Erasmus+ Program
STRATEGIC PARTNERSHIPS FOR
VOCATIONAL EDUCATION AND TRAINING
(KA 202)

Q4: Training need analysis

Report

July, 2015

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The survey

From February to June 2015 the partners of the project carried out a survey aimed to identify some fields of interest and the appropriate training materials & tools for present and future farmers, milk producers, cheese makers and professionals of the milk by-products and waste management, who are interested to improve their knowledge, skills and competencies in the milk-cheese supply chain, to diversify and optimize their activities and products, as well as to improve the management of their businesses.

For this purpose, a questionnaire has been developed to be submitted to:

- Farmers/milkman
- Mangers of dairy products
- Dairy producers
- Students of dairy faculty on Agricultural University
- Food technologists
- Academics

The questionnaire covered 4 different areas:

1. innovative trends in milk/cheese by-products and waste
2. training needs
3. management
4. information and training courses

This report presents the results collected in the 4 countries of the partnership: Italy, Hungary, Poland and Turkey.
“Improvement of Production and Management Processes in Dairy-Cheese Sector and Dairy Waste Management”

Number of questionnaires collected

<table>
<thead>
<tr>
<th>Language</th>
<th>Number of Questionnaires</th>
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<tbody>
<tr>
<td>tr</td>
<td>28</td>
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<tr>
<td>pl</td>
<td>20</td>
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<tr>
<td>hu</td>
<td>24</td>
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<td>it</td>
<td>27</td>
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The questionnaires have been collected in face to face meetings, during dedicated workshops, sent by e-mail to different responsants.
1. INNOVATIVE TRENDS IN MILK/CHEESE BY-PRODUCTS AND WASTE

1. In the area where you work, for which reason do you think that farmers, milk producers/cheese makers should introduce some changes?

Respondants could choose one or more statement:

- a. To make their work more profitable and to earn extra income
- b. To make their work more environmentally sustainable
- c. To diversify their sources of income, to make it more stable
- d. To make their business more sustainable in the long term.
- e. To give their relatives better employment opportunities.
- f. To receive a grant in form of a project under European funds.
- g. To search for a better way of life.
- h. To escape from unemployment in other sectors
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Mean of responses of Hungary, Italy, Poland and Turkey

- To make their work more profitable and to earn extra income
- To diversify their sources of income, to make it more stable
- To make their work more environmentally sustainable
- To make their business more sustainable in the long term.
- To receive a grant in form of a project under European funds.
- To escape from unemployment in other sectors
- To search for a better way of life.
- To give their relatives better employment opportunities.
2. **What do you consider the most innovative trends in the dairy supply chain for your region/country with reference to the use of by-products?**

Respondents were asked to rate from 1 (not innovative) up to 5 (very innovative) each item. The given result is the average of different ratings.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rating 1</th>
<th>Rating 2</th>
<th>Rating 3</th>
<th>Rating 4</th>
<th>Rating 5</th>
<th>Average</th>
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</thead>
<tbody>
<tr>
<td>a. Protected quality cheese making with use of whey as a by-product</td>
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<td>b. Cottage cheese making by using whey as a by-product</td>
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<td>c. Mozzarella cheese by using buttermilk as a by-product</td>
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<td>d. Whey use for production of lactose and whey powder</td>
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<td>e. Buttermilk powder for animal feeding (piglets, etc.)</td>
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<tr>
<td>f. Buttermilk use for extraction of casein and other substances</td>
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<td>g. Pharmaceutical use of some compounds (sugars, fats) and minerals</td>
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<td>h. Use of whey for protein supplements</td>
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<tr>
<td>i. Use of whey and effluents for soil fertilization</td>
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<td>j. Use of whey and effluents for mix of bio-mass energy</td>
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<td>k. Use of whey extracts for organic disinfectants and detergents</td>
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</tbody>
</table>
Mean of responses of Hungary, Italy, Poland and Turkey

- Pharmaceutical use of some compounds (sugars, fats) and minerals
- Use of whey and effluents for mix of bio-mass energy
- Use of whey for protein supplements
- Buttermilk powder for animal feeding (piglets, etc.)
- Whey use for production of lactose and whey powder
- Cottage cheese making by using whey as a by-product
- Protected quality cheese making with use of whey as a by-product
- Use of whey extracts for organic disinfectants and detergents
- Mozzarella cheese by using buttermilk as a by-product
- Buttermilk use for extraction of casein and other substances
- Use of whey and effluents for soil fertilization
3. Successful case studies of companies with a good combination of the innovative trends above listed

ITALY

Caseificio Tomasoni
Via Bovon, 3 - 31030 Breda di Piave (Treviso)
http://www.caseificiotomasoni.it

Latteria e Caseificio Moro (S.R.L.)
Via Postumia, 1, 31045 Motta di Livenza (Treviso)
http://www.caseificiomoro.com/

Via Ingorie, 2 Coderno di Sedegliano (Udine)
http://www.latteriacoderno.it

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**POLAND**
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- OSM Myszkow - [www.osmmyszkow.pl](http://www.osmmyszkow.pl)
- OSM Konskie - osm.konskie.pl
- OSM Kazimierza Wielka
- OSM Skala - [www.osmskala.pl](http://www.osmskala.pl)
- OSM Miechow - [http://osm.miechow.pl/](http://osm.miechow.pl/)
- OSM Jasienica Rosielna - [www.osm-jasienica-rosielna.pl](http://www.osm-jasienica-rosielna.pl)

**TURKEY**
2. TRAINING NEEDS

4. Associated to the innovative activities you have indicated above, which ones do you think that target users might require more training in your region/country?

Respondants were asked to rate from 1 (more important) up to 3 (less important) each item. The given result is the average of different rating.

- a. Protected quality cheese making with use of whey as a by-product
- b. Cottage cheese making by using whey as a by-product
- c. Mozzarella cheese by using buttermilk as a by-product
- d. Whey use for production of lactose and whey powder
- e. Buttermilk powder for animal feeding (piglets, etc.)
- f. Buttermilk use for extraction of casein and other substances
- g. Pharmaceutical use of some compounds (sugars, fats) and minerals
- h. Use of whey for protein supplements
- i. Use of whey and effluents for soil fertirrigation
- j. Use of whey and effluents for mix of bio-mass energy
- k. Use of whey extracts for organic disinfectants and detergents
“Improvement of Production and Management Processes in Dairy-Cheese Sector and Dairy Waste Management”

Mean of responses of Hungary, Italy, Poland and Turkey

- Buttermilk use for extraction of casein and other substances
- Buttermilk powder for animal feeding (piglets, etc.)
- Cottage cheese making by using whey as a by-product
- Pharmaceutical use of some compounds (sugars, fats) and minerals
- Whey use for production of lactose and whey powder
- Mozzarella cheese by using buttermilk as a by-product
- Use of whey extracts for organic disinfectants and detergents
- Use of whey and effluents for mix of bio-mass energy
- Use of whey and effluents for soil fertirrigation
- Protected quality cheese making with use of whey as a by-product
- Use of whey for protein supplements
3. MANAGEMENT

5. What kind of complementary management competencies to the technical ones are, according to you, are the most important for improving management of companies in the dairy sector?

Respondants were asked to rate from 1 (more important) up to 3 (less important) each item. The given result is the average of different rating.

- Administration and bookkeeping
- Use of the European structural funds (EAFRD, ERDF, ESF)
- Strategic planning and business plan
- Relationships with banks
- Relationships with insurance companies
- Safety at work
- Individual marketing strategies
- Group marketing strategies
“Improvement of Production and Management Processes in Dairy-Cheese Sector and Dairy Waste Management”

Mean of responses of Hungary, Italy, Poland and Turkey

- Relationships with insurance companies
- Safety at work
- Individual marketing strategies
- Group marketing strategies
- Relationships with banks
- Strategic planning and business plan
- Administration and book keeping
- Use of the European Structural funds (EAFRD, ERDF, ESF)
4. INFORMATION AND TRAINING COURSES

6. Do you think that relevant information and training for innovative agriculture are easily available in the dairy supply chain sector?
7. What kind of learning do you think that the companies and staff in dairy supply chain, young farmers, women, and new farmers in your area of action would prefer?

Respondants were asked to rate from 1 (more important) up to 3 (less important) each item. The given result is the average of different rating.

- **a.** Residential courses, lasting one week
- **b.** Non residential courses, with lectures spread over several weeks or months
- **c.** Self long distance learning (offline courses via internet)
- **d.** Video-conference organized by the training centre
- **e.** Learning by doing, with meetings at, and visits to pilot farm(s)
- **f.** Blended methodology (front classroom, online and offline training)
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Mean of responses of Hungary, Italy, Poland and Turkey

- Video-conference organized by the training centre
- Blended methodology (front classroom, online and offline training)
- Learning by doing, with meetings at, and visits to pilot farm(s)
- Residential courses, lasting one week
- Self long distance learning (offline courses via internet)
- Non residential courses, with lectures spread over several weeks or months
8. What kind of training tools and activities do you think are more effective and user friendly for target users?

Respondants were asked to rate from 1 (more important) up to 3 (less important) each item. The given result is the average of different rating.

- a. Complete online course based on teaching material and exercises
- b. Teaching material downloadable and printable for offline course
- c. Handbook made of chapters for self-study and front lesson
- d. Video-conferences from class room organized by Skype with students
- e. Placement based on learning by doing assisted by a tutor
- f. Combination of the above
Mean of responses of Hungary, Italy, Poland and Turkey

- Combination of teaching methodologies
- Complete online course based on teaching material and exercises
- Video-conferences from class room organized by Skype with students
- Placement based on learning by doing assisted by a tutor
- Teaching material downloadable and printable for offline course
- Handbook made of chapters for self-study and front lesson
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Conclusions

Without having the ambition of representing the views of all the farmers, milk producers, cheese-makers and professionals of the milk by-products and waste management in each country, the responses collected allows the partnership to proceed with the design of the training course and the preparation of educational materials that are responsive to the needs emerged during the investigation.

With regard to the training needs, there are no large differences between the responses collected in the four countries and the indications of respondents will be the guidelines for the designing of the training contents.

Only in the section Information and training course, the question of whether the respondents think that relevant information and training for innovative agriculture are easily available in the dairy supply chain sector, there are striking differences. In fact, most respondents in Hungary say that the information are easily available while the respondents of Italy and Turkey replied that they are not. This is the only question that shows significative differences between the countries, and the course and didactic materials that will be developed will fulfil this gap.

To conclude we can say that the training needs survey and the analysis of the results offer to the partnership a solid base to develop the training course and the didactic materials in a way that will completely fulfil the needs of the sector.