Rationality and Forest Utilization

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Abstract

Within the Swedish context, forest utilization has progressively developed into a complex and dynamic system which connects and divides the diversity of forests interests who utilize the resource under the political mechanism designed to develop and protect its economic, environmental and social dimensions. This paper explores the Swedish Forest Agency's (SFA) use of participation and dialogue in the context of achieving the environmental quality objective, Sustainable Forests. In doing so, provides insights into the challenges faced on the institutional level where objective success is dependent upon external and unified action. Using Habermas and the theory of 'communicative rationality,' there has emerged three categories of analysis from the empirical data (the process, knowledge and roles) which have illustrated the general success of the SFA's National Advisory Council as a means of creating mutual understanding and collective perspectives. In saying that, this paper also identifies and suggests an institutional/organizational dependence upon contradicting means of legitimacy which create a divide between collective perspectives and unified environmental action.

Acknowledgments

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1. Introduction

1.1 Background

One of the 16 environmental quality objectives adopted and defined by the Swedish Parliament in April 1999 is Sustainable Forests. As with all 16 objectives, Sustainable Forests is designed to direct and describe sustainable development which consists of balancing economic, environmental and social dimensions, (Noren & Wigrup 2006). "The value of forests and forest land for biological production must be protected, at the same time as biological diversity and cultural heritage and recreational assets are safeguarded," (Summary of Government proposition 2004/05:150:152). In March 2005 the Swedish Forest Agency (SFA) formally assumed responsibility for this environmental objective and its implementation for the country's forest sector as well as 13 interim targets which were designed as quantitative targets to be accomplished within the generational timeframe, 2020. Sustainable Forests has four components or partial goals which refer to specific aspects of sustainable forestry. These are protecting the forests worth for biological production, maintaining bio diversity as well as protecting both the cultural and social worth of the forests (Summary of Government proposition 2004/05:150:152).

From an international perspective, the above policy formation and direction has a number of characteristics with are aligned with both European and international policy. The Ministerial Conference for the Protection of Forests in Europe (MCPFE) adopted a criteria and indictor system (C&I) for sustainable forest management which similarly reflects the Swedish forest sectors environmental objective. There have also been connections made between the environmental objective and the international Convention on Biodiversity (CBD) where quantitative methods are encouraged as a means to decrease global reductions of biodiversity (Report, SFA, 2007:17).

In assuming the responsibility for the environmental quality objective (sustainable forests), the SFA was assigned the task to interpret the political policy and implement it in conjunction with the so called 'Swedish model for achieving sustainability'. This model refers to the shared responsibility between state and forest owners to collectively contribute to forest sustainability. Where the state must meet its political goals, forest owners must show consideration for nature and protect it without compensation (Noren & Wigrup 2006).

1.2 Problem Description

It is from the above model and a specific tool used in achieving Sustainable Forests that the basis of this research has been developed and the identification of the problem which will be investigated. Dialogue is considered by the SFA as a crucial means in helping achieve the various actions needed to reach the objective, Sustainable Forests (SFA webpage: 2010). This is due to the fact that many of the required actions, on behalf of the forest owners and organisations, are not legally binding and therefore on a voluntary basis. According to the SFA a prerequisite to achieve the objective is to create the conditions where forest owners and organizations can receive the knowledge they need, with respect to environmental practices, to work toward sustainable forestry, (Summary of Government proposition 2009/10:155). It

is important to note here that according to the Government's latest summary of Sustainable Forests, the objective can be achieved by 2020 if additional and extensive measures are implemented. These measures relate to reducing the felling of high nature conservation areas as well as the forest industry protecting biodiversity and culturally valuable sites. While the latest summary proposition suggests that a number of current measures are on track to achieve the objective the government has suggested the development of additional measures to improve the forest industries environmental consideration especially with respect to water environments and cultural sites. The government's strategy for the above developments proposes working procedures which emphasise knowledge improvement as well as increased collaboration and participation with the various forest interests, (Summary of Government proposition 2009/10:155).

1.3 Scope and Objective

The concept of participation has increasingly developed through political promotion since the early 1990's. Lafferty and Meadowcroft state that participation theorists are consistent in claiming that democratic participation necessitates from increased economic and social complexity, large populations and centres of political and economic power which have lead to diminishing opportunities for citizens to participate in decision-making, (Lafferty & Meadowcroft 1996). This increased attention can be understood as the result of various driving forces, such as a means of creating legitimacy with respect to political decision-making. Even though final outcomes may not represent the citizen/societal perspectives involved in the process, their inclusion increases a perceived degree of legitimacy. Another factor which supports the development of participation is that such processes lead to enhanced social decision-making. While experts and politicians play vital roles in policy and decision-making, they are also limited by biases of personal and professional interest which therefore influence decisions/judgements they make, (Lafferty & Meadowcroft 1996).

A number of international policies, such as those mentioned above, have emphasized the importance of participation in relation to environmental sustainability. This shift is clearly seen within the SFA's approach to achieving Sustainable Forests, (Summary of Government proposition 2009/10:155). One of the SFA's communication methods in working toward the objective is through participatory processes where advisory councils on the national, regional and local level meet with representatives from various organizations in order to manage forestry issues specifically related to the level that the advisory council represents. The national level advisory council (NAC) and a sample of the representatives from the forest industry and conservation organizations who participate during the meetings (3-4/year) define the scope and sample of my research. By setting this research parameter I believe I am able to explore the SFA's use of participation and dialogue with the representatives of external organizations in order to development understanding and work toward achieving the environmental quality objective.

1.4 Research Focus

The central research focus is:

To explore the role participation and dialogue plays in the context of achieving the environmental quality objective, Sustainable Forest.

From this central focus respondents will be asked to explore their interpretations of the objectives, successes/failures, results of participation and dialogue in relation to the environmental objective.

2. Swedish Forest Agency (SFA)

The SFA is the national authority responsible for matters concerning Swedish forests and their industry production. The SFA is branched under the Ministry of Agriculture and consists of 5 regions, 120 local offices and 45 districts spread over the country. The agency's strives after sustainable utilization of the countries forests in accordance with the Swedish parliament and government directives, (SFA webpage: 2010).

The National Advisory Council (NAC) is an advisory organ to the SFA's general director with the main purpose of managing the overall forest and environmental political questions and issues. The council was formed in 2002 and consists of representatives from the forest industry, conservation organizations, research institutions, union organizations and the authority, (SFA webpage: 2010). Those represented in the council are as follows:

Holmen Forest, Svea Forest, World Wildlife Foundation, Northern Forest Owners, Forest Industries, Swedish Hunting Organization, The Federation of Swedish Farmers, GS Union, Swedish Agricultural University, Swedish Society for Nature Conservation, The Swedish National Heritage Board, The Swedish Local Heritage Movement, Sami Parliament, The Outdoor Organization, Environmental Protection Agency as well as SFA general director with representatives.

3. Theoretical Framework

3.1 Communicative Rationality

In order to explore and link the SFA's increased emphasis and implementation of participation and dialogue this investigation will be based within the theoretical framework of "communicative rationality" which was developed by Jurgen Habermas. Habermas has been applied in an attempt to connect and give communicative meaning to the political, institutional and societal dimensions of this investigation. Drawing from Habermas, Elling claims that communication and rational decision-making are the key elements of communicative rationality. In order to democratize decision-making processes related to the environment a renewed conceptualization of rationality is required, (Elling 2008). Elling claims that decision making processes have been dominated over the last decades by what Habermas defines as the "instrumental rationality," (Elling 2008:6). 'Instrumental rationality'

refs to a planned and reasonable decision-making rationale that should be widely accepted due to the social-democratic mind set. Political economists and natural scientists are two concrete examples of the dominating forces having major influence over political and institutional decision-making processes, (Elling 2008). It is the historical dominance of this science based rationality that both Habermas and Elling question in order to reinstate a more encompassing concept of rationality. While the 'instrumental' aspect plays a vital role in decision-making, over time it has squashed a political and societal consciousness which considers moral, ethical and aesthetic rationales at the same time, (Elling 2008). Therefore the theory of 'communicative rationality' attempts to recreate societal rationality by restoring lost aspects of rationality which are founded in democratic argumentation, (Murray 2005).The decision-making approach, that Habermas (1984) proposes is his theory of 'communicative rationality,' in which he theorizes that collective reasoning, argumentation and analysis can develop a unified vision of reality and thus create social integration, group solidarity and coordinated action, (Murray 2005:2).

Dallmayr, in the article "Habermas and Rationality" (1988), states the importance of another concept closely related to 'communicative rationality' as well as this investigation. The concept of knowledge raises questions with respect to 'validity claims' as to whose knowledge is 'true' and therefore which knowledge should be used as the basis of valid argumentation and decision-making, (Dallmayr 1988). Habermas distinguishes between two main types of knowledge which can be used in the development of 'validity claims.' The first is 'instrumental' and is specifically used for "successful intervention" while the second type of knowledge is developed for reasons of clarification and discussion, (Dallmayr 1988:558). Habermas has used these forms of knowledge in order to create the basic types of rationality which are respectively phrased as "cognitive-instrumental rationality" and "communicative rationality," (Dallmayr 1988:558).

In order to specifically illustrate the theoretical frameworks relevance to the context of this investigation, the environmental quality objective and the SFA use of dialogue and participation they can be connected on a number of levels. As a state institution, the SFA has directives delivered from the government with respect to the environmental objective as well as guidelines to assist in the development of work procedures, (Summary of Government proposition 2009/10:155). Here we are able to clearly connect what Elling describes as the institutionalization of the environment in both the political and public spheres, (Elling 2008:26), where the political mechanism is driving an increased agenda toward environmental sustainability. As an institution the SFA creates this link between the political and the public spheres with a continued drive of the political mechanism into the public sphere.

The connection between communicative rationality and this investigation becomes clear when considering the environment and its political institutionalization. As claimed by Elling, a direct result of the environment entering the political apparatus is that it becomes an object of rationalization, (Elling 2008:26), where an interdependence is created along the political, institutional and public procedure chain and as an object of rationalization highlights questions relating to morals, values, ethics and aesthetics. It is these various forms of Habermasian rationality that link the concept of knowledge and its claims of validity to the Swedish forestry context and this investigation. Multiply dimensions to forest utilization raise questions of how/who's knowledge shall be accepted in processes involving participation and dialogue. Rationality is also connected to this investigation due to the 'Swedish model for achieving sustainability.' The SFA works within the political framework provided by the government which has reduced their legal mandate and promotes landowner

and organization responsibility, (Noren & Wigrup 2006). Therefore creating a situation where the SFA must use dialogue and participation to develop an external understanding of the multiply dimensions related to sustainable forest utilization.

On a more practical level, the SFA has developed a number of work procedures in order to reflect the political directives as well as assist in the task of reaching the environmental quality objective. Participation, dialogue and the SFA's use of the national level advisory council become interesting analytical instruments from which to investigate and assess their connection to the theoretical framework provided by Habermas, Elling and Dallmayr.

3.2 Participation and Dialogue

The concepts of participation and dialogue are increasingly becoming a priority within institutions and organizations that are faced with pressures of meeting ambitious environmental policy requirements. "The capacity for participation and integration seems to be crucial (at least in the highly developed democracies)," (Lafferty & Meadowcroft 1996:79). Extensions in political participation have continued to develop with respect to participation rights to influence policy. Decentralization combined with regional boundaries increasing in strength and their legal rights all add to participations capacity building, (Lafferty & Meadowcroft) 1996). According to Lafferty and Meadowcroft, communication and information are also factors adding to participation capacity which relate to the different levels of "production, diffusion and application of knowledge," (pg. 80). In saying this, they claim that the significance of communication and information as policy instruments for the environment are often ignored, (Lafferty & Meadowcroft 1996).

Whatever the reasons are for this development it is important to define participation in the context of this investigation in order to analyze the National Advisory Council as a participatory process as well as its success in contributing to the environmental objective, Sustainable Forests. For the point of this investigation a generalized definition will be applied as a means of understanding the process as well as matching this investigations practical level of participation analysis. "Participation is a voluntary process whereby people, individually or through organized groups, can exchange information, express opinions and articulate interests, and have the potential to influence decisions or the outcome of the matter at hand," (FAO/ECE/ILO 2000).

Parallel to the above trends, the concept of dialogue is gaining attention as a means of communication in order to attempt to develop learning and mutual understanding from divergent interests groups. What separates dialogue from other communication methods, on a theoretical level, is that successful agreement between divergent interests is not the immediate goal. Dialogue strives for co-constructed mutual understanding where both successes and failures become visible to the parties involved in the process, (Daniels & Walker, 2001:132). The concept and this definition of dialogue reflect the nature of the advisory council and therefore justify its relevance in this investigation due to the fact that the council is an advisory platform and is explicitly defined as not being a decision-making process.

4. Methodology

The methodology used in this investigation for data analysis is a qualitative discourse approach. This approach refers to a process of exploring and understanding an empirical situation which is derived from systematically collected data and systematic data analysis produced and developed throughout the research process. An abductive research strategy has also been applied in an attempt to constantly acknowledge that individual statements are dependent upon personal interpretation of the conditions which they are subjected to, (Atkinson, 2010). With respect to this investigation, respondents were subjected to semi-structured interview questions which are dependent on respondent interpretation. Semi-structured interview questions were used in all interviews as well as core interview questions following a degree of consistency. Due to the fact that four of the respondents represented different organizations certain interview questions were specifically adapted to relate to their specific context. The reasoning behind this decision was to create a level of comparability between the empirical data as well as to allow respondents the opportunity to develop issues that were of specific importance to them. Appling this approach has raised some questions related to the trustworthiness and depth of the respondent's responses. Alvesson states that "while an interview technique trying to maximize neutrality and minimize interviewer influence may lead to shallow, convention-guided and not very honest answers, closed-maximizing approaches may lead to answers in which the orientations of the researcher more strongly guide or specificities of the local context brings forward highly idiosyncratic responses," (Alvesson 1999:18). Due to the fact that all respondents represent their respective organizations/agency on a national level consideration must be given to whether responses reflect a standardized version from an organizational perspective or of a more personalized nature.

The respondent sample was drawn from participating representatives of the National Advisory Council (NAC). Due to various reasons such as time, resources and representative work commitments, six council representatives were interviewed as well as the SFA's national environmental goal manager who occasionally participates in the council. It is clear from this sample that this is far from a complete representation of the NAC due to the NAC process including representatives from at least 15 organizations. This is an important point which illustrates that this investigation does not provide a complete representation of the process.

An introductory email was sent by the SFA to forestry industry and nature conservation representatives who participate in the NAC. This was followed by a telephone call from myself in order to make personal contact and attempt to secure an interview. In relation to the number of emails sent this seemed to be an effective method to make contact and then secure an interview. The decisive factor was generally dependent upon the representative's finding time in their schedule.

The empirical data was collected under a three week period stretching from the 13th -30th of April. There were seven interviews in total and each lasted between 30-60 minutes. The majority of the interviews were undertaken in the respondents usual work environment excluding one which was held at the Swedish Agricultural University.

Interview transcription was made directly after the interview where possible; three interviews were transcribed the following day of the interview due to travel and late afternoon interviews. This process has proved to be rather challenging for a number of reasons and has illustrated the limitations and risks involved in such a process. The major challenge has been language, six of the seven interviews were held in Swedish with the seven held in English. Having to accommodate two languages into this investigation has created challenges on a number of levels. During the transcription process it has become clear that I have missed a number of interesting opportunities to ask the respondent to continue to develop their line of thought. The reason being, that under the circumstances of the interview I have had difficulties developing relevant follow up questions while at the same time following the content of the interview and controlling the overall interview procedure. Another challenge during the transcription process has been translation from Swedish to English. Translation always creates opportunities for misunderstanding and this has become evident in both finding the corresponding words in English as well as respondent clarifications when the transcripts were sent to the respondents for approval. In order to account for these challenges I have transcribed as soon as possible after the interview as well as offering the transcript to the respondent after transcription. Generally I have only experienced minor misunderstandings which have been clarified by the respondent. In saying this, two of the respondents chose not to approve the transcript and in doing so have supported my discretion. One transcript was altered rather substantially during the approval process and due to its relevance, a section of the removed data has been included in this investigation but the respondent's identity is kept anonymous.

An important aspect of this investigation is the theoretical frame work from which to base the analysis. Habermas's theory of 'communicative rationality' and the later inclusion of 'systematically distorted communication' (in the discussion section) have been applied for a number of reasons. Firstly it was necessary to apply a frame work which links and shifts between the political, institutional and societal arenas which relate to the context of this investigation. It was also important to find theoretical meaning to account for and help analysis the various economic, environmental and social dimensions which make up the Swedish forest context. Applying this theory has created a number of challenges due to the meta-theoretical nature of Habermas's 'communicative rationality.' To apply this theory to the NAC process a number of scale adjustments have been made as well as collapsing the meta-theoretical umbrella of social formation analysis and applying it specifically to the NAC and the institutional/organizational level. The question needs to be raised as to what the results of this investigation would be if applying a different theoretical framework. In light of the challenges and risks involved in applying this theory I believe it has added justifiable value to the investigation and assisted in producing an interesting result.

4.1 Interview Respondents

The respondents and their organizations involved in this investigation shall be briefly described below:

- **Monika Stridsman** (General Director) SFA

- **Erik Sollander** (Head Strategist) SFA

- **Ulrika Siira** (Environmental Goal Manager/Specialist) SFA

- **Peter Staland** (Head of Forest Policy) LRF – The Swedish Federation of Forest Owners

The LRF is an interest and business organization to promote the development of the forest industry as well as protecting the forest owner's productivity, (LRF webpage: 2010)

- **Marie Larsson-Stern** (Forest Manager) Sveaskog

Sveaskog is Sweden's largest forest owner and leading supplier of timber, pulp and bio fuel, (Sveaskog webpage: 2010).

- **Mårten Larsson** (Forest Director, Head of Forest Policy) Swedish Forest Industries Federation

The SFIF is the trade and employee organization for pulp, paper and wood mechanical industries whose role is to foster competitiveness of its members and promote the use of wood based products, (SFIF webpage: 2010).

- **Jonas Rudberg** (Forest Officer) Swedish Society for Nature Conservation

The SSNC is an environmental organization created in order to spread knowledge, create solutions, map environmental risks and influence politicians and public authorities, (SSNC webpage: 2010).

Another limitation of this investigation is identifiable from the above; the forest industry is clearly a dominating representation among the four external interests. A number of examples from the empirical data that are used as a contradictory means come from the SSNC respondent and therefore raise questions of reliability and power relations within the process as well as the forest sector. These specific examples from the SSNC respondent are difficult to defend in terms of general reliability and are therefore used as a means of raising questions in the context of this investigation. Ideally the World Wildlife Foundation would have also been included in this investigation in an attempt to balance the interest ratio and possibly increase the perspective and reliability from the environmental conservation side.

It is also important to clarify that from the following analysis, this investigation will developed into a double sided investigation considering both the practical process of the NAC as well as the wider implications and challenges for communication and environmental consideration.

5. Analysis

In order to systematically analyse the empirical data, a number of categories will be introduced to assist the analysis and in doing so create a systematic structure to develop this investigation and assist the reader. The categories which follow (the process, knowledge and roles) have emerged from the empirical data being placed against the theoretical framework and have been developed to cover and connect both the practical and theoretical elements of this investigation. The emergence of these categories and their contents has been heavily influenced by the words and expressions used by the respondents during the interview processes and in combination with the theoretical concepts. The analysis of each category will begin by exploring the respondent's interpretations of the interview questions which referred to the NAC process and the concepts of participation and dialogue. From this point the categorical analysis will turn to explore my interpretations of the empirical data and make connections to the theoretical framework used in this investigation.

5.1 The Process

From analyzing the empirical data in relation to the NAC process it has become clear that there is a high degree of consistency between the respondents involved in this investigation. This consistency is evident both from the SFA who own the process as well as the external participates who are present. In this context consistency refers to the respondents responses when asked to explore their understandings of the reasoning behind and the importance of the process as well as the dialogue that takes place. All respondents have expressed a definite and consistent view of the process, it is clear that the SFA's objective with the process is clearly understood by the external respondents as well as clearly understanding the importance of a collective process where all interests can gain knowledge about the SFA and their current activities while at the same time express issues that are of specific importance to their organization.

We need this communication otherwise confrontations will occur; I think it is important to resonate on these questions, to have an understanding of each others operations and to create debate. (Interview 4: Marie Larsson-Stern - Sveaskog)

The important aspect is we have the opportunity to lift forward what we what in front of the other interests, to have collective consistency. (Interview 2: Peter Staland - LRF)

An interesting aspect of the process which has emerged is the delicate balance between creating and developing this process, ensuring that interests perceive the process as important and discussing the issues that are of the greatest importance.

This is important to have in mind, because if we avoid the important questions in this process then it will die of itself. We have to sit on the edge and bring up the difficult questions. We have to constantly try to open Pandora's Box. (Interview 5: Erik Sollander - SFA)

Although this fragile balance has not been explicitly expressed by the external interests, it is evident that there are numerous issues and discussions where the differences in

opinion/position are definitively opposed therefore creating difficulties for continued discussion. The SFA has placed emphasis on creating the opportunity for the interests to be able to raise questions and issues which are of importance for their organizations. This point is clearly supported by the external interests who have expressed satisfaction with the agenda procedures and competent work methods of the SFA employees involved in the process. A number of the external respondents have expressed that they consider the process as an equal forum to exchange information and opinion. This seems to be due to the efficient agenda procedures used by the SFA and their commitments to ensure that all participates are provided with the opportunity to raise matters of interest/concern during the process. From the empirical data there is no conclusive evidence of dominance by the SFA or any external interest involved.

Of course the SFA has the preference but what I have experienced is that the proceedings are evenly distributed in the way that discussions and comments develop until they are concluded, then you can always drive on a discussion one more time but this seldom achieves much. (Interview 3: Mårten Larsson - SFIF)

In saying this it has become apparent that there exist questions as to whether certain points of discussion are considered to be worth developing in the process. The SFA's vision and objective with the process has been clearly expressed as well as the value in achieving it.

Our vision is to create a forum where we are able to communicate and have open discussion. If we only receive the politically correct (version) *then what's the point, if you express what is in your heart it may create short term problems but at least we know what the problem is and can maybe do something about it.* (Interview 5: Erik Sollander - SFA)

I have to admit that sometimes I do not bring up certain issues; it's a self sensor, because if I feel that this is not going to work, we can discuss it, but it's not going to go forward. Then sometimes I decide not to bring it up at all. This might say something about me and my organization but it might also say something about the council. (Interview 6: Jonas Rudberg - SSNC)

This definite contradiction between vision and practice is a single example taken from the data and does not represent the general view of the external interests but one which I consider important when placed in the wider context of the environmental objective and the theoretical framework. This specific example is considered important because of the question of whether or not the respondent who expressed this stands alone on this issue or whether the other respondents chose not to express it during the interview. On the hand a question must be raised as to whether the expression of this reflects a concern and/or lack of mandate with respect to power relations within the process. It would be reasonable to assume that a lack of mandate within the process would represent a lack of mandate in the context of the forest sector. It is clear that the interests participating in the process represent a number of clear and conflicting stand points but as an institution whose goal is to gather these conflicting views and use them to develop forest utilization there is a clear break in the communication channel when an interest will not contribute an opinion due to a perceived lack of meaning. With respect to Daniels and Walker and the concept of dialogue, the goal of mutual understanding

is the realization of the successes and failures of that which is discussed, (Daniels & Walker, 2001:132). Not expressing a certain position/opinion within the NAC process creates a missing link within the theoretical frame of dialogue and in doing so creates a possible lack of understanding between the interests involved in relation to the specific issue. In light of Habermas's theory of 'communicative rationality,' a similar reflection is raised in trying to build a 'unified reality' to coordinate action. Habermas theorizes that "collective reasoning, argumentation and analysis," (Murray 2005), are the specific elements necessary to build this reality. When an interest within the NAC process decides not to share a certain point of view/position then immediately the basis behind Habermas's theory and the concept of a 'unified reality' falls short of the premise of unification. The important question which must be raised here is why this respondent decides not to share an opinion/position. As stated by the respondent the issue at hand is interpreted as being locked and unable to go forward for reasons of contradicting positions. For the point of this investigation it is necessary to search beyond the face value of this situation and explore the reasoning behind these contradicting positions and consider the relationship and effect this has on communication. These issues will be developed further in the following categories as well as the discussion.

Excluding this specific example from the analysis of the NAC process, Elling claims that Habermas "believes it is the communicative coordinated processes in their full validity sphere that are the deciding factors of action, both in the realm of society and the individual," (Elling 2008:61). In light of this and the empirical data, there can be a strong connection made that illustrates the importance and general success of the NAC as a process where the interests points of view and the expression of them are highly valued by the SFA and according to the data successfully achieved in general terms.

5.2 Knowledge

Through the analysis of the empirical data it has become obvious that knowledge and the appropriate holder of it is very much a matter of interpretation and debate. The defining and measuring of diffuse concepts such as bio-diversity has left a lot of space for both individual and organizational interpretation and this has been expressed by the various respondents. When expressing concern over the SFA's use of the Polytax inventory method, a system used to account for environmental consideration and regeneration result in relation to felling, (Esseen, Glimskär, Moen, Sandström,Weibull 2004:55), the respondent describes difficulties with respect to communication around these systems.

I question whether Polytax is a good way to follow nature conservation. With communication around this, statistics are so interpretation dependent and are dependent on those involved in their collection and presentation, which then reflects what is presented as the truth..//.. because building your conclusions on something that is possibly not truthfully placed can easily lead to sanctions and consequences that actually do not have anything to do with the reality of the situation. This type of information can lead to a political debate and therefore there is a major responsibility with respect to (statistical) *formation and presentation.*
(Interview 3: Mårten Larsson - SFIF)

This controversial measurement system used by the SFA, illustrates an important point of difference which has no simple solution. A number of the forest industry organisations use their own follow up systems when measuring environmental consideration, (Esseen, Glimskär, Moen, Sandström,Weibull 2004:55), which in turn creates a complicated and diverse situation where contradictions in statistical results are likely to happen regularly and create conflicts when attempting to present externally acceptable result. This point of difference and concern is supported from the SFA side where a respondent explains…

This difference in base understanding can create serious confrontation. We have a lot of people that are very specialized, this is often good but it sometimes means you loss an overall perspective. Even if you have a PhD you can easily miss what is important. This can create division among individuals. (Interview 5: Erik Sollander - SFA)

These work procedures which are used in order to represent a 'true' picture of the forest context must be interpreted as a central point of divergence among the respondents involved in this investigation. They also highlight questions related to communication on a more inter-personal level. On a number of occasions respondents have expressed the risks involved in individual interpretation and how these interpretations are respectively expressed.

I experience that if I say one thing and my colleague is supposed to say the same thing, we will say it in different ways, and what I say can be very provocative and vice versa. (Anonymous)

Two civil servants from the SFA can delimit the concept (key habitats) *in different ways.* (Interview 3: Mårten Larsson - SFIF)

My interpretation of this draws attention to a number of issues which relate both to the NAC process as well as environmental management within the forest sector. As an institution attempting to develop a balance between production and environmental consideration the SFA is confronted with a difficult situation. When attempting to communicate both success and/or failure toward environmental consideration in the forest sector the SFA will be confronted and criticized with opposing statistical result due to the various measurement systems used and interpretations made in practice. When each respective measurement system is developed and implemented by experts who can defend the method and result then argument and communication become influential means to drive a specific agenda.

It depends on my ability to express it. I do not perceive that there are any restrictions on what can be discussed. So it is completely dependent on my ability, how well read I am, how many facts I can provide and how I can express them. (Interview 3: Mårten Larsson – SFIF)

What seems evident from this statement is that the respondent perceives the NAC process as an open forum without communicative restrictions and where an individual's ability to express their position becomes a vital aspect. While a prerequisite for open and constructive communication seems to have been achieved, it is reasonable to assume that there is a definite need to justify what is expressed with the use of factual evidence.

When considering the above against the theoretical frame work a number of interesting connections can be made. Habermas clearly separates the basic types of rationality, which are the 'cognitive-instrumental rationality and the 'communicative rationality,' which reflect a point of difference when considering knowledge as a means for argumentation and decision making. From the interpretation of this category it seems clear that the 'cognitive-instrumental rationality' that Habermas draws our attention to plays a dominate role in the development and communication of method and result with respect to environmental consideration. Measurement and target systems of a quantitative nature have been developed and applied to the various and diffuse concepts which make up specific environmental consideration practice. In order to gain external acceptance of the results of these systems it is possible to identify at least three problems which hinder collective acceptance. The first, which was expressed above by a respondent, is that statistics are very much dependent on those involved in their collection and interpretation. While the second, are the difficulties which become apparent when applying quantitative systems to measure concepts which are diffuse and therefore very susceptible to contradictory interpretation. The third is that the methods and results which are being communicated can be justified and defended both in terms of their collection and representation.

If you consider forest and environmental politics you have a rather thought provoking situation, very ambitious goals have been set, everything must be perfect, we shall be rich, save the social and cultural aspects, we all must enjoy it, no one should be afraid. But if you consider the tool box that we have its very limited, regulations that come from partial political reason. (Interview 5: Erik Sollander - SFA)

This respondent's description surfaces an interesting problematic which makes a connection with stretches the entire spectrum from theory to practice within this investigations context. The political directive which steers the SFA in terms of environmental consideration has a clear congruence with the 'communicative rationality' from which Habermas theorizes. By setting ambitious goals in order to protect social and cultural dimensions of the forest it is reasonable to assume and identify the connection to the moral and ethical aspects of rationality which Habermas points out. By this I refer to the political drive to incorporate and protect non-productive aspects of the forest which are of societal importance. In order to achieve this as an institution, the SFA has applied quantitative measurement systems, which can be claimed as being products of the 'cognitive-instrumental rationality,' to the aesthetic nature of the concepts that represent social and cultural dimensions of the forest. In doing so, we are left with a complex situation where the links between the political, institutional and public spheres are complete but the means by which to systematically and successful cope with this combination (the 'cognitive-instrumental' and the 'communicative' aspects of environmental consideration) are partial and without a unified procedural methodology. The 'communicative rationality' by which Habermas claims as needing release from the 'cognitive-instrumental' has in this context had its hands tied by the institutional reliance on a quantitative (technical-scientific) system of measurement which has enjoyed dominance over a number of decades and according to Habermas have pushed aside the moral and ethical aspects of rationality. Here we can see what Elling claims as an expansion of the frame work

where "the moment the environmental question was institutionalized in the public and in the political mechanism, the processes of rationalization in society become dependent on a rational attitude to questions concerning ethics and values," (Elling 2008:26). In light of this dependence on rationalization, which in the context of this investigation refers to the environmental directives from the political arena and the SFA implementation of them, there seems to be a clear collision of Habermas's rationalities where the weight of this complex situation rests upon the shoulders of the institution (SFA). The process of defending 'validity claims' in the institutional arena effectively become messy and without direction when combining the two rationalities without a collective means of measurement and/or perspective for the three forest dimensions (economic, environmental and social) described in the environmental objective.

Our politicians set up ambitious goals but there is a badly developed tool box and where people shall act voluntarily. It's left to people like me and my colleagues to skate on thin ice, which is quite scary; I would like to see some theory on this. (Interview 5: Erik Sollander - SFA)

5.3 Roles

This category's analysis will focus on the roles of the respondents in relation to the specific interests they represent. The category can be defined as a continuation of the previous categories in the way that there are direct links conceptually as well as empirically but what separates this category is the attempt to widen the perspective in order to make a direct connection to the point of departure of this investigation, Sustainable Forests. In doing so, a number of interesting points of discussion will emerge and assist in making this connection as well as tying the empirical data and the theoretical frame work to the investigation.

From the SFA side there is clear indication that although the NAC process is for dialogue and not for decision-making there is of course a strategic goal behind it in order to develop as an institution as well as reaching specific targets.

Another goal with the council is to meet and learn about each other, there is a different culture with different interests, but behind the culture (organizational) *they are actually good people, but its important to go forward and what I think is hard is that the group is great and there is positive discussion but from discussion to something actually happening in the forest is very difficult, because then someone needs to say I'll fix that and then follow it up, there we have not reached in the council.* (Interview 1: Monika Stridsman - SFA)

When asked what the SFA was doing to bridge this gap the respondent answered…

This is the question what I am trying to drive in the council, I think follow ups are very effective, but I want to come to the stage where the forest industry says a little more clearly that yes we promise to fix that and this is very difficult..//..I would like to get to the point where every company, hunting organization and conservation organization are saying that this is what we are going to do and then see after a year if it has been achieved or not. (Interview 1: Monika Stridsman - SFA)

It is clearly consistent that the NAC does not and can not strive after consensus but there is a definite attempt in developing a collective perspective in order to produce and achieve concrete measures in the forest. To reach this the respondents from the SFA side have made a number of references to creating the opportunity for the external interests to trust that what is said inside the council will not be used a means of negative publicity or contradiction. In doing so attempting to develop a process where participates are able to speak their minds openly and without fear of retribution.

We encourage open dialogue and they must say what is important even if they actually climb outside of their institutional role of their own organization…//… If you compare with the daily papers, in the advisory council we see that there are different interests but the worst of the over tones have disappeared. (Interview 5: Erik Sollander - SFA)

What is evident is the SFA has created a positive process which has not only been accepted by the external interests but also there is definite indication of its worth. In saying this, for the point of this investigation it is necessary to widen the perspective and consider the NAC process in the context of the SFA working toward the environmental objective. It is from this point of analysis that the emerging points of discussion become visible.

The idea of 'climbing outside' of an institutional role is shared by an external respondent who states that there are opportunities for this to take place but claims that in reality this rarely occurs.

Of course it depends on the topic but there is a lot of room for leaving those positions you have, it is not likely to change. The result is that 99% of the time you can see exactly what they are going to say. It's probably the same with me; I have to say certain things, it is not that you don't believe in it but you have to repeat it and it is important to say it again. Things probably have not changed too much in the forest in the last few months but you have to say it again. It totally depends on the topic but you can think that this is a waste of time; we are not getting anywhere here. (Interview 6: Jonas Rudberg - SSNC)

As a representative participating in the NAC process it is reasonable to assume that the idea of 'climbing outside' of a specific institutional/organizational role comes with a number of difficulties and risks. These difficulties and risks, in combination with the issues raised in the previous category 'knowledge,' produce a critical point of analysis and discussion in the context of this investigation. Using 'communicative rationality' as the backdrop of the analysis, the SFA strives after a process where the representatives are able to represent their specific interests but at the same time reach a level of interaction beyond organizational representation. A level of communication where participants can honestly and safely express opinion that could possibly lead to a level of understanding and possibility which extends beyond organizational representation and rather meets on a plain of understanding which can lead to possibilities for procedural develop which avoid the immediate collisions of interest divergence. It is from this interpretation of the SFA's vision that 'communicative rationality' is linked by the concept of 'reflexivity.' According to Elling, (2008), reflexivity becomes a key concept when considering the developments of modern society. He claims that Habermas sees reflexivity as a process created through the liberation of individual's from the existing

traditions, norms and culture. This in turn allows for the development of mutual understanding between individuals on an independent basis and therefore becomes the requirement for 'systemic purposive rationality,' (Elling 2008:164). In order for the individuals participating in the NAC to 'climb outside' of their roles there demands a release from the organizational norms/culture of which they represent. An inability to achieve this release can be interpreted as a continuation of what Habermas describes as the domination by the 'cognitive-instrumental rationality' over the moral-practical and aesthetic-expressive rationalities, (Elling 2008:164).

As claimed in the analysis category 'knowledge' it is reasonable to link the 'cognitive-instrumental rationality' with the NAC process in the form of contradicting knowledge, target, measurement and result procedures as hindering a collective and united perspective of environmental consideration. Interpreted in this way it becomes difficult to assume that external representatives participating in the NAC are able to consistently use 'expert' knowledge to justify their organizations methods while at the same time 'climb outside' of their organizational role in order to develop a higher level of collective understanding. According to the empirical data, discussions within the process seem to reach a level that satisfies the frame of the process, namely dialogue and collective understanding. But in doing so have reached their capacities for developing the commitments needed to improve environmental consideration in practice. In other words, the representatives participating in the NAC process are bound by the technical-scientific knowledge that their organizations use as a means of justification. Of course this is case/topic specific and in certain discussions consistencies between interests are found but the empirical data suggests and provides a number of concrete cases which can be interpreted as examples of the 'cognitive-instrumental rationality' dominating and thereby restricting the development of a 'communicative rationality.'

Today it is commonly seen that the key habitats understanding is not legally comprehendible, the definition is owned by the SFA and it is their civil servants in the field that assess them. Because this is so controversial to fell and use the products there are no companies that are interested in the wood, in principle a logging ban. (Interview 3: Mårten Larsson - SFIF)

This statement illustrates two important aspects of the 'cognitive-instrumental rationality' that are common in the context of this investigation and which become problematic when attempting to produce a collectively accepted result in the forest. The concept 'key habitat' is owned by the SFA and therefore developed by them, the means and definition by which this concept was produced can be interpreted as being challenged by the respondent. Also the fact that the SFA's specialists are responsible for field assessment of the concept in the forest seems to suggest some sort of bias which needs to be questioned.

Another example can be seen through a respondents concern over a clear cut analysis done by the SFA and the statistical results which were presented.

One example of a very serious issue that I do not think has been taken care of. I am not sure if there is another forum to take of it, but it is an issue that according to the SFA analysis 29% of the clear cuts in Sweden are not legal. It has been around 25% but now it is even more.

We think this is a serious problem…//…We said the SFA should do something about this, if its 25% of all the felling in the country then it is a big problem and not within the law. I have raised this on a number of occasions but there is not much that happens. (Interview 6: Jonas Rudberg – SSNC)

If the statistics were externally accepted and collectively seen as outside the frame of the law then one would assume that action would be immediately taken to improve the situation. It is reasonable to assume that what restricts progress and collective acceptance around this issue is contradicting justifications about the 'true' felling statistics.

A third example of the 'cognitive-instrumental rationality' relates to the Polytax inventory system which has been identified and explained in the 'knowledge' category above.

6. Discussion

Starting from within the NAC process the boundaries of the investigation have then been expanded for two reasons: 1) the theoretical framework demanded it 2) numerous examples from the empirical data demanded interpretation and explanation of which there were no answers to be found within the process itself. Therefore the investigation has developed into an investigation of the practical process as well as the wider implications and challenges for communication and environmental consideration within the forest sector.

From the analysis of the empirical data against the theoretical framework there have emerged three categories (the process, knowledge and roles) which have provided an interpretive picture of the NAC process but at the same time raised a number of questions in relation to the environmental objective, Sustainable Forests, and the wider challenges for communication faced by the SFA.

What is apparent is that the NAC process is collectively perceived as important and useful as a means of creating dialogue between the SFA and the external interests. Respondents have been clear in expressing the need for such a process and the positive benefits that result in being provided with current information relating to the SFA operations as well as having the opportunity to provide the SFA with their organizations perspective. What is obvious is that this process fulfills a necessary function in providing the forests interests with a platform where dialogue can take place. Respondents have expressed that the process has no communicative restrictions which would indicate successful process creation and implementation by the SFA. Without this process it is reasonable to assume that the interests are likely to drift further apart with respect to their understandings of each other and in doing so create even more confrontations due to misunderstandings. Without such a process it is likely that the media becomes a common source of interaction which has been expressed by the respondents as a risky arena for communication. Respondents have consistently expressed this while at the same time drawn attention to a number of specific cases which contradict the success of the process as well as surfacing a number of issues which highlight the complex situation of balancing both the environmental and production aspects of the forest sector. It is

these surfaced issues that create the crux of this investigation and which will be discussed in the following pages. In order to continue this discussion it is necessary to briefly clarify the emerging context which shall be discussed and then apply new theory in an attempt to bring meaning and solidify it.

It is obvious that some bold interpretations have been drawn from the empirical data but these are justified by their apparent coherence with the theoretical framework. It can be assumed that there exists a complex situation where the SFA is confronted by a challenging institutional dilemma with ambitious environmental directives from the political arena; these directives encompass the social and cultural dimensions of a societal perspective and the SFA has adopted the responsibility to successfully meet these directives. The SFA has developed the NAC process as a means of communication to confront this challenge due to their reliance on external interest's taking measures which to a degree should match the procedural goals and results of the SFA. In light of this context, the interpretation illustrates a collision within the institutional arena where the political directives, combining the three dimensions of sustainable forestry, are assigned to the SFA but thereafter clash with a number of the institutional and organizational methods on both a conceptual and practical basis. Put in another way, the concepts and methods used to describe and measure the diffuse and interpretation dependent areas of environmental consideration which are used both by the SFA and external interests are based upon the 'cognitive-instrumental rationality.' This technical-scientific knowledge base according to Habermas, is the very mechanism which blocks the moral and ethical dimensions of rationality which are needed in this context to create the circumstances where a collective acceptance of environmental consideration could possibly emerge. In the context of the NAC, we can assume that the parameters of the process meet the requirements for 'communicative rationality' to emerge; exploration of concerns and their specific contexts appears to have been achieved. In saying this, it can be argued that respondent's are bound by the normative expressive dominance of the 'cognitive-instrumental rationality' that to a large degree steers the procedural mechanism of the institutional/organizational arena. This dominant 'rationality' is of course not the only force which steers the procedural mechanisms of the forest interests. They are also strongly bound to the core interest/value that each organizational interest represents, which could either be the economic productivity and/or property right protection of forest owners or the societal representation for nature conservation. Here the issue of power relations is brought into the light where respective interests are required to match each other in terms of justification and means in order to protect the core interest/value of the organization. In saying this, it is reasonable to assume that the 'instrumental rationality' is the justification and/or production mechanism behind the core interest/s of the organization which is then validated by specific methods which are of an 'instrumental' nature. It is then suggested that within this arena the collision between 'expert' knowledge's become apparent and in doing so restricts the ability of the representative to 'climb outside' of an organizational role in order to create the conditions necessary for 'communicative rationality' to emerge.

6.1 Systematically Distorted Communication

In order to give theoretical meaning to this situation I will again draw on the work of Habermas and the theory of "systematically distorted communication" developed as a central definition in critical theory, (Crossley 2004:2). The development of this theory is derived from the connection between the epistemologies of psychoanalysis and critical theory. Tracing the root of speech omissions, slips, defenses etc the psychoanalyst categorizes these distortions where by making them visible to the patient and creating the circumstances to master them. In the same way Habermas's critical theory uses this approach but replaces the patient with public discourse and there by identifying the communicative public discourse distortions to uncover there causes in an attempt to dispose of them, (Crossley 2004). To this effect Habermas claims that "we can speak of the 'fundamental contradiction' of a social formation when and only when, its organizational principle necessitates that the individuals and groups repeatedly confront one another with claims and intentions that are, in the long run, incompatible," (Habermas 1975:27). In this circumstance the communication between participates is essentially distorted or blocked.

For the point of this discussion the scale of this theoretical analysis must be again shifted, from the social formation that Habermas speaks of, to the context of this investigation. Where by the respondents of the NAC process become the objects of analysis, replacing the social formation/public discourse, and the distortions in communication are revealed as the result of the respondent's dependence on their specific 'organizational principle.' The means of justification of this principle dependence can be interpreted as a reflection of the 'cognitive-instrumental rationality' which steer the contradicting representations of 'truth' within the NAC process. "It is important to note that 'systematically distorted communication' is not something that is merely deceptive or illusionary, but is inscribed in the materiality of social and institutional practice (Kincheloe & McLaren, 1994) and is always mediated by power relations, (Prasad 2005:148).

When reflecting upon the empirical data in relation to the recent inclusion of the 'systematically distorted communication,' we are left to consider the communicative constraints which become apparent during the NAC process when the respondent's and their means of 'rational communication' are distorted/blocked by the organizational reliance on specific and contradictory 'validity claims.' The empirical data has provided numerous examples where respondents have repeatedly expressed the difficulties in developing discussion and the inability to find consensus in certain issues due to the commitments and interpretations of that which they represent.

When considering the environmental objective and the challenges facing the SFA, in order to achieve this ambitious objective, questions must be raised with respect to the role of communication and its effectiveness as a means of building mutual understanding which create the conditions for achieving the objective. It is this question that seems to illustrate the practical and theoretical gap between mutual understanding and collective action among the forest interests and successful implementation and achievement of Sustainable Forests.

While in general terms the NAC has successfully created the parameters for mutual understanding between the interests, it is reasonable to assume that such a process has reached its capacity in terms of a collective perspective/understanding that does not include the means to go beyond the organizational restrictions that each interest is committed to represent. In relation to this investigation, these restrictions or 'distortions' are assumed as being traced back to technical-scientific ('instrumental') methods that the respective interests use as the basis of justifying their work. In order for the specific interests to validate the stance/direction they represent they are committed to the historically dominating and contradictory means of legitimizing 'truth.' It is this structured and dominate bond between knowledge, 'instrumental rationality' and legitimizing 'validity claims' which seems to play the crucial role in ensuring the gap between mutual understanding and unified action is unable to close.

It is important here to again state that the NAC process is not directly responsible for decision-making and solutions to the difficulties in achieving the environmental objective. The collective commitments and actions which are needed are not to be found within the NAC process but this analysis raises questions and assumes that the solutions are not easily found outside the process either when the problematic stretches beyond the parameters of the institutional arena. In assuming this problematic within the NAC process it is reasonable to claim that the same clashes in procedural 'rationality' will be meet at all levels of the institutional arena. On the other hand, as a national level advisory council where dialogue is abstracted from specific cases/issues it is possible to consider this process as including the requirements for a 'rational purposive' communication to occur. By this I refer to the higher level of constraints faced by the regional and local level advisory councils where more specific and practical implementation issues are raised.

This problematic highlights a difficult challenge not only for the SFA in the context of this investigation but also natural resource management and the discourse of environmental communication. Relying on the concepts of communication and participation as the means for ensuring successful resource utilization opens the doors for a range of positive opportunities but at the same time seems to provide no clear guidance to coping with the various challenges that arise with respect to knowledge, validity and power.

7. Conclusion

From this point we are left with the pivotal question which through the process of this investigation reaches beyond the boundaries of the NAC process. In light of the above, what role does participation and dialogue play in the context of the NAC process and the environmental objective?

This investigation has explored the SFA's use of the NAC as a participatory process who's formal objective is through dialogue create a collective perspective between and among the SFA and the external forest interests. What seems empirically sound is the general success of the process as a means of developing this perspective. Interests are consistently aware and in

agreement about the objective and results of this process. While not focused on any specific issue, including the environmental objective, the process has successfully brought a large number of forest interests who represent a wide spectrum of societal and economic perspectives together and in doing so created a national level and strategic forum for collaborative learning and collective perspectives. The use of dialogue, in general terms, has been expressed as a successful means to accomplish these perspectives.

The investigation has also provided a number of individual examples which can be seen as contradicting aspects of the process objective and which have been interpretatively used in order to raise questions which relate both to the success of the process (collective perspectives) and the power relations between the respondent's and their organizations.

It is clear that the use of participation and dialogue are valuable communicative tools within the NAC process but when applied to the environmental objective there seems to be lacking a communicative bridge between a collective perspective of environmental consideration and an acceptable implementation of that consideration. In order to explain this missing link I have drawn from the theoretical work of Habermas and assumed this to be the result of an institutional/organizational dependence on various systems to define, conceptualize and measure what is interpreted as the acceptable and realistic level of environmental consideration, these systems become contradicting representations of 'expert' knowledge. These institutional/organizational interpretations are the means by which to promote and defend the various procedural methods of environmental consideration and are essentially claims of legitimacy which can be used both as a means of justification and contradiction.

Therefore, this investigation concludes in claiming that the SFA's use of participation and dialogue within the NAC process has succeeded in the context of its objectives. But as a means of progressing and achieving the environmental objective a communication gap has been identified and is seemingly locked in place by the systemic distortions which the forests interests rely upon as a means of legitimizing their operations.

It is from this point that we are left with a number of complex questions which both stretch beyond the communicative capacity of the SFA's and natural resources management in general. These questions relate to how institutions are to tackle ambitious political directives/goals, which require the implementation of participation and use of communication, and at the same time demand collective measures to be taken by external interests when the interests (including the institution itself) are unable to unify the legitimating processes which are dominate throughout the institutional/organizational arena.

Toward this question further research is required.

8. Recommendations

The investigation has illustrated that the NAC process has in general terms successfully achieved its objectives. The investigation also suggests a complex problematic which restricts communication leading to unified and collective action. It suggests that the problematic is based beyond the communicative capacity of the NAC and the SFA, therefore the recommendations that follow are intended as a means to minimize the effects of the problematic on the communicative aspects of the NAC process and suggest possible means of communication/agency development.

- Continued and increased emphasis on understanding and developing collective perspectives of organizational/individual driving forces (drivkrafter).

- Development of a stakeholder database as a means of collecting and categorizing capacities, interests and perceptions (non-'instrumental') in order to analysis and develop insights into creative and collectively acceptable solutions.

- Avoidance of communication predetermined by power and normative preconceptions.

- Consideration of this investigation's problematic in relation to the agency's target management system, specifically the general failure of the 'feedback' (återkoppling) phase.

9. References

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9.2 Interviews

Interview 1: Monika Stridsman   13/04-2010: 13.00-14.00 - SFA (Stockholm)

Interview 2: Peter Staland   14/04-2010: 11.00-12.00 – LRF (Stockholm)

Interview 3: Mårten Larsson   19/4-2010: 10.30-11.00 – FI (Stockholm)

Interview 4: Marie Larsson-Stern   23/4-2010: 8.00-9.00 – SLU (Uppsala)

Interview 5: Erik Sollander   26/04-2010: 11.00-12.00 – SFA (Jönköping)

Interview 6: Jonas Rudberg   29/04-2010: 13.00-14.00 – SSNC (Stockholm)

Interview 7: Ulrika Siira   30/04-2010: 9.00-10.00 – SFA (Uppsala)

Digital interviews/transcripts available on request