



# Entrepreneurial Discovery Process

## In Eastern Macedonia and Thrace

Dairy & Meat focus-group



29-30 January,2015

Dairy & Meat focus-group, Komotini, Greece







### Entrepreneurial Discovery Focus Group on Dairy and Meat Products in Eastern Macedonia and Thrace

#### Introduction

Held under the aegis of the European Parliament Preparatory Action "Actual and desired state of the economic potential in regions outside the Greek capital Athens," and building on outcomes and lessons of the November 2014 EDP Focus Group, this event focused on the meat and dairy products sectors in the Region of Eastern Macedonia and Thrace (REMTh) and on selected activities which may contribute to their future development. Organised by the European Commission's Joint Research Centre, the Special Managing Authority of the Operational Programme of the region, and the Regional Council for Innovation and Entrepreneurship, the main aims of this focus group were threefold, namely:

- To encourage interaction between relevant stakeholders in these sectors, going beyond the core value chains to explore and catalyse the dynamics of the entrepreneurial process of discovery;
- To examine the key criteria to identify and then actively pursue relevant projects for the region; and
- Ongoing refinement and dissemination of the focus group approach for its future application both to other key sectors identified under the RIS3 strategy of the region and in other regions.

Over the course of two days, the focus group meeting combined plenary and parallel sessions, with interventions by regional, national, and international experts. Within the two sectors, the following a priori themes for discussion were identified:

- Research and innovation in animal husbandry
- Food processing technologies
- Research and innovation in dairy products
- Organic meat and dairy products and sustainable production.

The primary aim of the preparatory action is to support the region in the refinement and implementation of its RIS3. It seeks to test and optimise the entrepreneurial discovery process (EDP) within selected priority sectors identified in the RIS3 strategy of the region. The EDP focus group approach aims to make important contributions to achieving this aim. The second event has reinforced the impact of the first, enhancing the process and generating further ideas for the region.

In order to explore the broad-ranging nature of the dairy and meat sectors, and their complex and interlinked value chains, a mix of international and national experts were invited to make presentations centred on each of the four themes identified above.

Ideas and opportunities in and around each of these themes were then discussed in four corresponding parallel working groups. This followed an enhanced version of the participatory methodology employed in the first EDP focus group in 2014. As before, this centred on the generation of ideas, the selection of the most feasible for further refinement in smaller subgroups, taking into account issues for implementation, such as funding. Moderators and rapporteurs were appointed for each group to apply the methodology and report the outcomes, both in summary to the plenary, and in a more comprehensive follow-up report.







The participation and engagement in the event, in terms of both level and quality, were high. More than 90 stakeholders from within the region and beyond actively participated throughout the two days in both the plenary and parallel sessions. Building on the experience of the previous focus group, efforts were made to ensure a good level of participation of entrepreneurs from the region. This was very encouraging, but can still be enhanced.

The participatory process has again worked smoothly, successfully taking on board the lessons from the first focus group. More time was allocated for discussion in the parallel groups, and participants were encouraged to take the ideas even further forward. As before, the generation and exchange of ideas was a key element of the success of the meeting. Moreover, a number of interesting linkages between the ideas emerging within and between the different parallel sessions were also evident. The good levels of engagement between the stakeholders must be followed up.

The ideas generated and discussed in this EDP focus group, included both the use of technological and non-technological innovations. These included:

- Creating a Trademark for traditional products from REMTh
- Introducing probiotics in dairy products
- Exploit animal waste for heating and biogas
- Introducing Halal products made in REMTh in order to create a new meat value chain

Selected ideas will be among those proposed to be refined during the forthcoming project development labs.

Once again, this event generated valuable lessons in how to continue to refine the EDP focus group methodology and the overall strategic approach of the project. This also aligns with the second objective of the PA, in generating lessons that can be applied to other regions.

Details of the focus group are also available on the managing authority website.

#### Overview

The workshop on the value chain of dairy and meat products was based on the initial approach followed for the set-up of the first EDP focus group (wine industry) with slight changes.

The event would give the opportunity to the participants (representing all the strands of the triple helix) to be exposed on key innovations in the value chain of the selected sectors at the national and European level and at the same time to stimulate idea generation for business development. These objectives would be achieved via plenary sessions for knowledge diffusion and focused parallel sessions that addressed more specific topics.

Over the course of two days, the focus group meeting combined plenary and parallel sessions, with interventions by regional, national, and international experts. Within the dairy and meat products sector, the following a priori themes for discussion were identified:

1) Research and Innovation in animal husbandry







- 2) Food processing technologies
- 3) Research and innovation in dairy products
- 4) Organic meat and dairy products and sustainable production

In the opening session, the aims and approach of the preparatory action were set out by JRC-IPTS. Aiming to facilitate the refinement and implementation of the RIS3 strategy in a region heavily hit by the crisis, while also serving as a model for other convergence regions in Greece and Europe, the project centres on the provision of "hands-on" support to the REMTh RIS3 implementation process. In addition to developing the process, the envisaged outcomes include the support for the launch of concrete projects in the region and consequent absorption of structural funds. In view of this primary aim, this event represents an important step along this path.

Two concrete concerns for the EDP were emphasised by JRC-IPTS in the introductory session. First was the issue of whether it is best for ideas to match the funding available or whether a more ambitious search for ideas should be undertaken based on potential, for which it is better to then seek appropriate funding. Second, the need to better engage with international networks was emphasised.

In order to fully explore the value chain of wine production, a variety of international and national experts were invited to make presentations centred on each of the four themes identified above. To further examine ideas and opportunities in each of these areas, parallel working groups were organised, following a common participatory methodology. These centred on the generation of ideas, and the selection of the most feasible for further discussion. Moderators and rapporteurs were appointed for each group to oversee the application of the methodology and report the outcomes.

The participation and engagement in the event, in terms of both level and quality, were high. More than 90 stakeholders from within the region and beyond participated. Both the plenary and parallel sessions saw active engagement by both invited experts and stakeholders from the region and beyond.

A key issue identified by the region during the RIS3 preparation was the lack of business involvement. A key positive outcome of this event was the level of business participation: more than half of the participants came from the private sector, and actively engaged in proposal formulations for future collaboration.

This generation and exchange of ideas were key elements of the meeting. The outcomes of the working groups were highly constructive, with a number of feasible ideas, proposed and thought through during the second day. The participatory process used for this worked smoothly, with participants actively engaging in the tasks, and with lessons emerging for its refinement in the subsequent such events envisaged under the preparatory action. The overall perception of participants was highly positive.

A key issue of the meeting was the making and reinforcement of linkages, and the importance of subsequent joint efforts, on both bilateral and multilateral bases. The good levels of engagement between the stakeholders should be followed up.

**Outcomes: Participation** 







In planning the event, a broad mix of potential participants was identified, based on an initial value chain analysis. The main stakeholder groups included:

- 1) Farmers and animal breeders;
- 2) Dairy and meat product industries.
- 3) Researchers and experts on the primary activities of the value chain (e.g. veterinaries, agronomists, biologists, economists)
- 4) Representatives of other value chains that provide win-win opportunities, i.e. tourism and cultural events.
- 5) Regional Administration officers

The regional members of the above-mentioned groups were identified with the collaboration of the five regional Chambers of Commerce and the regional Managing Authority. Some of the entrepreneurs suggested that additional members of their staff should also attend the workshop, on the basis of their technical skills, competences and functional roles.

The second pool of participants consisted of national and international experts that would share their knowledge and expertise on:

- Value enhancing innovations for dairy products;
- Co-operation projects in the field of animal nutrition;
- Marketing tools in the field of the food industry;
- The selected 4 areas of the EDP.

Totally 11 experts were selected to cover the above issues, 2 international and 9 local/national.

A consolidated list of participants was reviewed by JRC/IPTS and the MA and invitations were sent by JRC/IPTS with an option for e-registration. Overall, 123 participants were recorded in the list and 43 of them used the e-registration tool to confirm their participation. At the same time an open invitation was published in the local press and online by the Regional Government, encouraging any other interested party to attend. The workshop was attended by 93 participants (excluded JRC/IPTS and MA REMTh staff).

In conclusion, stakeholder engagement was a demanding process in terms of time and cost, based on the combined efforts of two organizations (JRC/IPTS and MA/REMTh) with certain pitfalls mainly due to the geographic distance as well as local constraints (motivation, trust issues, etc.) regarding the nature of the event.

#### **Outcomes: Parallel Working Groups**

The most important element of the workshop was the Participatory Exercise that took place within the parallel sessions by 4 working groups (WGs). The formation of the 4 WGs corresponded to the 4 thematic areas and was based on the preference expressed by all participants during the e-registration process. The exercise included the following stages:

 An introductory presentation by a local/national expert on the area examined as an ignition for the discussion followed.







- A brainstorming session in which each member of the group was asked to generate an idea under the thematic area of the work group (task 1).
- The presentation of the ideas by each participant to the rest of the group (task 2).
- The discussion and selection of most favourable ideas leading to the formation of "innovation partnerships", in other words, sub-groups within the main work group (task 3).
- The development of ideas by the partnerships and initial reflections on issues that they had to tackle for the ideas to be transformed into sound projects (task 4).
- The further refinement of the ideas based on a set of guiding questions (task 5)
- The presentation of the ideas within the work group and to plenary session as well.

A detailed presentation of the methodology of the exercise was given to all participants during the plenary session. Prior to the exercise, a moderator and a rapporteur had been appointed and were also provided by instructions towards the effective implementation of the tasks. It must be noted that neither the moderators nor the rapporteurs were involved in the various partnerships.

The basic difference from the first EDP focus group in Drama was that the participatory exercise was split into 2 days. As a consequence the composition of the WGs was changed between day 1 and day 2. In some WGs this created some problems in terms of consistency of the partnerships creation.

Apart from this change the process was followed as described by the methodology. Small changes were made after discussion among WG members without having negative effects to the overall results of the exercise.

The four EDP parallel sessions were attended by 62 participants (excluding moderators and rapporteurs) representing the following stakeholder groups:

- 28 from industry
- 13 from research and/or academic community
- 19 from public administration (national and/or regional)
- 2 from non government organizations

It must also be noted that we had 3 participants from a neighboring region of Bulgaria.

Table 1 presents a summary of the main outcomes of each group, while the remaining sections set out the outcomes, based on the minutes compiled by the rapporteurs during the process.







Table 1: Main outcomes of the participatory exercise

Working Group	Idea/Partnership Name	Brief description	Expected results/outcomes
	Cluster for animal husbandry and agriculture	Production of milk (and meat) in clusters with the aim to produce high quality products at competitive prices	Establishment of a healthy co-operative model based on clustering.
		and with specific features linked to the local advantages and unique characteristics.	Increase of production and employment of the sector.
	Genetic mapping and genetic improvement	Genetic mapping and genetic engineering aiming at increasing production and resistance to illnesses.	Creation of a brand name and image of local products.  Production of high-quality and safe products and the creation of herds of national / local identify (through creating
	- Improvement	militaries production and resistance to innesses.	cores of development of genetic material) for each animal breed.
R & I in animal husbandry			Development of races that are resistant to animal / human illnesses targeting mainly exports.
	Inter-community supporting	Establishing collaboration with neighbouring regions in	Increase of trans-national sales for animals and products
	farming/production; Short	Bulgaria.	but also the creation of support structures for coaching,
	supply chain (from consumer		mapping and training activities.
	to producer)		To raise awareness about local gastronomy.
	Completion of vertical inte-	Completion of the vertical integration in animal hus-	Creation of vertically integrated units that would ensure
	gration – slaughter houses in	bandry by creating slaughter houses in small farms.	better value for money.
	small farms	The costs of the slaughter houses can be shared among groups of small farms by creating for instance	Increased quality of products based on local unique features as well as certification and traceability of quality of







Working Group	Idea/Partnership Name	Brief description	Expected results/outcomes
		producers' cooperatives.	products.
R & I in processing and preservation of meat	Religious Certifications of Meat and Meat Products  Production of certified traditional meat products and their promotion via marketing innovations	Organisation and certification of all the links of the value chain of Hallal-certified meat (breeders, slaughterhouses, meat processing plants), initially to cover the needs of the Muslim population in REMTh and in the longer term to enter other markets abroad (EU countries with significant Muslim populations, Turkey).  Introduction of a private/proprietary quality certification scheme that would cover traditional (meat) products and guarantee the use of local inputs across the value chain and correlate these products with the historical and territorial context of REMTh.	Exploitation of the potential for exports of Hallal-certified meat products in markets with strong Muslim populations.  Part of the certification scheme would be an electronic infrastructure that would provide to end-users traceability-related information on the inputs and value-added information related to the end products.  Constitution of a network-type of business model, which is novel to REMTh.  Extension of the certification scheme to other categories of primary sector products, foods and beverages and improve exports and mark-ups.
	Innovative technologies in producing local non-pig meat products with improved conservation ability	Development of a series of innovative meat products characterised by improved conservation ability by exploring dehydration or natural antibacterial substances or traditional preservation methods.	Expansion of current product mix.  Improved sales of innovative products with higher margins.







Working Group	Idea/Partnership Name	Brief description	Expected results/outcomes
	Sustained and integrated promotion of local, traditional fermented food systems from authentic microbial cultures	Isolation and identification of the microbial strains from local traditional milk products. It is also refers to probiotic properties standards testing, testing for research activation of cytochromes, as well as antibiotic resistance testing.	Experimental application in food products and evaluation of their characteristic organoleptic properties.  Set up of a Laboratory Bank of wild isolated strains.  Application for international patents and commercialization of the final outputs/products.
R & I in dairy products	Development of a Certification Scheme for dairy products based on the local quality characteristics (geographic, chemicals and organoleptic properties)	Development of an integrated quality certification scheme system for local products that could guarantee the use of local products and producers within the value chain of dairy products.	Promotion of local quality and functional characteristics of the factors that contribute to the milk and dairy production.  Implementation of technology tools for the traceability authentication.
	Development of functional products based on local dairy products	Research and development of functional products based on local dairy products. The functional products will be enriched with different ingredients (for example carbohydrates from domestic legumes) and will be promoted to special groups of consumers.	The project is closely related to the other 2 ideas of the same WG, especially with the development of local microbial cultures that might boost the functional food sector.  Possible exploitation of by-products should be further investigated, since they present a high market potential.
Organic meat and	Dairy / Meat Sectors Cluster	Formation of a wide cluster initiative comprised by as	To comprise a regional epidimiological control mecha-







Working Group	Idea/Partnership Name	Brief description	Expected results/outcomes
dairy products and sustainable production		many actors of the meat and dairy value chain.	nism.  Establishment of livestock zones / production parks.  To take advantage of shared resources and services (e.g. standardisation, veterinary services, etc). with additional research activities.
	Research and/or implementation of new technologies and methodologies for the production of new value added products	Development of new technologies or implement new production methodologies in order to innovate at traditional production processes (e.g. cheese bags) or new added value dairy products (e.g. ariani with honey).	Exploitation of regional characteristics (e.g. minority traditions, regional natural environment/herbs, regional herds, culinary/gastronomy traditions, etc.).  Implementation of modern marketing techniques to capture niches with recorded price premiums.
	Energy production from animal waste	Biogas (and other forms of energy) production from animal waste and its exploitation.	Implementation of an environmentally friendly alternative method for energy production.
	Development of a network for collecting and management of data on milk and dairy production chain	Creation of a regional network for recording and valorisation of regional data (from soil studies, measurements and mapping) and their management to the local producers' benefit.	Development of an interactive platform designed to assist local stakeholders (meat/dairy production / distribution) in decision making. Assistance of Regional Administration in policy making.







#### **Assessment**

This section provides an initial assessment of the outcomes of the first EDP focus group drawing on the opinions expressed by participants and recorded by the four working group rapporteurs.

The overall exercise was carried out as planned. The blend of participants was quite balanced, thus allowing various perspectives to emerge. Initially, the entrepreneurs thought that this process would help solve their individual issues, the need for generalisation and partnership formation was not understood in the beginning of the exercise. Overall, all participants said that they enjoyed the process and expressed positive comments.

The methodology applied was improved since the first workshop in terms of allowing more time for creative discussion. However, the EDP process was spread over two days. This resulted in 'loosing' some of the participants from one day to another. More specifically:

- For WG1 all the researchers were absent on the second day. This may have led to less qualification of the ideas in relation to the research component;
- For WG4 the group capacity felt from 16 participants on the first day to 10 in the second one.

In addition the start of the second day was considerably delayed to allow for farmers and businesses to attend. Given that their presence is essential in this process we may need to consider carrying out next workshops in two half days with the presentations not that much relevant to businesses taking up the morning. Another option would be to organise the event on week-end time. Of course this depends on the sector specificities.

Civil society organisations were again largely missing, even though 2 participants from non governmental organisations were present. This is particularly important given also the sensitivity of the food sector to social and cultural considerations. There are several societal organisations that can be invited in following the ideas that resulted from the workshop. These include for instance Philadelphia http://philadelpheia.blogspot.gr/, Slow Food Thrace https://www.facebook.com/slowfood.thrace, WWF, Greenpeace, e etc.).

As in the previous workshop time keeping was again a difficult task. The next events can benefit from less presentations and more time for deliberation. The first day can be dedicated for example to scheduled presentations and also ad hoc interventions from the audience of people who want to present their cases. The second day can be devoted to the actual work. If more time was available discussions might have gone further to actual building an action plan that would commit at least the people in the specific groups.

Moreover a final session where a mixing of initial working groups takes place may lead to improved synergies and better processing of ideas leading to ideas spillover / cross-fertilisation between different working groups.

It is important that the attendants are clear about what they will be asked to do in the next workshops. If an invitation is sent out clearly stating that attendees will actively contribute to developing ideas for support by the regional authorities, attendance from business may be increased. In addition, the oppor-







tunities offered by the networking character of these events should also be highlighted. Certain collaborations were already established as side-effects of the formal activities of the workshop.

Another important point is to how to stimulate innovation element during ideas contribution. Best practices by innovative professionals and non-academic innovation-oriented contributions from research and academic communities can be further pursued.

In some working groups there were a lot of initial ideas proposed. Therefore it was decided to first discuss upon them and try to "cluster" them into more generic ones and then try to rank and to proceed to the formation of partnerships.

Despite some shortcomings, the positive mentality, real interest and willingness of people was also present in this workshop. This made them engage in discussions and produced useful input for designing the next steps in the follow up activities of the project. A momentum is created that the Regional authorities should build on for the benefit of the specific project as well as more generally in designing and facilitating bottom-up governance structures that include all key stakeholders in generating ideas, building networks and collaborations and translating these into concrete policy measures and even research and business strategies action plans. The continuation and follow up of the discussions is not only desired but also necessary so that this project is not discarded (as many others in the past) because of no/limited impacts.







### AGENDA - ENTREPRENEURIAL DISCOVERY FOCUS GROUP ON DAIRY AND MEAT IN EASTERN MACEDONIA AND THRACE

29-30 January 2015

Komotini, Greece

ARCADIA HOTEL

Panepistimioupoli Komotini

Simultaneous translation will be provided between Greek and English in both plenary and parallel sessions

#### 29 January

11:00 – 11:30	Registration	
11:30 - 13:00	<ul> <li>1.1 INTRODUCTORY PLENARY SESSION</li> <li>Welcome - George Pavlides, Regional Governor of Eastern Macedonia and Thrace</li> <li>Welcome - Mark Boden, project leader for the Preparatory Action at the European Commission's Joint Research Centre - JRC-IPTS</li> <li>Welcome - Petros Soukoulias, President of the Innovation Council of REMTh</li> <li>Introduction to the project - Mark Boden - JRC-IPTS</li> <li>Smart Specialisation Strategy for Eastern Macedonia and Thrace: setting priorities - Michalis Metaxas - Innovatia Systems</li> <li>Research and innovation in dairy and meat in Greece and REMTh in an international context - Karel Haegeman - JRC-IPTS</li> </ul>	
13:00 – 13:45	Lunch break	
13:45 – 16:00	Plenary presentations in different areas:  1. Research and innovation in animal husbandry Innovative applications in animal production  Prof. Pascalis Fortomaris, Associate Professor, Head of the Laboratory of Animal Husbandry, Faculty of Veterinary Medicine, School of Health Sciences, Aristotle Univ of Thessaloniki  2. Food processing technologies	







	Exploitation of cheese manufacturing by-products by production of added	
	value products with health claims	
	Prof. Dimitrios Kouretas, Department of Biochemistry & Biotechnology, University of Thessaly	
	3. Research and innovation in dairy products  Application of innovative technologies in probiotic dairy foods production lo-	
	annis Kourkoutas, Assistant Professor, Department of Molecular Biology & Genetics, Democritus University of Thrace	
	4. Organic meat and dairy products and sustainable production	
	Dairy foods, Functional Foods, Health and the Industry	
	Prof. Eugenia Bezirtzoglou, President of Department of Agricultural Development Lab of Microbiology, Biotechnology and Hygiene, Democritus University of Thrace	
	<b>5. Value Enhancing Innovations for Feta Cheese</b> Prof. Dimitris Gousios, Department of Spatial Planning and Regional Development, University of Thessaly	
	Methodological Outlook of parallel sessions	
16:00 – 16:30	Coffee break	
	Parallel sessions – round 1: Presentation on the topic followed by an interactive discussion	
	Research and innovation in animal husbandry     Animal breeding and national animal products from a genomic point of view	
	Anagnostis Argyriou, Researcher, Institute of Applied Biosciences , CERTH	
16:30 – 18:00	2. Food processing technologies Innovations in Processing and Production of Meat and Meat-Products	
	Prof. Ioannis Amvrosiadis, School of Veterinary Medicine, Faculty of Health Science, Aristotle University of Thessaloniki	
	3. Research and innovation in dairy products Quality and safety of Greek traditional cheeses	
	Dr George Samouris, Veterinary Research Institute of Thessaloniki, NAGREF	







	4. Organic meat and dairy products and sustainable production Sustainable Low Input Systems for Meat and Milk in Greece: Science-based evidence for innovation Prof George Arsenos, Lab. Animal Husbandry, Faculty of Veterinary Medicine, Aristotle University of Thessaloniki
18:00 – 18:10	Conclusions of day 1
19:00 – 21:00	Networking dinner







#### 30 January

08:30 - 09:00	Registration (continued) – coffee
09:00 - 09:15	Introduction – Vasilis Pitsinigkos, Managing Authority, REMTh & Mark Boden - JRC-IPTS
	Overview of the day – Patrice dos Santos - JRC-IPTS
	Plenary presentations and discussion on framework conditions supporting entrepre-
	neurial discovery in dairy and meat: marketing & promotion, networking, etc.
	1. Cooperation projects in the field of animal nutrition
09:15 - 11:00	Mariana Petkova, Institute of Animal Science Kostinbrod, Bulgaria
	2. Marketing tools and experiences in the food industry (FARMInc)
	Alessio Cavicchi, University of Macerata, Italy
	Plenary Discussion
11:00 – 11:30	Coffee break
	Parallel EDP sessions – round 2: Interactive discussion in parallel sessions
11:30 – 13:00	1. Research and innovation in animal husbandry
11.30 13.00	2. Food processing technologies
	<ul><li>3. Research and innovation in dairy products</li><li>4. Organic meat and dairy products and sustainable production</li></ul>
13:00 – 14:00	1.2 Networking lunch
	1.2 NETWORKING LONGIT
14:00 – 16:00	1.3 PARALLEL EDP SESSIONS FOR EACH OF THE FOUR AREAS: CONTINUED
16:00 – 16:30	Coffee break
16:30 – 17:00	Report back to the plenary
17:00 – 17:30	Discussion and Conclusions

