morocco
		Data integration to	
		maximise the power of	
		omics for grapevine	Morocco, South
Green transition	<u>CA17111</u>	improvement	Africa, Tunisia
		Establishment of a Pan-	
		European Network on the	
		Sustainable Valorisation of	
Green transition	<u>CA17128</u>	Lignin	South Africa, Algeria
		Implementing nature	
		based solutions for	
		creating a resourceful	
Green transition	<u>CA17133</u>	circular city	Tunisia
		Optical synergies for	
		spatiotemporal sensing of	
		scalable ecophysiological	
Green transition	<u>CA17134</u>	traits	Tunisia
		SOURDOugh	Egypt, Nigeria,
		biotechnology network	Morocco, South
Green transition	<u>CA18101</u>	towards novel, healthier	Africa,



		and sustainable food and	
		bloproCesseS	
		Genome editing in plants -	
		a technology with	
Green transition	<u>CA18111</u>	transformative potential	Tunisia, South Africa
		Genomic Blodiversity	
		Knowledge for Resilient	
Green transition	<u>CA18134</u>	Ecosystems	Tunisia, Algeria
		Research network for	
		including geothermal	
		technologies into	
		decarbonized heating and	
Green transition	<u>CA18219</u>	cooling grids	Algeria,
		European network of	
		FURan based chemicals	
		and materials FOR a	
Green transition	CA18220	Sustainable development	Tunisia
		Green Chemical	
		Engineering Network	
		towards upscaling	
Green transition	<u>CA18224</u>	sustainable processes	Algeria
		Non-conventional yeasts	
		for the production of	
Green transition	<u>CA18229</u>	bioproducts	Tunisia
		European transdisciplinary	
		networking platform for	Algeria, Tunisia,
Green transition	<u>CA18238</u>	marine biotechnology	South Africa



		Pan-European Network	
		for Climate Adaptive	
		Forest Restoration and	
Green transition	<u>CA19128</u>	Reforestation	Algeria
		EPIgenetic mechanisms of	
		Crop Adaptation To	
Green transition	<u>CA19125</u>	Climate cHange	Algeria, Tunisia
		WATer isotopeS in the	
		critical zONe: from	
		groundwater recharge to	
Green transition	<u>CA19120</u>	plant transpiration	Morocco
Green transition,		Oxygen sensing a novel	
innovation and		mean for biology and	
technology	<u>CA18210</u>	technology of fruit quality	Morocco, Tunisia
		Rethinking packaging for	
		circular and sustainable	
Innovation and		food supply chains of the	
technologies	CA19124	future	Tunisia, South Africa
		Network on Privacy-Aware	
		Audio- and Video-Based	
Innovation and		Applications for Active and	
technologies	<u>CA19121</u>	Assisted Living	Tunisia
		High-performance	
		Carbon-based composites	
		with Smart properties for	
Innovation and		Advanced Sensing	
technologies	<u>CA19118</u>	Applications	Tunisia, Morocco



		Unifying Approaches to	
		Marine Connectivity for	
Innovation and		improved Resource	Algeria, Tunisia,
technologies	CA19107	Management for the Seas	Morocco
Innovation and		Language In The Human-	
technologies	<u>CA19102</u>	Machine Era	Tunisia
		International	
		Interdisciplinary Network	
Innovation and		on Smart Healthy Age-	
technologies	<u>CA19136</u>	friendly Environments	Tunisia
		European Network of	
Public health	CA16231	Vaccine Adjuvants	Tunisia
		Investigation and	
		Mathematical Analysis of	
		Avant-garde Disease	
		Control via Mosquito	
Public health	CA16227	Nano-Tech-Repellents	South Africa
		European Network for	
		Problematic Usage of the	South Africa,
Public health	CA16207	Internet	Morocco
		Realising the therapeutic	
		potential of novel	
Public health	CA16225	cardioprotective therapies	South Africa
		New diagnostic and	
		therapeutic tools against	
		multidrug resistant	
Public health	CA17104	tumors	Tunisia



		Aedes Invasive	
Public health	CA17108	Mosquitoes	Tunisia, Morocco
		Identifying Biomarkers	
		Through Translational	
		Research for Prevention	
		and Stratification of	
Public health	CA17118	Colorectal Cancer	Tunisia
		Catalysing transcriptomics	
		research in cardiovascular	
Public health	CA17129	disease	South Africa
		Risk-based meat	
		inspection and integrated	
Public health	CA18105	meat safety assurance	Tunisia
		Underground Built	
		Heritage as catalyser for	
Public health	CA18110	Community Valorisation	Tunisia
		European Network for	
		Chemical Elemental	
		Analysis by Total	
		Reflection X-Ray	
Public health	CA18130	Fluorescence	Kenya, Egypt
		People in Motion:	
		Entangled Histories of	
		Displacement across the	
		Mediterranean (1492-	Morocco, Egypt,
Public health	CA18140	1923)	South Africa
Public health	CA18206	Glioma MR Imaging 2.0	Morocco



		European Network for	
		Optimization of Veterinary	Tunisia, Morocco,
Public health	CA18217	Antimicrobial Treatment	South Africa,
		European Burden of	
Public health	CA18218	Disease Network	Tunisia
		The Core Outcome	
Public health	CA18227	Measures for Food Allergy	South Africa
Public health	CA19144	European Venom Network	Morocco, Tunisia
Public health,		Indoor living space	
innovation and		improvement: Smart	
technology	CA16226	Habitat for the Elderly.	Tunisia
		Combatting anthelmintic	
Other	CA16230	resistance in ruminants	Tunisia, Algeria
		European Network for	
Other	CA16228	Game Theory	Morocco
		Network on the	
		Coordination and	
		Harmonisation of	
		European Occupational	
Other	CA16216	Cohorts	Morocco
		The multi-messenger	
		physics and astrophysics	
Other	CA16214	of neutron stars	Egypt
		Unraveling new physics at	
		the LHC through the	
Other	CA16201	precision frontier	Morocco



		Transdisciplinary solutions	
		to cross sectoral	
Other	CA17114	disadvantage in youth	Morocco
Other	CA17120	Chemobrionics	Tunisia
		Public Value Capture of	
Other	CA17125	Increasing Property Values	South Africa
		The Soil Science &	
		Archaeo-Geophysics	
		Alliance: going beyond	
Other	CA17131	prospection	Tunisia
		Revealing the Milky Way	
Other	CA18104	with Gaia	South Africa
		Understanding and	
		exploiting the impacts of	
		low pH on micro-	
Other	CA18113	organisms	Tunisia
		Advanced Engineering and	
		Research of aeroGels for	
		Environment and Life	Morocco, South
Other	CA18125	Sciences	Africa
		International Nucleome	
Other	CA18127	Consortium	Egypt
		Islamic Legacy: Narratives	
		East, West, South, North	
		of the Mediterranean	Morocco, Egypt,
Other	CA18129	(1350-1750)	Tunisia, Algeria
		Worlds of Related	
Other	CA18205	Coercions in Work	South Africa, Senegal



		Molecular Dynamics in the	
Other	CA18212	GAS phase	Tunisia
		Rural NEET Youth	
		Network: Modeling the	
		risks underlying rural	
Other	CA18213	NEETs social exclusion	Algeria
		Global Atrocity Justice	Ethiopia, Kenya,
Other	CA18228	Constellations	Uganda, Rwanda
		Mathematical models for	
		interacting dynamics on	South Africa,
Other	CA18232	networks	Morocco
		European Network for	
		assuring food integrity	
		using non-destructive	
Other	CA19145	spectral sensors	South Africa
		Trace metal metabolism in	
Other	CA19116	plants	Algeria



Full list of African institutions involved in running COST Actions per country

Algeria	Semir Bechir Suheil Gaouar
	Institut National de Recherche Forestière
	Office National de la Météorologie
	Research Centre on Analytical Chemistry (CRAPC)
	Universite Alger 2
	University of Tlemcen
	Research Center in Applied Economics for Development
	Ecole nationale polytechnique de Constantine
	Research Centre on Analytical Chemistry
	SARL MIZRANA FISH of TIGZIRT
	Faculty of Natural and Life Sciences, Department of Ecology and
	Environment, University of Batna 2
	University Oran1-Department of Biotechnology
	Dr. Hoceme DEGAÏCHIA
	Annaba University
Egypt	Zewail City of Science and Technology
	Alexandria University
	The Egyptian Meteorological Authority
	Cairo University
	National Research Centere
	University of Minia
	Bibliotheca Alexandrina
	National Research Center
	American University of Cairo
Ethiopia	Jimma University
Kenya	University of Nairobi
	Kenyatta University
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Morocco	ENSIAS
	Ministry of Health
	Mohammed V University in Rabat
	EmLyon Casablanca
	École Supérieure des Industries du Textile et de l'Habillement
	Cluster des Textiles Techniques Marocains
	Institut Agronomique et Véténrinaire Hassan Il
	University Sultan Moulay Slimane
	CHOUAIB DOUKKALI UNIVERSITY
	COOPERATIVE AGRICULTURE FEMININE ADDOHA
	INRH
	Euromed University of Fes
	University Hassan II Casablanca
	ENSMR, MINES-RABAT
	Ibn Zohr University
	Institut Pasteur of Morocco
	National School for forestry engineers
Nigeria	Federal University of Agriculture Abeokuta
	Lead City University
	University of Ibadan
Rwanda	University of Rwanda
Senegal	Institut Edtudes avancées in saint-Louis Sénégal



South	University of Stellenbosch
Africa	University of Cape Town
	Medical Research Council
	Department of Paediatrics and Child Health, University of Cape Town
	University of Pretoria
	Gordon Institute of Business Science, University of Pretoria, Sandton-
	Johannesburg Campus
	University of the Witwatersrand
	University of Kwazulu-Natal
	South African Institute for Aquatic Biodiversity
	South African Astronomical Observatory
	CSIR
	Rhodes University
	University of Pretoria / private veterinary practice
Tunisia	National Veterinary School of Sidi Thabet/ Ecole Nationale de Médecine
	Vétérinaire de Sidi Thabet
	Higher Institute of Applied Sciences and Technology of Sousse
	Institut Supérieur des Arts et Métiers (ISAM) de Sfax
	University of Sfax
	Faculté des sciences humaines et sociales de Tunis
	Institut des Regions Arides
	Faculty of Dental Medicine of Monastir
	Laboratoire de Génie Textile - Université de Monastir
	Pôle de Compétitivié Monastir-El Fejja (mfcpole)
	Institut Pasteur de Tunis
	Center of Biotechnology of Borj Cedria
	University of Tunis
	Gabes University
	CERTE



	Digital Research Center
	Hanana Mohsen
	University of Tunis el Manar
	Faculty of Medicine Sousse
	Chaima Bouyahya
	Université de la Manouba
	INSTM
	FSGF
	University of Gafsa
	Higher Institute of Arts and Crafts of Sfax
	University of Kairouan
Uganda	Uganda Christian University