



## Science, Technology and Innovation Cooperation between Sub-Saharan Africa and Europe



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### Building Bi-regional Partnerships for Global Challenges



CAAST-Net Plus is funded by the European Union's Seventh Framework Programme for Research and Technological Development (FP7/2007-2013) under grant agreement n° 311806. This document reflects only the author's views and the European Union cannot be held liable for any use that may be made of the information contained herein.

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**Organisation Name(s):** UniPID, CSIR-STEPRI,  
FORTH,

# 25 partner network

## Africa

- Ministry of Higher Education and Scientific Research, Egypt
- **Council for Scientific and Industrial Research, Ghana**
- Department of Science and Technology, South Africa
- Research Research (Africa), South Africa
- Ministry of Science and Technology, Kenya
- Uganda National Council for Science and Technology, Uganda
- Ministry of Education Rwanda, Rwanda
- Ministry of Higher Education, Science, and Innovation, Cape Verde
- Ministry of Higher Education and Scientific Research, Senegal
- National Office for Technology Acquisition and Promotion Act, Nigeria
- Direction of Research, Ministry of National Education and Scientific Research, Madagascar
- Ministry of Education, Science and Technology, Malawi
- Association of African Universities, Ghana

## Europe

- **Association of Commonwealth Universities, UK**
- Research Council of Norway, Norway
- Institute of Research and Development, France
- Project Management Agency in the German Aerospace Centre, Germany
- **University of Jyväskylä/UniPID, Finland**
- Foundation for International Cooperation, Health, and Social Policy, Spain
- Foundation for Science and Technology, Portugal
- Council on Health Research for Development Association, Switzerland
- The Technical Centre for Agricultural and Rural Cooperation, Netherlands
- **Foundation for Research and Technology, Greece**
- United Nations Environment Programme Riso Centre, Denmark
- Centre for Social Innovation, Austria

# Quick facts

<b>CAAST-Net Plus</b>	<b>Advancing Sub-Saharan Africa-European Union Research and Innovation Cooperation for Global Challenges</b>
<b>Period</b>	2013-2016
<b>Coordinator</b>	Dr Andrew Cherry (andy.cherry@acu.ac.uk) Association of Commonwealth Universities UK
<b>Africa Regional Coordinator</b>	Dr Eric Mwangi (emwangi23@yahoo.com) Ministry of Higher Education, Science and Technology, Kenya
<b>Website</b>	<a href="http://www.caast-net-plus.org">www.caast-net-plus.org</a>
<b>Funding Instrument</b>	Seventh Framework Programme (FP7)
<b>Grant Agreement</b>	311806
<b>Keywords</b>	Research; innovation; European Union; African Union; Horizon 2020; policy dialogue; National Contact Point; climate change; food security; global health
<b>Predecessor Project</b>	Network for the Coordination & Advancement of Sub-Saharan Africa-European Union Science and Technology Cooperation
<b>YouTube</b>	<a href="https://www.youtube.com/watch?v=LJru9tJrhLc">https://www.youtube.com/watch?v=LJru9tJrhLc</a>

## Our goal?

To strengthen the cooperation in research and innovation between Africa and Europe

## Why?

To more effectively tackle the global challenges of **health, food security, and climate change**

# CN+ Purpose

- A policy support tool to reinforce EU-Africa cooperation in STI, particularly, but not exclusively, in the complementary contexts of H2020 and JAES by:

Focusing on Global Challenges

Supporting dialogue on policies, priorities and practices of international cooperation

Fostering, improving & monitoring practical research cooperation partnerships:  
strengthening cooperation

# Specific Objectives



To encourage new and diverse multi-stakeholder partnerships that, through research and innovation, tackle global challenges in health, food security, and climate change that affect Africa and Europe.



To enable better understanding between the public and private sector in Africa and Europe of the link between research and innovation, and to identify and share opportunities for cooperation through networking and communication.



To facilitate exchanges that result in learning and that support formal policy dialogues, in particular Partnership 8 of the Joint Africa-EU strategy, for more effective research and innovation cooperation.

# CAAST-Net Plus: Work Package 5



- **Lead Partners:**
  - **CSIR-STEPRI**
  - **UNIPID**
  - **HELP-FOWARD**

# CAAST-Net Plus: Work Package 5

## Objectives:

- Raise the level of awareness about Horizon 2020 among African and European STI research communities, but also of other significant programmes supporting bi-regional cooperation, and of the opportunities they present for cooperation, particularly around global challenges
- Support the enlargement of the NCP network in Africa
- Conduct analysis and monitoring of Africa-Europe cooperation in key themes



## Overview: Rules for Participation in Horizon 2020



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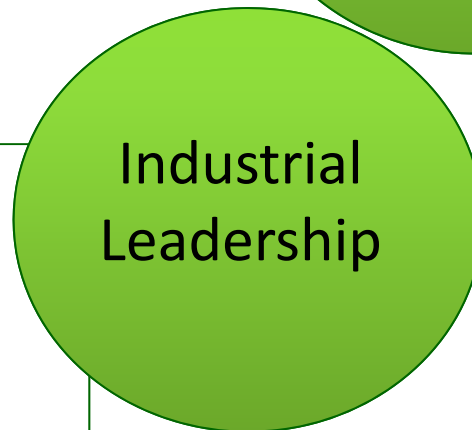
**Organisation Name(s):** UniPID/University of Jyväskylä, CSIR-STEPRI

5. 12.2013

# Horizon 2020

## Structure

- European Research Council
- Future and Emerging Technologies
- Marie Skłodowska-Curie Actions
- Research Infrastructures, including e-Infrastructures



- Leadership in Industrial and Enabling Technologies
- Access to Risk Finance
- Innovation in SMEs

- Health, demographic change and wellbeing
- Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy
- Secure, clean and efficient energy
- Smart, green, and integrated transport
- Climate action, resource efficiency and raw materials
- Europe in a changing world – inclusive, innovative and reflective societies
- Secure societies – protecting freedom and security of Europe and its citizens

# Participation in Horizon 2020

## Who Can Apply?

- Legal entities from EU Member States and Associated Countries
  - A **legal entity** is defined as “any natural person, or any legal person created and recognised as such under national law, European Union law or international law, which has legal personality and which may, acting in tis own name, exercise rights and be subject to obligations
- Legal entities established in International Cooperation Partner Countries (ICPC-INCO), including African countries
  - If provided for in a Strategic Programme or a Work Programme, or
  - If essential for carrying out an action, or
  - If provision for funding is provided for in a bilateral agreement between Community and that country

# Participation in Horizon 2020

## Which Types of Participants?

- Research organizations, Universities
- High-tech Small and Medium Sized Enterprises (SMEs)
- SME Associations (specific instruments)
- Public administrations (local, regional, or national)
- Individual researchers wishing to work in another country
- Institutions running a research facility of multi-national interest
- Civil society organizations

# Participation in Horizon 2020

## What can I apply for?

- Research and Innovation Actions
- Innovation Actions
- Coordination and Support Actions
- Frontier Research Grants – European Research Council
- Support for Training and career development – Marie Skłodowska-Curie Actions
- SME Instrument
- Fast Track to Innovation

# Participation in Horizon 2020

## What can I apply for?

Research and Innovation Actions		Innovation Actions	
Funding for projects tackling clearly defined challenges, which can lead to the development of new knowledge or a new technology.		Funding focused on closer-to-the-market activities.	
Who?	Minimum 3 independent legal entities from 3 different EU MS or AC <ul style="list-style-type: none"> <li>Additional information may be defined in the Work Programme</li> </ul>	Who?	Minimum 3 independent legal entities from 3 different EU MS or AC <ul style="list-style-type: none"> <li>Additional information may be defined in the Work Programme</li> </ul>
Funding Rate	100% funding for all activities and participants	Funding Rate	70% funding for all activities and most participants <ul style="list-style-type: none"> <li>100% reimbursement possible for non-profit organizations</li> </ul>
Overhead Rate	25%	Overhead Rate	25%

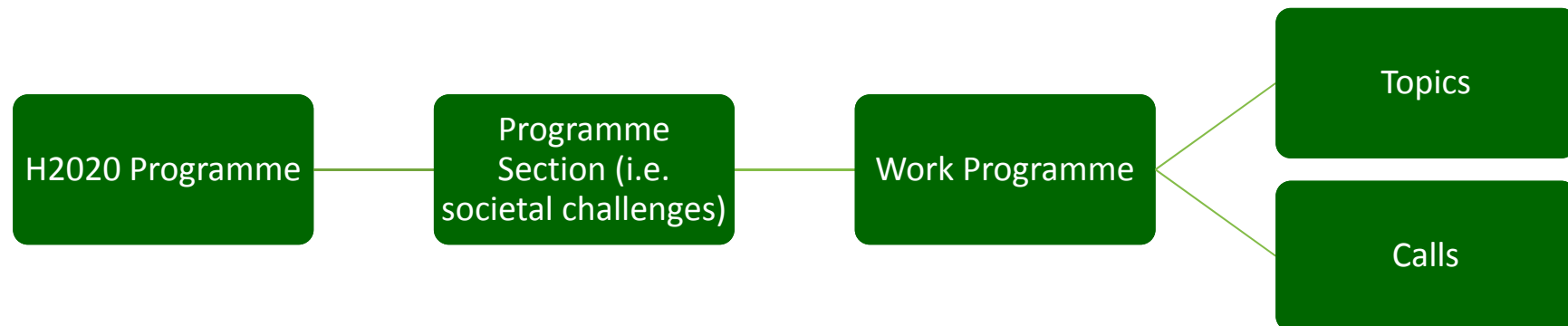
# Participation in Horizon 2020

## What can I apply for?

Coordination and Support Actions		Marie Skłodowska-Curie Actions	
Funding covers the coordination and networking of research and innovation projects, programmes, and policies. <i>Funding for research and innovation per se is not eligible.</i>		Funding for international research fellowships in the public or private sector, research, training, staff exchanges	
Who?	Single entities or consortia of partners from different countries, industry, and academia <ul style="list-style-type: none"> <li>Additional information may be defined in the Work Programme</li> </ul>	Who?	Early stage researchers or experienced researchers (of any nationality), technical staff, national/regional research mobility programmes <ul style="list-style-type: none"> <li>Additional information may be defined in the Work Programme</li> </ul>
Funding Rate	100% funding for all activities and participants	Funding Rate	100% funding for all activities and most participants
Overhead Rate	25%	Overhead Rate	25%

# Relationships in Horizon 2020

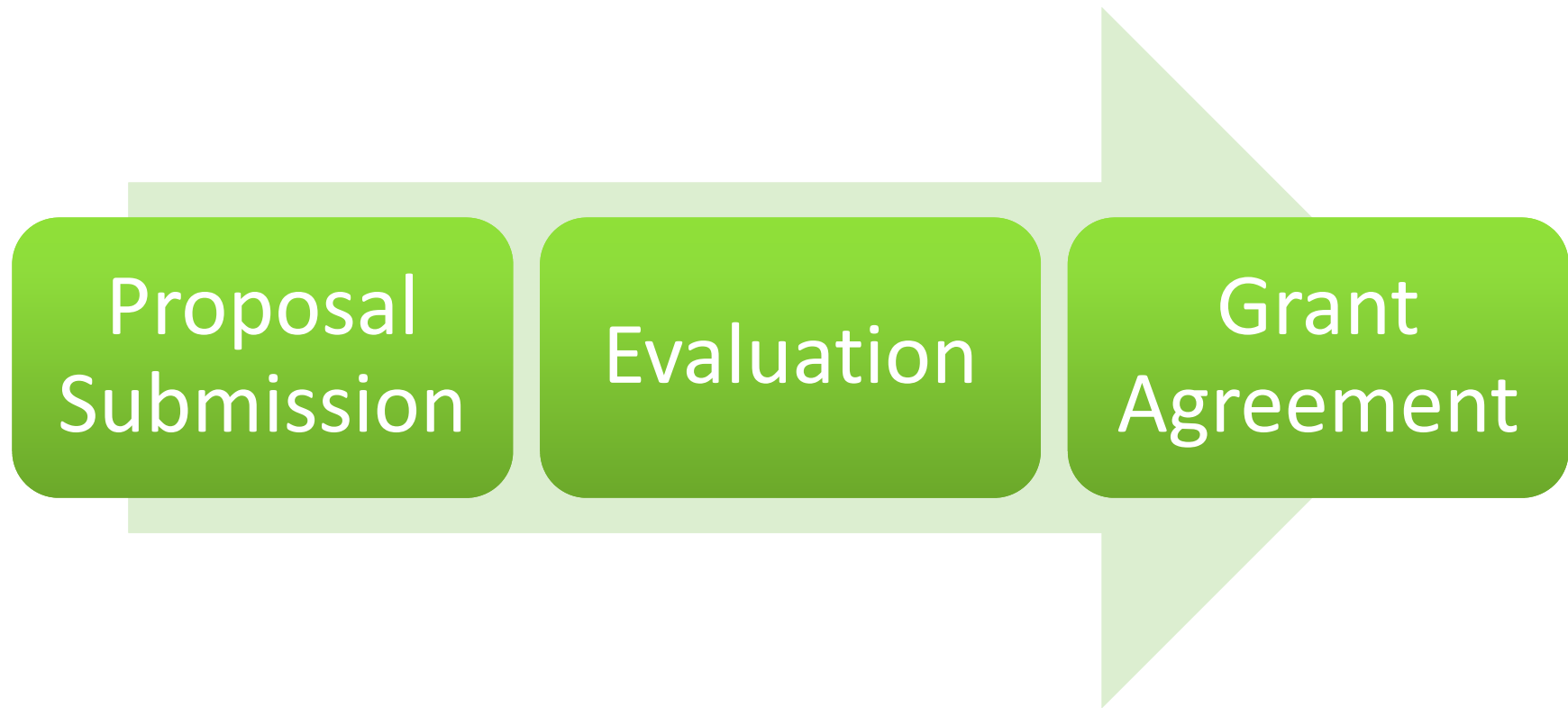
## Key Items





# Dimensions of Simplification

## Granting Process



# Funding Schemes in Horizon 2020

## How do I apply?

1. Read the Work Programme and identify areas of interest and expertise
  - Should be relevant to your organization's strategic direction and research objectives
  - Talk to the National Contact Points (NCP) for that area for more information
2. Form or join a consortium
  - Identify relevant partners to cooperate with
  - Determine what kind of role you are aiming for: partner, work package leader, coordinator (must be in EU organization)
  - Identify and highlight what you bring to the consortium and what aspect of the project would be interesting for your organization
  - Be flexible

# Funding Schemes in Horizon 2020

## How do I apply?

### 3. Write a proposal

- Agree on the concept of the project with the partners; WP leaders outline proposed tasks and responsibilities for each WP; agree on who writes what (often written by one person/organization)
- Main parts of the proposal:
  - Part A – Administrative details related to the partners (beneficiaries and proposed budget)
  - Part B – Main areas to be addressed
    - Concept and Objectives
    - Work Plan Structure – Work Packages and Tasks
    - Implementation – project management strategy, profiles of partners, complementarity of the consortium, justification of funding requested
    - Impact – how does the project proposed address the expected impacts in the work programme, dissemination strategy, exploitation strategy
  - Organizational profile for each partner

# Funding Schemes in Horizon 2020

## How do I apply?

### 3. Write a proposal (*continued*)

- Preparing the Budget:
  - Grant reimbursed by actual costs based on budget submitted and actual eligible costs incurred
  - Eligible costs:
    - Personnel costs: based on actual salary, salary + social security; Person Months (PMs) allocated for each task, timesheets must be kept to account for work
    - Subcontracting: not for core activities of the project or for project management; Eligible activities: printing of dissemination materials, room hire and catering for meetings and workshops, design of website, etc.
    - Other direct costs: travels costs and subsistence allowance (based on the normal practices of the institution); depreciation costs of essential equipment
- Intellectual Property Rights:
  - Discuss initial strategy for IPR, access rights to pre-existing knowledge, and exploitation and dissemination in the proposal & between partners
  - Handling of IPR codified in Consortium Agreement

# Funding Schemes in Horizon 2020

## How do I apply?

4. Proposal submitted online via coordinator
5. Proposal evaluated by independent, thematic experts based on:
  - Excellence of the approach:
    - concept, objectives, alignment with call text, research approach, details and coherence of the work plan
  - Impact
    - aligned with expected impact outlined in the Work Programme
    - quality of the IPR strategy, exploitation and dissemination
  - Quality and efficiency of the implementation
    - project management structure – communication flows, assignment of responsibilities, quality controls, conflict resolution strategy, etc.
    - partners - profiles must clearly show expertise and relevance of activities to be undertaken based on skill base
    - complementarity of the consortium
    - justification of the budget
  - Proposals will receive an Evaluation Summary Report

# Funding Schemes in Horizon 2020

## How do I apply?

6. Successful proposals subject to negotiations with the Commission, followed by signing a Grant Agreement
7. Successful consortia should sign a Consortium Agreement, including the fair handling of IPR
  - Basic guidelines for IPR:
    - Ownership of Results: beneficiary who generated the results, joint ownership in specific circumstances where a number of partners were involved in the specific activity
    - Results should be protected If results are capable of commercial/industrial exploitation
    - Exploitation: results should be exploited by the partners on a best efforts basis – need to explain exploitation strategy in proposal
    - Dissemination: required to widely disseminate the results, open access to scientific publications

## EU Africa Research Cooperation in Horizon 2020: Health, Climate Change, and Agriculture



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## Societal Challenge 1: Health, demographic change and wellbeing

[http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014\\_2015/main/h2020-wp1415-health\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-health_en.pdf)

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**4.11.2013**



# Societal Challenge 1 – General Information

## Health, Demographic Change and Wellbeing

- Aim to create opportunities for real breakthrough research and radical innovation in health and wellbeing.
- One focus on Personalising Health and Care (PHC)
  - Topics divided into 7 areas, reflecting the need for a translational and integrated approach to the challenge.
- The special areas of PHC:
  - Understanding health, ageing and disease
  - Effective health promotion, disease prevention, preparedness and screening
  - Improving diagnosis
  - Innovative treatments and technologies
  - Advancing active and healthy ageing
  - Integrated, sustainable, citizen-centred care
  - Improving health information, data exploitation and providing an evidence base for health policies and regulation

# Societal Challenge 1: Objectives

## Personalizing Health and Care

- To improve understanding of the causes and mechanisms underlying health, healthy ageing and diseases
- Improve the ability to monitor health, prevent, detect, treat and manage diseases
- Support older people to remain active and healthy
- Test and demonstrate new models and tools for health and care delivery

# Societal Challenge 1: Overview

Topics
<b>UNDERSTANDING HEALTH, AGEING AND DISEASE</b>
PHC-1-2014. Understanding health, ageing and disease: determinants, risk factors and pathways
PHC-2-2015. Understanding diseases: systems medicine
PHC-3-2015. Understanding common mechanisms of diseases and their relevance in co-morbidities
PHC-4-2015. Health promotion and disease prevention: improved inter-sector cooperation for environment and health based interventions
PHC-5-2014. Health promotion and disease prevention: translating 'omics' into stratified approaches
PHC-6-2014. Evaluating existing screening and prevention programmes
PHC-7-2014. Improving the control of infections epidemics and foodborne outbreaks through rapid identification of pathogens
PHC-8-2014. Vaccine development for poverty-related and neglected infectious diseases: Tuberculosis
PHC-9-2015. Vaccine development for poverty-related and neglected infectious diseases: HIV/AIDS

# Societal Challenge 1: Overview

Topics
<b>IMPROVING DIAGNOSIS</b>
PHC-10-2014. Development of new diagnostic tools and technologies: <i>in vitro</i> devices, assays and platforms
PHC-11-2015. Development of new diagnostic tools and technologies: <i>in vivo</i> medical imaging technologies
PHC-12-2014/2015. Clinical research for the validation of biomarkers and/or diagnostic medical devices
<b>INNOVATIVE TREATMENTS AND TECHNOLOGIES</b>
PHC-13-2014. New therapies for chronic non-communicable diseases
PHC-14-2015. New therapies for rare diseases
PHC-15-2014/2015. Clinical research on regenerative medicine
PHC-16-2015. Tools and technologies for advanced therapies
PHC-17-2014. Comparing the effectiveness of existing healthcare interventions in the elderly
PHC-18-2015. Establishing effectiveness of healthcare interventions in the pediatric population

# Societal Challenge 1: Overview

Topics
<b>IMPROVING HEALTH INFORMATION, DATA EXPLOITATION AND PROVIDING AN EVIDENCE BASE FOR HEALTH POLICIES AND REGULATION</b>
PHC-30-2015. Digital representation of health data to improve disease diagnosis and treatment
PHC-31-2014. Foresight for health policy development and regulation
PHC-32-2014. Advancing bioinformatics to meet biomedical and clinical needs
PHC-33-2015. New approaches to improve predictive human safety and testing
PHC-34-2014. eHealth interoperability
<b>COORDINATION ACTIVITIES</b>
HCO-1-2014. Support for the European Innovation Partnership on Active and Healthy Ageing
HCO-2-2014. Joint Programming: Coordination Action for the Joint Programming Initiative “More Years, Better Lives – the Challenges and Opportunities of Demographic Change”
HCO-3-2015. Support for the European Reference Networks: Efficient network modelling and validation
HCO-4-2014. Support for international infectious disease preparedness research
HCO-5-2014. Global Alliance for Chronic Diseases: prevention and treatment of type 2 diabetes
HCO-6-2015. Global Alliance for Chronic Diseases: 2015 priority

# Societal Challenge 1: Health

## PHC-9-2015: Vaccine development for poverty-related and neglected infectious diseases: HIV/AIDS

Call: H2020-PHC-2015-single-stage

Deadline: 21.04.2015

Scope: Proposals should focus on strengthening the capacity for discovery and early development of new vaccine candidates for HIV/AIDS by addressing all of the following inter-related elements:

1. Establishment of a platform for the discovery and selection of several new diverse and novel preventive or therapeutic vaccine candidates for HIV/AIDS, and their pre-clinical and early clinical testing.
2. The major bottlenecks in vaccine development should be addressed; in particular better ways for early distinction between successful candidates and those that will eventually fail in late stage clinical trials. Proposals should therefore pool expertise in the areas of *in vitro* and *in silico* testing, predictive animal models, predictive correlates of protection, phase 0 trials, first in man trials and innovative risk prediction methods, taking into account sex-specific differences. Based on these criteria the most promising new vaccine candidates for HIV/AIDS will be compared and selected in an objective and transparent process according to their merit.
3. The successful proposal shall continue its vaccine development in the context of the **European and Developing Countries Clinical Trials Partnership (EDCTP)**, and a pathway and commitment towards this direction must form an integral part of the proposal.

> Research and Innovation Actions

# Societal Challenge 1: Health

## HCO-6-2015: Global alliance for Chronic Diseases. Prevention and treatment of lung diseases

Call: H2020-HCO-2015

Deadline: 24.02.2015

Scope: Proposals must focus on lung diseases and they must have an implementation science focus. They must address what works, for whom, under what contextual circumstances and are the intervention(s) adaptable and scalable in ways that are accessible and equitable. Proposals should generate new knowledge on interventions and their implementation for the prevention and treatment of lung diseases in LMIC, and/or in vulnerable populations in HIC. Proposals must focus on existing approaches to prevention and control of lung diseases or develop treatments at lower costs. They should demonstrate a sound understanding of the local health system context as well as the global cross-sectorial context.

All proposals should:

- Focus on research into implementation of prevention and/or treatment strategies derived from existing knowledge and research.
- Develop an improved understanding of the key barriers and facilitators at local and national levels that affect the prevention and treatment of lung diseases.
- Provide evidence of a health economics dimension such as cost effectiveness of the proposed intervention and its scalability.

# Societal Challenge 1: Health

## *Scope (continued)*

- Describe a clear proposed pathway to embedding the intervention into policy and practice after the study which addresses how:
  - Local and/or national policy makers will be engaged both at the start of the project as well as the end.
  - The project outcomes/evidence will be utilised for the scaling up of the intervention on a local, national and international level.
  - Future scaled-up implementations will fit within the local social, cultural and economic context.
  - Identify obstacles such as inequities and equity gaps including gender that will be taken into account in the design of an implementation strategy.
- Include local stakeholders such as patient groups or community groups.

Proposals may focus on a wide range of prevention and/or treatment strategies. This may include programmes addressing (one of or combinations of):

- Structural interventions or policies designed to promote improved health outcomes. For example, evaluating the contribution of public policies to lung diseases prevention efforts, or monitoring the potential effects of such policies if adopted and implemented;
- Approaches to implementing accessibility of or adherence to, pharmaceutical, or other promising or proven interventions;
- Study the feasibility and effectiveness of low-cost and integrated prevention and management approaches of lung diseases;



# Summary Points on Health & Wellbeing Programmes

- Most of the topics are aimed at 100% collaboration;
- Most of the topics have appeal outside of Europe and should be of interest to Africa; in fact health and wellbeing improvement is a global challenge;
- For those in the Health Sector, there is opportunity for everyone given the core areas:
  - *Understanding health, ageing and disease;*
  - *Effective health promotion, disease prevention, preparedness and screening;*
  - *Improving diagnosis;*
  - *Innovative treatments and technologies;*
  - *Advancing active and healthy ageing;*
  - *Integrated, sustainable, citizen-centred care;*
  - *Improving health information, data exploitation and providing an evidence base for health policies and regulation;*
  - **Importantly, there are opportunities for private sector/ SME participation**



## Societal Challenge 2: Food Security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy

[http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014\\_2015/main/h2020-wp1415-food\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-food_en.pdf)

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**4.11.2013**

## Societal Challenge 2: General Information

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

- Aim to make the best of the biological resources in a sustainable way
- General focus on developing productive and efficient systems, supporting ecosystem services, and strengthening low carbon supply chains
- **2014-2015 focus** on sustainable food security, blue growth, and supporting the bioeconomy
- Multi-disciplinary approach useful
- Focus on finding solutions
  - innovation aspect
  - integrating end-users
- All activities **open to third countries**, with specific topics stemming from ongoing international dialogues (**including the EU-Africa dialogue on research and innovation**)

# Societal Challenge 2: Food Security

## Sustainable Food Security

- This focus area will develop competitive and resource-efficient aquatic and terrestrial food productions systems covering: eco-intensification of production; sustainable management of natural resources, including the accurate valuation of ecosystems services, while addressing climate change mitigation and adaptation; technologies for a sustainable food chain; safe foods and healthy diets for all; and a global food security system.
- **2014-2015 focus** on:
  - Sustainable food productions systems
  - Safe food and healthy diets
  - Global drivers of food security

# Societal Challenge 2: Food Security / Overview

Topics
<b>SUSTAINABLE FOOD PRODUCTION SYSTEMS</b>
SFS-1-2014/2015. Sustainable terrestrial livestock production
SFS-2-2014/2015. Sustainable crop production
SFS-3-2014. Practical solutions for native and alien pests affecting plants
SFS-4-2014. Soil quality and function
SFS-5-2015. Strategies for crop productivity, stability and quality
SFS-6-2014. Sustainable intensification pathways of agro-food systems in Africa
SFS-7-2014/2015. Genetic resources and agricultural diversity for food security, productivity and resilience
SFS-8-2014/2015. Resource-efficient eco-innovative food production and processing
SFS-9-2014. Towards a gradual elimination of discards in European fisheries
SFS-10-2014/2015. Tackling disease related challenges and threats faced by European farmed aquatic animals
SFS-11-2014/2015. Implementation of an Ecosystem-based approach for European aquaculture

# Societal Challenge 2: Food Security / Overview

Topics
<b>SAFE FOOD AND HEALTHY DIETS AND SUSTAINABLE CONSUMPTION</b>
SFS-12-2014. Assessing the health risks of combined human exposure to multiple food-related toxic substances
SFS-13-2015. Biological contamination of crops and the food chain
SFS-14-2014/2015. Authentication of food products
SFS-15-2014. Proteins of the future
SFS-16-2015. Tackling malnutrition in the elderly
SFS-17-2014. Innovative solutions for sustainable novel food processing
<b>GLOBAL DRIVERS OF FOOD SECURITY</b>
SFS-18-2015. Small farms but global markets: the role of small and family farms in food and nutrition security
SFS-19-2014. Sustainable food and nutrition security through evidence based EU agro-food policies
SFS-20-2015. Sustainable food chains through public policies: the cases of the EU quality policy and of public sector food procurement

# Societal Challenge 2: Food Security

## SFS-01c-2015: Assessing sustainability of terrestrial livestock production

Call: H2020-SFS-2015-2

Deadline: 24.2.2015

Stage 2: 11.6.2015

Scope: Proposals should address the following issues (C):

...

- c) **Assessing sustainability of terrestrial livestock production:** Proposals should undertake an assessment of the sustainability and potential delivery of ecosystem services, social services, resilience, competitiveness and possible trade-offs of diverse EU animal production systems. The assessment should be holistic, encompass the main facets of the concerned systems, including international trade, extend to the dimensions of supply chains and territories and elaborate necessary indicators. Proposals should extend to socio-geographic and demographic changes of the concerned farming community and projections, as well as the expected place of animal products in the society and diets in the future, looking across the whole food chain. Proposals should establish a farm-level observatory and knowledge exchange networks on the sustainability of livestock linking with the European Innovation Partnership with a focus on innovative system solutions for short and long-term needs. Proposals should combine socio-economic work and case studies and sketch a roadmap for further research and policy making. Proposals should fall under the concept of 'multi-actor approach'.

> Research and innovation actions

# Societal Challenge 2: Food Security

## SFS-5-2015: Strategies for crop productivity, stability and quality

Call: H2020-SFS-2015-2

Deadline: 24.2.2015

Stage 2: 11.6.2015

Scope: Proposals should propose smart approaches and tools to improve identification, prediction and introduction of useful genetic variation in crops, as well as favorable combinations of genotypes and management practices in a range of environments. They should tackle crop improvement in a holistic manner, and seek for novel breeding targets to improve yield, yield stability, quality, biotic/abiotic stress tolerance/resistance and environmental benefits. Activities and results should feed into breeding programmes as well as help diversifying and optimizing crop management at different stages of plant development. **In line with the objectives of the EU strategy for international cooperation in research and innovation, proposals are encouraged to include participants established in third countries.** Proposals should fall under the concept of 'multi-actor' approach and allow for adequate involvement of the farming sector in proposed activities. **This action allows for the provision of financial support to third parties in line with conditions set out in Part K of the General Annexes.**

> Research and innovation actions



# Societal Challenge 2: Food Security

## SFS-7b-2015: Management and sustainable use of genetic resources

Call: H2020-SFS-2015-2

Deadline: 24.2.2015

Stage 2: 11.6.2015

Scope: Proposals should address one of the following issues (a) or (b), and should clearly indicate to which one they refer.

...

- b) [2015] Management and sustainable use of genetic resources:** Proposals should implement comprehensive actions to improve the status and use of (in particular European) ex-situ and in-situ genetic collections. More specifically, they should support acquisition, conservation, characterization/evaluation and especially the use of specific genetic resources in breeding, farming and forestry activities. Furthermore, proposals should undertake broader dissemination and awareness raising activities. In doing so, they should closely liaise with relevant on-going initiatives e.g. seeking to harmonize, rationalize, and improve management of existing collections and databases. **In line with the objectives of the EU strategy for international cooperation in research and innovation, proposals are encouraged to include participants established in third countries. This action allows for the provision of financial support to third parties in line with conditions set out in Part K of the General Annexes.** Proposals should address crop, forest and/or livestock genetic resources.

> Research and innovation actions

# Societal Challenge 2: Food Security

## SFS-18-2015: Small farms but global markets: the role of small and family farms in food and nutrition security

Call: H2020-SFS-2015-2

Deadline: 24.2.2015

Stage 2: 11.6.2015

Scope: Proposals should thoroughly assess the role of family farms and other small food businesses and particularly those with small structures in achieving sustainable FNS, evaluating the means by which such entities could respond to the expected increase in demand for food, feed and fiber under ever scarcer resources, as well as providing evidence and developing tools to guide decision makers in the choice and combination of intensification pathways. Research should identify the optimal enabling environment for small and family farms and businesses to accomplish the aforementioned role on FNS and the multiple dimensions of sustainability with respect to infrastructure, supply chain and governance needs. Foresight activities should be carried out to project the potential weight and roles of the aforementioned entities in a few decades' time, regarding the various dimensions of sustainability, **including the challenges of less developed countries' growing rural densities**. Research work should build upon existing knowledge and take into account activities related to the 2014 International year of Family Farming and Smallholder Farming. **In line with the objectives of the EU strategy for international cooperation in research and innovation and in particular with the implementation of the EU-Africa dialogue, proposals are encouraged to include third country participants, especially those established in Africa and Asia.**

> Research and innovation actions

# Societal Challenge 2: Food Security

## SFS-20-2015: Sustainable food chains through public policies: the cases of the EU quality policy and of public sector food procurement

Call: H2020-SFS-2015-2

Deadline: 24.2.2015

Stage 2: 11.6.2015

Scope: Proposals should investigate the impact of both the quality policy and public sector food procurement policies (including “school schemes”) on the overall sustainability of rural territories and their role in fostering the provisions of public goods as well as the impact of public food procurement on balanced nutrition. They should extend to short food supply chains which are impacted by both types of policies and assess their impact on the rural economy. Proposals should investigate the contribution and impact of the quality policy to the various objectives of the agricultural and rural development policies ranging from social and territorial cohesion to consumer confidence. Costs related to the policy and possible routes to improve its delivery should be researched. Proposals should cover a large array of PDOs and PGIs, organic products (including agriculture and aquaculture products), and short food supply chains based on regional sourcing. On food procurement policies, proposals should review existing practices, identify constraints to their development, investigate how communities of practice and partnerships involving a broad range of stakeholders can be utilized and shed light on its impact on territorial development. A large review of existing schemes should allow elaborating good practices, decision tools and recommendations for scaling up. Relevant data on short food supply chains should be gathered, which should allow the assessment of their contribution to the agricultural and rural economy. Relevant knowledge platforms should be set up. **Research should involve relevant categories of stakeholders and cover an appropriate number of EU Member States, Associated Countries and Third countries.** Proposals should fall under the concept of ‘multi-actor approach’. **This action allows for the provision of financial support to third parties in line with conditions set out in Part K of the General Annexes.**

>Research and Innovation actions

# Societal Challenge 2: Bioeconomy

## Innovative, Sustainable and Inclusive Bioeconomy

- Aim to support sustainable agriculture and forestry management processes providing public goods and innovative products for sustainable growth; foster innovation (including social innovation) in rural areas for inclusive growth; and enhance innovation in the bio-based industry for smart growth
- Activities complimentary to the activities supported under the two Focus areas 'Sustainable Food Security' and 'Blue Growth'
- Focus areas:
  - Sustainable agriculture and forestry
  - Sustainable and competitive bio-based industries
  - Cross-Cutting actions

# Societal Challenge 2: Bioeconomy

## ISIB-3-2015: Unlocking the growth potential of rural areas through enhanced governance and social innovation

Call: H2020-ISIB-2015-2

Deadline: 24.2.2015

Stage 2: 11.6.2015

Scope: Proposals should undertake a thorough analysis of social innovation in agriculture, forestry and rural development, encompassing its complexity and various dimensions as well as its impact on unfolding the territorial capital in different regional contexts. Proposals should establish appropriate methods for the evaluation of social innovation. Attention needs to be given to different learning arrangements (e.g. multi-actor networks, producer-consumer association, hybrid innovative networks, territorial alliances) as well as to innovative governance mechanisms at various levels, and their potential implications for social innovation. Proposals should also address the role of different policy instruments, other relevant incentives and diverse entities (public/private, local/non local, active citizens, etc) as catalysts/constraints to social innovation. Proposals should explain why regions with similar initial conditions display diverging paths. Activities should cover diverse types of rural areas across the EU and Associated Countries and non-European Mediterranean countries. **In line with the objectives of the EU strategy for international cooperation in research and innovation, proposals are encouraged to include third country participants, especially those established in Mediterranean countries.**

> Coordination and support actions

# Societal Challenge 2: Bioeconomy

## ISIB-12-2015: Public-Public Partnerships in the bioeconomy

Call: H2020-ISIB-2014-1 & H2020-ISIB-2015-1      Deadline: 26.6.2014 & 11.6.2015

Scope: Proposals should address one of the following issues and should clearly indicate to which one they refer:

- c. [2015] Monitoring and mitigation of agricultural and forestry greenhouse gases (GHG): Monitoring and mitigation of agricultural GHG, including such aspects as reducing uncertainties and improving national agricultural GHG inventories (e.g. with ICOS), the role of climatic variability and agricultural and forestry practices for GHG emissions, the technical and economic potential of CH<sub>4</sub> and N<sub>2</sub>O mitigation, carbon sequestration and reduced emissions from energy use and pre-chain inputs, emissions/removals certification, economic and policy measures, including trade, barriers to implementation, life cycle assessment.
- d. [2015] Sustainable crop production: Sustainable crop production, including such areas as breeding, nutrients recycling and soil-plant-atmosphere interactions, plant health and protection, management practices and added value of the products.
- e. [2015] Sustainable livestock production: Sustainable livestock production, including animal health and welfare, but also in areas like breeding, nutrition and production systems.
- f. [2015] Biomarkers for nutrition and health: Development and validation of biomarkers for nutrition and health, including biomarkers for food intake and for the risk of diet-related disease.



## Societal Challenge 5: Climate action, environment, resource efficiency and raw materials

[http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014\\_2015/main/h2020-wp1415-climate\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-climate_en.pdf)

[caast-net-plus.org](http://caast-net-plus.org)

### Building Bi-regional Partnerships for Global Challenges



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**4.11.2013**

# Societal Challenge 5: General Information

## Climate action, resource efficiency and raw materials

- Objective is to achieve an economy & society which lives within the sustainable limits of the planet's natural resources
- Focus on investing in innovation for a green economy
- Actions will:
  - Address gaps in the knowledge base
  - Identifying policies, methods, & tools to tackle challenges
- 2014-2015 focus on Water, Waste, and Growing a low carbon, resource efficient economy with a sustainable supply of raw materials



## Societal Challenge 5: Waste

Waste: A resource to Recycle, Reuse and Recover Raw Materials

- Towards a near-zero waste society – to boost innovative, environmentally-friendly and cross-sectoral **waste prevention & management solutions**
- Activities address the whole production & consumption cycle
- Specific challenges in the areas of food, agricultural and construction waste

# Societal Challenge 5: Waste / Overview

## Topics

WASTE-1-2014. Moving towards a circular economy through industrial symbiosis

WASTE-2-2014. A systems approach for the reduction, recycling and reuse of food waste

WASTE-3-2014. Recycling of raw materials from products and buildings

WASTE-4-2014/2015. Towards near-zero waste at European and global level

WASTE-5-2014. Preparing and promoting innovation procurement for resource efficiency

WASTE-6-2015. Promoting eco-innovative waste management and prevention as part of sustainable urban development

WASTE-7-2015. Ensuring sustainable use of agricultural waste, co-products and by-products

# Societal Challenge 5: Waste

## WASTE-6a-2015. Eco-innovative strategies

Call: H2020-WASTE-2015-two-stage

Deadline: 21.04.2015

Stage 2: 08.09.2015

Scope: Proposals should adopt an integrated urban metabolism approach and inter-disciplinary research and innovation and take into account the gender dimension where relevant. Proposals should involve active engagement of local authorities, citizens and other relevant stakeholders, using innovative concepts such as mobilisation and mutual learning.

Proposals shall address the following issue:

- **Eco-innovative solutions:** Demonstration, at an appropriate pilot scale, and market replication, of integrated eco-innovative cost- and energy-efficient technologies, processes and/or services for waste prevention, treatment, enhanced collection, recycling and recovery of high-grade valuable materials from waste. Approaches should integrate technological and non-technological solutions, including, where appropriate, the use of economic instruments, such as incentives for more sustainable production and consumption patterns, and awareness raising initiatives. Proposals should include the participation of industry, including SMEs as far as possible.

> Research and innovation actions

# Societal Challenge 5: Waste

## WASTE-6b-2015. Eco-innovative strategies

Call: H2020-WASTE-2015-two-stage

Deadline: 21.04.2015

Stage 2: 08.09.2015

Scope: Proposals should adopt an integrated urban metabolism approach and inter-disciplinary research and innovation and take into account the gender dimension where relevant. Proposals should involve active engagement of local authorities, citizens and other relevant stakeholders, using innovative concepts such as mobilisation and mutual learning.

Proposals shall address the following issue:

- **Eco-innovative strategies:** Development of innovative and sustainable strategies for waste prevention and management in urban and peri-urban areas. Proposals should highlight how urban patterns, drivers, consumer behaviour, lifestyles, culture, architecture and socio-economic issues can influence the metabolism of cities. Proposals should highlight the possible benefits to be derived from ecosystems services and green infrastructure, and their gender sensitive application.

> Research and innovation actions

# Societal Challenge 5: Water

WATER-5c-2015. Development of water supply and sanitation technology, systems and tools, and/or methodologies

Call: H2020-WATER-2015-two-stage

Deadline: 21.04.2015

Stage 2: 8.9.2015

Scope: Proposals shall address the following issue:

**[2015] Development of water supply and sanitation technology, systems and tools, and/or methodologies** to manage risks associated with water supply and sanitation and/or cross-boundary water management issues, or integrated water resources management systems for sustainable agriculture and food security, sustainable environment protection and economic growth, focused on the non-EU Mediterranean countries and/or Africa. Proposals should connect to local knowledge, socio-economic development cultures, policy institutions and implementing bodies, and take into account the gender dimension where relevant. **In line with the EU's strategy for international cooperation in research and innovation international cooperation is encouraged, in particular with non-EU Mediterranean countries and/or Africa.** Proposals should include participation of organisations from the above-mentioned regions is considered essential.

> Research and Innovation actions

# Other Topics of Interest

Topics	
<b>EXCELLENT SCIENCE</b>	
Marie Sklodowska-Curie Actions	<ul style="list-style-type: none"> <li>• H2020-MSCA-ITN-2015. Marie Sklodowska-Curie Innovative Training Networks</li> <li>• H2020-MSCA-IF-2015. Marie Sklodowska-Curie Individual Fellowships</li> <li>• H2020-MSCA-RISE-2015. Marie Sklodowska-Curie Research and Innovation Staff Exchange</li> </ul>
Future and Emerging Technologies	<ul style="list-style-type: none"> <li>• H2020-FETOPEN-2014/2015. FET-Open research projects</li> </ul>
European Research Infrastructures, including e-Infrastructures	<ul style="list-style-type: none"> <li>• INFRAIA-1-2014/2015. Integrating and opening existing national and regional research infrastructures of European interest</li> <li>• EINFRA-5-2015. Centres of Excellence for computing applications</li> </ul>
Information and Communication Technologies	<ul style="list-style-type: none"> <li>• H2020-ICT-2015. International partnership building in low and middle income countries</li> <li>• H2020-ICT-2015. Internet of Things and Platforms for Connected Smart Objects.</li> </ul>
Space	<ul style="list-style-type: none"> <li>• H2020-Galileo-2015-1. Releasing the potential of EGNSS applications through international cooperation</li> <li>• H2020-COMPET-2015. International cooperation in space science</li> </ul>



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**Building bi-regional partnerships for global challenges**



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