The Participatory Process behind the Green Infrastructure Plan in Scania, Sweden

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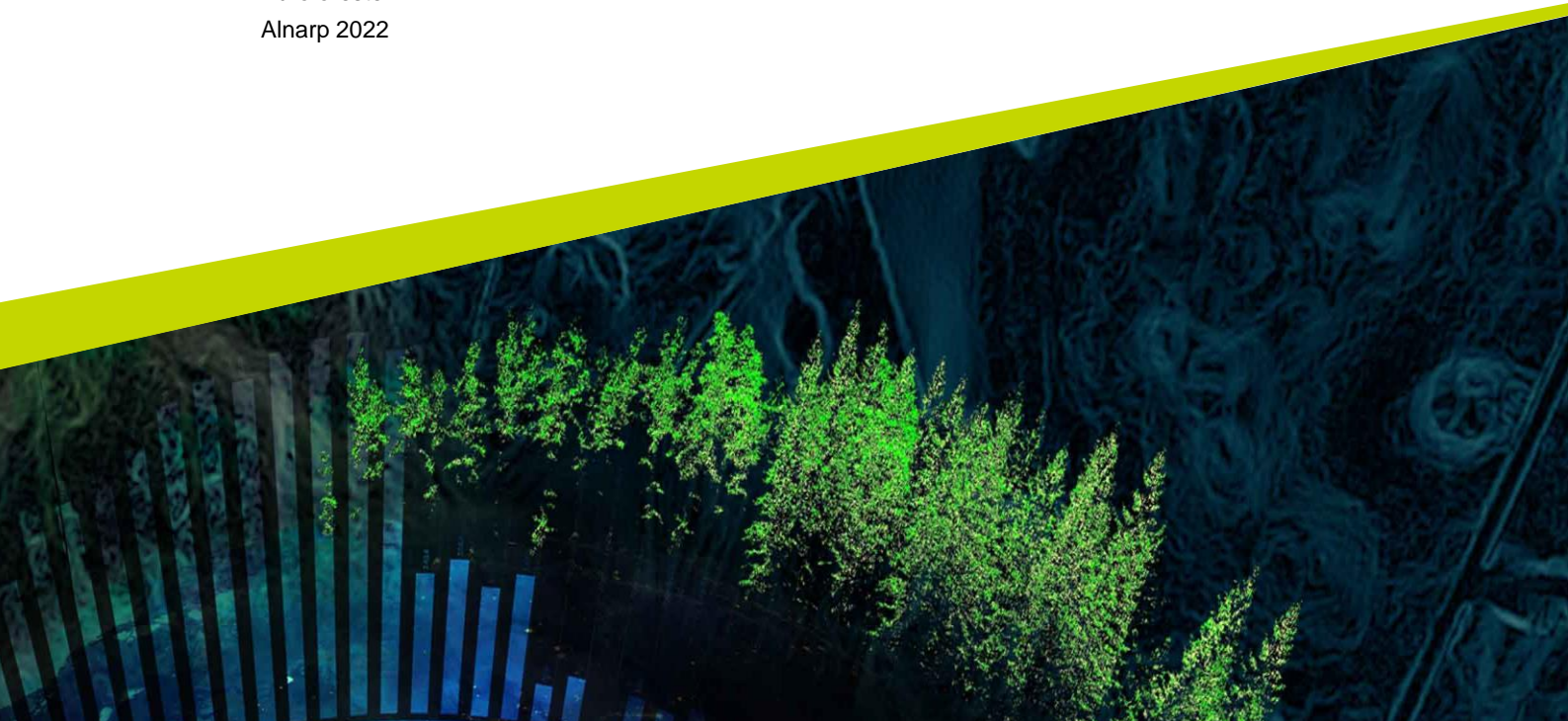# The Participatory Process behind the Green Infrastructure Plan in Scania, Sweden

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Abstract

This study explores stakeholders' perceptions of the participation process of Green Infrastructure (GI) in Scania. Participation processes have become increasingly important and common in dealing with complex issues, especially within forestry. There is a threat to our forests' functional biodiversity and risks in the provision of ecosystem services, many species are threatened and have been red listed. In response to this biodiversity issue, the Swedish Government has mandated the County Administrative Boards to design regional GI plans, created with the inclusion of stakeholders and applying a participatory process. This plan aims to increase the knowledge base about the landscape and ecosystems values with the goal of long-term preservation and sustainable management, with initiatives for species and environments that are vulnerable, i.e., preserving and developing the ecosystem services. This study was based on semi-structured interviews carried out with 14 different stakeholders within the forest sector. The data is analysed using a theoretical framework focused on collaborative governance to comprehend the criteria of a successful participation process to achieve collective learning and environmentally friendly outcomes. The main findings were that, in general, individual stakeholders perceive the participatory process of GI as mainly informational rather than deliberative. New knowledge exchange and collective learning has been missing, these results could be caused by the limits in resources and the timeframe of the entire process. Despite the GI plan documents are finalised, it does not mean the participation as a process should be finished because it may limit the realisation of activities that foster GI across Scania's landscape. This study adds an in-depth analysis of stakeholders' perceptions and experiences of the creation of GI. Moreover, it underscores what criteria are required to have successful outcomes for an inclusive governance of forest resources.

Key words: Participatory process, green infrastructure, forestry governance, forest management, collaborative governance, Scania (southern Sweden).

Sammanfattning

Denna studie utformades för att undersöka hur intressenter uppfattade samverkansprocessen för Grön infrastruktur (GI) i Skåne. Samverkansprocesser har blivit viktigare och vanligare när det kommer till att hantera komplexa frågor, särskilt inom skogsbruket. Den biologiska mångfalden och ekosystemen i våra svenska skogar är i fara och många arter är hotade. För att lösa frågan om den biologiska mångfalden har regeringen gett länsstyrelserna i uppdrag att utforma regionala handlingsplaner för GI. Handlingsplanen är till för att öka kunskap om landskapet för att bevara ett långsiktigt mål och hållbar förvaltning med insatser för att bevara och utveckla arter, miljöer och ekosystemtjänster. I studien ingår 14 enskilda intressenter inom skogssektorn som har intervjuats genom semistrukturerade intervjuer. Teorin om kollaborativ styrning har tillämpats för att förstå kriterierna för en framgångsrik samrådsprocess för att uppnå kollektivt lärande och miljövänliga resultat. Studiens resultat påvisar att de enskilda intressenterna uppfattade GI:s samrådsprocess huvudsakligen informativt. Utbyte av ny kunskap och ett kollektiv lärande verkar ha saknats, men detta resultat kan bero på själva resurserna och tidsramen för hela processen. Trots att GI handlingsplan är färdigställd är inte själva samrådsprocessen för GI avslutad, vilket kan begränsa genomförandet av aktiviteter som kan främja GI i Skånes landskap. Denna studie har en djupgående analys av intressenternas uppfattningar och erfarenheter för att skapa GI handlingsplan. Därtill får man en förståelse för vilka kriterier som krävs för att uppnå framgångsrika resultat för en bättre inkluderande styrning av skogens resurser.

Nyckelord: Samrådsprocess, grön infrastruktur, skogsbruksstyrning, skogsvård, kollaborativ styrning, Skåne (södra Sverige).

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Abbreviations

GI	Green infrastructure
CAB	County Administrative Boards
SFA	Swedish Forest Agency

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1. Introduction

Logging and wood harvesting in Swedish forests has led to habitat loss, fragmentation, and degradation (IUCN 2013), resulting in threats to functional biodiversity and risks in the provision of ecosystem services (Niss et al. 2020). Sweden hosts a substantial proportion of red-listed species at the European level, requiring more action to improve their status and survival ability. Biodiversity cannot be secured solely by the conservation treatments used in Swedish forestry (e.g., leaving some species with structural function, eternity trees, 10% voluntary set asides, buffer zones) and creation of nature reserves, national parks, and protected areas. On the contrary, it is necessary to make efforts from a wider landscape point of view (Angelstam et al. 2020). A landscape with a diversity of natural areas creates a spatial structure for biodiversity, enabling connectivity and species dispersal, even in a changing climate (CBD 2014). In response to the issue and threats of biodiversity, the Swedish Government has mandated the County Administrative Boards (CAB) to design regional **Green Infrastructure** (GI) plans to produce increased knowledge based on the qualities of the landscape, i.e., the intrinsic value of nature and the value in the form of contribution to the welfare that nature provides (Berlin & Niss 2019). Furthermore, GI plans should provide a long-term goal and sustainable management with specific initiatives for species and environments that are particularly vulnerable, such as preserving and developing functions of the ecosystem services. Achieving the goals of GI plans requires formal support from various instruments and functional planning documents, with common goals for all stakeholders in the landscape (Angelstam & Manton 2021). Additionally, the GI plans, to preserve functional ecosystems in the long-term and identify the entire landscapes with conditions for maintaining ecological functions and qualities, requires communication and management with consideration and long-term coordinated efforts from all stakeholders (Länsstyrelsen Skåne n.d.), making other government institutions within forestry, i.e., the Swedish forest Agency (SFA), also responsible for collaborating and supporting the County Administration Board of Scania.

1.1 Participatory processes and green infrastructure in Scania

Who is the forest for and to whom should the forest benefit? Answering these questions will probably lead to conflicts given the variety of interests within the forest sector and the limit of the forests resources. One way of tackling such conflicts is by developing a forest policy, where stakeholders with different interests and expertise engage and negotiate (Krott 2005). Anyhow, it also means complications and debates might continue in the sector. The forest conflicts involve forest owners and forest enterprises wanting to use timber, and the environmentalist and biologists who want to protect biotopes and ecosystems (Ibid). Forest degradation, biodiversity loss, and climate change are prominent examples of issues governed by instruments that include legal, non-legal, governmental, and non-governmental arrangements (Bernstein & Cashore 2012). In many countries, and not at least in Sweden, participatory processes, defined as consensus-oriented decision-making in collective forums, have become increasingly common (Mårald et al. 2015) to deal with these prominent issues. Public agencies use participatory processes to facilitate outcomes that could not supposedly be accomplished solely by the state, which means private stakeholders can engage in the issue and try to solve the knowledge gap between different interests, to achieve collaborative governance and collaborative learning (Johansson 2016; Ansell & Gash 2008; Jakobsson et al. 2021). Academics, policymakers, and public actors are devoting considerable attention to the problem of understanding, influencing, and working through governance networks (Klijn & Skelcher 2007; Jakobsson et al. 2021; Emerson & Nabatchi 2015). However, this also means modern democracies have become more complex, fragmented, and multi-layered (Sundström et al. 2010), which may depend on the various stakeholders' opinions and the complexity of the environmental challenges (Lidskog & Elander 2007). Moreover, decisions have become more decentralised into more regional levels, and this increases the demand for expertise and better communication technologies to transfer information and knowledge (Klijn & Skelcher 2007). Participatory processes aim hence to help to solve overly complex problems, where multiple views and

stakeholders can reach agreements. This makes participatory processes a great tool for the governance of forest in Sweden and to reach the forest policies of the sector. Ideally, in order to satisfy all interests, the Swedish forestry model tries to be sustainable by promoting all three aspects of economic, social, and ecological measures, the premise of this approach calls for "more of everything" (Lindahl et al. 2015). Hence, involving stakeholders in decision-making can make the decisions more legitimate by increasing trust, awareness, acceptance and ownership over problems and solutions, thereby reducing conflicts, and helping achieve environmental goals more effectively (Johansson 2016; Reed et al. 2018; Pettersson et al. 2017). Furthermore, participation processes can integrate variation of values and knowledge (Reed 2008) but, the political and cultural dimensions of conflicts also raise important and problematic procedural questions about which stakeholders should be included in a participatory process, the process in itself, and with what kind of expectations should exist (Jakobsson et al. 2021; Reed 2008). Ultimately, we should also ask if participatory processes per se are the solutions to environmental conflicts? As current systems might not be challenged even with the implementation of participatory processes, "More of everything is likely to result in "more" for those who have voice and influence, and "less" for those who lack resources and networks" (Lindahl et al. 2015:11).

In this study, I explore the social processes around the construction of the GI plan in the Region of Scania. Scania is the most species-rich county in Sweden, but unfortunately also the county with the most endangered species (Niss et al. 2015). The interesting characteristics of Scania with its diversity of landscapes and stakeholders make it an interesting case study to understand the processes behind the GI plan creation and its current and future implementation from a stakeholder point of view.

1.2 Research aims and research questions

Increasing the engagement for biodiversity conservation and improving ecosystem services at a landscape level requires cooperation between all involved stakeholders (Berlin & Niss 2019). Moreover, successful and long-term collaboration entails building trust between the participants through continuous learning and mutual respect (Ansell & Gash 2008; Appelstrand 2002; Johansson et al. 2020; Reed et al. 2018; Johansson 2016). At the same time, forest governance in Sweden is complex, with multiple stakeholders having differing goals for forest utilisation (Sundström et al. 2010). Therefore, participatory processes and decision-making processes are relevant approach to apply. However, a successful participatory process should fulfil certain criteria (e.g., learning, mutual gains, power balance, legitimacy, transparency) (Eriksson & Klapwijk 2019; Buchy & Hoverman 2000; Reed et al. 2018; Jakobsson et al. 2021; Reed 2008; Lidskog & Elander 2007; Johansson 2016).

Hence, I ask: what is a successful participation process and has this emerged in the creation of the GI plan in Scania? To answer these overall questions, I studied the social processes behind the creation of Scania's GI plan and the actions that stakeholders assumed for its implementation phase. The main objectives of my study were threefold: 1) to examine the stakeholders' perceptions of Scania's GI plan; 2) to identify what factors of the participatory process may have influenced the creation and outcomes of the GI plan; 3) to explore what the implementation of the GI plan has been so far.

2. Background

This chapter consists of three general topics about the Swedish forestry and the relationship with participation process. Firstly, I will explain the Swedish forestry and the governance and their impacts on biodiversity. Secondly, I will provide a theoretical background of the participation process and its criteria to answer if the participation process of GI has been successful or not. Thirdly, I will clarify what GI's plan stands for and its purpose and aim to make it commence into reality.

2.1 Forestry governance and forest management impacts on biodiversity in Sweden

After WWII until the 1990s, the Swedish forest policy has prioritised wood production and economic values, which has resulted in more intense silviculture: more harvesting, selective cutting to clear-cutting, shorter rotations, fertilisation, planting, ditching, and monocultures, etc. (Lundmark et al. 2014; Jansson et al. 2011). These activities strongly contrast with the complexities of the disturbance-succession cycle observed in unmanaged forests (Kuulivainen 2009). In 1993, the Swedish Government made a new forest policy based on the international commitments with the UN Conference and Environment and Development in Rio in 1992 (UNCED), changing the main production priority and including the ecological dimension and biodiversity protection goals of the sector (Lindahl et al. 2015). This forest policy decision changed the balance between the forest policy instruments, shifting from reliance on legal instruments toward information instruments. The Forest Management Act (legal instrument) was deregulated, and instead, the focus should be on individual responsibility (informative instruments), such as knowledge transfer and counselling. The economic incitements such as state aid almost disappeared (mainly measures supporting wood production), and only a few subsidies for nature conservation actions remained (Appelstrand 2007). "Freedom under responsibility" is the slogan of the Swedish forestry: there shall be an optional commitment in addition to the legal requirements from the forest owners themselves in advance to achieve the political environmental goals, the forest owners are expected to take more responsibility by receiving the necessary knowledge, as well as voluntarily saving valuable forest land (Sundström 2005; Appelstrand 2007). This self-regulation approach indicates that forest owners have the freedom to develop their silvicultural activities. Nonetheless, the protection of biological diversity should be a fundamental basis and a priority in relation with forestry actions and decisions. Moreover, the activities should also rely on the combination of counselling and subsidies to influence the forest owners' decisions (Lindahl et al. 2015; Sundström 2005). Sweden's essential forest political instrument is "skogsvårdslagstiftningen" and the law tells us about the fundamental requirements on how forestry shall pursue, and the SFA is the supervisor authority. Despite the "new forestry policy" being implemented, with possible effects on increased amounts of deadwood and other vital structures, it is not clear of its causation (Kyaschenko et al. 2022) why Sweden seems not to meet its biodiversity objectives in forestry (Angelstam et al. 2020). More conservation actions need to be implemented and more work needs to be done to improve the conditions for biodiversity (Nilsson et al. 2021; IUCN 2013; Kyaschenko et al. 2022). One culprit could be the expansion of monocultures of coniferous forests, which have expanded far beyond the limits of their natural ranges (Spiecker 2000; Felton et al. 2010; Lindbladh et al. 2000). The forest management changes, and the self-regulated implementation of forestry policy goals may likely result in less activities to preserve biological diversity (Forsberg 2012) and reduce the resistance to abiotic and biotic disturbances (Spiecker 2003). Continuing with this intensive forest management can result in more habitat losses and affect several forest species (Czeszczewik & Walankiewicz 2016). Despite the large amount of knowledge that indicates that forest management has affected forest ecosystems and biodiversity, the economic dimension is still prioritised. We might wonder why the equal values of nature and production in forests have not been accomplished. Lindahl et al. (2015) suggest that part of the answer lies in how forest actors operationalise sustainable development in Sweden. Wood production represents a solution to serve economic and environmental problems and, therefore, is a reasonable argumentation. Moreover, research and development of silviculture in Sweden have been dedicated to a significant extent to monocultures for many decades. Therefore, it has become more convenient to recommend monocultures instead of mixed stands (Agestam et al. 2006), and an effective even-aged monoculture system is the only management option to secure and satisfy the Swedish forestry model (Lindahl et al. 2015; Angelstam et al. 2020). This

consequence may tell the legal framework for forestry needs to be reviewed and strengthened to steer away from unsustainable choices of action (Forsberg 2012).

Another factor influencing forest management and its implications for biodiversity can be that modern democracies have become more complex and multi-layered (Sundström et al. 2010). The state is not the sole owner of the forests, but they are divided between landowners with different opinions and goals. In 2020, single persons, estates, and companies (not trading), owned the largest area of productive forest land (48 %). Private-sector companies/corporations have the second-largest holdings (24 %), followed by public owners (21 %). Then, other private owners (6 %) and other public owners have (1 %). The owner structure development from 1999 to 2020 is relatively stable, and these shares change only scarcely (Skogsstyrelsen 2021). The ownership structure can imply significant differences within forest management (Eriksson & Klapwijk 2019; Kindstrand et al. 2008).

Nonetheless, while our forests have changed, there are still some efforts and activities in relation to protecting biodiversity. Forest certification, conservation, and retention are the three main objectives that have been current to preserve biodiversity while still maintaining wood production in Swedish forestry. Forest certification (FC) has been developed as a policy tool for maintaining sustainable forest management (Kraxner et al. 2017), and this certification was established because concerned people and environmentalists had started campaigns against politicians to stop deforestation, clear-cut in old forests, and instead focus more on preserving and maintaining the protection of biological diversity (Kraxner et al. 2017; Rametsteiner & Simula 2003). If a landowner follows a forest certification, they should voluntarily set aside a proportion of their land to promote biodiversity (Simonsson et al. 2016). Retention is another common approach while clearcutting management is in use, individual trees and a group of trees are retained at the final harvest and deadwood is either created or left at the site (Gustafsson et al. 2020).

Due to the scarcity of protected forest areas in Sweden, it is controvertible whether it is achievable to obtain the conservation of biodiversity if the current forest management is not modified. These actions need to take place within areas where the protected forests are low (Kuuluvainen 2009). Data from Naturvårdsverket (2021) shows that in 2020 formally protected forestland was in total 2,4 million ha, which corresponds to 8,7 % and of which 6% was in productive forestland. To maintain biodiversity, we have two options: increase protected forest areas of land as parks and nature reserves and restore degraded forests to avoid higher pressure for further natural habitat conversion (Dobson et al. 1997). Forest restoration can help to bring back many ecosystem functions and avoid a function collapse, by recovering and establishing the original biodiversity (Chazdon 2008). Restoration is related to achieving stakeholder goals of ecosystem sustainability, economic efficiency, and social wellbeing (Stanturf et al. 2014).

2.2 Participatory processes: theoretical underpinnings and experiences in the Swedish forest sector

I am applying collaborative governance based on the framework developed by Ansell and Gash (2008). Using this approach, researchers have been able to define the needs of conducting successful participatory processes and what principles are required to achieve good outcomes. Collaborative governance stands for a consensus orientation between stakeholders to reach a decision. The public and private stakeholders come together to engage, communicate, and collaborate on a concrete issue rather than debating and using argumentation to defend own interests (Ibid). Buchy and Hoverman (2000) have discussed on the duality of participation, which can be seen as an approach or a management tool, and at the same time an end or a means to an end. Reed et al. (2018) points out "Whether success means achieving beneficial environmental outcomes or whether it simply leads to an increase in trust and more positive working relationships, a theoretically informed approach to stakeholder and public engagement has the potential to markedly improve the outcomes of decision-making processes" (p. 12). Nonetheless, even if participation means as an end (process focus) or to an end (product focus), or as an ethos or as a

management tool, the responsible stakeholder that summons the participatory process still has the implications of which type of level or how the process will run. But no matter what the responsible stakeholder stands for or how they do it, they cannot ignore the fact that issues of power, representation, and social change must be addressed or anticipated before the processes are established (Buchy & Hoverman 2000).

The framework of collaborative governance by Ansell and Gash (2008) is shown in figure 1. The starting condition of collaborative governance is to avoid power imbalances, which can e.g., occur when stakeholders cannot participate in the collaborative process. One relative factor may be the time, energy, or independence to engage in time-intensive collaborative processes. Furthermore, there may be different expectations of what the precise process should concern or the results, especially the balance of time and energy that collaboration requires. Besides, earlier experiences of participatory processes (prehistory of cooperation or conflict) may influence the relationship with other stakeholders and the expectation and commitment for a participation process. Hence, these aspects should be addressed or anticipated before establishing the process, to avoid complications. Therefore, an institutional design of the process is essential, and leadership is a key factor in improving this issue. The institutional design refers to basic protocols and ground rules (e.g., creating clear ground rules, the time of the process, building trust, encouraging dialogue, and analysing mutual gains). Henceforth, access to the collaborative process is essential in obtaining legitimacy and transparent decision-making. Stakeholders with interest in an issue should be included in the process (Lidskog & Elander 2007). Involving various stakeholders integrates variation of values and knowledge, and it can deliver more comprehensive information, in turn, providing and enhancing the quality of environmental decisions and knowledge exchange (Reed 2008; Pettersson et al. 2017; Ansell & Gash 2008). However, the quality of the outcomes and success of stakeholder participation does depend on the quality of the process itself and not merely on participation (Reed 2008). Communication is fundamental to reaching decisions based on consensus, and dialogue must incorporate equivalence (seen as equal participation) and involvement to achieve transparency, accountability, and trust (seen as the ability to express concerns). By fulfilling these criteria, long-term legitimacy for public policy can be secured (Johansson 2016). Hence, it means that the information needs clarity, consistency, and truth that corresponds to reality (Krott 2005), in other words, clarifying the purpose, principles, and rules of the participation process (Johansson 2018). If there is trust between the participants, then the relationship would be more positive and experiences and knowledge can be shared, and in turn, learning outcomes can be reached (Johansson et al. 2020; Reed et al. 2018; Johansson 2016).
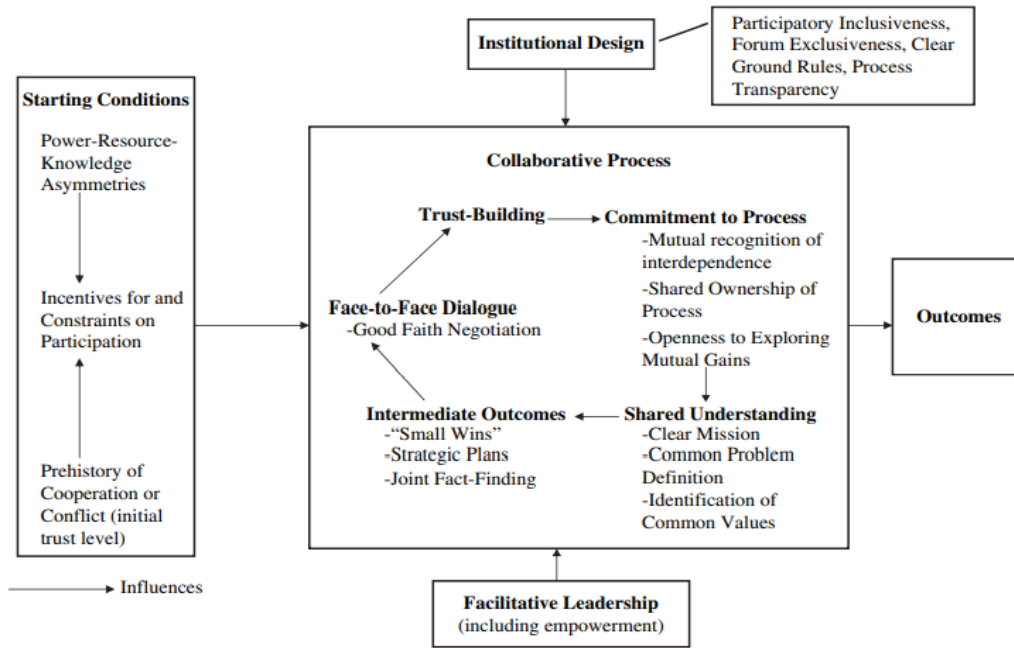
Figure 1. A model of collaborative governance. Illustrated by Ansell & Gash (2008).

Realising what knowledge and competence each stakeholder ought to have can also help the responsible actors (i.e., policymakers) to attain a mutual understanding (Eriksson & Klapwijk 2019; Buchy & Hoverman 2000; Reed et al. 2018; Jakobsson et al. 2021; Reed 2008). In general, the opinions of the relevant stakeholders can contribute to the key societal demands on forests, and the knowledge of these groups is necessary for an understanding of managed forests in terms of a complex socio-ecological system (Eriksson & Klapwijk 2019). Nevertheless, the collaborative process itself has different developing phases, the outcomes of collaborative governance can be contradictory, either positive or negative, and the results from the process will not necessarily reach the outcomes initially stated.

There are different forms of participatory processes appearance, and in each one, there are various levels of influence capacity each stakeholder or interest group has. According to Johansson et al. (2020), after interpretation of Arnstein's (1969) "ladder of citizen participation", from an analytical perspective, the degree of influence can be defined in different forms of collaboration (figure 2).
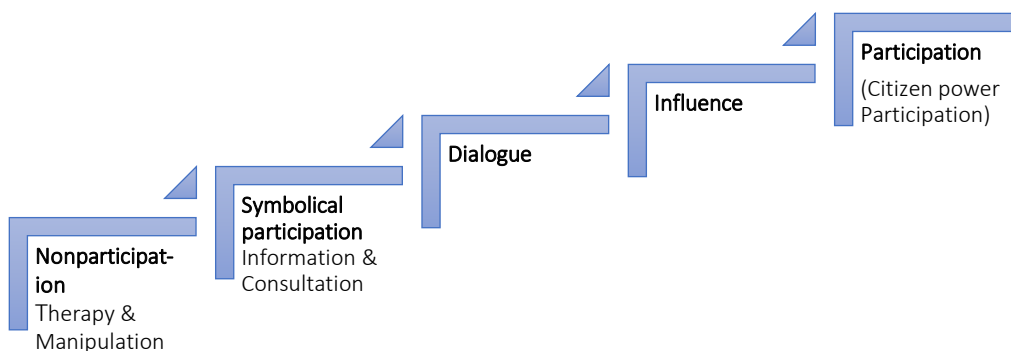
Figure 2. Steps in citizen participation. Modified from Arnstein (1969) and Johansson et al. (2020).

The ladder or staircase- analogy illustrates (beginning from the lowest step) 1. **non-participation**: manipulation and therapy; 2. **symbolical participation**: information and consultation; 3,4,5 shows in different steps delegation of **power** between stakeholders: starting with participating in a dialogue,

being involved to influencing, and then it becomes successful **participation**. Johansson et al. (2020) have shown that there may be some critical points with participatory processes. Instead of stakeholders gaining influence, they participate in activities where manipulation may occur, manipulate the stakeholders' perceptions, or divert attention from basic problems. Similarly, as Krott (2005) emphasises that communication and exchange of interests and knowledge is the equitable solution for the conflict solution, however, sometimes the primary attempt is to enforce each other own interests through information, persuasion, and power. The condescending of experts, or lack of expertise, can threaten participation and the decisions may lead to false assumptions, especially regarding forestry (Ibid). The risk with participatory processes is that it can benefit those stakeholders within forest sectors, such as the government, forest owners, and forest industries (Sundström 2005). Furthermore, a participation process may sometimes be only symbolic, where communication and dialogue arise, but there is no warranty that aspects and perceptions consider. Principally, it is only in the last steps where citizen power participation processes offer a genuine impact (Johansson et al. 2020). The analogy of "ladder of citizen participation" correlates with other participation processes. According to Reed et al. (2018), there are diverse types of public and stakeholder engagement, and few typologies attempt to explain why engagement may or may not deliver desired outcomes in any given context. For example, engagement can be either called 1. Top-down, with one-way communication, is when the process is initiated and led by an organisation with decision-making power. The aim is to consult the public and stakeholders or communicate decisions to them. 2. Top-down deliberation, a process is initiated by an organisation, but instead of consulting, is it about engaging the public and stakeholders in a two-way process to discuss and find solutions. This approach enables us to better understand and explore suggestions with stakeholders and their decisions and opinions. 3. Contrarily, if the deliberation is initiated or led by citizens, the public or special interest groups, it is called bottom-up. A top-down process can be co-productive, includes more deliberation, and the decision can be cooperatively developed and decided by both the initiated party and stakeholders (Ibid). Nevertheless, as Johansson et al. (2020) indicated, the diverse types of participatory processes should be available for use. However, the several types of participation should be based upon a theoretical understanding of "what works" in terms of desired outcomes from the participation process (Reed et al. 2018).

The democratic and deregulated nature of the Swedish forest governance system has included examples of participatory processes. In 1998, Sweden signed the Aarhus Convention, which means there shall be a good/open relationship between citizens and government (Naturvårdsverket n.d.). The citizens should have the right to access environmental information and give the ability to influence and appeal to environmental decisions. Moreover, public participation must: a) include reasonable timeframes of the decision-making process/participatory process; b) inform the public in advance to let them be prepared and participate; and c) ensure that the results of the participation considered reflected in the decision (Pettersson et al. 2017). Collaboration in nature conservation issues has been in action for a long time as an essential part of nature conservation work in Scania. In 2009, the government gave responsibility to each county to develop participatory processes, to improve the regional nature conservation through increased collaboration between the involved stakeholders (Länsstyrelsen Skåne n.d.). Furthermore, public participation has become crucial to keeping public acceptance of policy decisions, especially in the forestry sector, where it is an everyday conflict of interests (Blanc et al. 2018). However, according to Pettersson et al. (2017), the legal framework for forestry in Sweden makes no specific reference to the notion of effective participation. The statement can connect with the problem that not all stakeholders have formal rights or duties in the forest governance system (Lindahl et al. 2015). To participate in a participation process depends on the scope and the initiative about the issue. Moreover, all forest policy debates lie in political and power relationships, and this cause some stakeholders to have less voice and impact.

However, the problem of involving all stakeholders can result in variation of opinions and values, and therefore, it is important to have a deeper justification of the knowledge gap between different interests

(Jakobsson et al. 2021), and have a solution to the conflict, negotiation, learning, communication, and adoption (Appelstrand 2002). Furthermore, the more people participate can make it more challenging for the decision-makers to choose between the different prospects, but the outcomes for the community become more prominent (Buchy & Hoverman 2000). In the end, we can only know the results from the participation process by having a reflecting phase. By reflecting on feedback from participants and how they perceived the process, it is possible to refine practice, but there is no substitute for the experience (Reed 2008).

2.2.1 Stakeholders and prehistory of cooperation or conflict

According to Ansell and Gash (2008), collaborative governance often builds on a history of bad feelings, and successful collaboration can be hindered by having dynamics of "us versus them". Prehistory of conflict may lead to low levels of trust and commitment, where strategies of manipulation occur, which may result in dishonest communications. Meanwhile, prehistory of cooperation can create a higher level of trust and deliver an ongoing process of collaboration.

Forest ownership in southern Sweden is distributed between private owners (75%), private organisations (9%), and others (17%) (Blomberg et al. 2020). These large amounts of private forest owners underscore the importance of using a collaborative participatory process to increase knowledge and to achieve the goals of GI. Therefore, it is tempting to wonder on how much are the private owners included in the decisions making processes. Furthermore, on top of all diverse forest owners, we have other stakeholders with an influence who want to utilise the resources the forest provides, i.e., authorities and government institutions, e.g., SFA and CAB (working for the implementation of environmental governance and regional development objectives), municipalities, scientists, forest companies, i.e., Södra (purchasing and proceeding timber, etc.), Non-profit organisations, i.e., Swedish Society for Nature Conservation and Birdlife Sweden (represents the general public in conservation), social values and activities, e.g., Swedish Association for Hunting and Wildlife Management, then as for recreation, e.g., Swedish Outdoor Association (Jakobsson et al. 2021).

The prehistory of participation can tell us earlier experiences can create the expectations stakeholders ought to have today regarding participatory processes, as well as the relationship between stakeholders. Jakobsson et al. (2021) investigated the different dimensions of conflict perceived by private forest owners and other stakeholders. The results show an ongoing conflict with all concerned stakeholders, where the issues are based on values and emotions rather than facts and proof. In the past, forestry issues concerned silvicultural practices (technical dimensions), and nowadays, it is more about the political and cultural dimensions, e.g., the study revealed that private owners felt they had little ability to influence political decision-making. Furthermore, previous research has established that even though we have a legal framework for participation processes, that does not make any specific reference to having effective participation. Pettersson et al. 2021 reviewed the role of participation in the planning process in Sweden, and one example from them showed "there are no mechanisms to ensure that the outcome of the consultation is considered in the decision-making" (Pettersson et al. 2017:9). The results indicate that this specific participation process did not fulfil the criteria for effective participation because of a limitation of stakeholders being involved. On top of all, it seems the consultation was primarily intended to mitigate adverse effects instead of providing a deliberative process. In the same vein, Rönnegård (2021) studied collaborative governance in forest policy by analysing the regional forest programs. The results showed that the inclusiveness of diverse interests was too diminutive, which undermines successful participation. Furthermore, it seems the stakeholders had not participated on equal terms, where economic and production-oriented interests were valued higher than other interests such as social, environmental, and recreation values.

2.3 Green infrastructure in Scania

The GI plan is a knowledge base for planning the land uses and water management for nature conservation on a landscape level. It operates as a support for identification and analyses of future threats (e.g., climate change). The main task for fulfilling the goals and strategies is developing dialogue and participation with different stakeholders to gain a consensus and a mutual understanding of what and where is valuable nature in the landscape. Then, deciding upon what measures need to be applied. The application of use of the GI plan addresses the key actors, those who possess and manage land, i.e., CAB, municipalities, landowners, and other authorities. However, a condition for GI to be a tool in helping to manage the landscape in the long term means all stakeholders in the landscape should contribute, and this can solely be achieved by benefitting from the experiences and opportunities of various stakeholders (Niss et al. 2020).

After the European Union's strategy for biodiversity in 2011, a preparatory work with GI became relevant. In 2012 landscape- and policy analyses were reached, followed by proposals in 2013 on how to develop the plans at the regional level, and in 2015 guidelines for regional action plans came. Lastly, in 2018 the assignment of counties to produce regional action plans commenced (Länsstyrelsen Skåne n.d.).

In 2015, the county of Scania adopted a nature conservation strategy, "the pathway for a richer biological Scania". The onset for the strategy is: "It is wiser and cheaper to preserve and restore the habitats the threatened species are present today than recreate or try to get back those habitats once lost" (Niss et al. 2020:27), and this strategy influenced and inspired the GI plan. Restoration aims to recreate ecosystems and increase their services, which indicates that objectives have been transformed into reality, feasible, measurable targets, and actions (Stanturf et al. 2014).

The definition of GI:

> "Green Infrastructure is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services. It incorporates green spaces (or blue if aquatic ecosystems are concerned) and other physical features in terrestrial (including coastal) and marine areas." (European Commission 2011)

To create functioning GI, there is a necessity to expand and connect the solitary biological values still existing in the landscape. Meaning areas with high ecological conservation values, "*värdetrakter*", and contiguous natural areas with high natural values, "*värdekärnor*", should evolve, expand, and improve with the help of green corridors (Berlin & Niss 2019). Green corridors allow the threaten species to spread (Niss et al. 2020). Reinforcing the valuable areas and applying appropriate management can restore the ecologically functional landscape.

Deciduous forests are one of the habitats with the highest species richness in Scania and with the most red-listed species. One challenge is thus to preserve these biotopes and cultural landscapes. One strategy to make this happen is by increasing the knowledge about broadleaves for the forest owners and applying specific management due to a certain habitat/environment. There is a lack of a good overview of the management of the requirements with the diverse types of deciduous forests, and knowledge of the needs is deficient among authorities, as well as municipalities and the forest industry (Berlin & Niss 2019). Forestry considerations and nature conservation efforts also need to be adapted to what the surrounding landscape looks like to generate the best possible benefit from the efforts considered and the efforts made in felling, voluntary provisions, and choice of tree species (Ibid). Another strategy is to pay attention to old and larger trees (coarse trees). There is a widespread continuity gap concerning a few old coarse trees and middle-aged trees that can ensue the oldest trees when they die. Due to changes in climate and more extreme weather events, we can expect modified dynamics between trees, insects, diseases, and other forest species. Moreover, it is essential to match tree species with the right location,

considering the effects on the organisms in the forest ecosystems and the tree species' relationship with soil conditions, which can play a great part in biodiversity and ecosystem services (Cernansky 2018; Felton et al. 2020). Furthermore, choosing tree species with distinctive characteristics or stages of succession is vital when we want to obtain highly structured and diverse tree communities (Kelty 2006): this creates forest complexity and, in turn, gives critical ecosystem functions.

Modern forestry has led to more spruce monocultures replacing old mixed forests and pine forests, and in the meantime, the deciduous forests have become denser. Additionally, old and big trees, deadwood, and the continuity of the soil as tree bearing are important for many species and their survival, but these environments are small and isolated (Niss et al. 2020). To achieve a long-lasting GI in the short term is to preserve the most valuable natural environment, i.e., the core values (Berlin & Niss 2019). The tool to fulfil this goal is to form state or municipal nature reserves, biotope protection areas, or long-term nature conservation agreements initiated by the government or municipalities. The individual landowners are encouraged to participate through "Nya Komet" and a few produced regional programs: concerning the forest sector, and among other things: a strategy for formal protection of forest in the county of Scania and forest strategy. The "Nya Komet" is a continuation of a programme that was running between 2010-2014, in collaboration between the Swedish Environmental Protection Agency, SFA, and the CAB of Scania with the aim of trying to take advantage of landowners' interest in protecting valuable nature on their land. The CAB with the Nature management Consultation group in Scania is responsible for the follow-up and evaluation of the process and measures. Meanwhile, it declares that collaboration and participatory processes are essential when the measures in the GI plan commence (Ibid). Moreover, a successful landscape collaboration requires long-term work, where trust plays a significant part, and trust can only be gained by continuous learning and mutual respect (Naturvårdsverket 2017).

3. Methods

This study aims to gather in-depth knowledge about stakeholders' perceptions and memories of the procedure in creating the GI plan and explore the perceptions of how successful the process has been and how the implementation phase is proceeding. A qualitative approach using semi-structured interviews is considered appropriate to investigate these questions to discover underlying factors and relevant information.

3.1 Study site

Scania is Sweden's most southern county (Figure 3), covering a land area of 11 035 km². The county is the most species-rich landscape in Sweden, regarding remnants of semi-natural vegetation in forests, woodlands, former grazing lands, and agricultural land. Its species diversity is due to Scania's unique location in the nemoral temperate ecoregion, having two climate zones where both southern and northern species can thrive (Niss et al. 2015; Rydin et al. 1999; Röhrig & Ulrich 1991). Agricultural land represents the largest land cover by approximately 499,000 ha (45 %), followed by approximately 425,000 ha of forest land or 38% of the land area. Scania is thus the county with the least proportion of forest in Sweden, of which 416,000 ha is productive forest land the rest, about 9,000 ha, is unproductive forest land (Blomberg et al. 2020). The most common type of forest in Scania today is planted spruce forest, growing on 35% of the county's productive forest area. The second most common forest type is trivial broadleaved forest[1], which covers about 22%, and deciduous noble broadleaves forest (ädellövsskog), in turn, covers just over 18%. Yet, this makes Scania the county with the highest proportion of deciduous forest. Pine forests barely cover 11% of the county's productive forest area, then follow by conifer mixed forest with 2%, mixed forests with 5 %, and forest land with no defined tree species with ages between 0-2 years old cover 7% (Blomberg et al. 2020; Nilsson et al. 2021). However, coniferous has expanded far beyond the limits of their natural ranges (Spiecker 2000), and spruce and pine dominate the forests in the south of Sweden. Through Lindbladh et al. (2000) study, the regional vegetation maps show a clear transition from deciduous to coniferous forest in southern Sweden. Nonetheless, the broadleaves (especially "noble" hardwood tree species) are considered vital for nature conservation and forestry (Götmark et al. 2006).
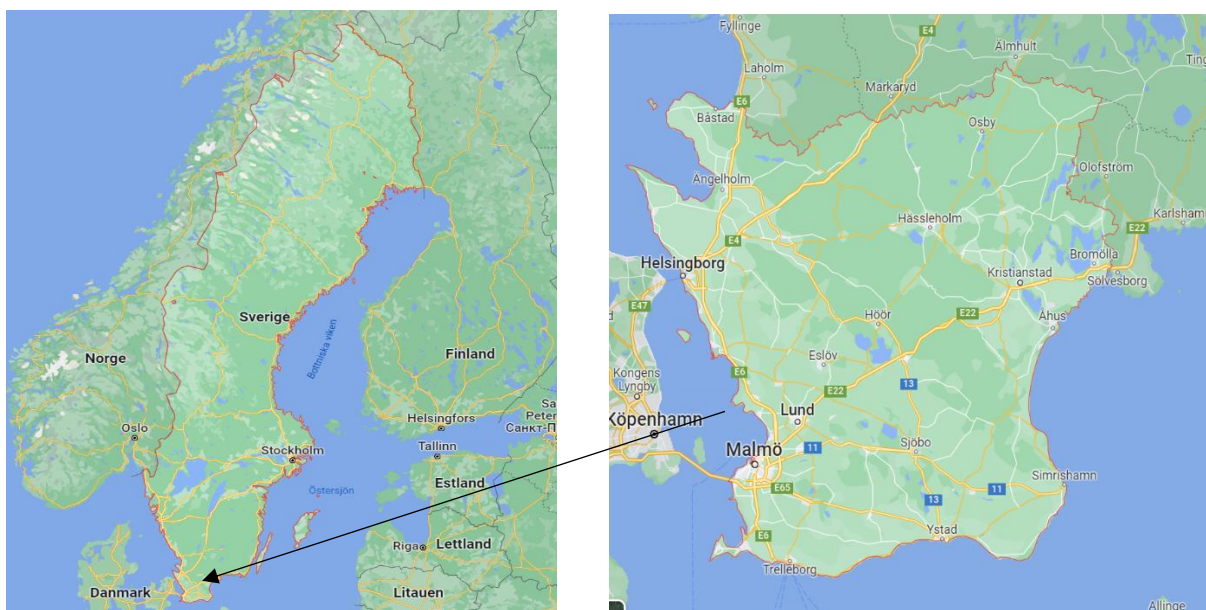

Figure 3. Location of Scania. Images from Google maps.

[1] Deciduous trees that occur in large parts of Sweden, classifies not as deciduous noble trees which only occur in the southern part of Sweden.

3.2 Stakeholder selection

The first step consisted in contacting the relevant authority engaged with GI plans (CAB) to understand more about the process of the creation of Scania's GI plan, this step allowed to inquiry about which stakeholders participated in the creation of the plan. Furthermore, I asked for other participatory processes that have occurred in relation to GI.

Those stakeholders that represent the forest sector or had interests in the forest were selected from the information and documents provided. The aim was to interview at least one person from an interest group or who could be representative of a particular stakeholder in the forest sector. To get a hold of those chosen stakeholders searching through the internet to collect e-mails or phone numbers was necessary. Each stakeholder whose contact information was found got an e-mail. Those stakeholders who responded got an individual appointment. If a person did not respond, the research continued to contact someone else within the same organisation/association/stakeholder, until they agreed to participate in an interview. Ultimately, interviews were carried with fourteen stakeholders from nine diverse types of categorical interest/stakeholders (Table 1).

Table 1. The participants of the study.

Position / ID	Date	Mode / Place	Duration (min)
Landowner association 1	25/3/2022	Digital platform/ Teams	43
CAB	28/3/2022	In Person/ Participant's office	57
Scientist 1	30/3/2022	In Person/ Participant's office	48
Scientist 2	30/3/2022	In Person/ Participant's office	36
Forest foundation	1/4/2022	In person/ Participant's office	32
Municipality 1	4/4/2022	Digital platform/ Teams	54
Government institution	5/4/2022	In Person/ University	61
Non-profit association	5/4/2022	Digital platform/ Teams	56
Scientist 3	7/4/2022	Digital platform/ Zoom	30
Municipality 2	8/4/2022	In Person/ Participant's office	19
Forest owner association	12/4/2022	Digital platform/ Teams	38
Landowner association 2	13/4/2022	Digital platform/ Teams	47
Scientist 4	20/4/2022	Digital platform/ Zoom	53
Forest owner	21/4/2022	Digital platform/ Zoom	53

3.3 Semi-structured interviews

Forestry has become sensitive topic due to broad differences between stakeholders' individual experiences, attitudes, and beliefs. Semi-structured interviews are one of the most successful techniques for collecting individual perceptions (Dejonckheere & Vaughn 2019; Reed et al. 2009). Therefore, semi-structured interviews can be appropriate, as it gives the chance to examine uncharted territory with unknown but potential momentous issues and allow identifying useful leads and pursuing them (Adams 2015). Furthermore, a key advantage of using semi-structured interviews is that intends to open complementary perspectives on the research issue through the interviewees' experiences and perceptions (Dearnley 2005).

I have followed the advice from Kallio et al. (2016), a semi-structured interview guide should follow a five-step process: 1. Collect empirical knowledge to complement previous literature-based knowledge, 2. Formulate a preliminary guide, 3. Do a pilot test, 4. see if the interview guide is presentable, and 5. complete the semi-structured interview guide.

Furthermore, to help me define and structure a relevant interview guide, I used Buchy and Hoverman's (2000) guidelines on how different principles should be emphasised to fulfil a successful participatory

process. The four principles are 1. *Commitment and clarity* about the participatory process are necessary to avoid misleading the participants and raising false expectations (e.g., is it informing people, seeking opinion, or proposing sharing control?). The relationship should be clear between the stakeholders, all should take responsibility, and when they have reached an agreement, the participants should implement the recommendations. 2. *The time and group dynamics* are measures to estimate commitment related to the time distributed to the process. Time can be one of the issues either is not enough time, or the timing is not appropriate. However, if the participatory process aims for an educative method, the learning can only happen over time. 3. *The representative principles*, which include an open invitation, mean every stakeholder with an issue should be able to participate. Therefore, identifying the most potential stakeholders without forgetting or ignoring any groups of specific stakeholders is vital. In this principle, there is a need to consider the power relationship between the stakeholders (e.g., has the issue of equity been defined and agreed upon? Do stakeholders have a similar voice and opportunity to express their views?). 4. Lastly, there shall be an opportunity to *transfer the skills* and knowledge, and different skills and knowledge need to be addressed and transferred. Moreover, with knowledge comes power, where some stakeholders have better access to their resources, which need to be carefully addressed and anticipated. Those stakeholders with fewer resources shall get the same conditions. The value of transferring skills to the community is often overlooked or undervalued. Besides the aforementioned principles, I included other literature on what is required and how to create collaboration within participatory processes. Then, I started making a preliminary interview guide. A pilot test was constructed to see if it was a complete interview guide with correct and open questions. The pilot test confirmed the need for modifications, and after further analysis and change of the interview guide, the empirical data could be collected.

Table 2. Interview guide.

The numbers in the table illustrate which literature paper implicates the themes and terms associated with successful collaborative governance and the participatory process.		
Relevant literature	**Aim and theme**	**Interview questions**
	Introduction and description	What is your name? What role position do you have? What is your academical background or earlier work experience? What made you to participate in this collaboration?
1. Eriksson & Klapwijk 2019; Buchy & Hoverman 2000; Reed et al. 2018; Ansell & Gash 2008; Johansson et al. 2020; Appelstrand 2002 **2.** Jakobsson et al. 2021; Reed 2008; Buchy & Hoverman 2000; Ansell & Gash 2008; Johansson 2018 **3.** Reed et al. 2018; Johansson 2016; **4.** Ansell & Gash 2008	Engagement and clarity in participatory process **1.** Awareness and attitudes **2.** Expectations **3.** Trust and transparency **4.** Leadership	How did you perceive the participatory process? - Who was responsible and leading the discussions? How did you perceive the goal and purpose of the participatory process? - For example, in those collaboration meetings you participated in: were there any differences? See how their memories are…
1. Buchy & Hoverman 2000; Reed 2008 **2.** Lindahl et al. 2015; Lidskog & Elander 2007; Krott 2005; Sundström 2005 **3.** Buchy & Hoverman 2000; Krott 2005; Lindahl et al. 2015; Johansson et al. 2020; Ansell & Gash 2008; Reed 2008	Transfer of competence and consensus **1.** Time & group dynamic **2.** Stakeholders interests **3.** Power & power imbalances **4.** Values & knowledge, collective learning, problem solving	With answers in hand, do you recognise the results in the GI's plan? - Would you say there was a consensus in the decisions that were made? - Were there any eventual differences? Do you like participatory, or do you prefer any other process? What did you gain from your participation, was it meaningful for you?

4. Reed et al. 2018; Buchy & Hoverman 2000; Reed 2008; Ansell & Gash 2008; Pettersson et al. 2017		
1. Johansson 2016; Reed et al. 2018 **2.** Reed 2008	Future implementations **1.** Reconnection/ feedback-loop **2.** Support and guidance	Now we have the plan, how are you part of the implementation? - How often do you use the plan? Have you got information and reconnection after the participatory process? What would you said have been the positive and or negative regarding the results and the process itself? (Those activities that need to develop GI?) (increase/reduces trust between stakeholders, changed attitude, etc.,)

The first part of the interview consisted of questions to perceive the individual participant's background and their position in the participatory process. The second part was designed to find out the engagement and clarity of the participatory process: how the stakeholders' expectations and perceptions were of the participation. The third part was about asking the participants to describe how the relationship and dialogue have been within the group of participants. In the last part, the outcomes of the participatory process and future implementations are discussed.

To create trust and acquire the requested stakeholders to participate in this study, a short letter of introduction was sent in advance, including a summary of the interview guide: this can add legitimacy and save time that would otherwise have to be devouring to explain and justify the research (Adams 2015). However, I did not reveal all questions because I wanted to avoid steering the conversation in a direction already from the start and allow the participants to prepare their answers.

The participants had been identified and the appointments have been set up before interviewers arrive at the site. Each interview followed the structure which generated comparable results. Semi-structured interviews allowed each stakeholder to discuss freely the questions that were asked. Furthermore, the interviews were recorded with a recording device with participants' permission. The participants also signed a consent form to be included in this study to ensure that they become anonymous and create a certain legitimacy.

Moreover, due to the stakeholders having distinct roles within forestry, some questions were not relevant to ask. The interviews were held in Swedish, and it allowed sharing of the same vocabulary and acronyms to avoid misunderstanding and communication failure.

3.4 Data analyses
The study was conducted through the following steps: literature review, gathering of empirical data and their analysis. The recordings from the semi-structured interviews were transcribed as soon as possible because then comprehending what the participants talked about could help me if something sounded wrong while transcribing. Meanwhile, my thoughts were fresher on how I experienced or interpreted the interview and answers. The transcription part was conducted throughout an instrument (dictation) on Microsoft word document, and secondly: the InqScribe software. The transcription becomes more efficient using this two instruments/software by saving time, by only correcting the missing word or wrong sentences. Subsequently, when all the interviews were completed and the recordings transcribed, the data were coded according to the themes of the theoretical framework and semi-structured interview structure. Analysis was based on the methodology proposed by Hjerm et al. (2014). The structure of qualitative analysis is first encoding to find out the themes and then organised thematically and summarised together with the theoretical framework. Then I chose representative quotes of the different

themes. I also looked at differences and similarities between stakeholders' perceptions. I analysed the answers in Swedish and then translated the chosen quotes into English.

3.5 Validity and limitations

In particular, the analysis of the participation process behind the GI plan was problematic because it happened six years ago, and the memory of a few participants might not be as vivid. Therefore, one important limitation of the study is the time that has passed since the process happened. Moreover, this study relies on the memory, social interaction between the participants (during the meetings), and the fact of having participated can also influence the study. I experienced that some stakeholders were unwilling to participate in this study. Some stakeholders politely turned down the request due to their lack of memories about it or did not feel that they had a high involvement in the process. Secondly, some participants in this study were only included at the beginning or on only one meeting, which tells us the answers cannot be representative of the whole participation process of GI since their perceptions are based on one-time experience.

From the start, the focus of this study has been on the stakeholders' memory of the participation process of GI itself. Based on this backdrop, it became more relevant to investigate the process after the GI plan and focus on what has happened after all these years to glimpse if it has been a successful participation process or not. A key factor is how the process of GI is operating today, some years afterwards, regarding feedback, consultation, and involvement of participatory processes (e.g., casework or information forums). However, this alternative appeared complicated as well, as the answers from the interviews were ambiguous regarding the opportunities dedicated to GI due to external factors (i.e., memory and other participative processes).

Furthermore, I, as an interviewer, may have influenced the answers in a certain direction due to the information I provided in advance to help the participants' memory. It was noticeable that few participants did not know what the participation process meant as they sometimes did not answer straight to the questions regarding participation and instead talked about GI itself and its meaning. Therefore, I needed to give examples of what requires having successful participation processes, which may have influenced the answers. On the other hand, after each interview, I gained more knowledge, and could focus on the underlying themes, which allowed me to take advantage by asking follow-up questions and improve the conversation of the upcoming interviews to see if there were a general feeling about a definite subject.

The responses relating to GI and the participation process were subjective and were therefore susceptible to recall bias. Moreover, I felt the empirical data I collected from 14 participants were enough to reach a saturation point because the answers and perceptions of the participants were generally similar. The more interviews that went on, the more I confirmed the general perception, to some extent, and the participants' answers did not differ. In other words, I did not feel that I received more information, but I got more confirmation of my interpretation. In the beginning, it felt like it was significant to have various stakeholders in this study due to every stakeholder experiencing differences regarding resources and interests. Yet the end of the study showed it was not noteworthy because the answers did not contradict.

4. Results

This chapter consists of four sections that follow a thematical order. The first part is about the distinct phases of participation process and creation of the GI's plan. The second part is about information versus participation, providing how the participants' perceptions have been in the different collaboration meetings. The third part is about the limiting factors for participation that may have affected the outcomes and the individual perceptions. The fourth part focuses on the period after the plan was written, specifically, on the follow-up and how the participants use the plan.

4.1 The participation process of GI: an overview

The whole process behind GI started with the Swedish Environmental Protection Agency giving instructions on how the CABs should carry out and implement a plan for GI. After an interview with CAB, the ambitions seem to be high early stage. There was an ongoing discussion between the representatives of CABs, the Swedish Environmental Protection Agency, and SFA about which goals should be applied and how to work with them.

> "Someone just made an analogy that you want a "Rocco ko furniture", but you dispatched an IKEA manual. Like: "´Do this and good luck with this´"", "´Here's the money you have, this is something you must at least succeed in building together´". "´If you can, aim for the stars, and you'll get to the treetops´"", a bit of that philosophy. [...] So to speak, depending on the conditions, you managed to get something together, or you did not succeed with this. [...] "´Do the best you can and try to reach and adapt to the regional conditions and needs´", so everyone [the action plans and management] looks different, even if we got it in the end, […] we still worked in parallel with the Swedish Environmental Protection Agency and discussed "´how should we set it up then? How should one produce an ecological conservation values and what kind of values should be added, and how should we do it?´". [...] These consultants worked with this, but there was never anyone who felt that you got this overview, so it was quite chaotic in the first years. The discussion went: how, what, and who before it fell into place, then "´now we work with it´", and so, in the end, everyone did this in their own way. But we continued having ongoing contact. However, it took a while before we, like, got a little control over it, at each County Administration Board." (CAB, 28/3)

The CAB in Scania started the process by having four focus groups which included each interest group. For each group, there were two separate occasions to participate. The arrangements of the meetings began, in 2016, to give a basis for collaboration with all concerned stakeholders in Scania. The purpose of the start-up meetings in 2016 was to discuss a regional GI plan and how to implement it effectively. The four start-up meetings included: landowners, municipalities, non-profit organisations, and a merged group with regional authorities and experts. There were meetings for each target group because of their divergence of specific problems and responsibilities concerning the assignment by producing a regional action plan for GI. Then the responsible leaders decided to have a joint seminar, "forest and trees in the landscape", in the spring of 2017: to create a common foundation, clarify contradictions, and see how the stakeholders work with the issues instead of the government telling them how to do it. After remittance in 2018, was the GI plan compiled and completed. Consequently, the question is what has happened and what opportunities have been dedicated to GI after these collaborations.
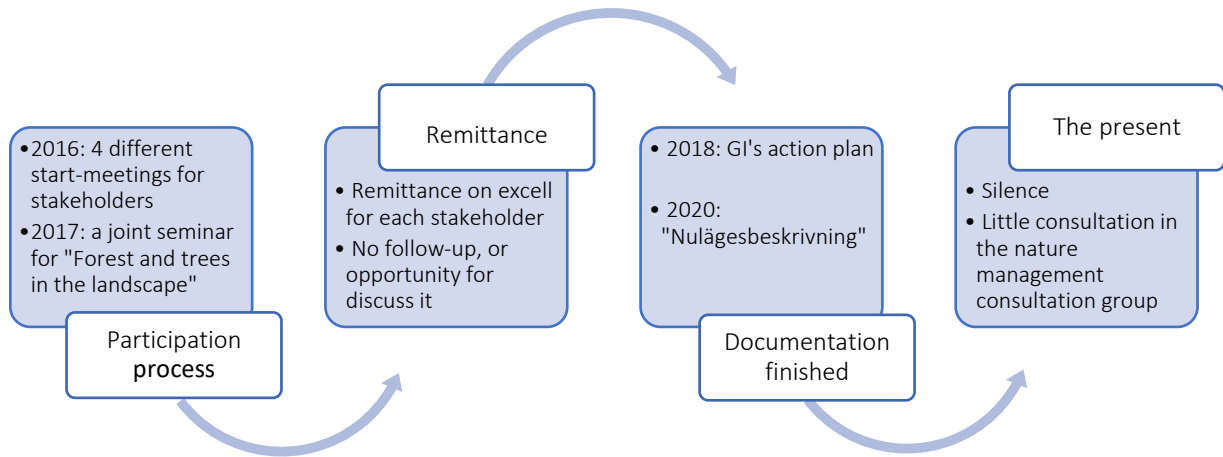
Figure 4. An overview of the process of creating the GI plan.

4.2 Information VS. Participation

The first result of this study refers to the perceived nature of the participatory process of creating the GI plan. The overall impression of the participants is that the collaboration process of GI has been more about providing information rather than feeling that the process can be framed as participation. When asked about their perceptions on how the consultation/collaboration process was in producing the GI plan, interviewees reported that the meetings served to 1) provide informational material, 2) gather opinions about GI itself and its required measures, 3) map out all stakeholders that have a key role to commence the plan into reality. Some participants expressed the meeting or meetings were only about the CAB who wanted to give information and explain about GI, but there had been workshops and time for asking questions. These answers may be related to the occasions the stakeholders had the opportunity to participate or how the target groups were organised. Nevertheless, according to one of the delegates responsible for GI in Scania, CAB, the perception or meaning of the participatory process to start working and creating GI in Scania was:

> "[…] we started to single out the owners and municipalities as central stakeholders because they have the resourcefulness over the land. […] This is a mission to collaborate with all stakeholders to accomplish GI, and it is not a new law or money that can dictate the outcome. Neither a whip nor a carrot." (28/3)

It is evident that the CAB wanted to collaborate to accomplish the mission of GI in Scania. But there is a contradiction among participants' perceptions of how the process and collaborations around GI took place. All participants expressed in different forms that there is a need for collaborative processes and were pleased to get the opportunity to participate in the creation of the GI plan. However, some participants expected more involvement (opportunity for collaboration) to get more influence in the process itself than what they had.

Meanwhile, these collaborative occasions may have fulfilled their purposes if a participant was only in these collaboration meetings to understand the meaning of GI and the requirements of each stakeholder. However, if the objective was to increase an understanding of each interest and stakeholder, it may have failed. Moreover, dividing the stakeholders into separate groups arose a question for a few participants while others saw it as an opportunity to express their concerns and interests.

> "My expectations then were mostly to try to understand what this collaboration should lead to, what is it we should discuss, what is it we can discuss, for me it was a lot about that we don't understand each other, and there is collaboration especially important. […] Then I don't know if it necessarily led to an increased understanding of each other's perspectives, I didn't perceive it that way, but I perceived it as many parties

were very vigilant about their interests, and I would probably say now when I have immersed myself […] that it was initially to little consultation and collaboration. Collaboration came extremely late in the process and then it was not perceived as a collaborative instead as communication of what had already been discussed, and that perhaps led to some stakeholders being more critical of this than might have been needed." (Scientist 4, 20/4)

The quote indicates that many stakeholders have been invited and somewhat been involved in the process. But the general opinion on the participation may differ. Some participants said that GI was a project with an already finished idea, meaning that collaboration be seen as a "fake" process, which can cause an irritation when the final product becomes another document that could have been written before the meeting. As scientist 3 said:

"It felt it was quite an early stage, I must say. You could interpret it as if they wanted to listen and inform, or you can also interpret it a bit cynically as if you were having a consultation, and then you might still do as you have intended from the beginning, but I do not know." (17/4)

Meanwhile, forest owners' main concern was how GI could affect their own business or the other members business.

"Then as usual CAB of Scania had already decided quite much in the beginning how they want this project to be and mostly they also get instructions from above […], they would call it participatory process, but it is more information meeting. I do not know what we could change or impact in that meeting really, but it was more that we found out this is something that should be prioritised." (Forest owner, 21/4)

It becomes interesting why some stakeholders, in this case, forest owners, felt the issue was already decided from the beginning and had no influence. Therefore, are these assumptions something that arises from these meetings, or are these general thoughts about the participatory process and the trust against authorities?

When asking the forest owner association who participated just in the joint-seminar, s/he said: "there was one seminar, about five years ago, after that, it has not happened so much […], at that moment it was pure information, in some additional collaborations have I not been involved in" (12/4). Furthermore, the participant suggested that instead of looking at these issues (i.e., the measures in GI), there should be an opportunity to be out in the field and propose a practical case. Similarly, in the meetings for municipalities, municipality 1 perceived the participation process of GI as:

"It has been good, they [CAB] presented the plan, and then we had discussions in groups, but this is a standard version. You usually call it workshops sometimes, and sometimes you call it seminars. But the main part has been informational, I would still say. Then you have been invited to dialogue, absolutely. But the question is how good you are at dialogue, so there is a lot to develop […]." (4/4)

The goals and purpose of these GI meetings seem to have been presented. The participants expressed they understood the mission of the participation process, e.g., what kind of measures are important to commence, collect the stakeholders' perceptions and opinions on what and where the measures should be prioritised, and make sure all stakeholders are on board with this mission. Therefore, the participation process meets its standard of providing a better explanation of the meaning of GI and giving a better structure on which measures are most appropriate to take.

Other participants expressed that the meetings had also positive effects regarding exchange of ideas, experience, and knowledge, despite the informative nature of the process. Sharing opinions and expressing points of views was considered fundamental by CAB. E.g., when asked about if it is about collective learning instead of expressing opinions, CAB responded "yes, when we get to that point [learning point], first we all have a need to express what we feel, so it takes time before to get to the learning point and the concrete collaboration" (28/3).

Sharing views and opinions was regarded as important. Yet, this also presents difficulties for all parties to have equal amount of time express their concerns, as some voices can be louder than others. Finally, it is thought provoking that despite their involvement, they do not see their influence in the final product. For instance, scientist 2 despite having been able to express his/her opinions, sees the process as a sharing information. However, even though the general feeling about the participation was about information about GI, some would say this has been a valuable process for the stakeholders, where these processes create personal contacts. Moreover, providing an opportunity to discuss and understand other interests, as well as convince others of one's interests.

4.3 Factors that influence participation

I found that the most principal factors were time, expectations, leadership/personality, resources, and trust.

The deliberation of **time** or **opportunities** for collaboration seems not to have been sufficient to make everyone feel they have participated. Despite the GI plan being finalised, meaning it has been written and published, there was not enough time for a fully participative process. Some would say there was a need for more collaboration or dialogue between the separate phases in the process regarding interests, the value, and the purpose of participatory processes. While others felt there had been enough collaboration opportunities. The problem does not seem to be that there has been little time for collaboration to write and finish the GI plan. The problem seems to be the phases afterwards. After the output of the GI's plan has been published, there has been low interaction between all involved participants due there has not been any time for more specifically participatory process meetings. Likewise, it has been no opportunity for reconnection between the remittance and the finalised GI plan. However, it may depend on which professional, background or expectations you have, to realise and perceive what and how much is needed to make this participatory process work in practice. As scientist 2 said:

> "I always think that I was only at one meeting when it comes to GI, this is a process, and there is always a need for more time. Thus, the CAB tried to do a decent job, and there was a lot of interest in this meeting and with different stakeholders, there was time for a dialogue, but the process isn't done after one meeting." (30/3)

While scientist 4 who has immersed in this subject for a while now have also realised it was too little opportunities for collaboration or participatory processes.

> "I think that the CAB had a huge task here, to get something done in a brief time, and on that occasion, it was not easy to find the time for collaboration that may require something like this to land within. Everyone should have time to digest and be able to present their views so that it's difficult to say why it happened as it did. Now my opinion is, at least within some areas, it has probably softened a bit even we have realised GI is here to stay: the process and work, but in concrete terms, I don't know if we exactly know what this means in practice." (20/4)

Meanwhile, the landowner association 2 and the forest owner felt there had been enough meetings to express opinions. Nonetheless, the participants expected to be part of a follow-up: "Well, I think there has been enough collaboration, then it might be a bit close at the end when you had to implement everything, i.e., now the CAB comes "´now we have decided, here is the plan!´"" (Landowner association 2, 13/4). Another consideration which may underline why the participants felt there had been enough meetings is that there are many other participation processes about other issues. This issue was brought up by the person from the Forest Foundation, where s/he feels it is hard to distinguish what relates to GI specifically.

The different answers of how numerous opportunities there have been for collaboration can be related to the **expectations** of the process itself. There was a clear relation between participants' awareness and knowledge of what a collaborative process is and having higher expectations on the participatory

components of the GI plan. Meanwhile, other participants expressed they did not have any expectations despite knowing what collaborative processes stands for. This was due to their experience of how such processes ordinarily turn out. One participant who has been collaborating with participating processes before said the concepts are abused a lot in this context.

> "Well, I expect another thing, but if people tell me before it is an information meeting, then fine. But if you invite to a consultation or collaboration meeting then you expect to have or to be able participate to have an impact." (Government institution, 5/4)

A participant, from a forest owner association also had higher expectations: "they didn't really work with the network that could have been built up through these different involved stakeholders, such as nature conservation associations, and of course everyone else who operates in the forest. It would have been possible to do that, but I don't see any results of it" (12/4). Furthermore, some of the participants expressed expectation that they would meet, i.e., a meeting after the first participation meeting, and get the opportunity to discuss the GI plan. Although, the memory sometimes failed about what and how everything happened: few of the participants did declare that they left comments on an excel file as circulation for comments, while nothing happened afterwards.

Here, **leadership or personality** play an essential role for the outcomes or the agenda of the participatory processes and how a specific direction the dialogue takes. Sometimes the discussions have been derailed: scientist 3 felt it was too much talk and little workshop, and some were more proactive (in the municipality group). Therefore, as hardly any of the participants mentioned, there was an occasion the leaders needed to steer the meeting to avoid participants sitting there and solely throwing out their positions:

> "I want to remember they tried to grab the discussion: "′okay, yes, we understand that you experience this, but now we are here, and we need to come up with an action plan, so now we need to come up with something″", such occasions existed when there were more about having opinions than discussions on the concrete measures." (Scientist 4, 20/4)

Moreover, landowner association 2 mentioned the participation and purpose was quite broad from the start which may have to do with the leadership, but as the participant from the government institution said, some mistakes could be improved regarding leadership and structure of the process, such as:

"I would say the discussions themselves were right, but then I don't think we got it right on these workshops and they turned out to be not as heavenly good as one hopes for, it's always when you are in a large group in the seminar, and there are questions and so on […], it's difficult to get over the energy from the morning, and then we're so heavily focused on only coping with the whole. I felt it should have been clear from the start: who would be taking the lead in each workshop group […]. They at least got lists of things they should answer or discuss […]. There is something to think a little more about, how to set them up [workshops] and get the ambition to match the time, the time-space you have." (Government institution, 5/4)In addition, the **resources** each stakeholder holds are important to get a chance to participate. Obtaining a successful collaborative meeting requires the participation of every affected interest or stakeholder. Unfortunately, some stakeholders have more difficulty participating than other stakeholders due to time or interests. As mentioned by a few participants, there was a wide invitation from the start, but not all showed up as wished. Stakeholders such as individual forest owners and non-profit organisations were conspicuous by their absence. The absence can be due to most individual landowners being members of landowner associations, and these associations speak for the members' interests.

> "Most of the time, we as an organisation go there and represent a lot of landowners, […]. Then sometimes these meetings must be at the right time: it was such a simple thing when we had our regional meeting yesterday. We were significantly fewer than we usually are because everyone was sitting on their tractors and were out. Then you do not have time for any internal meetings. We had two special meetings aimed at the landowners, and the trickiest thing is it is not a problem to ask me or get other officials […] but getting your landowners to these meetings is not the easiest, you do not really know if it affects my

company or myself. So, we probably had a few landowners, but we also see that we represent 15,000 landowners in Scania." (Landowner association 1, 25/3)

The forest owner and landowner association 2 touch upon similar factors as previous quote. If you pay for a membership, you perhaps expect these organisations to protect your interests. Meanwhile, according to the CAB, it was a wish to include landowners because everyone has different perspectives, which scientist 2 also indicated.

> "Yes, but they have very different ways of attacking it, the landowners and those who are representatives from landowners' associations, then we invited the smaller landowners' representatives, so to speak, different organic producer and others, but they have not the same organisational weight and financial muscles, so they were never present at the meetings." (CAB, 28/3)

Lack of personal interest in the project can also limit the engagement in the processes. When it comes to two of the scientist's perspectives, while asking why they had only been participating in one meeting: "It's probably personal interest that is missing a bit, and then I think others are also better at that when it comes to special analyses compared to me […], this with participation we do as time permits" (Scientist 1, 30/3). Scientist 3 (7/4) had similar thoughts. On the other hand, the other two scientists have been more involved due to their interest in the subject itself and participate in nature management consultation group. Furthermore, the non-profit association expressed concern that no other non-profit associations or outdoor promotion organisations were present:

> "When authorities have similar consultation processes, […] those meetings take place mainly during the day and that also means […] many organisations [non-profit organisations] cannot send representatives because they simply have regular jobs, so when there are similar meetings, it is often the case that we and perhaps Scania's ornithological association because they have seniors who can participate, we miss the moss's friends [an association who wants to improve knowledge of moss], we miss mycologists, so there are many organisations that have many members who possess an incredible knowledge but they do not have the opportunity to participate during the day." (5/4)

To include more non-profit associations, it would be better to have these processes in the evenings or the weekends. Furthermore, concerning time and availability to participate, some mentioned the effectiveness of having these processes on digital platforms (e.g., webbinarium), where you do not need to travel far. Simultaneously, a few participants mentioned the connectivity between the participants could be lost, when using digital platforms to have participatory processes.

Lastly, **trust** seems to be an underlying factor to why not take part in a participatory process or how the relationship and communication becomes. It can play a substantial difference which background one has, to have a better dialogue or keep trust between stakeholders. It is easier to reach out to those with the same background because they have the same official way of working and educational experience, or as landowners- and associations with similar experiences, congruence of interests, and emotional aspects. "It was probably easier to talk to the municipalities than the landowners, but everyone still agreed on the importance of working to preserve biological diversity, so the goal image remains. I don't experience a difference in it, but how to do it there we have differences" (CAB, 28/3). One aspect to this could be, as scientist 4 pointed out, that it is easier to have a dialogue when there have been few people with a clear purpose with tangible information and goals. When asked the forest owner why not continue to participate further within GI (i.e., the joint seminar), the answer was that the forest owner had confidence that the landowner associations could handle his interest instead. Therefore, trust seems to be higher between the stakeholders with the same interests. Meanwhile, the trust between forest owners and landowners' association against authorities is low, and it has not changed after taking part in the process of GI either. "If this requires diplomat, then I can say I haven't gained increased trust, and should

I speak based on what the brain and heart say, then the question is whether we have any trust at all, it's just that bad" (Landowner association 2, 25/3). Similarly, with what forest owner felt, s/he said:

> "Those that were sceptical at the beginning with collaboration with CAB are still sceptical. […] you feel quite small when CAB comes and say that they will do something, then you think they will do as they want, it doesn't matter if I go, I usually go, but mostly some think why they should spend 2-4 hours when it doesn't lead to anything. It is about the legitimacy of our institutions." (21/4)

The results show that trust correlates with resources (i.e., time and interest), and beliefs in these processes are low from a forest owner's perspective. If stakeholders do not believe and trust what the participation process solely leads to, they will not invest their time participating. Yet, despite the trust seems be low, the person from landowner association 2 felt the participation process, in general, has developed over the last ten years, and the communication between CAB and forest owners has been improved.

4.4 How is the plan used: what has happened?

I found a general perception that the participatory process stopped or that there have not been sufficient follow-ups after the GI plan was finalised, from remittance to GI plan (2018) to the documentation of the current situation description (nulägesbeskrivningen) was published in 2020. In this section, I explore what aspects may have played a role in why nothing seems to have happened, such as reconnection, the roles of participation in other groups, information transfer, own initiatives, and resources.

According to the majority of the participants, there have been different sorts of **reconnections** after the participation since 2016/2017. As a stakeholder that is in the nature management consultation group said: "What can I say, it has been silent for a while, but as I have said, there are many projects, and sometimes you mix them up, and we have a consultation group of nature management, and it is in that constellation we have worked with it" (Forest foundation, 1/4). On the other hand, stakeholders who are not part of the nature management consultation group expressed that there has not been any connection except for sharing of information after they participated in the initial meetings:

> "No reconnection, it was something after the meeting when you got material with information. But after that, I have not heard anything, and perhaps that was not the purpose either. I don't know what resources they had. […] I cannot remember that they presented a long-term approach that supports or conduct this type of collaboration/participatory process, at least I do not remember. I may have suppressed it." (Forest owner association, 12/4)

Likewise, when it comes to municipality 1:

> "No, I, myself, actively found out how the situation is, so to speak, by going through the website, as I knew this has been an important process. Then I have had sought personal contact but that is another thing, but just this that you then in your e-mail, or somewhere, easily get a question if you want to be part of a dialogue and we will listen, really listening, and that is when you feel that you are involved, "´we see you and will take care of your opinions that are submitted´", that part has not been very clear I think." (4/4)

On the other hand, the process of GI has continued in the nature management consultation group. This group is organised by the Swedish Environmental Protection Agency and managed by the CAB. The group is a platform for different stakeholders which meets twice a year. However, the participants' answers did not lead to concrete results in my study, on the extent to which the GI is communicated and addressed at these meetings. However, as some participants expressed, these meetings are more one-way communication, where most of the time CAB informs, but sometimes there is time for discussions and field excursions to look at something in common. As landowner association 2 said:

> "Firstly, we had this in 2016 with different landowners [GI meeting], and it was great that they first took landowners then municipalities, but we all see it as we must meet to do this. Otherwise, you only get one

angle on everything, and we do not come up with any solutions if we discuss in small groups, […] we must be all in a group and that group has then been nature management consultation group, we all were already involved in it. So, there has been an opportunity to brainstorm about GI." (13/4)

As the landowner association 2 quoted, "we all were already involved in it", means that work continues but in the different forum. Moreover, the government institution expressed that mostly it is the same people involved in the nature management consultation group, which leads to a tricky question: what can the outcomes be if it is the same people every time? Few participants expressed that it can be a problem due to no added information or knowledge shared, and that similar discussions will occur every time. Moreover, how can the participants make sure the **information will not stay** in this participatory process?

"I can imagine the Swedish Society for Nature Conservation, landowner association, and others: it is often very few who are involved or appointed from each organisation to be concerned in these processes, and in our case, it is mostly me. It is both good and bad, and it means a lot of this knowledge that appears may be caught with me. It is difficult for me to get this out. As I said, we have many members, and how should I get this out to everyone. Then one project comes after one another as well, so on. When you have had such a large topic, you put it aside. You then go on to the next topic." (Non-profit association, 5/4)

Scientist 4 expressed the same concern and had asked the other participant in nature management consultation group how they usual do:

"The idea is in this consultation group that each stakeholder should represent their organisation, so after I have asked the others in this nature conservation group: how do you do, how do you do after we have had these meetings, how do you communicate what has been saying with your organisation, and most probably no one has a real routine for it." (20/4)

The representant of landowner association 2 also shared how they deal with the spread of information after the meeting:

"Yes, but we do write to our members, […] but so far, as I said, no approach [no active plans or projects to take actions] have emerged, just some things we should do, this is not a big discussion for the members. The members think: okay, what is happening? They know something, a discussion is going on about GI and what is supposed to be done, but nothing has happened […], and it does not affect someone so far." (13/4)

Nevertheless, all have expressed that collaboration and GI are of interest and vital, but why has nothing happened? Who bears the responsibility for something to happen in practice: "Then we have not been asked what we do, we had some clear measures the University should be responsible for […]. There has been no one who says, "´now we want to know if you have been working with the measures´", so it has fallen into oblivion, you could say." (Scientist 4, 20/4). It seems that CAB should be more engaging and supportive in what happens to individual actors, but there was another wish from CAB:

"It feels like we got a few things in place, the knowledge base is out, and you would have wanted it there from the beginning, but it took longer than you thought. [...] so now it's about working with it and not only at CAB but also at municipalities and landowners, […] good initiatives by themselves are the idea: that you take a holistic concept of the landscape and work for collaboration with everyone." (CAB, 28/3)

As CAB phrased it, there was a wish there would be own **initiative** from their stakeholders. The general feeling, in the end, can be that the participatory processes have been satisfactory for writing the GI plan and its measures, but how to implement it is another thing, as scientist 2 said.

However, the individual initiatives regarding the GI feels have been low. For example, while asking about the usage of the plan in work/practice, the interpretation was that no one occasionally uses the

action plan in their work, or they did not feel it concerns them. Some joked that they had not investigated it after they participated. (Table 3). As scientist 1 quoted it: "One thing that I might want to mention is this is not the first action plan that has been made, and there is always a risk that such action plans not followed up and they will be desk products, and then they will be overplayed after a few years: therefore, it is important with follow-up" (30/3).

Table 3. Quote examples of the participations answers on if they have applied or use the GI plan in their daily life (work).

Quote examples	Regularity of use	(Potential/Ideal) Reason for its use
"I use it regularly in such a way that I use it in teaching, […]" Scientist 1	Always/ Sometimes	Teaching material
"If students write their master's degree in planning, then I check if they have written about GI in Scania" Scientist 2	Sometimes	As a reference and educational material
"When there is some major exploitation going on or I'm looking for some facts about how to communicate it" Municipality 2	Sometimes	Knowledge material
"it's not something for us to use in or regular basis [work]. There may be if there is threat to an area, e.g., and we want to point it out then we could use the plan to refer the fact that this area is included in the GI plan […]" Non-profit association	Sometimes	Facts and proof
"No, but yes, I looked at it last week, why did I do it? Well, I sent it to my colleague because we will have a review this summer or this year, and then I thought it was important that my colleague who will help me that he gets part of what we said 2017-2018, or something like that, when we left comments" "It has happened another time I have looked at it, to see what we said about the pollinated plants and deciduous trees. But no, I think it's more of a tool for those who are going to practice GI." Landowner association 1	Sometimes	Reminding, a tool
"The plan is in the head; this is not something new" Forest Foundation	Never	No need of usage
"No, […] it's not so concrete to implement it in the daily work, there is so much else to think about" Forest owner association	Never	No concrete measures
"Now when you mention it, and when you asked if I had looked at the GI plan, I could see that we do a lot as what it is said here" Forest owner	Never	Working already with the strategies/ideas

Here, again, the leadership matter why the plan turned out as it did, one to two participants said the GI plan is not concrete for the individual stakeholder and is extensive work. Therefore, while asking CAB about if they decided for themselves that the goals and measures were not supposed to be concrete and if it would limit the work to some extent, he/she said: "We didn't really know due to this was the first generation of GI plans, and there were so many ways to solve the issues. At that time, it was better to formulate them [the measures] fairly openly, but then they became impossible to evaluate" (28/3). Following, CAB elaborated this a little further, how the personality played an important part in why the plan and process turned out to be as they did:

> "I was the project manager at the beginning, and I'm a bit like this: "´yes, but it's nothing, we'll bring everything later´", but the person who works now as a project manager, he/she wants something like "´No, but you need to have smart goals and measures, they should feel that this is what needs to be done, so everyone knows from the beginning´". Yes, it is an advantage to go out and say: "´you have accomplished the task and you haven't´", knowing we are on the right path [...]. So, our personalities are a little different, which may have formed the outcomes [the plan and the process itself]." (28/3)

Finally, the defined and presented factors are related to the criteria for having a participatory process. However, a subconscious factor can determine the outcomes, making an idea into reality. Each stakeholder within their occupation has different **resources** such as time and support to enforce or work with something. Or we have external factors such as the pandemic, which may have played a big part in why activities (e.g., collaboration or results) are put on ice.

> "It's nice to have such a document as support in our work, then I wished they would manage to spread this more politically, i.e., to politicians as well: because we are governed, we are political, we work in a political organisation, and I'm [only] one person who works with these issues." (Municipality 2, 8/4)

Some participants wished for more collaboration to get support in their field activities to keep measures and ideas about GI alive. Other participants would have asked for a follow-up, more excursions, and practical activities, and few mentioned the financial issue. During the interview with CAB, it was brought up that they had some complaints in the Nature management Consultation group, some participants felt CAB has been quiet about GI plan:

> "You start and have a lot of collaboration, and then as landowner association 1 experiences: "´what has happened, it has been two years, and we have not heard anything from you˝" then we thought oops! We have started to focus on getting our colleagues working with the national perspective and collaboration elsewhere. We noticed we had lost them [the stakeholders]. So, if looking back, we could have used the resources or prioritised differently, continue to work with what is said in the action plan [GI], one would need to have more discussion and more knowledge exchange during the process. We will have to take this with us to the next period, on how to distribute better the attention, so that we do not lose crucial collaboration partners as landowners." (CAB, 28/3)

Here the CAB had listened to the participants, and there has been an opportunity to express this concern.

Nevertheless, it is worth commenting that CAB, while having this interview at the end of March, mentioned there is agenda to have a participation meeting at the beginning of June. The meeting is supposed to provide an opportunity to summarise the situation of GI. Furthermore, reviewing if other measures need to be applied and where there is a need for a continued working process. Above all, investigate if it would be more reasonable to adjust the measures to become more concrete and measurable. Anyway, notification if and how this meeting was accomplished is unknown in this study. However, except for landowner association 1, no one else seems to be aware of this event, as they did not mention it while asking questions regarding future implementation.

5. Discussion

The results of this study show that there have been occasions for collaboration to complete a GI plan for Scania. Therefore, if the goal was only to create and finalise a plan for GI, it has been successful. However, if the GI plan was supposed to be a long-term process of collaboration, then, we could consider that the goal still has not been reached. A comparison of the findings in the GI plan shows that collaboration and participatory processes are vital when the measures in the action plan commence (Berlin & Niss 2019). Something noticeable is that the GI plan is not a carrot nor a stick, cannot be classified as either a regulatory or incentive policy instrument. The GI plan provides information and measures on how to expand and connect the solitary biological values that are still existing in the landscape and preserve biodiversity and ecosystem services, and its implementation on voluntary basis. Therefore, it is even more crucial to keep having participation processes to allow everyone to be on board in exchange for knowledge and experiences. Since actions take place voluntarily, it is important to address the stakeholders' roles in fulfilling and obtaining the GI goals, because if not stakeholders are aware of their roles and we cannot rely on goodwill decisions, how can valuable changes happen in practice? Another question is if the participation of stakeholders in the GI plans, results in them devoting time and actions to save and preserve biodiversity and ecosystem services.

5.1 Stakeholders' relationship to the GI plan

According to the results, the participants are not actively using the plan. The intimation is that the measures in the GI plan are not concrete and may be too extensive to implement in the activities, which may tell us the plan is not detailed enough for actions to happen. More collaboration through the participatory process is a necessity or a need for a practical project. Furthermore, the aim should be to continue the process to reach the learning process and create legitimacy in advance to have trust and achieve outcomes and results.

Consequently, interpreting the criteria for collaborative governance and successful participatory processes, and comparing it with the results of this study, indicates that the participatory process for GI did not fulfil all the important aspects and criteria (Ansell & Gash 2008; Eriksson & Klapwijk 2019; Buchy & Hoverman 2000; Reed et al. 2018; Jakobsson et al. 2021; Reed 2008; Lidskog & Elander 2007; Johansson 2016). Therefore, I conclude this participation process could be considered as an approach to an end (product focus) (Buchy & Hoverman 2000) due to CAB having invited stakeholders to a participation process and conducting the goal of creating and publishing a finishing product, i.e., the GI plan. However, the process is not finished just by that. Despite, CAB has been successful in fulfilling one criterion of the literature: making a broad invitation, and stakeholders felt they have been participating somehow. The meaning of the participation process could go further. For instance, to engage in an issue together by communicating and collaborating and not using argumentation to defend one's interests (Ansell & Gash 2008). According to the data, it seems the time for collaboration has been devoured on expressing opinions instead of listening. Moreover, the meetings appeared to be more about informing than having a dialogue. The explanation behind these outcomes may depend on the pre-history of collaboration. Where some stakeholders, (mostly forest owners and landowner associations) had earlier experiences with not being listened to and now wanted to take the opportunity of sharing their concerns and values.

5.2 The participatory process of GI

According to the collaborative governance model by Ansell and Gash (2008) (Figure 1), the outcomes of the process depend on the expectations of what the process should concern or the results themselves. The results show that there may be a need for more time for participation meetings to achieve collective learning. The participants were satisfied that a plan came into the making, but there were different views

about the participation process. This result may be explained by the fact that most participants did not feel they had been in a participation process, instead they felt as they joined some sort of informational meeting or seminar.

Another possible explanation is that the participants did not feel involved in the final product (the GI plan). Obtaining successful stakeholder participation with increasing legitimacy of decisions and knowledge exchange depend on the process itself (Jakobsson et al. 2021; Reed 2008). Every opinion should be considered and integrated into decision-making (Pettersson et al. 2017). Moreover, the institutional design plays an important part, were the ground rules to build trust, encourage dialogue, analyse mutual gains must be presented in advance (Ansell & Gash 2008).

One interesting finding is the low trust from the perspectives of forest owners and landowner associations. Without trust, the process has been unable to take advantage of shared knowledge and learning outcomes opportunities (e.g., Johansson et al. 2020; Reed et al. 2018; Johansson 2016), which are the main criteria of successful participation. But why does trust becomes low against authorities, even after the involvement in the process? This result appears consistent with other research, that information needs clarity and shall correspond to reality (Krott 2005; Johansson 2018). Clarity about the participatory process is important to avoid misleading the participants and raising false expectations (Buchy & Hoverman 2000).

Many participants felt CAB had already decided on the outcomes and that the collaborative process can be an abused word. A possible explanation for this might lay on the analogy to "ladder of citizen participation" (Arnstein 1969; Johansson et al. 2020). It seems the participation process of GI only fulfils the first steps in the citizen participation ladder (see figure 2), where there has been a chance for communication and dialogue but has not been a warranty that the aspects and perceptions were considered. Moreover, these results can be explained by the GI plan that was conceived and initiated by the CAB, which is a top-down approach (Reed et al. 2018), and the level of the engagement may have been low, which tells us why desired outcomes have not been delivered (any results). Furthermore, by interpreting the citizen participation ladder and Reed et al. (2018), it seems the process falls under one-way communication instead of a top-down deliberation. Nevertheless, the goal was still to engage the public and stakeholders to discuss and find joint decided solutions, making the GI process a two-way process and enabling better understanding and exploring the stakeholders' opinions (e.g., Reed et al. 2018), but, for some stakeholders, it turned out to be the opposite, where a decision had already been made. Moreover, the continuity of the process has not succeeded, and this result may partly be explained by the balance and deliberation between stakeholders has been missing.

There has been no follow-up or an opportunity to discuss GI's plan (even if it has somewhat been touched upon in the nature management consultation group). Nevertheless, expectation from national GI initiative is that to implement the GI plan continued cooperation is needed through participatory processes (Berlin & Niss 2019). However, if the participatory process aims for an educative method, the learning can only happen over time (Buchy & Hoverman 2000), and perhaps it was the purpose of the GI plan. But external factors, i.e., the covid-19 pandemic or other individual activities of stakeholders, affected the process. As Buchy and Hoverman (2000) emphasised in their study, when evaluating participatory processes, we should ask if it has been about informing people, seeking opinion, or proposing sharing control. It seems CAB has been focusing on informing people about GI and seeking opinions from stakeholders but sharing control has not been the case. Furthermore, this may also be the reason why we have not seen any practical results expressed by the stakeholders, or why they do not know what the others have done regarding GI. These results also show that commitment and clarity could have been missing, which may have led to why participants felt false expectations. Although all have expressed that collaboration and GI are of interest and vital, I wonder why stakeholders consider implementation to be low. There seems to be a missed link to what was needed from each stakeholder,

for example, own initiatives. Moreover, support and advice on how to operate in their daily life would have been appreciated. Therefore, by nature, the GI plans per se may not work. In general, the participation process may be ideal, but in this case, it seems not sufficient to get confirmed results and actions and, in turn, preserve biodiversity. The question remains what does the participation process means in the end if we cannot see any changes in actions?

5.3 Successful participation processes as an important policy tool

Meanwhile, as we know, efforts to preserve ecosystems and biodiversity mainly lie in the hands of voluntary activities through consultation and participatory processes (e.g., Sundström 2005; Appelstrand 2007). However, Swedish forestry has become complex due to its many owners and the freedom under responsibility, which results in different silvicultural approaches (Sundström et al. 2010; Skogsstyrelsen 2021; Eriksson & Klapwijk 2019), and it has shown that many forest species are still threatened. Although, scientists can see a positive trend in retaining dead wood, large living trees, and tree species diversity. However, there is still an ongoing decline in understory vegetation coverage (Kyaschenko et al. 2022). Therefore, due to the complexity and multi-layer of owners, the participatory process becomes vital due to helping solve overly complex problems.

The participatory process allows knowledge and experience exchange, through stakeholders' collective learning and agreements, and enhancing the quality of environmental decisions can be reached (E.g., Reed 2008; Pettersson et al. 2017; Ansell & Gash 2008; Klijn & Skelcher 2007; Reed et al. 2018; Buchy & Hoverman 2000). But what if participatory process does not fulfil its purpose, what is the solution then? This study affirms the findings of Forsberg (2012). Perhaps it is necessary to examine the legal framework to avoid continuing to make unsustainable choices of actions. What if we cannot rely on the fact that voluntary activities are enough? As one of the questions at the beginning of this study: Are participatory processes per se the solutions to environmental conflicts? As the results show, perhaps it is not enough, due to the limitation of participation opportunities before the finalised document or afterwards has led to stakeholders not actively working with GI.

Furthermore, this study appears to be the first study to compare the stakeholders' experiences and perceptions of GI in Sweden, further studies could help to increase our understanding of participation processes in this context. The results should be interpreted with caution because the social processes happened years ago, and some participants did not remember vividly their experience. The participants recalled participating in meetings, but few did not remember when and how the meetings took place. These results can depend on the timeframe (i.e., time and opportunities for collaboration) devoted to the GI participation process. Therefore, a content analysis investigating the notes from each meeting and remittances from different stakeholders can help fill in the gaps where the memory failed. Despite its limitations, the study adds to our understanding of what successful participation means in the context of obtaining desired or expected results. However, as Reed et al. (2018) emphasised, successful participation can be different in achieving beneficial environmental outcomes or whether it leads to better working relationships (e.g., increased trust between the stakeholders). As for the results, neither of these options has been confirmed, but there is a mutual understanding (from e.g., landowner association) that participatory processes can be a difficult task for all involved, but these kinds of participative processes have become more efficient and better nowadays, which could potentially mean that trust and working relationships can be improved in the future.

6. Conclusion

The aim of this study was to assess what a successful participation process is and if the creation of the GI plan in Scania followed certain criteria for participatory processes. My results show that the process of participation in creating a GI plan has been somewhat successful because there has been a dialogue between stakeholders. Thus, the participation has fulfilled its purpose in terms of publishing the GI plan in Scania but cannot demonstrate that the plan would help get results in the end, specifically since stakeholders seem not to make use of it. Nevertheless, the collaboration has worked to produce a joint action plan for GI, but to complete and implement the measures in practice is a different contrivance, in other words, a finished document and plan, but with still more potential for participation that can help its application. A possible cause is a low involvement in the final product (the GI plan), which indicates that the feedback or communication has failed in some phases of the participation process. Therefore, participation (e.g., an opportunity for deliberation) has not been fully reached. Likewise, there have not been any activities or more participation processes for GI, which may lead to the consequence of the lack of opportunities for knowledge exchange and support. However, sometimes GI has been brought up in the nature conservation consultation group.

Finally, it is important to understand that completing and implementing the GI plan for the county of Scania was an immense task that needed work, resources, and personal commitment, from many stakeholders but also from the CAB itself. The difficulties and limitations experienced by the CAB to create a GI plan were not studied in depth in this study, yet they are large as a GI is a comprehensive plan, entailing not only a large amount of knowledge summarizing, and creation of maps, but also working with numerous and various stakeholders. Despite such efforts, the nature of nature conservation means that the results will not be seen in the short-term. As CABs own reflections show us "the very idea of GI mission feels successful, but it feels like it goes too slowly […]. But this is always the same when trying to save the world: it takes time" (28/3).

Further research

This study raises the question of whether it is the pandemic fault why something such as results, or further participative opportunities has been delayed? Therefore, it is important to study the processes post-pandemic.

Furthermore, to develop a whole picture of the participation process of GI, additional studies will be needed that investigate other study sites to compare Scania with other regions, and see what may have been the differences, are there other factors that may play a part, and what have been the advantages and disadvantages of the approach taken in Scania. Such studies are vital to obtain and preserve biodiversity and ecosystems, and if participation processes fail, where and how can we make a change?

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