

STATUS QUO OF GENDER EQUALITY IN EU RURAL BUSINESS MANAGEMENT

Lesya Kolinets¹, Volodymyr Tokar^{2*}

¹ *Dr. habil Ternopil National Economic University, 11 Lvivska Str., Ternopil, Ukraine, 46009,
Phone +380677538663. E-mail: kolinets@i.ua*

² *Prof. Dr. habil Kyiv National Economic University named after Vadym Hetman.
54/1 Peremohy Avenue, Kyiv, Ukraine, 03057, Phone +380983805107. E-mail: tokarww@ukr.net*

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The relevance of article relates to achieving sustainable development goals declared by the United Nations Organization and enrooted in the EU legislature and practice, namely guaranteeing gender equality and eradicating hunger via enhancing agricultural production. The main research problem is determining the status quo of gender equality in EU rural business management. The purpose of the article is to estimate the female-to-male ratio among managers of agricultural holdings in EU member-states. The goals of the article include determining leading countries and outsiders, as well as suggesting recommendations to change the situation. The research methodology relies on converting the raw data to ratios, truncating the data at equality benchmark and ranking. This approach can be used for evaluating and monitoring the efficiency of measures aimed at fostering gender equality in the EU rural business in the future. The results showed the leading positions of Baltic countires, probably, due to their openness to new innovative ideas of female empowerment, especially after freeing from the communist burden, and lack of traditional managerial structure determining the patterns in other EU member-states (i.e., Germany, Denmark, and Netherlands). Special measures devoted to overcoming the discovered absence of gender parity should include information campaigns advertising managerial positions in agriculture for females, gender quotas, training programs and mentorship aimed at bridging the gender gap in rural business management.

Key words: agricultural managers, gender equality, rural business, sustainable development goals, EU member-states.

JEL Codes: J16, Q13.

** Corresponding Author*

1. Introduction

During the first quarter of the 21st century, in spite of prodigious achievements of the global scientific and technological, as well as innovation development in solving the global problems of humankind, the world community still faces the challenges of the global food problem. In spite of 2 percent annual growth of the global production of foodstuffs and 1.14 percent increase in the world population (Holt-Gimenez, 2008), over 850 million people do not have the access to the volume of foodstuffs sufficient for active and healthy life (Lukianenko, 2014). Agriculture is one of the key food production sectors aiming at solving the global food problem. The efficiency of rural business depends on the set of different factors, including the equality between men and women both working and managing agricultural holdings.

Agarwal highlights the role of gender equality (UN Sustainable Development Goal – SDG 5) in implementing other SDG goals, including eradicating poverty (SDG 1) and hunger (SDG 2) (Agarwal, 2018). Johnson et. al supported the idea that female ownership of assets reduces the poverty in rural areas via positive effects on outcome at the household and individual levels (Johnson, 2016). Theriault, Smale, and Haider discovered that eliminating the male bias in extension services and improving access to financing and equipment to female plot managers foster the sustainable agriculture (Theriault, 2017). Osabuohiena et. al. showed that even though large-scale agricultural land investments increased productivity, created new jobs and facilitated rural development, there is still a need for targeting of potential beneficiaries to ensure the rural female empowerment in Africa (Osabuohiena, 2019). Drucza and Peveri shed light on ignoring the female sector of the small farming household and the role of labor investment by women in livestock in Pakistan due to traditional bias (Drucza, 2018). Palacios-Lopez, Christiaensen, and Kilic argued that investments in raising agricultural female labor productivity provide high returns in reaching female empowerment and improving nutrition of children in Africa (Palacios-Lopez, 2017). Zirham and Palomba proved the existence of a link between females managing farms in the short food supply chain and the innovative boom in Italian agriculture (Zirham, 2016).

Mekonnen, Gerber, and Matz substantiated the role of networks of female household members in promoting agricultural innovations and yield improvement in the case of row-planting (Mekonnen, 2018). Mutenje et. al. demonstrated that women's bargaining power and access to information positively influenced the probability of investing in climate smart agriculture technologies (Mutenje, 2019). Campos, Covarrubias, and Patron found that "older status of female heads, holders and manager of plots, child dependency ratio, and limited access to adult male labor are factors decreasing productivity in female plots in Uganda" (Campos, 2016). Alkire et al. shed light on the Women's Empowerment in Agriculture Index, which consists of two sub-indices covering decisions about agricultural production, productive resources, use of income, community leadership, and time allocation, as well as measuring the percentage of women whose achievements are at least as high as men in their households (Alkire, 2013). Using Women Empowerment in Agriculture Index in Ghana, Ragsdale et al. found that women lack empowerment in input in productive

decision-making, purchase, sale, or transfer of assets, and speaking in public raising the topicality of special programs devoted to achieving gender equity in rural business (Ragsdale, 2018).

Akter et al. (2017) disclosed that female empowerment being the pre-condition for achieving the global food security requires country-specific interventions aimed at closing the gender gaps in agriculture (Akter, 2017), while Sraboni and Quisumbing (2018) showed the interplay between women's empowerment in agriculture and improvement of dietary quality of individuals within households in Bangladesh (Sraboni, 2018). Fischer et al. suggested gender-sensitive training and the establishment of group models to promote the forage chopper's sustainability in Tanzania (Fischer, 2018). Doss et. al. declared the necessity to improve gender statistics on land tenure, control over assets, and work burden, including chores aimed at monitoring the impact of programs and policies, as well as enabling the identification of drivers of positive changes (Doss, 2018). Johnson and Schnakenberg stated that amendment of civic agriculture requires the empowerment of female farmers via gendered organizations, horizontal networks, and innovative strategies (Johnson, 2017). Therefore, there is a bulk of literature proving the efficiency of gender equity in agriculture, but the above-mentioned researches concentrating on many different aspects lack the specific emphasis on the European situation. Therefore, in our paper, the main research problem is determining the status quo of gender equality in EU rural business management. The purpose of the article is to estimate the female-to-male ratio among managers of agricultural holdings in EU member-states. The goals of the article include determining leading countries and outsiders, as well as suggesting recommendations to change the situation.

2. Research methodology

By analogy with the Global Gender Gap Index, introduced by World Economic Forum in 2006, we determine the gender equality in rural business management of EU member-states, namely gender parity from 0 (total inequality) to 1 (equality) (World, 2019). We concentrate on estimating gaps, capture outcome variables and rank on gender equality. In our study, we shed light on female-to-male ratios among managers considering number of farms, agricultural area, and labor force. The process of evaluating the gender gap embraces converting the raw data retrieved from Eurostat to ratios, truncating the data at equality benchmark (namely, the equality in quantity of females and males engages in rural management) and ranking EU member-states.

Using the Eurostat statistics (Eurostat, 2019) on number of farms, agricultural area, and labor force by age and sex of the manager in 2005, 2010, and 2013 (the latest available data), we calculate the female-to-male ratios and estimate the status quo for the EU member-states determining maximum, minimum, and average values for each country and for the sample itself. Finally, we determine the changes in scores and rank EU member-states based on their results.

3. Research Results and Discussion

Table 1 shows that the best scores of female-to-male ratios of managers considering number of agricultural holdings under supervision in EU member-states in 2005-2013 featured the Baltic countries, namely Lithuania (0.890 in 2013), Latvia (0.823), and Estonia (0.534). The worst ones were Malta, Germany, Netherlands, and Denmark. The average value of this indicator increased from 0.298 in 2005 to 0.305 in 2013, as well as well as median (from 0.243 to 0.274) and maximum (from 0.882 to 0.890), while minimum value slightly decreased from 0.072 to 0.063.

Table 1. Dynamics of female-to-male ratio of managers considering number of agricultural holdings under supervision in EU member-states in 2005-2013

Country	2005		2010		2013		Change
	Score	Rank	Score	Rank	Score	Rank	
Lithuania	0.739	2	0.912	1	0.890	1	0.151
Latvia	0.882	1	0.879	2	0.823	2	-0.058
Estonia	0.587	3	0.558	3	0.534	3	-0.053
Austria	0.518	4	0.526	4	0.491	4	-0.027
Romania	0.407	6	0.478	5	0.488	5	0.081
Poland	0.470	5	0.423	7	0.432	6	-0.037
Italy	0.388	7	0.443	6	0.418	7	0.031
Portugal	0.325	10	0.414	8	0.405	8	0.080
Hungary	0.310	11	0.357	11	0.364	9	0.054
Greece	0.337	9	0.383	9	0.356	10	0.019
Slovenia	0.355	8	0.375	10	0.295	11	-0.060
Bulgaria	0.215	17	0.295	12	0.288	12	0.074
Spain	0.235	15	0.276	15	0.286	13	0.052
France	0.274	12	0.294	13	0.274	14	-0.001
Cyprus	0.271	13	0.260	16	0.241	15	-0.030
Luxembourg	0.145	20	0.189	18	0.202	16	0.057
Slovakia	0.243	14	0.206	17	0.190	17	-0.054
Belgium	0.177	19	0.177	21	0.180	18	0.003
Sweden	0.129	22	0.182	19	0.179	19	0.051
United Kingdom	0.220	16	0.150	22	0.175	20	-0.045
Czech Republic	0.201	18	0.178	20	0.134	21	-0.067
Ireland	0.129	21	0.130	23	0.123	22	-0.006
Finland	0.117	24	0.125	24	0.106	23	-0.010
Malta	0.089	26	0.125	25	0.102	24	0.013
Germany	0.094	25	0.092	27	0.094	25	0.000
Denmark	0.127	23	0.099	26	0.086	26	-0.042
Netherlands	0.072	27	0.065	28	0.063	27	-0.009
Croatia	n.a.	n.a.	0.283	14	n.a.	n.a.	n.a.
Average	0.298		0.317		0.305		0.007
Median	0.243		0.280		0.274		0.031
Maximum	0.882		0.912		0.890		0.008
Minimum	0.072		0.065		0.063		-0.009

Source: calculated and compiled by authors based on (Eurostat, 2019)

Table 2 indicates the leadership of Latvia (0.376), Lithuania (0.354), and Austria (0.345 in 2013) by female-to-male ratios considering utilized agricultural area (ha) under supervision in EU member-states in 2005-2013, while outsiders were Malta, Denmark, and Netherlands. The average, maximum and minimum values of the ratio declined by 0.003, 0.098, and 0.017 respectively; only median increased from 0.126 to 0.142 during the observed period.

Table 2. Dynamics of female-to-male ratio of managers considering utilized agricultural area (ha) under supervision in EU member-states in 2005-2013

Country	2005		2010		2013		Change
	Score	Rank	Score	Rank	Score	Rank	
Latvia	0.474	1	0.428	1	0.376	1	-0.098
Lithuania	0.403	2	0.382	2	0.354	2	-0.049
Austria	0.296	3	0.361	3	0.345	3	0.049
Italy	0.215	6	0.260	4	0.259	4	0.044
Romania	0.237	4	0.222	6	0.224	5	-0.013
Poland	0.184	9	0.208	8	0.205	6	0.021
Slovenia	0.232	5	0.247	5	0.192	7	-0.040
Portugal	0.161	10	0.195	9	0.186	8	0.025
Spain	0.144	12	0.168	11	0.176	9	0.032
Hungary	0.100	17	0.132	15	0.160	10	0.060
Estonia	0.200	7	0.168	10	0.155	11	-0.045
France	0.152	11	0.156	12	0.152	12	0.000
Bulgaria	0.134	13	0.138	14	0.147	13	0.013
Greece	0.196	8	0.142	13	0.142	14	-0.054
Luxembourg	0.082	20	0.129	16	0.126	15	0.044
Belgium	0.112	15	0.115	17	0.120	16	0.008
Slovakia	0.088	18	0.092	19	0.097	17	0.009
Cyprus	0.126	14	0.106	18	0.095	18	-0.032
Sweden	0.067	23	0.082	21	0.082	19	0.014
Ireland	0.102	16	0.087	20	0.080	20	-0.022
Germany	0.064	24	0.070	24	0.072	21	0.009
United Kingdom	0.077	22	0.067	26	0.072	22	-0.005
Finland	0.079	21	0.079	22	0.070	23	-0.009
Czech Republic	0.056	25	0.068	25	0.067	24	0.011
Malta	0.051	26	0.077	23	0.057	25	0.006
Denmark	0.088	19	0.049	27	0.039	26	-0.049
Netherlands	0.047	27	0.031	28	0.030	27	-0.017
Croatia	n.a.	n.a.	0.209	7	n.a.	n.a.	n.a.
Average	0.154		0.160		0.151		-0.003
Median	0.126		0.135		0.142		0.016
Maximum	0.474		0.428		0.376		-0.098
Minimum	0.047		0.031		0.030		-0.017

Source: calculated and compiled by authors based on (Eurostat, 2019)

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Considering labor force directly employed by the holdings in EU member-states in 2005-2013, Latvia (0.685), Lithuania (0.610), and Austria (0.469) were at the top of the ranking, while Malta, Denmark, and Netherlands – at the bottom (Table 3). The average and median values of the indicators grew by 0.008 and 0.040 respectively, while maximum fell from 0.715 to 0.685, and minimum – from 0.052 to 0.040.

Table 3. Dynamics of female-to-male ratio of managers considering labor force directly employed by the holdings in EU member-states in 2005-2013

Country	2005		2010		2013		Change
	Score	Rank	Score	Rank	Score	Rank	
Latvia	0.715	1	0.716	1	0.685	1	-0.030
Lithuania	0.560	2	0.618	2	0.610	2	0.050
Austria	0.463	3	0.530	3	0.469	3	0.006
Portugal	0.289	8	0.385	4	0.369	4	0.079
Poland	0.314	5	0.335	5	0.354	5	0.041
Romania	0.278	9	0.298	9	0.321	6	0.043
Italy	0.291	7	0.305	8	0.290	7	-0.001
Bulgaria	0.177	14	0.271	10	0.276	8	0.099
Estonia	0.372	4	0.332	7	0.274	9	-0.097
Slovenia	0.304	6	0.333	6	0.259	10	-0.046
Greece	0.220	10	0.257	11	0.255	11	0.036
Spain	0.209	11	0.233	13	0.240	12	0.031
Hungary	0.191	13	0.229	14	0.238	13	0.047
France	0.206	12	0.219	15	0.217	14	0.011
Luxembourg	0.121	21	0.164	16	0.181	15	0.060
Cyprus	0.171	15	0.155	17	0.148	16	-0.023
Sweden	0.117	22	0.139	18	0.145	17	0.029
Belgium	0.132	18	0.137	19	0.138	18	0.006
United Kingdom	0.127	20	0.095	23	0.117	19	-0.011
Slovakia	0.137	17	0.110	22	0.113	20	-0.024
Finland	0.128	19	0.124	20	0.111	21	-0.017
Ireland	0.144	16	0.119	21	0.106	22	-0.038
Germany	0.080	24	0.084	25	0.087	23	0.006
Czech Republic	0.078	25	0.085	24	0.078	24	-0.001
Malta	0.052	27	0.082	26	0.065	25	0.013
Denmark	0.095	23	0.071	27	0.060	26	-0.035
Netherlands	0.054	26	0.043	28	0.040	27	-0.015
Croatia	n.a.	n.a.	0.255	12	n.a.	n.a.	n.a.
Average	0.223		0.240		0.231		0.008
Median	0.177		0.224		0.217		0.040
Maximum	0.715		0.716		0.685		-0.030
Minimum	0.052		0.043		0.040		-0.012

Source: calculated and compiled by authors based on (Eurostat, 2019)

The results showed the leading positions of Baltic countires, probably, due to their openness to new innovative ideas of female empowerment, especially after

freeing from the communist burden, and lack of traditional managerial structure determining the patterns and trends in other EU member-states (i.e., Germany, Denmark, and Netherlands). Our assumption requires further inter-disciplinary researches that rely on quantitative and qualitative methods including questionnaires and interviews of female and male managers in EU rural business.

4. Conclusions

1. We can assume that female-to-male ratios of managers considering number of agricultural holdings, utilized agricultural area, and labor force directly employed by the holdings in EU member-states in 2005-2013 demonstrated the absence of gender parity. Therefore, EU member-states should introduce special measures, such as information campaigns aimed particularly at females attracting them to apply for managerial positions in agriculture, gender quotas, training programs and mentorship aimed at bridging the gender gap in rural business management.

2. The statistical provision requires amendments, as the latest available data is 2013, while there was no information regarding Croatia in 2005 and 2013. The enhanced statistical support will guarantee the monitoring of efficiency of national and supranational programs devoted to female empowerment in EU agriculture in general and in managerial decision-making in particular.

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LYČIŲ LYGYBĖS STATIKA ES KAIMO VERSLŲ VADYBOJE

Lesya Kolinets¹, Volodymyr Tokar^{2,*}

¹ *Ternopilio nacionalinis ekonomikos universitetas, Ukraina*

² *Kijevo nacionalinis ekonomikos universitetas, Ukraina*

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Straipsnio aktualumas susijęs su Jungtinių Tautų organizacijos paskelbtų ir ES įstatymų leidybos bei praktikoje įtvirtintų darnaus vystymosi tikslų įgyvendinimu, t.y. lyčių lygybės užtikrinimu stiprinant žemės ūkio gamybą. Pagrindinė tyrimų problema yra lyčių lygybės „status quo“ nustatymas ES kaimo verslo vadyboje. Straipsnio tikslas - įvertinti moterų ir vyrų santykį tarp ES valstybių narių žemės ūkio valdų valdytojų. Straipsnio tikslai yra nustatyti pirmaujančias šalis, taip pat siūlyti rekomendacijas, kaip pakeisti situaciją. Tyrimo rezultatai parodė lyderiaujančias Baltijos šalių pozicijas

tikriausiai dėl jų atvirumo naujoms inovatyvioms moterų įgalinimo idėjoms, ypač išsilaisvinus nuo komunistinės naštos, taip pat dėl tradicinės vadybos struktūros, lemiančios kitų ES valstybių narių modelius (t.y. Vokietijos, Danijos ir Nyderlandų). Specialios priemonės, skirtos įveikti nustatytą lyčių lygybės nebuvimą, turėtų apimti informavimo kampanijas, kuriomis reklamuojamos vadovaujančios pareigos žemės ūkyje moterims, lyčių lygybės principai siekiant panaikinti lyčių atotrūkį kaimo verslo valdyme.

Raktiniai žodžiai: žemės ūkio vadovai, lyčių lygybė, kaimo verslas, tvarios plėtros tikslai, ES valstybės narės.

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