

## **Table of Contents**

<b>4.1 Final publishable summary report</b>	<b>2</b>
<b>Executive Summary</b>	<b>2</b>
<b>Summary description of project context and objectives</b>	<b>4</b>
<b>Description of the main S&amp;T results/foregrounds</b>	<b>6</b>
<b>The potential impact and the main dissemination activities and exploitation of results</b>	<b>13</b>
<b>Project Website</b>	<b>15</b>

## 4.1 Final publishable summary report

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### Executive Summary

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**BIOPARTNERS** ([www.biopartners-dibb.ge](http://www.biopartners-dibb.ge)) was a Support Coordinated Action funded by the European Commission under the FP7 programme aiming to stimulate win-win cooperation and strategic partnership between Europe and Georgia in the thematic priority “Food, Agriculture and Fisheries, and at integrating Georgia into the European Research Area, by strengthening Georgian participation in the 7<sup>th</sup> and H2020 Framework Programme, increasing Georgian visibility of the European research arena and improving cooperation capacities.

Georgia is one of the Europe’s neighbours, and the reinforcement of the cooperation with Georgia in the context of the European Research Area (ERA) is an important part of the European Union international collaboration activities. It aims to promote closer scientific cooperation between Georgia and the European Union, and to prepare Georgia’s possible future association to the Framework Programmes. It also aims to increase Georgian participation in 7th Framework programme.

The 36-month BIOPARTNERS project gave Georgia the possibility to improve the research activities of their highest quality in the FP7 and H2020 thematic priority —Food, Agriculture and biotechnology, through twinning activities between one of the leading Georgian scientific and educational organisations, the Durmishidze Institute of Biochemistry and Biotechnology of Agrarian University of Georgia (DIBBAUG), with their long term partner University of Murcia (Faculty of Biology) UMU). Inno, an international S&T collaboration expert, with a strong experience in FP7 coaching and training of scientific organisations, provided methodological, coaching and training support to the project partners.

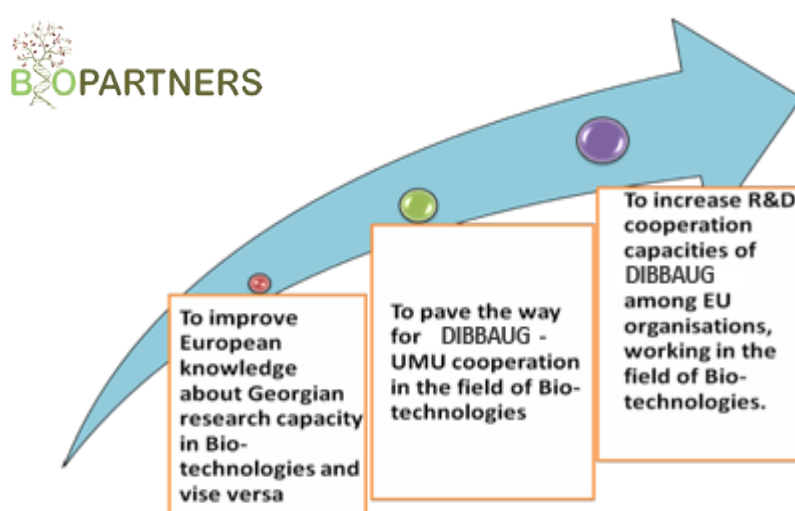
**During the first project period**, the project focused on the analytic activities in objective to prepare the basis for a coherent development strategy for DIBBAUG. A SWOT and socio-economic analysis, on a Georgian, regional (Caucasian) and European level, have been realized, also thanks to the contribution of the BIOPARTNERS Scientific Reference Team, that has been set up. More than 30 stakeholders from Europe, Georgia and Caucasus countries, have been involved in the analysis process. In order to improve the networking capacities of DIBBAUG, a dissemination strategy has been developed and implemented.

**In its second phase**, the project has reached a significant progress in its activities:

- **Finalisation of the preparatory and analytical activities**, to allow better understanding about DIBBAUG’s strengths and weaknesses, and the preparation of DIBBAUG’s Strategic Development Plan.

- **In-depth implementation of twinning activities**, based on the twinning and joint research plan prepared and implemented jointly by UMU and DIBBAUG. This activity includes exchange of researchers and young specialists, organisation of joint scientific workshops, set up of joint research experiments, , etc.
- **International cooperation activities, such as networking and training events, ETP and FP7-H2020 consortia integration** at wide European and regional level, involving other European organisations in order to broaden the impact of the project.
- **Training and coaching activities** to increase DIBBAUG’s understanding of FP7, H2020 and build competences.

A graphical outline of the project concept is presented in the following picture:



**Fig. 1 Overview of the BIOPARTNERS Project Concept**

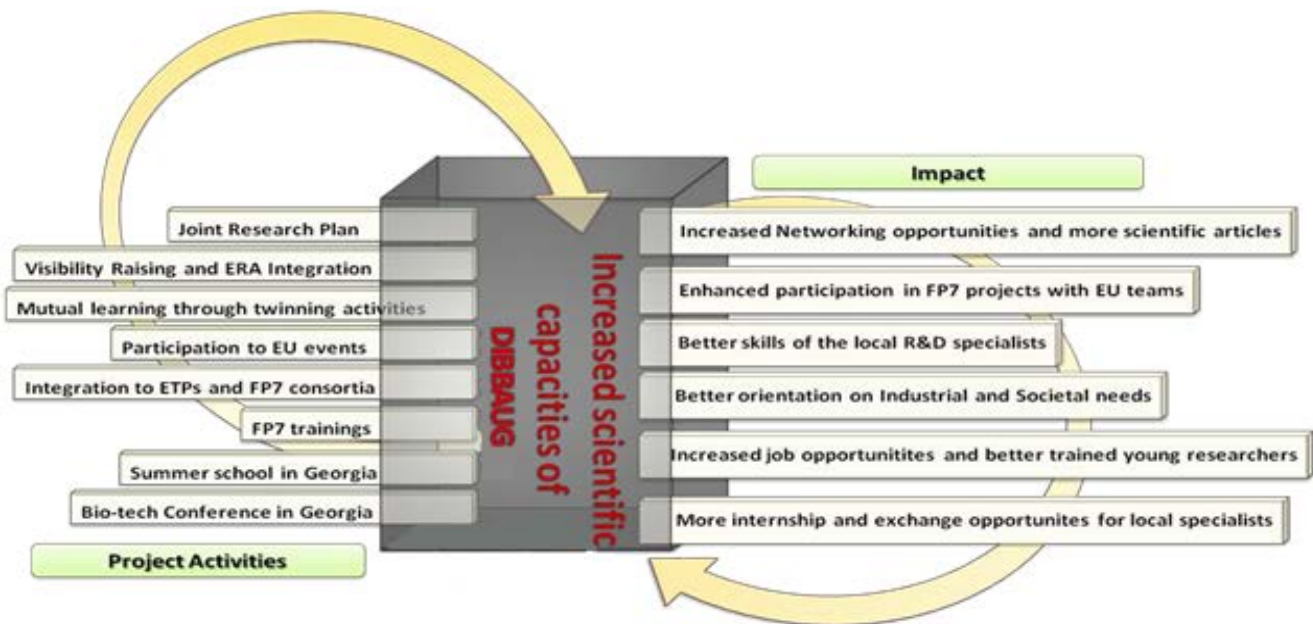
Over two and half years, the BIOPARTNERS project team – **DIBBAUG, UMU and inno**, supported by a **dedicated expert group** developed a range of activities and concrete initiatives to strengthen cooperation and research capacities of DIBBAUG and . The project team also mobilised **100+ members of the European and Caucasian R&D community** with the goal to strengthen collaboration research links between DIBBAUG and other EU research organizations. The main results of the project are:

- SWOT analysis and Strategic development plan of DIBBAUG
- Twinning programme between DIBBAUG and UMU, including a joint research plan
- Scientific Reference Team
- 6 Scientific workshops
- 4 DIBBAUG FP7 trainings opened to other relevant Georgian organisations
- DIBBAUG integration into 2 European Technology Platforms and network
- over 35 promotional and / or networking and information presentations and sessions
- over 104 participants in the large-scale conference in Georgia
- 1 summer school organised in Georgia
- 25 DIBBAUG participations in the international events in EU (10 participations were supported by BIOPARTNERS project)

- Sustainability plan for DIBBAUG-UMU collaboration' continuation

The main outcome of the project is - implementing twinning activities, providing hand on support for EU cooperation, training activities and defining SWOT and socio-economic analysis of the DIBBAUG needs – these outcomes reaffirmed the interest to explore new collaboration opportunities in order to create a new dynamic for the EU-Georgian cooperation. The openness principle that has been pushed forward by BIOPARTNERS will increase visibility and facilitate international collaboration.

**The strategic impact of the BIOPARTNERS project stems from its main aim to** reinforce international S&T cooperation, by development of strategic partnership for R&D capacity building with Georgia and more precisely with one of its leaders in the bio-technology research – DIBBAUG.



## Summary description of project context and objectives

Georgia is one of the Europe's neighbours, and the reinforcement of the cooperation with Georgia in the context of the European Research Area (ERA) is an important part of the European Union international collaboration activities. It aims to promote closer scientific cooperation between Georgia and the European Union, and to prepare Georgia's possible future association to the Framework Programmes.

In this context, the overall objective of BIOPARTNERS project is to stimulate win-win cooperation and strategic partnership between Europe and Georgia in the thematic priority "Food, Agriculture and Fisheries, and Biotechnology", and at integrating Georgia into the European Research Area.

The overall project has four main objectives:

1. Prepare DIBBAUG to the new step in its strategic development
2. Set up and implement an ambitious twinning programme between DIBBAUG and its long term European partner, University of Murcia (Spain)

3. Reinforce international cooperation capacities of DIBBAUG and integrate DIBBAUG in the international networks and research consortia
4. Organise events to strengthen H2020 skills of DIBBAUG and to raise awareness about collaboration opportunities with DIBBAUG

These activities were divided into two periods, the first period the project had three main objectives that were successfully reached:

- ✓ Undertake preparatory and analytical activities, allowing to build on the results of the twinning and integration activities
- ✓ Launch twinning activities
- ✓ Launch implementation of awareness raising campaign and activities aiming at reinforcement of international cooperation capacities of DIBBAUG.

Activities of the second period consisted in pursuing the following objectives:

- ✓ To keep on implementing twinning activities DIBBAUG-UMU
- ✓ To reinforce international cooperation capacities of DIBBAUG
- ✓ To prepare a background for extending of twinning collaboration (DIBBAUG exit strategy)

#### **(i) Deepening the understanding of DIBBAUG's research needs**

The project has reached a significant progress on the main types of activities, thus forming a coherent plan for improving DIBBAUG's capacities in a number of fields relevant to the FP7 Thematic Priority "Biotechnology". For the second period, it was important for the project to build upon the analysis that had been carried out in the project's first phase: SWOT, socio-economic analysis as well as the development of a Strategic Development Plan (SDP) in order to assess the setting of priorities while undertaking the twinning activities accordingly (the SDP was finalized during the second project period).

#### **(ii) Implementing Twinning activity**

The objective of this group of activities was to develop an ambitious twinning programme between DIBBAUG and its long term European partner UMU (Spain) and to launch its implementation.

The first sub-objective was to prepare the basis of the twinning work between the two research organisations, by elaborating an overall Twinning Plan. The second sub objective was to agree and implement joint twinning research activities. These activities included setting-up of short-term researchers' exchange, organizing scientific workshops, practical exchange, data and knowledge sharing between researchers, joint publication, etc. Accurate feedback was guaranteed by means of regular peer reviews.

#### **(iii) Awareness raising and reinforcement of international cooperation capacities of DIBBAUG**

This group of activities was prepared in the first phase and implemented in the second; it was the basis for the reinforcement of DIBBAUG's international cooperation capacities through the strengthening of DIBBAUG's cooperation skills. It included dissemination actions, participation in EU events, and development of the BIOPARTNERS project website. It included integration in the thematic European Technology Platforms and hands-on support to integrate H2020 consortia.

## Description of the main S&T results/foregrounds

The implementation of the BIOPARTNERS project provided a substantial added value to the activities enhancing EU-Georgian research cooperation. This added value includes many exploitable results, such as the knowledge that has been acquired on the collaboration schemes between the researchers in the common scientific field of Biotechnology as well as on the coaching provided by inno.

The main achievements during the 2 years of project implementation are summarised below.

Key Results/ (expected in the Description of Work)	Progress towards objectives
<b>Specific objective 1: to prepare ISMA to the new step in its strategic development</b>	
<b>Successful project launching</b>	Kick off was organised in Murcia on March 2012. It allowed refining the methodology and validation of the first year work plan. Consortium has become operational on the strategic and operational level (identified project management team, administrative and financial office). Cohesive team was created (good interaction with project coordinator, quick reaction of the partners) and significant progress of the coordinator was done in the management of the European project.
<b>SWOT analysis completed</b>	DIBBAUG SWOT analysis had been completed in order to prepare the basis for the future project activities, and in particularly for DIBBAUG strategic development plan. It was expected that detecting the strengths, weaknesses, opportunities and threats for DIBBAUG would allow a clear overview of the achievements that DIBBAUG should do during the project and beyond. The SWOT analysis results were based on information, collected during in-depth discussions with DIBBAUG's staff as well as with DIBBAUG's external partners. The interviews demonstrated that DIBBAUG played a critical role in the national research and, undoubtedly could be ranked in the top 3 of the national research organization. Significant growth potential has been identified in the following areas: <ul style="list-style-type: none"> <li>• Microbial synthesis directed to the production of enzymes, medicinal polysaccharides, glycosides, organic and amino acids and other small weight compounds</li> <li>• Plant extracts , containing biologically active compounds</li> <li>• Pharmaceuticals</li> <li>• Biofuel</li> </ul>
<b>Scientific reference team created and operational</b>	A high level Scientific Reference Team of experts was set up, in order to have external expert opinions on major project results. Effective collaboration with experts during first project period contributed to enlarging the communication scope of the BIOPARTNERS project and greatly facilitated the validation of key reports of the project. The Scientific Reference Team was constituted of 3 experts, chosen according to a transparent selection process.

<p><b>Socio-economic analysis completed</b></p>	<p>The socio-economic analysis (SEA) has been completed in order to assess the potential of Biotechnology research and development. This report provided an analysis of the status of the biotechnology sector and presents general trends in the biotechnological market landscape. It analysed the biotechnology sector on two different perspectives, looking in particular at the EU and at the Caucasian region including Georgia.</p> <p>The findings and conclusions of the exercise were helpful to the project teams in formulating main priorities for DIBBAUG R&amp;D themes.</p>
<p><b>DIBBAUG Strategic plan developed</b></p>	<p>Strategic Plan has been developed on the basis of above mentioned analysis of the strengths and weaknesses of DIBBAUG (SWOT-analysis) and socio-economic analysis of the current level of science and technology development. The plan provided the overall strategy of the twinning activities that was implemented by DIGGAUG and UMU in order to foster joint academic research. The document puts particular focus on the three axis of the strategy and provided the list of the twinning activities that had be implemented.</p> <p>The Strategic Plan of DIBBAUG has been reviewed by the Scientific Reference Team.</p>
<p><b>Specific objective 2: to develop an ambitious twinning programme between DIBBAUG and its long term European partner, UMU (Spain) and launch its implementation</b></p>	
<p><b>Development of the twinning work basis</b></p>	<p>Twinning Plan and a Joint Research Plan have been elaborated and regularly adjusted during strategic meetings of partners. Memorandum of Understanding and a formal Twinning Agreement have been developed and signed.</p>
<p><b>Implementation of joint twinning activities</b></p>	<p>The core of the project is the implementation of the twinning activities in order to set up a basis for future expansion of DIBBAUG partnerships in Europe and to provide support for conducting of joint experiments.</p> <p>Twinning activities between DIBBAUG and UMU were implemented according to the Twinning plan issues. Twinning and Joint research plans were being constantly updated during regular strategic meetings, informal communications and by online DIBBAUG /UMU contacts during the whole project life. <b>Six strategic partners meetings</b> and regular communications between scientists of DIBBAUG and UMU were organized during project life for successful project advancement.</p> <p>Joint experiments were carried out according the following scientific topics approved by the members of Scientific Reference Team:</p> <ol style="list-style-type: none"> <li>1. Produce and investigate dry extracts from Georgian green tea (<i>Camellia sinensis</i> L.)</li> <li>2. Produce and investigate dry extracts from Georgian from high inulin-containing dry extracts of topinambur (<i>Helianthus tuberosus</i> L)</li> <li>3. Produce and investigate dry extracts from stevia (<i>Stevia Rebaudiana</i> ) introduced in Georgia.</li> <li>4. Produce and investigate dry extracts from pokeberry introduced in Georgia (<i>Phytolacca americana</i> L.)</li> </ol>

	<p>DIBBAUG and UMU organized <b>9 researchers' visits</b> for short term exchange and joint experiments conducting in Spain and Georgia. DIBBAUG researchers accessed to scientific equipment of UMU.</p> <p>Special attention has been put on young researchers involvement and training. BIOPARTNERS project supported <b>short term exchange of young researchers (4)</b> to UMU;</p> <p>Main results of joint research were presented at scientific workshops, international conferences, in scientific publications as well as are available on the project website;</p> <p>Biopartners twinning partners (DIBBAUG &amp; UMU) took part together in 11 international events.</p> <p>3 International BIOPARTNERS scientific workshops on Biotechnology thematic were organized for the purpose of information, knowledge, data sharing, training of young researchers and presentation of main achievements:</p> <p>1<sup>st</sup> BIOPARTNERS International Scientific Workshop“ was held in Istanbul, Turkey on May 7, 2013.</p> <p>2<sup>nd</sup> BIOPARTNERS International Scientific Workshop“ was held in Prague, Czech Republic on November 7, 2013.</p> <p>3<sup>rd</sup> BIOPARTNERS International Scientific Workshop was held in Murcia, Spain, on May 30, 2014.</p> <p>Most of the BIOPARTNERS workshops were held in conjunction with large scale international conferences in order to bring together experts in the field of project interest, to provide the wide audience for dissemination of project results and to provide a supportive environment for networking.</p>
<p><b>Scientific reference team – BIOPARTNERS ambassador and consultancy body</b></p>	<p>A high level Scientific Reference Team of experts in the Biotechnology domain was set up in the project beginning, in order to have an external expert opinion on major project results. Effective collaboration with experts during the second project period contributed to enlarging of the communication scope of the BIOPARTNERS team and greatly facilitated the validation of key reports of the 2<sup>nd</sup> period.</p> <p>It should be noted that all the experts provided substantial input to the project, especially on DIBBAUG network enhancement and DIBBAUG international collaboration.</p>
<p><b>Monitoring of joint twinning activities</b></p>	<p>The Members of Scientific Reference Team performed peer reviews of the following documents: Twining Plan, Strategic Development Plan, and Twinning and international activities.</p> <p>All planned reviews were evaluated with positive comments of experts' team.</p>
<p><b>Specific objective 3: <i>to reinforce international cooperation capacities of DIBBAUG</i></b></p>	



<p><b>Awareness raising campaign designed and successfully launched</b></p>	<p>A strategic visibility raising and dissemination plan has been elaborated and key channels for informational campaign were indentified.</p> <p>The BIOPARTNERS public web-site <a href="http://biopartners-dibb.ge">biopartners-dibb.ge</a> is an important tool for the dissemination of project results. It contains complete information related to the project events, results, achievements, and gives free of charge access to the project materials for all target groups.</p>
<p><b>Extensive activities to raise awareness about DIBBAUG collaboration opportunities namely via the participation in a number of relevant events</b></p>	<p>Dissemination activities have been implemented in line with the strategic visibility raising and dissemination plan.</p> <p>Project team participated in 24 relevant events including BIOPARTNERS Networking sessions.</p> <p><b>At international level</b> project team participated in 16 international scientific conferences UMU and DIBBAUG staff presented results of joint research and promoted DIBBAUG capacities.</p> <p>55 scientific publications were prepared including 40 abstracts of reports and 14 scientific articles in referred journals and a Chapter in a book.</p> <p>8 BIOPARTNERS presentations in mass media were performed.</p> <p>For integration in the EU consortium DIBBAUG has initiated two proposals:</p> <ul style="list-style-type: none"> <li>• On the call KBBE.2013.3.3-04: Optimal and cost-effective industrial biocatalysts</li> <li>• And on the call KBBE.2013.3.4-01: Preventing and valorising bio-waste in biorefineries</li> </ul>
<p><b>large scale international conference in Georgia was organised</b></p>	<p>Large scale international conference “International Conference on Food and Biotechnology, ICFB 2014”, organized by DIBBAUG in the framework of BIOPARTNERS project, was held on September 11-12, 2014 at Agricultural University of Georgia, Tbilisi, Georgia. The Conference web-page: <a href="http://biopartners-dibb.ge/conference-home.html">http://biopartners-dibb.ge/conference-home.html</a>.</p> <p>The aim of the Conference was:</p> <ul style="list-style-type: none"> <li>• to provide the exchange of knowledge between DIBBAUG researches and other participants from Georgia, Caucasia and Europe</li> <li>• to arrange the networking and brokerage sessions between the research teams</li> <li>• to detect further collaboration opportunities and establishment of partnerships on a wide European level</li> </ul> <p>The event attracted 104 scientists in Food Science and Biotechnology including young scientists. The Conference consisted in 23 oral presentations and 33 poster presentations. The conference covered awareness raising, networking and brokerage for the participants. The Conference materials were published in the Book of Abstracts of the International Conference on Food and Biotechnology, ICFB 2014 and in the scientific Journal "Annals of Agrarian Science", specially issued for this conference.</p> <p>During the International Conference on Food and Biotechnology, ICFB 2014 most of its objectives has been achieved:</p>

	<ul style="list-style-type: none"> <li>• awareness about DIBBAUG research and technological potential in the field of Biotechnology</li> <li>• Biopartners project achievements were promoted</li> <li>• dissemination and exchange of knowledge between participants were provided</li> <li>• UMU/ DIBBAUG twinning activity results were presented for wide audience of experts on Biotechnology thematic</li> <li>• networking and brokerage sessions were arranged for detection of future international collaboration opportunities</li> </ul>
<p><b>Networking session organised</b></p>	<p>From the beginning of the project till today, the consortium organized three networking sessions:</p> <ol style="list-style-type: none"> <li>1." New Biotechnology Opportunities in the South Caucasus and in Europe" (Within the context of the conference EuroFoodChem XVII, Istanbul, Turkey)</li> <li>2. "The Latest Developments in Food Science and Technology in European and South Caucasus Countries" (Within the context of The 6th International Symposium on Recent Advances in Food Analysis (RAFA 2013),Prague, Czech Republic)</li> <li>3."Viticulture and oenology In Georgia"( Murcia, Spain)</li> </ol> <p>The goal was transversal to all sessions: to promote DIBBAUG competences and to identify collaboration opportunities among other leading European laboratories in the field of Biotechnology.</p>
<p><b>Training events to strengthen FP7/H2020 skills of DIBBAUG staff</b></p>	<p>There were two types of activities:</p> <ol style="list-style-type: none"> <li>1.1 Training sessions dedicated to DIBBAUG staff aiming at developing skills in management of the European project. The sessions were face-to-face (meetings in Murcia in March 2012,) as well as virtual (skype and videoconferencing support).</li> <li>2.1 Training sessions dedicated to DIBBAUG and Caucasian researchers in order to improve their capacities to participate in EU projects and be ready for Horizon 2020.</li> </ol> <p>In total, 4 training courses were delivered in line with these two axes. Four training sessions have been delivered from the beginning of the project till the end:</p> <ol style="list-style-type: none"> <li>1. March 2012: Training session on preparation, submission and implementation of FP7 projects: administrative, financial and legal aspects”</li> <li>2. July 2012: Workshop-Training on participation in the 7th Framework Program</li> <li>3. November 2012 – Workshop-Training “Opportunities of Participation in FP7/H2020 Projects for Georgian Scientists.</li> <li>4. September, 2014 - The Workshop-Training «Horizon 2020 training»</li> </ol>
<p><b>Specific objective 4: <i>To prepare a background for extending of twinning collaboration (DIBBAUG exit strategy)</i></b></p>	

<p><b>Integration of DIBBAUG in ETPS</b></p>	<p>In line with a Strategic development Plan of DIBBAUG, the partners have investigated on a real interest and benefits of the DIBBAUG's integration in ETP. Initial target (3+ ETP) has been revised on the basis of the progress of the project findings.</p> <p>The consortium first presented a long list of 18 ETPs and other networks. A short list of 9 organisations/ ETP was then selected. Inno provided practical information and support on how to join them, including links and contacts. With regard to these networks and ETPs identified by the project team, it became clear that several networks were less suitable; for example some of them were restricted to EU organisations only, and did not allow Georgian organisations to become a member, other were not in the focus of research of DIBBAUG and thus did not add any value in terms of collaboration opportunities. From this investigation, it appeared that two ETPS/ networks were relevant for DIBBAUG: EPSO and EFB.</p>
<p><b>Sustainability plan and exit strategy developed</b></p>	<p>During the 4<sup>th</sup> BIOPARTNERS Consortium Meeting organised in Murcia, Spain, the partners were discussing the possible scenario of the project's further development, approaches of the project exit strategy and as the result took important decisions regarding the sustainability plan. All existing consortium and experts expressed their interest to continue to work together and to develop BIOPARTNERS into a single wide project design which will include new members "pan-European informal network on Bioactive Compounds and Biotechnology".</p> <p>Discussions among scientists from European and Caucasian countries about the importance of this network had been already started during different events, and especially it was addressed during the International Conference on Food and Biotechnology (ICFB2014) in September 2014 in Tbilisi and the International Summer School for Young Scientists in September 2014 in Bazaleti, Georgia. Participants from Georgia, Spain, France, Austria, Slovenia, Armenia, UK, and Poland took part in it and discussed about opportunities to build research infrastructures in the field of Bioactive Compounds and Biotechnology.</p> <p>On the basis of these discussions and agreements the partners developed a sustainability plan and exit strategy. Partners agreed on examining factors insuring further sustainability of the joint research activity by focusing on new research priorities, individual capacities, financial resources, etc.</p> <p>BIOPARTNERS partners took important decisions regarding the Sustainability Plan:</p> <ul style="list-style-type: none"> <li>• The consortium partners are interested in continuing to work together.</li> <li>• BIOPARTNERS will be developed into a single wide project design which could include new members.</li> </ul> <p>Following this decision, the partners considered several points in order to develop a future model for the consortium to allow it to be successful with new potential proposals. These points were the following:</p> <ol style="list-style-type: none"> <li>1. The future model of collaboration (which one, why, what are the benefits):</li> </ol>

The future extended consortium will be aimed to the broadening of the scientific research fields and experimental facilities for mutual R&D activities realization.

2. How to use the remaining efforts of BIOPARTNERS. What should be done to build the ground? BIOPARTNERS would prepare the ground for this process of building of a common area for coordinated research & innovation, infrastructure that could connect bio-thematic research with technology and industry.
3. Suggesting new potential scientific ideas for the future consortium activity: The fundamental studies about tea catechins and inulin in cancer treatments in conjunction with studies of food additives from edibles and medicinal plants have been the core of BIOPARTNERS scientific activity for a long period of time. The future consortium involving the leading international experts in this field of research will allow joining efforts for development of new technologies for nutraceutical and biopharmaceutical sector. Introduction of “omic” technologies, expand analytic and preparative techniques, increase industrial interest, and facilitate the opportunity of DIBBAUG to the protection of intellectual property right will be some innovative aspect develop for the future consortium.
4. Potential synergies with ETP, especially related to Bioactive Compounds and Biotechnology; choice of research priorities relevant to DIBBAUG-UMU collaborative directions: DIBBAUG will become a member of The European Federation of Biotechnology (EFB) and its involvement in this European Technology Platform will make the network more visible in European community of Biotechnology.

The creation of a pan-European network on Bioactive Compounds and Biotechnology is the main sustainability strategy of BIOPARTNERS project. The concept of the network agrees with the strategic goal of the project and may be considered as an approach to define the joint research and technology initiatives. On the other hand, this network will become a primordial tool to facilitate the incorporation of young students since the beginning of their careers. So, we can signalize two main components which are defined as following:

- Scientific actions – scientific research; exchange of ideas, sharing and dissemination of knowledge.
- Formative actions – Bringing (and bridging) young students. Promotion and awareness campaigns.

DIBBAUG and UMU have discussed possible ways of the developing a network for cooperation which allows the inclusion of new partners in the future. The creation of this a pan-European network includes three different levels:

- Level I - Core activity: scientific research and bringing students.
- Level II - Internalization: implementation and management.
- Level III - Financial part.

# The potential impact and the main dissemination activities and exploitation of results

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BIOPARTNERS support coordinated action has contributed to improving European and Georgian research collaboration in the field of Biotechnology.

The key project outcomes - implementing twinning activities, providing hand on support for EU cooperation, training activities and defining SWOT and socio-economic analysis of the DIBBAUG needs – these outcomes reaffirmed the interest to explore new collaboration opportunities in order to create a new dynamic for the EU-Georgian cooperation. The openness principle that has been pushed forward by BIOPARTNERS will increase visibility and facilitate international collaboration.

The key project impacts are summarised below:

## ***Contribution to R&D capacity building in Georgia***

The twinning activities between DIBBAUG and UMU have strengthened DIBBAUG capacities in the field of Biotechnology.

## ***Enhanced awareness on participation in the 7th and H2020 Framework Programme***

H2020 Trainings and networking events helped DIBBAUG to detect cooperation opportunities and to enlarge its scientific network. However, these became evident that there are still many obstacles for building a high level H2020 research consortium (low success rates, lack of visibility...). Participation in Scientific Mobility Programmes should be further developed.

## ***Networking with other research centers in Member States or Associated Countries***

The BIOPARTNERS project built a propitious environment for networking with other research centers Member States or Associated Countries. This became possible thanks to the informational coverage previewed by the BIOPARTNERS project for Georgia, Caucasus and Europe. As the awareness raising actions included information about the large-scale conference in Georgia, about the summer school in Georgia and about the other relevant events, this was a great opportunity to bring Caucasian scientists closer to ERA.

## ***Increased job opportunities in the country for young scientists***

The development of DIBBAUG previewed by BIOPARTNERS had direct impact on the young scientists by nourishing the soil for young bio-researchers careers. In addition, activities like organisation of Summer School in Georgia helped building the bridge between young scientists and EU researchers.

The BIOPARTNERS projects created policy impacts by helping to address several EU policy objectives relating to its neighbour - Georgia. For example, the FP7 INCO Work Programme 2011 explicitly states:

### ***“Objectives:***

To become more competitive and play a leading role at world level, the European Community needs a strong and coherent international science and technology policy. This international policy has three objectives:

– To support European competitiveness through strategic partnerships with third countries in selected fields of science and by engaging the best third country scientists to work in and with Europe.

– To enhance the production of knowledge and scientific excellence by enabling European universities, research institutions and firms to establish contacts with their partners in third countries, thereby facilitating access to research environments outside Europe and promoting synergies on a global scale.

–To address specific problems that third countries face or that has a global character, on the basis of mutual interest and mutual benefit.

BIO-technologies and bio-sciences represent a strategic importance for European scientific and industrial communities and directly impact on the European competitiveness.

BIOPARTNERS project has undertaken several groups of activities in order to support European competitiveness through strategic partnership with DIBBAUG.

The BIOPARTNERS, with the implementation of the twinning activities allowed the creation of new scientific knowledge and excellence thanks to the reciprocity and the mutualisation of the previous scientific experience of the twinning research organizations DIBBAUG and UMU.

Moreover, creation of partnerships with other private and public organizations with interest for the BIO-thematic and biosciences was equally beneficial for the European universities, research institutions and firms. The positive impact reposed on the facilitation of the access to Georgia and other South Caucasus countries technologies markets.

Finally, the Georgian partner DIBBAUG could beneficiate from enrichment from the European experience and research traditions, technological equipments or also publications and visibility raising in the European magazines, technology platforms and Bio-networks.

To resume, the project had a good and positive impact on the European and Georgian research competitiveness, fostering trans-national cooperation between the two twinning partners, but also including indirect beneficiaries, such as research entities, enterprises, local and regional authorities connected to the area of mutual interest.

**Conclusion:**

**The impact of the BIOPARTNERS project is important in the short to medium term on policy, technology and socio-economic levels, since it provided a solid framework for Bio-Tech research cooperation and strengthening the cooperation capacities not only of DIBBAUG, but also of Georgia and the surrounding Caucasian region.**

# Project Website

<http://biopartners-dibb.ge/>

The Website is the main integrating tool for raising awareness of the project: it contains complete information on the project events, findings, results, achievements, etc.

The BIOPARTNERS public website was developed in November 2012. The web-site was designed by DIBBAUG and agreed with the consortia.

BIOPARTNERS project website follows the BIOPARTNERS **branding**.

The screenshot shows the homepage of the BIOPARTNERS website. At the top left is the BIOPARTNERS logo, which features a stylized tree with a DNA double helix as its trunk. To the right of the logo is the text "Reinforcing Georgian international cooperation capacities in the field of Food and Biotechnologies". Below this is a green navigation bar with the text "Seventh Framework Pro". The main content area is divided into three columns. The left column contains a "MAIN MENU" with links to Home, About the project, Project partners, Scientific reference group, About biotechnology in Georgia, About FP7 and Biotechnology, BIOPARTNERS project and You, and News and Events. The middle column has a "Welcome to the BIOPARTNERS Website!" section with two announcements: one about the International Conference on Food and Biotechnology, ICFB 2014, and another about the International Summer School for Young Scientists "Enhancing Health Promoting Compounds in Food". The right column features a "CALENDAR" for December 2014, a "SEARCH" bar, and the "SEVENTH FRAMEWORK" logo.

BIOPARTNERS project Website plays especially important role in information campaign: it integrates all the information related to the project and other dissemination tools, makes materials of the project accessible to all target groups.

The screenshot shows the "News and Events" page of the BIOPARTNERS website. The layout is similar to the homepage, but the main content area is titled "News and Events" and lists several events: "International Conference on Food and Biotechnology, ICFB 2014", "BIOPARTNERS Networking Session: New Biotechnology Opportunities in the South Caucasus and in Europe", "Biopartners Scientific Reference Team Meeting in Murcia", "BIOPARTNERS Networking Session: The Latest Developments in Food Science and Technology in European and South Caucasus Countries", "International Summer School for Young Scientists 'Enhancing Health Promoting Compounds in Food'", and "BIOPARTNERS Networking Session: Viticulture and Oenology in Georgia". The left sidebar menu is the same as on the homepage. The right sidebar contains the same "CALENDAR" and "SEARCH" elements.

All open Project materials are placed on a website, including

- information about project partners and links to their web-sites,
- project deliverables,
- Biotechnology in Georgia
- useful links,
- news from project partners,
- calendar of project events,
- other documents related to Project

General description of the project and information on Project participants are practically constant issues; project news, events, deliverables and other web-pages have been regularly updated. Partners make contribution to project web site (news, events, etc).

DIBBAUG and the partners worked together to make sure that the information on the website is kept up-to-date.

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