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SCIENTIFIC REVIEW

Women in Forestry Sector in Bulgaria



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ABSTRACT

This paper aims to characterize the employment rate, performance as well as economic and social work conditions for women in forestry sector in Bulgaria. It also aims to characterise the impact of factors affecting competitiveness and productivity corresponding to females employment, such as: formation of wages; education and training, insurable earnings for women in the sector, etc. At the end, some conclusions and policy recommendations are drawn. The study is based on literature and legal framework survey, as well as on statistical analysis and individual interviews.

KEY WORDS: *forestry, competitiveness, labour productivity, women, Bulgaria*

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Introduction

One of the main strategic objectives of the European Union (EU) is to achieve inclusive economic growth by increasing the level of female employment in the Member States of the Union. There are some specifics of employing women in forestry sector. On the one hand a major challenge to the forestry sector development in Bulgaria is the loss of competitiveness that results to negative consequences such as slowing the economic growth and ineffective utilization of forest resources in the country (Chobanova R., 2016, p.61). On the other hand, the different activities in forestry are not equally attractive for women and this has to be taken into account when identifying where increasing the employment is leading to better labour productivity and competitiveness of the sector. In this respect it is important to characterize the employment rate, performance as well as normative and real work conditions for women in Bulgarian forestry sector and factors affecting them.

Employment of women in the forest sector in Bulgaria

Generally in Europe the employment rate is lower among women³. The EU strategy aims to achieve 75% employment rate of females and males at the age between 20 and 64 years, by 2020. On a national level, a priority objective of Bulgaria is to increase the employment rate of people at the age between 20 and 64 years, up to 76% by 2020 (Europe 2020: National reform programme, 2015, p. 49). The number of employed women is approximately 9 percentage points more than the number of employed men in 2015⁴. Such kind of data could be considered as positive when it comes to the participation of females in the labor market, which as noted, is almost equaled to that of males.

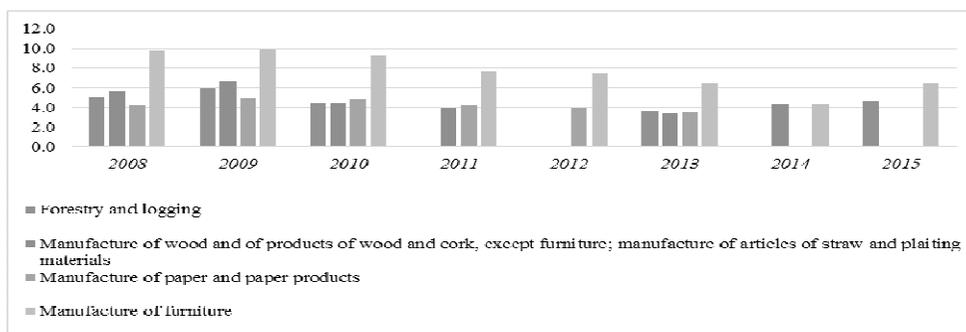
Employment of women in forestry sector differs from the general employment in the economy. For the period 2008 - 2015 the employment of women in forestry sector is lower, more specifically in "Forestry and logging"; "Manufacture of wood and of products of wood and cork, except

³ Employment rate is 63% among women and 76% among men at the age between 20 and 64 years.

⁴ The data is based on published information in National statistical institute for employed men and women in the Northwest, North Central, Northeast, Southeast, Southwest and South Central regions of Bulgaria.

furniture; manufacture of articles of straw and plaiting materials"; "Manufacture of paper and paper products"; "Manufacture of furniture" (see figure 1)⁵. The highest number of employed females is reported in the "Manufacture of furniture" but their share, however, is only 1/5 of the total number of the employed in the industry. One of the most underdeveloped industries based on women employment's rate is "Forestry and logging". In addition, for the time period that is analyzed, all considered sectors reports an outflow of female labor force. The lowest employment rate of women is for the years 2014 and 2015. Therefore, although at national level there is overall improvement in employment rates, the data for the forestry sector indicates lower activity in the labor market.

Figure 1: Employed women in "Forestry and logging"; "Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials"; "Manufacture of paper and paper products"; "Manufacture of furniture", 2008-2015, thousands



Source: calculated using data from Eurostat, 2016, [online]: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=for_emp_lfs&lang=en, Last update on 21.12.16, Extracted on 27.01.17

Education and Training of Women Working in the Forestry Sector

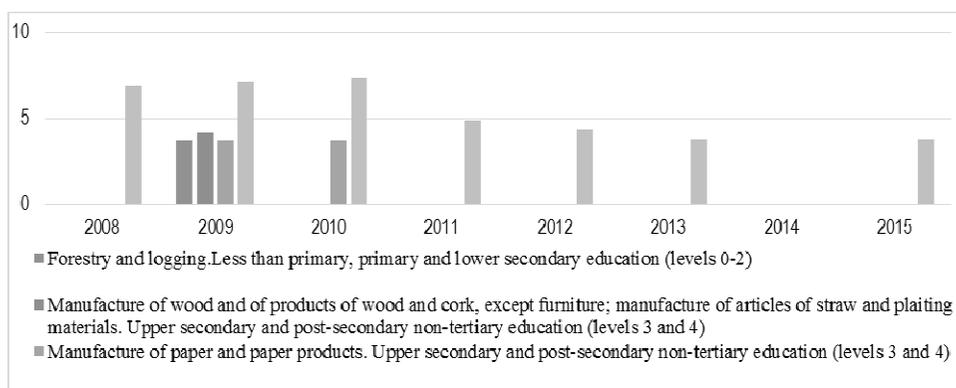
Among the main factors affecting productivity and competitiveness is education. For that purpose by 2020, 40% of women and men who are at the age between 30 and 34 years should acquire tertiary or equivalent education

⁵ The data is from Eurostat for the period 2008-2015 on the basis of analysis of employed men and women only for the periods for which there is published data in these sectors.

(Europe 2020 strategy for smart, sustainable and inclusive growth, p.13). The national contribution to achieve this objective concerns the target - by 2020 to increase the percentage of people, falling in the age group between 30 and 34 years old, who have tertiary education up to 36%. In 2016 this percentage is 33.4%, which marks a positive trend.

The impact of education in forestry sector to the growth differs from the national level. Taking into account the fact that women who are employed in the forestry sector in Bulgaria have low level of education and skills (see figure 2) the impact of this factor could not be defined as positive for improving competitiveness in the forestry sector. In addition, none of the considered forestry sectors reports data for employed women that have tertiary education.

Figure 2: Educational level of women in "Forestry and logging"; "Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials"; "Manufacture of paper and paper products"; "Manufacture of furniture", 2008-2015, thousands



Source: calculated using data from Eurostat, 2016, [online]:

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=for_emp_lfs&lang=en, Last update on 21.12.16, Extracted on 27.01.17

In order to identify the reasons for such lower level of female employment in forestry sector we will examine the impact of general for the sector development factors such as minimum wage, minimum monthly insurance income, as well as specific for female employment factors such as differences in salaries and maternity leave.

Gross National Minimum Wage and Minimum Monthly Insurance Income of Women Employed in Forestry in Bulgaria

There is a common understanding, supported by several arguments that the correlation between women's participation in the labor market and the payment they receive is positive (Cuberes D., M. Teignier, 2011, p. 9). On other hand, there are no significant deviations from the way of forming the wage of employees working in the forestry sector in Bulgaria compared to other economic sectors. Employees in the forestry sector that are receiving additional remunerations for working overtime and on Sundays are almost twice less than the country's total number of people receiving additional payments (Stefanova - Bogdanska D., 2014). In this context, women that are employed in the forestry sector relay mainly on the gross wages that are specified in their employment contracts.

For the purposes of forming the contracted gross wage significant influence have the minimum wage⁶ for the country per year and the minimum monthly insurance income by professions and positions per year. The minimum wage regulates the minimum amount of salary, which women who are employed in the forestry sector must receive as remuneration. As a result of changes in economic, political and social level, the amount of the minimum wage (for all professions and positions in the country) increases annually and in 2017 it is 460 leva. It should be noted that Bulgaria is in the group of countries in Europe in which the monthly minimum wage is below 500 EUR ⁷. This in turn is a factor that affects the income of employed women in the forestry sector. The annual changes of the minimum wage are essentially a prerequisite for changes of the average annual salary which employed females in "agriculture, forestry and fishing"⁸ receive. From 2010

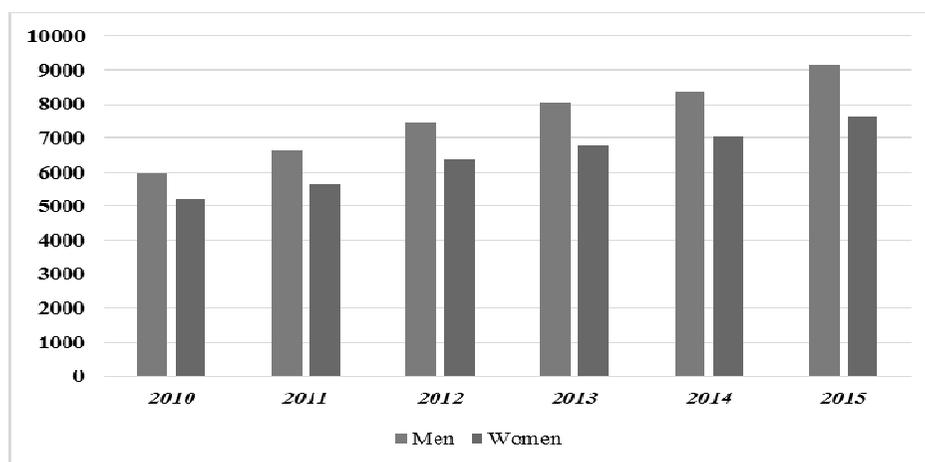
⁶ The minimum wage is the lowest wage on an hourly, daily or monthly rate that employers may legally pay to their employees. It has gross nature, must be form based on market principles and is annually determined by the state.

⁷ In the scope of the group of countries in Europe where the monthly minimum wages are below EUR 500 except our country falls further Romania, Lithuania, Hungary, the Czech Republic, Latvia, Slovakia, Croatia, Estonia, Poland and Albania, Montenegro, FYR Macedonia/ Republic of Macedonia and Serbia. From all the countries that are included in this group only Albania and FYR Macedonia/ Republic of Macedonia have less monthly minimum wages than Bulgaria.

⁸ In terms of national statistics it should be noted that the statistical data published in the NSI includes the information for the entire sector "agriculture, forestry and fishing." There is no published detailed data concerning only the forestry. Therefore, the following data and

to 2015 there is insignificant increase of the average annual salary of women who are employed in the sector (see figure 3).

Figure 3: Average annual wages of men and women employed in sector "Agriculture, forestry and fishing", 2010-2015, in leva



Source: calculated using data from National Statistical Institute, 2016; [online]: <http://www.nsi.bg/bg/>, last open on 15.04.2017

The gender equality can enhance competitiveness and economic productivity, which is a prerequisite for achieving higher economic growth (Cuberes D., M. Teignier, 2015, p.1; Revenga A., S. Shetty, 2012, p. 40-43). In the forestry sector in Bulgaria there is a pay gap between men and women which is increasing through the years (see figure 3). As main reasons for the existence of such gap the following factors can be mentioned - the presence of discrimination in the workplace; different working tasks that are given to men and women; various practices that employers provide to men and women regarding their career development and skill training; underestimation of the kind work and skills women can develop or already have, and the opportunities to reconcile work and family responsibilities (Tracking the gender pay gap in the European Union, 2014, p. 5-7).

The minimum monthly insurance income is introduced in Bulgarian legal framework in 2003. It serves as a basis for calculating the compulsory and voluntary contributions that are made for and by the insured person. For

conclusions are made for the whole sector "agriculture, forestry and fisheries" in which forestry is included.

the representatives of female sex social security contributions have an important role in determining the amount of compensations that must be paid by the National Insurance Institute in terms of general sickness and maternity. For the period 2010 - 2017 an increase of the minimum insurance income is noted among all qualifying groups of professions employed in forestry sector (see table 1). This increase is largely due to changes in the minimum wage during the years. For forestry jobs that do not require special qualification from 2010 to 2013 (inclusive) the amount of minimum monthly insurance income is higher than the amount of minimum monthly wages for the same period. From 2013 to 2017 (inclusive) both indicators are aligned. For the period 2016 - 2017 the amount of the minimum monthly insurance income for skilled workers in forestry is similar to that of the minimum wage for the country. In this basis, the legislature introduces equal insurance relations to the qualified and unqualified staff. In terms of minimum monthly insurance income, fishing and agriculture (covered by sector - "agriculture, forestry and fishing") offers better opportunities than those of forestry for women – managers, specialists and workforce, who does not occupy managerial positions. This conclusion is based on the fact that for the period 2012 - 2017 the amount of the minimum monthly insurance income for qualified and unqualified staff in fishing and agriculture is higher than in forestry (Social Security Fund Budget Act, Appendix № 1 to Art. 9, para. 1, p. 1, by years).

The low rates of the minimum insurance income have negative effects to maternity leave and the opportunities for raising a child. In order to increase female participation in the labor market in the forestry sector, it is appropriate and helpful to increase the minimum insurance income and to bind it to the wages and qualifications of employees. This could help women towards reconciling work, private life and motherhood.

Table 1: Minimum monthly insurance income in forestry, 2010 – 2017, in leva

Years	Managers	Specialists	Technicians and associate professionals	Administrative support	Employed in public services, trade and security	Skilled workers in agriculture, forestry, hunting and fishing	Qualified workers and craftsmen	Machinery operators and assemblers	Professions requiring special qualifications
2010	621	444	392	380	320	352	392	397	270
2011	655	466	412	400	336	370	411	457	283
2012	684	487	431	418	351	387	429	478	296
2013	700	500	450	430	390	400	440	490	320
2014	750	525	472	451	400	400	450	490	340
2015	780	546	491	469	416	416	468	510	360
2016	900	620	530	480	450	420	520	500	420
2017	900	620	530	480	460	460	520	500	460

Source Collected from Social Security Fund Budget Act, Appendix № 1 to Art. 9, para. 1, p. 1, per years

Maternity Leave as Factor for Increasing Women's Employment

In 2014 employed women in Bulgaria between 20 and 49 years old who have children under the age of 6 are approximately 13.5 percentage points less than employed women without children. This data is above the EU average for the same period (13.2%) (Labor force participation of women, 2015, p.4). It is believed that parenting has a significant impact on female employment (Country report Bulgaria, 2016, p.38), which is a factor that has strong impact on the productivity and competitiveness of the forestry enterprises. Main factors that affect the participation of women with children under the age of 6 in the labor market are: legal rights of women, regarding their rightful maternity leave and compensations for it; access to services related to child care; working hours and the opportunity for part-time work; and working conditions in the workplace.

In accordance to the European legal framework (Council Directive 2010/18/EU), Bulgarian legislation defines the pregnant women and mothers as a risk group, providing them specific legal protection. In this regard female employees in forestry sector have the right to leave for 410 days due to pregnancy and childbirth for each child (Labor code, article 163). During maternity leave, women are paid compensation, which is 90 % of the average gross wage or the average daily insurance income, on which the social security contributions for a period of 24 calendar months before the month of the maternity leave are calculated. However, the amount of financial support provided by the state and calculated on this basis is below the necessary parental resources that are needed for raising a child. It is so, because of the fact that the compensations are directly related to the social security income which minimum rates (see table 1) are equivalent or close to the gross national minimum wage. The legislature allows the maternity leave of 410 days to be transferred from the mother to the father who should take care of the child. This provision does not encourage fathers to take maternity leave, despite the fact that the leave is paid and recognized as working experience. Such circumstances can be seen as main reasons women to refuse to terminate their maternity leave and to return to work, despite the low amount of compensation provided by the state for raising up a child¹.

¹ The conclusions are based on conducted individual interviews with women, working in forestry sector, who are currently on maternity leave, pending their pregnancy and birth, or parents of children up to 6 years old.

In Bulgaria for the period 2007-2014 the percentage of women who does not work due to maternity leave or to take care of elderly has increased by 5 percentage points (Labour force participation of women, 2015, p.15.). It should be noted that there is a risk of loss of skills and competencies related to protracted maternity leave (European Commission 2013 Employment and Social Developments in Europe; OECD (2012) Closing the Gender Gap). Because of that childcare services could help mothers to raise their children while working and by that to reduce the percentage mentioned above. However, childcare services in our country are underdeveloped and only 11% of children under the age of 3 attend kindergartens for more than 30 hours per week (Country report Bulgaria, 2016, p. 38). This is 23 percentage points below the target of the European Council in this area. Fees of childcare services are identified as the main reason for the underdevelopment in this area. In this regard, fees in Bulgaria for childcare for all-day service for one child in 2012 are approximately 5% more than the net income of a family with two members (Labour force participation of women, 2015, p.18). The lack of childcare facilities is the second most important reason pointed out as a factor negatively affecting the use of such kind of services.

When the maternity leave is over and the mother must return to work she has the rights to offer her employer, for a certain period of time, to change the employment relation in connection to the duration and distribution of working hours (Labor code, article 167, p. b). This legislative rights helps mothers through the adaptation process from maternity leave to perform well on their job. However, part-time work is not a common practice in Bulgaria and less than 5% of employees do not work full-time jobs (Labour force participation of women, 2015, p.5). It should be noted that till now, the awareness of women regarding their legislative rights on issues concerning maternity leave was not an object of reproductive population attitudes study. Because of that, there are no data on women who benefited from the legislature rights for mothers, imposed by the law.

Economic literature claims that a factor indirectly affects competition on the labor market is the reproductive behavior of women (Gencheva, M., J. Marinova, p.70). This behaviour is mainly connected to concerns over the negative impact of workflow and working conditions on the embryo (fetus). In this regard, some possible reasons for miscarriage among women are hard physical labor tasks, presence of harmful working conditions and workplace stress. For the period 2006 - 2010 accidents in forestry sector are mostly

associated with loss of control over the machine, vehicle or forklift trucks; loss of control over hand tools or objects; movement of the body during physical load (normally leading to an internal injury); movement of the body that can lead to fracture, cleavage, sliding, falling, collapsing; slipping or tripping to fall; falling. However, only small share of employees in forestry sector feels that their health is at risk during work and that their job has a negative impact on their health. In this regard, although there are work accidents reported in forestry sector, there are relatively low rates of absences because of health reasons ("Prevention Safety and Health at Work" job security, life, p.7). In addition, the legislature imposes the requirement enterprises to have rooms for personal hygiene of females and for rest of pregnant women. There is a legislative prohibition women to participate in difficult and hazardous work tasks. Because of that, enterprises must transfer females to suitable jobs or must alleviate the working conditions for all pregnant women or nursing mothers that are employed in the organization. Therefore, forestry sector in Bulgaria is a sector with a low risk in terms of safety and security for women.

Conclusions and Recommendations

As a main conclusion it could be noted that participation of females in the forestry labor market is lower than of males. This state of the art is resulting from the influence of several factors such as economic, legal and social.

In order to stimulate employment rate among females in forestry sector it should be eliminated the pay gap between genders. The foregoing can be accomplished through increase of the wage and the monthly insurance income. This should not be done lightly, but the rise must correspond to the specifics of the tasks performed by woman as well as her education, skills and competences. It is appropriate to introduce requirements in the job description for each position, regarding not only the level of education but obligation for yearly increase the level of knowledge and skills of workers (skilled and unskilled). The obligation should not be interrupted during maternity leave. Because of that, development and implementation of virtual educational platforms (VEP) could be seen as a form of a long distance learning that could benefit all workers that must be absent from work for a long period of time.

The main social factors that are having an impact on women's employment rates may be linked to the possibility females to combine work tasks with their personal lives. This has strong impact mainly to future and current mothers and mothers of children under the age of 6. By providing childcare services, creating work environment conducive to the maintenance and development of the social status and introducing flexible full-time working hours for mothers, employers can support the balance between women's work and their family obligations. It is appropriate during safety briefing on labor safety, some of the lessons to have focuses on women and maternity rights legislation. In particular, females' rights for diferent working conditions and prevention of risk factors that can lead to miscarriage. Such social policies must be disclosed in the non-financial statements and anual forestry enterprises's reports, which would promote and enhance the image of organizations that have adopted them.

From the legislative point of view it should be noted that despite the process of harmonization between national and European legislation, no substantial progress in women employment in forestry sector, was achieved.

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