



Article Challenges for FSC Forest Certification: Audits in the Context of Pandemic COVID-19

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Abstract: The COVID-19 pandemic caused economic difficulties for companies in forestry as well as significant issues for entities dealing with Chain of Custody (CoC) certification. Global certification schemes, like FSC and PEFC, based on some preventive provisions in their procedural frame, developed new approaches and derogations to maintain quality evaluation and the power of standards. Arising from COVID-19 restrictions, postponed audits (and the extension of the validity of existing certifications) or remote auditing became increasingly common. Based on a survey applied to companies that had CoC FSC audits in 2020, this study aimed at evaluating the perceptions of companies regarding the audits performed under COVID pandemic procedural derogations, along with other research objectives like the continuous investigation of certification drivers or advantages. Companies indicated that the certification bodies explained the characteristics of pandemic-adapted audits and conducted risk assessments before choosing the adapted approach. Almost half of the companies perceived significant differences between the on-site previous audits and the audits performed during the pandemic due to the imposed restrictions and adapted approaches. Additionally, companies found that hybrid or remote audits are not so efficient, and for the future on-site audits are preferred. The study concluded that making the auditing procedures less interactional is not yet a sufficiently mature approach; there is a clear need for better procedures, building online tools usage capacity, to better communicate the specificity of such procedures better, and to better balance the online evaluations with on-site assessments.

Keywords: audit; COVID-19; FSC certification; Romania; companies

1. Introduction

1.1. General Context

The need for a change in forest governance and management emerged after the United Nation Conference on Environment and Development held in Rio de Janeiro, Brazil in 1992, promoting and encompassing sustainable forest management [1,2] through environmental, social, and economic filters [3–6]. The auditing process played the most important role in fulfilling these goals.

Forest Stewardship Council (FSC) and Program for the Endorsement of the Forest Certification (PEFC) are the only two voluntary forest certification schemes active in Romania and also the most important worldwide [7]. In Romania, FSC has been certified both at forest management and at CoC levels [8], and by December 2020, PEFC had certified 32 entities in Romania but only at CoC level [9]. Interest in FSC CoC certification in Romania has increased in the last ten years. The number of CoC-certified companies increased from 32 in 2011, to 844 in May 2021. Studies show that companies implemented the FSC



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Copyright: © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). CoC certification because they tried to gain some economic advantages, to maintain their clients, to increase the exports or the reputation on the European market, etc. [10,11]. Third-party audits are used for the certification process by both schemes. During these audits, forest management entities and wood processing companies are assessed against a specific standard. Therefore, audits represent the bottom line for the certification process, and through them the certification process becomes compliant with the standard requirements. The steps in getting and maintaining certification are: (i) pre-evaluation, which is an assessment aimed at evaluating the applicant's readiness for the main evaluation (optional); (ii) main evaluation, which is the assessment of an applicant for FSC Certification, basically the beginning of the certification, after which the applicant receive the FSC certificate being allowed to use the FSC trademark; (iii) surveillance evaluation-the assessment that takes place annually or maybe more frequently depending on specific factors; and (iv) re-evaluation, which is the assessment for re-certification that happens every five years [12]. The reason why certification schemes are engaging towards sustainable practices is their willingness in promoting and raising their level of trust [13]. This can be achieved through the audit's credibility. There are widely accepted factors that enhance the audit's credibility: effectiveness, objectivity, and transparency of the audit's process [14]. Those factors (auditor's qualifications, auditing time, knowledge, audit samples, etc.) were investigated and further broken down by numerous studies [15-18]. In the same time, the quality of the auditing process can be severely affected or even biased in some cases by numerous issues, and there are numerous researchers in different fields who have analysed these issues: factors influencing external audit fees [19,20], public opinion related factors [21], marketing audit and factors that affect its use in the companies' practices [22], the quality influencing factors [23,24], and even the influence of technologizing on audit procedures [25,26].

COVID-19 caused changes in the daily behaviour of humans [27], altering virtually all aspects of society worldwide, including forested protected areas [28]. The COVID pandemic affected the forest certification procedures, just as it affected procedures in many other fields. New approaches were devised for adapting the auditing process to the pandemic conditions since involved entities in the forest sector had to adapt their activity, while the reasons for certification were still present. If the auditing process is so important and if so many factors have an influence on it, how does the auditing process keep its regulation and policies implementable enough to go over the pandemic outbreak without losing their most important asset—trust? The aim of the study is to make a preliminary assessment of how the new approaches, applied during the COVID 19 pandemic, affected the FSC CoC certification auditing process, by evaluating the perceptions of the representatives of the certified companies in Romania.

1.2. Adapted Approaches in the Certification Audits

From the beginning of FSC certification, the on-site audits were clearly defined by procedures and documents. Aspects related to audit time, team, evaluation, methods of collecting evidences, assuring impartiality, and objectivity were designed within the procedures; implemented; and, in many cases, improved and updated over time. The COVID-19 pandemic induced the necessity to protect the health of the people and avoid the on-site visits and meetings. Therefore, the auditing process has faced the challenge to modify the normal procedures in order to comply with the new COVID-pandemic-imposed restrictions. As businesses are recommended to create new short-term trust-based relationships [29], the audit process must keep up, too. In a study done by Auld and Renckens [13], there were 51 certification entities that announced changes to the auditing process, with FSC being the first company that made such changes. PEFC did not present the changes as quickly as FSC. COVID pandemic-triggered changes put their fingerprints on the entire procedure: there are transformations from the normal audit system to the hybrid system and even to the online procedures. The communication and the documents' evaluation have changed along with the human interaction. The challenges were even higher at the certificate holder level, because they had to provide technical and operational capability to face audits remotely by

securing data transmission and even to provide training for the staff members that were unable to use the online system [30].

To maintain their audit's characteristics/quality, the certification schemes changed their audit evaluation types through some derogations (Table S1). New FSC derogations [30–33] have defined new terms, while the PEFC scheme also issued derogations [34,35]. The main objectives of the derogations, during the COVID period, were to enforce the specific restrictions but also maintain the credibility and legitimacy of the audit while preserving the health of the people and minimising the impact of the virus [36]. It is known that COVID-19 affected forestry field significantly, causing a downfall trend in production and export [37,38].

However, remote auditing (or remote assessment) is not necessarily a new approach. It was adopted in 2015, in the field of audits, by International Accreditation Forum and defined as the assessment facilitation of a Conformity Assessment Body from a remote location [39] and is enhanced by using information and communication technology for gathering, storing, retrieving, processing, analysing and transmitting information [40]. This approach—remote auditing—had very little practical applicability but has gained importance in the pandemic period, being, in some cases, the only way to evaluate the companies' performance from the voluntary standards point of view. Hybrid audit was defined as a combination of a remote desk audit and an on-site inspection [30].

The Theory of Change (ToC) is defined by FSC [41] as the basis from which organizations can identify their intended impacts and the changes they need to make to achieve them. The purpose of ToC is therefore to use an adaptive approach to any unexpected situation. As an example, it was used even as a tool to improve conservation and biodiversity [42,43] and for evaluating FSC certification of sustained timber yield [44]. ToC is also not a new term/approach, but we can see its very best use during the pandemic period, in the sense of the auditing process adaptation to the newly created conditions. Together with the remote auditing, ToC can be viewed as a precautionary measure taken into consideration long before the pandemic. Those measures assured a set of rules in case something happened, and they have demonstrated their utility in the COVID-19 pandemic period. Even if the ToC is not widely accepted and requires adaptations for its very use, and there are still debates about its usefulness [42], it can provide a framework that can be adapted for the auditing process.

2. Materials and Methods

The survey method was used to assess the companies' representatives' perception regarding the certification in the pandemic context. Fifty FSC CoC-certified companies (wood harvesting/processing and printing companies) were selected using FSC database platform (www.info.fsc.org accessed on 9 October 2020) in order to have a fair representation form the point of view of size category, certification year (experience with FSC), presence of other types of certification, export level etc. The sample structure was adopted according to other studies done in Romania in the field of FSC certification [24,45,46]. According to the adapted FSC certification procedure, companies may have the possibility to postpone the audit for one year if they meet the conditions presented in the derogation. Twenty-nine of the selected companies decided to postpone the audit, therefore the survey was applied to the remaining 21 entities. The survey used a questionnaire including both open and closed questions and aimed at gathering data on the changes in FSC audit process and assessing the perception of CoC administrators/FSC responsible persons within the certified companies about the impact of COVID-19 and changed audit approaches in the field of voluntary certification scheme at the end of 2020. The questionnaire was elaborated by authors and included two sets of questions: (1) the first one included general information questions—company size, main activity, year of certification, presence/absence of other certificates, presence on international markets, and share of exported products; (2) the second set of questions contained both open questions about different COVID-19 impacts on the audit process and closed questions needed for qualitative analysis using a five-point Likert scale. The five-point Likert scale is an interval scale where the mean can provide insights

information about the groups. A model based on the study by Pimentel [47] was created in order to compare those means. Therefore, if the mean is from 1 to 1.8, it means strongly disagree; if it is from 1.81 to 2.60, it means disagree; from 2.61 to 3.40, it means neutral; from 3.41 to 4.20, it means agree; and from 4.21 to 5, it means strongly agree. The initial draft survey instrument was reviewed by representatives of several certification bodies systems, and their comments and suggestions were included in the final questionnaire.

The questionnaire was applied via e-mail during November 2020. An Excel database was created using the survey's results, allowing one to elaborate different types of tables, graphs, and distributions.

One important limitation of the methodology is related to the qualitative character of the questionnaire. However, using open questions as well as the Likert scale questions (which were quantitatively assessed) significantly reduces this limitation. Another limitation is the fact that the sample size may be considered small. However, we need to have in mind that some companies decided to postpone the audit for one year because they met the conditions presented in the derogation. This sample size limitation can also be superseded by other studies on different regions and cultures that allow greater representation and assess possible differences between regions (Table S1).

3. Results

3.1. General Information on Studied FSC Companies

Almost half of the companies—47.6% (Table 1)—are classified as big, with more than 100 employees. The rest of them have between 10 and 100 employees, with only one company having under 10 employees. In a study published in 2013, Halalisan et al. [10] found out that 51.1% of the surveyed companies have between 1 and 100 employees. Of course, the 2013 study used a bigger sample, but still, the distributions are quite similar.

Item	Category	Ν	Frequency (%)
Size	1–10	1	4.8
	11–30	4	19
	31–50	3	14.3
	51-100	3	14.3
	more than 100	10	47.6
Other certification	Yes	10	47.6
	No	10	47.6
	No response	1	4.8
Export share	no export	8	38.1
	under 25%	5	23.8
	25-75%	6	28.6
	100%	2	9.5
Year of certification	2011-1013	7	33.8
	2014-2016	6	23.8
	2017-2020	5	42.9
Main Activity	Primary production	13	61.9
	Printing	3	14.3
	Secondary production	2	9.5
	Wood trading	2	9.5
	Forest logging	1	4.8

Table 1. Descriptive statistics of the general information about the companies.

Ten of the surveyed companies (50%) had other certificates, besides the FSC CoC one: PEFC CoC and different types of ISO certificates (i.e., 19001, 14001, 45001, 18001, etc.). For this specific question, only one company did not respond. In a similar study done in 2019, Halalisan et al. [11] found out that 57% of companies hold another certificate.

Most of the companies, summing 52.4%, export up to 75% of their products. Some companies (38.1%) do not export any of their products but address only the domestic market. There are only two companies that export all their products.

Surveyed companies were grouped by the year of the first certification, in three groups. The companies in the first group got their certification between 2011 and 2013. There are 33.8% of the companies within this group. The second group was formed by 23.8% of the companies being certified between 2014 and 2016. The third group was the biggest one (42.9%) and includes companies certified between 2017 and 2020. In the above-mentioned study done in 2019 [11], the authors found out that 40% of the companies export more that 75% of the products, 37% export less than 50%, and the rest of them export between 50% and 75%.

As for the main activity, most of the companies (61.9%) hold a primary production certificate. There is only one company that holds a certificate for forest logging. The rest of them (23.3%) have printing, secondary production, and wood trading as primary activities. There are 8 (38.1%) out of the 21 companies that have multiple activities. In the 2019 study [11], the authors found out that the main activity is secondary production (43%) and the second one is primary production (22%), with the rest of them being relatively the same order.

3.2. FSC Audit in Pandemic Period

3.2.1. Type and Duration of Audits

Companies that benefited from three and four days of audit are distributed in the same way for both the evaluation type (one audit with four days and three audits with three days) (surveillance/recertification) and the system applied (hybrid/normal/online) (Figure 1).

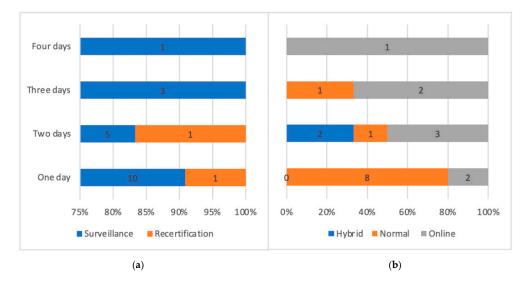


Figure 1. Number of companies distributed by number of auditing days: (**a**) audit type; (**b**) audit system.

The surveillance audits are predominant with 19 out of 21 audits. Additionally, audits with one day (10 audits) and two days (5 audits) were predominant. There are only two recertification audits, one of them is for one day and the other one is for two days.

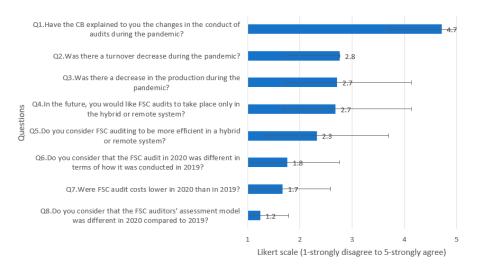
As for the audit system used, the normal system, which is represented by face-to-face audits, as it was until the pandemic period, dominates, with 10 audits. It is closely followed by the online system, which has 9 audits. The hybrid system was used only twice: once for recertification (2 days) and the other time for surveillance (2 days). Direct contact is maintained in many cases, while the online system is clearly imposed by the pandemic and used mainly for surveillance audits.

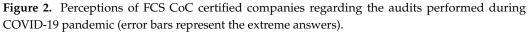
3.2.2. Audits Risk Assessment

The companies were asked to answer a closed question (Yes/No) if there was any risk assessment carried out by the certification body for the audit conducting purpose; 71% responded that a risk assessment was carried out, and the other 29% responded that the risk assessment was not carried out, which indicates that, in general, risk assessments are considered in most of the cases.

3.2.3. Perception on Audits during Pandemic Period

Only the answers for question one (Q1) can be included in the strongly agree category (Figure 2). Answers in the strongly disagree category represent 37% of the responses, disagree and neutral categories each have 25%, and there are no answers in the no agree category. There are two questions (Q5 and Q6) that were not responded by any of the questionnaire respondents.





Most of the companies indicated that the CB explained the changes in the audits. Aspects related to healthy issues or distancing were seen as changes in the audits. Of course, in some cases, after the risk assessments, some audits were conducted in hybrid system or online.

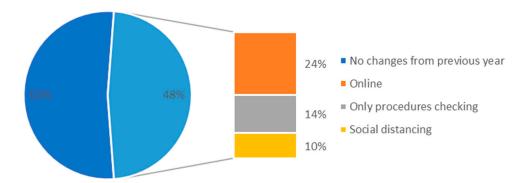
Companies had a difficult year, decreasing in turn over being recorded for studied companies (2.8 mean on Likert scale with 1-strongly disagree) (Figure 2). Related to production decrease, the perception is the same with 2.7 (Figure 2).

Perceptions on FSC audits are in line with other results or comments. For most of the companies, the audits in the online or hybrid system are perceived as not efficient (2.3 mean for Q5). Additionally, audit costs were not perceived as different from previous year, even if companies had a different audits approach.

One question was related to advantages for companies with hybrid or online evaluation. One of company's (primary processing company) representatives mentioned: *We consider that we have some advantages: being able to reduce costs with auditors travel or auditing time (which also forces the auditor to request and consult the documents before the audit).* Another representative of a primary processing company mentioned that: *During the pandemic, the risk of contamination decreases. In this system (hybrid or online) we protect our personnel.*

3.2.4. New Challenges for FSC Audits

For 52% of the companies, there was no difference between the audit in the pandemic year comparing to the previous year (Figure 3). The other 48% of the companies perceived some differences. This may indicate that, after a risk assessment, the CB considered that the evaluation can be conducted in a usual approach.





Online approach and the absence of the auditors is the most spread kind of difference with 24% mentioning. Usually, the presence of auditors in company creates a connection with company employees. Additionally, during face to face audits, the auditors have the possibility to check all phases of productions. With the new approach, the audits can be more disputable, with some concern on audits findings.

Additionally, the respondents mentioned some changes of checking standard requirements. In many cases of online or hybrid evaluations, the auditors focused on other communications channels, mainly document checking or asking questions related to procedural knowledge. In this way, the companies only presented documents to auditors at distance, with contact with staff or production processes being absent. This approach ensured that some aspects of FSC standards are disputable. This is best reflected in the following statements:

Being online, the material flow could not be physically audited. The interviews (which would otherwise have been done face to face) were also conducted online (Printing company).

Using the online approach in evaluation, some aspects related to the segregation of products (certified or non-certified products, related activities and processes, knowledge, etc.) are difficult to evaluate. The face-to-face approach can easily solve these questionable aspects of standards, and the presence of auditors in companies can increase the value of the audit.

Other challenges and changes were related to mentioned social distancing (Figure 3). The safety measures against COVID-19 were implemented by auditors or companies' staff. Social distancing and safety measures ware challenging for companies and auditors. One company mentioned:

In the current context, we have been aware that the continuous contact with members of the certification body may increase the risk of contamination with COVID-19. Social distancing or limited interactions between the auditor and the staff were difficult to put into practice in some circumstances. For almost all of the time, the distance of 1.5 m was observed; the protective equipment was used (printing company).

3.3. Perceived FSC Advantages

Most of the respondents (71%) perceived that there are some advantages of FSC certification (Figure 4). Larger range of clients and market accessibility are the most mentioned perceived advantages—both were 19%. Financial reasons and reputation represented just 14% of the responses. Trust was mentioned only by two companies, with both being relatively large companies (over 50 employees); both exporting over 50% and 100% of their products, respectively; and primary production was the main activity for both of them. The least-mentioned advantages were responsible trade and other small advantages, with only one response each.

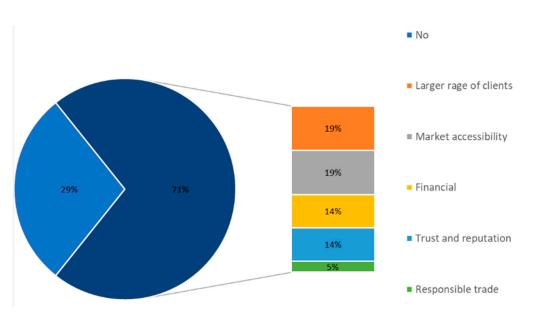


Figure 4. FSC certification advantages perceived by customers.

3.4. FSC Drivers

When asked about the FSC certification drivers, customer demand was mentioned the most among the answers (Figure 5); 43% from studied companies believe that this is the most important factor for certification. Obtaining a competitive advantage was the second mentioned reason, with 14% (Figure 5). The gap between the first and the second reason is significant in the context of the number of respondent companies.

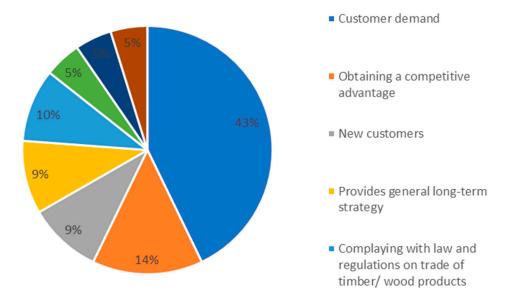


Figure 5. Perceived drivers toward FSC.

Other reasons such as improved quality of management, improved company reputation, and environmental responsibility were mentioned. Other reasons (new customers, providing a general long-term strategy, and complying with law and regulations on trade of timber/wood products) had only two answers each.

The advantages refer to the benefits received after certification, while the drivers refer to the determinant factors in certification.

4. Discussion

The results indicate that customer demand is the top driver for FSC certification in the perception of companies' representatives. There is significant consistency in this matter between previous studies and the present one. Similar qualitative analyses were carried out in Romania by Halalisan et al. [10,11], to assess the perceived advantages toward FSC CoC certification. First study was carried out in 2013 and the other one in 2019, as a continuation and an update for the previous one. Additionally, the FSC-certified companies seem to have, in general, the same profile in terms of size, main activity, and export level (the study from 2013), and main activity, export level, and the presence of other certifications (the study from 2019). One similar study carried out by Enescu et al. [46] in 2019 looked at the current profile of PEFC CoC companies in Romania and asked about type of certification, distribution by county, and the CBs activating in Romania. Many other studies looked at the profiles of certified companies (FSC, PEFC, and ISO) [48–52]. The present research, along with the above-mentioned studies, is providing valuable descriptive information.

There are multiple studies on the perceived advantages of certification, but there are not many studies on the changes in the auditing process: some treat the audit in general, others look at the change in policy time and other aspects [13] or other industries. Therefore, the novelty of this study is clear; it takes the perspective of companies about the COVID-19 pandemic and analyses those outputs. A lot of efforts were made by many stakeholders in order to help the maintenance of the auditing process during this period.

The number of days for each audit type and each audit system depend very much on the specific period and conditions for each region of the country (county), depending on the evolution of COVID-19 pandemic. The answers in this study indicate that there is a tendency for one day or two days' audit rather than a longer period, but this cannot trigger the conclusion that online audit is composed of fewer days per audit than the normal or hybrid one, because the pandemic and the specific number of cases per county determined the type of the audit. Additionally, the complexity of each company determined a specific amount of time. Hence, this characteristic cannot be generalized. This tendency of one or two days can be attributed to the fact that there were more surveillance audits, and those remain unaffected by the pandemic. Therefore, in those annual surveillance audits the rate of non-conformities can be less than in other years, but this assumption can be further studied to provide a more confident framework.

The surveillance audits dominated because those are more frequent than recertification audits. Just two recertification audits were present; this means that just two companies have renewed their certificate during the pandemic. One of those was under the hybrid system and the other was under the normal system. As specified in the FSC-DER-2020-001 and FSC-DER-2020-012 [30,33], the hybrid system is used if the normal system cannot be carried out due to health issues. This means that the condition in Vrancea county (hybrid system) was worse (from a pandemic point of view) than in Bacau county, where the normal system was used.

The answers regarding the efficiency of the online and hybrid approaches, as well as the answers regarding the preference for using changed and fewer interactional approaches in the future are very interesting. There are very few companies that, perceiving a decreasing audit efficiency, are tempted to use the online or hybrid systems in the future. This may be the main outcome of the present study. It is not hard to justify the answers. Firstly, despite of probably reduced audit costs, the pandemic type of audits can be a challenge for the companies due to the need for using different tools (like online communication platforms) that require specific knowledge and skills. Secondly, there may be a concern regarding the credibility of a certificate issued after online audits in which the remote auditor may not be able to properly check all standard requirements due to reduced interaction with the staff or direct contact with the production process. Based on the results of the study, some recommendations can be formulated, aimed at reducing the above-mentioned issues: proper, clear, and informed procedures for audits; well balanced hybrid audits, etc. One option for mirroring the perceptions regarding the online/hybrid audits would be to separate the face-to-face auditing-obtained certificate from those issued after adapted types of audits. However, the extensive use of adapted auditing procedures should be done with caution, and more investigations are needed.

5. Conclusions

This study is based on surveying a sample of FSC CoC-certified companies having a structure that is very similar to samples structured in other studies done in the last decade. It advocates for the veracity of the results despite a rather small sample. Nevertheless, the need for further studies in Romania or other countries still exists. The paper brings valuable information on audit characteristics in special contexts like the pandemic period. The efforts to adapt the certification procedures for assuring the aimed quality are highlighted, but there are numerous directions of future necessary research targeting the relationships between the quality of online or hybrid audits and other factors like costs or, more broadly, the resources involved. Important conclusions can be dropped from the research:

- Many companies preferred to postpone the audit, if they were fulfilling the established criteria for that.
- The COVID-19 pandemic period is characterized by the preponderance of surveillance audits; the number of companies that benefit from three and four days of auditing are distributed the same for both the type (one audit with four days and three audits with three days) (surveillance/recertification) and the system applied (hybrid/normal/online). The higher the number of auditing days, the higher the use of online and hybrid approaches. However, for one-day audits, on-site approach is predominating.
- The online system has only nine audits. The hybrid system was used only in 10% of the cases. The precondition for the remote component of the hybrid audit was that virtual video meetings, interview with key staff, other relevant documents, and records had to be presented. Hence, because of the small amount of desk audits (2 out of 21), the conclusion that the certificate holders did not have enough experience and technical capability to carry out this kind of assessment can be drawn—customer demand remains the most important driver for certification, in the perception of the companies' representatives, and most of the companies do perceive FSC certification as providing advantages.
- Almost half of the companies' representatives in this study (48%) believe that there are differences between the audit in the pandemic year when compared with the previous period, due to social distancing, working from home, auditor physical absence, and production dynamics. This result indicates that making the auditing procedures less interactional is not yet a sufficiently mature approach, being able to satisfy the trust of the companies; there is a clear need for better procedures, building online tools usage capacity, better communicating the specificity of such procedures and better balancing the online evaluations with on-site assessments.

Supplementary Materials: The following are available online at https://www.mdpi.com/article/10 .3390/f12080997/s1, Table S1: The FSC audit changes during Covid-19.

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