

Recruiting Women into Scottish Wood Chain Industries

Dr Dan RIDLEY-ELLIS
Principal Research Fellow
Centre for Timber Engineering, Napier University
Edinburgh, UK

Dr Suzi MACPHERSON
Research Fellow
Employment Research Institute, Napier University
Edinburgh, UK

Emily THOMSON
Lecturer
Caledonian Business School, Glasgow Caledonian University
Glasgow, UK

Summary

In common with many countries, the composition and attitudes of Scotland's population are changing. It is the regions where the industries in the wood products value chain are based that are expected to change most dramatically. These industries continue to draw their employees from traditional routes and are already reporting difficulty in recruiting and retaining enough people. This situation is expected to get dramatically worse over the next 20 years if employment practices are not changed to reflect the diversity and aspirations of Scotland's modern workforce. The necessary changes are linked to the current low proportion of female workers, but are aimed at improving employment generally. This paper summarises the findings of a two-year study of the Scottish wood chain, but the recommendations are applicable to other countries facing similar challenges.

1 Introduction

The forest and timber industries influence many aspects of Scottish society both directly and indirectly. As well as supporting a booming timber frame industry, forests provide support for employment, tourism, recreation and biodiversity. However, in common with many countries with mature economies, the workforce is changing. An ongoing fall in both the fertility rate and the proportion of the male population that is economically active are expected to combine with population movement to put pressure on the regions where forestry and wood processing are most important. This coincides with 30% increase in forecast forest output [1].

Wood chain employers already face difficulty recruiting and retaining staff in an economic climate of high employment and diverse career options. People disregard job opportunities in the sector because they do not meet, or are perceived not to meet, their requirements. Employers continue to draw on fading traditional routes of recruitment and the workforce is among the least diverse of all industries. Women represent nine tenths of the growth in the number of economically active people in Scotland over the last decade [2] and wood chain employers will face a serious challenge in keeping pace with the potential for growth if they do not address the low proportion of women in the workforce. Many of the actions necessary will also help improve the recruitment and retention of male workers.

2 The structure of Scotland's wood chain industries

Although part of the United Kingdom, Scotland has had limited self-government and separate legal system. The forest and timber industries are particularly important to the economy and have been identified as a core part of the Scottish Government's strategy to deliver economic, social and environmental aims, particularly in rural areas [3].

It is difficult to estimate the current number of people directly employed in the forest products industries, but it is thought to be about 0.7% of the total working population [4]. Forestry,

primary processing and related activities employ about 0.4% of the working population [5]. This is about a third of the figure for Scotland, England and Wales combined despite Scotland having just 8.7% of Great Britain's population. However, in the 'Dumfries and Galloway' and 'Highland' areas of Scotland the figure is much higher at 2.8% and 1.9% [2,5]. There are also a high number of forestry and processing jobs in the 'Strathclyde' area, although as this includes Glasgow, Scotland's most populous city, the proportion of total jobs is much lower.

Forests cover 17% of Scotland, and represent 47% of the United Kingdom's total forest area. In Scotland, 35% of the forest area is owned by the Forestry Commission, a Government body, although this is managed for a variety of reasons in addition to timber production. A further 2% is owned by other public bodies and by local authorities. Private forestry and timber businesses own 2.2% and a further 8% is owned by other private businesses. The majority, 43%, is personally owned [1]. In comparison with the rest of Europe, the forest cover is low, the EU27 average being 37%. However, the softwood availability is forecast to increase by 30% by 2020 [6].

The sawmills in Scotland process 2.4 million green tonnes of softwood a year, with 44% of the sawnwood from large mills going to the construction industry with the rest going to fencing, packaging and pallets [1]. However, as is the case for the UK overall, the bulk of the domestic timber production goes towards low added value uses. The timber frame industry uses predominantly imported sawn timber. Indeed, per capita the UK is currently one of the world's largest importers of timber and just 30% of the sawn softwood used is grown in the UK.

The timber frame industry in Scotland has boomed in recent years and represents three quarters of all new home starts. In the UK as a whole it is growing strongly representing 20% of all new starts and there is particularly strong growth in larger houses and medium rise flats [7]. These figures, together with the forecast increase in output from Scottish forests represent a major economic opportunity for the wood chain industries in Scotland.

However in a recent survey of business health, 'employing and retaining staff' was identified as the second biggest problem facing Scottish forest and timber businesses (after 'the economic environment') [8].

3 Women in the current wood chain workforce

In Scotland 48.2% of the current working age population is female and women represent 48.0% of people in jobs, although a higher proportion of women (17%) than men (3%) work part-time [2]. It is difficult to obtain accurate and comprehensive figures for the levels of female employment in the forest and timber industries because the absolute numbers are so low. There is variation by company type and by role, but various analyses place the figures in the order of 1 in 10. This is about on a par with the general construction industry and about half the aggregated level for agriculture, forestry, hunting and fishing.

However, there are significant differences when roles are examined separately. Statistics from a recent voluntary industry survey of forest and timber jobs (excluding timber frame and construction) indicated that 72% of admin and clerical roles, and 7% of management roles, in the sector are performed by women [9]. Just one in twenty of the technical workers are female and the proportion of female machine operators is unmeasurably small. A separate voluntary survey of 13 UK softwood sawmills indicated that 7% of the total workforce in primary processing is female [10].

Figures for the timber frame industry do not appear to be available, although they are thought to be similar to building and construction generally. Government labour force surveys [2] indicate that 13% of the construction workforce in Scotland is female, but that most of these women work in secretarial and clerical roles (91% women). Design and management is 15% female, while women account for less than 1% of craft and trade workers.

Female representation in construction has remained unchanged over the last decade, and female employment in forestry is gradually falling (Table 1). Female employment in wood and wood products (excluding furniture) is rising sharply, but this is largely due to reductions in types of jobs performed mainly by men (i.e. skilled trades). In both wood and wood products, and construction, about a third of the women work part-time, while the numbers of part-time male

workers are currently very small (about 1%). In forestry most workers are self employed but the level of part-time working is still much higher for women (17%) than it is for men (3%).

Table 1 The percentage of women workers by sector for the UK (with 2012 projection) [11]

	Year		
	1992	2002	2012
Forestry	14.3%	12.5%	11.5%
Wood & wood products (excluding furniture)	16.2%	23.4%	37.1%
Construction	10.6%	9.9%	9.9%

4 Pressures

Scotland’s wood chain employers will face challenges that arise from a combination of large changes in the demographics of Scotland’s population and the demographics of their own workforce. On top of this there are ongoing social changes that are changing what people seek from their working arrangements.

4.1 Demographic pressures

Scotland’s population is forecast to change in two ways. Increased life expectancy and falling fertility rates mean that the composition of the population will change, having proportionally more people over retirement age and proportionally fewer people of working age. On top of this there are population movements within Scotland and across its borders.

By 2031 government forecasts of population [2] suggest an 81% increase in the number of people over 75 and a 7% decrease in the number of people aged between 16 and 29 with the overall number of people of working age staying more or less the same. However there are regional differences that make the situation worse for the wood chain industries. For example, in Dumfries and Galloway, the area where the highest proportion of residents work in forestry and primary processing, there is already a higher ratio of older people than the Scottish average.

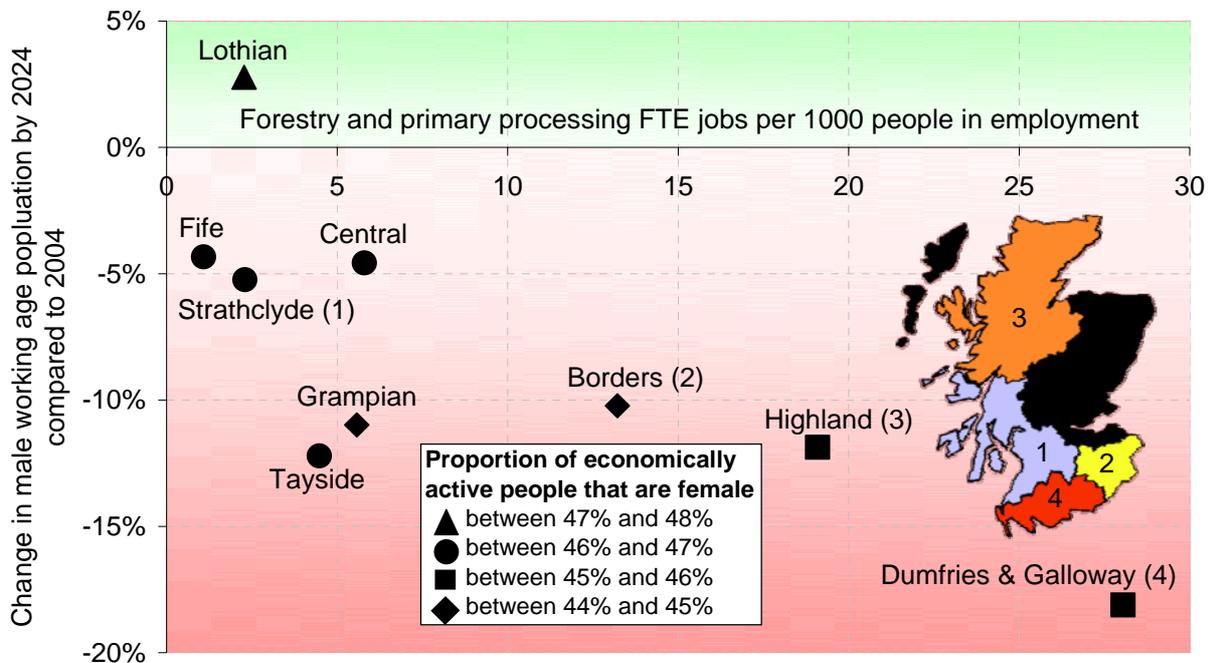


Fig. 1 Forestry and primary processing jobs in the regions of Scotland and forecast changes in the male working age population [2,5]

Because the vast majority of people currently working in the wood chain are male, it is most useful to look at the forecast changes in the male working age population. Figure 1 shows the predicted change from 2004 levels [2] as well as the proportion of forestry and primary processing jobs as measured by the last substantial survey (1998/9) [5]. The three areas where forestry and processing employ the highest proportion of people (Dumfries and Galloway, Highland and the Scottish Borders) are also those that are expected to experience the largest drop in male working age population (between 10 and 20%).

There is also additional pressure that arises from the demographics of people working in the wood chain. A recent industry survey [9] estimated the average age of workers (excluding timber frame) to be about 45, whereas the mean age of working males in Scotland overall is 40. This means that many will reach retirement age in the near future and the rate of recruitment will need to increase to compensate.

This aging population means a diminishing pool of people to recruit from, particularly those under 30 who are less likely to be established into another career. Also, with fewer working age young people entering the labour market, this group of people will, in the future, have more choice about the types of work that they do.

4.2 Social pressures

Since 1984, the growth in Scotland's workforce has been due largely to women becoming more economically active (either in work or looking for work). Whereas the total number of economically active men fell by 6%, the increase in economically active women was 25%. This effectively meant that more than 4 in 5 of the additional jobs in the economy were filled by women. This is being driven by ongoing trends for decreasing economic activity rates for men and increasing economic activity rates for women (figure 2).

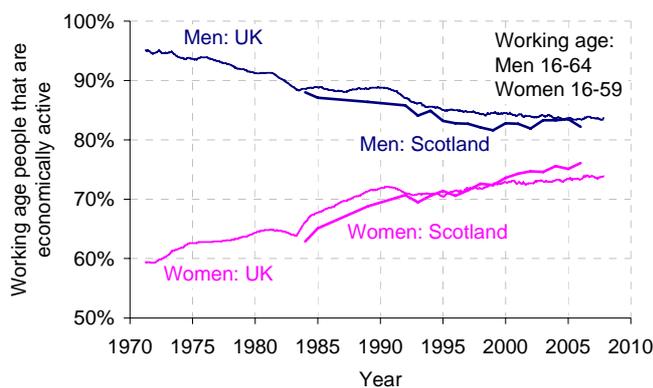


Fig. 2 Historical trends in economic participation of men and women in Scotland and the UK [2]

As with the UK workforce as a whole, people in Scotland are increasingly demanding a relationship with work that allows them to fulfil their family responsibilities and does not demand that they sacrifice their social and home life in order to achieve a successful career.

In the UK more people (52% of men and 48% of women) would like to work more flexible hours [12]. This trend is even more apparent among younger people, with 90% of young people wanting a job that would enable them to effectively combine work and family life [13].

Mothers remain the main child-carers in the household, but the evidence is that both parents desire to spend more time with their children. UK employment law now allows for paternity leave as well as maternity leave and for parents to set their own balance of the two to a certain extent. Some 70% of fathers would like to be more involved in childcare than they currently are [14].

As well as responsibilities for children, working age people are more involved now in caring for their own parents as they enter old age. This trend is expected to rise further as people have children at older age, and live longer. By 2030 there are expected to be 80% more people over 75 being supported by the same number of working age people as there are now.

A recent study suggests that some of the critical factors that have historically supported recruitment in the wood chain will not be as effective in the future [9]. In the past, many young people would follow their parents and relatives into an industry, but this is no longer happening. In fact, (probably because of low morale in some parts of the wood chain) some wood chain workers actively discourage younger family members from doing this.

Additionally, in the past, most households in communities near large woodlands would have had one or more family members working in the wood chain or in agriculture. However, as the people living in these communities change, and the industries become less labour intensive these connections are reducing. As a result, there is a widespread lack of knowledge of the range of jobs in the forest industries, with many people having a narrow idea of what is involved. Indeed the public perception is riddled with problematic misconceptions that are partly fuelled by an out-dated image of the sector that is, to some extent, supported by the forest and timber industries in the way they promote themselves. This image is thought to be helpful in recruiting just a small proportion of men into the industry, and even fewer women [15].

5 Solutions

Given these constraints, employers will need to look to other groups of workers in order to maintain current levels of recruitment or expand their activities.

5.1 Women workers

Women are currently a large, and essentially untapped, pool of potential labour for the Scottish wood chain. The economic activity rate for women continues to increase in Scotland and at a higher rate than the UK overall. In areas where a higher proportion of jobs are in the sector, the proportion of economically active women is slightly lower than the figure for Scotland overall (figure 1). However, this represents an opportunity as more women may be encouraged to enter the job market given the right incentives.

Indeed due to higher rates of migration out of rural areas for young men, and the slightly better life expectancy of women, the female proportion of the working age population in forestry areas is set to increase [2]. This forecast change is most stark for the Scottish Borders area where the number of men aged 16-49 is expected to fall by 20%, while the number of women aged 16-49 increases by 10%. This means almost 60% of people in that age group will be female. In Dumfries and Galloway, where there is expected to be the most dramatic fall in the number of men aged 16-49 (27%), the number of women in this age group is also expected to fall, but by a smaller amount than for men (22%). In the Highland area the drop for men is 21% while the drop for women 14%.

There is a general view in Scotland that people's suitability for different jobs is not determined by their gender, and this is reinforced by anti-discrimination legislation. However, the wood chain industries are firmly linked to assumptions of masculinity in the public consciousness. This means that young women tend not to see this as an opportunity for them, and neither do their parents or teachers. This stems from a combination of a poor public understanding of the industry and the existing gender imbalances.

In addition to this poor public understanding, women tend not to be included in traditional routes of recruitment into the wood chain industries (family connections and work experience). This means those women who are interested in working in the sector find it difficult to find information about jobs and routes into them.

It is also the case that women generally still maintain the largest share of childrearing responsibility. Women planning their careers tend to favour employment that gives access to flexible working options. At present, the prevailing idea of 'flexible working' in the wood chain industries is of employees being flexible to employer demands.

5.2 Immigrant labour

The industry is currently turning to migrant labour, mainly from Eastern Europe, as the main way of satisfying its immediate recruitment shortfalls. A recent report of skills in the UK wood and wood products sector suggests the proportion to be about 10% of new employees [16]. A recent survey of UK softwood sawmills put the figure at 16% [10]. This is generally viewed as a positive thing, especially where the jobs being filled are low skilled jobs that are unattractive to local workers. However, this short-term solution has certain risks attached. The forest and timber industries have traditionally had long lengths of service and a communal sense of commitment to the long term, particularly in forestry. Immigrant labour is, by nature, more short lived and there is concern that people will feel less of a stake in the future of the business or

forest. This supply of labour is also at risk from political and economic changes that can take place over a very short period of time. It is unlikely that flow of cheap and willing labour from Eastern Europe will continue into the longer term. It also has the effect of suppressing wages, which could undermine local recruitment initiatives and worsen the labour shortage.

5.3 Career changers

People seeking to change careers may find some jobs in the wood chain attractive. As with women this group needs accurate and clear information on the nature of available jobs and entry routes. Flexible working practices and training and development opportunities are likely to provide further incentives.

6 Recommendations

The required actions to increase the number of women in the Scottish wood chain will be, by no means, easy. However, they are necessary and will pay dividends to businesses in the longer term. To be effective at encouraging women into the forest and timber industries there are actions required on a range of inter-related issues. These will improve recruitment and retention generally, but are of particular importance for women.

6.1 Flexible working practices

Responding to future workforce needs means recognising that more workers (both women and men) are looking for more opportunities to work flexibly. This is a matter of particular importance for women who, on the whole, have more responsibilities in caring for children and other relatives.

Incorporation of flexible working practices is not an easy matter for the forest and timber industries due to the nature of some of the work involved. However, there are generally more possibilities than employers think. There are sound business reasons to engage with this issue; and the sooner that these are considered and implemented by businesses, the quicker they will be ready to meet the current and future workforce challenges that they face. Benefits that follow may include:

- Improved recruitment and retention
- Reduced casual sickness absence
- Improved productivity
- Improved staff morale and commitment

The considerations of particular importance to women workers are:

- Being more open to flexible working requests wherever possible
- Recognising women's non-linear career paths when considering potential promotions
- Providing support mechanisms for women returning to work after maternity leave

Flexible working policies can also help improve the progression of women into managerial positions, which helps improve workforce diversity in the longer term.

6.2 Routes in and the public image of the wood chain

Clearly, when it comes to careers, both men's and women's choices are heavily influenced by cultural and social norms and values. There is significant evidence to suggest that stereotyped assumptions about which jobs are suitable for both men and women begin at an early age and that children largely conform to gendered expectations in terms of their own choice of future career. Gender stereotypes exist about both the nature of jobs themselves and about who should perform them.

It is here that the wood chain industries face a particular problem. The public idea of the sector is largely one of hard, physical labour and the idea of women in the industry is still seen as a novelty by the media [e.g. 17]. This is not helped by the current lack of careers information for the wood chain. What little information does exist tends to lean on the public image of macho

work and tends to feature very few, if any, female role models. Most of the potential careers in the wood chain are being ruled out by young people on the basis of an image that does not represent the true nature of a given occupation, or describes only one aspect of a multi-faceted job.

Employers can take positive action to address this by:

- Ensuring career services are aware of the full range of jobs available in the forest industries and the different facets of each of these jobs.
- Better promoting the benefits to society of working in the wood chain, in particularly those linked to the environment.
- Ensuring that materials portraying the forest industries show images of female, as well as male role models. The temptation to play to gender stereotypes and traditional images of the industry should be resisted to avoid reinforcing misconceptions.
- Providing ‘taster’ sessions or work experience to allow young people to experience the forest industries in a comfortable environment.
- Advertising in places that will be seen by women and in ways that will engage their interest.
- Being more open-minded about the skills and qualifications necessary for a role.
- Suppressing the current masculine workplace culture, including expressions of sexist humour and workplace decoration, which make some female trainees and visitors feel excluded.

7 Concluding remarks

Even allowing for net economic migration into Scotland, demographic trends mean that there will be an inexorable squeeze on the working age population. This will coincide with the retirement of a significant proportion of the current wood chain workforce and population movement away from traditional forestry locations.

Even if there is no expansion within the forest and timber industries, to maintain current numbers in the workforce there will have to be an improvement in the recruitment of men in face of diminishing numbers, greater effort to recruit men from overseas, or improved recruitment of women workers.

Women provide the best opportunity for a sustainable long-term solution, but the numbers of women in the industry will need to be doubled or tripled by 2024 to compensate for the anticipated fall in recruitment of men. This especially relevant in the Scottish borders area where the number of working age women is actually expected to increase while the number working age men decreases. This requires proper consideration of gender in recruitment and careers initiatives.

It also means thinking about flexible working practices, which will also be demanded by a greater proportion of men. Many of the changes are likely to be made compulsory by law for equality reasons and many are already demanded by legislation covering public bodies like the Forestry Commission.

There is no institutional sexism in the wood chain at management level, but there is an implicit assumption that the problem lies with women not applying for jobs, rather than anything employers are, or are not, doing. There is also some evidence of unhelpful thinking at operational level among both male and female employees which leans partly on an out-dated image of the wood chain rather than modern reality. The current image of the wood chain is a real problem. Industry needs to make less of the macho elements, and more of environmental aspects which will make more appealing to young people generally, but women particularly.

Rather than being issues affecting the ‘long term strategy’ for the sector, these are real threats that will have to be tackled now for the industry to stay competitive in the medium to long term. However, this also represents an opportunity. Recruiting from a more diverse pool of workers means companies can draw on more a varied skills base and work experience.

8 References

- [1] Forestry Commission, *Forestry Statistics 2007*, Forestry Commission (Economics and Statistics), Oct 2007.
- [2] Office for National Statistics UK / General Register Office for Scotland
- [3] The Scottish Executive, *The Scottish Forestry Strategy 2006*, Forestry Commission Scotland, 2006.
- [4] ESEP, *ESEP Economic and Labour Market Intelligence Annual Report 2004/5*, East Of Scotland European Partnership, 2005.
- [5] Forestry Commission, *Forest Employment Survey 1998/9*, Forestry Commission (Economics and Statistics), Jan 2001.
- [6] Halsall L., Gilbert J., Matthews R., and Fairgrieve M., *United Kingdom New Forecast of Softwood Availability*, Forestry Commission 2006.
- [7] UKTFA, *Market report*, United Kingdom Timber Frame Association 2004 & 2007
- [8] Forestry Commission, *Business Health in the Forest and Wood Industries*, Forestry Commission (Economics and Statistics), Feb 2005.
- [9] Lee R., Smither M., Lee S., and Blake H., *A Survey of People in the Forest Industries in South Scotland*, Barfill Management Centre for the South Scotland Forest Industries Cluster, 2007.
- [10] McGuire D., *Human Resource Management Practices in UK Softwood Sawmills: A National Survey*, Napier University, <http://cte.napier.ac.uk/firrs/info> in press.
- [11] Dickerson A., Homenidou K., and Wilson R., *Working Futures 2004-2014 Sectoral Report*, Institute for Employment Research, University of Warwick, for the Sector Skills Development Agency, Jan 2006.
- [12] Holmes K., Ivins C., Hansom J., Smeaton D., and Yaxley D., *The future of work: individuals and workplace transformation*. Working Paper Series. Manchester: EOC 2007
- [13] Bhavnani R., and PTI Consultancy, *Ahead of the game: the changing aspirations of young ethnic minority women*. Moving on up Series. Manchester: EOC, 2006.
- [14] Thompson M., Vinter L., and Young V., *Dads and their babies: leave arrangement in the first year*. Equal Opportunities Commission, 2005.
- [15] Tomlin P., *Professional Women Foresters in the British Forestry Industry*, Wildcat One Consulting for Forestry Commission, May 2000.
- [16] UK Wood Chain, *Catching the Wave. Labour Market Study – UK Manufacture of wood, cork and ligno-cellulosic fibre products*, UK Wood Chain, 2007.
- [17] Horne M., *She's a lumberjill and she's OK*, Scotland on Sunday, 28 October 2007.

9 Acknowledgements

The firrs project was supported by the European Social Fund under Priority 5 'Addressing Gender Imbalance' which provided 45% of the total budget. The other 55% was provided as cash and in-kind contribution of time from Napier University and partnering organisations including the Scottish Forestry Trust and ConstructionSkills Scotland. The authors are also grateful for the assistance received from industry organisations and the Forestry Commission.