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Assessment of gender equality in the professions of land surveyor, geodesist and land appraiser in Ukraine

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SUMMARY

Gender inequality in access to certain professions is an obstacle to achieving genuine equality between men and women. Even now, in developed countries, women occupy only about 25% of technical positions, and the profession of land surveyor in many countries at the level of social stereotype is often considered to be “male”. Despite the fact that from 1995 to 2018, the gender inequality index in Ukraine decreased from 0.480 to 0.284, the problem of equal access to engineering professions, such as the profession of geodesist or land surveyor, still requires special attention. Taking into account that in Ukraine the activities of land engineers, geodesists and land appraisers are separately regulated and certified, the gender balance was studied among professionals working in these areas at the national level and in the context of individual regions based on data from the relevant state registers.

Introduction

Gender inequality is one of the manifestations of socio-economic differentiation of the population, which leads to different opportunities for self-realization of women and men in society, so research these problems is relevant, although the results are perceived differently by the public.

Historically, Ukrainian women have less ability to express their own abilities. This is explained by several factors: firstly, workload at home and secondly, confidence among employers that the most important thing for a woman is self-realization in the field of motherhood, family life, and everything else - career growth, development of one's abilities - goes to the 2 place (2).

Gender inequality in Ukrainian society is a consequence of the policy of solving the women's issue in the USSR. Even in Soviet times, women were given more opportunity to work, but under its unequal distribution, their salary was on average lower than men's (3). In the post-Soviet period, there was a certain revival of patriarchal ideology and practices that cemented and deepened the inequality that prevailed during the Soviet era.

In recent years, gender researches of the labor market have attracted considerable scientists attention. A significant contribution to the development of theoretical and practical aspects of gender research belongs to O. Grishnov, E. Libanova, L. Lobanov, O. Makarova, V. Novikov, Y. Sayenko, V. Ceshenko. The authors prove that there are significant gender imbalances in the Ukrainian labor market by analyzing the level of economic activity and employment of the population. However, gender studies in the Ukrainian labor market remain underdeveloped and require further development and greater attention. That is why the article analyzes the labor relations in the field of land relations by gender differentiation. Equal participation of women and men in the professional fields should be an important area of public educational and employment policies.

Methodology of research and materials

The basis of methodological approaches to the researches of gender problems in the socio-economic area is the analysis of gender imbalances in the labor market, in particular, economic activity and employment of the population, differentiation of wages, gender imbalance in the sphere of economic decision-making. Analyzing the socio-economic structure of society, gender issues are reflected in the unequal opportunities for women and men to participate in the leadership positions, education and employment, income and property. The method of studying the problem involved the study not only of quantitative characteristics, but also the transition to the researches of the conditions and statuses of employment of men and women.

Discussion and results

Ukraine is a participant of many international legal treaties that promote and establish a gender equality regime. According to the Sustainable Development Strategy of Ukraine until 2030, the strategic goal of sustainable development for the period until 2030 is to expand the economic opportunities of women in the context of employment, income and development of entrepreneurial potential. Although gender mainstreaming is not strictly required in the context of employment, it is worth noting that land relations professionals are not tasked with the performance of which is influenced by the physiological abilities of existing members.

To determine the professional and social skills that a progressive land relations specialist should possess in the future, job offers were analyzed on job search websites. The most common requirements for candidates for the job of land surveyor and geodesist are determined. 85% of employers were interested in the candidate's ability to work with the appropriate software, which absolutely greatly simplifies the activity, and in some cases - opens up new opportunities (Fig. 1).

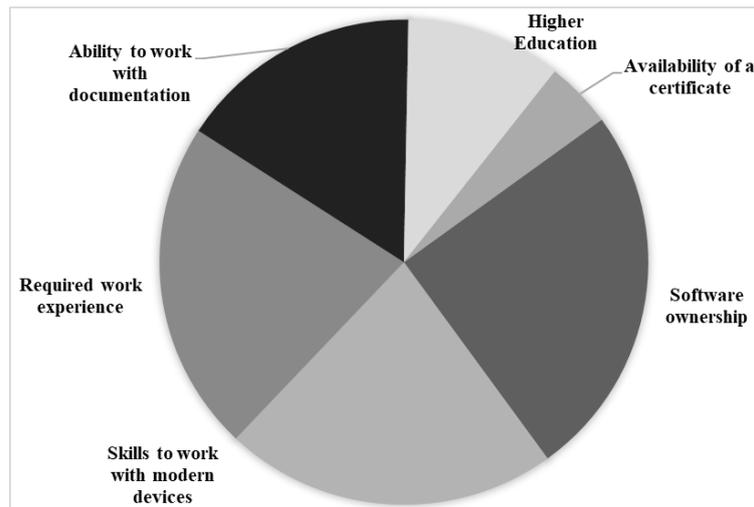


Fig. 1. Requirements for candidates for the position of land surveyor

Software is most commonly understood as computer-aided design systems, such as Autodesk AutoCad, DraftSight, and others. Typically, these programs are used to produce a graphical part of land surveying documentation such as cadastral maps, longitudinal profiles, and other.

Compulsory skill on every enterprise is the ability to work with a suite of office applications: Microsoft Office, namely, Microsoft Word, Microsoft Excel. 90% of employers require an engineer to be proficient in these programs. An important requirement for candidates is the ability to work with modern GIS systems such as ArcGIS and QGIS. A quarter of employers require candidates to work with geo-information systems. They can be used to visualize location data, create and compile maps, atlases, plans, and land monitoring. This software can also be used extensively for spatial planning, land use restrictions establishment, environmental impact assessments, etc.

The job of geodesist in 40% of cases requires a person who is able to work in the programs of data capture processing. Examples of such programs are Digitals and CredoDat. They relieve the engineer of the need to independently process the results of measuring work, and fully automate computing. This greatly improves the productivity and efficiency of the geodesist, as the human impact on results and errors is minimized. Also, most employers require some experience in land management industry. Almost 40% of vacancies require 2 years of experience, 1 year and 3 years - 15%, and only 5% require as much as 4 years of work experience.

The source of information on the number of certified land surveying, geodesists and land appraisers are the relevant state registers, which are publicly available on the website of the State Service of Ukraine for Geodesy, Cartography and Cadastre (<https://land.gov.ua>).

Most land surveyors are working in Kyiv, Kharkiv and Lviv regions, the least - in Ternopil and Kherson regions. The land surveyor certificate have 2,914 people, 60% of whom are men and 40% are women.

According to the registry, there are about 880 certified geodesists in Ukraine. 77% of them are men and 23% are women. Most geodesists are working in the Kyiv, Lviv and Dnipro regions. Sumy, Kirovohrad and Kherson regions have the least amount of geodesists. Although the issue is not considered separately in this study, it should be noted that the total number of certified geodesists in the regions of Ukraine correlates with such indicators as gross regional output in construction and urban housing.

There are currently about 1141 appraisers of expert monetary valuation of land. The gender balance is almost equal, with a difference of only 41 in favor of men (Table 1).

Table 1. Gender balance in the field of land surveying, geodesy and land valuation in Ukraine (01.01.2020)

Name of region	Certified land surveyors		Certified geodesists		Land appraisers	
	Men	Woman	Men	Woman	Men	Woman
Vinnytsya	72	35	21	3	18	24
Volyn	61	27	21	5	13	11
Dnipro	71	101	52	18	34	30
Donetsk	48	54	15	9	17	23
Zhytomyr	67	23	15	7	17	10
Zakarpattia	63	34	24	10	14	18
Zaporizhyya	45	44	25	7	18	20
Ivano-Frankivsk	86	37	41	19	15	9
Kyiv	245	180	117	30	158	120
Kirovohrad	47	22	13	0	21	11
Lyhansk	20	12	6	1	6	3
Lviv	121	55	49	12	50	22
Mykolaiv	42	46	12	9	21	22
Odesa	99	95	71	10	23	46
Poltava	82	87	24	8	22	24
Rivne	66	32	25	3	10	12
Sumy	40	29	10	1	17	17
Ternopil	64	15	16	10	7	12
Kharkiv	101	86	41	13	34	54
Kherson	33	23	10	1	15	14
Khmelnitskiy	95	31	17	7	16	16
Cherkasy	61	27	22	3	19	13
Chernivtsi	53	31	25	10	16	4
Chernihiv	80	26	14	5	10	15
Total	1762	1152	680	200	591	550
	2914		880		1141	

Male land surveyors prevail in western Ukraine (Ternopil, Ivano-Frankivsk and Lviv regions), and vice versa, female land surveyors make up the majority in the east and south of Ukraine (Donetsk, Dnipro and Mykolaiv regions).

On all territory of Ukraine prevail male geodesists. This may be due to the fact that the work of a geodesist is closely linked to physical activity and, in some cases, extreme working conditions.

Today, the gender balance is almost preserved among the appraisers of the expert land valuation, the difference is only 1%. Most appraisers are located in Kyiv, Kharkiv and Odesa regions. In the Kirovohrad region, unlike the number of land surveyors and geodesists, there were quite a few appraisers – about 60. Rivne, Ternopil, and Chernivtsi regions also have a small number of appraisers. Male appraisers prevail only in the Kyiv region, and female appraisers are majority in the Odessa region. Gender equality remains in the rest of the country in terms of the number of specialists.

At the same time, there is an extremely low representation of women in higher government, political and trade union structures in Ukraine. Women in Ukraine control from 5 to 10 percent of economic resources. They have fewer opportunities than men in high-paying jobs and career advancement. Also most employers prefer men because women can interrupting their working hours and losing their skills due to the birth of children or their care in case of illness (4).

Women have more difficulties than men in terms of career and pay. Today, the labor market continues having tendency to discriminate women. Yes, women earn less than men on average (5). Men have more career prospects than women. A small percentage of women become executives, especially at a high level. The analysis of statistics shows that 61% of men occupy leadership position. According to the survey, the number of enterprises in the private business of geodesy and land management headed by men is 70% (Fig. 2). So, the higher the social status of the position, the less in these positions women.

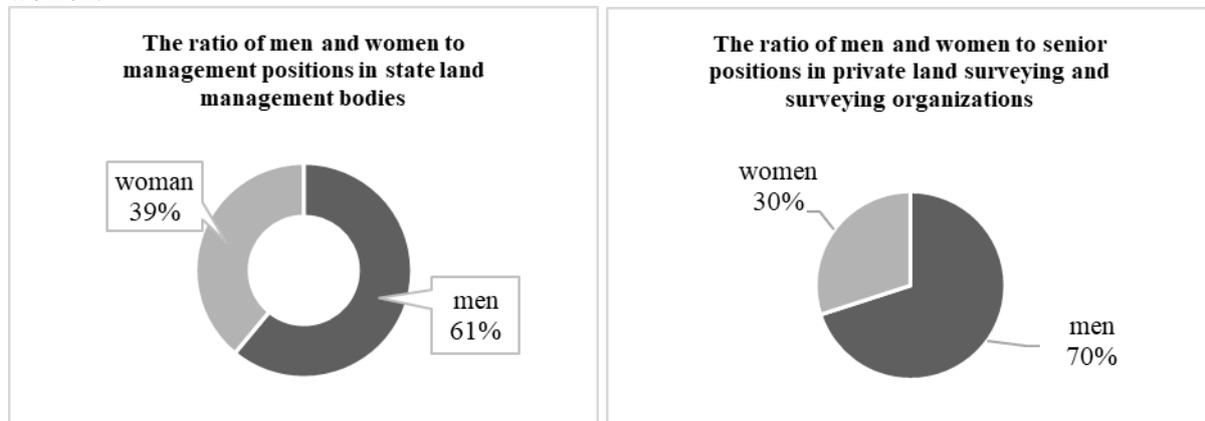


Fig. 2 The ratio of men and women to senior positions in private land surveying and surveying organizations

Thus, the analysis of statistical data shows that at the moment most management positions are held by men. The higher the social status of the position, the fewer women in these positions.

Conclusions and proposals

Nowadays approximately equal numbers of men and women are involved in land relations infrastructure. There is no clear trend of gender inequality in the territory of Ukraine, only in some eastern regions the preference of women is evident, while in the west there is a clear preference of men. But despite the high proportion of women among land appraisers, land surveyors, and geodesists, they typically hold lower-level positions and have fewer career prospects than their male colleagues. Thus, there is a gender inequality in the labor market in Ukraine, which is expressed in the fact that women in general occupy less prestigious and paid jobs, earn less on average, less often occupy senior positions, but in the meantime have higher levels of education.

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