

Timber sale systems – Polish and Irish example

KAROL SIKORA¹⁾ SŁAWOMIR KRZOSEK²⁾,

¹⁾College of Engineering and Informatics, NUI Galway

²⁾Faculty of Wood Technology, Warsaw University of Life Sciences - SGGW

Abstract: *Timber sale systems – Polish and Irish example.* The paper cover information regarding owner structure and system of round wood sale in Poland and Ireland, both country belong to UE. Woodiness of Poland (29,4%) and Ireland (11%) differ significantly, when average woodiness in Europe 30% and level of wood cutting is in Poland about 35 million cubic meters per year and 4,5 million cubic meters in Ireland. System of round wood selling in Poland is more complex than in Ireland, but both country use the electronic platform for selling.

Keywords: Round wood, timber, round wood market, round wood sales system

INTRODUCTION

Due to the increasing focus on the use of sustainable materials to meet environmental targets related to efficient energy use and emissions, a significant opportunity exists for forestry sector in Europe. However, data on round wood production and trading is limited for a number of countries due to the different definitions of forest products used in the production and trade statistics (**FAO, 2012**). Nevertheless, this paper endeavours to collate this information for two different EU countries: Poland and Ireland. Since trading has a significant role in every production chain, and significantly determines a production, the focus of this article is on timber sale systems.

SALE SYSTEM IN POLAND

Poland is a medium sized European country with well developed timber industry. The forest area in Poland is currently 9177.2 thousand hectares, which gives the forest coverage rate of 29.4%. The area with the largest forest cover in Poland is Lubuskie Province (49.2%) and the lowest forest cover occurs in the Lodz Province (21.3%). The vast majority of forests in Poland are public. They represent 81.2% of all forests in Poland, while 77.2% of forest area is under the management of the National Forest Holding "State Forests". Neutral persons own the 17.8% of the polish forests (**Raport o stanie lasów w Polsce, 2013**). The detailed structure of forest ownership in Poland is presented in Fig. 1

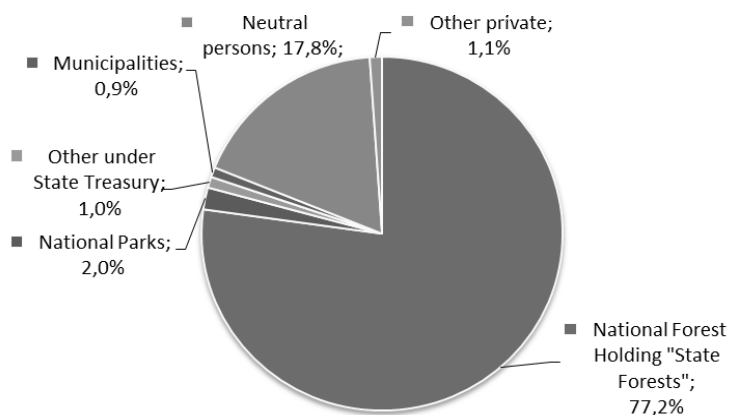


Fig. 1 Structure of forest ownership in Poland (Raport o stanie lasów w Polsce, 2013)

In recent years, a forest cover in Poland has been gradually increasing. In addition, from year to year timber harvesting of Polish forests has been also increasing. Although the State Forests manage only 77.2% of the forests in Poland, it has the actual monopoly in the supply of wood for industry. Over 95% of the wood harvested in Poland comes from the State Forests. In 2013 a total of 35796 thousand m³ of net merchantable timber (diameter over 7 cm) was acquired in Poland, including 34152 thousand m³ from the State Forests and from private forests only 1246 thousand m³. In 2015 State Forests planned the total timber production (including roundwood of tip-7 cm) of 37700282 m³ (**Decision No. 56 of the Director-General of the State Forests of 13 October 2014**). Despite such amount of wood harvested it is still less than the needs of the Polish wood industry. It is estimated that the deficit amounts to several million m³. Currently, there is a debate in Poland, on increasing the supply of wood without harming forests. Currently, timber harvesting in Poland is 55% of timber yield, when comparing with other European countries (Sweden 86% of yield, the Czech Republic 84%, Slovakia 75%, Finland 70%, Austria 60%), it is not a high value (**Czemko, 2013**). Many experts believe that just by increasing the acquisition of over 55% of yield can be a sufficient solution for increasing the amount of wood available for industry in Poland.

The second, even more significant issue for timber buyers in Poland is the State Forests' timber sales system. In 2008, the State Forests in Poland introduced online system of timber sales for an industry. This, uncommon in other Western European countries, system was controversial from the time of introduction and industrial buyers, mainly sawmills, have raised objections against it. Since the introduction until today the system has been modified several times, but its main element, sales via the Internet, and not as in other countries in the way of trade negotiations between the seller and the buyer, remained unchanged. The system currently consists of the following elements:

- a) sale of wood via the portal of Forestry and Timber (PLD),
- b) sale via online system auctions in the e-drewno application,
- c) sales via online auctions in the e-wood,
- d) sale by submission (only small amounts of precious wood),
- e) optionally trade negotiations – not occurring in practice.

In 2013 an additional opportunity to make purchases through the PLD was introduced for companies that start new investments in sawmills.

Sale via the portal of Forestry and Timber is only available to customers who did purchases from State Forests in previous years. It is a sale bid. The buyer via the portal offers to purchase a certain amount of wood, without giving the price. The price is determined by the selling party. Such a sale takes place twice a year. Following this procedure each customer is allowed to buy up to 70% of the average amount of wood purchased during the previous three years. If a buyer submits offers on more wood than it is available, an available pool is distributed through a reduction of orders. The purchase procedure of wood via the portal of Forestry and Timber ends up signing a contract for one or two years. The remaining amount of requested timber can be purchased by using a different form of sales.

Portal e- drewno (system and ordinary) is a classic auction website. The winner is whoever offers the highest purchase price. Auctions via e- drewno system take place only twice a year. Auctions on ordinary e- drewno are held successively throughout the year. Timber that was not sold at auctions via PLD and via e-drewno system is offered via normal e-drewno portal.

Another form of purchase that applies only to precious wood, usually veneer or timber with special properties, is submission. This form of sale is not carried out via the Internet. The logs to be subject of submission are available for view to anyone interested. Then, customers interested in purchasing submit offers of the purchase in sealed envelopes. On the agreed date commission is opening envelopes, usually in the presence of interested bidders. The winner is the one who offered the highest price.

Since there is a shortage of wood at market, the described sales system, results in prices inflating during the auction on e-drewno. It creates a situation in which the same piece of timber has different prices depending on the form of its sales (*Czemko and Krzosek 2014*).

SALE SYSTEM IN IRELAND

Ireland has the second lowest proportional percentage cover of all European countries; approximately 11% compared to an European average of well over 30% (*O'Hanlon 2012*). Co. Wicklow has the highest forest cover while Co. Meath has the fewest trees. These forests are mostly man-made. Government policy is to bring the national forest cover to 17% (*Teagasc 2015*).

In 2012, the Irish forestry and forest products sector generated €2.2 billion in annual output, representing 1.3% GDP, and employed approximately 12,000 people (*IFFPA 2014*). Moreover, there exists a substantial potential to expand production. According to COFORD (2011) half of the forest estate is less than 25 years old and further expansion of forest cover is planned by policymakers. The supply of round wood from Irish forests is projected to increase from an estimated 4.46 million m³ in 2011 to 7.38 million m³ in 2028. The volumes available within the Republic of Ireland are estimated to double over the forecast period, while those in Northern Ireland are estimated to show an increase of 20%, which is presented in Fig. 2 (*Phillips 2011*). Increased sales of existing products and the development of new markets at home and abroad for new added-value wood products will lead to job creation across the sector (*Harte et al. 2014*).

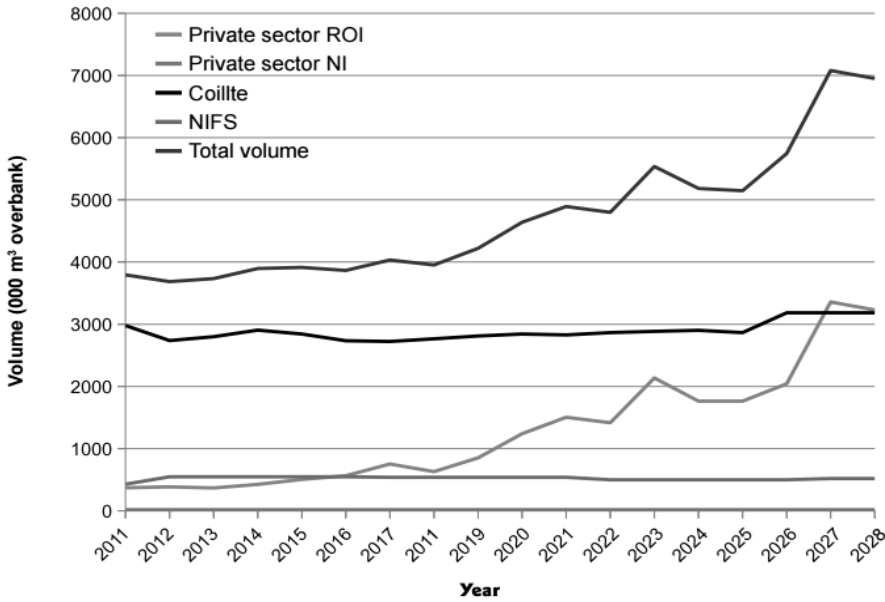


Fig. 2 Forecast of net realisable volume production, 2011-2028 (Phillips, 2011)

However, in accordance to IFFA (2014), in order to fully realise this round wood harvest plan a few issues must be overcome. These include; developing a ‘standardised low cost’ round wood sales system which facilitates round wood sales in the Irish private forest, and combining private woodlots into larger sales units that can be harvested more economically.

70% of forests in Ireland are managed by Coillte which is a state-sponsored company. Coillte, a commercial company operating in forestry, land-based businesses and added-value processing operations, sold approximately 2.3 million m³ of round wood in 2010. 1.5 million m³ was sold to sawmill customers and the balance was sold to wood-based panel producers. Timber sold per annum has increased from 1.4 million m³ in 1989, when Coillte was established, to 2.3 million m³ in 2010, which is shown in Fig. 3 (Coillte 2015).

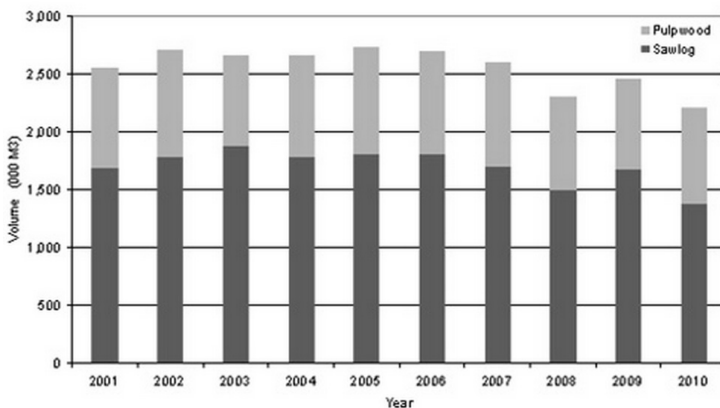


Fig. 3 Timber sales per Annum

Timber in Ireland is sold either standing or by the roadside. Timber sold standing is left in place in the forest for the customer to organise the felling and extraction of the trees. Timber sold by the roadside is felled and extracted by the forest owner and stacked on the side of the forest road for collection by the customer. Due to the cost of harvesting, organised by the owner and not by the customer, timber sold by the roadside has a significantly higher price than timber sold standing (*Forestry Focus 2015*).

The two main timber sales systems operating in Ireland are:

- a) Coillte Timber Auction,
- b) Timbersales.ie.

Coillte Timber Auction is an electronic auction system, introduced in 1997, for selling round wood primarily from Coillte forests. Private timber grower's, such as farmers or other land owners, can have their timber offered and sold on their behalf through Coillte's Auction System. The system provides a robust and equitable method for auctioning timber nationwide to a widely dispersed customer base. This type of sales method is most suited to larger customers whose scale allow for economic transportation of large timber volumes from forests to sawmills over greater distances. Coillte hold a round wood auction on a fortnightly basis. The schedule alternates between Standing and Harvested sales.

Timbersales.ie is the a web-based round wood timber marketing service for private timber sales which provides a link between the timber seller and buyer and serves as a one-stop-shop for those involved in round timber marketing, sales and purchasing in Ireland. This site provides a facility for timber sellers to advertise their timber sales on one of our on-line catalogues (timber sales or hardwood matters) and for timber buyers to view these catalogues and get in touch with the forest owner or timber seller.

CONCLUSIONS

The current data and forecasts on timber production in both countries indicate an increase in demand for timber. However, the volumes of timber available are gradually increasing. These trends might be insufficient to meet a demand, what has been already observed in Poland. As a result of this, and complex timber sale system in Poland, prices have been inflating during the timber auctions. Furthermore, it has created a situation in which the same piece of timber has different prices depending on the form of its sales. Therefore, an immediate action should be undertaken on developing new and more accessible timber selling platform. Since the internal market of the European Union is a single market in which the free movement of goods is ensured, such new selling platform should be in line with this principle, providing the greatest versatility, bearing in mind the diversity in the existing traditions of timber sale in individual EU countries.

REFERENCES:

1. COFORD, 2011: Forecast report 2011, www.coford.ie.
2. Coillte 2015: Coillte Forest, www.coillte.ie/coillteforest
3. CZEMKO B. 2013: Rynek drzewny widziany oczami producentów wyrobów z drewna. Najważniejsze fakty. V Europejski Kongres Gospodarczy w Katowicach, 13 – 15 maja 2013.
4. CZEMKO B., KRZOSEK S. 2014: Aktuelle Situation auf dem Rundholzmarkt in Polen. Annals of Warsaw University of Life Science-SGGW. Forestry and Wood Technology, No 86, p. 56 – 60.
5. Decision No. 56 of the Director-General of the State Forests of 13 October 2014.

6. Food and Agriculture Organization of the United Nations (FAO) Yearbook of Forest Products 2012.
7. Forestry Focus, 2015: TIMBER SALES, www.forestryfocus.ie/growing-forests-3/harvesting
8. HARTE A., McPOLIN D., SIKORA K., O'NEILL C., O'CEALLAIGH C. 2014: Irish Timber – Characterisation, Potential and Innovation, Civil Engineering Research in Ireland, Belfast.
9. Irish Forestry and Forest Products Association (IFFPA) 2014: An overview of the Irish forestry and forest products sector 2013, www.iffpa.ie.
10. O'HANLON R. 2012: Forestry in Ireland: the Reforestation of a Deforested Country, The Forestry Source.
11. PHILLIPS H. 2011: All Ireland Roundwood Production Forecast 2011-2028, Dublin.
12. Praca zbiorowa: Raport o stanie lasów w Polsce 2013, 2014 Centrum Informacyjne Lasów Państwowych, Warszawa.
13. Teagasc, 2015: A Brief Overview of Forestry in Ireland, www.teagasc.ie/forestry/advice/forestry_history.asp

Streszczenie: *Systemy sprzedaży drewna okrągłego w Polsce i w Irlandii.* W referacie zaprezentowano informacje dotyczące struktury własności lasów oraz systemu sprzedaży drewna okrągłego dla przemysłu w dwóch krajach należących do UE: w Polsce i w Irlandii. Oba kraje różnią się znacznie lesistością (Polska 29,4%, Irlandia 11%, przy średniej europejskiej wynoszącej ok. 30%), oraz ilością pozyskiwanego drewna w skali roku (Polska ok. 35 milionów m³, Irlandia ok. 4,5 miliona m³). System sprzedaży drewna okrągłego w Polsce jest znacznie bardziej rozbudowany niż w Irlandii, ale w obu krajach są to systemy funkcjonujące na płaszczyźnie elektronicznej.

Corresponding authors:

Karol Sikora
Civil Engineering
College of Engineering and Informatics
NUI Galway, University Road,
Galway, Ireland
e-mail: karol.sikora@nuigalway.ie

Sławomir Krzosek,
Department of Wood Science and Wood Protection
Warsaw University of Life Science - SGGW
02-776 Warszawa, Nowoursynowska 159, Poland
e-mail: slawomir_krzosek@sggw.pl