- Calls on international cooperation in **Societal challenge 2** –

*Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy*

Serena Borgna
borgna@apre.it

*on behalf of Biohorizon project*
SERENA BORGNA

BIOHORIZON partner: WPL Trainings and Webinars
EU Horizon 2020 – National Contact Point
- Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy
- Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing
- European Research Council

- Head of Institutional department
- Project Manager, expert in innovation and international cooperation with India
- Trainer

https://www.ncp-biohorizon.net/
Content

a. Overview of the SC2 International cooperation flagships. Focus International Bioeconomy Forum
b. Figures about the International cooperation in SC2
c. Overview of the topics and project funded in Horizon 2020 flagged for IC
d. Opportunities in the last WP2020 and eligibility criteria
e. Biohorizon- project – An NCPs network open to the world
a. OVERVIEW OF THE SC2 INTERNATIONAL COOPERATION POLICIES AND FLAGSHIPS
A Bioeconomy Strategy for Europe

Working with nature for a more sustainable way of living.
Sustainable and circular: Bioeconomy, the European way

The bioeconomy covers all sectors and systems that rely on biological resources – animals, plants, micro-organisms and derived biomass, including organic waste – as well as their functions and principles.

It includes and interlinks:
- land and marine ecosystems and the services they provide;
- all primary production sectors that use and produce biological resources (agriculture, forestry, fisheries and aquaculture);
- and all economic and industrial sectors that use biological resources and processes to produce food, feed, bio-based products, energy and services.

*To be successful, the European bioeconomy needs to have sustainability at its heart and be circular by definition.*
Implementation and assessment of the 2012 Bioeconomy Strategy and Action Plan

• 5.2.2.4 Developing international cooperation on bioeconomy R&I to jointly address global challenges

• This action has been implemented through the setting up of ambitious R&I cooperation programmes between the EU and strategic third countries on the bioeconomy. For example, cooperation actions with China and African countries around the issue of sustainable agriculture, food security and safety and nutrition are expected, inter alia, to enhance coherence between national R&I agendas for the bioeconomy, facilitate technology development and adaptation for addressing global challenges (e.g. climate change or food security), create new capacities and opportunities and improve decision making capacities regarding food supply and management.

• Research on the preservation and sustainable management of oceans and seas and their socioeconomic potential for the bioeconomy are addressed through several international initiatives developed since 2013 such as the BLUMED initiative, the BONUS programme, the Galway Statement on Atlantic Ocean Cooperation and the Belém Statement on Atlantic Research and Innovation Co-operation.
Implementation and assessment of the 2012 Bioeconomy Strategy and Action Plan

• 5.2.2.4 Developing international cooperation on bioeconomy R&I to jointly address global challenges

• The EC is strongly engaged in the Global Bioeconomy Forum, set up by the German Bioeconomy Council, which frequently organises international conferences, the Global Bioeconomy Summits, to bring together international stakeholders for discussing issues relevant to the global development of the bioeconomy.

• Last but not least, the EC's role in driving an international bioeconomy R&I agenda is evidenced by the setting up of the International Bioeconomy Forum (IBF). The IBF, which is a platform gathering major countries and international and regional organisations, is expected to develop a policy dialogue on the bioeconomy (e.g. indicators, availability of biomass, microbiome), align research funding programmes and increase R&I investment and international awareness of the central role of bioeconomy.
Systems approaches

Socio-economic research 30% SSH – 2/3 value chain approaches

New approaches and infrastructure

Using information technologies

Engaging with society
Horizon 2020 Flagships on targeted activities for international cooperation
Societal Challenge 2 **FLAGSHIP 2018-2020**

- All Atlantic Ocean Research Alliance Flagship
- EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture (FNSSA)
- EU-China FAB Flagship initiative
- The Future of Seas and Oceans Flagship Initiative
 EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture (FNSSA)
 EU-China FAB Flagship initiative

 The Future of Seas and Oceans Flagship Initiative
 All Atlantic Ocean Research Alliance Flagship
The Atlantic Ocean Research Alliance (AORA) between Canada, the European Union and the United States was launched by the signatories of the Galway Statement on Atlantic Ocean Cooperation in May 2013. The AORA intend to advance the shared vision of an Atlantic Ocean that is healthy, resilient, safe, productive, understood and treasured so as to promote the well-being, prosperity and security of the present and future generations.

The challenge of keeping our ocean healthy is too great for any one nation to tackle alone. Together, we are building an Atlantic community of researchers, policymakers, businesses and citizens. This Atlantic Community extends across and along the Atlantic Ocean.

AORA facilitates common research and knowledge exchange for us to provide healthy, resilient oceans for our future generations.
Flagship on the “Future of Seas and Oceans” in line with the G7 Initiative, and reinforce cooperation with partners in other regions such as the Baltic Sea and the North Sea, the Mediterranean and the Black Sea

On behalf of the international community of marine researchers represented through our affiliations, we greatly welcome the attention being given by G7 Ministers of Science to ‘the future of the seas and oceans’, arising from their meeting in Berlin, 8-9 October 2015. Such a focus is timely and fully appropriate: the G7 nations – Canada, France, Germany, Italy, Japan, UK and USA – not only have direct responsibility for around 40 million km2 of marine habitat (nearly twice their total land area), but together they produce the overwhelming majority (more than 80%; Jappe, 2007) of oceanographic scientific publications, while also collectively having unrivalled technological capacity and infrastructure, through state-of-the-art research vessels, satellite sensors and autonomous observing platforms.

EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture (FNSSA)

(2016) High Level Policy Dialogue on science, technology and innovation (HLPD) has adopted the roadmap for the EU-Africa Research and Innovation Partnership on Food and Nutrition Security & Sustainable Agriculture (FNSSA). In support of the implementation of the R&I Partnership on FNSSA and in line with the ‘Joint communication to the European Parliament and the Council for a renewed impetus to the Africa-EU Partnership’, a number of actions are proposed. The actions include: for the overall support to the implementation of the EU-Africa R&I Partnership on a Cooperation and Support Action (SFS-33-2018); for pillar I of the roadmap (Sustainable intensification) a portfolio of projects (SFS-35-2019-2020 and CE-SFS-36-2020); for pillar II (Agriculture and food systems for nutrition) a research and innovation action (LC-SFS-34-2019). Pillar IV of the partnership should be considered as appropriate in each proposal.

Proposals are expected to establish relevant links with other projects funded in support of the EU-Africa R&I Partnership on FNSSA, including those funded by previous Horizon 2020 work programmes and those funded by the EU’s development budget.
EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture (FNSSA)

The European and African Unions adopted in April 2016 a roadmap on research and innovation for food and nutrition security and sustainable agriculture (FNSSA). The European Commission invited around 25 African and European experts to discuss the state of play of this cooperation and to further develop the FNSSA priority themes with a view to contribute to Horizon 2020 work programme 2018-2020.

Key goals of the FNSSA Partnership

- Boost the impact of AU-EU joint research at local level by addressing the entire value-chain, strengthening capacity-building (human, research infrastructures and institutional) and focusing on demonstration projects and pilot actions to bring R&I results to the users;
- Increase production of high quality food with appropriate inputs, enhance income growth and promote rural development, contributing as such to Agenda 2030 (SDGs).

African Countries in Horizon 2020 - Statistics

(Record date: May 2018)

617 participations, in 279 grants
€98.1 million of EU funding to
African Union partners

645 researchers from African Union
countries involved in
Marie Skłodowska-Curie actions

Most active countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Projects*</th>
<th>Participations</th>
<th>EU contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>114</td>
<td>160</td>
<td>€25.68 million</td>
</tr>
<tr>
<td>Kenya</td>
<td>44</td>
<td>62</td>
<td>€8.97 million</td>
</tr>
<tr>
<td>Tunisia</td>
<td>43</td>
<td>57</td>
<td>€7.51 million</td>
</tr>
<tr>
<td>Morocco</td>
<td>46</td>
<td>52</td>
<td>€4.47 million</td>
</tr>
<tr>
<td>Egypt</td>
<td>34</td>
<td>37</td>
<td>€3.18 million</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>368</strong></td>
<td></td>
<td><strong>€49.81 million</strong></td>
</tr>
</tbody>
</table>

* Individual projects may include participants from more than one of the listed countries.

African Countries in Horizon 2020 - Statistics

Union: Participations, EU contribution & own contribution of most active countries in signed projects of H2020

Note: Participations of beneficiaries, third-parties and partner-organisations.
Source: DG Research and Innovation - International Cooperation
Data: CORDA (IRC, EIT and art.185 not included); extraction date: 15/10/2018

EU CHINA FLAGSHIP FAB - Food, Agriculture and Biotechnology

The European Commission and the Chinese Academy of Agricultural Sciences signed a letter of intent on research and innovation cooperation in food, agriculture and biotechnology (FAB) in November 2013. They agreed to work towards an ambitious strategic long-term partnership and launched the FAB 'flagship initiative'. Building on this agreement, the EU-China Task Force on FAB has developed specific common priorities that will promote substantial, coordinated and balanced research and innovation cooperation between the EU and China.
The China EU Food, Agriculture and Biotechnology (FAB) Task Force was established in 2011 under the framework of China-EU Joint Steering Committee on S&T Cooperation which was co-established by the MOST and DGRTD.

AIMs:

- Building an seamless connection and open dialogue pathway to enhance mutual understanding
- Coordinating experts from both sides in identifying priorities, jointly submitting the EU project proposals and conducting collaboration
- Providing background documents for high level coordinating bodies e.g. Joint Steering Committee on S&T Cooperation and hence to facilitate decision making process
China in Horizon 2020 - Statistics

316 Participations in 144 Projects:
- 143 in pillar “Excellent Science”
  138 x Marie-Sklodowska-Curie Actions
- 15 in pillar “Industrial Leadership”
- 154 in pillar “Societal Challenges”
  110 x Food security
  24 x Europe in a changing world
  14 x Climate action
- 4 in pillar “Science with and for Society”

EC contribution: 3,054 Mio. €
### China in Horizon 2020 – Most active organisations

<table>
<thead>
<tr>
<th>Rank</th>
<th>Organisation</th>
<th>Participations</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TSINGHUA UNIVERSITY</td>
<td>17</td>
<td>Higher or secondary education</td>
</tr>
<tr>
<td>2</td>
<td>ZHEJIANG UNIVERSITY</td>
<td>13</td>
<td>Higher or secondary education</td>
</tr>
</tbody>
</table>
Focus
INTERNATIONAL
BIOECONOMY
FORUM
BACKGROUND

• **BioE strategy objective**: raising the importance of the bioeconomy at international level (in line with the Open to the World priority).

• **Phasing out of KBBE Forum**: need to fill this void strongly acknowledged also during the Global Bioeconomy Summit organised by Germany in 2015.
RATIONALE

• A strategic approach at global level, to facilitate the exchange of knowledge across the political and scientific community and ensure an efficient use of the available resources

• Bring a contribution to the achievement of important policy objectives (such as SDGs, COP21, F&N security, rural development and decarbonisation of industries)
IBF OBJECTIVES

- Identify R&I priorities at global level to align research funding programmes and focus the global effort on specific themes.
- Identify emerging needs, issues and future research trends.
- Knowledge exchange on critical areas and development of a policy dialogue (especially on horizontal issues such as bioeconomy indicators, biomass availability, etc).
- Raise international awareness of the central role of bioeconomy in reaching global policy targets.
CURRENT SITUATION: WHO IS INTERESTED IN IBF

- Funding agencies and research ministries (Argentina, Australia, Canada, China, India, New Zealand, South Africa and US.)
- International organisations (FAO, EFI, JPI OCEAN, FACCE and HDHL)

- Argentina: Ministry of Science, Technology and Productive Innovation
- Australia: Department of Industry Innovation and Science
- Brazil: FAPESP, CONFAP, EMBRAPA
- Canada: AAFC Agriculture and Agri-Food Canada, Canadian Forest Service
- China: Institute of Food and Nutrition Development, Chinese Academy of Agricultural Sciences
- India: Ministry of Science and Technology – Department of Microbiology
- New Zealand: Ministry of Business and Innovation
- South Africa: Department of Science & Technology
- United States: National Science Foundation (NSF), USDA/ARS, USDA/NIFA, NIH
Who?
Ministries + Funding Agencies + Int. Org.s

PLENARY

Horizontal aspects (tbc)

Biomass demand/supply

Standards

Skills

Legis/Reg frame

Indicators

Thematic activities (under preparation)

WG on Food Systems Microbiome (EU lead)

WG on ICT in Precision Food Production (New Zealand lead)

WG on Plant Health (US lead)

WG on Forestry (lead to be discussed)
b. FIGURES ABOUT THE INTERNATIONAL COOPERATION IN SC2

* based on Dashboard | EU Funding & Tenders Portal
STATE OF PLAY –
International cooperation in SC2 -H2020
State of Play – International cooperation in SC2 -H2020

- 91 grants signed with third countries
- 327 participations from third countries
- 23,868,068.32 € EU contribution assigned third countries
- 52 third countries with at least one participation
- 253 institutions participating (127 without European funding)
- 72 topics with third countries participations
- AU BR CA CN HK JO KR NZ PE RU TW US
H2020 Participations

- China: 102
- South Africa: 24
- Canada: 16
- Kenya: 15
- United States: 15
- Argentina: 10
- Brazil: 10
- Egypt: 9
- New Zealand: 8
- Ghana: 7
- Australia: 7
- Uganda: 6
- Senegal: 6
- Taiwan: 5
- Lebanon: 5
- Chile: 5
- Viet Nam: 5
# TOP10 Topic for contribution to third countries

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SFS-41-2016</td>
<td>EU-Africa Research and Innovation partnership on food and nutrition security and sustainable agriculture</td>
<td>1</td>
<td>€ 3.307.081</td>
</tr>
<tr>
<td>SFS-11-2016</td>
<td>Challenges for disease management: Perennial crops in the tropics and sub-tropics</td>
<td>2</td>
<td>€ 2.872.470</td>
</tr>
<tr>
<td>SFS-42-2016</td>
<td>Promoting food and nutrition security and sustainable agriculture in Africa: the role of innovation</td>
<td>1</td>
<td>€ 2.747.750</td>
</tr>
<tr>
<td>SFS-33-2018</td>
<td>Support to the implementation of the EU-Africa Research and Innovation Partnership on Food and Nutrition Security &amp; Sustainable Agriculture (FNSSA)</td>
<td>1</td>
<td>€ 1.824.336</td>
</tr>
<tr>
<td>BG-08-2018-2019</td>
<td>All Atlantic Ocean Research Alliance Flagship</td>
<td>1</td>
<td>€ 1.262.519</td>
</tr>
<tr>
<td>SFS-07b-2015</td>
<td>Management and sustainable use of genetic resources</td>
<td>3</td>
<td>€ 1.087.895</td>
</tr>
<tr>
<td>SFS-10-2017</td>
<td>Research and approaches for emerging diseases and pests in plants and terrestrial livestock</td>
<td>3</td>
<td>€ 670.938</td>
</tr>
<tr>
<td>SFS-18-2015</td>
<td>Small farms but global markets: the role of small and family farms in food and nutrition security</td>
<td>1</td>
<td>€ 626.365</td>
</tr>
<tr>
<td>RUR-03-2017</td>
<td>Towards 2030 - policies and decision support tools for an integrated approach to the management of land as a resource</td>
<td>1</td>
<td>€ 590.688</td>
</tr>
<tr>
<td>SFS-14-2016</td>
<td>Understanding host-pathogen-environment interactions</td>
<td>2</td>
<td>€ 555.213</td>
</tr>
</tbody>
</table>
Type of organisation

Participation by Legal Entity Type

HES  REC  PUB  OTH

HES - Higher Educ., PRC - Private, REC - Research, PUB - Public, OTH - Other
Projects with third countries signed for year

Signed Grants / Participant EU Contribution by Project Signature Year / Month

<table>
<thead>
<tr>
<th>Signature Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>22</td>
<td>24</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>2016</td>
<td>22</td>
<td>24</td>
<td>22</td>
<td>22</td>
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<tr>
<td>2017</td>
<td>22</td>
<td>24</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>2018</td>
<td>22</td>
<td>24</td>
<td>22</td>
<td>22</td>
</tr>
</tbody>
</table>
## Top 10 institutions active in SC2 (for n. of participations)

<table>
<thead>
<tr>
<th>Legal Name</th>
<th>Country</th>
<th>City</th>
<th>H2020 Participations</th>
<th>H2020 Net EU Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHINA AGRICULTURAL UNIVERSITY</td>
<td>CN - China (People's Republic of)</td>
<td>BEIJING</td>
<td>6</td>
<td>€ 0</td>
</tr>
<tr>
<td>AGRICULTURAL RESEARCH COUNCIL (ARC)</td>
<td>ZA - South Africa</td>
<td>PRETORIA</td>
<td>5</td>
<td>€ 1,117,905</td>
</tr>
<tr>
<td>COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH</td>
<td>GH - Ghana</td>
<td>ACCRA</td>
<td>4</td>
<td>€ 799,653</td>
</tr>
<tr>
<td>INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE</td>
<td>NG - Nigeria</td>
<td>IBADAN</td>
<td>4</td>
<td>€ 745,455</td>
</tr>
<tr>
<td>DEPARTMENT OF SCIENCE AND TECHNOLOGY</td>
<td>ZA - South Africa</td>
<td>BRUMMERIA</td>
<td>4</td>
<td>€ 666,195</td>
</tr>
<tr>
<td>UNIVERSITY OF PRETORIA</td>
<td>ZA - South Africa</td>
<td>PRETORIA</td>
<td>4</td>
<td>€ 325,195</td>
</tr>
<tr>
<td>Ministerio de Ciencia, Tecnología e Innovación Productiva</td>
<td>AR - Argentina</td>
<td>BUENOS AIRES</td>
<td>4</td>
<td>€ 213,771</td>
</tr>
<tr>
<td>NATIONAL RESEARCH FOUNDATION</td>
<td>ZA - South Africa</td>
<td>PRETORIA</td>
<td>3</td>
<td>€ 673,964</td>
</tr>
<tr>
<td>COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION</td>
<td>AU - Australia</td>
<td>ACTON ACT</td>
<td>3</td>
<td>€ 0</td>
</tr>
<tr>
<td>MEMORIAL UNIVERSITY OF NEWFOUNDLAND</td>
<td>CA - Canada</td>
<td>ST JOHN'S</td>
<td>3</td>
<td>€ 0</td>
</tr>
</tbody>
</table>
## State of play – EU AFRICA (SC2)

<table>
<thead>
<tr>
<th>Year</th>
<th>SC2 Total</th>
<th>Topics Flagged for Africa – cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Call Budget</td>
<td>Call nb topics</td>
</tr>
<tr>
<td>2014</td>
<td>351.5</td>
<td>45</td>
</tr>
<tr>
<td>2015</td>
<td>211.5</td>
<td>27</td>
</tr>
<tr>
<td>2016</td>
<td>340.5</td>
<td>43</td>
</tr>
<tr>
<td>2017</td>
<td>416.5</td>
<td>51</td>
</tr>
<tr>
<td>2018</td>
<td>403.54</td>
<td>34</td>
</tr>
<tr>
<td>2019</td>
<td>466.6</td>
<td>28</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2190.14</td>
<td>228</td>
</tr>
</tbody>
</table>
## State of play – EU CHINA (SC2)

<table>
<thead>
<tr>
<th>Year</th>
<th>SC2 Total</th>
<th>Topics Flagged for China – cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Call Budget</td>
<td>Call nb topics</td>
</tr>
<tr>
<td>2014</td>
<td>351.5</td>
<td>45</td>
</tr>
<tr>
<td>2015</td>
<td>211.5</td>
<td>27</td>
</tr>
<tr>
<td>2016</td>
<td>340.5</td>
<td>43</td>
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<tr>
<td>2017</td>
<td>416.5</td>
<td>51</td>
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<td>403.54</td>
<td>34</td>
</tr>
<tr>
<td>2019</td>
<td>466.6</td>
<td>28</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2190.14</td>
<td>228</td>
</tr>
</tbody>
</table>
c. OVERVIEW OF THE TOPICS AND PROJECT FUNDED IN HORIZON 2020 FLAGGED FOR IC

* based on Dashboard | EU Funding & Tenders Portal
Foster functional ecosystems, sustainable food systems, and healthy lifestyles
Address climate change and resilience on land and sea
Boost major innovations on land and at sea → new products, value chains and markets
Develop smart, connected territories and value chains in rural and coastal areas
Make the transition towards a circular bioeconomy

Manage our resources wisely to nourish people sustainably
Understand, preserve and valorise oceans
Develop smarter, greener, circular rural economies

Sustainable food security
Blue Growth
Rural Renaissance

Dynamic & innovative food and farming sectors
Resource & climate-smart eco-healthy food production and consumption
Productive, healthy, resilient seas and oceans
Sustainable aquatic resources for food and bio-based value chains
Strong blue economy

Sustainable growth based on circularity and connectedness
Enhanced innovation systems
Strong & attractive rural areas

Circular Bioeconomy investment platform
De-risking investments in innovative technologies fostering industrial, rural and coastal development

5 priorities
3 goals
3 calls + FI

Key impacts

5/01/19
Sustainable Food Security

€ 753 million to use our resources more wisely and nourish people more sustainably

- Produce more diverse and healthier food from well-managed functional ecosystems
- Increase resource efficiency and environmental performance of food systems
- Understand the impact of climate change and design adaptation strategies
- Going global: joint actions with Africa and China
Call Sustainable Food Security – SFS. CALL 2019

From functional ecosystems to healthy food
SFS-04-2019-2020: Integrated health approaches and alternatives to pesticide use
SFS-08-2018-2019: Improving animal welfare
SFS-12-2019: A vaccine against African swine fever
LC-SFS-17-2019: Alternative proteins for food and feed

Environment and climate-smart food production and consumption
LC-SFS-20-2019: European Joint Programme on agricultural soil management
SFS-23-2019: Integrated water management in small agricultural catchments
CE-SFS-24-2019: Innovative and citizen-driven food system approaches in cities

Building capacities
DT-SFS-26-2019: Food Cloud demonstrators
SFS-28-2018-2019-2020: Genetic resources and pre-breeding communities
SFS-31-2019: ERANETs in agri-food

Targeted international cooperation
LC-SFS-34-2019: Food Systems Africa
SFS-35-2019-2020: Sustainable Intensification in Africa
SFS-37-2019: Integrated approaches to food safety controls across the food chain
CE-SFS-39-2019: High-quality organic fertilisers from biogas digestate
Targeted international cooperation topics (2018 -2020)

SFS-32-2018: Supporting microbiome coordination and the International Bioeconomy Forum (CSA)

“Participation of relevant partners from third countries and international organisations is strongly encouraged”

Project Funded: **MicrobiomeSupport**

Coor. **AIT AUSTRIAN INSTITUTE OF TECHNOLOGY**

4ys project

EU contribution: € 3 520 466,25

TC organisations:

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Waterloo</td>
<td>CA - Canada</td>
</tr>
<tr>
<td>UNIVERSITY OF WESTERN SYDNEY</td>
<td>AU - Australia</td>
</tr>
<tr>
<td>Ministerio de Ciencia, Tecnología e Innovación Productiva</td>
<td>AR - Argentina</td>
</tr>
<tr>
<td>UNIVERSITY OF PRETORIA</td>
<td>ZA - South Africa</td>
</tr>
<tr>
<td>PONDICHERRY UNIVERSITY</td>
<td>IN - India</td>
</tr>
<tr>
<td>Institute of Microbiology, Chinese Academy of Sciences</td>
<td>CN - China</td>
</tr>
<tr>
<td>UNIVERSIDADE ESTADUAL DE CAMPINAS</td>
<td>BR - Brazil</td>
</tr>
<tr>
<td>BATTELLE MEMORIAL INSTITUTE NON PROFIT CORPORATION</td>
<td>US - United States</td>
</tr>
<tr>
<td>New Zealand Forest Research Institute LTD</td>
<td>NZ - New Zealand</td>
</tr>
</tbody>
</table>
EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture (FNSSA)

DEPARTMENT OF SCIENCE AND TECHNOLOGY
MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH
FORUM FOR AGRICULTURAL RESEARCH IN AFRICA, GHANA
NATIONAL RESEARCH FOUNDATION
AGRICULTURAL RESEARCH COUNCIL (ARC)
REGIONAL UNIVERSITIES FORUM FOR CAPACITY BUILDING IN AGRICULTURE LIMITED (FORUM) BY GUARANTEE
COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH
INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE
NETWORK OF AFRICAN SCIENCE ACADEMIES (NASAC)
AFRICAN UNION
KNOWLEDGE ECONOMY FOUNDATION FOR SOCIETY DEVELOPMENT
MINISTRY OF EDUCATION SCIENCE AND TECHNOLOGY
FONDS NATIONAL DE LA RECHERCHE ET DE L'INNOVATION POUR LE DEVELOPPEMENT
THE REGISTERED TRUSTEES OF THE ASSOCIATION FOR STRENGTHENING AGRICULTURAL RESEARCH IN EASTERN AND CENTRAL AFRICA
MINISTERE DE LA RECHERCHE SCIENTIFIQUE

ZA - South Africa
EG - Egypt
GH - Ghana
ZA - South Africa
ZA - South Africa
UG - Uganda
GH - Ghana
NG - Nigeria
KE - Kenya
ET - Ethiopia
EG - Egypt
KE - Kenya
BF - Burkina Faso
UG - Uganda
SN - Senegal
Due to the specific challenge of this topic, in addition to the minimum number of participants set out in the General Annexes, proposals shall include at least four participants from a specific region of Africa (as defined by African Union) and a minimum of five participants from Africa.

Proposals need to ensure the commitment and participation of a variety of partners established in the EU and in Africa, and shall establish relevant links with other projects involved in the EU-Africa Research and Innovation Partnership on Food and Nutrition Security & Sustainable Agriculture (FNSSA). Proposals should include a task to cluster with other projects involved in the EU-Africa R&I Partnership on FNSSA and with the cooperation platform established under SFS-33-2018.

SUBMITTED PROPOSALS: 19
EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture (FNSSA)

SFS-35-2019-2020: Sustainable Intensification in Africa
A. [2019]: African Farming Systems, sustainable intensification pathways (RIA)

Due to the specific challenge of this topic, in addition to the minimum number of participants set out in the General Annexes, proposals shall include at least five participants from specific region of Africa (as defined by the African Union) and a minimum of eight participants from Africa.

For proper analysis, a range of different systems should be included (e.g. organic farming, agroecology, agroforestry). While presenting results the importance of scale of the analysis and its applicability should be taken into account. The analysed systems should include socio-economic aspects, analyse its resilience to climate change, farm income and where pertinent also cultural aspects of farming. Preference will be given to proposals focusing on specific regions of Africa.

SUBMITTED PROPOSALS: 46
The indicators should be developed as a part of the long-term implementation of FNSSA and its contribution to the SDGs discussion. Presentation of data should be provided in an open data and map viewer and should include four aspect pictures of where the soil sample was taken and should link with open earth data from e.g. the Copernicus programme and the project funded under H2020 topic SFS-43-2017. It is expected that the open database will contain at least a minimum of 20 000 soil sample analysed by one laboratory. The final methodology should be developed in cooperation with and validated by the Joint Research Centre and the Global Soil Partnership – ITPS African members.

**SFS-35-2019-2020: Sustainable Intensification in Africa**

B.[2019]: Soil system for Africa (RIA)

Due to the specific challenge of this topic, in addition to the minimum number of participants set out in the General Annexes, proposals shall include at least eight participants from Africa. Due to logistics the laboratory for soil sample analysis should be located on the African continent.

**SUBMITTED PROPOSALS: 6**
EU-China FAB Flagship Initiative

SFS-38-2018: Highly efficient management of soil quality and land resources (RIA)

- SUBMITTED PROPOSALS: 3
  - Still under evaluation!

- 1x(5M€+5M€ Cina)

SFS-37-2019: Integrated approaches to food safety controls across the agri-food chain (RIA)

- SUBMITTED PROPOSALS: 15

- MAA

- 2x(4M€+4M€ Cina)

CE-SFS-39-2019: High-quality organic fertilisers from biogas digestate (IA)

- SUBMITTED PROPOSALS: 29

- 1x(5M€+5M€ Cina)
CO-FUNDING MECHANISM in SC 2 - Bioeconomy

Chinese Ministry of Science and Technology (MOST)

H2020 Societal Challenge 2 - Food security, sustainable agriculture, marine and maritime research & the bioeconomy – topics where is foreseen a strong cooperation with Chinese organisations:

- **SFS-37-2019**: Integrated approaches to food safety controls across the agri-food chain (RIA)
- **CE-SFS-39-2019**: High-quality organic fertilisers from biogas digestate (IA)

Current information available:

On 22° of Oct 18 the MOST published the second call for the 2018 proposals. CNY 50 Million € for chinese –full based participants in areas of national strategic interest.

Deadline: 10 December 2018

- **MOST**
- **Call Notice - unofficial English translation**
- **Frequently Asked Questions on the Co-funding Mechanism**
- **Call identifier – only for reference for the Chinese application**

Contacts

MOST:
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China Science and Technology Exchange Centre (CSTEC)
Mr. Xin Bingqing E-mail: xinbq@cstec.org.cn
Ms. Lin Xiyan Email: linxy@cstec.org.cn
Tel:
European Commission clarifications (for SC2 topic 2019)

MOST 2019 call


Evaluation process

- The evaluation by MOST and EC is done in parallel with exchange of information and at this moment the timing of final evaluation is much closer than in the previous years. The project proposals are evaluated based on the criteria set up by MOST and EC respectively. Thus for the 2019 proposals should be submitted to both EC and MOST (in 2018 the EC deadline was in February, MOST call was closed in March).

- At the end of the evaluation process the EC will grant agreement to the winning consortium and the expectation is that MOST will fund the Chinese partners. However, since there are specific rules MOST might support all, some or none of the Chinese partners. From practice, if not all partners are funded by MOST, we see that some of them are getting financial support from other funding streams (e.g. Chinese Academy of Sciences) or self-fund. Thus, indeed there is a risk that the project that will be selected under H2020 will only have funding from H2020 and the Chinese partners will not be successful. This scenario will not change the EC decision, however this will be a risk for the consortium. In those cases EC is helping and discussing with Chinese counterpart to see if other solutions are possible.

EC encourages Chinese applicants to read the MOST call in detail as they are some specific rules to whom the funding is addressed.
## SFS-11-2016 Challenges for disease management: Perennial crops in the tropics and sub-tropics

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Duration</th>
<th>Institution</th>
<th>Countries</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>TROPICSAFE</td>
<td>22</td>
<td>University of Bologna (IT)</td>
<td>(CL - Chile - ZA - South Africa - MX - FR – France JM - Jamaica - ZA - South Africa - GH – Ghana - MX – Mexico - CU – Cuba)</td>
<td>€ 3,999,964</td>
</tr>
</tbody>
</table>
Blue Growth 2018-2019

€ 166.5 million to sustainably harvest the potential of aquatic and marine resources, while protecting biodiversity and enhancing climate resilience

- Improve knowledge on impact of **climate change** on marine ecosystems and biological resources to effectively manage their response, mitigation and resilience capacities
- Preserve and sustainably exploit **marine and coastal ecosystems** and biological resources to deliver improved **nutrition and health**
- De-risk investments and boost blue innovations to develop new bio-based **marine value chains** and open up new markets
- Develop smart and connected territories between **land and sea**
- Strengthen **international cooperation**, to promote a globally sustainable blue economy
BLUE GROWTH and IC

• Major international cooperation activities will also be launched, focusing on the South Atlantic Ocean (and NOrth) and paving the way towards an 'All Atlantic Ocean Research Alliance', and reinforcing cooperation with partners in other regions such as the Baltic Sea and the North Sea, the Mediterranean and the Black Sea.
BG-01-2018: Towards a Baltic and North Sea research and innovation programme (CSA)  
1x2,5M€

LC-BG-03-2018: Sustainable harvesting of marine biological resources (RIA)  
MAA  
2x6M€

BG-05-2019: Multi-use of the marine space, offshore and near-shore: pilot demonstrators (IA)  
2x9M€

Implementation of the EU Integrated Maritime Policy and its environmental pillar, the EU Blue Growth Strategy, the EU Marine Strategy Framework Directive, the EU Maritime Spatial Planning Directive, the EU international Ocean Governance Communication, the EU Communication for a Sustainable European Future, the EU Bioeconomy Strategy
Blue Growth

BG-07-2019-2020: The Future of Seas and Oceans Flagship Initiative (IA)

[A] 2019 - Blue Cloud services 1x6M€

[B] 2019 - Observations and forecasting 1x12M€

[C] 2020 - Technologies for observations

BG-08-2018-2019: All Atlantic Ocean Research Alliance Flagship

[A] 2018 - Coordination of marine and maritime research and innovation activities in the Atlantic Ocean (CSA) 1x4M€


[C] 2018-2019- New value chains for aquaculture production (RIA) ~2x8M€

[C] 2018-2019- New value chains for aquaculture production (RIA) 1-2x8M€
LC-BG-09-2019: Coordination of marine and maritime research and innovation in the Black Sea (CSA)

BG-10-2020 - Fisheries in full ecosystem context

BG-11-2020 - Towards a productive, healthy, resilient, sustainable and highly-valued Black Sea

1x2M€
d. FAQ + LESSONS LEARNT
FAQ

Question:
• In the “Topic and Documents” section of the call is stated that: “Due to the specific challenge of this topic, in addition to the minimum number of participants set out in the General Annexes, proposals shall include at least four participants from a specific region of Africa (as defined by African Union) and a minimum of five participants from Africa”.

Answer:
• The proposal should have minimum 5 entities from Africa. Minimum 4 entities should be from a specific region, while additional 1 (or more) could be from other parts of Africa or from the already chosen region. Please pay attention to the definition of regions as per the African Union definition and also to the legal status of the entities. The legal status will define the country of the entity.
Question(s):

"The Topic text reads: "Preference will be given to proposals focusing on specific regions of Africa."

1) Does the selected region have an influence on the evaluation?
- A: The selected region does not have any influence on the evaluation.

2) Could there be more than one project in a region?
- A: Proposals will be evaluated based on the evaluation criteria under H2020 and there is a possibility that two proposals having the same region in focus will be rank high and both might be funded.

3) Will the Commission try to cover multiple regions in Africa?
- A: Under sub-topic A the intention is that the highest rank proposals will be having different regions in Africa as the main focus.
FAQ

SFS-35-2019-2020

• How can CGIAR (Consultative Group for International Agricultural Research) Centers with a Headquarter in Africa (ILRI, ICRAF) be incorporated into consortia? Will they count as African regional partners, international partners or like "overarching" African partners?

• A: For this specific topic any general African organization located on the African continent will be counted towards African partners, as they have pan-African role they cannot be counted towards African regional partners.

• Regarding the legal status of the organization in terms of obtaining funding the general H2020 rules apply.

• In the particular case of ILRI and ICRAF both are national organizations as they are established under the Kenyan national law.
In terms of the requirements for African partners, that “proposals shall include at least five participants from specific region of Africa (as defined by the African Union) and a minimum of eight participants from Africa”. Does this mean five participants from five different countries within the region, or just a total of five partners from the region, with all potentially coming from the same country? Similarly, can all eight participants come from the same region?

Answer:

It should be read: **eight legal entities from any of the African countries which includes five legal entities from the same region (as defined by African Union).** The legal entities can be from the same country and the eight legal entities can be from the same region. Please pay attention that not all entities which are using ‘international organization’ in its name are registered as international one, many of them are registered under national law of the country were they are located. At the same time many of the umbrella organizations are having multiple country registration thus only the entity registered under one of the African countries law will be counted towards the African countries limit i.e. entity working with African and having in its title ‘Africa’ but registered in a MS will be counted towards MS requirement.
EC/MOST evaluation and communication

• The evaluation by MOST and EC is done in parallel with exchange of information and at this moment the timing of final evaluation is much closer than in the previous years. The project proposals are evaluated based on the criteria set up by MOST and EC respectively.

• At the end of the evaluation process the EC will grant agreement to the winning consortium and the expectation is that MOST will fund the Chinese partners. However, since there are specific rules MOST might support all, some or none of the Chinese partners. From practice, if not all partners are funded by MOST, we see that some of them are getting financial support from other funding streams (e.g. Chinese Academy of Sciences) or self-fund. Thus, indeed there is a risk that the project that will be selected under H2020 will only have funding from H2020 and the Chinese partners will not be successful. This scenario will not change the EC decision, however this will be a risk for the consortium. In those cases EC is helping and discussing with Chinese counterpart to see if other solutions are possible.

• We encourage Chinese applicants to read the MOST call in detail as they are some specific rules to whom the funding is addressed.
Lessons learned from implementation (from EC)

- Good communication is important: regular contact and use diverse communication channels (e.g. Skype, Weechat, video-conferencing...)
- Especially for those receiving EU funding: need for assistance by coordinators to TC beneficiaries on the EU project management
- Bridging research-policy gaps: policy sessions in review meetings; joint conferences; success stories
- Keep beneficiary register up-to-date (e.g. if LEAR changes) + check validation (in case of adding new beneficiaries)
Lessons learned from implementation - EU-China cooperation

CLEAR ADDED VALUE ON BOTH SIDES FROM MUTUAL COOPERATION (E.G. JOINT PUBLICATIONS, SHARING OF RESULTS).

However:

- More capacity building for Chinese applicants to contribute to project proposals
- Coordinated funding decision by the EU and MOST is needed
- Lack of knowledge by the EU partners of the amount of Chinese funding dedicated to joint projects
- Better institutional cooperation EU-China: ‘Project officer’ type of role at Ministry/Agency level in China could ease the coordination of EU-Chinese partners in joint projects
How Commission (REA) interacts with EU/TC policy actors:

- Regular REA B2 participation in:
  - Food, Agriculture and Bioeconomy Task Force (EU-China)
  - The Inter Service Group on High Level Policy Dialogue (HLPD) on Science Technology and Innovation (STI), with focus on Food Nutrition Security and Sustainable Agriculture (FNSSA) (EU-Africa)
  - Expert Working Group on Food Nutrition Security and Sustainable Agriculture (FNSS) (EU-Africa)
  - H2020-SFS-33 call: Support to the implementation of the EU-Africa Research and Innovation Partnership on FNSSA – policy driven CSA
- Regular contact on the implementation of projects targeted for int. cooperation
- Selection of experts from TCs evaluating H2020 proposals
e. BIOHORIZON-PROJECT – AN NCPS NETWORK OPEN TO THE WORLD
NCP & SC2 NCPs Network

BioHorizon

Network of the NCPs for the Societal Challenges 2 + Bioeconomy

- Assistance in Partner Search
- Brokerage events organization (see «profiles» section in the website)
- Webinars for participants
- News

https://www.ncp-biohorizon.net
Origins of the participants of all BioHorizon training activities (trainings, webinars, workshops).

34 active participation
One of the main objective of Biohorizon (WP2) is **to strengthen the Bio-NCP network, providing for coherent and sustainable collaboration at transnational level.**

It aims also at improving the connection with ICPC and newcomer Bio-NCPs, and to promote the tools produced especially for them, namely the newsletter and the e-mentoring matrix. It was also important to find a way to bring more experienced Bio-NCPs together with less experienced ones.
Activities focused on third countries NCPs

<table>
<thead>
<tr>
<th>E- mentoring service</th>
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<tbody>
<tr>
<td>• in order to ensure that a consistent level of NCP support is also provided outside of Europe.</td>
</tr>
<tr>
<td>• Several activities took place during reporting period to improve the connection between the European core of the Bio-NCP network and ICPC and newcomer NCPs in order to optimise the exchange of communication between all involved and to seek to provide support to Bio-NCPs wherever needed</td>
</tr>
</tbody>
</table>

### Direct support.

- calling ICPC NCPs in order to better understand their needs and to promote the BioHorizon tools

### 2. Welcome letter

- starts communication, introduces the BioHorizon project and its activities and describes tools available

### 3. Missions – a personalised approach (Tunisia and Ukraine).

- BH helps to organise the event, defines content and provides trainers and expertise.
Services open to third countries NCPs

- Webinars
- Trainings (including travel reimbursement for ICPC NCPs)
- Workshops
- Newsletters /Communication flow (including social media)
- Guideline for NCPS
- Brokerage event
- Advisory board BH
- Internal platform
International Brokerage Event

Food Security | Sustainable Agriculture and Forestry | Marine, Maritime and Inland Water Research | Bioeconomy | KET-Biotechnology | Brussels, 3rd July 2019

Events
3 July 2019, Brussels, Belgium


Looking for Horizon 2020 project partners? Do not miss one of the most relevant and supportive SC2 & KET-Biotechnology events of the year!

more information →

https://www.ncp-biohorizon.net/events?cmd=showDetail&id=242
Thank you for your attention

Serena Borgna
BIOHORIZON partner
APRE
borgna@apre.it
- PRIMA – Partnership for Research and Innovation in the Mediterranean Area is the most ambitious joint programme to be undertaken in the frame of Euro-Mediterranean cooperation.
- An integrated Research and Innovation Programme on food systems and water resources in the Mediterranean
- 19 Countries, 11 EU and 8 SEMCs, and the EC
- 500 million euro budget over 7 years
- Mission: “To achieve, support and promote integration, alignment and joint implementation of national R&I programmes under a common research and innovation strategy to address the diverse challenges in water scarcity, agriculture, food security.”
• **MANAGEMENT OF WATER**
  Integrated and sustainable management of water for arid and semi-arid Mediterranean areas

• **FARMING SYSTEMS**
  Sustainable farming systems under Mediterranean environmental constraints

• **AGRO-FOOD VALUE CHAIN**
  Sustainable Mediterranean agro-food value chain for regional and local development

[http://prima-med.org/](http://prima-med.org/)
Indicative PRIMA Call 2019 Content

Section 1, four Calls

**THEMATIC AREAS**

1. Thematic area water management
2. Thematic area farming system
3. Thematic area food value chain
4. Thematic area Nexus

Section 2, a single multi-topic Call

**THEMATIC AREA:**

Agro-Food value chain, Farming systems, Management of water

DISCLAIMER Preliminary information, AWP has not been approved by European Commission yet
Strategic Priorities Allocation of Topics in 2019 Calls

- Priority 1 Water resources availability and quality within catchments and aquifers
- Priority 2 Sustainable, integrated water management
- Priority 3 Irrigation technologies and practices

- Priority 1 Adaptation of agriculture to climate change
- Priority 2 Developing sustainable and productive agro-ecosystems

- Priority 2 Food Safety in local food chains
- Priority 3 Implementation of innovation in the Agro-food chain, promoting higher quality, sustainability and competitiveness, with particular reference to smallholders

Topics 1

<table>
<thead>
<tr>
<th>TOPICS</th>
<th>S1</th>
<th>TOPICS S2</th>
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<tbody>
<tr>
<td>RIA 1.1.1</td>
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<td>RIA 1.2.1</td>
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<td>RIA 2.1.1</td>
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<td>RIA 2.2.1</td>
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<td>IA 1.2.2</td>
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<td>CSA 1.4.2</td>
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2 IAs

6 RIA*
Total Budget for 2019 Calls

- 28 M Euro Section 1 Call
- 35 M Euro Section 2 Calls
- 63 M Euro
Calendar 2019 Calls **Section 1** and **Section 2**

**Call launch:** 18 December 2018 - Open for proposals

**Call closure Stage 1:** Submission of pre-proposals →
21 February S2
28 February S1

**Evaluation process Results →**
17-20 May S1
10 June S2

**Call closure Stage 2:** Submission of full proposals →
16 July S1
4 September S2

**Results Announcement:** tentative December 2019

**Signature of grant agreements:** (max 8 months after the full proposals submission deadline)
Standard eligibility conditions

The minimum number of participants is three. Consortia must be composed by at least three independent legal entities established in three different countries considered to be PRIMA Participating States, of which:

- At least one is established in a EU Member State (Croatia, Cyprus, France, Germany, Greece, Italy, Luxembourg, Malta, Portugal, Slovenia, Spain)
- At least one is an established in a third country bordering the Mediterranean Sea: Algeria, Tunisia, Turkey, Israel, Jordan, Lebanon, Egypt, Morocco.