Sustainability of Czech forest management during the bark beetle calamity Martin Fojt

SVOL - the Association of Municipal and Private Forest Owners in the Czech Republic



Goal of stability and sustainability in forestry

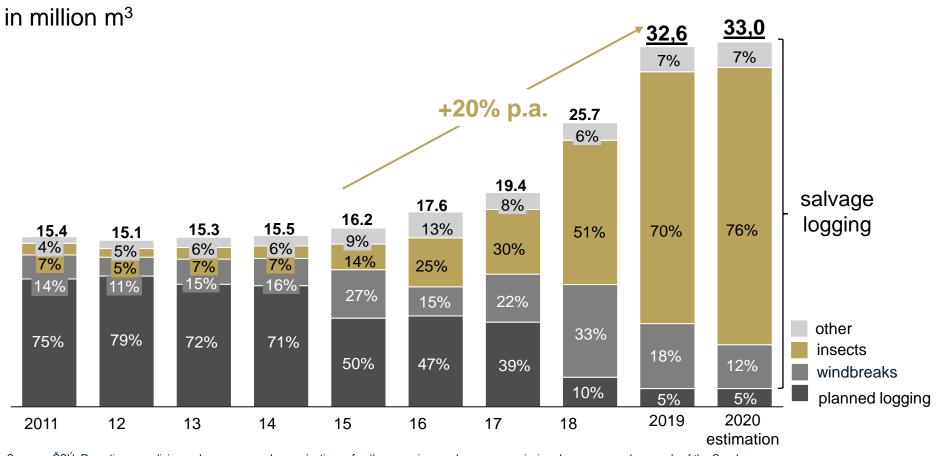
Bark beetle calamity threat **Economic factors** Added value creation Appropriate profit for competitiveness **Economic** pillar Stable supplies of sources Balanced competition on the **Ecological factors** market Water retention State aids Air temperature regulation **Ecological** Social **Social factors Biodiversity** pillar pillar Wetland preservation Job stability Timber stock **Tourism** Annual increment Competitive salaries Forest species/age stucture Company welfare

Source: www.uhul.cz

Effective and stable legislation

The bark beetle calamity during the last 5 years has led to an excessive salvage logging leading to full utilisation of logging capacity

Logging in the Czech Republic



95%

of the total logging in the year 2019 was caused by calamities

~30 mil.

m³ is the present logging capacity in the CR

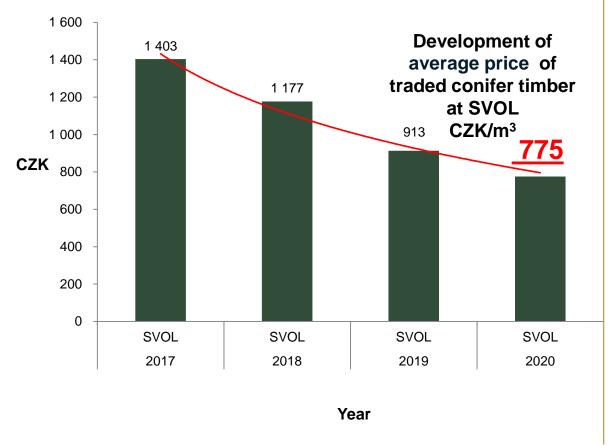
Sources: ČSÚ; Reporting on policies and measures and on projections of anthropogenic greenhouse gas emissions by sources and removals of the Czech Republic; print, VŠE presentation: Sustainability of forestry and wood processing industry in the Czech Republic



[,] https://www.timber-online.net/rundholz/2020/02/significantly-more-damaged-wood-in-2019.html

Price fall - conifer timber sold by non-state owners (period 2017-2020)

1 EUR = 26,195 CZK (15.3.2021)



995 CZK/m³

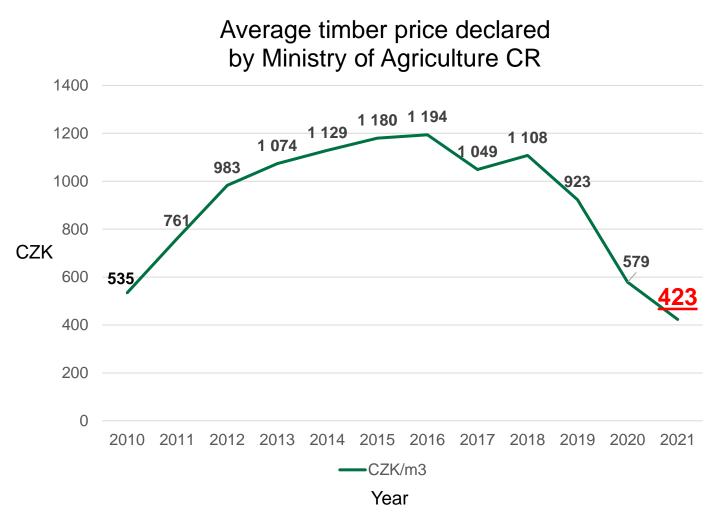
Limit profit from timber sale for ensuring at least the forest recovery after calamity and the care for the new forest stands till the age of 40 years

- Average price of conifers timber reached in the year 2020 was 775 CZK/m³ only
- Price fall of conifer timber in years 2017-2020 was 627
 CZK/m³
- Price fall of conifer timber in years 2017-2020 on the forest road locality is by non-state forest owners 46%

Source:

Average timber price (period 2010-2021)

- for the calculation deforestration payments



452 CZK/m³

Production costs on 1m³ of timbyer in the year 2019 (on the forest road locality)

- Average timber price is at a lower level than after the widespread calamity Kyril
- Forest owners realized their sale of raw timber below the production costs

-750 CZK/ha

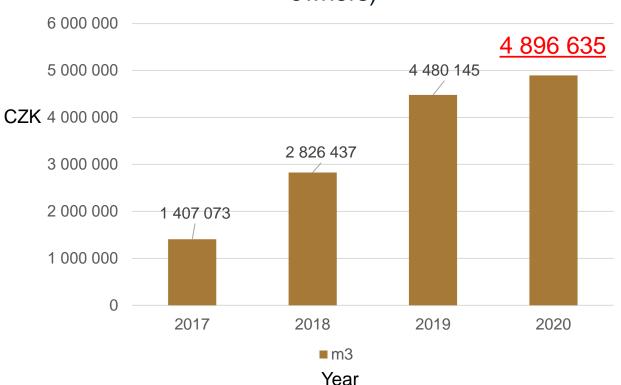
Average economic result (loss) of the forest owners without a state contribution in the year 2019

Source: Data - Ministry of Agriculture CR, Report of the State of the Forest and Forest Management i in the CR



Development of salvage conifer logging – non-state owners (in years 2017-2020)

Development of salvage conifer logging – non-state owners (SVOL survey on cca 30% forest area of non-state forest owners)



7.1 m³/ha

Overall annual average increment on 1 ha forest in the year 2019

- In Vysočina region the logging reached 47.5 m³/ha (6,7x)
- The most affected forest owners reported logging of 65 -85 m³/ha (Vysočina and Southern Moravia Region) (10x)
- Yearly increase of salvage conifer timber logging between the years 2019 and 2020 reached 9% = the calamity state of bark beetles still persists



Contribution to reducing of bark beetle calamity impacts - for the period 1. 10. 2017 – 31. 12. 2019

4.Q 2017 - 2018

2.7 Billion CZK

Paid in the 1st stage for the period <u>1. 10. 2017</u> <u>– 31.12. 2018</u>, contributions payment realized during December 2019 – June 2020

Regions - the most affected by bark beetle calamity – Vysočina 0.6 billion CZK, Olomouc Region 0.36 billion CZK, South Bohemia Region 0.34 billion CZK

5.3 billion CZK

2nd stage – financial contribution need for non-state forest owners in the year 2019 as a result of ongoing bark beetle calamity, claimed volume of conifer salvage logging 13 million m³ according to compensation requests

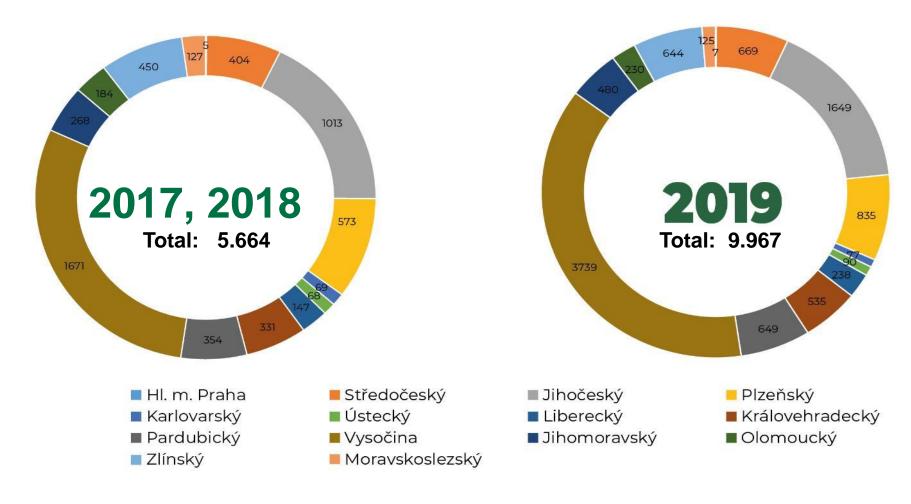
4.0 billion CZK

Allocated financial contribution to the nonstate forest owners for the year 2019, to the 4.1.2021 was paid the volume 68% of the from the state budget allocated amount

300 CZK/m3

Contribution reduced by 25 % ate in the year 2019 compared to the rate announced by M. of Agriculture = political decision www.svol.cz

Short-time financing to overcome the current crisis in forestry - Contribution to reducing of bark beetle calamity impacts (development of request numbers)



Maintaining the economy of non-state forest owners and restoring forest functions at the time of bark beetle calamity

Sustainability of the Czech forestry economy at the time of bark beetle calamity directly depends on contributions to mitigate the effects of bark beetle calamity and contributions to provide forest management.

14.6 million m³/YEAR

Expected amount of coniferous salvage logging for nonstate owners in 2020

779 CZK/m³

Calculated contribution to full mitigating the effects of bark beetle calamity based on real data of non-state forest owners, assuming a real financial need of 11.4 billion CZK for 2020

5.8 billion CZK/2020

Minimum financial amount of contributions for non-state forest owners to mitigate the effects of bark beetle calamity in 2020 (calculation at the 2019 rate = CZK 398,-/m³)

