

KEY PERFORMANCE INDICATORS FOR THE CONTROL ACTIVITIES OF THE SUCEAVA FOREST GUARD: RESULTS AND FUTURE PERSPECTIVE

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REVIEW ARTICLE

Abstract

This article examines the methodological framework for quantifying the control activities conducted by the Forest Guard through the use of performance indicators. By analysing these indicators in correlation with statutory obligations and institutional objectives, the study seeks to determine their relevance and analytical value. Furthermore, the article proposes the introduction of new indicators aligned with European and international requirements, designed to capture both institutional capacity and the substantive effects generated within the forestry sector through regulatory control activities.

Keywords: forest guard, key performance indicators, forest control, forestry, forest legislation

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INTRODUCTION

In 1992, Romania adopted the Statement of Forest Principles during the United Nations Conference on Environment and Development (UNCED), held in Rio de Janeiro in 1992, a document stipulating that "Forest resources and forest lands should be sustainably managed to meet the social, economic, ecological, cultural and spiritual human needs of present and future generations." Thus, Romania committed itself to ensuring a sustainable management of forests, enabling the long-term fulfilment of all their functions. According to Prins et al. (2023), sustainable forest management informs and guides the decisions of forest owners and managers and of those who make policy and law with regard to forests, and thus influences the condition of forests and the goods and services they provide to society and the planet.

Within a legislative framework intended to fulfil the desideratum of sustainable forest management, one of the necessary conditions is that the State authority possesses the capacity to ensure the enforcement and implementation of this legislation. The first territorial control structures of the central public authority responsible for forestry were established on the basis of Government Emergency Ordinance No. 96/1998 regarding the regulation of the forest regime and the administration of the national forest fund. These structures underwent numerous organisational and territorial adjustments until 2005. Subsequently, although

the territorial distribution of the control structures remained unchanged and their competences largely the same, the management of these institutions relied exclusively on statutory powers, without a clear definition of institutional mission, objectives and, implicitly, indicators for assessing the achievement of these objectives.

Following a broad consultation process with public officials within these institutions, conducted in 2016, the mission and objectives of the Forest Guards, including those of the Suceava Forest Guard, were defined. In the context of sustainable forest management, the mission of the Suceava Forest Guard is to ensure the enforcement of the law with a view to the sustainable development of forest and game resources, while contributing to the improvement of the regulatory framework in the public interest (<https://gfsuceava.gov.ro/gfsv/misiune/>).

The general objective of the institution is the guarantee of compliance with the forest and game regime and with the legality of timber circulation. Subordinate to this general objective, ten specific objectives have been identified. The indicators analysed in this paper focus on the achievement of the following specific objectives:

- Integrity, quality and diversity of forest and game resources
- Prevention and reduction of illegal tree felling and ensuring the integrity and development of the forest fund

- Ensuring the guarding of the national forest and game fund
- Ensuring the legality of placing forest products on the market

The specialised literature demonstrates that the performance of institutions responsible for forest governance can only be assessed through measurable indicators that reflect both the efficiency and the impact of control activities. Consequently, for the Suceava Forest Guard, the definition and use of indicators relating to control activities (e.g. number of inspections, value and number of sanctions, value of damages, level of compliance) are essential for measuring progress against the specific objectives and for grounding management decisions.

MATERIALS AND METHODS

The analysis of the indicators used in evaluating the activities carried out by the Suceava Forest Guard was conducted in two stages: first, a descriptive stage concerning the control activities that generate the indicators employed, and second, the actual analytical stage, involving their comparison with various other parameters (e.g. surface area inspected, number of sanctions, etc.).

The description of the principal control activities undertaken by the Forest Guard was carried out from the perspective of the following elements:

- Definition/purpose
- Legal basis (entitlement or obligation), standardised control form
- Frequency, duration and timeframe for execution.

1. Comprehensive/partial forest inspection

- Definition/purpose

The comprehensive forest inspection is a control activity aimed at verifying the manner in which the forest ranger fulfils guarding duties within a forest district (canton). According to the provisions of the Regulation on guarding the forest fund, approved by Government Decision No. 1076/2009, the comprehensive forest inspection encompasses:

- verification of the boundaries of the forest fund to determine any potential encroachments;
- verification of boundary markers and management unit limits;
- identification of trees, seedlings or shoots that have been cut, broken or uprooted

without authorisation, by surveying the entire area, as well as the evaluation of damages and calculation of losses;

- verification of the delineation in the field of zones and routes authorised for grazing, watering and sheltering, as applicable;
- verification of the management of entrusted assets; (...)

- Legal basis (entitlement or obligation)

The authority to conduct this type of inspection is provided by Article 11(a) of Government Decision No. 1076/2009, as well as by Article 14 of the Regulation on guarding the forest fund approved by the same act, Article 11(1) and (2), Article 132(1)(a) of Law No. 331/2024 – the 2024 Forest Code, and Article 6(1)(a), (j), and Article 19(1)(k) of Order No. 2185/2024.

The performance of a comprehensive or partial inspection constitutes a right of the Forest Guards, becoming an obligation under the following circumstances: complaints, requests from the Public Prosecutor's Office, police or other institutions, or instructions from superior authorities. The standard control form is set out in Annex 4 of the Regulation on guarding the forest fund approved by Government Decision No. 1076/2009.

- Frequency, duration and timeframe for execution

As this type of control is primarily a right of the institution, no specific duration or fixed interval for its execution is defined. The annual control plan establishes the scheduling of such inspections, generally specifying the number of actions and occasionally their location. When the inspection becomes an obligation, the deadline for execution is a maximum of 30 days or the timeframe indicated in the referring document (e.g. the prosecutor's order, instruction issued by a higher authority, etc.). Regardless of the circumstances, the duration of a comprehensive inspection is inherently conditioned by several factors: the surface area to be covered and the nature of the terrain, season, climatic conditions, number of cutting sites in operation, number of silvicultural works, issues identified, and the number of personnel involved. On average, a comprehensive inspection lasts between 4 and 12 days, though documented cases exist in which, due to identified irregularities, such an inspection extended to as long as 90 days.

2. Inspection of compliance with timber harvesting rules

- Definition/purpose

The inspection of compliance with timber harvesting rules is a control activity aimed at verifying the manner in which an authorised economic operator fulfils the obligations incumbent upon it within a harvesting plot. According to Article 19(1) of the 2011 Instructions regarding the deadlines, methods and periods for collecting, removing and transporting timber, approved by Order No. 1540/2011, such inspections aim to verify compliance with the provisions of these Instructions, with the purpose of preventing and limiting the damages that may be caused to the national forest fund through timber harvesting activities.

b) Legal basis (entitlement or obligation)

The authority to conduct this type of inspection is provided by Article 19(2) of the 2011 Instructions, Article 11(1) and (2), Article 132(1)(a) of Law No. 331/2024 – the 2024 Forest Code, and Article 6(1)(a), (j), and Article 19(1)(k) of Order No. 2185/2024.

The performance of this inspection constitutes a right of the Forest Guards, becoming an obligation under the following circumstances: complaints, requests from the Public Prosecutor's Office, police, other institutions, or instructions from higher authorities. The standardised control form is set out in Annex 5 of the 2011 Instructions approved by Order No. 1540/2011.

c) Frequency, duration and timeframe for execution

As this type of control is primarily a right of the institution, no specific duration or interval for execution is defined. The annual control plan establishes the scheduling of such inspections, generally indicating the number of actions and, at times, their location. When the inspection becomes an obligation, the timeframe is a maximum of 30 days or as stipulated by the referring document. The duration is conditioned by factors such as terrain, climatic conditions, issues detected, and the number of personnel involved. On average, the inspection lasts one day, although in cases of severe irregularities (illegal felling, suspected unauthorised use of the marking hammer, use of falsified devices, damage to regeneration, etc.), this duration may be significantly extended.

3. Inspection of timber transport legality

a) Definition/purpose

The inspection of timber transport legality is a control activity aimed at verifying

the legality of timber transports, the lawfulness of timber provenance, and the legality of placing such timber on the market.

b) Legal basis (entitlement or obligation)

The authority to conduct this type of control derives from Article 4(5)(a) of the 2020 Norms regarding the provenance, circulation and commercialisation of timber materials, the regime of timber storage facilities and roundwood processing installations, and provisions implementing Regulation (EU) No. 995/2010 of the European Parliament and of the Council of 20 October 2010, approved by Government Decision No. 923/2020; Article 24(1)(a) of Law No. 171/2010 on the establishment and sanctioning of forestry contraventions; Article 132(1)(c) of Law No. 331/2024 – the 2024 Forest Code; and Article 6(1)(e), Article 19(1)(w), (x), (y) of Order No. 2185/2024.

The performance of this control is a right of the Forest Guards, becoming an obligation when triggered by complaints, requests from the Public Prosecutor's Office, police or other institutions, or instructions from superior authorities. Since the applicable legislation does not provide a standard form for this control, the Suceava Forest Guard developed its own template.

c) Frequency, duration and timeframe for execution

As with other control types, no fixed timeframe is defined. Scheduling is done through the annual control plan. If the control becomes obligatory, the relevant document stipulates the deadline. Duration depends on factors such as route, season, climatic conditions, number of vehicles inspected, irregularities identified, and the size of the inspection team. On average, such inspections last one day, although severe irregularities (illegal transports, cubage difficulties, lack of handling equipment, etc.) may prolong the activity significantly.

4. Inspection of timber depots/processing installations

a) Definition/purpose

The inspection of timber depots and roundwood processing installations concerns the legality of timber provenance, processing activities, and the placing of timber products on the market.

b) Legal basis (entitlement or obligation)

The authority to conduct these inspections is established by Article 4(5)(a) of the 2020 Norms, Article 24(1)(a) of Law No.

171/2010, Article 132(1)(c) of Law No. 331/2024 – the 2024 Forest Code, and Article 6(1)(e), Article 19(1)(w), (x), (y) of Order No. 2185/2024.

This inspection is a right of the Forest Guards, becoming an obligation under the same conditions as above. As the legislation contains no standardised form, a template was created at institutional level.

c) Frequency, duration and timeframe for execution

The general rules on scheduling, obligations and duration apply similarly to this type of control. Duration is influenced by route, season, climatic conditions, number of vehicles checked, irregularities found, and staff involved. On average, the inspection lasts one day, though severe non-compliance issues may extend this significantly.

Outside these inspection categories, the Forest Guard also conducts other inspections based on statutory responsibilities.

Results of the activities conducted, structured by type of control, are reflected in quantitative indicators within the periodic reporting document entitled the guarding memorandum, drawn up quarterly by each Forest Guard and centralised at the National Forest Guard. These indicators were initially structured by forest ownership category, type of inspection, and nature of irregularities.

To analyse this reporting system, the SWOT method was used. In public and non-profit administration, Bryson (2018) recommends SWOT as an analytical instrument within a strategic cycle, contributing to clarifying the current position, challenges and development directions.

Table 1

SWOT Analysis of the Forest Guard Surveillance Report, Applied to Operational Data of the Suceava Forest Guard

<p>Puncte Forte (Strengths)</p> <ul style="list-style-type: none"> ✓ Detailed structure by counties, forest districts, ownership types and control types ✓ Easy to complete in Excel ✓ Possibility for manual consolidation ✓ Long-term use (at least 10 years), allowing comparative analyses over time ✓ Prevents additional information requests from the central public authority 	<p>Puncte Slabe (Weaknesses)</p> <ul style="list-style-type: none"> ✗ Absence of qualitative parameters within control activity ✗ Requires manual centralisation for numerous forest districts (88 districts) ✗ High risk of erroneous data entry due to the large number of fields – 412 ✗ Overlapping data between control types (e.g. illegal felling detected through comprehensive, partial, exploitation or stand-reconstruction inspections; possible association with illegal use of marking hammers)
<p>Oportunități (Opportunities)</p> <ul style="list-style-type: none"> → Potential to develop a centralised digital platform (e.g. Google Forms) → Introduction of qualitative and performance indicators (aligned with National Forest Strategy 2030 – DSA 13 OECD, Forest Code) → Automation of reporting with automated flagging of potential irregularities → Integration with other forestry databases (SILV 1, SUMAL 2.0) 	<p>Amenințări (Threats)</p> <ul style="list-style-type: none"> ⚠ Risk of errors and duplication in reporting ⚠ High manual workload → staff demotivation ⚠ Lack of standardisation of national datasets ⚠ Risk of misinterpretation and reduced transparency

Analysis of the evolution of control indicators at the Suceava Forest Guard (2016–2024)

Based on the guarding memorandum, correlated with the share of activities carried out and with the accuracy of data enabling correlation, the following indicators were identified as relevant, with their corresponding

position in the memorandum shown in parentheses:

- Forest inspections (comprehensive, partial, integrity checks, grazing inspections, fire prevention) – number of actions (13)
- Illegal timber volume (m³) (19)
- Timber transport inspections – number of actions (56)

- Contraventions recorded during timber transport inspections – number (57)
 - Timber confiscated during transport inspections (m^3) (60)
 - Inspections of processing installations, depots etc. – number of actions (65)
 - Offences identified during inspections of processing installations, depots etc. – number (66)
 - Contraventions identified during inspections of processing installations, depots etc. – number (67)
 - Timber confiscated during inspections of processing installations, depots etc. (m^3) (70+75)
 - Exploitation inspections – number of actions (79)
 - Contraventions identified during exploitation inspections – number (80)

Comprehensive/partial inspections and associated indicators (number of inspections, volume detected as illegally harvested)

The number of forest inspections corresponding to Chapter 1, point 13 of the guarding memorandum provides an aggregate view of inspections conducted in the forest fund, combining comprehensive/partial inspections with those aimed at forest integrity, grazing and fire prevention. Given the importance and weight of these inspections, the parameter that must be considered and correlated with other indicators is the number of comprehensive/ partial inspections. In the absence of a breakdown by distinct inspection types, it is not possible to present the temporal fluctuation of their numbers.

For a qualitative assessment, it would have been necessary to report the area surveyed during comprehensive/partial inspections relative to the total forest fund area. Unfortunately, this parameter is not quantified, although it would have been relevant for assessing the proportion of forest area effectively inspected.

From the processing of available data, the following aspects emerged:

- Incorrect reporting in 2016, likely due to a transcription error or the summation of values inconsistent with reality, indirectly confirming one of the weaknesses highlighted in the SWOT analysis.
 - The average number of inspections per employee is 6.5, indicating that—contrary to the importance of this inspection type—the actual activity is relatively limited.

- In the absence of data on the inspected area, the proportion of inspected forest relative to the total forest fund cannot be assessed.

Within comprehensive/partial inspections, the principal indicator monitored is the volume of illegally harvested timber. In assessing the intensity of the phenomenon, it is relevant to relate the volume detected as illegally harvested to the total forest fund area. According to Bouriaud (2005), “A Romanian official acknowledged that, in fact, nobody knows how much timber is harvested from private forests, estimating approximately 4 million m^3 of black-market timber, meaning 30% to 40% more than the officially recorded volumes.” Regarding the Suceava Forest Guard’s area of competence, the same author notes that in northern Romania, private owners acknowledged that in the absence of a forest management plan, they harvest 3–4 m^3 /ha/year instead of the legal quota of 2 m^3 /ha/year.

In this context, the most relevant indicator remains the volume of illegally harvested timber.

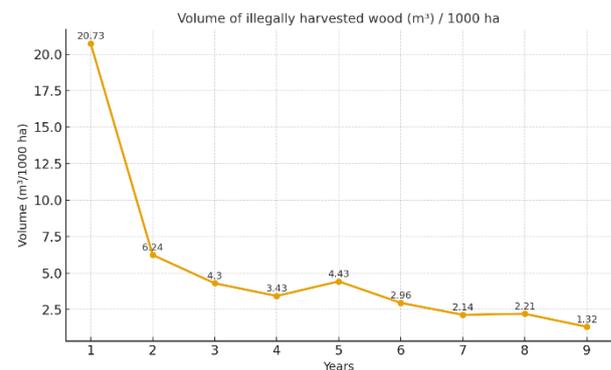


Figure 1 Illegal volume harvested per forest area

Both the effectiveness of inspections and the intensity of the illegal harvesting phenomenon can be calculated by reporting the volume detected as illegally harvested to the number of inspections conducted (noting that the calculation is based on the parameter in the guarding memorandum and not strictly on comprehensive/partial inspections):

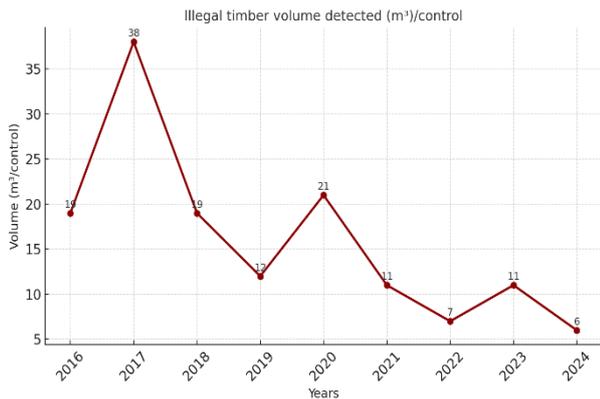


Figure 2 Evolution of the ratio between illegal volume and forest control actions

Both qualitative indicators highlight a significant decline in illegal timber harvesting, at least at levels detectable through comprehensive/ partial inspections.

Exploitation control and associated indicators

As in the case of comprehensive/partial inspections, the absence of data regarding either the inspected surface area or the timber volume associated with harvesting plots prevents the calculation of ratios such as inspected area vs. total forest area, or inspected timber volume vs. total harvested timber volume.

In this situation, the analysis of efficiency was limited to the ratio between the number of contraventions applied and the number of exploitation inspections conducted.

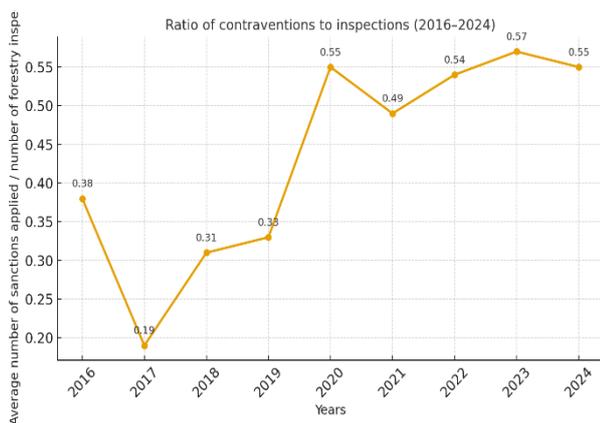


Figure 3 Evolution of the sanction-to-exploitation control ratio

The analysis of the data indicates a significant increase in exploitation inspections that resulted in sanctions, eventually reaching a ratio of approximately one sanction for every two inspections carried out.

Control of timber circulation and associated indicators (confiscated volume, number and value of contraventions, number of offences)

The activity of controlling the circulation of timber is one largely carried out in cooperation with the police authorities, due to the fact that the competence to stop vehicles on public roads lies exclusively with them. Another defining feature of these actions is that, through the "SUMAL 2.0 system - Inspectorul pădurii", any interested natural or legal person may report suspected irregularities related to timber transport.

The qualitative assessment of this type of control focused on two aspects:

1. territorial coverage (number of inspections per 1,000 ha), and
2. average number of sanctions imposed per inspection, together with timber volume confiscated per inspection.

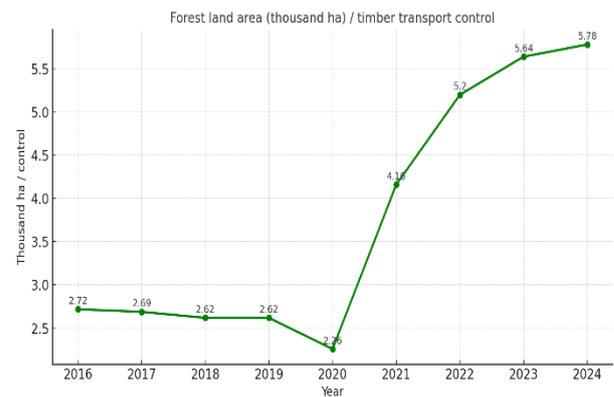


Figure 4 Evolution of the ratio between forest area and number of wood-transport controls

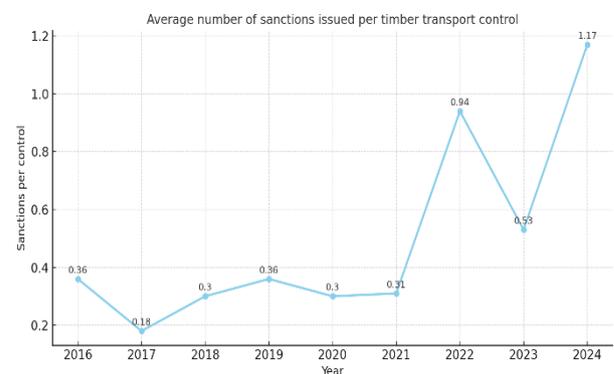


Figure 5 Evolution of the sanction-to-wood-transport control ratio

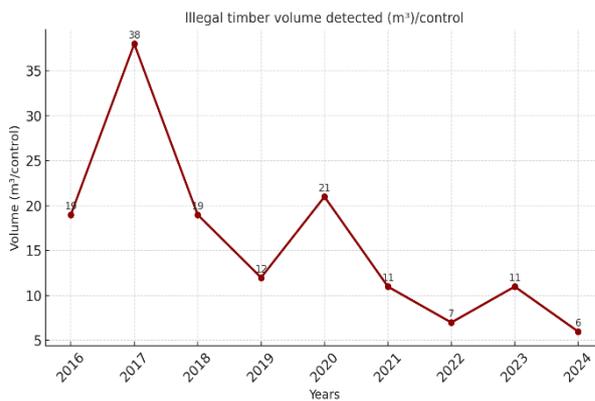


Figure 6 Evolution of the ratio between confiscated volume and wood-transport controls

Efficiency could also be measured by relating the number of verified transport authorisations to the number of authorisations issued (according to SUMAL 2.0) within a given period and region. Since there is no central recording of the number of vehicles or authorisations actually verified, this correlation cannot currently be made.

Correlating the data on timber-transport inspections shows a downward trend in the number of inspections, combined with an increase in the number of sanctions applied per inspection, as well as an increase in the volume confiscated per inspection.

An important parameter relevant to the efficiency of timber-transport control is the number of offences, particularly because, starting in 2020, under Law No. 197/2020, the transport of quantities exceeding 10 m³ without proof of legal provenance constitutes a criminal offence. Moreover, the current Forest Code has lowered this threshold to 5 m³. Since these actions are conducted jointly with the police, and the legal measures (e.g. confiscation of the transport vehicle and initiation of criminal proceedings) are applied by the police, this parameter is not included in the guarding memorandum, although it would be relevant for assessing enforcement effectiveness.

Control of timber depots/processing installations and associated indicators

(number of inspections, confiscated volume, number of sanctions)

The control of timber depots and processing installations represents a significant share of enforcement activities. In terms of results (number and value of sanctions, volume of confiscated timber), this is the type of control that has generated the highest revenues for the State budget.

Our analysis examined:

1. the evolution over time of the number of inspections and of detected offences, and
2. the efficiency of these inspections, expressed as the ratio of sanctions applied and confiscated timber volume relative to the number of inspections.

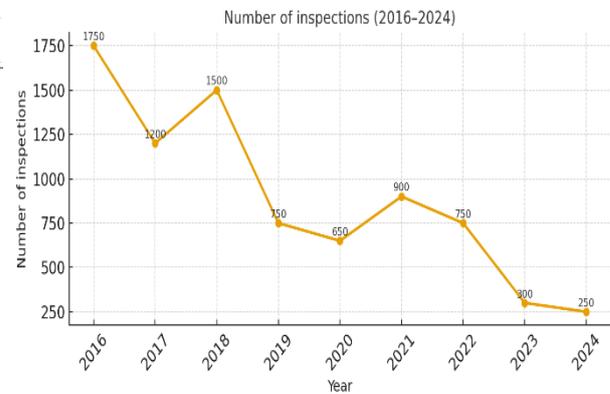


Figure 7 Variation over time in the number of sawmill deposit controls

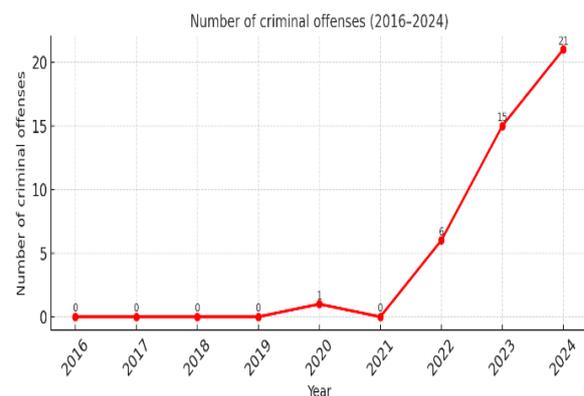


Figure 8 Time variation of detected offences at sawmill deposit controls



Figure 9 Evolution of the sanction-to-sawmill control ratio



Figure 10 Dynamics of confiscated wood mass over time

The data clearly indicate an increase in enforcement efficiency and a targeted focus on high-risk entities. This improvement is attributable to:

- The use of SUMAL 2.0, which provides access to information (timber volumes, suppliers, historical stock evolution, and protected data-integrity mechanisms) that, when cross-referenced, yields valuable insights for enforcement;
- Inter-institutional cooperation with other relevant authorities (forest administrators, police, gendarmerie);
- Public access to transport data in SUMAL, enabling the reporting of irregularities not only by State authorities but also by citizens.

According to Bouriaud et al. (2014), “Illegal logging is connected to forest-related activities such as timber harvesting, processing, transport and commercialisation in violation of the law.”

An interesting aspect concerning illegal harvesting volumes is the correlation between:

- the volume detected during comprehensive inspections,
- the volume identified as illegal in transport controls, and
- the volume identified in depot/processing-installation inspections.

The graph below compares these three indicators:

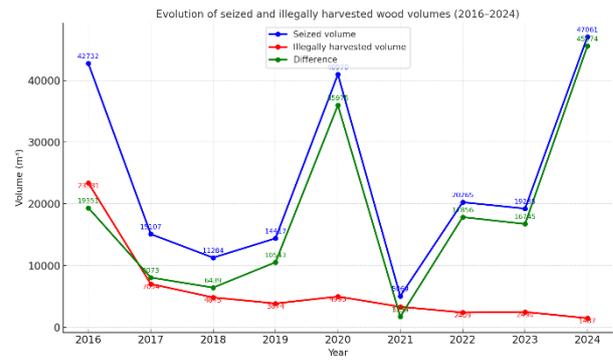


Figure 11 Time dynamics of illegal harvested volume vs. confiscated volume

This graphic representation indicates that although the volume identified as illegally harvested shows a continuous decline, the volumes confiscated during transport and depot/processing inspections remain at very high levels.

This apparent anomaly may have several causes, which may act simultaneously to varying degrees.

Possible causes:

1. The reorientation of enforcement efforts, with an emphasis on timber transport and processing installations at the expense of forest-fund inspections;
2. Confiscation of timber not originating from illegal harvesting, when loss of traceability arises from procedural breaches rather than actual illegal felling;
3. Confiscation of timber that may have resulted from illegal activities in previous years;
4. Illegal harvesting carried out through alteration of dendrometric data in valuation documents or through unauthorised use of marking devices.

For causes 1 and 4, analyses may be conducted and methods developed to evaluate enforcement outcomes by:

- Analysing the distribution of enforcement activities and correlating them directly with their respective outcomes;
- Including, in the reporting of volumes detected as illegally harvested (from the guarding memorandum), the quantities detected during stand reconstruction or cases involving illegal use of marking devices.

DISCUSSIONS AND CONCLUSIONS

The present article highlights the necessity for major changes in the approach to evaluating control activities and in the way these activities are reported.

With regard to the indicators of control activity, for a realistic and objective measurement of performance, we consider it appropriate to shift from exclusively quantitative indicators to qualitative indicators. These new indicators are intended to reflect the efficiency of control activities from multiple perspectives:

- the degree of coverage of the forest sector by inspections (e.g. area inspected through comprehensive control/total forest fund area; number of verified transports/total number of transports; number of economic operators inspected/total number of authorised operators, etc.);
- institutional effort (e.g. number of inspections of a certain type/number of staff with enforcement duties; total value of sanctions applied and recovered/annual institutional budget);
- the intensity and frequency of legal violations (e.g. number of sanctions applied/number of inspections conducted; confiscated volume/number of inspections; confiscated volume/illegally harvested volume, etc.).

Regarding the reporting methodology, we consider that the following actions would be beneficial and would produce immediate effects:

- automation of data centralisation in the guarding memorandum;
- clarification and completion of terminology used in the memorandum;
- introduction of qualitative indicators that can be derived from the existing data in the current reporting template.

Rethinking the method for evaluating control activities will implicitly generate greater efficiency and a more outcome-focused orientation of enforcement actions.

REFERENCES

- Bryson, J. M. (2018). *Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement* (5th ed.). Hoboken, NJ: John Wiley & Sons.
- Prins, K., Köhl, M., & Linser, S. (2023). Is the concept of sustainable forest management still fit for purpose? *Forest Policy and Economics*, 157, 103072.
<https://doi.org/10.1016/j.forpol.2023.103072>
- United Nations Conference on Environment and Development. (1992). *Non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests* (A/CONF.151/26 (Vol. III), Annex III). United Nations.
<https://www.un.org/esa/documents/ga/conf151/aco nf15126-3annex3.htm>
- Government of Romania. (2010). Law No. 171 of July 16, 2010 on the establishment and sanctioning of forestry contraventions.
- Government of Romania. (2024). Law No. 331/2024 – Forest Code.
- Government of Romania. (2008). Law No. 46/2008 – Forest Code (updated).
- Government of Romania. (2019). Emergency Ordinance No. 57/2019 – Administrative Code (updated).
- Forest Guard of Suceava. (n.d.). Internal documents of the Suceava Forest Guard. Retrieved September 6, 2025, from <https://gfsuceava.gov.ro/gfsv/misiune/>
- Government of Romania. (2009). Government Decision No. 1076/2009 approving the Regulation on the guarding of the forest fund.
- Government of Romania. (2023). Government Decision No. 46/2023 on the organization, functioning, and allocation of staff positions for the National Forest Guard and the subordinated forest guards (updated).
- Government of Romania. (2020a). Government Decision No. 923 of October 28, 2020 approving transitional measures necessary for the uniform application of the rules regarding the origin, circulation, and marketing of wood materials, the regime of storage spaces for wood materials and wood processing facilities, as well as those concerning the origin and circulation of wood materials intended for the owner's personal use.
- Government of Romania. (2020b). Government Decision No. 497/2020 approving the rules on the origin, circulation, and marketing of wood materials, the regime of storage spaces for wood materials and wood processing facilities, as well as measures for applying the provisions of Regulation (EU) No. 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market (updated).
- Ministry of Environment, Waters and Forests. (2018). Ministerial Order No. 1112/2018 approving the content of the national register of forest administrators and forest districts, the model documents for establishment, organization, and functioning, the procedure for establishment and authorization for all forest districts, and their responsibilities (updated).
- Ministry of Environment, Waters and Forests. (2011). Ministerial Order No. 1540/2011 approving the Instructions regarding the deadlines, methods, and periods for collecting, removing, and transporting wood material.
- Ministry of Environment, Waters and Forests. (2024). Ministerial Order No. 2185/2024 approving the Regulation on the organization and functioning of the National Forest Guard and its subordinated forest guards.

Ministry of Environment, Waters and Forests. (2020). Ministerial Order No. 491/2020 approving the Regulation on the establishment, functioning, and duties of the committees for classification and promotion of forestry personnel by professional grades and increments, and the Procedure for the organization and functioning of disciplinary councils operating within the administrators of state-owned forest and private forest districts.

Ministry of Environment, Waters and Forests. (2018a). Ministerial Order No. 767 of July 23, 2018 approving the Procedure for approval, modification, and decommissioning of valuation acts for timber from the national forest fund and forest vegetation on lands outside the national forest fund, and the Procedure for valuation and harvesting of timber from forests not subject to

forest management plans and from forest vegetation outside the national forest fund.

Government of Romania. (2021). Emergency Ordinance No. 77/2021 on the establishment of the National Forest Guard (updated).

Ministry of Environment, Waters and Forests. (2018b). Ministerial Order No. 766 of July 23, 2018 approving the Technical Rules on the drafting of forest management plans, amendments to their provisions, and changes in the land-use category of forest fund lands, and the Methodology for approving the exceeding of the allowable cut/annual allowance for harvesting accidental products I