Improving the conditions for Agrofood SME’s participation in European Framework Programmes

The Agrofood Sector Group is a group of agrofood experts within the Enterprise Europe Network, the world’s largest technology transfer and EU advice network for SMEs, set up by the EU Commission in 2008. The Network provides innovation and support services to SMEs from all economic sectors, ranging from internationalisation and innovation advice to transnational technology transfer, funding consultancy and feedback services. The main aim of the Sector Group Agrofood (ASG) is to contribute to raising the innovation capacity of the Network’s SME clients through the information, promotion of technology transfer and business cooperation and to feedback the EC policies in the agrofood sector with the real interests of the industry. The Agrofood Sector Group is composed of 48 partners from 17 countries. The present paper was elaborated by the Group in order to analyse factors influencing SME’s decisions to participate in European projects, mainly FP7.

1. Introduction

SME participation in the FP7 KBBE calls

The European Commission has acknowledged the importance of SMEs as innovators and set a target of 15% of the funding available under the ‘Cooperation’ part of FP7 to go to SMEs. This translates into more than €900 million. While participation in FP7 can offer SMEs substantial benefits (such as additional funding or access to new markets and excellent research facilities in Europe via the project partners), many SMEs are still hesitating. To date, only 7.6% of the funding made available in KBBE projects
(Knowledge-based Bio-economy, covering food, agriculture, fisheries and biotechnology), has gone to SMEs. The agrofood sector is highly diverse, ranging from family-run businesses with a strong regional focus to highly innovative and internationalised companies. The obvious alternative for the former – i.e. the companies who do not have own research capacities, the Capacities Programme of FP7 would be the obvious alternative to Cooperation projects. However, here, the food sector competes with more innovative sectors and it is therefore difficult to be awarded the requested grants. The latter, however, are also underrepresented in the KBBE calls. The Agrofood Sector group would like to help remedy this situation and thereby increase the innovation capacities of SMEs from the mentioned sector.

**Approach**

One of the ASG’s activities is promoting SME participation in European Framework Programmes. So the group carried out an analysis on factors hindering and promoting the participation of food SMEs in these programmes. As a first step, the participants carried out SWOT analyses in their regions to determine the factors favouring or hindering the participation of regional food SMEs in the programme. In most cases, this involved surveys or regional workshops and meetings with the NCPs and other players involved in FP7 support. During these workshops, the experts compiled and analysed internal and external factors influencing the attitudes of SMEs towards FP7. The different dimensions of the SWOT were pre-defined as follows:

- **Strengths:** attributes of the SMEs that are helpful to achieving the objective of participating in FP7 Cooperation Programme
- **Weaknesses:** attributes of the SMEs that are harmful to achieving the objective of participating in FP7 Cooperation Programme
- **Opportunities:** external conditions (e.g. the framework conditions of FP7) that are helpful to achieving the objective of increasing SME participation in FP7 Cooperation Programme
- **Threats:** external conditions which could do damage to the objective of increasing SME participation in FP7 Cooperation Programme

The results were presented at the ASG meeting in Amsterdam in October 2010. In a common session of nine experts, these factors were assessed, prioritised and recommendations were deduced. This report presents the most important results of the regional SWOT analyses as well as ideas and recommendations directed both at the European Commission, national and regional authorities and the players already active in FP7 support, such as NCPs, Enterprise Europe Networks, clusters, etc.

### 2. Results of the SWOT analysis

#### 1. Internal Factors

The internal factors analysed (i.e. strengths and weaknesses) refer to the capacities and motivations of small and medium sized companies from the agrofood industry. They strongly influence SME’s opportunities concerning participation in a European research project.

The internal factors identified in the local workshops can be grouped in two main categories: skills & capacities as well as motivation & orientation. In order to strengthen SME’s strengths and overcome their weaknesses, local actors such as the Enterprise Europe Network, NCPs, clusters etc need to address these factors with the appropriate support of the European Commission, where possible.

**Skills and capacities**

Regarding skills and capacities, most of the experts have recognised a high potential in their regions regarding food SMEs and the possible participation of those companies in FP7 projects. This potential is mainly due to the very strong know-how to be found even in smaller companies, coming along with a high degree of specialisation. In addition to this, SMEs tend to show a great reactivity for implementation, industrial trails, prototyping etc. In some regions, the experts could also observe a growth in proposal writing and project management skills since participation in European funding programmes is becoming more common.

However, these favourable factors are in opposition with some important deficits. The most important one of those is a lack of resources, i.e. time, money and qualified staff (with the necessary R&D project management and English language skills) available for projects outside the day-to-day business. The fact that a lot of agrifood companies are small, family-run companies with a regional focus are not primarily striving for innovation has to be taken into consideration, too. Furthermore, even in the more innovative companies, the daily work leaves little time to deal with public funding programmes, with the consequence that

<table>
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<th>Internal Factors</th>
<th>SWOT Analysis</th>
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<td>Strengths</td>
<td>Increasing SME participation in FP7 Cooperation Programme</td>
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<td>Weaknesses</td>
<td>Hampering participation in FP7 Cooperation Programme</td>
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<tr>
<td>Opportunities</td>
<td>Favoring participation in FP7 Cooperation Programme</td>
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<tr>
<td>Threats</td>
<td>Hindering participation in FP7 Cooperation Programme</td>
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knowledge about and interest in this topic is low. Cooperation culture among SMEs in the sector tends to be quite low, too, and so a lot of companies lack both the will and the concrete network contacts for participation in transnational projects.

**Orientation and motivation**

Participation in FP7 can have some obvious and highly relevant benefits for small and medium-sized companies, which are, however, not always sufficiently recognised. They include increased visibility in Europe, excellence, access to new markets via the project partners, stimuli for innovation, access to European research competences, a strategic perspective and, last but not least, additional funding. In general, companies do consider that R&D activities are important for raising their competitiveness. The economic crisis fuels this impression and might actually force SMEs to turn to new markets, e.g. by engaging in international collaborative projects.

Yet, different perceptions and needs in relation to time horizons are very important arguments against participation of food SMEs in FP7. On the one hand, SMEs depend on a fast commercialization of their product developments, which can normally not be accomplished in FP7 projects. On the other hand, one of the experts pointed out that SMEs’ operational strategies are set 18-24 months in advance, whereas FP7 projects, from proposal to results, can easily last longer than 5 years. Further counter-arguments concern the orientation of SMEs, since especially the small, family-run food SMEs tend to be neither R&D-oriented nor oriented towards European markets. These companies simply do not see the benefits of collaborating with other European SMEs and even less with technical centres or Universities. The scientific language used in the context of FP7 does not appeal to these SMEs and the topics are too much ahead of their daily work.

The most important factors found within SMEs that favour or hamper participation in FP7 are summarised in table 1.

| Table 1 Summary of internal factors influencing participation of SMEs in FP7 |
|---------------------------------|---------------------------------|
| **Helpful factors**             | **Harmful factors**              |
| - High specialization/ expert know-how of SMEs in Agrofood | - Limited resources (time, money and qualified staff) |
| - Huge potential benefits (visibility in Europe, excellence, access to new markets via project partners, stimulus for innovation, access to European research competences, strategic perspective, additional funding, etc.) | - Need for quick commercialization/short time to market |
| - Economic crises might push SMEs to widen their market to a European level | |

2. **External factors**

The external factors analysed refer to conditions or events that are not inherent to the companies. They can be clustered in three thematic areas: FP7 structures and processes, FP7 support, FP7 impact for the companies.

**FP7 structures**

Several elements in the setup of FP7 certainly favour SME participation. These include a high funding rate, simplified procedures compared to former programmes and the fair and transparent evaluation procedures (including the evaluation reports with helpful feedback). The fact that SME participation has become mandatory in some calls has improved the SMEs’ negotiation position in the consortium.

Again, these favourable conditions are opposed by some grave obstacles to SME participation in FP7 Cooperation programme. First of all, FP7 is originally designed to promote scientific excellence, whereas the SME’s interest lies, first and foremost, in the development and fast commercialization of new products. As a result, the topics are too far ahead of most SME’s daily work. Inflexible structures (very specific topics, only one call per year, only 1-2 approved projects per call in a very competitive environment, etc.) and low success rates (as well as the fact that a project reaches the threshold does not mean that it gets funding) discourage SMEs from participating and, in the worst case, cause frustration before the SME even starts to work in a European project. Even in the case of participating as a partner, it is difficult to fulfil all the formal and technical requirements to be accepted into a consortium. Furthermore, evaluators tend to be rather research-oriented. Finally, even if the project is approved and funded, and in spite of the recent simplifications regarding administration procedures, participation in EU projects still causes a large amount of administrative work which SMEs are not always willing and capable to deliver (cost-benefit balance). All in all, there are few alternatives to the Cooperation programme; in the Capacities programme which presents fewer obstacles to SME participation, less
money is available and the food sector competes with more innovative sectors. This has a negative impact on success rates. A further fact that was mentioned by a company is that deadlines coincide with the Christmas campaign which means that the necessary resources for the preparation of a project are not available.

**FP7 support**

The support made available to SMEs wanting to become active in European R&D projects is quite comprehensive, but also quite complex. At present, a very good support Network is available to SMEs, including the National Contact Point Network, Enterprise Europe Network, local innovation agencies and clusters, private actors, etc. On the one hand, these institutions increase the awareness about European funding programmes. On the other hand, they offer practical support which, in many cases, is tailored to the special requirements and needs of SMEs. Additionally, some countries/regions offer specific support for SMEs in the preparation of proposals, e.g. by funding proposal writing (within the company or by external service providers) or funding proposal pre-checks.

However, the variety of services and public and private service providers can easily have a contrary effect: if too much and too complex information is available, the SME will not know whom to turn to and where to find the necessary help and information.

**FP7 impact**

The expected results and impact are further factor which will influence an SME’s decision to participate or not in FP7. Certainly, the participation in FP7 can have all the positive effects already mentioned, including new products and higher visibility in Europe.

However, success stories of SMEs who have successfully participated are still not sufficiently disseminated. In the common perception, the negative sides related to FP7 project management still (“paper war”) prevail over the perceived benefits, especially in regions where regional/national funds are easily available (even though funding rates may be lower). Intellectual property issues can be an additional barrier to SME participation as interest and motivations of the different project partners vary and are often contradictory: universities and research institutions are primarily interested in publications whereas an SME’s concern lies in protecting its IP so its competitors do not benefit from research activities that they have invested resources in. But IP are not the only legal issue that may impede an economically beneficial use of the research results; food law and related regulations or legal uncertainty can also lead to a situation where an SME invested resources in a project without being able to benefit from the results later on. Finally, transformation of research results into (SME-led) innovation after the end of the project (which could be an alternative to “classical” participation as a partner) is a very challenging task because in many cases, dissemination and valorisation strategies of past and ongoing projects are not sufficiently defined and do not correspond to SME’s needs.

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### Table 2 Summary of external factors influencing participation of SMEs in FP7

<table>
<thead>
<tr>
<th>Helpful factors</th>
<th>Harmful factors</th>
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<tbody>
<tr>
<td>- Attractive funding rates in FP 7</td>
<td>- Trade-off between scientific excellence and SME benefits (FP7 aims at scientific excellence where as SMEs main interest lies in the quick commercialisation of new products)</td>
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<tr>
<td>- Large coverage of high-quality support services</td>
<td>- Lack of flexibility in programme structures (top-down approach with very narrowly-defined topics, 1 call per year, 1-2 funded projects per call)</td>
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<tr>
<td>- Implementation of new national and regional grant mechanisms to help companies benefit from FP7 funds</td>
<td>- Conflict of interests in IP (publication vs. Protection)</td>
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### 3. Recommendations

The factors analysed in the regional SWOT analyses point to a variety of measures which could be taken in order to allow SMEs to maximise their benefits from public funding programmes such as FP7 – KBBE from the point of view of the ASG experts. They are presented in this section.

1. **Increase the skills & capacities of agrofood SMEs**

A number of measures are applicable in order to empower SMEs to successfully participate in European Framework Programmes for Research and Technological Development. They could include

   - funding the employment of foreign PhD students or other qualified staff in SMEs (“innovation assistants”)

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Recommendations

- making available or expanding existing national funding programmes for supporting proposal writing
- offering pre-proposal checks
- encouraging SMEs to become evaluators (= as FP training measure)

2. Make SMEs aware of potential benefits of participating in cooperative European R&D projects

The event formats and information materials available for explaining the 7th Framework Programme are often strongly offer-based and do not correspond to an SME manager’s needs and interests, with the consequence that he/she loses interest even before the most important contents are conveyed. Therefore, Enterprise Europe and NCP networks should join forces to develop a demand-oriented communication strategy for EU Framework Programmes. This process should be supported and enhanced by the relevant DGs of the European Commission. The focus should be on the practical experiences of other (small and medium-sized) companies from the agrofood sector who have participated in EU projects. They should present both the impact that the project had on their business (especially their competitiveness) and the problems they faced before, during and after the project. These case studies should also be published in one central project database so interested SMEs can access it anytime.

3. Make the Framework Programmes more SME-friendly

Current programme structures keep suggesting that the Framework Programme’s initial and primary target groups are research organisations. In order to simplify the access of SMEs to European funds, several measures are possible:

- Divide future Framework Programmes (Cooperation) into two or even three parts:
  1. Science/basic research – oriented calls for research organisations
  2. Technology-oriented calls for SME/industry with the support of academic/scientific partners and possibly
  3. Mixed scientific-technological calls (status quo)
- Simplify project management as much as possible for SMEs, e.g. by further simplifying administrative procedures, limiting the number of partners in SME-oriented projects
- Think of flexible models for SME participation (e.g. the possibility to incorporate SMEs at a later stage with an SME “wildcard”, obliging project consortia to clearly define their valorisation/dissemination strategies to suit them to SME needs, etc.)
- Enhance the participation of industry (especially SME) experts in the evaluation panels

4. Continuously evaluate and improve FP7 support services

The support networks are currently well-developed. However, cooperation between the different Networks should be fostered in order to avoid redundancies and confusion among companies. This could help to improve coverage and achieve that no proposal is submitted without consultancy services from the relevant institutions.

5. Maximise the impact of FP7 participation for SMEs

The impact of FP7 projects on SMEs can be negatively affected by insufficient valorization strategies and unclear SME involvement in specific projects, insecurities or conflicts of interest regarding IP or changes in food regulations. Approved projects should have clearly defined dissemination or valorization strategies showing how research results can be turned into innovation by industry, especially SMEs, towards or after the end of the project. Proposals which lack such a strategy should not be considered for funding. This procedure would open up alternatives to full participation of SMEs and might appeal to companies that have no experience in EU-funded R&D projects. In a next step, they might consider regular participation as a SME partner. Regarding the IP issue, support and information to SMEs should be improved, e.g. by publishing case studies of successful projects, paying special attention to the IP aspects.

In the following table, the measures suggested above are summarised and classified according to the (financial and political) effort necessary to implement them and the impact they are likely to have.
Table 3: Suggested measures according to necessary efforts and impact

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<tr>
<th>Effort</th>
<th>Medium impact</th>
<th>High impact</th>
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<tbody>
<tr>
<td>Medium effort</td>
<td>• Better coordination of support services</td>
<td>• Insist on application-oriented valorisation strategies in approved projects</td>
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<tr>
<td></td>
<td>• Develop an integrated, demand-oriented and success case-based communication strategy, including IP issues</td>
<td>• Encourage more SME representatives to become evaluators</td>
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<td></td>
<td></td>
<td>• Change programme structure (flexibilisation, more projects/topic, etc.)</td>
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<td></td>
<td></td>
<td>• Allow for SME wild-cards/possibility to name SMEs at a stage where basic research is finished</td>
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<tr>
<td>High effort</td>
<td>• Increase complementary support (i.e. proposal writing/innovation assistants/pre-proposal checks, etc.)</td>
<td>• Divide FP 8 in 2 or 3 programme parts (according to degree of development)</td>
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4. Conclusions

The evaluation of the regional SWOT analyses suggests a number of reasons why certain SMEs from the agrifood sector participate in FP7 cooperation projects and others do not. When talking about the European agrifood sector, one has to take into account the wide variety of companies that can be found here: from small, family-run cheese producers to high-tech companies developing biotech applications for the food industry. This makes the definition of common factors favouring or hampering FP7 participation extremely difficult.

However, the Enterprise Europe Network experts, who are in daily contact with the SMEs in their region, have identified a number of these factors and made suggestions in order to increase the attractiveness and participation of SMEs in the European Union’s Framework Programmes. They relate to the skills and competences of SMEs which need to be increased, the orientation and motivations of SMEs as well as some concrete proposals to make the Framework Programme more SME-friendly and easier to access through improved support services. Some of them are directed at the EU Commission, others can be implemented by national or regional authorities or by the support players themselves, especially Enterprise Europe Network and the National Contact Point Network.

The most important points include suggestions to achieve a stronger innovation-orientation in the Framework Programme (both in topics and evaluation procedures), instead of a primarily scientific approach as it is currently the case. There are currently some funding programmes at national or regional level which could serve as models for a more SME-friendly Framework Programme, (e.g. Zentrales Innovationsprogramm Mittelstand, ZIM, in Germany) or provide ideas for new complementary practices (e.g. Innovation Assistant, support for proposal-writing etc.)

In any case, a strong coordination effort between different EU units and the support networks set up by them is necessary to provide optimum conditions and support for SMEs.