

# **Multifunctionality in Agriculture a New Entrepreneurial Model to Improve and to Promote**

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### INTRODUCTION

The multifunctionality represents a strategic key of enhance and development of the rural sector and it conjugates:

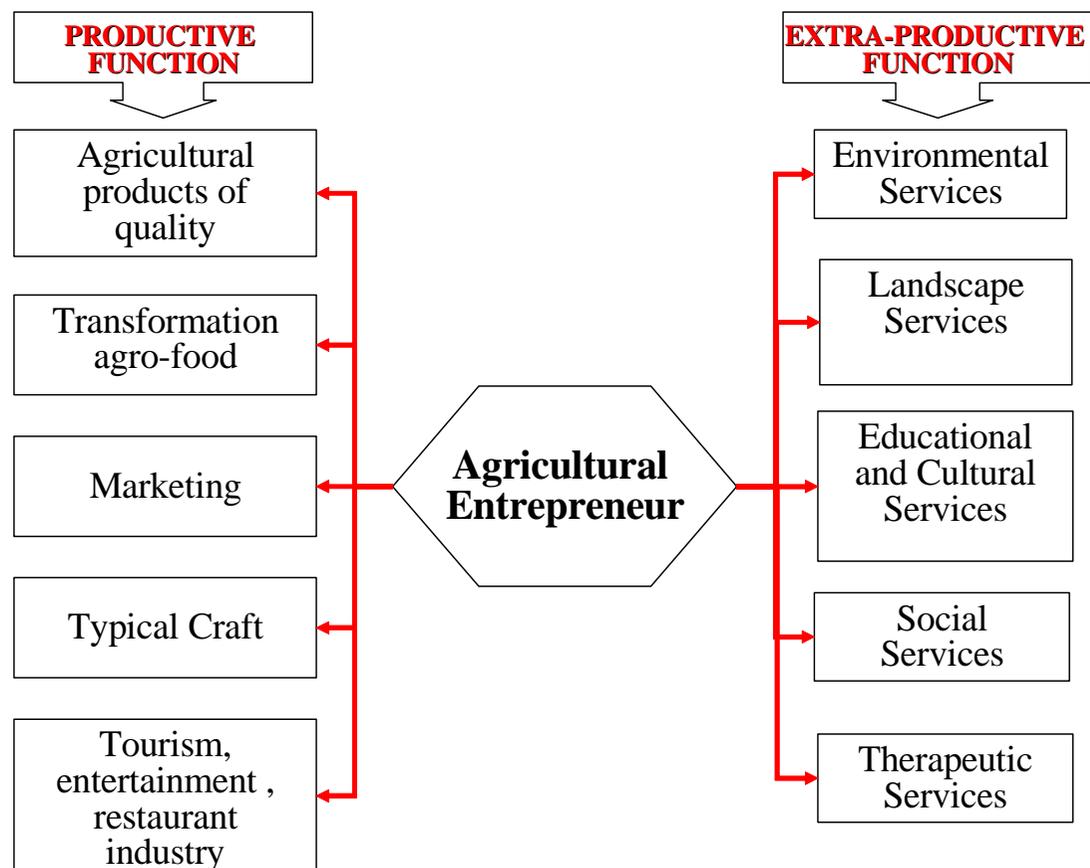
- the sustainable agriculture;
- the multifunctionality of the resources;
- the food safety;
- the multiactivities of the agricultural household;
- the territorial equilibrium and the maintenance of the landscape.

Some indicators on the multifunctionality will be presented and discussed using some results of the European Farm Structure Survey (FSS) 2007.

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## PRODUCTION SECTORS

*Products and services of the multifunctional farmer*



## Multifunctionality in Agriculture a New Entrepreneurial Model to Improve and to Promote

Holdings with connected activity to the agriculture (M.H.), Utilised Agricultural Area (UAA), Woods, Total Area of multifunctional holdings (TA), and Indicators for Region. Year 2007 – EU

REGION	Multifunctionality holdings( M.H.)			UAA ha	Woods ha	TA ha	Indicators			
	Year 2007		Variation 2007/2005				M. H./ All farms	UAA/ TA	Woods/ TA	UAA/ M. H.
	n.	%	%							
Piemonte	13.359	11,1	30,3	219.079	60.662	294.181	17,7	74,5	20,6	1639,9
Valle d'Aosta	855	0,7	-47,1	29.709	5.690	74.415	22,2	39,9	7,6	3474,7
Lombardia	7.974	6,6	18,5	167.004	24.877	202.557	13,9	82,4	12,3	2094,4
Trentino-Alto Adige	6.182	5,1	27,8	75.111	77.814	167.967	14,9	44,7	46,3	1215,0
<i>Bolzano-Bozen</i>	<i>4.361</i>	<i>3,6</i>	<i>30,2</i>	<i>61.398</i>	<i>62.372</i>	<i>138.280</i>	<i>20,9</i>	<i>44,4</i>	<i>45,1</i>	<i>1407,9</i>
<i>Trento</i>	<i>1.821</i>	<i>1,5</i>	<i>22,5</i>	<i>13.713</i>	<i>15.441</i>	<i>29.687</i>	<i>8,8</i>	<i>46,2</i>	<i>52,0</i>	<i>753,0</i>
Veneto	8.774	7,3	35,2	129.623	63.072	237.874	6,1	54,5	26,5	1477,4
Friuli-Venezia Giulia	3.291	2,7	39,0	52.241	12.213	70.527	13,6	74,1	17,3	1587,4
Liguria	396	0,3	253,6	2.979	792	4.423	1,9	67,4	17,9	752,3
Emilia-Romagna	6.386	5,3	-9,9	190.814	23.573	236.559	7,8	80,7	10,0	2988,0
Toscana	16.084	13,3	17,0	284.334	249.302	573.264	20,4	49,6	43,5	1767,8
Umbria	4.835	4,0	-6,0	59.504	45.776	110.347	12,7	53,9	41,5	1230,7
Marche	4.403	3,6	27,6	107.427	10.794	129.817	9,0	82,8	8,3	2439,9
Lazio	1.102	0,9	90,3	28.638	10.274	40.802	1,1	70,2	25,2	2598,7
Abruzzo	1.493	1,2	69,3	34.144	13.287	49.909	2,5	68,4	26,6	2287,0
Molise	685	0,6	-3,2	9.565	629	10.819	2,9	88,4	5,8	1396,4
Campania	14.917	12,4	30,5	61.606	10.800	78.043	9,8	78,9	13,8	413,0
Puglia	1.712	1,4	107,0	58.036	19.897	80.265	0,7	72,3	24,8	3389,9
Basilicata	2.502	2,1	4,9	45.228	20.580	68.485	4,4	66,0	30,1	1807,7
Calabria	9.459	7,8	106,3	71.772	14.202	90.741	7,9	79,1	15,7	758,8
Sicilia	1.328	1,1	-23,3	54.821	13.407	69.471	0,6	78,9	19,3	4128,1
Sardegna	15.039	12,5	-26,4	234.710	67.662	330.166	22,7	71,1	20,5	1560,7
<b>Italy</b>	<b>120.775</b>	<b>100</b>	<b>14,6</b>	<b>1.916.345</b>	<b>745.303</b>	<b>2.920.630</b>	<b>7,0</b>	<b>65,6</b>	<b>25,5</b>	<b>1586,7</b>
<b>Northern Italy</b>	<b>47.217</b>	<b>39,1</b>	<b>19,6</b>	<b>866.560</b>	<b>268.692</b>	<b>1.288.502</b>	<b>10,5</b>	<b>67,3</b>	<b>20,9</b>	<b>1835,3</b>
<b>Central Italy</b>	<b>26.424</b>	<b>21,9</b>	<b>15,3</b>	<b>479.903</b>	<b>316.147</b>	<b>854.230</b>	<b>9,8</b>	<b>56,2</b>	<b>37,0</b>	<b>1816,2</b>
<b>Southern Italy*</b>	<b>47.135</b>	<b>39,0</b>	<b>9,7</b>	<b>569.882</b>	<b>160.464</b>	<b>777.899</b>	<b>4,9</b>	<b>73,3</b>	<b>20,6</b>	<b>1209,0</b>

Source: data processing ISTAT

\* +Sicily and Sardinia Islands

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Holdings with connected activity to the agriculture by size of farms in Agricultural Area. Year 2007 – EU

Agricultural area (ha)	Number of connected activities to the agriculture				Number of connected activities to the agriculture			
	All multifunctional holdings	One activity	Tow activities	Three activities	All multifunctional holdings	One activity	Tow activities	Three activities
	NUMBER HOLDINGS				VARIATION PERCENTAGES 2007/2005			
without UAA	224	210	9	5	-67,4	-69,5	-	-
< 1	23.321	23.033	288	-	2,2	1,7	54,8	-
1 - 2	17.671	16.651	882	139	6,3	4,0	54,5	167,3
2 - 3	11.228	10.887	289	53	19,1	25,1	-51,4	-57,6
3 - 5	14.137	12.185	1.569	383	11,2	6,6	33,4	271,8
5 - 10	19.550	16.915	1.880	755	26,1	18,1	105,7	178,6
10 - 20	13.690	11.859	1.577	254	16,2	14,0	36,5	12,9
20 - 30	6.279	5.210	1.007	62	31,3	25,6	83,8	-27,1
30 - 50	6.882	5.369	1.372	142	44,9	30,9	137,8	100,0
50 - 100	4.881	3.850	948	84	23,3	19,4	51,7	-24,3
100 and more	2.910	2.239	462	210	24,2	13,1	63,3	159,3
<b>Totale</b>	<b>120.775</b>	<b>108.406</b>	<b>10.282</b>	<b>2.087</b>	<b>14,6</b>	<b>11,0</b>	<b>55,1</b>	<b>85,8</b>

Source: data processing ISTAT

"-" data is not available in 2005

Although most **multifunctional holdings** have an **UAA < 20** ha in particular with **size < 2**. In 2007 there was a significant increase in **30-50 ha (44.9%)** and positive also for all farm size in UAA. Whereas, a **negative sign** has been recorded for multifunctional holdings without **UAA (-67.4%)**. These holdings have a more specialization of the connected activity to the agriculture, indeed, they have only one connected activity **(-69.5%)**.

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### Economic size of the Multifunctional holdings

The analysis of the **economic size** of the multifunctional holdings determined in terms of **SGM**, at Italian level, a modest share than the whole agricultural sector (**14,1%**).

REGION	SGM		Average SGM of M. H.		Indicators (%)		
	ESU	%	2007	Variation % 2007/2005	SGM/ UAA	SGM M.H./ SGM All farms	Average SGM M. H./Average SGM all farms
Piemonte	290.941,3	8,2	21,8	1,8	132,80	17,1	1,0
Valle d'Aosta	8.816,3	0,2	10,3	139,8	29,68	35,9	1,6
Lombardia	468.831,5	13,3	58,8	41,3	280,73	15,3	1,1
Trentino-Alto Adige	156.411,6	4,4	25,3	39,0	208,24	17,5	1,2
<i>Bolzano-Bozen</i>	<i>84.496,0</i>	<i>2,4</i>	<i>19,4</i>	<i>-8,6</i>	<i>137,62</i>	<i>17,1</i>	<i>0,8</i>
<i>Trento</i>	<i>71.915,5</i>	<i>2,0</i>	<i>39,5</i>	<i>243,4</i>	<i>524,44</i>	<i>18,0</i>	<i>2,1</i>
Veneto	351.557,3	10,0	40,1	35,4	271,21	15,6	2,6
Friuli-Venezia Giulia	95.755,8	2,7	29,1	47,0	183,30	23,1	1,7
Liguria	6.105,9	0,2	15,4	-22,5	204,94	2,5	1,3
Emilia-Romagna	508.399,0	14,4	79,6	67,6	266,44	17,4	2,2
Toscana	422.000,2	11,9	26,2	2,9	148,42	35,2	1,7
Umbria	65.465,5	1,9	13,5	32,7	110,02	17,4	1,4
Marche	151.194,3	4,3	34,3	51,9	140,74	24,7	2,8
Lazio	55.282,6	1,6	50,2	-9,9	193,04	4,2	3,9
Abruzzo	43.038,8	1,2	28,8	13,5	126,05	7,0	2,8
Molise	12.683,0	0,4	18,5	43,5	132,59	5,6	1,9
Campania	184.776,9	5,2	12,4	-13,4	299,93	10,7	1,1
Puglia	79.111,1	2,2	46,2	-14,4	136,31	3,4	4,9
Basilicata	58.720,8	1,7	23,5	-12,4	129,83	13,0	3,0
Calabria	175.921,2	5,0	18,6	-11,9	245,11	14,9	1,9
Sicilia	88.978,8	2,5	67,0	196,5	162,31	4,0	7,1
Sardegna	308.024,5	8,7	20,5	98,9	131,24	25,7	1,1
<b>Italy</b>	<b>3.532.016,2</b>	<b>100</b>	<b>29,2</b>	<b>31,7</b>	<b>184,31</b>	<b>14,1</b>	<b>2,0</b>
<b>Northern Italy</b>	<b>1.886.818,6</b>	<b>53,4</b>	<b>40,0</b>	<b>34,5</b>	<b>217,74</b>	<b>16,4</b>	<b>1,6</b>
<b>Central Italy</b>	<b>693.942,5</b>	<b>19,6</b>	<b>26,3</b>	<b>17,2</b>	<b>144,60</b>	<b>19,8</b>	<b>2,0</b>
<b>Southern Italy*</b>	<b>951.255,1</b>	<b>26,9</b>	<b>20,2</b>	<b>33,7</b>	<b>166,92</b>	<b>9,5</b>	<b>1,9</b>

Source: data processing ISTAT

\*"+Sicily and Sardinia Islands

## Multifunctionality in Agriculture a New Entrepreneurial Model to Improve and to Promote

### The young people in the Multifunctional holdings

REGION	Distribution by age of holders				Indicator holders <40 years of the M.H./ holders <40 years All farms
	< 40 %	40-54 %	55-64 %	>=65 %	
Piemonte	11,8	28,1	19,9	40,2	19,9
Valle d'Aosta	14,5	29,7	24,1	31,7	26,4
Lombardia	15,8	35,7	30,0	18,5	20,4
Trentino-Alto Adige	15,5	36,6	19,5	28,5	22,0
<i>Bolzano/Bozen</i>	<i>14,2</i>	<i>40,6</i>	<i>18,0</i>	<i>27,3</i>	25,6
<i>Trento</i>	<i>18,5</i>	<i>27,1</i>	<i>23,1</i>	<i>31,3</i>	17,5
Veneto	14,3	40,8	15,1	29,7	14,1
Friuli-Venezia Giulia	8,4	31,8	18,0	41,7	22,5
Liguria	16,9	64,4	11,1	7,6	4,0
Emilia-Romagna	4,5	37,6	28,9	29,1	4,5
Toscana	10,3	27,0	20,1	42,6	25,6
Umbria	9,6	26,7	17,7	46,0	15,9
Marche	16,6	21,9	25,6	35,8	31,8
Lazio	19,8	39,5	16,2	24,6	3,6
Abruzzo	6,5	51,4	11,7	30,5	1,9
Molise	9,9	28,6	24,2	37,2	3,2
Campania	3,8	30,8	25,9	39,5	5,9
Puglia	6,7	31,7	34,6	27,1	0,9
Basilicata	8,9	26,1	25,6	39,4	4,5
Calabria	3,4	36,4	14,5	45,8	6,1
Sicilia	2,2	26,1	37,3	34,4	0,2
Sardegna	8,3	22,4	26,8	42,5	18,0
<b>Italy</b>	<b>9,5</b>	<b>30,9</b>	<b>22,4</b>	<b>37,2</b>	<b>9,9</b>
<b>Northern Italy</b>	<b>12,3</b>	<b>34,7</b>	<b>21,7</b>	<b>31,2</b>	<b>15,7</b>
<b>Central Italy</b>	<b>11,7</b>	<b>26,6</b>	<b>20,4</b>	<b>41,3</b>	<b>17,3</b>
<b>Southern Italy*</b>	<b>5,6</b>	<b>29,5</b>	<b>24,0</b>	<b>40,8</b>	<b>4,3</b>

The Italian farms have **holders over 55 years**, due to **slow generational exchange** in the management of the agricultural holdings, for a combination of **political causes, social, cultural and economic**. The **young people** that want to enter in the management of the agricultural holding find different **obstacles** (eg. **cost of purchase and rent of land, low levels of profitability and etc.**) if they not have a farm of own family.

Source: data processing ISTAT

\* +Sicily and Sardinia Islands

## Multifunctionality in Agriculture a New Entrepreneurial Model to Improve and to Promote

### Specialization of the multifunctional holdings

**Index of Specialization of the functional activities – (ISP)**, obtained by the index of Balassa-Hover, that allows to describe the characteristics of the specialization of the regional structure of multisectorial farms.

$$** \text{ISP}_{pa} = \frac{X_{pa}/X_p}{X_{.a}/X_{..}}$$

p= region; a= functional activity;  $X_{.a}$ = all holdings in Italy that activity  $a$ ;  $X_{..}$ = all multifunctional holdings in Italy.

The coefficient compares the regional or territorial quota of the functional activity of the holdings with that national and it assumes minimum value equal to zero in the case of absence of specialization, whereas for above values to the unity, it is positively correlated to the regional or territorial specialization of the activity of reference.

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### Index of Specialization of the functional activities – (ISP) - Year 2007 – EU

REGION	Agritourism	Processing of farm vegetable products	Processing of farm animal products	And other gainful activities
Piemonte	0,4	1,3	1,1	0,6
Valle d'Aosta	0,3	0,9	3,4	0,1
Lombardia	0,9	0,5	2,9	1,4
Trentino-Alto Adige	3,5	0,3	1,0	1,2
<b>Bolzano</b>	<b>4,5</b>	0,2	1,1	0,8
Trento	1,0	0,8	0,7	2,2
Veneto	0,9	1,0	0,5	1,3
Friuli-Venezia Giulia	0,9	1,1	0,8	1,7
<b>Liguria</b>	<b>4,3</b>	0,4	0,8	0,3
Emilia-Romagna	0,9	1,0	0,4	1,4
Toscana	1,7	1,2	0,5	0,5
Umbria	1,7	1,1	0,2	0,5
Marche	1,5	1,0	0,5	0,7
Lazio	2,9	0,7	1,0	0,9
Abruzzo	2,1	0,7	1,8	0,4
Molise	0,5	0,9	1,1	1,3
Campania	0,4	1,3	1,3	0,4
Puglia	0,8	0,8	2,0	0,6
Basilicata	0,7	1,0	1,1	2,4
Calabria	0,4	0,3	0,2	3,5
Sicilia	2,2	0,6	1,8	0,8
Sardegna	0,3	1,3	1,1	0,2
<b>Italy</b>	<b>1,0</b>	<b>1,0</b>	<b>1,0</b>	<b>1,0</b>
<b>Northern Italy</b>	<b>1,1</b>	<b>0,9</b>	<b>1,3</b>	<b>1,1</b>
<b>Central Italy</b>	<b>1,7</b>	<b>1,1</b>	<b>0,5</b>	<b>0,6</b>
<b>Southern Italy*</b>	<b>0,5</b>	<b>1,0</b>	<b>1,2</b>	<b>1,1</b>

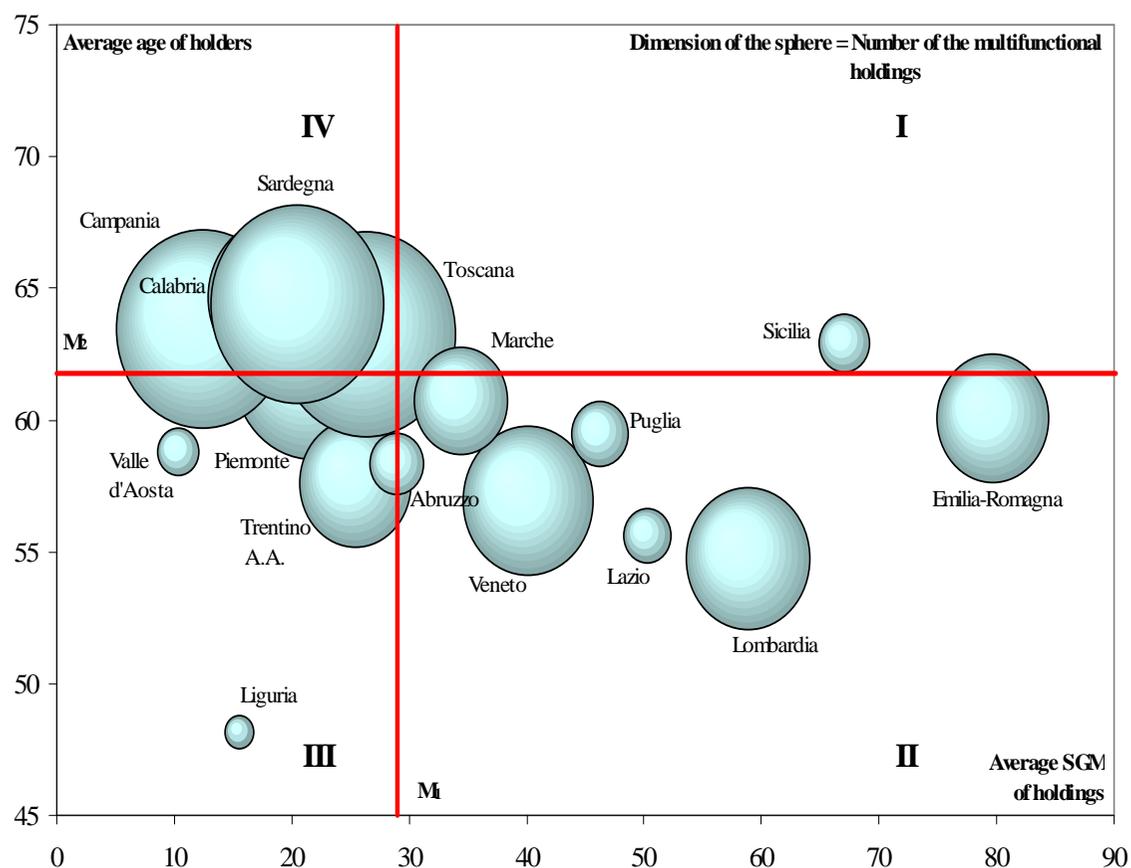
Source: data processing ISTAT

\* +Sicily and Sardinia Islands

## Multifunctionality in Agriculture a New Entrepreneurial Model to Improve and to Promote

### Performance of the multifunctional holdings

On the base of the data punctually analyzed of the phenomenon of the diversification of the holdings, has been put in comparison **three principal indicators** of the **performances** of multifunctional holdings: the **average size economic** in terms of **Standard Gross Margin**, the **average age of holder** and the **number of the holdings** to the purpose to locate the weight of the farm structure in the territory and of the generational exchange.



The **quadrant "I"** of the graph include the regions with **holdings that introduce levels of seniority of the holder and performance in terms of SGM above to the national average** while the number of the holdings is visualized from the size area of the sphere. In this area of the graph there is the **Sicilia** with few holdings but very profitable that produce average **SGM next to 70**, with a discrete propensity to the activities of transformation or connected to the agriculture, but the average age of the **holder is 63 year** with low generational exchange.

The **quadrant "II"** is characterized by **regions with the most efficient and more "young" compared to the national average** with increased propulsive capacity of the phenomenon in constant evolution.

In this area the **Emilia-Romagna** and **Lombardia** have more multifunctional holdings (6-8 mila) and an average economic size between 60 and 80 ESU. The average age of holders of this regions is below the national average, with levels between 55 and 60 years.

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### Conclusion

- The empirical results gotten by the last data of the Italian Farm Structure Survey show some important specific aspects of a composite productive network.
- The gotten results allows some general consideration that want to encourage future studies on the agricultural holdings and on their destiny.
- Empirical analysis puts in evidence the abilities of the holdings of the Northern and Central Italy that seem more competitive.
- The Italian holdings try to give an answer to the slow generational exchange and the new strategies of market.
- The European agricultural politics have an important role to promote the development of the multifunctional holdings. The multifunctionality is a big opportunity for the agricultural and rural development.