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Production directions of agricultural farms located in remote rural areas of Poland

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Production directions of agricultural farms located in remote rural areas of Poland

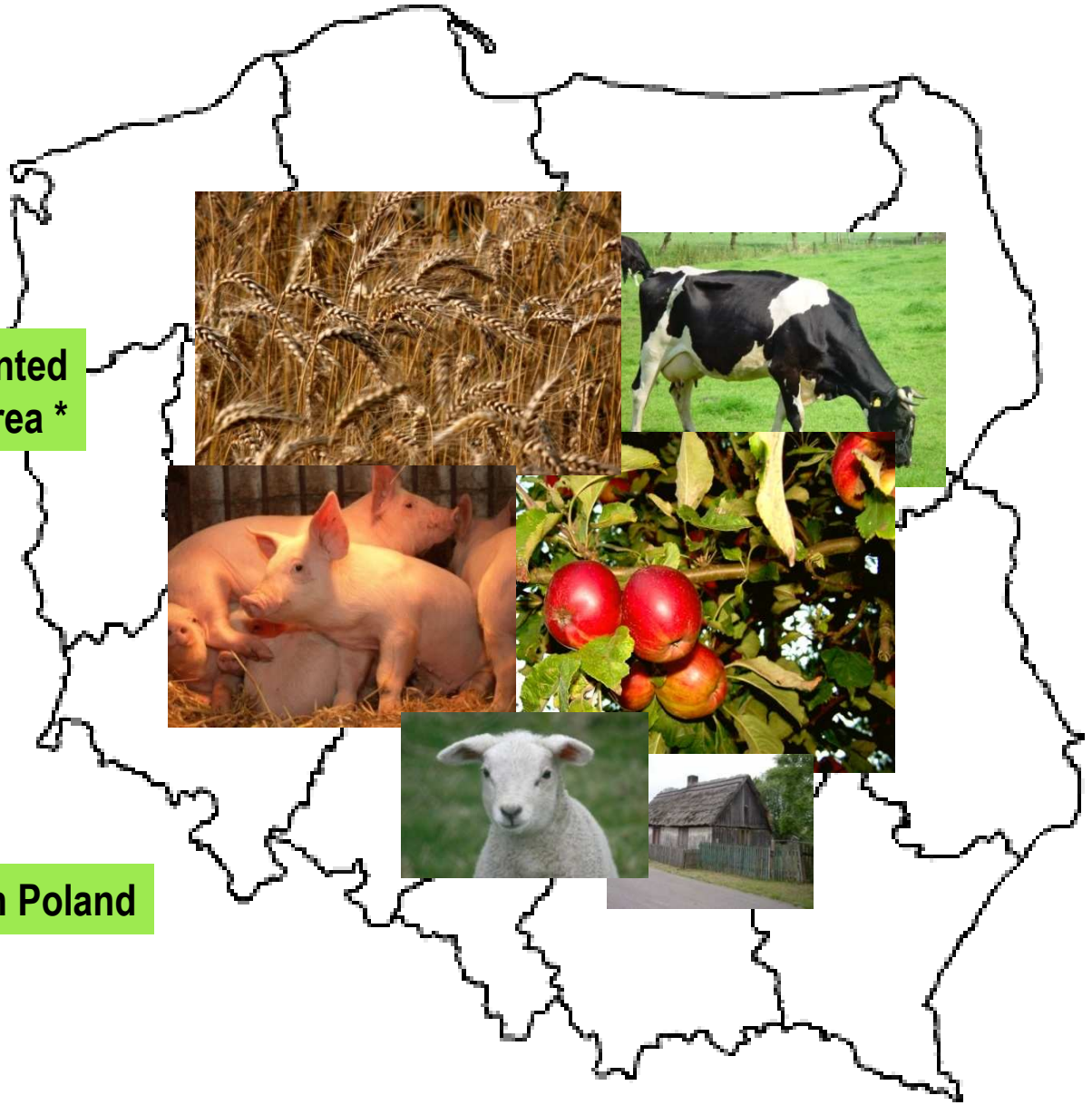
93% of Poland are rural areas (administrative criteria)

>50% of Poland's area is represented by Utilised Agricultural Area *

80% of farms >10ha *

70% of farms are below 8 ESU **

fragmented structure of farming in Poland

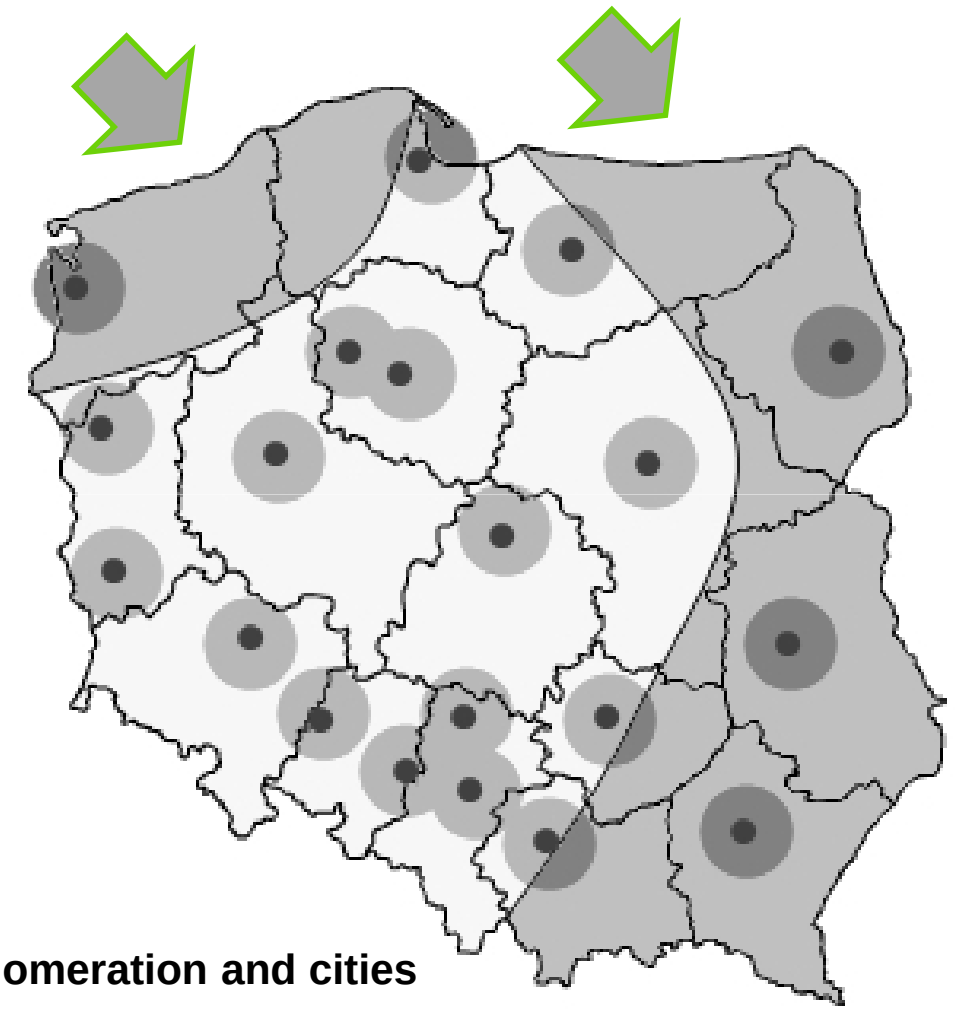


* according to Central Statistical Office
** according to Polish FADN

Rural areas in Poland (importance of agriculture and distance from cities&towns as a criterium)

- **integrated rural areas**
  - ✓ low importance of agriculture
  - ✓ connected to big cities
- **intermadiate rural areas**
  - ✓ high importance of agriculture (especially big farms)
  - ✓ connected to small towns
- **remote rural areas**
  - ✓ strong connection with agricultural activities and production
  - ✓ distanced from cities and small towns

Main zone of remote rural areas in Poland



• urban aglomeration and cities

Farms in remote rural areas

- small in the term of area
- small economic strenght
- multilateral agricultural production mostly for family consumption (self-supplied farms)
- family income from abroad the agricultural sector – social transfers (retirement, pension)
- mostly benefitient of social protection system (unemployment benefit)

What are opportunieties for these farms to continue agricultural activities and make it more profitable?

Is there any agricultural management system more suitable to agricultural activity in remote rural areas?

Management systems of farming

Conventional farming	Organic farming
management focused on individual production (specialized monocultural production)	whole farm management (balance of plant&animal production)
maximum production output - intensive production	optimal production output - extensive production
higher costs of production	lower costs of production
low level of production control	whole farm controlling system
use of chemicals and syntetics	high limitation or lack of chemicals and lack of syntetics
environmental exploatation and contamination	environmental protection (water, soil, natural landscape, biodiversity)
use GMO	no GMO allowed

Objective of survey

- **agricultural farms located on remote rural areas of 6 voivodship of Poland**
  - warmińsko – mazurskie
  - podlaskie
  - lubelskie
  - podkarpackie
  - świętokrzyskie
  - małopolskie
- **certified organic farms**
- **conventional farms**

Data source

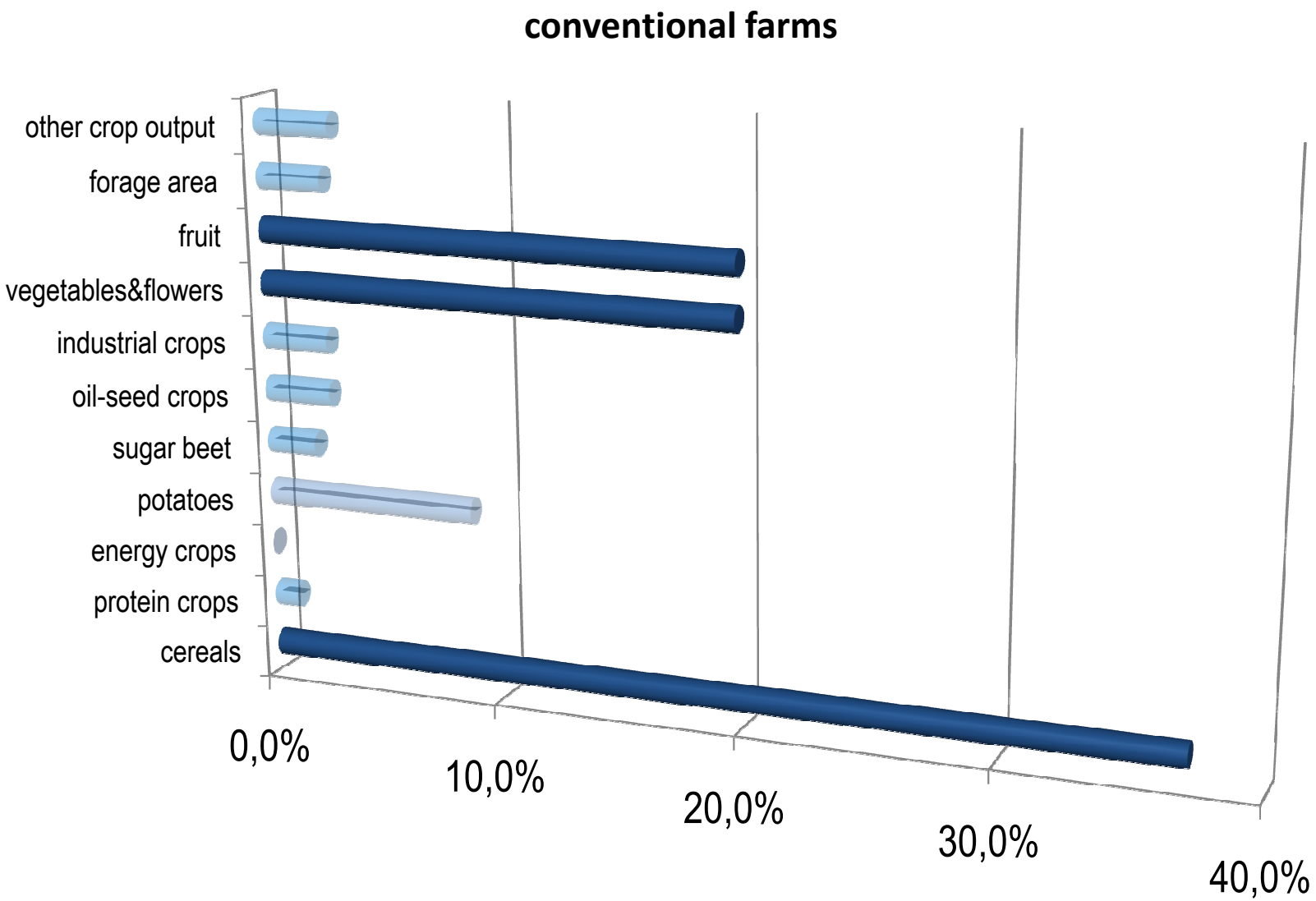
- **accountancy data from Polish FADN and AGROKOSZTY in 2008**

Survey sample for analizing main directions of agricultural production (based on Polish FADN in 2008)

Specification		Average in agricultural farms	
		conventional	organic
number of farms		1096	91
economic size	[ESU]	4,9	4,6
total Utilised Agricultural Area	[ha]	11	11,8
rented UAA	[ha]	2,2	1,2
yield of wheat	[dt]	47,5	31,8
milk yield	[kg per cow]	3719	3352

1 ESU = 1200 EURO

Share of crop output in total output crops



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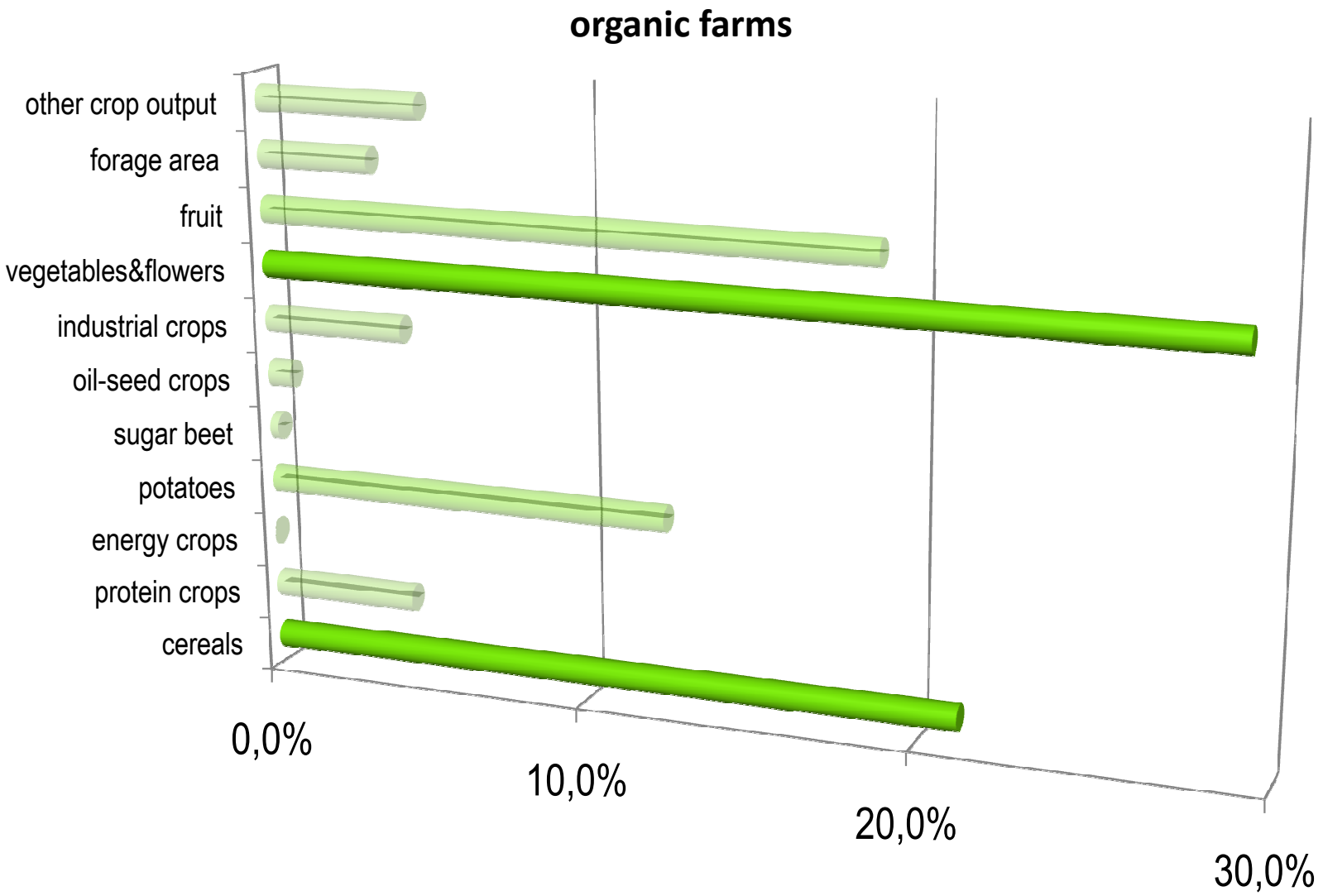
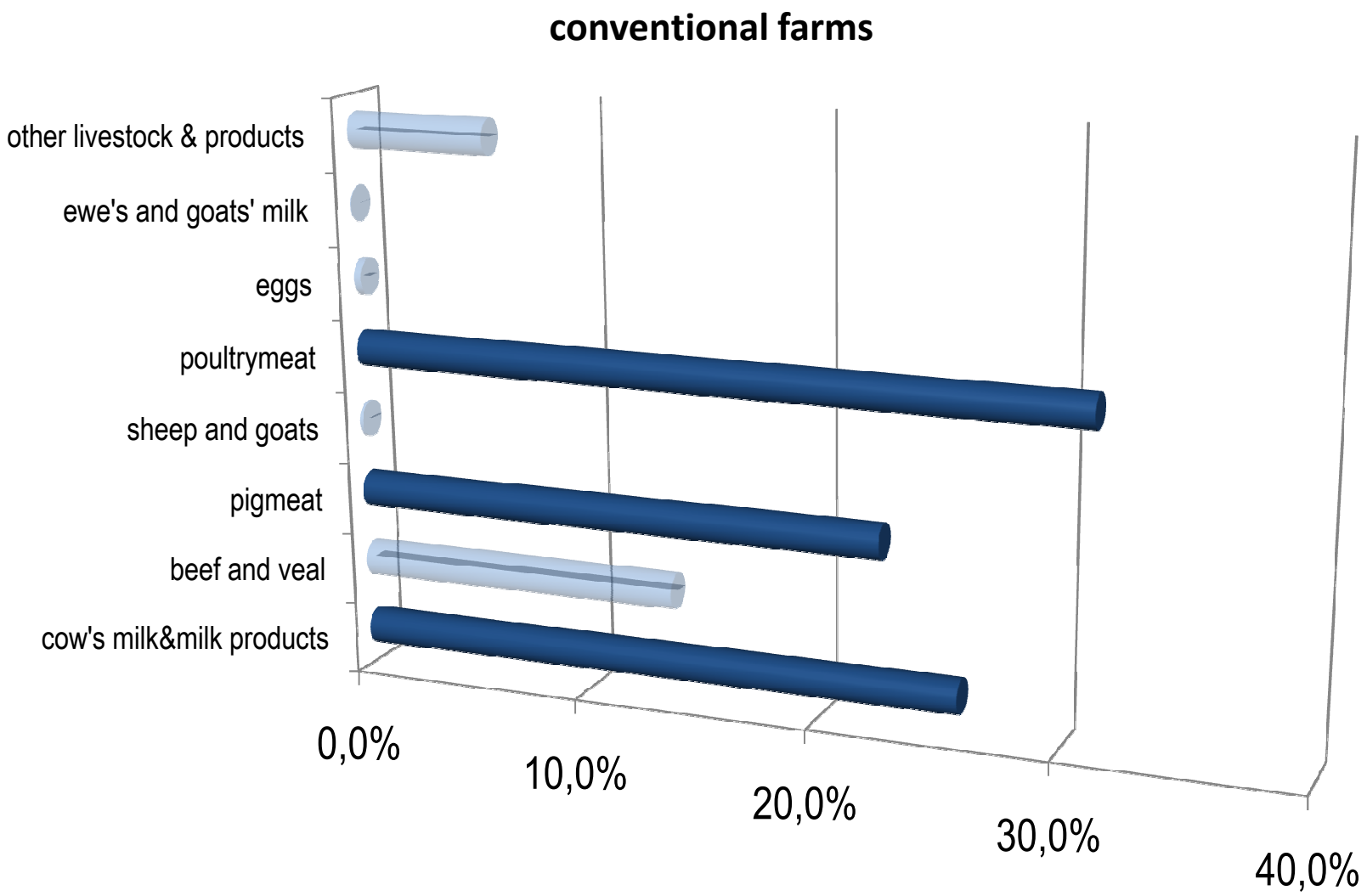


Share of livestock products output in total output livestock production



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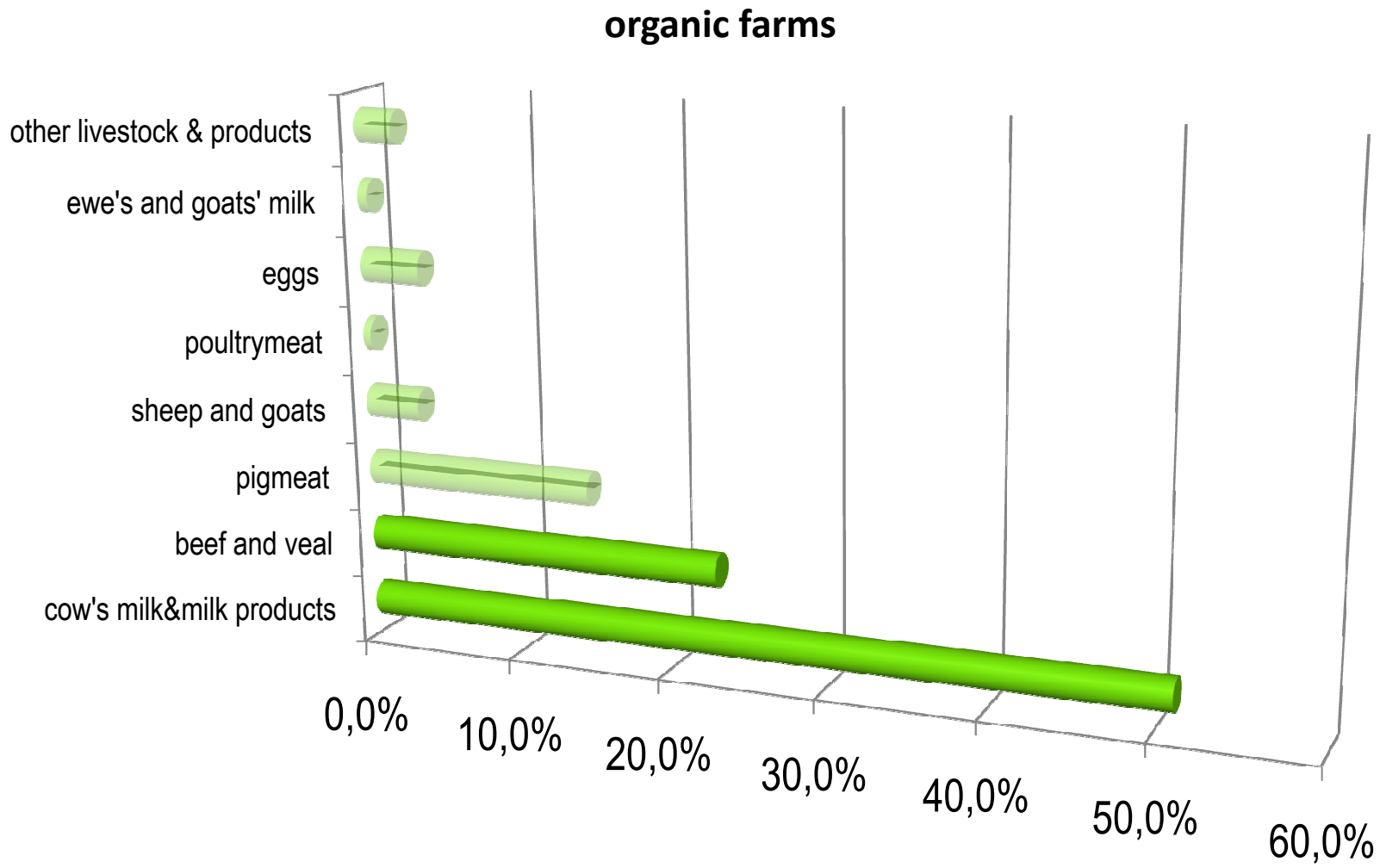


Results of survey on the level of main agricultural activieties (based on AGROKOSZTY in 2008)

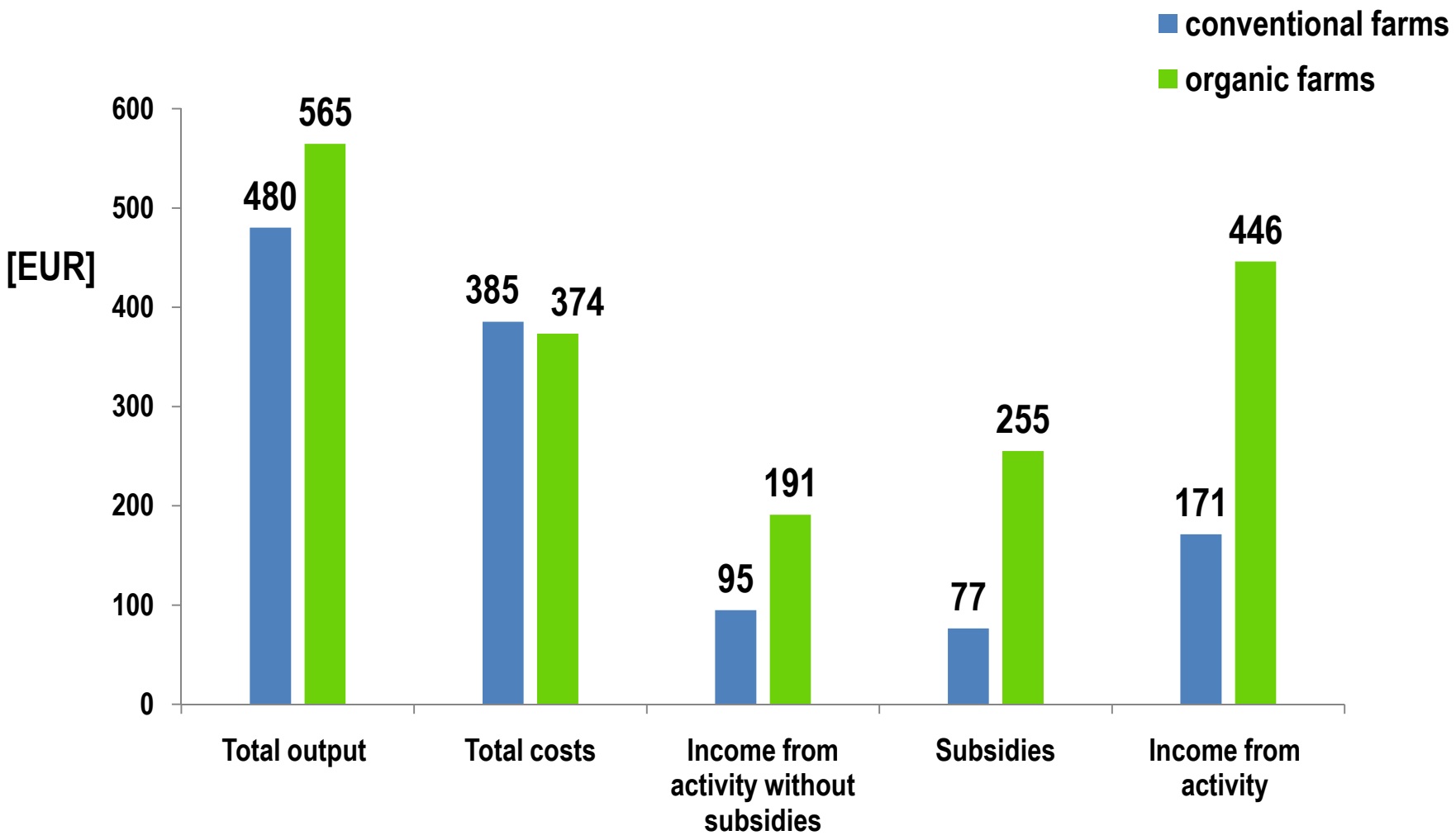
Winter rye

Specification		Average in farms with winter rye	
		conventional	organic
Number of analysed farms		35	19
Yield of winter rye	[dt/ha]	**37,8**	25,8
Sale price	[EUR/dt]	12,7	**21,9**
Total labour input	[hours]	10,2	**11,6**
therein: unpaid labour input	[hours]	9,8	**11,1**

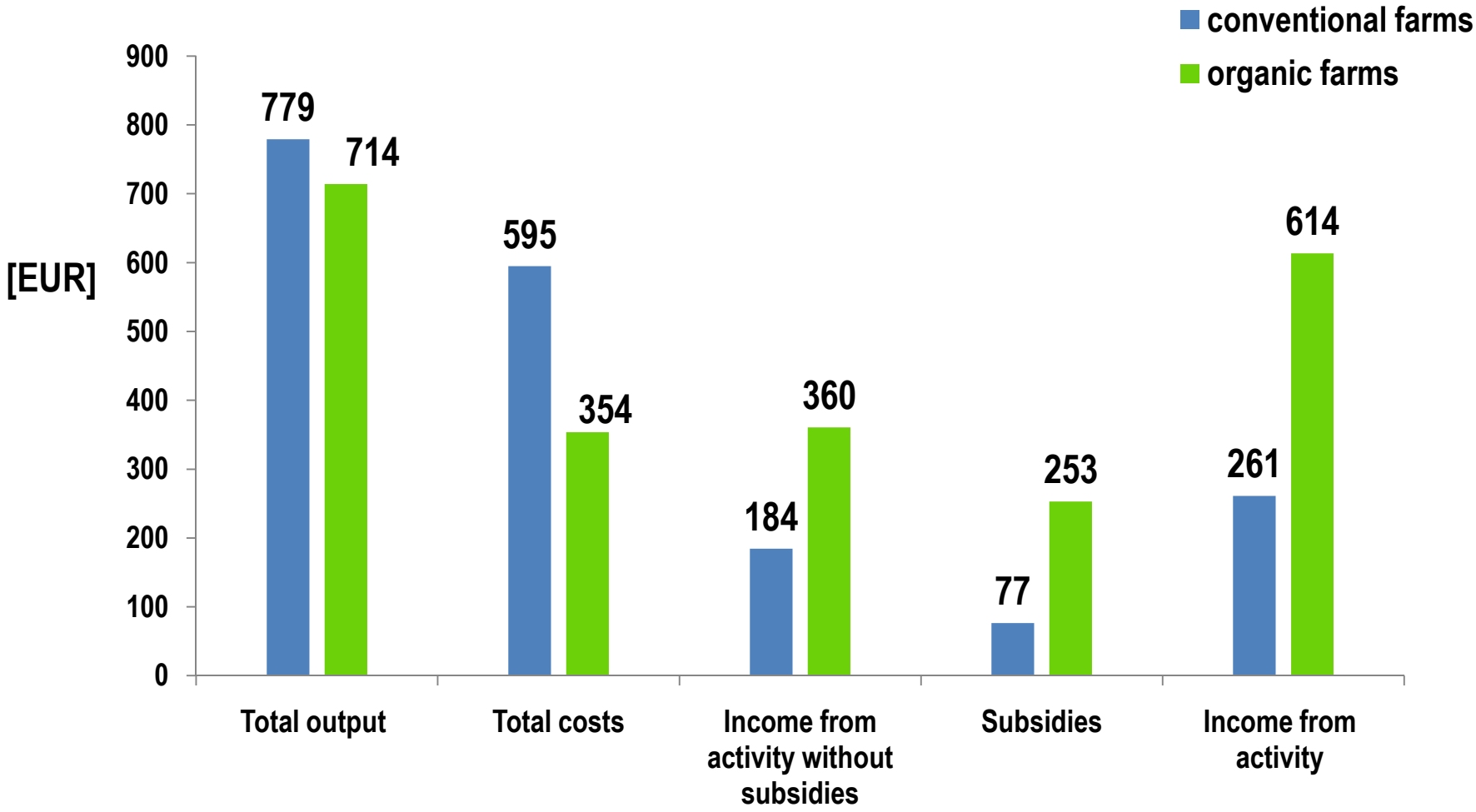
Winter wheat

Specification		Average in farms with winter wheat	
		conventional	organic
Number of analysed farms		32	14
Yield of winter wheat	[dt/ha]	**60,1**	30,1
Sale price	[EUR/dt]	13,0	**23,7**
Total labour input	[hours]	15,2	**16,5**
therein: unpaid labour input	[hours]	15,1	**16,1**

Income from winter rye in 2008 per ha of area under cultivation



Income from winter wheat in 2008 per ha of area under cultivation

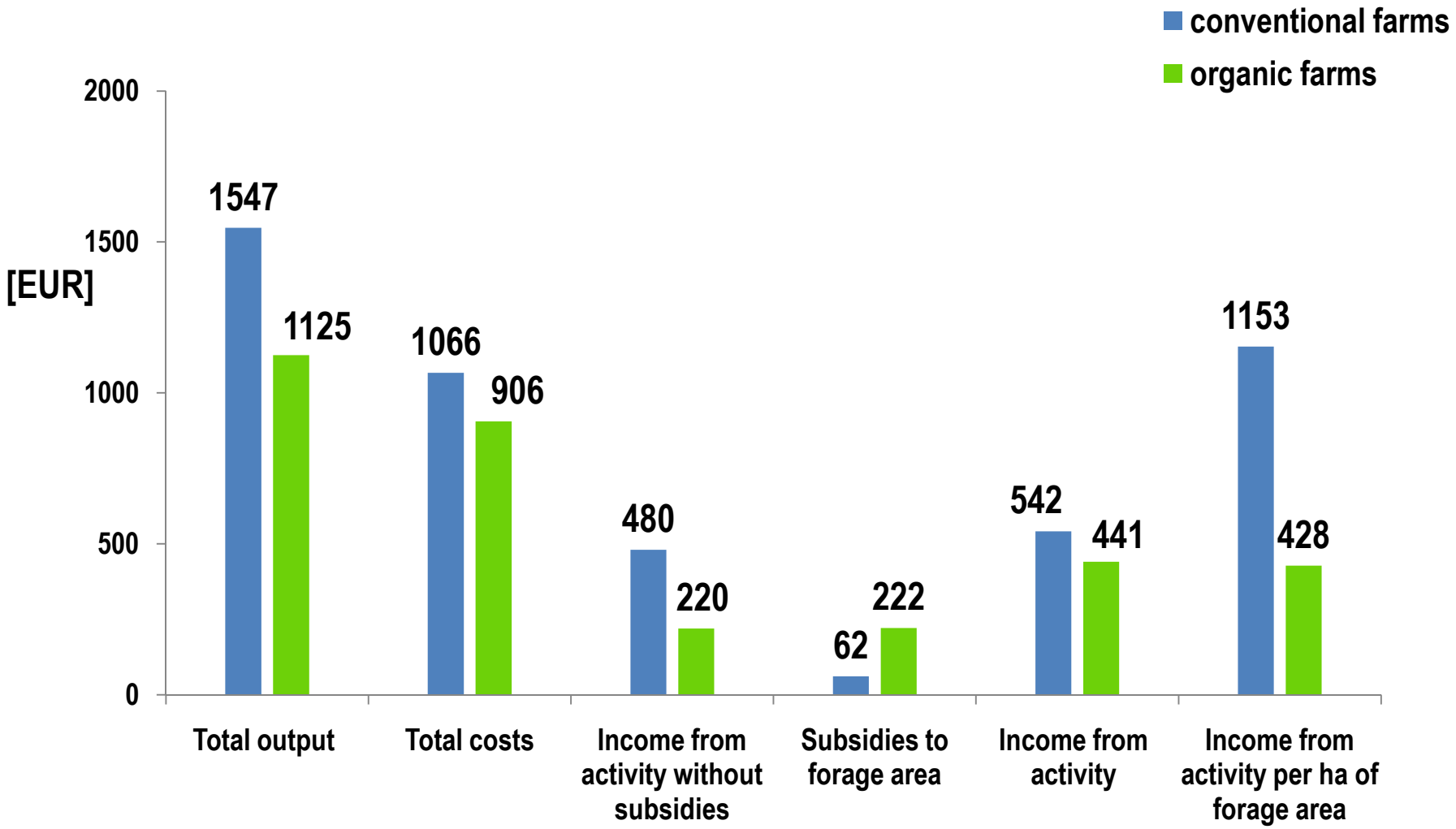


Results of survey on the level of main agricultural activieties

Dairy cows

Specification	Average in farms with dairy cows	
	conventional	organic
Number of analysed farms	52	25
Average annual number of dairy cows [heads]	**10**	7
Milk yield [litres/cow]	**4793**	3361
Sale price of milk [EUR/litre]	0,28	0,27
Total labour input [hours]	207,3	**229,2**
therein: unpaid labour input [hours]	205,2	**228,4**

Income from milk production per dairy cow



Conclusions

• On the basis of conducted analyses the main directions of agricultural production in surveyed farms were identified. Both in organic and conventional production cereals could be mainly specified for leading directions of plant production and dairy cows for animal production.

• Organic production of cereals leads to higher income from activity both in winter rye and winter wheat in surveyed farms.

• Lower economic results of organic milk production were mainly due to lower production results – lower milk yield and lower number of dairy cows. It's very difficult to increase the forage area in organic farms according to the current structure of agricultural land in Poland

• In general the total costs of analysed agricultural activities were lower in organic farms

• The share of subsidies in income from organic production was higher that in conventional farms and strongly influenced the level of income from activity.

• Total labour input was higher in organic farms for all surveyed agricultural activieties.

Conclusions

- The benefits of organic farming for remote rural areas
  - ✓ could be alternative for farms in the adopting process to the changing economic and social situation
  - ✓ needs more labour force - creation of new workplaces
  - ✓ gives more advantages for producers on local market and producers group for the export
  - ✓ Increase in demand for organic product – increase in income of farmers
  - ✓ environmental protection (water, soil, natural landscape, biodiversity)
  - ✓ cultural and social aspects of organic farming (contacts, exchange of experiences)
  - ✓ changing attitude of farmers

Presented results should be treated carefully due to small sample of surveyed farms


thank you
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