LEONARDO DE VINCI TRANSFER OF INNOVATION – AGRIYOUTH LdV TOI Project

AGRIcultural Youngsters Oriented Ultimate Training Handbook

Project Number 2013 – 1-TR-1-LEO05-47516

Survey Report on Analysis of Agricultural Innovative Trends and Training Needs
Transnational Synthesis

TRANSNATIONAL SUMMARY REPORT: TURKEY, ITALY, HUNGARY, POLAND, ROMANIA AND SPAIN

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Perugia, 10th June 2014

PART A: Questionnaire from farmers

1. METHODOLOGY

Describing how, when and how many farmers have been contacted

The methodology used by the partners was different depending of relationships with the target groups:

- in **Turkey** the survey started on January 2014 and the farmers were contacted individually face to face through contacts with local agricultural associations in the Çanakkale and Balikesir provinces by CASIAD, Balikesir University and Çanakkale Onsekiz Mart University, and their staff and students; **40** filled in questionnaires were given back;

- in **Italy** the survey started on January 2014 and the farmers were contacted by the staff of the Italian Confederation of Farmers from various offices in the region, mostly addressed to the members of the associations "AGIA" (Young farmers) and "Donne in Campo" (Female farmers) with an help desk provided by Cia Umbria central office; **51** filled in questionnaires were given back, mostly by email and few of them by fax;

- in **Hungary** the survey started on January 12th 2014 and finished at the end of February. with help of Chamber of Agriculture in Csongrád County region; **42** filled in questionnaires were given back;

- in **Poland** the survey started on January 2014 and the farmers were contacted individually, face to face by involving local agricultural associations in Karniowice and Kraków provinces during fairs and meetings; **77** o filled in questionnaires were given back.

- in **Romania** the survey started on February 5th by presenting the project and involving persons in charge of the FAAT(Associated Farmers Federation Timis); **40** filled in questionnaires were given back by regular mail or provided directly by personnel of FAAT.

- in **Spain** the survey started on January 2014 and the farmers were contacted by the staff of the Italian Confederation of Farmers from various offices in the region, directly or by telephone; **40** filled in questionnaires were given back.

The farmers giving back their responses were therefore totally **290**.

2. DEMOGRAPHICS

Tables and text commenting size of farms, kind of productions, areas involved (questions 43 – 47 and 1 – 21)

The respondents to the optional questions 43-47 (demographics) of the questionnaire:

- in **Turkey** were 40, 32 males and 8 females. The average age was 32 and education was mainly middle and primary, a notable part higher (10), and two with primary PhD or Master. Average experience in farming was 11 years and work experiences out of farming for 5 (12,5%) of the respondents. The respondents to the questions from 1 to 21, were 100%. Multiple answers were also allowed.

- in **Italy** were 40, of 51 questionnaires come back, 14 males and 26 females. The average age was 39 and education was mainly middle (22), then primary (10), higher (7) and just one with a master certificate. Average experience in farming was 12 years and work

experiences out of farming for 50% of the respondents. The respondents to the questions from 1 to 21, were 100% of the 51 interviewees.

- in **Poland** were 77, of 77 questionnaires come back, 45 males and 32 women. The average age was 39, but most of the participants included in the range 21-30 years old, and education was mainly middle (22 , 11 of them having completed high school and 11 of them with a bachelor or master), then primary (8), nobody had a degree. Average experience in farming was 17 years and 55 work respondents with experiences out of farming (71%). The respondents to the questions from 1 to 21, were 100% of the 37 interviewees. Many respondents have a second source of income.

- in **Romania** the respondents to the optional questions 43-47 of the questionnaire were 40, 29 males and 11 women, of 40 interviews come back. The average age was 40,8 and education was mainly higher (27), then primary (10), higher (7) and just one with a master certificate. Average experience in farming was 16,6 years and work experiences out of farming for 17 of the respondents. The respondents to the questions from 1 to 21, were 100% of the 40 interviewees.

- in **Spain** the respondents to the optional questions 43-47 of the questionnaire were 40, 27 males and 13 women, of 40 interviews come back. The average age was 39 and education was mainly higher (21), then Master (13), Middle (4) and 2 farmers with a primary studies. Average experience in farming was 17 years and work experiences out of farming for 27,5% of the respondents. The respondents to the questions from 1 to 21, were 100% of the 40 interviewees.
- in **Hungary** the respondents to the optional questions 43-47 of the questionnaire were 42, 19 males and 3 women, 20 non respondents. The average age is 45 and comprised between 21 and 64. the average experience in farming was 20, from 0 up to 33 years, and work experiences out of farming was 50% of the respondents (but with 24 of 42 non respondents).

About farm activities **Table 2** (question 1) shows (multiple answers possible):

- in **Turkey** crop production is at the 1st place (65%), animal production is the 2nd one (45%) then vegetable production (25%) and last food processing (7,5%). No response for agrotourism and others.

- in **Italy** crop production is at the 1st place (49%), animal production is the 2nd one (39,2%) then vegetable production (25,5%) and food processing (25,5%), agrotourism (13,7%), others (29,4%).

- in **Poland** crop production is at the 1st place (52%), animal production is the 2nd one (34%) then vegetable production (19%). Then others (beekeeping, 22%), agritourism (12%) and food processing (4%).

- in **Spain** crop production is at the 1st place (50%), agro-tourism (37,5) is the 2nd one then animal production (32,5), vegetable production (30%), food processing (15%) and others (5%).

- in **Romania** crop production is at the 1st place (85%),vegetable production (25%) is the 2nd one, then animal production (17,5%), food processing (2,5%) and others (10%).

- in **Hungary** crop production is at the 1st place (59%), vegetable production and animal production (38,6%) are the 2nd higher average, then agritourism (6,8%) and others (10%). No response for food processing.

About **farm structural data** of the respondents **Table 3** (questions 2-12) shows:

- in **Turkey** the average farm area was 71,4 da. The pastures were very limited area (17,6 da per farms). The dairy cows, meat cows, sheeps and goats number per farm were 22, 12, 57 and 32, respectively. No farm have pigs. In general, the farms were small-sized type average farm area was 12,1 ha.

- in **Italy** the average farm area was 18,12 ha. The most consistent area was constituted by arable lands (15 of the interviewees) with 24,11 ha average area. For orchards, 16 of the interviewees, the average area was 5,30 ha; for pastures, 24 of the interviewees, 7,15 ha; for woods, 18 respondents, 6,87 ha; dairy cows, 5 respondents and 60 ha; meat cows, 5 respondents and 28 ha; sheep, 10 respondents and 96ha; goats, 2 interviewees and 6 ha; pigs, 7 interviewees and 6 ha; courtyard/small animals, 6 interviewees and 25 ha.

- in **Poland** the average farm area was 9 ha. The pastures were very limited area (4 ha per farm). The dairy cows, meat cows, sheep's and goats number and pigs per farm were 18,12,13,6,16. There is aloso a response quoting horses 3%. In general, the farms were small-sized type.

- in **Spain** the average farm area was 21,95 ha. The most consistent area was constituted by arable lands (32 of the interviewees) with 21,75 ha average area. For orchards, 7 of the interviewees, the average area was 7 ha; for pastures, 11 of the interviewees, 8,09 ha; for woods, 3 respondents, 8,67 ha; dairy cows, 4 respondents and 45 ha; meat cows, 3 respondents and 51 ha; sheep, 1 respondent and 10 ha; goats, 5 interviewees and 42,6 ha; pigs, 5 interviewees and 48 ha; courtyard/small animals, 13 interviewees and 16 ha.

- in **Romania** the average area was 164,10 ha The most consistent area was constituted by arable lands (12 of the interviewees) with 165,75 ha average area. For orchards, 1 of the interviewees, the average area was 30 ha; for pastures, 5 of the interviewees, 17 ha; for woods, 3 respondents, 14,33 ha; dairy cows, 1 respondent and 40 ha; meat cows, 0 respondents; sheep, 3 respondent and 190 ha; goats, 0 interviewees; pigs, 2 interviewees and 40 ha; courtyard/small animals, 1 interviewees and 160 ha.

- in **Hungary** (adopted multiple answers) the average area was 67 ha The most consistent area was constituted by arable lands (39 of the interviewees) with 55,1 ha average area. For orchards, 17 of the interviewees, the average area was 6,3 ha; for pastures, 20 of the interviewees, 20,1 ha; for woods, 11 respondents, 9,8 ha; dairy cows, 9 respondents and 14,6 ha; meat cows, 8 respondents, 23,9 ha; sheep, 6 respondents and 28,8 ha; goats, 3 interviewees and 6,3 ha; pigs, 11 interviewees and 21 ha; courtyard/small animals, 14 interviewees and 61,4 ha.

About on farm products, **Table 4** (questions 13-18) shows:

- in **Turkey** the most popular on farm activity concerns olive oil and other oil based products. 24 respondents of 40 (60%) filled in the field "Others" since none of the shown on farm activities were performed. Jams, breads, pies and some meats (only Turkish sucuk) are made only for home consumption, not for selling.

- in **Italy** the most popular on farm activity concerns olive oil and other oil based products, with 21 respondents of 51 (41,2%). Miscellaneous activities include 15 respondents, whilst engaged in other single activities are 8 for processed meats (15,7%), 5 wines and spirits (9,8%), 5 production of jams (9,8%), 2 breads, etc. (3,9%). Actually extra-virgin olive oil, aged salted pork meat and wine are traditional farm products. Cheese could be also a widespread farm product, mostly from milk sheep producers. Fruit is also largely used for small farm production.

- in **Poland** the most popular on farm activity concerns on farm production of jam and other fruit based preserves (44,2%). However, 21 and 20 respondents of 77 make respectively breads and pies and spirits. A very trendy activity is constituted by honey and beekeeping by-products with 23,4 % of the respondents. On farm processing is largely carried out. Many respondents are artisanal food processers, but on-farm processing has to be mostly related to family consumption. Many farmers will offer these products as gifts and their sale is not significant source of farm income in this sample. On farm food processing could be improved to increase farm income. In the sample, the other choice indicated other products such as mushrooms, fruit juices and tomato sauce.

- in **Spain** the most popular on farm activity concerns olive oil and other oil based products, with 28 respondents of 40 (70%), processed meats include 6 respondents (15%),Breads 4 (10%) , 2 others, etc. (5%). Actually olive oil production, is the principal economic activity in Andalucia.

- in **Romania** the majority of the respondents don't have such kind of on farm activities. Just 1 respondent has a jam production and other 4 not defined productions (others)

- in **Hungary** there is no specific popular on farm activity: of 23 respondents, 6 are jam producers, 3 bread and pies, 5 wine and spirits, 5 processed meats, 4 others (not defined).

About agritourism, **Table 5** shows:

- in **Turkey** there were no respondents with ongoing agritourism.

- in **Italy** 7 of 51 farms have ongoing agrotourism activities. Average number of rooms is 5,1; average number of beds is 11,4; average restaurant seats is 36,5.

- in **Spain** 14 of 40 farms have ongoing agrotourism activities. Average number of rooms is 4,4; average number of beds is 10; average restaurant seats is 11,7.

- in **Poland** the total farms with agritourism are 5, with an average 6,3 rooms, 11,2 beds and 25 seats at the restaurant.

- in **Romania** there were no respondents with ongoing agritourism.

- in **Hungary** the total farms with agritourism are 2, with average 3 rooms, 6 beds and 27,5 seats at the restaurant.

The sample of interviewees can be considered significantly representative, even if in a very small scale, of the farms in Turkey, Italy, Spain, Poland, Romania and Hungary, in terms of farm size, production and kind of on farm processing activities.
Agrotourism is represented in the chosen sample of farms only in Spain (14), Italy (7), Poland (5) and Hungary (2).

3. LABOUR

Tables and text commenting per cent rates from the responses on labour relationships (22 – 26)

About provenience of the farms and parental relationships, **Table 6** (Question 22) shows:

- in **Turkey** a large majority of the respondents, 38 of 40 (95%) declares that the farm was owned by own family; 3 interviewees of 40 (7,5%) had another work experience before farming.

- in **Italy** a large majority of the respondents, 38 of 51 (74,5%) declares that the farm was owned by own family; 26 interviewees of 51 (51%) had another work experience before farming, whilst 25 respondents had not.

- in **Poland** a large majority of the respondents, 56 of 77 (72,7%) declares that the farm was owned by own family; 47 interviewees of 77 (61%) had another work experience before farming.

- in **Spain** a large majority of the respondents, 36 of 40 (90%) declares that the farm was owned by own family; 12 interviewees of 40 (30%) had another work experience before farming, whilst 28 respondents had not.

- in **Romania** a large majority of the respondents, 30 of 40 (75,0%) declares that the farm was owned by own family; 17 interviewees of 40 (42,5%) had another work experience before farming, whilst 23 respondents had not.

- in **Hungary** a large majority of the respondents declares that the farm was owned by own family, as well as a majority declares to have had another work experience before farming.

About kind of labour condition at farm, **Table 7** (Questions 24-26) shows:

- in **Turkey** farmers mostly use family members and partly seasonal workers for labour in farms (only 5% of the farms without family members, 45% 1 family member, 42,5% 2 family members, 7,5% 3 family members; 80% of the farms has no permanent workers, just 7,5% 1 permanente worker and 5% 3 permanent workers; 62,5% of the farms has no seasonal workers, 2,5% 1 permanent worker, 12,5% 2 permanent workers, 2,5% 3 permanent workers, 15% more than 5).

- in **Italy** 45 respondents declare to have at farm no permanent workers (88,2%), just 1 at 5 farms and 3 permanent workers at 1 farm. About involvement of family members, 21 interviewees declare that no relative works at farm; 14 respondents declare 1, 12 declare 2, 3 declare 3 and 1 declare 4. About seasonal workers, 32 interviewees declare none; 11 declare 1, 3 declare 2 and 1 declare 3. Those figures can be considered adequate in comparison with the sample, even if more tending to very small farms, than small/medium size.

- in **Poland** the majority of the interviewees declares that their farms have family workers , whilst respectively 83,1% and 84,4% of farmers declare have no permanent as well as no seasonal workers.

- in **Spain** 16 respondents declare to have at farm no permanent workers (40%), 23 respondents declares to have only one(57,5%) and just 1 to have 2(2,5%). About involvement of family members, 21 interviewees declare that no relative works at farm; 19

respondents declare 1,. About seasonal workers, 6 interviewees declare none; 7 declare 1, 10 declare 2 and 5 declare 3, 4 declare 4, 4 declare 5 and other 4 declare more than 5. Those figures can be considered adequate in comparison with the sample, even if more tending to very small farms, than small/medium size.

- in **Romania** 22 respondents declare to have at farm no permanent workers (57,5%). About involvement of family members, 10 interviewees declare that no relatives works at farm; 15 respondents declare 1, 12 declare 2 and 3 declare 3. About seasonal workers, 12 interviewees declare none; 2 declare 1, 5 declare 2 and 3 declare 3 and 2 declare 4.
- in **Hungary** 42 of 42 respondents declare to be supported at work by family members. 34 of the respondents (81%) declare not to have at work permanent workers and 21 declare not to have at work seasonal workers (50%).

4. INNOVATIVE TRENDS

Tables and text commenting per cent rates from the responses on the most popular trends (27-31)

Innovative trends in agriculture is to be considered a focus of the survey in coherence with a rural development based on social, economic and environmental sustainability.
The state-of-the-art of the project has outlined three strategic target groups for innovation in rural areas: first of all young and female farmers and, in some cases, also farmers with other economic sector experiences.

About the reasons to innovate trends in farming, **Table 8** (Question 27) shows, from multiple choices:

- in **Turkey** 11 (77,5%) of the responses "To make the farm more profitable and to earn extra income", 27 (67,5%) of the responses "To search for a better way of life" and 14 (35%) "To make the business more sustainable in the long term".

- in **Italy** 27 (52,9%) of the responses "to make business more sustainable in the long term", 26 (51%) of the responses "to make the farm more profitable and to earn extra income", 24 (47,1%) "to diversify the sources of income, to make it more stable". It means the three major groups aim at sustainability, competitiveness and diversification. Then, by decreasing, 19 responses (37,3%) "to search for a better way of life", by linking innovation and life level improvement, 13 (25,5%), thinking on opportunities for the family, "to give to relatives better employment opportunities", 9 (17,6%) , by considering farming and rural life a better employment opportunity, "to escape from unemployment in other sectors" as well as, the same number of choices "to receive a grant in form of a project under European funds", by understanding importance of EU funds in agriculture and rural development.

- in **Poland** 53 (68,8%) of the responses "To search for a better way of life", 30 (39%) of the responses " To give to relatives better employment opportunities" and 18 (23,4%) "To receive a grant in form of a project under European funds".

- in **Spain** 21 (52,5%) of the responses "to make business more sustainable in the long term", 21 (52,5%) of the responses "to make the farm more profitable and to earn extra income", 21 (52,5%) "to diversify the sources of income, to make it more stable". It means the three major groups aim at sustainability, competitiveness and diversification. Then, by decreasing, 10 responses (25%) "to search for a better way of life", 8 "to escape fron unemployment in other sectors"(22,5%)…

- in **Romania** 53 (68,8%) of the responses “To search for a better way of life”, 30 (39%) of the responses “ To give to relatives better employment opportunities” and 18 (23,4%) “To receive a grant in form of a project under European funds”.

- in **Hungary** 24 (57,1%) of the responses “to make business more sustainable in the long term”, 18 (42,%) “to diversify the sources of income, to make it more stable”, 17 (40,5%) of the responses “to make the farm more profitable and to earn extra income”. Then, by decreasing, 14 (33,3%) “to receive a grant in form of a project under European funds”, 12 (28,6%), “to give to relatives better employment opportunities”, 10 responses (23,8%) “to search for a better way of life”, 2 “to escape from unemployment in other sectors”(4,8%).

About opinion on innovation value of the listed activities, **Table 9** (Question 28) shows:

- in **Turkey** the top innovative activities in farming and other productions in rural areas are considered “Direct selling of products” (4,8), “Alternative animal production” (4,6) and “organic farming (4,2)-“wind energy” (4,1). At the end of the list “ didactic and social farms linked to social issues of civil society” (1,7) is not considered innovative.

- in **Italy** the top innovative activities in farming and other productions in rural areas are considered “biomass for renewable energy or composting” (4,5/5), “photovoltaic or solar energy production” (4,4/5), “direct selling of products” (4,1/5), “nursery, gardening and landscaping” (4,1/5), “didactic and social farms..” (4,0/5). Then (3,9/5) “organic farming” , “biodiversity”, “outdoor, environmental and didactic tourism”. At the end of the list “alternative animal production” (2,4/5) is not considered innovative, perhaps, since poultry, rabbits and other courtyard animals, also including ostriches, had been produced in Italy since the years 80s with uncertain economic results. Different score evaluation concerns “on farm processing of traditional and quality foods” (3,8/5), that is considered an added value for agricultural products.

- in **Poland** the highest rated activity was "organic farming (cultivations and livestock breeding)" followed by “photovoltaic or solar energy production” and "on-farm processing of traditional and quality foods".The next highest included "biodiversity protection (seed and/or breed saving)", "agritourism", "direct selling of products (various modalities)" "medicinal plants and health/nutraceutical products" and "biomass for renewable energy or composting". The least innovative activity for this sample was "non-food on-farm products" and "didactic and social farms linked to social issues of civil society".

- in **Spain** the top innovative activities in farming and other productions in rural areas are considered “biomass for renewable energy or composting” (4), “photovoltaic or solar energy production” (4), “wind energy” (3,5). At the end of the list “Agro-tourism” (2,4/5) is not considered innovative.

- in **Romania** the top innovative activities in farming and other productions in rural areas are considered “biomass for renewable energy or composting” (5/5), “photovoltaic or solar energy production”(5/5), "didactic and social farms linked to social issues of civil society”(4,7) “direct selling of products” (4,5/5). Not innovative are considered "alternative animal production", "non food on farm activities (silk, wool and their products)" and "nursery, gardening and landscaping".

- in **Hungary** the top innovative activities in farming and other productions in rural areas are considered "organic farming (cultivations and livestock breeding)", (4,4) followed by "on-farm processing of traditional and quality foods", (4,2), "medicinal plants and health nutraceutical plants" (4) and "biodiversity protection (seed and/or breed saving)" (3,9) . Not

innovative are considered "non-food on farm activities.." (2,7) and outdoor, environmental and didactic tourism" (3).

Passing to planning one of the previously indicated innovative activities, **Table 10** shows:

- in **Turkey** the first in the rank is “direct selling of products” (50%), followed by “direct selling of products” (50%), followed by “alternative animal production“(35%); then“wind energy” (20%).

- in **Italy** the first in the rank is “direct selling of products” (49%), followed by “organic farming” (39,2%); then “on farm processing of traditional and quality food” (25,5%), “biodiversity protection” (23,5%), “didactic and social farms..” (21,6%), “photovoltaic or solar energy production” (17,6%) and so on. The last two planned activities are “non food on farm activities..” and “”nursery, gardening and landscaping”. Therefore it is marked that those considered the most innovative activities are not planned by most of the interviewees.

- in **Poland**, with reference to the most innovative activities to be planned, the first in the rank of responses in Table 10, is “Organic farming (cultivations and livestock breeding)” (67,5%), followed by “Medicinal plants and health/nutraceutical products “(40%); then “On farm processing of traditional and quality foods” in the same like “Direct selling of products (various modalities)“ (27,3%).

- in **Spain**, with reference to the most innovative activities to be planned, the first in the rank of responses in Table 10, is “Agritourism” (25%), followed by “direct selling of products" (22,5%); then“organic farming” (22,5%).

- in **Romania**, with reference to the most innovative activities to be planned, the first in the rank of responses in Table 10, is “organic farming” (82,5%) followed by “on farm processing of traditional and quality food” (82,5%) then “direct selling of products” (65%),; “biodiversity protection” (12,5%),“didactic and social farms..” (5,0%), “photovoltaic or solar energy production” (5,0%) and so on. The last two planned activities are “non food on farm activities..” and “”nursery, gardening and landscaping”. Therefore it is marked that those considered the most innovative activities are no planned by most of the interviewees.

- in **Hungary**, with reference to the most innovative activities to be planned, the first in the rank of responses in Table 10, is “organic farming” (33,3%) followed by “on farm processing of traditional and quality food” (14,3%), “direct selling of products” (14,3%), “biodiversity protection” (14,3%),“didactic and social farms..” (14,3%).

About the interest to develop one of the listed activities, **Table 11** shows:

- in **Turkey**, preferences mostly go to “direct selling of products”(52,5%) and “alternative animal production” (30%), "followed by on farm processing of traditional and quality foods" (17,5%) and "wind energy" (17,5%). The last choices in ranking of interest are "nursery and landscaping", "agritourism", "outdoor, environmental and didactic tourism" and "didactic and social farms linked to social issues of civil society", each of them 2,5%.

- in **Italy** preferences mostly go to “photovoltaic or solar energy production”, 20 of 51 respondents (39,2%), “direct selling of products” 15 (29,4%), “organic farming” 14 (27,5%), “biomass for renewable energy or composting” 13 (25,5%), “agritourism” 10 (19,6%) as well as for “on farm processing of traditional and quality foods”, etc. The last one in ranking of interest is “alternative animal production” 3 (5,9%).

- in **Poland** preferences mostly go to "organic farming (cultivations and livestock breeding)"(64,9%) and "medicinal plants and health/nutraceutical products" (40,3%). The last choices in ranking of interest are "non food on farm activities (silk, wool and their products)" and "didactic and social farms linked to social issues of civil society (3,9%).

- in **Spain** preferences mostly go to "agritourism", 17 of 40 respondents (42,5%), and direct selling of products" 12 (30%), "organic farming" 10 (25%). The last choices in ranking of interest are "biodiversity protection", "medicinal plants", "alternative animal production" "non food on farm activities" and "photovoltaic or solar energy productions" (2,5%).

- in **Romania** preferences mostly go to "organic farming" 33 (82,5%), "direct selling of products" 15 (62,5%),"on farm processing of traditional and quality foods" (75,0%). The last choices in ranking of interest are "wind energy" 0 (0%) and "non food on farm activities (silk, wool and their products)".

- in **Hungary** preferences mostly go to "organic farming" 24 (57,1%) and "direct selling of products" 18 (42,9%). The last choices in ranking of interest are "non food on farm activities (silk, wool and their products)" and "didactic and social farms linked to social issues of civil society", 1 preference (2,4%) each.

About use of alternative biomass, **Table 12** shows:

- in **Turkey**, largely chosen as the best option is "Biomass for energy", 21 of 40 responses (52,5%) followed by "compost" 16 (40%) and "biomass for heating 13 (32,5%).

- in **Italy**, "compost" is largely chosen as the best option, 28 of 51 responses (54,9%), followed by biomass for heating 19 (37,3%) and biomass for energy 11 (21,6%).

- in **Poland**, largely chosen as the best option is "compost", 46 of 77 responses (59,7%) followed by "Biomass for energy" 24 (31,2%) and "biomass for heating 19 (24,7%).

- in **Spain**, largely chosen as the best option is "compost", 25 of 40 responses (62,5%) followed by biomass for heating 13 (32,5%) and biomass for energy 1 (2,5%).

- in **Romania**, largely chosen as the best option is "compost", 37 of 40 responses (92,5%) followed by biomass for energy 10 (25,0%) biomass for heating 7 (17,5%).

- in **Hungary**, largely chosen as the best option is "compost", 23 of 42 responses (54,8%) followed by biomass for heating 16 (38,1%) and biomass for energy 6 (14,3%).

5. TRAINING NEEDS

Tables and text commenting per cent rates from the responses on the most popular training needs (32 – 36)

About availability of information and training **Table 13** shows:

- in **Turkey** availability of information and training is considered not adequate by all of the respondents, 40 of 40 interviewees (100%). It means that a lot of work is necessary to spread information and perform training courses addressed to the target users and based on the most requested training needs.

- in **Italy** it is considered not adequate by the majority, 36 of 51 interviewees (70,6%), whilst 15 (29,4%) have the opposite opinion. It means that a lot of work is necessary to spread information and perform training courses addressed to the target users and based on the most requested training needs.

- in **Poland**, availability of information and training is considered not adequate by the majority of the respondents, 41 of 77 interviewees (53%). It means that a lot of work is necessary to spread information and perform training courses addressed to the target users and based on the most requested training needs.

- in **Spain**, availability of information and training is considered not adequate by the majority, 36 of 40 interviewees (90%), whilst 4 (10%) have the opposite opinion. It means that a lot of work is necessary to spread information and perform training courses addressed to the target users and based on the most requested training needs.

- in **Romania**, availability of information and training is considered not adequate by the majority, 39 of 40 interviewees (97,5%), whilst only 1 (2,5%) have the opposite opinion. It means that a lot of work is necessary to spread information and perform training courses addressed to the target users and based on the most requested training needs.

- in **Hungary**, availability of information and training is considered adequate by the majority, 26 of 42 interviewees (61,9%), whilst 9 (21,4%) have the opposite opinion, 7 (16,7%) give no response. It means that information is considered good and work can be concentrated on performing training courses addressed to the target users and based on the most requested training needs.

About the interest for specific aspects of innovative farming training, **Table 14** shows:

- in **Turkey** "marketing and direct selling" is the 1st choice (28 of 40 respondents, 70%), followed by "project financing" (42,5%) chosen by 17 respondents.

- in **Italy** for 26 of 51 respondents (51%) "marketing and direct selling" is the 1st choice, then 24 choose "production technologies" and "food processing" at the same level, 22 (43,1%) "project financing" and 15 (29,4%) "use of biomass and RES".

- in **Poland** the highest preference goes to "marketing and direct selling of products", 57 of 77 respondents, chosen by 10 respondents (13%).

- in **Spain** for 24 of 40 respondents (60%) "marketing and direct selling" is the 1st choice, then 18 choose "production technologies" (45%) and 10 "project financing" (25%). Only 3 "use of biomass and RES (7,5)".

- in **Romania** for 31 of 40 respondents (77,5%) "marketing and direct selling" is the 1st choice, then 28 choose "food processing" (70,0%), 14 (35,0%) "production technologies" and, 23 (57,5%) "project financing"and 12 (30,0%) "use of biomasses and other RES".

- in **Hungary** "production technologies" is the is the 1st choice (27 of 42 respondents, 64,3%), followed by "marketing and direct selling"(33,3%) chosen by 14 respondents. Then "food processing", "project financing" and last "use of biomasses and other RES".

About the subjective condition of thinking necessary more knowledge and skills for starting and managing a new activity **Table 15** shows:

- in **Turkey** almost everybody, 39 of 40 (97,5%) answers “yes”, whilst just 1 (2,5%) thinks to have adequate skills and knowledge.
- in **Italy** almost everybody, 46 of 51 (90,2%) answers “yes”, whilst only 5 (9,8%) think to have adequate skills and knowledge.
- in **Poland** a large majority 54 of 77 (70.1%) answers “yes”. whilst 23 (29,9%) think to have adequate skills and knowledge.
- in **Spain** almost everybody, 36 of 40 (90%) answers “yes”, whilst only 4 (10%) think to have adequate skills and knowledge.
- in **Romania** almost everybody, 37 of 40 (92,5%) answers “yes”, whilst only 3 (7,5%) think to have adequate skills and knowledge.
- in **Hungary** a large majority, 33 of 42 (78,6%) answers “yes”, whilst only 4 (9,5%) think to have adequate skills and knowledge and 5 (11,9) give no response.

About the sectors requiring more knowledge and skills, **Table 16** shows:

- in **Turkey** “direct selling of products” holds the 1st place according to 32 of 40 (80%) interviewees, followed by “organic farming” 14 of 40 (35%).
- in **Italy** “organic farming” holds the 1st place for 20 of 51 (39,2%) interviewees, followed by “direct selling of products” 19 (37,3%), “photovoltaic or solar energy production” 18 (35,3%), “on farm processing of traditional and quality foods” 14 (27,5%), “outdoor, environmental and didactic tourism” 9 (17,6%) etc.
- in **Poland** the majority of the respondents (40 of 77) believe that "organic farming (cultivations and livestock breeding)" is a sector in which more knowledge and skills are required, followed by “Medicinal plants and health/nutraceutical products” (30 of 77).
- in **Spain** “agritourism” and “direct selling of products” hold the 1st place according to 15 of 40 (37,5%) respondents. “Biodiversity protection”,” medicinal plants..” and "non food on farm activities" are at the bottom of the ranking (2,5%).
- in **Romania** “ on farm processing of traditional and quality foods” holds the 1st place for 31 of 40 (77,5%) interviewees, followed by "organic farming” with 30 of 40 (70,0%) and “direct selling of products” 25(62,5%).
- in **Hungary** "organic farming" holds largely the 1st place for 25 of 40 (62,5%) interviewees, followed by "agriotourism" for 11 of 40 (27,5%).

About the preferred learning method, **Table 17** shows:

- in **Turkey** for 28 of 51 (68,6%) respondents “learning by doing with meetings at, and visits to pilot farms” is the 1st choice, "Blended methodology (front classroom, online and offline training) is chosen by 24 (60%), then “residential courses lasting one week” 21 (52,5%).

- in **Italy** for 35 of 51 (68,6%) respondents “learning by doing...” is the 1st choice, then “non residential courses.. spread over several weeks..” 22 (43,1%), but also appreciated by 15 interviewees (29,4%) “residential courses” and by 14 (27,5%) “blended methodology”.

- in **Poland** for 36 of 77 (46,8%) respondents “learning residential courses, lasting one week” is the 1st choice, then “self long distance learning (offline courses via internet)” for 30 (39%) and "non residential courses, with lectures spread over several weeks or months" for 26 (33,8%).

- in **Spain** for 22 of 40 (55%) respondents “blended methodology ” is the 1st choice, then “non residential courses.. " and "residential courses, lasting one week", for 16 (40%) respondents.

- in **Romania** for 29 respondents of 40 (72,5%) "blended methodology (front classroom, online and offline training)" is the 1st choice, then “learning by doing” for 25 respondents of 40 (62,5) is the second most preferred method.

- in **Hungary** "non residential courses, with lectures spread over several weeks or months" for 18 of 42 (49,2%) is the 1st choice, then “learning by doing” and “self long distance learning (offline courses via internet)” for 15 respondents of 40 (35,7%) are the second most preferred methods.

6. FARM MANAGEMENT

Tables and text commenting per cent rates from the responses on farm management (37 – 40)

About aspects relevant to farm management **Table 18** shows:

- in **Turkey** only 2 respondents (5%) declared to be informed on new CAP rules. 85% of the respondents think the new CAP rules will bring an important change. 80% of interviewes think the new CAP will make EU farms more sustainable and competitive.

- in **Italy** only 15 respondents (29,4%) declare to be not informed on new CAP rules. More than half of the respondents (53,7%) think the new CAP rules will bring an important change and the same number of interviewees think the new CAP will make EU farms more sustainable and competitive.

- in **Poland** 37 respondents (48,1%) declare to be informed on new CAP rules and 51,9% declare to be not informed. 75,3% of the respondents think the new CAP rules will bring an important change; same percentage think the new CAP will make EU farms more sustainable and competitive.

- in **Spain** only 2 respondents (5%) declare to be not informed on new CAP rules. More than 90% of the respondents think the new CAP rules will bring an important change and the same number of interviewees think the new CAP will make EU farms more sustainable and competitive.

- in **Romania** only 1 of the respondents (2,5%) declare to be informed on new CAP rules.10 of the respondents (25,0%) think the new CAP rules will bring an important change and 20 of interviewees (50%) think the new CAP will make EU farms more sustainable and competitive.

- in **Hungary** there is a more balanced situation, since 22 respondents (52,4%) think to be informed and 15 (35,7%) to be not informed. 33 (78,6%) of the respondents think the new CAP rules will bring an important change and 32 (76,2%) think the new CAP will make EU farms more sustainable and competitive.

About aspects relevant to farm management, **Table 19** shows:

- in **Turkey** the majority of the respondents think more significant for farm management "individual marketing strategies", 32 (8o%), followed by "group marketing strategies", 22 (55%) and "administration and bookkeeping" 12 (30%), "relationships with banks" 12 (30%) and "use of the Common Agriculture Policy measures" 11 (27,5%).

- in **Italy** 24 of 51 (47,1%) respondents think more significant "use of structural funds", 21 (41,2%) "administration and bookkeeping", 18 (35,3%), "group marketing strategies", 17 (33,3%) "individual marketing strategies", 16 (31,4%) "safety at work" and "strategic planning and businees plan" and so on.

- in **Poland** 52 of 77 (67,5%) respondents think the most significant aspect "use of the European structural funds (EAFRD , ERDF, ESF)", followed by "administration and bookkeeping", "safety at work" and "group marketing strategies", with 17 respondents each topic (22,1%).

- in **Spain** the majority, 32 of 51 (47,1%) respondents think the most significant aspect "strategic planning and business plan", followed by "administration and bookkeeping" 22 (55%) and "individual marketing strategies" 21 (52,5%).

- in **Romania** 33 of 40 (82,5%) respondents think the most significant aspect "strategic planning and business plan", then 18 (45,0) "use of structural funds", 23 (57,5%) "administration and bookkeeping", 1 (32,5%), "group marketing strategies", 26 (65,0%) "individual marketing strategies.

- in **Hungary** 23 of 42 (54,8%) respondents think the most significant aspect "administration and bookkeeping", followed by "use of CAP measures" 21 (50%) and 18 (42,9%) "use of European structural funds"

7. PROJECT PLANNING

Tables and text commenting per cent rates from the responses on project planning (41 – 42)

About kind of funds, **Table 20** shows:

- in **Turkey** 36 of 40 respondents declare more suitable for funding own development project national grants; 24 interviewees think also "regional grants" and 16 respondents declare European grants.

- in **Italy** 33 of 51 respondents declare more suitable for funding own development project European grants; 26 interviewees think also suitable bank loan; 7 respondents estimate important a business partner and same number family partner, whilst other funds, national or regional are considered relevant only by few respondents.

- in **Poland** 61 of 77 respondents declare more suitable for funding own development project European grants; 36 interviewees think also "regional grants" and 28 respondents declare national grants.

- in **Spain** 20 of 51 respondents declare more suitable for funding own development project European grants; 19 interviewees think also suitable bank loan; 16 respondents estimate important a business partner and same number family partner, whilst other funds, national or regional are considered relevant only by few respondents.

- in **Romania** 29 of 40 respondents declare more suitable for funding own development project with European grants; 13 interviewees think also suitable bank loan; 8 respondents estimate important a business partner, whilst other funds, national or regional are considered relevant only by few respondents.

- in **Hungary** 30 of 42 respondents (71,4%) declare more suitable for funding own development project with European grants; 22 (52,4%) interviewees think more suitable national grants; 15 (35,7%) interviewees think more suitable bank loan.

About type of advice, **Table 21** shows:

- in **Turkey** 85% of respondents refer to "advisors from the farmers' associations", 80% "experts from research centres and universities" and 65% "private advisors".

- in **Italy** 34 of 51 (66,7%) respondents refer to "private advisors", 25 (49%) to "farmers' associations", 20 (39,2%) to "..research centres and universities", 16 (31,4%) "other experienced farmers".

- in **Poland** 74% of respondents refer to "advisors from the farmers' associations", 29,9% "experts from research centres and universities" and 23,4% "Private advisors".

- in **Spain** 34 of 40 (85%) respondents refer 25 (85%) to "farmers' associations", 26 "private advisors"(65%); 10"..research centres and universities"(25%);4 "other experienced farmers"(10%).

- in **Romania** 34 of 40 (85,0%) respondents refer to "private advisors", 33 (82,5%) to "farmers' associations", 32 (80,0%) "other experienced farmers" and 16 (40,0%) to "..research centres and universities" or "advisors from financial institution".

- in **Hungary** 26 of 42 (61,9%) respondents refer to "private advisors", 23 (54,8%) to "farmers' associations", 13 (31,0%) "other experienced farmers".

PART B: Questionnaire from third parties

1. METHODOLOGY

When, where, how and number of interviewees

Questionnaires from experts/third parties

In **Turkey** the survey started on January 2014 and the third parties (experts) were contacted individually with a methodology similar to that used for the survey performed with farmers. **10** respondents filled in the questionnaire for 3rd parties.

In **Italy** the survey started on February 1st 2013, based on an interview strategic plan focused on the list of the potential interviewees with related addresses and contact ways.
It was decided to include as potential interviewees about the double of the target number.
About the way to inform the potential experts, it was presented the project in summary and the objectives of the questionnaire.
Such a presentation was given during briefing with colleagues/experts come to Perugia, location of the Cia Umbria regional premises, from the other towns of Umbria and by telephone with other colleagues/experts from Terni and other towns. Everybody received the questionnaire via email also offering to support them to fill in a "help desk", used by 50% of them. It was also provided some more information on the project starting from the web page links web page link www.agri-youth.eu/ and www.ciaumbria.it .
The interviews come back have been **20**, of which 19 via email and one hand written on paper.

In **Poland** the survey started on January 2014, based on face to face interviews with target group by participating in agricultural fairs, visiting regional and local agricultural associations in Karniowice and Kraków provinces. **5** were the respondents to the questionnaire for 3rd parties.

in **Spain** the survey started on January 2014 based on an interview strategic plan focused on the list of the potential interviewees with related addresses and contact ways. About the way to inform the potential experts, it was presented the project in summary and the objectives of the questionnaire. The interviews come back have been **10**.

in **Romania** The survey started on January 13th 2014, based on an interview strategic plan focused on the list of the potential interviewees with related addresses and contact ways. It was decided to include as potential interviewees about the double of the target number.
About the way to inform the potential experts, it was presented the project in summary and the objectives of the questionnaire. Such a presentation was given during briefing with colleagues/trainers.
Everybody received the questionnaire via email also offering to support them to fill in a "help desk", used by 50% of them. It was also provided some more information on the project starting from the web page link http://www.agri-youth.eu/.
The interviews come back have been **10**.

in **Hungary** the survey started on 12th January 2014, and finished end of February. The questionnaires were printed by Tudas, and the Chamber of Agriculture in Csongrád County helped to fill in them by experts in Hódmezővásárhely region. **21** experts filled in the questionnaire.

The total number of interviewees for 3rd parties was **76.**

2. DEMOGRAPHICS

Some information from the answers to questions in first part "personal data": areas of work, age, experience, gender.

Table 1, data about respondents, shows:

- in **Turkey** the respondents were 10, 3 of them women and 7 men, with an average work experience of 8,2 years. All of them are members of different associations referring to many Turkish and non public administration which worked directly with farmers. The positions in the organizations are basically executive agricultural engineers, directors, trainers and advisors. The associations are in Balikesir and Çanakkale.

- in **Italy** the respondents were 20, 9 of them women and 11 men, with an average work experience of 17 years. All of them are members of different associations referring to Italian confederation of farmers (Cia). The positions in the organizations are basically executive directors, trainers and advisors. The geographical coverage corresponds to Umbria region located in the Centre of Italy.

- in **Poland** the respondents were 5, 1 of them women and 4 men, with an average work experience of 10 years. All of them are members of different associations referring to many Polish and public administration which worked directly with farmers. The positions in the organizations are basically trainers and advisors. The associations are in Karniowice and in Kraków.

- in **Spain** the respondents were 10, 2 of them women and 8 men, with an average work experience of 12 years. All of them are members of different associations referring to many spanish asociatios and public administration whos worked directly with farmers. The positions in the organizations are basically executive directors, trainers and advisors.The geographical coverage corresponds to South of Spain.

- in **Romania** the respondents were 10, 3 of them women and 7 men, with an average work experience of 27,3 years. All of them are members of different farmers associations. The positions in the organizations are basically executive directors, trainers and advisors.The geographical coverage corresponds to west of Romania.

- in **Hungary** the respondents were 21, from the Hódmezővásárhely region, with 17,6 years average experience.

3. INNOVATIVE TRENDS

Tables and text commenting per cent rates from the responses on the most popular trends (questions 1 – 3)

About reasons for changes by farmers, **Table 2** (Question 1) shows:

- in **Turkey** 9 of 10 respondents (90%) focus on "to make their business more sustainable in the long term" and 8 respondents "to make their farm more profitable and to earn extra income" (80%).

- in **Italy** 15 of 20 respondents (75%) focus on diversification of income sources, 13 (65%) on sustainability and 11 (55%) on more profit. Even if with more enfasis on more profitability, that was the 2nd choice of farmers' sample, the three more voted items confirm those chosen by the farmers.

- in **Poland** 5 of 5 respondents (100%) focus on "To make the farm more profitable and to earn extra income" and 3 respondents "to diversify the sources of income, to make it more stable" and "to search for a better way of life" (60%).

- in **Spain** 9 of 10 respondents (90%) focus on to make their farm more profitable and to earn extra income; 8 respondents to diversify their sources of income, to make it more stable.

- in **Romania** 9 (90%) focus on sustainability, 6 of 10 respondents (60%) focus on diversification of income sources, and 6 (60%) on more profit.

- in **Hungary** most respondents focus on "to make the farm more profitable and to earn extra income", followed by "to diversify the sources of income, to make it more stable" and "to search for a better way of life".

About innovation of activities, **Table 3** (Question 2) shows:

- in **Turkey** "direct selling of products" is in 1st place (3,4/5) on one hand "wind energy" and "photovoltaic or solar energy production" are the less innovates activities.

- in **Italy** "nursery, gardening and landscaping" is in 1st place (4/5), then "biomass for renewable energy or composting" (3,7/5), "biodiversity protection" (3,5/5), "non food on farm activities" (3,4/5), "medicinal plants and health/nutraceutical products" and "on farm processing of traditional and quality foods" (3,3/5). In comparison with the criteria expressed by the farmers' sample the first two choices are the same, but not the others. Farmers seem to be more oriented to green economy (i.e. photovoltaic energy) on one hand and direct selling on the other hand (non food on farm activities are not taken into consideration).

- in **Poland** "organic farming (cultivations and livestock breeding)" and "biodiversity protection (seed and/or breed saving)" is in 1st place on second place "agritourism".

- in **Spain** "nursery, gardening and landscaping" is in 1st place (4/5) whilst "agritourism" and "organic farming" are considered the less innovative activities.

- in **Romania** "didactic and social farms linked to social issues of civil society" is in 1st place (5/5) with "photovoltaic or solar energy production" with the same rank. Farmers seem to be more oriented to green economy (i.e. photovoltaic energy) on one hand and direct selling on the other hand (alternative animal production are not taken into consideration).

- in **Hungary** "organic farming" (3,6), "on farm processing of traditional and quality food" (3,4) and "direct selling of products" are considered the most innovative trends.

About interest for innovative activities at local level, **Table 4** (Question 3) shows:

- in **Turkey** the most appreciated focus by the experts is "direct selling of products" (40%), followed by organic farming (30%).

- in **Italy** 12 of 20 respondents (60%) choose "medicinal plants and health/nutraceutical products" and "nursery, gardening and landscaping" as innovative activities interesting in

relation to own area of action, then 11 choose “organic farming” and “didactic and social farms”, 10 “biodiversity protection” and “biomass for renewable energy or composting”, 9 “direct selling”, “outdoor, environmental and didactic tourism” and “non food on farm activities” and so on. These choices are coherent with those indicated by the farmers’ sample, with exclusion of “medicinal plants and health/nutraceutical products” and “non food on farm activities” not so much appreciated by the farmers. On the contrary “photovoltaic or solar energy” strongly chosen by the farmers is not appreciated by the experts.

- in **Poland** “organic farming (cultivations and livestock breeding)” has 100% preference, followed by “biodiversity protection (seed and/or breed saving)” “agritourism” and "biomass for renewable energy or composting", 80% preferences.

- in **Spain** the most appreciated by the experts is “on farm processing of traditional and quality foods” (60%), whilst “photovoltaic or solar energy" and "biomass for renewable energy or composting", strongly chosen by the farmers are not appreciated by the experts.

- in **Romania** 9 of 10 respondents (90%) choose “organic farming” and 6 of 10 (60%) choose “biomass for renewable energy or composting”. These choices are coherent with those indicated by the farmers’ sample, with exclusion of “alternative animal production” and “non food on farm activities” not so much appreciated by the farmers. On the contrary “photovoltaic or solar energy” strongly chosen by the farmers is not appreciated b the experts.

- in **Hungary** "organic farming" and “medicinal plants and health/nutraceutical products” are the most appreciated by the experts, followed by "biodiversity protection" and "on farm processing of food products"

4. TRAINING NEEDS

Tables and text commenting per cent rates from the responses on the most popular training needs (Question 4)

About more requested training, **Table 5** shows:

- in **Turkey** 5 (50%) interviewees indicate “organic farming” and "wind energy", 4 (40%) “medicinal plants and health/nutraceutical products”, and "alternative animal production".

- in **Italy** 14 of 20 (70%) interviewees indicate “nursery, gardening and landscaping” , 12 (60%) “medicinal plants and health/nutraceutical products”, 11 (55%) “biodiversity protection”, 10 (50%) “organic farming”, “didactic and social farms” and “biomass for renewable energy or composting”, 9 (45%) “outdoor, environmental and didactic tourism” and so on. Also in this case, “medicinal plants and health/nutraceutical products” and “biodiversity protection” are some of the most requested by the experts, but non included by the farmers, who put at the 1st place “direct selling” and “photovoltaic or solar energy”.

- in **Poland** 5 of 5 experts (100%) choose "organic farming" followed by "agritourism" and "biomass for renewable energy or composting" 3 of 5 (60%).

- in **Spain** 5 of 10 experts choose "on farm processing of traditional and quality foods", then "biodiversity protection" chosen by 4 of 10 (40%), followed by "organic farming", "alternative animal production" and "direct selling of products".

- in **Romania** 10 (100%) interviewees indicate “organic farming”; “didactic and social farms” and “biomass for renewable energy or composting are also considered in need of more training.

- in **Hungary** "medicinal plants.." is chosen by 15 of 21 experts, "organic farming" by 14 and "alternative animal production" by 10.

5. MANAGEMENT

Tables and text commenting per cent rates from the responses on management (question 5)

About the most important themes for managerial attitudes, **Table 6** (Question 5) shows:

- in **Turkey** “strategic planning and business plan”, “administration and bookkeeping” and “individual marketing strategies” are at the top of the list according to the experts.

- in **Italy** 14 of 20 (70%) indicate “strategic planning and business plan”, then 12 (60%) indicate “use of the European structural funds”, 9 (45%) “group marketing strategies”, 7 (35%) “use of CAP measures”, and so on. The chosen themes are similar to those mostly chosen by the farmers’ sample, but with more emphasis on importance of strategic and businees planning and more marked differences between the four more voted and others less appreciated. Farmers split more their preferences.

- in **Poland** “use of the European structural funds (EAFRD , ERDF, ESF)”, “administration and bookkeeping”, “individual marketing strategies” and “safety at work” are considered the most important themes for managerial attitudes.

- in **Spain** 8 of 10 (80%) indicate “strategic planning and business plan” and “administration and bookkeeping”; 6 (60%) experts indicate “use of the European structural funds”, 5 (50%) “use of CAP measures”.

- in **Romania** 9 of 10 (90%) indicate “strategic planning and business plan”, then 5 (50%) indicate “use of the European structural funds”.

- in **Hungary** the most important themes are considered by the experts "strategic planning and business plan”, then "relationship with banks" and "relationships with insurance companies".

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6. INFORMATION AND TRAINING

Tables and text commenting per cent rates from the responses on information and training (6 – 7)

About availability of information and training, **Table 7** (Question 6) shows:

- in **Turkey** third parties give an opinion perfectly symmetrical in comparison to that provided by the farmers, since 100% of them think that information and training are completely available.

- in **Italy** third parties give an opinion perfectly symmetrical in comparison to that provided by the farmers (for 14 of 20, 70%, information and training are available; for 6 of them, 30%, not available).

- in **Poland** third parties give an opinion more similar to that provided by the farmers; for 4 of 5 (80%) information and training are not available.

- in **Spain** third parties give an opinion even more negative to that provided by the farmers; for all of them (100%) information and training are not available.

- in **Romania** third parties give an opinion similar to that provided by the farmers; for 8 of 10 (80%) information and training are not available

- in **Hungary** third parties give an opinion similar to that provided by the farmers; for 14 of 21 (66,6%) information and training are not available

About preferred learning method, **Table 8** (Question 7) shows:

- in **Turkey** "residential courses, lasting one week" is largely the 1st choice, 8 of 10 respondents (80%), followed by "non residential courses.. ", 7 (70%).

- in **Italy** "learning by doing" is largely the 1st choice, 19 of 20 respondents (95%), followed by "blended methodology", 16 (80%). Other options positively evaluated by the farmers, such as "non residential courses.." and moreover "residential courses" are not appreciated by the experts.

- in **Poland** "Learning by doing, with meetings at, and visits to pilot farm(s)" is largely the 1st choice, 4 of 5 respondents (80%), followed by "Self long distance learning (offline courses via internet) ", 3 (60%).

- in **Spain** "Residential courses" is largely the 1st choice, 8 of 10 respondents (80%), followed by "non residential courses.. ", 7 (70%). Other options positively evaluated by the farmers, such as "blended methology courses.." are not appreciated by the experts.

- in **Romania** "blended methodology", 8 (80%) is largely the 1st choice followed by "learning by doing" with 6 (60%).. Other options are not appreciated by the experts.

- in **Hungary** "Learning by doing, with meetings at, and visits to pilot farm(s)" is largely the 1st choice (18 of 21), then "non residential courses.." is also appreciated (16). Also "self distance learning" is well considered (12).

1. COMPARISON WITH THE STATE-OF-THE-ART

(significant similarities and differences between the SOA and the survey)

The target groups of the AGRI-YOUTH project are very consistent with the objectives of increasing employment opportunities in rural areas. Family is in all the pountries still the main reference for labour farm organization. There is a general problem for generation change in agriculture, even if in all countries young agricultural entrepreneurs are very active. Female farmers are more and more a strong support to agriculture in all countries. The survey results go in the same way stressed by the European Commission in relation to employment issues in rural areas.
Actually in Communication from the Commission of 21 December 2006 entitled "**Employment in rural areas: closing the jobs gap**" [COM(2006) 857] from 8.5.2007 was stated: "*In order to successfully adjust production structures in the Member States, it is essential to improve competitiveness and environmental sustainability and to boost jobs and growth. The problem is that many farmers still do not have the necessary skills in terms of innovation, diversification, bioenergy production, provision of environmental services and development of local services. For this reason it is imperative to promote research and development, vocational training, advisory services and innovation*".

Turkey - From the conclusions of the survey in Turkey: "Type of agriculture and farmers are mostly different from European countries. However, in Turkey, agriculture and type of farmers are changing year by year because of migrations from rural areas to the big cities. Young people don't want to stay in farming . In addition of these results the AGRIYOUTH project should take into consideration of Turkish economical structure and agricultural statistics. For example, organic farming and organic products are very popular in Europe but Turkey has to do also intensive farming to meet increasing demands of young people. Other problem in agriculture in Turkey is yearly income of the people who are in agriculture."
Farmers tend to innovate for making their farms more profitable and their income more stable and experts complete this economic approach with a vision of sustainability. One of the most remarkable conclusions is the fact that **direct selling of products** , such as extra-virgin olive oil and cheese, depicts their first aim, also with a notable interest for alternative animal production and organic farming that, even if not considered interesting today by farmers is strongly suggested by experts. Marketing for direct selling is therefore as a consequence the main training needs, clearly oriented.
As to the educational level, the statistics are less optimistic than the results from the restricted group of farmers who indicated their educational level and a problem deriving from the urbanization is estrangement of youngsters to farming, with consequent generation change gap. The report also emphasized that women account as sample for the survey for 25% of the farmers.
The educational level was generally higher than the official statistics. Young and female farmers are interested in more training and information about innovative activities such as **direct selling** and **on farm processing**, largely practised even if not for commercialization, with a view to **organic farming** from the experts.

Italy - The state-of-the-art of the agricultural innovative trends in Italy was focused on five main sectors: **agritourism**, also including different kind of leisure activities (environmental, outdoor, active, didactic and social tourism); **organic farming** and **animal production**; **quality food processing from farm products**; use of **renewable energy sources** for energy, heating, composting; **nursery, gardening and landscaping**, that is intended as an alternative to intensive farming and industrial crops.
This framework for multifunctional activities aiming at increasing sustainability and competitiveness of farming is confirmed in the responses to the questionnaires addressed to farmers and experts. Very important in this area is the role of female entrepreneurship, young farmers are also very

engaged in this kind of multifunctional innovative trends, as well as entrepreneurs from other work activities.
Effective and user friendly training in farm management and innovative multifunctional activities is requested by farmers and recommended by experts, as a conclusion of the survey in Italy, without significant differences in coherence with the state-of-the-art report.
Organic farming is confirmed as one of the most successful innovative trends in agriculture since more than 40 years in Italy.
Agritourism is also confirmed as a sector in expansion with further expected development in specific activities such as didactic open farms, social farms, services for outdoor and environmental tourism, but not considered so innovative anymore. Many farm stays also offer sports, recreation and cultural activities. Special laws have been created to license farm stays and fix quality standards for accommodation, with related training needs. Many of the agrotourism farms are also licensed for food service, linked in this way to traditonal recipes, food processing and direct selling at farm by offering tasting of own farm products.
Nursery, gardening and landscaping are also highly appreciated as innovative trends developed by farmers mostly coming from industrial crop or tobacco production and specialized in ornamental plant, fruit growing or market gardening, also offering services for garden design and maintenance, park and landscape design for private and public customers.
The **green economy**, based on activities respecting environmental measures, mainly addressed to production of energy from renewable energy sources (RES) is increasing in interest and performances in the framework of the most innovative farms, as more sustainable and integrated with extra-incomes. In agriculture the green economy has started to involve more and more farms in all the main typologies of sources: biomass, biogas, bio-fuels, solar thermal and photovoltaic energy, wind energy. Limitations of land occupation with photovoltaic panels and wind mills have arrived in some EU countries since a couple of years due to landscape protection. Training in this framework is requested by farmers as an highly appreciated integration of knowledge and skills.

Poland - The state of the art addressed the need for multi-funtional production systems to combine organic farming, agritourism and renewable energy to the farming sytsem. Some additional activities like promotion of food production on the farm are associated to the main aim from the sample of farmers and experts that is for **organic farming**.
These concerns were touched upon by the farmers and experts who also are concerned about sustainability and competitiveness in farming as well as a competitive approach of their farms.
As to the educational level, the state of the art was less optimistic than the results from the restricted group of farmers who indicated their educational level. The report also emphasized that women account for one third of the farmers. In the analysis of the data, we have a sample where almost 50% were female. The educational level was generally higher, but still reflected more or less the statistics.
The young, women and new entrant respondents are also interested in more training and information about innovative activities such as **organic farming** and **direct selling**.
This apporach is specifically oriented to crops and vegetable production, so that the organic farming module can be oriented to this kind of specific farming sector.

Spain - What is consistent between the state of the art document and the results of the survey is that there is a widespread need and want for improved productivity of farms, accompanied by environmental protection and biodiversity conservation in the sector in order to secure sustainable food production, both economically and environmentally, in Europe.
A big difference however, is the particular focus of respondents on the need for increased profitability – the number one concern – over the need for increased sustainability.
However, largely the trends outlined in the state of the art document are mirrored by the responses to the survey: farmers want increased productivity and efficiency in order to secure competitiveness, and they are aware that this is down to implementing innovative activities in order to increase outputs without increasing inputs.

It should also be noted that respondents are willing to start a secondary activity on their farm if it means it is to increase their financial security.
Agritourism is considered as an opportunity to be developed and is at the first place for innovation and training needs. Many of the agritourism farms can aspire to be licensed for food service, linked in this way to traditonal recipes, food processing and direct selling at farm by offering tasting of own farm products.

Romania - Romanian agriculture is developing fast in terms of technology and knowledge. Although big farms have better access to funds and are able to make profit , small farms (family farms) are not so well prepared for future agricultural needs and opportunities. AGRI-YOUTH is to be considered therefore the perfect program for young, present or future farmers, for the women that want to create a better life for themselves. Although information about agriculture can be found and accessed in Romania, all interviewees responded that a better information and training, especially in the new and innovative agricultural trends, is required. The majority of the targeted profiles by have access to internet but most of them suggested the use of mix techniques of teaching, online courses and offline meetings. The main aim for innovation and training needs is **agritourism** as an opportunity and a sector in expansion with further expected development in specific activities such as didactic open farms, social farms, services for outdoor and environmental tourism. Many farm stays also could offer sports, recreation and cultural activities. Medicinal plants and nutraceutical products could be also addressed to this kind of health oriented agritourism.

Hungary - The Hungarian sample was well balanced between young and female farmers included in the general sample, with average age therefore lower and education level higher than from the statistics. The combined methodology seems to be the most adequate in correspondence to preferences given to internal short training courses and attitude to use of internet technologies, even if limited by digital divide in the rural areas.
Even if Hungarian agriculture was traditionally oriented to conventional and industrial farming, **organic farming and biodiversity protection** was the first choice both for innovative activities and training needs, from farmers' and experts' survey.
Organic farming is also oriented to animal production since price differences for commercial categories such as meat and eggs compared to the correspondent conventional products are not so big as for vegetables with consequent interest of the internal market oriented to health products.
This apporach is specifically oriented to animal production, so that the organic farming module can be oriented to this kind of specific farming sector.

2. CONCLUSIONS AND RECOMMENDATIONS

(also including suggestions for training needs from innovative trends for young, female and second chance farmers)

From the previous analysis with comparison between the state-of-the-art report and training need analysis report farming innovative trends were effectively outlined and characterized.
The methodology for training supply is mostly oriented to get **learning by doing apprenticeship** and **work shadowing**. Traditional classroom and self long distance learning are not considered, as one the opposite of another, effective and user friendly; the second one also disadvantaged because of still existing digital divide in rural areas.
It is interesting that farmers are favourable to both **learning by doing with meetings** and **visits to pilot farms**,and **non residential courses with lectures spread over several weeks or months**.
It means training consistent with time scarceness as well as meetings shared with other farmers for a short, one week full immersion are highly appreciated.
A **well tailored user friendly course** is therefore intended as a wise blend of **limited theoretical approach** to set up the main themes in a very short and effective way, a **large learning by doing time spending**, compared to a limited whole course, with **involvement of experts and**

simultaneous active participation of an experienced and successful farmer and interactive training modules also involving trainees in discussions based on real problem setting and solving from case studies.
Contents suitable for training in the agriculture sector transferable within the EU Member States, are to be designed in coherence with the **European Qualifications Framework**.
So a special attention to the EQF standards has to be paid during the implementation of the AGRI-YOUTH training curriculum.
It is interesting that farmers are favourable to both **non residential courses with lectures spread over several weeks or months** and **residential courses lasting one week**, but they could have problems in transport to reach these training centres.
A **well tailored user friendly distance learning course** is therefore considered as a wise blend with **limited theoretical approach** to address the main themes in a very short and effective way, and **learning by doing through testing, individual work and completion of case studies**. We believe that off-line training could be effective alternative for new entrants, young farmers and women farmers with considerable challenges for time away from family.

3. SUGGESTED TASK SHARING WITHIN THE PARTNERSHIP BASED ON TRAINING NEEDS REPORT

Even if limited for a well-founded statistic analysis, the report from the questionnaires hilights the opportunities given by the new innovative trends and training for farmers.
The target group of the AGRI-YOUTH project, young and female farmers, but also emerging agricultural entrepreneurs from other sectors, shows to be particularly attracted by this kind of innovative themes and training and suitable to start, improve and network new work and development opportunities in rural areas.
Starting from the same target groups the demographic data are similar for age and gender, as well as for kind of education, even if there are different depending of different school structure in the six target countries.
The most appreciated themes are similar in the six target countries, with more focus on direct selling of products and food processing in Turkey, renewable energy sources linked to farm management in Italy, agritourism in Spain and Romania, and organic farming in Poland and Hungary.
Renewable energy sources are considered in all the target countries a suitable approach for all kind of innovative trends in agriculture.
From the final transnational report a specific focus is addressed to sustainability and competitiveness as fundamental issues for farming in the European Union, even if a critical point is emphasized on well balanced policies enabling farmers to get results by combining theese two main issues.
As a consequence the European policies and funds for a common agriculture are considered by a great majority of the respondents strategic, but doubts about effectiveness of the new CAP are also stressed.
Education and training in agriculture are considered generally very important for the development of work opportunities in rural areas, but availability of information on training courses and guidance to technical assistance are not considered easily to be found.
Combined training based on short and well designed theoretical courses and large learning by doing from farm apprenticeships on practical themes and works is the most appreciated learning framework.
Opportunities of placements and residential internships are also very well rated, possibly without continuous staying due to time scarceness.
This is also stressed from the transnational report, in which exchange and mobility opportunities are highlighted.
The modern Information and Communication Technologies are considered absolutely necessary, but with remarks to digital divide problems, that's why the only long distance learning and online training courses are not so successful in the opinion of the respondents.

The European Qualifications Framework are considered in all of the six target countries necessary to define the level of difficulty and competence for each module.
As a consequence, the AGRI-YOUTH teaching materials should be combined of short theoretical introduction to each course, available both online and off-line, and technical cards on each specialistic farming process, duly but shortly described and completed with related competencies. The online model will be designed interactive with a sequence of answer/response enabling the user to improve progressively own competence and obtain the relevant level certification after having successfully performed the relevant tests (from level 1, as an introductory level, through level 2 and 3, up to level 4, for the business plan, with certificate release from the training system).
The innovative trends for agriculture suitable for the AGRI-YOUTH project to be developed by the partners should be:

- **in Turkey on farm food processing and direct selling (Module 1)**;
- **in Italy farm management for biomass and renewable energy sources (Module 2);**
- **in Poland organic farming crops and biodiversity protection (Module 3)**;
- **in Spain**, **agritourism and on farm food services (Module 4);**
- **in Romania, agritourism and didactic farms (Module 5);**
- **in Hungary, organic farming for for animal production and biodiversity protection (Module 6).**

A common power point template with distinguished colours will be provided by Cia Umbria, modified by the coordinator, discussed with all partners and approved (by end June 2014)
The slides constituting each technical module will be limited to 50, with 20 lines maximum each slide, title size 20 and text size 14, font Arial (20 slides for Level 2 and 30 slides for Level 3, plus 10 slides tests at the end of each Module).
An introduction to the course with admission test (Level 1) made of 5 slides will be provided to start any technical Module. In this way the total number of slides will be 75 each module. A short guide to the course will be also provided.
Certificates of level 2, 3 and 4 will be provided to the users who successfully completed a module.
All the partners will collaborate to improve the contents and make them suitable for all the countries. All the training materials will be translated from English, as vehicular language into the national languages.
CAP updated measures on good agricultural practices, conditionality and animal welfare will be a transversal theme related to the technical courses.
Two significant **case studies** will be provided and duly presented, based on a template with production process descriptions and related competencies, also including pictures and, if available, short videoclips, by each partner for each module, as samples of reference to the relevant modules (**Case study library**). A reference to key words will allow to jump from a case study to another and to contents of the course.
A **Business plan platform** will be provided as an excel scheme by Cia Umbria and improved by the University of Canakkale and Balikesir, also with an explanation in power point on strategic and business planning and safety at work. When a business plan will be completed a Level four will be released and, after evaluation by the Governing Board of the project, published in the case study library.
The user friendly **design, deployment and implementation of the new teaching materials**, for online, off-line, class lessons and practical internship, will be provided by the coordinator.

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