

# International Cooperation in the Thematic Areas: «Food Security & Biotechnology»

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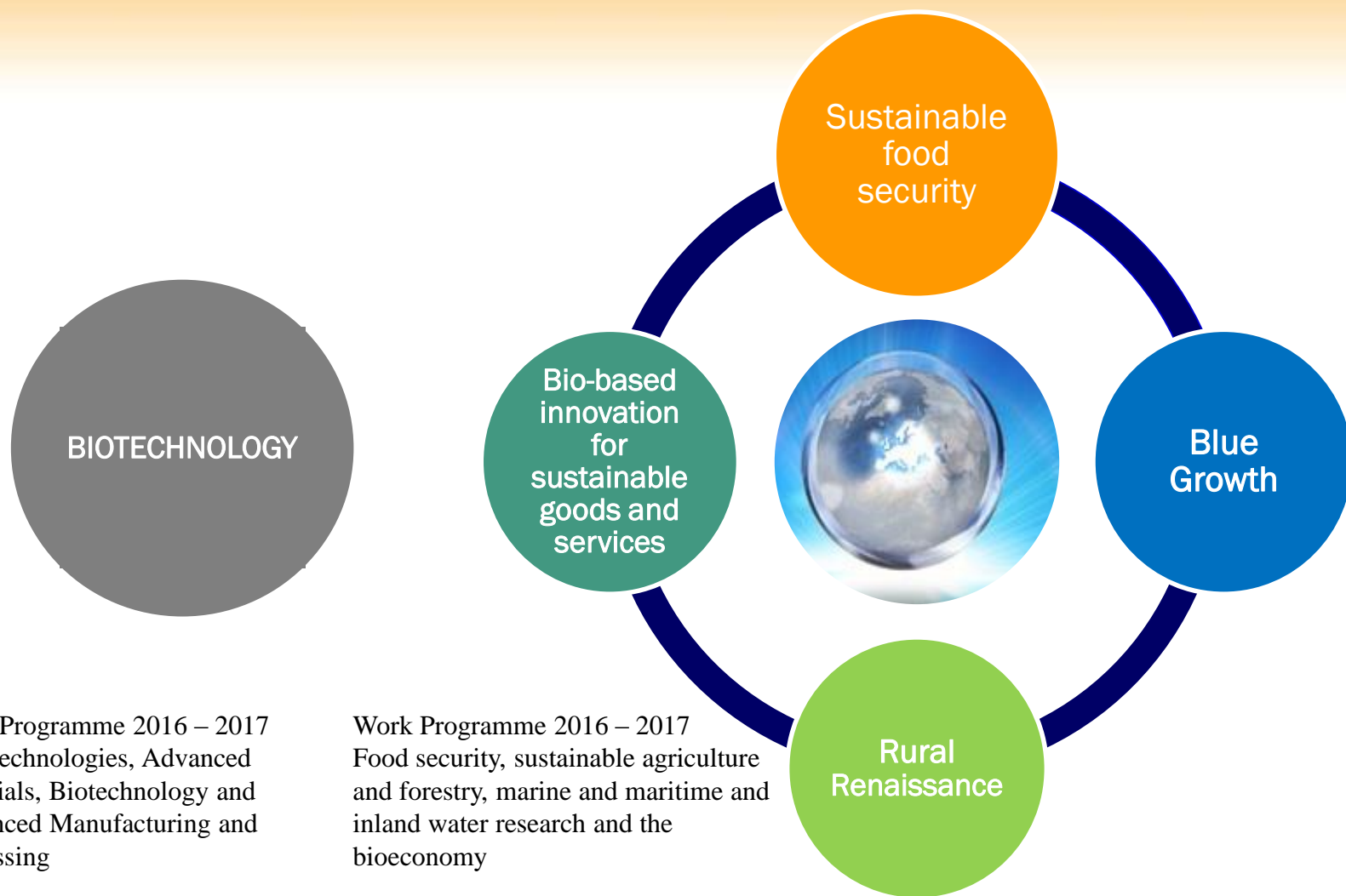
Russian National Contact Point on «Food,  
Agriculture and Biotechnology»

<http://bio-economy.ru/>



# Societal Challenge 2

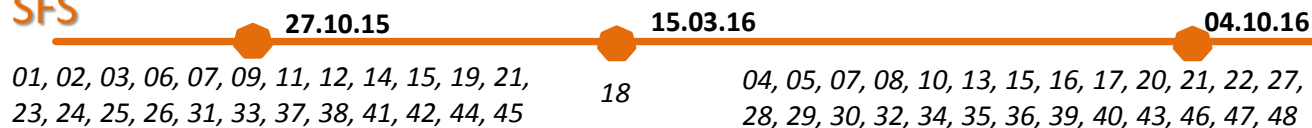
## Calls 2016-17



The opening date is marked by signs

Central digital codes for calls are specified under lines, for example SFS-**01**-2016

## SFS



## BIOTEC



## BG



## BB



## RUR



- Sustainable food security (SFS)
- Biotechnology (BIOTEC)
- Blue Growth - Demonstrating an ocean of opportunities (BG)
- Bio-based innovation for sustainable goods and services - Supporting the development of a European Bioeconomy (BB)
- Rural renaissance (RUR)

## Sustainable Food Security - AREAS



Resilient Resource efficient value chains



Environment /Climate-smart primary production



Competitive food industry



Healthy and safe foods and diets



Going global:joint actions with Africa and China



# Sustainable food security TOPICS summary

## Resilient, resource-efficient value chains

Abiotic stresses

Biotic stresses

Operationalising the resilience concept

Optimising use of critical inputs

Specific actions for organic farming

Sustainable fisheries and aquaculture

ERANETs/ SCAR

25 topics 206 M€

## Environment Climate-smart primary production

Carbon and nitrogen cycling in agro-ecosystems

Specific production systems

Ecosystem services

Socio-economics, demography and resilience of farms

7 topics 64 M€

## Competitive food industry

Resilient, sustainable and transparent value chains

Food losses

Resource efficient processes in food chain

Food packaging; labelling

3 topics 24 M€

## Healthy food and diets for all

One Health co-fund (zoonoses)

Dietary choices of children; consumers and food safety

Diet/impulsivity/compulsivity; obesity; sweeteners

5 topics 85,5M€

## Blue Growth TOPICS summary

### Boosting innovation for emerging Blue Growth activities

Large-scale integrated algae bio-refineries

High value-added specialised vessel concepts

Multi-use of the oceans marine space, offshore and near-shore:

- Legal and environmental issues
- Enabling technologies

ERANET cofund on Marine technologies

5 topics 57 M€

### Linking healthy oceans and seas with healthy people

Interaction between people, oceans and seas:

Blue green innovation for clean coasts and seas

Innovative sustainable solutions for improving the safety and dietary properties of seafood

3 topics 21 M€

### The Arctic Dimension

An integrated Arctic observing system

Impact of Arctic changes on the weather and climate of the Northern Hemisphere

Climate impacts on Arctic permafrost and its socio-economic impact, with a focus on coastal areas

3 topics 40 M€

### Valorising the Mediterranean Sea basin

Towards an integrated Mediterranean Sea Observing System

Support to the BLUEMED Initiative: Coordination of marine and maritime research and innovation activities in the Mediterranean

2 topics 11 M€

# CALL Rural Renaissance (RUR)

## Policies & governance

Territorial interactions:  
enhance synergies, adapt  
policies, foster cross-sectorial  
cooperation • Rural-urban  
• Land-sea

'Towards 2030': policies and  
decision tools for an  
integrated management of  
natural resources

Economic benefits from  
ecosystem services:  
• Farming & drinking water  
• Forest ecosystem services  
(IA)

5 topics 32 M€

## Value chains & business models

Crop diversification systems  
for delivery of food, feed,  
industrial products and  
ecosystem services

Resource-efficient and  
profitable industrial crops on  
marginal lands

Demonstration of integrated  
logistics for food and non-food  
applications

Business models for modern  
rural economies

4 topics 47 M€

## Innovation and skill development

Thematic networks

Experimental and  
demonstration farms:

Building a future science and  
education system

Advisors' role in AKIS

Working together in EU  
countries where cooperation  
level is low

Optimising interactive  
innovation projects and  
policies for innovation

7 topics 49 M€

# Bio-based innovation for sustainable goods and services (BB)

## Securing Sustainable biomass supply

Tree breeding strategies and tools

Forest production systems

Sustainability schemes

Data on bio-based industries and products

Circular economy – Potential of urban waste

## Building the bio-based markets of the future

Mobilization and mutual learning

Widening regional dimension





Supporting Russian participation in  
Horizon 2020



## COUNTRY PAGE FOR THE PARTICIPANT PORTAL: RUSSIAN FEDERATION

[http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020\\_localsupp\\_russia\\_en.pdf](http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020_localsupp_russia_en.pdf)

- MES - Funding support for Russian Horizon 2020 participants in accordance with its own call procedures (Russian Federal Programme (FTP) "R&D in Priority Areas of Development of the Russian S&T Complex 2014-2020").

(Activity 2.2 Support of R&D in the framework of cooperation with the EU countries)

- Russian Foundation for Assistance to Small Innovative Enterprises (FASIE) may be able to support the participation of small innovative Russian enterprises in Horizon 2020 projects

# Federal Targeted Program

«R&D for priority areas of the development of  
S&T complex of Russia» for the 2014—2020

## *The Ministry of Education and Science of the Russian Federation* Activity Streams

### Section 2

### International cooperation

#### Activity 2.1

Research in the framework of international  
multilateral and bilateral cooperation

#### Activity 2.2

Support of R&D in the framework of  
cooperation with the EU countries

#### Activity 2.3

Participation in large-scale international  
scientific and scientific-technological events

## 2.2 Support of R&D in the framework of cooperation with the EU countries

- **Call with EU** –Supporting research in priority areas with the participation of research institutions and universities in the EU Member States in the framework of multilateral cooperation in the framework programs of the EU
- **Bilateral Calls** - Selection of projects for research in priority areas with the participation of research institutions and universities (MES EU funding agency)
- **ERA NET Rus** -Research in the field of nanotechnology, environment / climate change, medicine research organizations and universities in EU Member States in the framework of the ERA-NET + Rus
- **Horizon 2020** - Supporting research in priority areas with the participation of research institutions and universities in the EU Member States in the framework of multilateral cooperation in the “Horizon 2020 “program of the EU.

# Russian Co-Funding Mechanisms for Research and Innovation Projects



The Ministry of Education and Science of the Russian Federation has established a functional mailbox [horizon2020@mon.gov.ru](mailto:horizon2020@mon.gov.ru) to which the Russian scientific community may send enquiries about support available in Russia for participation in Horizon 2020.



## NCP in Russia

- [http://bio-economy.ru/en/ncp\\_biotechnology/russian\\_ncps/](http://bio-economy.ru/en/ncp_biotechnology/russian_ncps/)



The Russian Foundation for Assistance to Small Innovative Enterprises ([www.fasie.ru](http://www.fasie.ru)) may be able to support the participation of small innovative Russian enterprises in Horizon 2020 projects on a case-by-case basis in accordance with its own funding rules.





# ERA - NETs



The Fund for Assistance to Small Innovative Enterprises in Science and Technology, also known as Bortnik Fund or FASIE, is a state nonprofit organization in the form of federal state budgetary institution. The Fund's activities are coordinated by the Supervisory Board, approved by the Government of the Russian Federation

The main objectives of the Fund are:

- Implementation of the state policy development and support of small S&T enterprises;
- Direct financial, informational and other aid to small innovative enterprises implementing development projects and the development of new types of high-tech products and technologies on the basis of these enterprises owned intellectual property;
- The creation and development of innovative infrastructure to support small businesses;
- Promoting the creation of new jobs for the efficient use of scientific and technological capacity;
- Extra-budgetary investment in small innovative business;
- Training (including youth involvement in innovation activity).

Web-site: <http://www.fasie.ru/>

ERA-IB 2 (Towards an ERA in Industrial Biotechnology) –

EuroTransBio

ERA-SME





# Russian funding organizations and mechanisms supporting the research



Russian  
Foundation For  
basic Research



Russian  
Science  
Foundation,  
Russian  
Foundation for  
Humanities



Federal  
Targeted  
Program  
«R&D for priority  
areas of the  
development of  
S&T complex of  
Russia» for the  
2014–2020



The Foundation  
for Assistance  
to Small  
Innovative  
Enterprises





# Areas supported by Russian funding organizations



## Russian fund of Fundamental Researches

R&D projects projects can be funded in research areas thematically:

(01) Mathematics, computer science.

(02) Physics and space science.

(03) Chemistry and materials science.

(04) Biology and research for medicine.

(05) Earth Science.

(07) Information and Communication Sciences

(08) Engineering science.

## Russian Science Foundation

Mathematics, computer science.

Physics and space science.

Chemistry and materials science.

Biology and life sciences.

Basic research for medicine.

Earth Science.

Humanities and Social Sciences.

Engineering science.

FTP «R&D for priority areas of the development of S&T complex of Russia» for the 2014–2020 Section 2.2

Industrial biotechnology / bioeconomy with research organizations and universities.

Creating a scientific and technological potential with the use of emission sources of photons and neutrons based by the accelerators and neutron sources, in cooperation with research institutions and universities.

Energy efficiency, energy conservation, nuclear power.

Rational nature management.

Industry nanosystems.

Living systems.

Transport and space systems.

Information and telecommunication systems.



## NCP «BIOTECHNOLOGY»

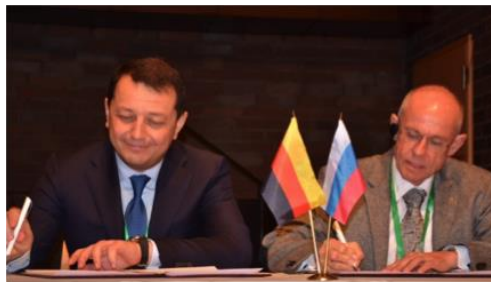
Russian National Contact Point «Food security, sustainable agriculture, marine and maritime research and the bio-economy & Biotechnology»



- Russian NCP was established by the Russian Ministry of Education and Science on the basis of A.N. Bach Institute of Biochemistry of Russian Academy of Sciences in May 2003
- The main objective is promotion of Russian science integration into the European Research Area through participation in the Framework Programme
- Full name NCP in the European research framework programme Horizon 2020 (2014-2020): «Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bioeconomy»



- The Conference «Cooperation between Russia and Germany in bioeconomy. Experience in the implementation of research projects in the field of biotechnology industry» was held on November 17, 2015 in the Embassy of the Federal Republic of Germany in Moscow.
- The Conference is one of the events of the Russian-German Biotechnology and Bioeconomy events week.
- The research centers, universities and business representatives from Russia and Germany introduced their organizations and shared their experience in the commercialization of projects and interaction structure between industrial and scientific organizations.
- The organizers of the events week are the German Embassy in Moscow, Federal Research Centre Fundamentals of Biotechnology of the Russian Academy of Sciences, **Russian National Contact Point «Food security, sustainable agriculture, marine and maritime research and the bio-economy & Biotechnology» (NCP Biotechnology)**, Biotechnological Innovation Regional Clusters Pushchino with participation of Russian Technological Platform «Bioindustry and Bioresources» (Biotech2030), Cluster of Industrial Biotechnology CLIB 2021, Moscow Region Development Corporation and The German House of Science and Innovation (DWIH) Moscow





# State policy mechanisms stimulating innovation activities- some clusters and platforms in the field of bioeconomy



## Platform

- Russian Technology Platform "Bioindustry and Bioresources – BioTech2030;
- Russian Technology Platform "Technology and food processing industry agro-industrial complex - healthy food";
- Russian Technology Platform "Innovative machine technologies for agriculture"



## Cluster

- Biotechnology innovation region Cluster Pushchino
- Siberian biotech initiative



## Agency

- Agency for strategic initiatives



# BioTech2030

- **Technological Platform «Bioindustry and Bioresources»** is a key expert organization in biotechnology sector in Russia. It aims to mobilize the research, technological development and innovation efforts in Russia and to bring together key stakeholders around a common vision for the development of the technologies and issues around bioindustry and bioresources.

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# BioTech2030 today

**Initiators and founders:**

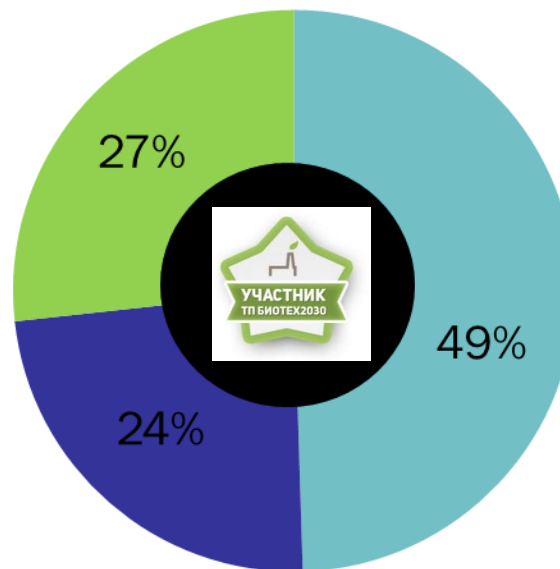
**101 organizations**



Lomonosov Moscow  
State University



Rostec  
Corporation



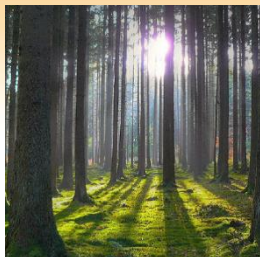
- Business
- Research Institutes
- Universities

**Trends:**

- ☐ growth in the number of business organizations (from 44 in the end of 2014 to 50 in the end of 2015);
- ☐ positive rotation of the participants - organizations' outflow doesn't exceed organizations' inflow
- ☐ geography expansion of the participants, regions' activity increase



# Technological priorities



## FORESTY

- PPM: utilization of waste, chlorine-free bleaching

- Conversion of lignocellulosic raw materials;

- Pellets.



## INDUTRIAL BIOTECHNOLOGIES

- Feed additives, including enzymes and amino acids;

- Biofertilizers;
- Plant protection products;

- Products for biodegradation.



## AGRICULTURAL BIOTECHNOLOGIES

- Vaccines;
- Test-systems



## FOOD

- Integrated processing of food raw materials;

- Probiotics;

- Sourdough.



## ECO BIOTECHNOLOGIES

- Utilization and valorization of waste.

# R&D projects

*Developing, discussing and accepting documents, which are laying out research and technology development priorities in the sphere of technology platform's competence.*



THE MINISTRY OF EDUCATION AND SCIENCE  
OF THE RUSSIAN FEDERATION

Forming the expanded database on funded projects in the field of biotechnology, bench-making of the state aid, drawing up recommendations for federal executive authority and development institutions



Development and approval of  
STRATEGIC RESEARCH PROGRAM



Participation in forming and updating long-term forecast of scientific and technological development in biotechnology field in Russia, especially in agrobiotechnology.



The program of new market grouping and setting the stage for global technological leadership of Russia to 2035 year. FoodNet Road map.

# Professional assessment

*By consolidated resources of scientific and industrial organizations, Technology platform carries out the professional expertise in the field of biotechnology. The examination is conducted for the benefit of governmental institutions, state development institutions and the individual applicants.*

TP is a provider of experts for:

- Scientific and technical cooperations & expert groups affiliated with Federal Target Program «R&D»
- Foundation for Assistance to Small Innovative Enterprises in science and technology
- MSU Scientific and Technological Valley
- «Innopractice»,
- Higher School of Economics
- Skolkovo
- RVC
- Federal executive authority



Иннопрактика



THE MINISTRY OF EDUCATION AND SCIENCE  
OF THE RUSSIAN FEDERATION

Types of realizing expertise:

- ❖ scientific and technical
- ❖ financial and economic
- ❖ overall prospectively assessment (for startups)
- ❖ expertise on accordance with SRP



# International activity

*Representing of Technology Platform and its members activities on the Russian and international public arena. International business and scientific cooperation - representing the interests of Russian companies and developers in their relations with foreign partners.*

- Russian-Dutch task force affiliated with the Ministry of Economic Development
- Task force on Innovation affiliated with Russian - French Council
- Conference "Cooperation between Russia and Germany in the field of biotechnology and bioeconomy. Implementation of scientific research results in bioindustry.
- The first Global Bioeconomy Summit 2015, Berlin
- Young Leadership Programme on Forest-Based Bioeconomy: Focus on Russia. Finland





«COLLAB4SAFETY» Project

Call: FP7-KBBE.2012.2.4-03

Contract type: Coordination (or networking) actions

Topic title: Towards sustainable global food safety collaboration

Russian partner name: Research Center of Biotechnology RAS,  
Immunobiochemistry Laboratory

Project description: Collab4Safety aims to contribute to an increased cooperation and coordination on food safety at a global level. This will be pursued by optimising the integration of research and training in food safety between the European Union (EU) and its trading partners, in order to facilitate the control and mitigation of existing and emerging food risks, and to provide a sustainable platform for global integration of food safety policies.

Web-site of the project: <http://web.spi.pt/collab4safety/>



web.spi.pt/collab4safety/database

## STAKEHOLDER DATABASE

Database Services

Access to Stakeholder Database

SUBSCRIBE TO MAILING LIST

## Stakeholders Database

Current number of registered stakeholders: 1619



The **Collab4safety Stakeholder Database** has been designed to include all types of stakeholders worldwide involved in any areas of food safety. The public database aims to increase brokerage and future collaborations between parties with common interests. It allows searching stakeholders by name, area of expertise, job title, organization, type of organization and country.

### Registered stakeholders will:

- Be part of a global food safety community
- Increase the visibility of their profile and work
- Have access to the entire network and to the profiles of other community members
- Enhance brokerage and collaborations with other community members
- Receive news about the findings and be invited to international events of this initiative
- Have the opportunity to engage in consultation with researchers of the Collab4Safety project

Registration takes less than 5 minutes. Please click on [Access to Stakeholder Database](#) to become a member. By registering you authorize the publication of the data filled in during the registration process. If you wish to change your data or delete your profile, you can do so through your account or contacting the project team.

## News

### Collab4Safety Policy Conference 2016 - Save the date!

Dec 14th, 2015

The Collab4Safety team is organizing the project final event - the **Policy Conference** to take place in Montpellier, France on the **30 June and 1 July 2016**.

[Read more](#)

### Registrations open for the Collab4Safety (C4S) workshop in the framework of EXPO2015 in Milan

Mar 31st, 2015

The Collab4Safety team is organizing a workshop in the framework of the European Commission events of the Milan EXPO2015.

[Read more](#)

### News Archive [+]



## Russian projects: «BaSeFood»



Call: FP7-KBBE-2008-2B

Contract type: SICA – Black Sea

Russian partner name: State educational institution of the high professional education “Moscow State University of Food Productions”

Project title: Sustainable exploitation of bioactive components from the Black Sea Area traditional foods

Web-site of the project: [www.basefood-fp7.eu](http://www.basefood-fp7.eu)

BaSeFood structure and activities have been developed around the following points, inherent to two key concepts of **bioactive substances** and **traditional foods** :

- there is an increased concern, especially in Western, industrialised world, for chronic- degenerative diseases connected to non-optimal nutritional habits;
- several plant components (bioactives) are presently being studied for their potential positive effects on human health;
- unifying approaches have been taken, setting up international standards for database management and formats for data acquisition, to which BaSeFood will refer;
- the health promoting concept is considered a potent tool to add values to food and, as such, is highly considered by the European Food industry;
- both the science approach to the study of bioactives, and the industrial approach to product development are often lead by technology or science push, not taking sufficiently into account the chain perspective and the opinion of end users;
- traditional foods** are often considered as a concentrate of positive traits, connected to several aspect of their production chain, including positive spontaneous relation with healthy properties.
- with respect to other areas, the Black sea region foods are still less known.



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<http://bio-economy.ru/>

