MASTEROPPGAVE

Tittel
The red thread of public health aims and health impact appraisals in municipal decision-making processes

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Preface

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Anne Kolseth Martinsen

Abstract

Public health affects us all and like a red thread intertwining throughout our lifespan and surroundings. This thesis is within organisational research and concerns the connection of public health aims in municipal master plans and health impact appraisal in single cases that are decided upon in the municipalities. The research is anchored in the Norwegian Public Health Act and Norwegian Planning and Building Act, and the municipal obligation to perform health impact assessments, in this case as a health impact appraisal. The epistemological approach is empirical qualitative research with a descriptive, interpretive, case study cross municipal organisational levels in three municipalities that share a common master plan. The research is further performed in an inductive manner with triangulation of data to ensure trustworthiness. The theoretical frames are within the instrumental and symbolic approaches in context of health impact appraisal, organisational structure municipal- planning, knowledge in organisations, decision-making- and the municipal policy process. The method includes interviews with different organisational levels as well as an interview with the manager from the organisation involved in the case sent to the municipalities about financing the organisation that ensures the local watersheds. Further I have reviewed documentation as protocols, the municipal master plan and the regional public health plan. The major findings of this research revealed that there is a red thread between health impact appraisals in this case and the public health aims in the municipal master plan, however, not a hierarchical or linear one. Through a three-dimensional view there is a connection that has emerged within and across the municipal organisations, bound to the building of a network that has promoted organisational learning, public engagement and cross-sectoral and disciplinary work as communicative planning and action through time and space. This has created an incorporated common understanding in the municipal organisations of health impacts within the field of watersheds.

Sammendrag

Folkehelse påvirker oss alle og strekker seg som en rød tråd gjennom våre livsfaser og omgivelser. Denne masteroppgaven er innenfor organisasjons forskning, og tar for seg sammenhengen mellom folkehelsemål i kommuneplanens samfunnsdel og helsekonsekvens-vurderinger i enkeltsaker for kommunal beslutningstaking. Forskningen er forankret i folkehelseloven og plan- og bygningsloven, hvor kommunene har krav om å gjøre helsekonsekvens-utredninger, som i denne sammenheng er helsekonsekvensvurdering. Den epistemologiske tilnærmingen i oppgaven er empirisk kvalitativ med deskriptiv og fortolkende case studie av ulike kommunale nivåer i tre kommuner med felles kommuneplan. Forskningsmetoden er induktiv tilnærming gjennom triangulering av data for sikre troverdighet. Det teoretiske rammeverket er grunnlagt i verktøy og symbol perspektivene satt i kontekst av helsekonsekvensvurderinger gjennom organisasjonsstruktur, kommunal planlegging, læring i organisasjoner, beslutningstaking og kommunal saksbehandling. Det er i kommunene gjennomført intervjuer på ulike organisatoriske nivåer og intervju med daglig leder for organisasjonen som fremmet saken om finansiering av organisasjonen som sikrer lokale vannområder. Videre har jeg gått igjennom saksprotokoller, kommuneplan og regional folkehelseplan. Funnene har avdekt at det er en rød tråd mellom helsekonsekvensvurderinger i denne spesifikke saken og folkehelsemålene i kommuneplanen, men at denne ikke er hierarkisk eller lineær. Gjennom et tredimensjonalt perspektiv fremtoner det seg en sammenheng på tvers av kommunale organisasjoner knyttet til nettverksbygging som har fremmet tverrfaglig læring og engasjement i organisasjonen på tvers av kommunene. Derigjennom har dette utviklet kommunikativ planlegging og handlinger gjennom tid og rom. Dette har ført til en felles iboende forståelse i de kommunale organisasjonene når det kommer til helsekonsekvenser i forhold til vannområdene.

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Table 1: Abbreviations and acronyms of words and phrases

Abbreviations and acronyms of words and phrases	
Abbreviation/ acronym	*Word/ phrases*
BSC	Balanced Scorecards
CETT	Committee of Environment, Technic and Transportation
EO1	Executive Officer 1
EO2	Executive Officer 2
EO3	Executive Officer 3
EU	European Union
CE1	Chief Executive 1
CE2	Chief Executive 2
CE3	Chief Executive 3
HIA	Health impact assessment
HIa	Health impact appraisals
NDPA	The Norwegian Data Protection Authority
NPM	New Public Management
NSD	The Norwegian Centre for Research Data
M1	Municipality 1
M2	Municipality 2
M3	Municipality 3
MA1	Mayor 1
MA2	Mayor 2
MA3	Mayor 3
O1	Officer 1
O2	Officer 2
O3	Officer 3
RPHP	Regional Public Health Plan
WHO	World Health Organisation
WOG	Whole of Government

1 INTRODUCTION

In this chapter I will provide the background and context of my research, present the research problem and questions with statement before I present the theoretical and methodological frames.

My inspiration for this research came via a research project that Østfold University College was involved in. The project was about health impact appraisals (HIa) in municipal propositions. I participated in a seminar and spoke with researchers and administrational staff from different municipalities participating in the research. Here, I observed there was some lack of connection between the plans, HIa and the decision-making process. This, I believed could be an issue, both in the case of the organisational operational process, and political decision-making.

This distinctive project was designed to create an overview of the knowledge and development of tools used to perform HIa in the process of municipal propositions. My interest craved another perspective and I became interested in delving deeper into the theme.

The health impacts on people involved in municipal tasks are widespread, across different fields of services. *The Norwegian Public Health Act §§ 4 and 5* (Folkehelseloven, 2011) emphasises that municipalities are responsible for obtaining an overview of areas that impact on public health. Further, it states that municipalities must take responsibility for all their actions that might have an impact on public health. *Public Health Act §1* (ibid.) states (as translated by the author):

> 'The purpose of this law is to promote public health in the development of society, including equity of social health. The work of public health should be to promote the health of the population, well-being, good social and environmental relationships, and contribute to the prevention of mental and somatic illness, damage or suffering.
>
> The legislation ensures that municipalities, county municipalities and governmental health departments enforce action, and unify in a prudent

> manner their activities and work within public health. The law
> facilitates a long-term systematic work on public health.*'*

This legislative emphasis on public health drew my attention to how municipalities manage these fundamental tasks throughout their organisations.

In the following sub-sections, I clarify my objectives and aims in this thesis by formulating the research problem, research question and how to conduct the research. Then I present the frames and design of the research and the following structure of this thesis.

1.1 IDEA

This sub-section explains the evolution of the idea behind this research, coupling the *Public Health Act* and *Planning and Building Act*.

Through the legislation of the *Planning and Building Act* (Plan og bygningsloven, 2008), each municipality in Norway makes their own planning strategy through a planning programme. The planning programme leads to a master plan with municipal frames and overarching direction. According this legislation, the master plan should consist of a section called social elements, and a section called land use. Together, they are the policy for future growth. Another aspect in the *Planning and Building Act, Chapter 14* (Plan og bygningsloven, 2008), is that the municipalities must conduct assessments on actions that may have an impact on the environment or society. Furthermore, the *Public Health Acts §§ 5 and 11* (Folkehelseloven, 2011) demand that the municipality has an overview of health impacts concerning the municipality. The municipality may impose upon those who are planning or undertaking an activity to conduct a health impact assessment (HIA).

This strong connection between the *Planning and Building Act* and *Public Health Act* strengthens the responsibility of public health in the municipalities.

So, in what way does this manifest in municipal organisation? How do they perform their tasks and ensure their activities promote public health? The inspiration behind this thesis, together with these questions, drew my attention to

the HIA. How is this reflected in the municipal plan and in individual cases of the municipality?

Roar Amdam (Planlegging og prosessleiing. Korleis lykkast i utviklingsarbeid, 2011, pp. 209-211) differentiates the municipal plan process into the following levels, the institutional, strategic, tactical and operational (see Fig.1).

Legislation, directives, regulations and the municipal plans are the municipal framework that the administration consider when presenting cases for political resolution. The annual process with economic plans, action plans, budgets and tasks are among the proposed resolutions. An HIA is a tool that reflects public health, which according the *Public Health Acts §§ 4 and 5* (Folkehelseloven, 2011) should be of concern in any given area of municipal handling. All this indicates that there should be a red thread running between the institutional, strategic, tactical and operational levels. Furthermore, this red thread should run through public health in the municipal master plan, all the way back to the decision-making process viewed through the HIA in single cases.

Institutional level: approval of the plan, meta-planning	• The municipal strategy of lanning, self-resolving plans, agreements of partnership, the need for planning and plan for planning.
Strategic level: challenges, aims, strategies	• The municipal master plan society section. Development characteristics, challenges, areas of attention, goals and directions for the society development, land use etc.
Tactical level: prioritisations and coordinations of actions	• The municipal master plan of land use. Obliging disposal and premises of land use
Operational level: implement projects and actions	• Plans of development, budget, projects, actions etc.

Figure 1: The society planning in the municipality, as translated by the author. (Amdam R. , Planlegging og prosessleiing. Korleis lykkast i utviklingsarbeid, 2011, p. 211)

1.2 THE RESEARCH PROBLEM AND WHY

In this section, I will substantiate the idea and explain why this is significant to research going through the purpose, the gap of knowledge, and establish the research problem and questions (Merriam, 2009, pp. 64-71).

Public health is an important issue that has an impact upon everybody. The equity of social health in a population provides a definition of our ability to empower and of the resources needed to take care of each other (World Health Organization, 1986, p. 3). Well-intentioned aims not acted upon, however, do not have any impact. Both politicians and municipal administrations have a responsibility to ensure a commitment to such aims. When it comes to public health, this has been a focus for generations but now there is new legislation that provides new perspectives. Within this context, we must develop new organisational ways of working to promote these tasks. This may be by using new techniques or tools, designs, or other means to achieve a long-term systematic approach. The municipal master plan is such a tool. In a municipal organisation, there are several roles and actors, however, both political and administrational, as well as individuals.

Another tool is the health impact appraisal (HIa) introduced by the World Health Organization(WHO) (Gothenburg consensus paper Health Impact Assessment. Main concepts and suggested approach, 1999, p. 6) because there are differences in the time frame and use of tools regarding the organisational conduct of an HIA. WHO has outlined the main processional steps of an HIA differentiated into three main types of conduct:

1. Rapid health impact appraisal – a rapid way of conducting an HIA with few resources using at hand expertise, known impacts and local actors.
2. Health impact analysis – an in-depth examination finding how to ensure positive health outcomes within a policy, programme or project.
3. Health impact review – areas such as policies, strategies or clusters of those that are so broad as to make an in-depth analysis unfeasible. (World Health Organization, 1999, p. 6)

Arve Negaard (Om helsekonsekvensutredninger. En oppsummering av norske og internasjonale kunnskaper, 2015) presents the need to differentiate the concept to fit with the understanding of those implementing an HIA into their local offices. Tools that are hands-on and easy to use in the everyday conduct of different proposals are essential concerning limited resources of staff, time and economy in the municipalities. This led to the following differentiation of the concept within this research, into health impact assessment (HIA) and health impact appraisal (HIa). The latter being the rapid way of conducting an HIA, which contributes in the decision-making process by local authorities regarding propositions and resolutions. It is in this context that I place my research – decision-making within local authorities, administration and politics. Therefore, the concept of HIA in this research is actually HIa.

Some Norwegian municipalities use this tool in their case handling, where the result is presented in single propositions that politicians make decisions upon. Through this process, however, do they make a connection between the aims of public health in the master plan and the HIa? Furthermore, how do they use HIa as a tool, and do the decision-makers take the HIa into consideration during resolutions?

These are the main aspects of this research and made it possible to narrow down the research problem and research questions.

The problem I wish to address in this research is:

> ***'Is there a red thread created by health impact appraisals between the political enactment aims of public health in the municipal society plan and the decision-making process of propositions?'***

To clarify the areas of concern to answer this research problem, I decided how to collect data and which topics to consider (Merriam, 2009, p. 60). This resulted in the following research questions:

- How do municipalities process the proposition in their organisation?
- Do they use any tools linking their aims for public health into their decision-making?
- Do the politicians in the municipalities use HIa in their decision-making?

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- Does the administration in the municipalities use HIa in their decision-making?
- Do the politicians use the society section of the municipal master plan actively in their decision-making?
- Does the administration use the society section of the municipal master plan actively in their decision-making?
- Is there a red thread between the municipal society plan, the theme of living conditions and public health, and the proposition?
- Does HIa influence the decision-making of the proposition?
- How do the politicians view public health via HIa in the proposition?

Through the context and the research problem, I have provided the purpose of the research, the problem statement and why this is important (Merriam, 2009, p. 60), resulting in the research questions. Together, these provide a substantiated topic to research. How to conduct the research is covered in sub-section 1.3, and the methodology in 1.4, but first there is a need to provide a definition of the concept of 'red thread' within this thesis.

1.2.1 Concept of 'red thread'
In this sub-section, I will clarify the use of 'red thread' as a concept. The red thread is a daily used concept in Norwegian. In English, it is seldom used and may hold different associations, from Greek mythology to the Royal Navy. Therefore, it is essential to explain the common understanding of the concept in the context of this thesis.

'In Greek mythology, Theseus rescued himself out of the labyrinth of Minotaur[sic] by following a red thread, given to him by Ariadne' (Wikipedia, 2016)

In the *Bible, Joshua 2:18*: '…thou shall bind this line of scarlet thread in the window which thou didst let us down by…' (BibleStudyTools, 2016)

Further explanation of the characteristics of 'the red thread' can be found in *Goethe's Works, vol. 5 (W. Meister's Travels; Elective Affinities) Part Two, Chapter II*:

'There is, we are told, a curious contrivance in the service of the English marine. The ropes in use in the Royal Navy, from the largest to the smallest, are so twisted that a red thread runs through them from end to end, which cannot be extracted without undoing the whole; and by which the smallest pieces may be recognized as belonging to the crown.

Just so is there drawn through Ottilie's diary, a thread of attachment and affection which connects it all together, and characterizes the whole. And thus these remarks, these observations, these extracted sentences, and whatever else it may contain, were, to the writer, of peculiar meaning. Even the few separate pieces which we select and transcribe will sufficiently explain our meaning.' (Goethe, 1885)

In *Social life of the Chinese Vol.1*, Justus Doolittle (1865) wrote about Chinese folklore from the Tang Dynasty. He tells of the ancient Chinese belief that when a child is born, invisible red threads reach out to connect the child to all the important people that bind it to life, including those which the child is destined to meet but has not yet met (Doolittle, 1865, pp. 68-69).

The inherent characteristic of the red thread becomes clearer, as Debra Kaye (2013) explains in prologue:

'…Red Thread Thinking is … central threads, each containing multiple filaments – fragments of thoughts and memories, new information, playful imaginings, and data that ply together to form a strong band of knowledge…looking for the underlying meaning and linkages – the Red Thread…' (The Red Thread Thinking: Waving Together Connections for Brilliant Ideas and Profitable Innovation, 2013, p. xiii).

Artists refer to the red thread within a storyline, such as in literature or in a screenplay. They refer to the red thread as the connection between different chapters, sequences, stories or inter-relationships within as book, or how it lies in-between, not obvious, perhaps even subliminal, but familiar to the reader. As Alicia Bramlett (The red thread, 1999) says:

'Unity comes from the uninterrupted presence of the red thread… the red thread is woven into multiple layers of a project from the birth of the

concept throughout the planning, execution and all the parts between…
The red thread may take on a physical form or exist as an idea or
emotional state.' (ibid.)

The red thread is a symbol of the connection and coherence within, throughout
and between concepts, stories, situations, organisations or inter-relationships. It
appears in different guises that may be obvious or subtle and thereby require
deeper analysis to surface. In this thesis, the red thread is used as a concept
with these attributes and its relevant characteristics are manifested through the
answered or non-answered parts of the research problem and research
questions.

1.3 HOW TO DO THE RESEARCH – DESIGN OF THE RESEARCH

In this section, I will present the theoretical and practical framework needed to
conduct the research.

To shed light on the research problem, the research questions must be
investigated. Since only some municipalities use HIa, I had to find those who used
it. Since the municipalities participating in the project already used HIa as a tool
in their propositions, I decided to review their propositions to see if I could find a
relationship to their municipal master plan.

To limit my scope, and yet be sure that there were sufficient cases, I narrowed my
search to between August 2014 and January 2015. The timeframe matched a
period where I knew the municipalities had focused on HIa as a tool in a research
project on HIa. By looking at several cases in the different municipalities, I found
some that had similar tasks or themes. I decided not to use a case conducted
within health care services, however, because the connection between public
health and health services is too obvious. To choose an area where the connection
to public health is considered more diffuse, any possible connection to the
municipal master plan through an HIa would be easier to detect. With this
consideration, I chose areas that traditionally do not have the same intuitive
coupling. I explored many different cases, such as the Concept-assessment of
Oslofjorden and the Municipal-reform, but did not find them suitable.

Then I found a draft of the case of The Organisation of the Local Water Sheds, known as Morsa: 'Further financing of surveillance in the water area of Morsa'. Morsa is an inter-municipal organisation of nine municipalities, two county municipalities and two county governors. All the municipalities in this organisation had received the draft for proposition. The draft held some interesting aspects concerning the funding of the organisation. The organisation was now moving from external fundraising to municipal funding; a clear economic aspect I thought to be of more concern to the municipalities than a possible HIa.

I began following the case into the different municipalities to learn more about the HIa in the decision-making process. The next question was whether there was a red thread connecting to the master plans of the municipalities. Reviewing the plans, I found that four municipalities in the same region had cooperate in the development of a common social element section of the master plan, 2011-2022. This plan included a theme called, 'Living conditions and public health'. The theme is determined by several areas of importance and aims to secure the living conditions and public health for the municipalities. These aims should be something that they all would strive to achieve. After all, this is their main document for the development of the municipalities.

Furthermore, all four municipalities had received the proposition draft from Morsa to process in their own municipalities. Hence, the common draft for proposition piqued my interest, along with the use and absence of HIa in the municipalities. I considered investigating all the stakeholders of Morsa, but decided that it would serve my purpose better to research in-depth rather than skimming the surface. Furthermore, the situation of the four cooperating municipalities had some degree of uniqueness that would give the study a stronger purpose. They had a common strategic level, and shared the same frame of steering, via policy in the master plan, for the municipalities. Therefore, they also should have a common ground for their HIa. I concluded that I would review these four municipalities and their usage of HIa.

1.3.1 The theoretical frames

In this sub-section, I will outline the different actors and research aims in a flow chart to clarify the theoretical frames. The theory chapter is in section 2.

Morsa is a pilot project founded by the Norwegian government and the EU. The purpose of Morsa is, among other activities, to create a surveillance programme around specific waters and streams in the region of the local watersheds around the lake Vansjø. The stakeholders of the organisation are two county governors, two county municipals and nine municipalities across two counties. Now that the project period of Morsa is over, the stakeholders must fund the organisation themselves. The proposition draft consists of a funding key based on the populations of each municipality. This proposition was forwarded to all the stakeholders to process in their local decision-making process. I decided that following the handling of the case and decision processes in the different municipalities would provide vital contribution to the research.

To obtain a better understanding of how to conduct the research, I outlined the first flow chart of my aims, and the participants in the research, see Appendix 9.1.

The core of my research is the middle section of the process outlined in Appendix 9.1. At this stage, I made the decision not to involve the Municipal Council, except through documents. The reason for this was to create reasonable frames for this research via a research design that could answer the research question, yet be able to treat the input of data. Through this, I narrowed down my research to the essential elements of actors who, through their role, could provide applicable data for the research problem and questions. This created the groundwork for the theoretical frame as described by Merriam (Qualitative Research: A Guide to Design and Implementation, 2009, pp. 64-71).

During the previous sections, several municipal and theoretical documents were reviewed to provide the theoretical framework. As Merriam (2009) points out, the theoretical framework must not be confused with the methodology (ibid.)

Through the review of legislation, public records and theory within the context of the idea, the theoretical framework of this thesis appeared. The main theoretical aspects of this research are public health with HIa, decision-making in municipal organisations, planning, the behaviour of actors in different municipal

organisational levels and organisational structure. In Chapter two, the theoretical framework is adapted into the theory of the thesis.

1.4 METHODOLOGY

In this section, I will place the theoretical framework, problem statement, and research questions into the methodology and thereby state the research design and further actions. I present the methodology at this early stage to provide the reader with clarification of the choices made throughout the research process. This is due to the interrelation between methodology, theory, method and analysis that has gone back and forth, where new areas of concern have surfaced throughout the research process.

1.4.1 Empirical studies, ontology and epistemology

Empirical studies, in contrast to the theoretical study of concepts or paradigms, are based on investigating how things truly are (Jacobsen, Hvordan gjennomføre undersøkelser? Innføring i samfunnsvitenskapelig metode., 2010, p. 14). This research is empirical because it involves investigating and describing the process of a proposal, see Appendix 9.1. It also investigates, how actors with different roles in the municipalities makes their decisions when it comes to the HIa.

Ontology is the teaching of the nature of reality in the world (Jacobsen, Hvordan gjennomføre undersøkelser? Innføring i samfunnsvitenskapelig metode., 2010, p. 24) Dag Ingvar Jacobsen argues that this is not possible to fully research empirically. In this research, I have used assumptions about the reality of the world within the field I am investigating. Some of these assumptions are revealed through the research questions. In order to present any questions at all, I must make some assumptions about how I believe different operations function in the practical world. I must use my own experience and knowledge through the unfolding process of reading documents to gain a grasp of what direction to pursue. If I am not aware of my inherent assumptions, they may lead my research into pit falls; but by using them consciously, they contribute to the progress of the research. To verify my assumptions about the reality of the world is, however, not

the purpose of this research. I have only used my assumptions to guide me further into the research context. This leads to the next concept, epistemology.

Epistemology is the teaching of how we can gather information about reality (ibid.). Jacobsen (2010) points out that it is concerned with the possibility of achieving an objective description of reality. Merriam (2009, p. 11) provides an outline of the different epistemological perspectives of Positivist/Post-positivistic, Interpretive/Constructivist, Critical and Postmodern/Post-structural theory by categorising them into purpose, types and reality, (see table two).

As mentioned previously, this research reviewed official records. These records are available at the official websites of the municipalities. On one level, they serve as documentation themselves, but they also function as groundwork of findings in specific contexts (Patton, 1990, p. 45). Through the need to know what actors emphasise during their decision processes, it became apparent that this research required qualitative research because it deals with words, not numbers (Jacobsen, Hvordan gjennomføre undersøkelser? Innføring i samfunnsvitenskapelig metode., 2010, p. 31).

Therefore, the epistemological perspective of this thesis is empirical qualitative research with descriptive and interpretive approaches. This is because the frames of phenomenology described by Merriam (ibid.) as only concerned with social-interactionism are too narrow because the theoretical approaches of the research must also account for the structural variables of the organisations. To be able to answer my research questions, there must be scope for my methodological approach, that fits with the overall picture of the thesis. During the theoretical review, the need to refine the research problem arose, along with the need to gather documents and begin analysing them. Then, when I read the social element in the common municipal master plan of the municipalities, it became obvious that a case study would be interesting, purposeful and would provide an in-depth view of the research questions and the research problem.

It became clear that triangulation (Patton, 1990) would be an appropriate approach for the design and method. 'It is possible to achieve triangulation within a qualitative inquiry strategy by combining different kinds of qualitative methods, mixing purposeful samples, and including multiple perspectives' (ibid. p. 188). In

this thesis, the triangulation is the analysis through the case study of different municipalities across organisational levels, their official records and with lines to the background and the further process of the proposition.

Table 2: Epistemological perspectives (Merriam, 2009, p. 11)

	Positivistic/ Post-positivistic	*Interpretive/ Constructivist*	*Critical*	*Postmodern/ Post-structural*
Purpose	Predict, control, generalise	Describe, understand, interpret	Change, emancipate, empower	Deconstruct, problematise, question, interrupt
Types	Experimental, survey, quasi-experimental	Phenomenology, ethnography, hermeneutic, grounded theory, naturalistic/ qualitative	Neo-Marxist, feminist, participatory action research, critical race theory, critical ethnography	Postcolonial, post-structural, postmodern, queer theory
Reality	Objective, external, out there	Multiple realities, context-bound	Multiple realities, situated in political, social, cultural contexts (one reality is privileged)	Questions assume that there is a place where reality resides: 'Is there a there there?'

1.4.2 Inductive rather than deductive

The inductive perspective starts without a clearly defined hypothesis or predetermined proposition (Jacobsen, 2010, p. 23). According to Merriam (2009, p. 16), the inductive method typically arrange the findings of the data into themes or categories. Deductive research involves testing theories and hypotheses according to tightly defined procedures (ibid.). This research utilises an inductive perspective to answer the research question. Using assumptions rather than hypotheses, this thesis exploits different aspects to discover how the different municipalities decided upon and used their proposals in relation to the HIa and municipal master plan.

1.4.3 Research action

In choosing a case study for my research, I reached a phase where using the figure from Catherine Marshall and Gretchen B. Rossman (Designing qualitative research second edition, 1995, pp. 20-21) 'A framework to guide the decision-making in Observation' and their 'Model of the research circle' (ibid. p.17) (see Figure 2) were helpful in structuring my research for the further steps of action.
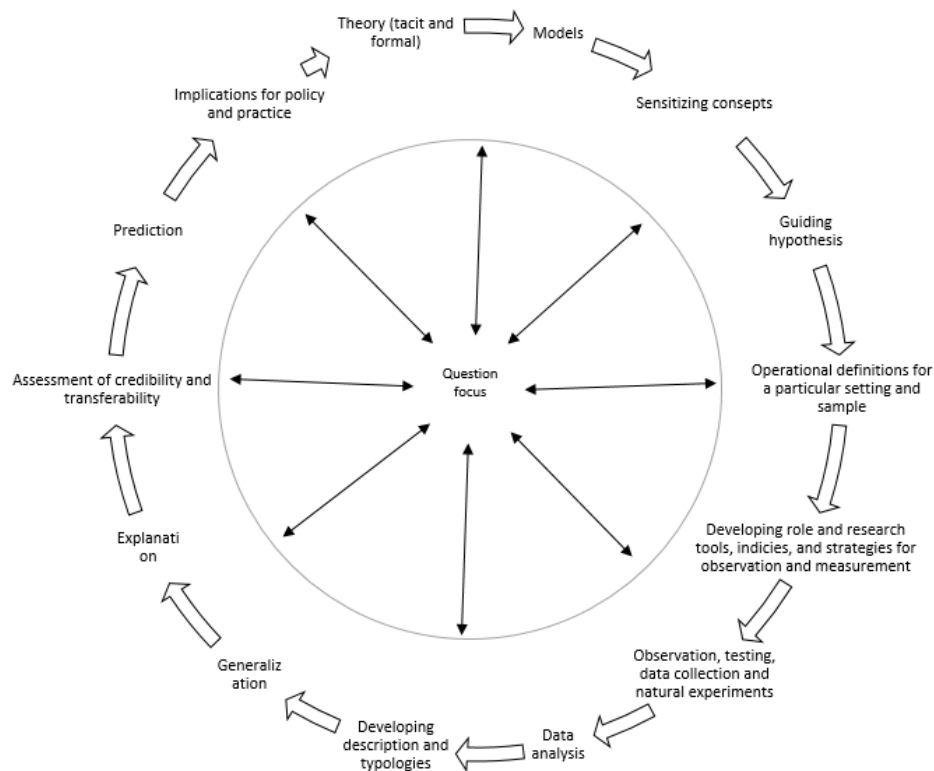
Working through the different stages of the research process allowed me to establish areas of focus at an early stage. The research circle provided me with insight into a systematic approach, which meant I could 'bounce' in and out of the core of the research, research problem and questions relating to different stages across the circle when necessary. The different steps of the circle are composed of themes. Not all the themes are applicable, however. The theme 'Guiding hypothesis' is instead, in this research, assumptions used in the initial phase of the thesis to find the 'gap of knowledge' (Merriam, 2009, p. 59). I have not used the circle as a fixed template but rather as a reflection chart.

The main actions of the research revealed at this point were the following:

1. Gathering information of HIA and decision-making.
   a. Review literature, articles and other documents relevant to the themes.
2. Review the social element of the municipal master plan of the four municipalities, with the theme 'Living conditions and public health'.
3. Review the case of Morsa and all the documents available within the timeframe of August 2014 to January 2015, but also consider the necessity of reviewing earlier documents.
   a. Find evidence of HIA eventually, if there are links to the theme 'Living conditions and public health'.
4. Interview key personnel and politicians.
   a. Interview key persons who were working with this case and how they went about doing it.
   b. Interview politicians about the case.
5. Interview the manager at Morsa. How did they conduct their appraisal concerning the draft of the proposition and, more importantly, was health impact appraisal used?

This chapter has outlined the theoretical frames complete with problem statement, problem question and research questions, the methodological approaches and actions for the research.

This research is an empirical qualitative research with a descriptive, interpretive, case study performed in an inductive manner with triangulation.

In the following chapter, I present the theory, based on the theoretical framework I use, for the analysing process.

2 THEORY

In chapter two, I will explore the theoretical frames and in what way they are important to this research. I will start with the theoretical approach leading down to public health and the municipal planning with organisational structure, a short sub-section on knowledge in organisations ending in the sub-section on decisions in context of structure and actors.

2.1 THEORETICAL APPROACH

In this section, I will clarify my theoretical approach and connect it to my research problem and research questions.

The theoretical approach must be able to handle two aspects: the municipal organisation and the people within the organisation, hence my scientific questions touch upon both regarding the decision-making process.

Kjell Arne Røvik (Moderne organisasjoner: trender i organisasjonstenkningen ved tusenårsskiftet, 1998) describes the neo-institutionalism of sociological-organisational theory as a socially created convention, or a rule-based fact viewed by actors within an organisation or from external promotors as the modern and 'right way' to organise their organisation. From this perspective, organisational approaches that become standards are an institutionalisation (ibid. p.19-20).

In this research, standardisation may be a part of the processes of how actors handle a proposition, however, there are other issues important for how the municipalities treat their propositions.

Røvik (1998) points out that concepts such as Total quality management, Value management and Reengineering are institutionalised standards or institutionalised organisational recipes. (ibid. p.13) In Norwegian municipalities, organisational recipes are often used. From 1960 to 1970, the municipalities were organised into different committees, which in the 70s changed to a main-committee model, and in the 90s to different types of organisational models (Jacobsen, Organisasjonsendring og endringsledelse, 2012, p. 115). This led to recipes as quality systems inspired from the private sector such as the modern balanced scorecards (BSC), which aim to connect different aims of achievement to answer four questions; 1. customer perspective -how does our customers view us, 2. internal perspective – at which extent do we manage our tasks, 3. innovation and long-term organisational learning – do we improve ourselves, and 4. short-time owner perspective – economical outcomes (Aune, 2008, s. 141)

 With this view, public health via the new legislation was a new recipe to implement into the organisational world of the municipalities and thereby the means to serve a purpose in the scrutinising of my scientific questions, however it only serves as a describer of the idea of the recipe. The arena for the recipes are within the organisations (Røvik, 1998, p. 30) To enter the organisational arena, there are in-depth analytical approaches that could be considered more suitable.

General and specific organisational theory have two dominating orientations within social science. These are the rational-economic paradigm and the institutionalised-sociological paradigm. Through the divergence of these paradigms, you have the instrumental and symbolic approaches. (ibid. p.31)

2.2   THE INSTRUMENTAL APPROACH

In this section I will clarify how the instrumental approach provides knowledge for analysing this research, but also why it is insufficient.

The instrumental perspective with modernisation addresses issues of how organisations develop improvements and effectivity within the areas of resolutions, services and goods (Røvik, 1998, p. 32). Or, as Daft (Organization Theory and Design, 1998) states, '*explains why and how organizations legitimate*

themselves in the larger environment and design structures by borrowing ideas from each other'(ibid. p.527). Tools for such a purpose may exist within the formal structure, management, processes or procedures. Managers can use these instruments to make the organisation better. One such instrument is planning and setting goals (Røvik, 1998, p. 32). To analyse how the aims of public health in the municipal society plan function in my research context, the instrumental perspective can provide a conceptual frame considering organisational structure and planning.

2.2.1 Insufficiency of the instrumental approach

According to Lennart Lundquist in *Demokratins väktare*, it is not enough with an instrumental approach to the organisation (Lundquist, 2011):

> 'If you do not have officials that understand, can and want to enforce a policy the good potentate will not achieve their purpose. You can also say if the officials are not able or do not want to enforce the policy of a bad potentate neither they will be able to achieve their purpose.' (ibid. p.11)

He thereby points out the central position the administration has in a municipal organisation. Furthermore, he claims that this can lead to threats as well as possibilities for the political democracy (ibid.). Within the municipalities, you have such structures that can be of concern regarding the perspective of Lundquist. The research questions raise the issue of the relationship between the political and the administrative via the political aims and the process of the proposition.

The instrumental approach is unable to cover all the aspects needed to answer all the research questions. The symbolic perspective provides insights into how the organisations manage their processes. Derived from the new-institutionalism (Røvik, 1998, p. 36), the symbolic approach provides an overview of aspects important for implementing the tools from a sociological viewpoint. 'Formal organisations have institutionalised environments where they are confronted with

socially created norms and conventions addressing how the distinct organisation should be shaped'(ibid.).

Considering the aspects of decision-making in municipalities, there is a need to look beyond formal structures, and into the human actions and what influences them.

Furthermore, as Svein K. Hansen and Arve Negaard (2010) describe it: 'A specialist can consider differently than an administrator with more general knowledge' (ibid. p.40). Hence, the research questions consider both administrational and political functions in the decision process, it will be important to view the decisions they are making on their organisational levels and not only the decisions made by the politicians.

2.3 THE SYMBOLIC APPROACH

In this section I will clarify the concept of the symbolic approach as a tool for analysing organisational activities.

Peter L. Berger and Thomas Luckmann (Den samfundsskabte virkelighed. En videnssociologisk afhandling, 1966, pp. 56-57) clarify that we live in a world of signs and symbols that make us capable of objectifying, conserving and accumulating both personal and historical experiences. Furthermore, they claim that accumulation is selective, which is the reason why some things are forgotten and other things are retained in the total base of social knowledge through generations, which individuals can use in their daily activities (ibid.). In other words, the world of everyday common sense is bound to the time we live in and the world of today. Considering this, the symbols of health itself are broad but contain some universal elements. Those who make decisions about what to emphasise when conducting an HIa, and those making their decisions based on an HIa, have a ground of common sense upon which to call in their interpretation of symbols. This means that they have a perspective of what should be important about our present time. The symbols may differ within individuals and within organisations, however.

2.3.1 The nine ground sentences of symbolism

Symbolic interpretation is developed from thoughts within different areas and disciplines (Bolman & Deal, 2010, p. 287). To make sense of the symbolic perspective, Torodd Strand (Ledelse, organisasjon og kultur, 2012) provides a nine point list of aspects based on Lee G. Bolman and Terrence E. Deal from 1991[1] (Strand T. , 2012, p. 153). In Bolman and Deal (2010, p. 287), they shortened the list to five points. Table 3 shows the nine point list taken into account for the managerial role, and how managers have more control over the use of symbols.

Table 3: The ground sentences of the symbolic frame

The nine ground sentences by Bolman and Deal 1991, referred to by Torodd Strand (2012, p. 153)	
1	The most important thing with situations is not what happened, but what it meant.
2	There is a weak connection between situation and meaning. The same situation or signs can have contrary meanings for different people based on what frame of reference the situation is interpreted.
3	Organisations may be seen as somewhat stable, but have an incoherent context of interpretation.
4	Most situations and processes in organisations are multi-layered and unsecure. Often it is hard to know what happened, why it happened, or what it may lead to. There is a weak correlation between action and result.
5	The more multi-layered and diverse the frame of reference, the harder it is to use rational approaches, e.g. for decision-making.
6	Beneath multiple layers and uncertainty, symbols contribute to clear away any confusion, increase foresight and direction. A referendum during a confusing meeting, a metaphor explaining a situation of diversity, a procedure providing a situation a known outcome, the presence of an important person or an assurance that something will happen on a certain

---

[1] In 1991 Bolman and Deal made the nine point list that Torodd Strand(2012) refers to in his book. In Bolman and Deal (2010), however, they have shortened the list into five point list that inherent the organisational symbolic aspects and refers in their text to the other four symbolic aspects that are in regard the managerial role. I have used the nine point list from Torodd Strand(2012) because the symbolic aspect of the managerial role can provide insight for the research.

	date. These are all examples of symbols that tie people's inverted understanding into a coherent extrovert world.
7	Many situations and processes in organisations are more important in what they express than by results they produce. Established traditions, behaviours, myths, rituals and stories, together with common habits and ways of speech help people find meaning and a system in their experience of organisations. Power and status are manifested through the expression of symbolism.
8	Managers and their many approaches are, in themselves, strong symbols in organisations. Members uses managers and their presumed attributes and actions as signs to create meaning.
9	Managers have greater access to and control of symbols. Managers use known symbols in their actions – such as numbers and aims – and by using ritual events, control the myths, and so on.

Many theories are concerned with the way managers can actively use symbolism to bring forth different desirable actions in their organisation. My research, however, is not normative but descriptive and interpretive (Merriam, 2009), and has the aspect of how symbolism functions in the three municipalities concerning the red thread between the municipal master plan and HIA through decision-making. Analysing the approaches within symbolism, together with instrumental theory to describe and interpret my findings, the symbolic view in this context is of great importance to be able to interpret the findings. Furthermore, the nine point list sums up the main aspects of the view that I follow, through the theoretical themes relevant for the analysis.

The following sub-sections discuss the theoretical aspects of the symbolic and instrumental approaches that provide an understanding of the research problem and questions.

2.4 PUBLIC HEALTH AND MUNICIPAL PLANNING PROCESSES

In this section I will explore the concept of public health in view of health impact appraisal and the municipal planning process.

Health is a broad concept; ask different people and you will receive different definitions. To narrow the scope, I have used the definition set by the WHO (2013):

> 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity
>
> Actions to protect and improve health, then, must go beyond providing services that reduce the effects of ill health and look into prevention of illness and promote good health.
>
> As the health of a population is inextricably linked with the state of the environment, both fields, environmental health and public health, are important for health in IA.'[2] (World Health Organization Regional Office of Europe, 2013, p. 3)

As Negaard (2015, p. 18) puts it, this is 'an ideal typical definition on a high level of abstraction'. He states that it does not say anything about what the population should have but that they only present it as a norm that should be reached.

The definition does not provide any perimeters or gradients and therefore held by whoever defines it further whether it is an individual in everyday life or a government that presents a policy.

To clarify the context of health in this thesis I will frame the context of instrumental and symbolic approaches into the essence of the public health act and how this is managed through the tools of HIA and HIa in Norwegian municipalities.

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[2] IA stands for Impact Assessment.

2.4.1 Health impact assessments and health impact appraisals

In this sub-section I will examine in depth the concepts of HIA and HIa.

Public health is inherent within a vast range of themes, from international vaccination programmes to individual well-being. According to the *Public Health Act* § 5, municipalities are obliged to have an overview of the health situation in their municipality and of the factors that influence public health. To achieve that, they must use quantitative data and instrumental tools. They also must combine methods to engage the public in their gathering of data, however, e.g. dialogue-meetings, which include qualitative methods linked to a more interpretive and symbolic approach.

The government, mainly through the Norwegian Institute of Public Health and the Directorate of Health, provides the municipalities with the statistics and tools to manage this task. Among these sources are the public health profile of each municipality, health registers (ten central registers), population surveys and youth data. In addition, the municipalities must use their own data, including KOSTRA (municipality-government report), SYSVAK (national vaccination programme), and knowledge to achieve an, as complete as possible, overview (Vedeld & Hofstad, 2014, pp. 19-20).

According the *Public Health Act* § 4 (Folkehelseloven, 2011), each municipality is obliged to emphasise public health in their local development, planning, administration and services. This is reinforced by the Planning and Building Act, Chapter 14 (Plan og bygningsloven, 2008) regarding impact assessments, and the *Regulation of Public Health Overview* § 3 (Forskrift om oversikt over folkehelsen, 2012), which states (as translated by the author): 'The overview must contain local and regional causes and impact appraisals in regard to public health, and identify resources and challenges. The municipality and county municipality should be especially attentive towards development that may create or sustain social or health issues and inequities.' (ibid.)

As Trond Vedeld and Hege Hofstad (2014) point out, there are several challenges to attaining the overview because there are many variables that must be taken into account (Vedeld & Hofstad, 2014, p. 21).

This view is supported by Arve Negaard (Om helsekonsekvensutredninger. En oppsummering av norske og internasjonale kunnskaper, 2015). They all pinpoint areas of concern in relation to the vast amount of knowledge within the area, but also the lack of applicable data to conduct local HIAs. Negaard (2015) points out that there is a need for cooperation between local and scientific actors to conduct the HIA and develop it within the regional and local areas of concern. Vedeld and Hofstad (2014) point out that the areas that lack applicable data are mainly:

- Social equity in health

- Environment

- Accidents and damages

- Governance/steering, politics and power

- Risk, vulnerability, climate/catastrophes, external shock and health robustness (resilience) (ibid. p.24)

The variables are called health determinants. These are cross-disciplinary and within different levels of society, as illustrated in fig. 3.
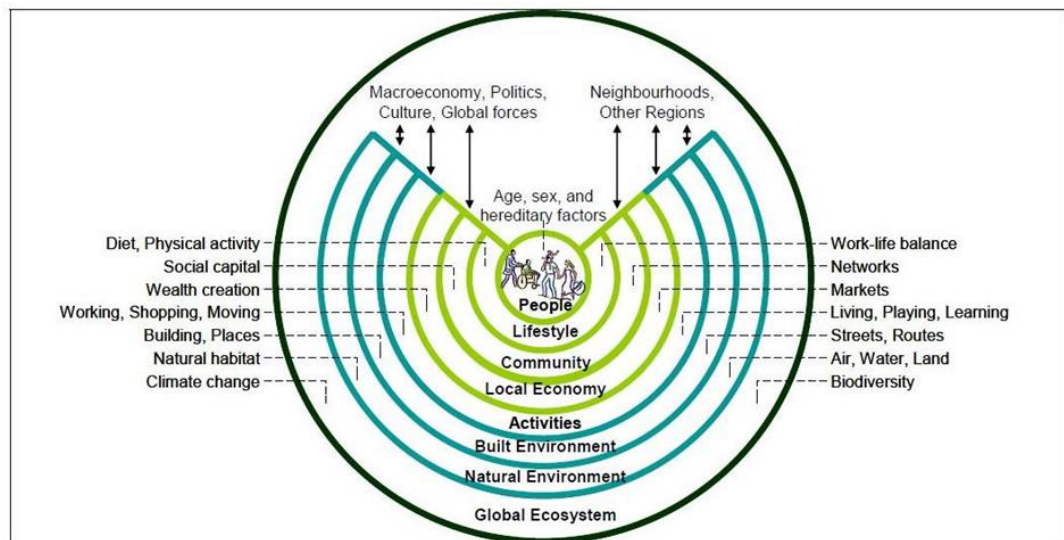
Figure 3: The main health determinants of health and well-being. From World Health Organization Regional Office of Europe, 2013, p.3. Source: Nowacki et al. (2010), adapted from Barton & Grant (2006)

According to Negaard (2015), it has been normal practice to use health determinants in HIAs. Furthermore, he argues that attention is brought upon the impacts the case may cause the determinants of health rather than the actual impact upon health. He concludes that such an approach enables case handlers to better perform an HIA based on their discipline and skills (ibid. p.8).

A metaphorical view proposed by Dahl, Berg & van der Wel (Sosial ulikhet i helse: En norsk kunnskapsoversikt., 2014) is that the health determinants are a river. In this river, the actions against the current overarch society interventions and are preventive health impact actions. Issues downstream are those actions we are forced to do because of negative outcomes on health. Such actions may be services to people, which are highly expensive, less effective and do not eliminate the issue (ibid. p.32).

This indicates that actions made upstream within each circle, as illustrated in Figure 3, impact greater to prevent inequity in health and cost society less in the long term.

Negaard (2015) points out that to perform an HIA will then only reflect how a case impacts these determinants either upstream or downstream. Furthermore, he refers to the WHO definition when he says (as translated by author): 'The standards for HIA, both explicit and implicit, express that the HIA should have a positive influence on the municipal decision-making process, services and public health.' (ibid. p. 13)

This is supported by Trude Tonholm and Rikard Eriksson (Erfaringsoppsummering av helsekonsekvensvurderinger i Råde, Moss och Fredrikstad, 2015), who state that 'The intention with the HIa is that it should influence the choice in political decision-making of single cases.' (Tonholm & Eriksson, 2015, p. 6)

Negaard (Negaard, 2015) also claims that the determinants may have an interaction of causes where they mutually reinforce or diminish each other. Then it is even more important that those who work on the case use local contextual knowledge and experience from similar cases, as well as scientific knowledge (ibid. p.20-21).

Negaard emphasises this when he states, (as translated by the author): 'The local context is crucial to pinpoint actions that strengthen health and diminish negative side effects.' (Negaard, 2015, p. 21)

So, even if the approach of how the case influences the determinants makes it easier to perform HIAs for case handlers providing knowledge within different disciplinary fields, the decision-making process may be complicated.

Negaard (2015) draws a distinction between the EU and Swedish guides on HIAs. The first one is a table-top HIa that requires two to six weeks work and a rapid HIA that demands approximately 12 weeks of work. The Swedish advice is that the HIA is performed by a wide cross-disciplinary group that provides documentation of opinions, experiences and expectations from the areas the case has an impact on during the whole process. An HIa, however, may also be based on a judgement call from the case handler. A challenge with this approach is to find the balance between timeframe and resources to achieve a relevant and reliable HIa. Disciplinary fields with straightforward measurable determinants, such as within physics, chemistry and biology, which have coherence of theory, documented local situation and proposed actions make it less complicated, in contrast to a multi-layered case, with several social and contrary determinants (Negaard, 2015, pp. 35-56).

When performing an HIa in a proposition, Negaard (2015) claims that the case handler must inherently have a public health view on the case. If this is not applicable, there is no need to perform an HIa, or an HIA, because different cases require different approaches according to the level of decision-making. He explains this with the view that there is a horizontal and vertical crossing sliding-scale of how to perform HIA in a municipality. The first axis ranges from overarching to specific cases and the other axis from simplistic and rule-based to complex multi-layered based on judgement call cases. (Negaard, 2015, pp. 142-148)

This may indicate that there are organisational differences in how to perform an Hia, and how the municipalities choose to treat their cases with regard to an Hia.

Tonholm & Eriksson (2015) report that the implementation of HIa in the municipalities raises five important issues. In short, they present the following (as translated by the author):

1. A knowledge issue – that there is a lack of knowledge coupled to mechanisms tied to public health.

2. A learning issue – how to incorporate HIa routines into the daily work already full of other tasks.

3. A corporate-economic issue – that strong capital interests that develop business and working places are prioritised before long-term plans within public health.

4. An internal economic issue – the need for resources working with HIa to have an effect on the population.

5. A political 'value-based' issue - different political views on how important social equity and the development of living conditions for the whole population are. (Tonholm & Eriksson, 2015, p. 23)

Furthermore, they claim that there are three different reinforcements for using HIa as part of the preparatory work in a case handling political propositions. These are external forces with legislation and regulations; the discipline of the case handler and that, through their administration of the case, define public health and living conditions as important to maintain; and ideological politics where the decision-makers believe social equity in health and living conditions are important (ibid. pp. 23-24).

Kenneth Dahlgren and Jo Ese (Fra folkehelse i alt vi gjør, til folkehelse på 1-2-3 Følgeevaluering av pilotprosjektet med helsekonsekvensvurderinger i fire Østfoldkommuner, 2015) point out, however, that there also are other factors of importance within the work-field of HIa. They have pinpointed four main areas of concern. The first is the difference between large and small municipalities and the size requirement for different working process. Small municipalities have more opportunity to work cross-sectionally and cross-disciplinary, while larger municipalities may have more specialists with time and opportunity to go into

depth within cases. The second is to what extent there is regulation for the performance of HIa within a discipline. The third is ownership, and to what extent the case handlers have been involved in the development of the tools. The fourth is home-court/away game, which reflects the limitation of skills and how to compensate when there is a lack of knowledge (Dahlgren & Ese, 2015, p. 46).

The views above presents that there are many issues that influence the performances of HIa. The knowledge and experience of the case handler, the dimensions of the case and the resources of the municipality both with regard to time and disciplinary specialists or ability to work cross-sectional. In the next sub-section I will go in depth of the municipal structure.

2.4.2   New public management and whole government

In this and forthcoming subsections I will clarify further the municipal structure. The importance of this is that social equity is bound to how the political steering mechanisms are differentiated into priorities, power and administration and how this influences the planning and development of society. (Vedeld & Hofstad, 2014, p. 21)

The new public management (NPM) evolved from the tradition of making organisations economically effective in the private sector (Amdam R. , 2011, pp. 178-179; Røvik, 2009, pp. 34-37). According to Røvik (2009), NPM began in the late 1980s with attempts to translate areas of professional management. Among others, these areas cover knowledge, grades of freedom in making decisions, and the distribution of business operations into smaller, self-contained units (ibid.p.34; Negaard, 2015, p. 46). Different strategies from the quality management within production came into account and the municipality organisations implemented these tools in various forms to strengthen the vertical structure and establish economic effectivity and quality within their services. These tools often create a structure with measurable aims, even down to single sectoral units. Furthermore, roles, responsibility and delegation are sharp and predefined (Røvik, 2009; Christensen & Lægreid, 2006; Negaard, 2015).

The municipalities have responsibilities that reach beyond the effectivity criteria, however, because they are developers of society. The activities of the municipalities require cross-sectional work and in partnership with other stakeholders on different administrative and political levels.

To comply with the need for horizontal organising, communication and information, a vertical structure for the concept of 'whole government' (WOG) has evolved (Christensen & Lægreid, 2006). Tom Christensen and Per Lægreid formulated the need for the concept of WOG:

> '…the public apparatus work better together, both in a vertical and in a horizontal way. Vertically because the central capacity for control, planning, and acting increases, as do the instruments for vertical coordination. Horizontally, because there is more capacity to establish and control cross-sectoral units and collaborative efforts and more capacity to scrutinize specialized agencies. Increased capacity at the centre also means that it is easier to handle and balance different considerations brought to the attention of the central political-administrative leadership…' (Christensen & Lægreid, 2006, p. 16)

Negaard (2015) clarifies the symbolic aspects of WOG when he says that it is an approach that represents (translated by author),

> '… development of a strong and coherent understanding of values, team building, involving of participating organisations, trust, value-based management and improvement of education and personal development of public employees. (Negaard, 2015, p. 47)

An area where the WOG approach is of essential importance is public health. In the view of health for all, the need to cross-sectionally work with volunteers, stakeholders, the private sector, and vertically from government to local politics is vital to cover the health issue.

Hans D. Tilset, Gunhild Heggem and Gudveig Gjøsund (Folkehelse - fra plan til praksis. En kunnskapsoppsummering knyttet til realisering av vedtatte folkehelseplaner, 2015, pp. 12-13) claim that the logic of control in NPM rapidly creates difficulties due to the aims and responsibilities attached to one single

sector. Therefore, it reinforces the borders between different departments and their responsibilities.

They also acknowledge, however, that the organisation would be much better at maintaining their activities with NPM. (ibid.).

From the WOG perspective, Negaard claims that the HIa in a single proposition can be understood as a link in a vertical assessment-chain that begins in the political and scientific groundwork of legislation and regulations. Furthermore, the chain evolves through rules and municipal plans down to specific cases. The complete HIAs are then accumulated assessments in this vertical chain (Negaard, 2015, p. 149).

This is a WOG perspective that points out the relevance of connecting the different levels of an HIA, both for the municipal administration and the politicians. And the chain may inherent both symbolic and instrumental approaches and methods.

2.4.3 Organisational structure and the municipal planning process

In this sub-section, I clarify organisational structures and the municipal planning process that provide understanding via the research process.

As presented by Bolman and Deal (2010, p. 105), the five-sector model of Henry Mintzberg (1989, p. 99) offers an overview of the structure of organisations in six parts.
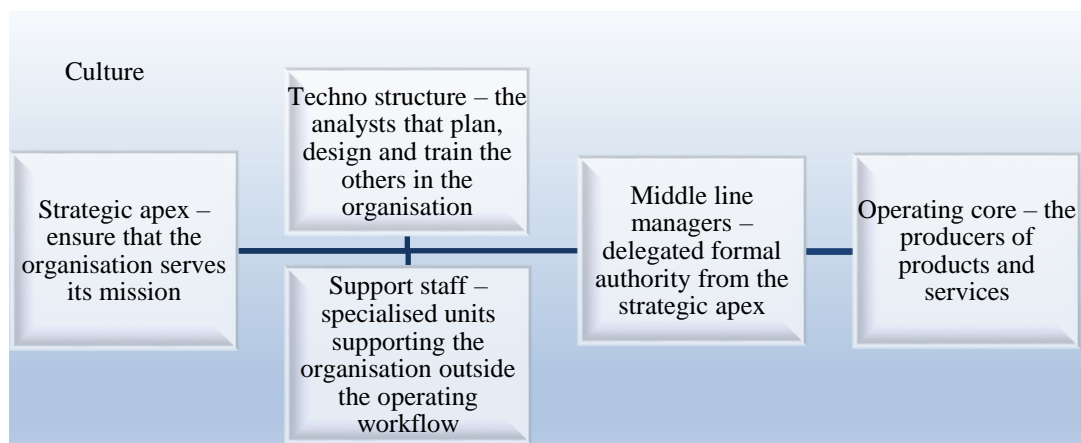
Figure 4: The five sector Model of Mintzberg (Mintzberg, 1989; Bolman & Deal, 2010; Sherwin, 2015)

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When considering this structure, in view of a municipality organisation, the Mayor and Chief Executive belong to the strategic apex, the Officer in the middle line and the Executive Officer in the operating core.

The sixth part of the organisation according to Mintzberg (1989) is the ideology or what is mainly called 'culture'. '… ideology encompasses the traditions and beliefs of an organization that distinguish it from other organizations and infuse a certain life into the skeleton of its structure.'(ibid. p.98)

These different sectors have inherent mechanisms that pull them in different directions. Mintzberg (1989) argues that there are different coordinating mechanisms and he lists them.

1) Mutual adjustment – coordination by the simple process of informal communication
2) Direct supervision – one person issue orders or instructions to several others whose work interrelates
3) Standardisation of work processes – coordination by specifying the work process of people carrying out inter-related tasks (usually techno-structure)
4) Standardisation of outputs – coordination by specifying the results of different work (usually techno-structure)
5) Standardisation of skills – coordinated by virtue of the related training the workers have received
6) Standardisation of norms – coordinate everybody by the same set of believes (ibid.)

According to Mintzberg (1989), these coordinating mechanisms contribute to creating order and integration in the organisations. Politics, however, is something different: '…politics acts to the detriment of coordination, by *dis*ordering and *dis*integrating what currently exists. Politics has to do with power, not structure…' (Mintzberg, 1989, p. 235)

When we examine the Planning and Building Act and the Public Health Act together, they set out some ground rules for how the municipalities are supposed to maintain their obligations within public health via the planning system. Figure

six, below, is translated into English by author from the website www.kommunetorget.no. The figure shows the municipal planning process and the impact of the Public Health Act.

According to Tilset, Heggem and Gjøsund (Folkehelse - fra plan til praksis. En kunnskapsoppsummering knyttet til realisering av vedtatte folkehelseplaner, 2015), 'It is important that visions and aims in the society element of the municipal master plan are followed by the land-use element, the thematic plans, the economy plan, budget and definite activities'(ibid. p.3) Moreover, they state that the county municipality has a responsibility to overview whether the municipalities enforce their obligations to transfer public health in the planning process across to the activity and economic part of the process (ibid.).

The county municipalities themselves, however, also have a regional planning process in which public health is one of their main areas of concern.
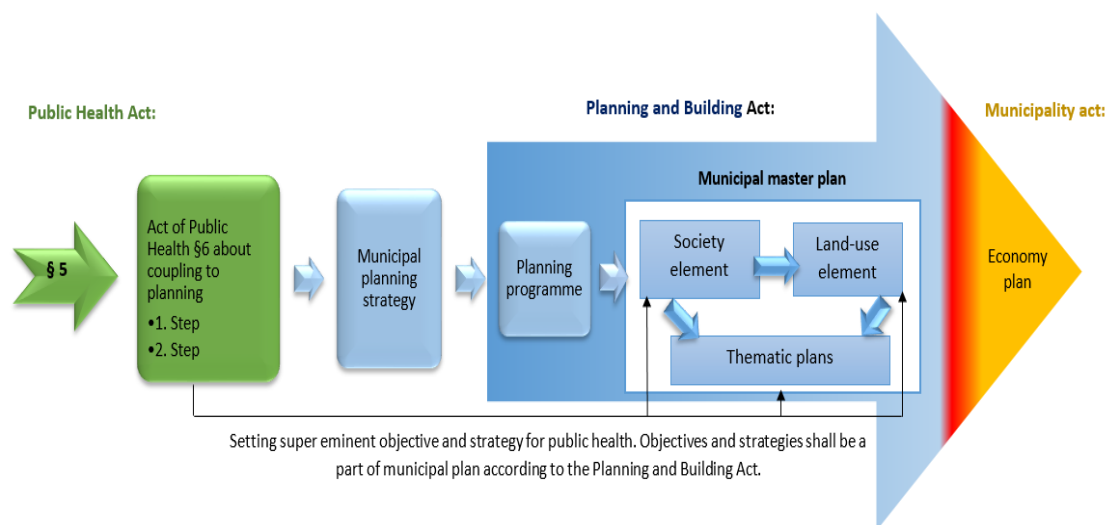
Figure 5: Public health in the municipal planning programme (Kommunetorget, 2015) translated by the author

2.4.4   Different organisational planning models
This sub-section supplements the planning process above, providing reference to some of the main characteristics of modern planning.

The different levels of the organisation also require tools for planning and decision-making. As previously clarified, this research touches upon the levels of

strategic and operational planning. Within the field of planning, Jørgen Amdam and Noralv Veggeland (Teorier om Samfunnsstyring og planlegging, 2011, pp. 33-38) refer to John Friedman (Planning in the Public Domain: From Kowledge to Action, 1987), and his four different strategies.

The first is called *Policy Analysis* and is linked to instrumental thinking. Solutions of political problems should be prepared by professionals and planners within their fields of discipline before being presented to political decision-makers. Whereas politicians choose strategic aims, professionals find suitable choices for implementing tools and solutions. In contrast, *Social Mobilisation* is a bottom-up approach to government that evolves through the organisation of interests and communal action. Choices are made without professional advice but through argumentation and conviction. This strategy is based on participation by actors in a free discourse linked to the accountability of choices and consequences and therefore symbolic in its approach. The other two strategies are *Social Learning* and *Social Reform*. Social Learning takes place through participation and may result in Social Reform. This means participation in planning processes, projects and so on that through incrementalism – small steps, leading municipal organisations into changes and innovation. (Amdam & Veggeland, 2011, pp. 33-39; Friedmann, 1987, pp. 87-308)

Social learning is also the causal knowledge between two parties that combine into a new meaning and therefore communicative action (Amdam & Veggeland, 2011, p. 133). These elements, brought together, are forms that have had a shifting influence on planning traditions. A further approach is the mixed-scanning approach of Amitai Etzioni (Etzioni, 1967). This approach requires the use of both strategic choices: planning the action and performing the action. Though, as Amdam & Veggeland (2011, pp. 139-140) highlight, without any concern for the participation or cooperation, it appears to be more an analytical, and therefore instrumental, approach.

Amdam & Veggeland (2011) also consider that, by combining the elements of communicative action and participation, the mixed-scanning approach is applicable for modern municipal planning processes as well as projects, operational planning and actions.

In this view, the municipality planning process is multi-layered and cross-disciplinary, with diverse goals, of which health is only one. Negaard (2015) supports the communicative planning approach. Furthermore, he argues, (as translated by the author):

> 'To achieve political support ensuring health, not only in respect of what the municipalities says or resolves, requires building disciplinary and political alliances with sufficient depth and range, common understanding of the situation, common aims and coordinated cross-disciplinary strategies and action to achieve these aims. Communicative planning and cross-disciplinary work may contribute to developing such strategies.' (ibid. p.9)

Planning theory is important for this thesis because it provides insight into the processual context of the proposition as well as the municipal planning processes. The municipalities have created a common municipal master plan that is their main strategic document with aims for public health. This thesis, however, does not describe how the process within the planning was conducted, though the case suggests the process from an overall viewpoint.

2.5 KNOWLEDGE IN ORGANISATIONS

The previous sub-sections revealed that knowledge is important. In this section, I clarify different aspects of how knowledge is displayed within organisations.

Another aspect that provides insight into the research problem is how knowledge is developed and displayed in organisations. Alice Lam (Tacit Knowledge, Organizational Learning and Institutions: An Integrated Framework*, 2000) points out that there is both explicit and tacit knowledge in organisations, and that there are three major areas that separate them. See Table 4, below.

Table 4: Differences between explicit and tacit knowledge (Lam, 2000, p. 490)

Conceptual view	Explicit knowledge	Tacit knowledge
Codifiability and mechanisms for transferring	Can be codified, formulated and abstracted. Ease of communication and transfer across time and space independently of the knowing subject.	Intuitive and unarticulated, difficult to formalise. Action oriented, personal quality, difficult to communicate. Requires close interaction and the build-up of shared understanding and trust among the knowing subjects.
Acquisition and accumulation	Can be generated through logical deduction and by formal study.	Only through practical experience in relevant context, i.e. learning by doing.
Aggregation and appropriation	At a single location, stored in objective forms. Without the participation of the knowing subject.	Is personal and contextual and distributive. Close involvement and cooperation of the knowing subject.

Though she also states:

> '…Although it is possible to distinguish conceptually between explicit and tacit knowledge, they are not separate and discrete in practice… More importantly, the creation of new knowledge in itself will necessarily involve the use and generation of tacit knowledge…The learning and innovative capability of an organization is thus critically dependent on its capacity to mobilize tacit knowledge and foster its interaction with explicit knowledge…' (Lam, 2000, pp. 490-491)

For this study, learning in organisations contributes to illustrate how the organisations process their propositions through explicit and tacit knowledge.

Cathrine Blåka & Gunnhild Filstad (Learning in Organizations, 2007) suggest that there are five types of knowledge derived from Alice Lam (2000) and Frank

Blackler (Knowledge, Knowledge Work and Organizations: An Overview and Interpretation, 1995):

> **Embrained knowledge** (individual-explicit) is knowledge that is dependent on a specific individual´s conceptual skills and cognitive abilities…abstract, formal and theoretical…
>
> **Embodied knowledge** (individual-tacit) is action oriented and is likely to be only partly explicit… depends on physical presence, as practical thinking, and in problem-solving techniques…an intimate knowledge of a situation…very context specific…
>
> **Encoded knowledge** (collective-explicit) is sometimes referred to as information and conveyed through symbols and signs. It is knowledge that has been encoded and stored in blueprints, recipes, written rules and procedures…
>
> **Embedded knowledge** (collective-tacit) is the knowledge that resides within the organisation in systematic routines and exemplified through organisational routines and shared norms. The notion of embedded knowledge explores the significance of relationships and material resources…
>
> **Encultured knowledge is Blackler´s big idea** and refers to the process of achieving shared understanding. Cultural meaning systems are intimately related to the process of socialisation and acculturation. Such understanding is likely to depend heavily on language, and hence to be socially constructed and open to negotiation... (Blåka & Filstad, 2007, pp. 97-98)

Furthermore, Blåka & Filstad (2007) follow Chiva and Alegre (Organizational Learning and Organizational Knowledge Towards the Integration of Two Approaches, 2005) who describe three types of characteristics about knowledge. See Table 5, below.

Table 5: Types of knowledge (Chiva & Alegre, 2005, p. 58; Blåka & Filstad, 2007, p. 99)

	Type of knowledge	**Characteristics**
Cognitive possession	Individual	Based on cognitive psychology. Knowledge is representations of the world. Reality is objective. Knowledge is universal, abstract, specific to one task or directed towards the solution of a problem. It deals with a close perception of the surroundings. Learning is the improvement of representations. Emphasis is placed on the possession of knowledge (knowledge as a commodity or in individuals' minds).
	Connectionist	The same as cognitive with the exception that the representational process of this reality is different, in that it considers knowledge as arising from networks and not individuals. Knowledge is found in connections.
	Social process	Social-process knowledge is an act of construction and creation. Reality is socially constructed. Knowledge is neither universal nor abstract (it depends on context). It is based on social interaction and discursive behaviour. Knowledge allows for the definition of a problem, not its solution. Emphasis is placed on the process or development of knowledge (knowing).

By exploring these different layers of knowledge, it bears evidence that both symbolism and instrumentalism are influential approaches. Explicit knowledge may be viewed as instrumental and tacit as symbolic. This research problem asks the question whether there is a red thread of connection between the HIa and the aims of public health in the society section of the municipal plan. Knowledge in the organisation thereby plays an important role on how this may or may not be.

There is both explicit and tacit knowledge, with different conceptual views. They create different forms of knowledge: embrained, embodied, encoded, embedded or encultured, for the organisation and organisational actors. Then there are types of knowledge that may be individual, connectionist or a social process. Together, they form a framework for how organisational knowledge appears and develops. When this is connected to the spiral of communicative and learning planning by Amdam & Veggeland (Teorier om Samfunnsstyring og planlegging, 2011), a view of knowledge through time emerges.

This spiral passes through phases of knowledge, recognition, vision, strategy, action, experience, new knowledge, new recognition, new vision, new strategy, new action, new experience and so on (Amdam & Veggeland, 2011, p. 189). This element of time provides a view on how actors and organisations work through their planning and organisational learning.

Throughout this sub-section we have discussed different organisational learning theories. In the next sub-section, we further examine how decisions are made by single actors throughout organisations.

2.6 DECISIONS IN THE CONTEXT OF STRUCTURE AND ACTORS

In this section, I will provide an overview of different concepts of decision-making and decision-making in municipal organisations.

Rational choice plays an important role in decision-making. James J. March (1994) declares that:

> 'Rational theories of choice assume decision processes that are consequential and preference-based. They are *consequential* in the sense that action depends on anticipations of the future effects of current actions. Alternatives are interpreted in terms of their expected consequences. They are *preference-based* in the sense that consequences are evaluated in terms of personal preferences. Alternatives are compared in terms of the extent to which their expected consequences are thought to serve the preferences of the decision maker.' (March, 1994, p. 2)

Furthermore, he gives us a rational procedure of four questions:

1. The question of *alternatives*: What actions are possible?
2. The question of *expectations*: What future consequences might follow from each alternative? How likely is each possible consequence, assuming that the alternative is chosen?
3. The question of *preference*: How valuable (to the decision-maker) are the consequences associated with each of the alternatives?

4. The question of the *decision rule*: How is a choice to be made among the alternatives in terms of the values of their consequences? (March, 1994, p. 2)

He also claims that in some rational theories there are assumptions that decision-makers share a common or basic set of preferences. Rationalism, in an absolute form, requires that decision-makers withhold all information about the consequences of their decision. moreover, that they withhold all information about the different variations for the decision (March, 1994, pp. 3-4).

The probability that the municipal decision-makers would have a perfect overall view over the alternatives and consequences in their decision processes is rather slim. To take such an approach to the theme in the analysis of the decision-making in the municipalities is out of question. All rational theories do not have this inherent view of rationality in decision-making, however, and the questions March uses in his procedure are of great value for understanding the research question.

2.6.1 Ethical views on decision-making

Marcus Selart (A leadership perspective on decision making., 2010) raises the issue of ethics in decision-making and divides it into three concepts:

1. The utilitarian – goal is to create as much benefit to the organisation as possible. Key aspects; efficiency, productivity and profitability.
2. The human – decisions should be made with regard to key policy documents and it emphasises that everyone has certain basic rights.
3. The fairness – divided in two: *distributive* distributes resources as equitably as possible, *procedural* is the process of creating as fair a justice as possible. (Selart, 2010, p. 37)

In this perspective, politicians and administrators make their decisions based on all these different aspects. As Negaard (2015, p. 44) says, to be instrumental, they are obliged by the *Municipal Act of Law* §1 (Lov om kommuner og fylkeskommuner LOV-1992-09-25-107, 1992) to adopt a state of affairs that is rational and effective, this also applies to their decision-making. Furthermore, as

Lundquist (2011) points out, public organisations must adhere to the demands of both democratic and economic values. Inherent in the democratic values he refers to are political democracy, legal protection and public ethics. These relate to the human and fairness aspects. The economic values, however, are bound to functioning rationality, cost-effectiveness and productivity (ibid. p.63).

This might be viewed as the utilitarian aspect. Moreover, we can view the municipal master plan as a key policy document of the human aspect, and the equity in the municipal for their inhabitants is the fairness aspect. Hence, decision-making in the municipalities is demanding on those involved. There are several views the decision-makers must take into count.

If we take the instrumental and the symbolic approaches and place them in the context of the figure of Morgan W. McCall and Robert E. Kaplan (Whatever it takes. The realities of Managerial Decision Making, 1990, p. 41), we can scrutinize them within contexts of the decision-making process.
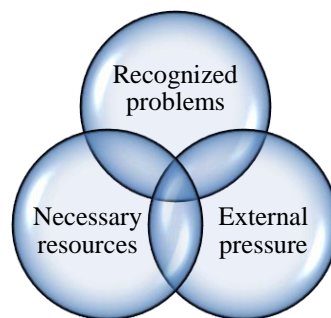
Figure 6: Interaction in decision-making (McCall & Kaplan, 1990)

The decision of a proposition is in the centre of the different factors of influence throughout the organisation. Throughout the process, these factors have an impact on how each person handling the case arrives at their decision. The recognised problem in this case is the title of the proposition, 'Further financing of surveillance in the water area of Morsa'. The necessary resources are the 'financing', an economic concern and thereby instrumental. Then, there are the external pressures of the case, which can be structures established to maintain the area of concern, and thereby instrumental. Though it might be that the situation is multi-layered, which provides different views or understandings of the situation, and is thereby a symbolic approach to the concern. What impact does it have?

Who are the stakeholders? What is the governmental influence and act of law or directives?

Other aspects influencing interaction in the decision process, according to Jacobsen (2012, p. 52), are the rationality of considering threats and possibilities, and finding solutions and implementing them. He further points out that the decisions of a process have its participants due their rights to make the decisions, or statutory obligation to make decisions derived from the formal structure. The circumstances in a situation require interpretation of their environment. Therefore, there is a risk that decision-makers create assumptions about influence from what they think is necessary, rather than what is necessary in the situation of the decision (ibid.).

One can assume that the politicians and administrators in the municipalities try to make their decisions based on rationality and thereby being instrumental. In reality, however, the interrelations in the case and process indicate that it is a mistake to take this for granted.

Jacobsen (2012) points out that if the person is capable of making a rational decision on the individual level, it does not necessarily mean that organisations are capable to make rational decisions. Selart (2010, p. 184) claims, 'A vital feature of decision processes is to make sense and establish order.' Jacobsen (2012) views making sense as an interpretation of the past and the story of the future (as translated by author):

> 'Interpretation of stories is based on the view of the past as never being an objective dimension. The past is often uncertain, vague and ambiguous, and different people can therefore put weight on different events and courses of events.' (Jacobsen, Organisasjonsendring og endringsledelse, 2012, p. 187)

Both McCall & Kapland (1990) and Jacobsen (2012) point out that there are many facets in a decision process, and the need for common understanding in a case is of importance. To arrive at a common understanding based on the variety of human understanding and interpretation, however, can be a challenge. Therefore,

it is necessary to establish predetermined definitions for the common understanding in decision processes.

2.6.2 Bounded rationality

With his concept of *Economic Man*, Herbert Simon (1955) portrays a rational man and decision-making with limitations. Selart (2010, p. 18) refers to the model of Simon when he argues that bounded rationality is a limitation in information within a decision. In the model, there are six assumptions that intertwine with the understanding of Hansen and Negaard (2010, p. 43), who explain it as limitation of wholeness, information and time. The decision-makers are not able to focus on effectivity and productivity alone.

The model of Simon (1955), according to Selart (2010), makes the following assumptions:

1. Decision-makers are generally assumed to be rational in certain given frameworks.
2. Decision-makers generally lack complete information with regard to options, decision consequences and future preferences.
3. Decision-makers are likely to have limitations in terms of both time and mental capacity.
4. Decision-makers are assumed to have a limited capacity to process information.
5. Decision-makers are assumed to be influenced by emotions when making their decisions.
6. Perception is assumed to be important in the sense that decision-makers often operate according to what they perceive. (ibid. p.18)

These assumptions strengthen the view that decision-makers in municipalities lack the ability to make a rational choice. As Nils Brunsson (The organization of Hypocrisy. Talk, Decisions and Actions in Organizations, 2011) mentions, however, '…those who specify goals also control decisions, and decision-makers control those who translate decision into action.' Though he argues that the government is supposed to be in control of the actions (ibid. p.72).

A view that Hansen and Negaard (2010) share is that resources in municipalities are steered towards the priorities and goals set by politicians. The different goals may have conflicting purposes, however, which demands that the administration takes a stand as to which goals are of greatest concern (ibid. p.112).

This is supported by Amitai Etzioni (Mixed-Scanning: A "Third" Approach to Decision-Making, 1967) who presents a new view of decision-making that combines the rational man and what he called the instrumental art of 'muddling through', referring to Charles E. Lindblom (The Science of "Muddling Through", 1959). In this approach, the decision-maker approaches a problem by zooming out to achieve an overview of the situation before zooming back in to areas of concern, thereby being able to make decisions.

> 'In the exploration of mixed-scanning, it is essential to differentiate fundamental decisions from incremental ones. Fundamental decisions are made by exploring the main alternatives the actor sees in view of his conception of his goals, but -unlike what rationalism would indicate- details and specifications are omitted so that an overview is feasible. Incremental decisions are made but within the contexts set by fundamental decisions (and fundamental reviews). Thus, each of the two elements in mixed-scanning helps to reduce the effects of the particular shortcomings of the other; incrementalism reduces the unrealistic aspects of rationalism by limiting the details required in fundamental decisions, and contextuating rationalism helps to overcome the conservative slant of incrementalism by exploring longer-run alternatives. Together, empirical tests and comparative study of decision-makers would show that these elements make for a third approach which is at once more realistic and more effective than its components.' (Etzioni, 1967, pp. 389-390)

So far, we have explored the main areas of decision-making. In the next sub-section, the decision-making process is set in the context of the actor-network theory, and how this may display in municipal decision-making process is discussed.

2.6.3 Actor network

As previous sub-sections have revealed there are different strategies of decision-making within the municipality. The relationship between the master plan and the single case through HIa and public health may inherent such strategies. Therefore, in context of this research these strategies may be able to shed light on the research problem. It is also important to view the organisation of networks, however, in view that the single case in this research has relations to an organisation.

As Amdam (Planlegging og prosessleiing. Korleis lykkast i utviklingsarbeid, 2011, p. 66) portrays partnership, it is mainly based on the binding cooperation between individual parties by the allocation of common resources thereby strengthening their ability to follow through within a field. Since the partnership describes the formal organisation of a network, this research needs to view the participants of the network. One symbolic approach to this context is the actor network that, according to Martha Feldman & Brian Pentland (Organizational Routines and the Macro-Actor, 2005, pp. 92-93), may explain the actor as someone who has things they are trying to do, e.g. project, or interests. This view is also concerned with actants, which can be anything; a thing, a project, a human, or something abstract like 'our culture' and is something that is acted upon. More importantly,

> '…actants get enrolled (translated) whenever an actor mentions (or invokes or refers to) the actant as part of planning, performing or accounting for their projects… People refer to ideas, things and each other as they go about planning, and explaining their work. These references occur in the context of narratives about work… These narratives create actants and the associations between them.' (Feldman & Pentland, 2005, p. 93)

This means that when people talk about phenomena, concepts or persons, they create a common set of associations and combine their understanding into actions. When actor-networks that have narratives with commonalities that strengthen the actants, and are applicable to programmes associated with success, this results in the stability of the actors because of this success. (ibid.92-93)

Since this research seeks to explore the decision-making process with actors in different levels of the municipal organisation and across municipalities, it is necessary to understand the development of actor-networks and their applicability. The actor-network theory has a symbolic approach that is important to provide an understanding of how actors in the process of the proposition are networked, and what their actants are.

In the next section, I will look further into the actors within decision-making and municipal policy process with view towards the principal-agent theory.

2.6.4 Decision-making and the municipal policy process

In this sub-section, I will further explore the relation between the different roles in the organisation with focus on decision-making. This is revealed through the principal-agent and actor-network view.

In sub-section 2.2.1, the views of Lundquist (2011) and Hansen and Negaard (2010) on the relationship between politics and administration, as well as within the administration were raised. This can be linked to the principal-agent theory.

The principal-agent theory (Ringstad, 2007, p. 163) concerns highlighting the context of actors in the municipalities. The theory is concerned with (as translated by the author):

> '…the problem of information within hierarchies in both private and public organisations. There is someone, the principal, who decides what shall be done, while others, the agents, perform the tasks. Often the agents are more informed than the principal about the situation and how the task should be performed, however. This disalignment of information provides the agents with the opportunity to choose a solution that benefits themselves and has disadvantages for the principal, which the principal cannot do anything about without special means.' (ibid.)

This view may also apply to how politicians decide overall municipal goals in the municipal master plan, and how these goals are supposed to be delivered by the administration. Furthermore, as Amdam (2011) explains, there are actions of power displays between these two organisational fractions. He refers to the three

different types presented by Steven Lukes (Power A Radical View, 2005). The first is the instrumental, one-dimensional thinking of the power relationship between politicians and administration, where '…A get the actor B to do the action **a** even though he would prefer action **b**.' (Amdam R. , 2011, p. 53). Roar Amdam (Planning in Health Promotion Work: An Empowerment Model, 2011) elaborates upon this, when he explains:

> 'We can also say that, in relation to the policy process model, this form of power represents the output side of the model; in other words, to what extent the political institution has the power to control how the solutions for actual problems are being carried out. The output side of the model can involve problem-solving in relation to the resolution, but can also involve symbolic problem-solving, escaping from the problem and unintended consequences.' (ibid. p.9)

Further there are the two- and three-dimensional arrangements of power within the municipal organisations. The two-dimensional arrangement implies not performing a resolution, while the three-dimensional is about controlling the input of cases on the political table (Amdam R. , 2011, pp. 51-56; Lukes, 2005, pp. 16-29). In *Planning in Health Promotion Work: An Empowerment Model* Amdam (2011) claims,

> '…two-dimensional power comes in the form of having the power to hinder the political system in making decisions that can solve the problem. In the policy process model, this power is expressed through having control over the decision-making activity, and, in other models, it can be called control over the throughput side of the policy process.
>
> Three-dimensional power represents control over the political agenda. In relation to the policy-making model, this involves having control of the input side and the influence on, for instance, what people think and care about, and how strongly people argue their case. Execution of power of this dimension can prevent minorities from developing into majorities and consequently, it can involve some anti-democratic patterns of action. On the other hand, the three-dimensional view of power allows people to

> mobilize and put their problems and solutions on the political agenda, eventually replace actors or set up new political institutions.' (ibid. p.9)

These dimensions provide an insight into analysing the municipal process of the proposition and how it connects to the municipal master plan when combined with 'The process of policy model' (ibid. p. 8; Amdam R. , Planlegging og prosessleiing. Korleis lykkast i utviklingsarbeid, 2011, p. 55), after the input-output model by Christopher Politt and Geert Bouckaert (Public Management Reform: A Comparative Analysis, 2004, p. 106) See fig. 7.
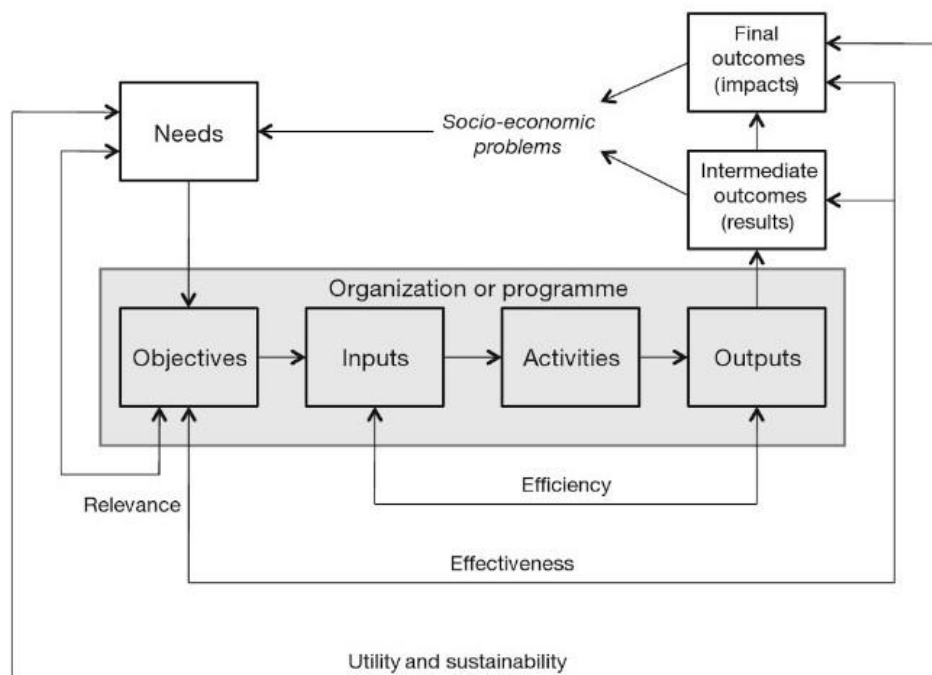
Figure 7: The policy process (Amdam R. , Planning in Health Promotion Work: An Empowerment Model, 2011, p. 8) source Input-output model (Politt & Bouckaert, 2004, p. 106)

2.7 OTHER DOCUMENT REVIEWS

Throughout my research, I have searched for sources with relevance to the research problem and research questions. Not everything I have reviewed has been applicable to this research; however, they may have influenced my choices of direction or helped me narrow down my scope. Using a literature check, I searched the internet for articles that contained the following sequences of words:

- Health impact assessment and decision-making

- Health impact assessment and the decision-making process

- Decision-making in municipal master plans and health impact assessment

- Decision-making and municipal master plans

- Health impact assessment and municipal plans

- Health impact assessment in decision-making

- Health impact appraisals and municipal decision-making

- Health impact appraisals and propositions

Through my online search, and searching at ScienceDirect.com, I obtained a few documents that could provide greater insight into the topic I wished to research further.

The article, *Enabling factors and barriers for the use of health impact assessment in decision-making processes* (Ahmad, Chappel, Pless-Mulloli, & White, 2007), interested me. The focus area of the article covers decision processes in organisations on the same level as the county municipality and the county government in Norway. The interview-guide they had used provided some useful insights that helped me narrow down my own research. I found that their perspective was not applicable with my research. Their view was more legislative, and about how the county or regional stakeholders could best serve the local stakeholders with essential legislative tools and frames for the conduct of HIA.

Each time I reached a theoretical shortcoming in my research I searched for relevant articles in www.jstor.org, www.bmj.com, various libraries, www.sciencedirect.com, www.Elsevier.com, www.google.com, and websites I thereby got linked to. This led me to the relevant sources I have used in this research, along with the references from the literature I already had available at hand.

3 METHOD

The previous chapters presented the research problem, research questions methodology and research design. Chapter two also provided insight into the theoretical frame and analytical approach. In this chapter I will clarify the choice of method based on the steps needed to provide insight into the research problem and research questions.

In this research, I use qualitative analysis, conducting in-depth interviews with 12 respondents in three municipalities, and one interview with the manager of Morsa. The fourth municipality chose not to participate.

Documents retrieved from the municipalities relating to the case were: the common society section of the master plan for the region, the Regional public health plan (RPHP) (Østfold County municipality, 2011), the draft for proposition and the case-documents for the proposition in three of the four municipalities.

The following section clarifies the choice of method based on the validity and reliability of the research.

3.1 VALIDITY AND RELIABILITY OF THE RESEARCH

In this section, I will explore the validity and the reliability of the research design and discuss how these have formed the method of the research. In this research, I have used triangulation.

Marshall and Rossman (1995, p. 143) argue that the validity of a qualitative study is strong when using in-depth description to illustrate the complexities of data and variables. Egon Guba and Yvonna S. Lincoln state that there are differences in which criteria are suitable for judging how reliable and of how high quality there is in the research. In positivism and post-positivism, the rational scientific approach is suitable for scrutinising internal validity, external validity, reliability and objectivity. In constructivism, however, these have parallels in credibility, transferability, dependability and confirmability (Guba & Lincoln, 1994, p. 114; Merriam, 2009, p. 211).

Merriam (2009, p.213) points out that the internal validity operates with how the findings match reality, however, she also reveals that the reality we are operating with is a construction of how people experience a particular phenomenon.

In order to make the decision of how to collect data, it is necessary to consider the extent of validity (Hellevik, 1997, p. 103), to be able to answer the research problem and research questions. Furthermore, to what extent are they reliable?

Marshall and Rossman (1995) say that, 'In-depth interviews with multiple informants at each site will also allow us to triangulate findings across sources and test issues of reliability and validity' (1995, p. 46). Following these views, the decision to use triangulation in this research strengthens the validity and reliability of the research method. The reason for this is that the data from the interviews are verified by the documentation and background check.

Further Merriam says that, 'Reliability refers to the extent to which research findings can be replicated. In other words, if the study is repeated, will it yield the same results? Reliability is problematic in the social sciences simply because human behaviour is never static…' (2009, p. 220).

Within this research, the interviews cover different levels of the municipalities and are cross-examined with each other. This strengthens the reliability of the research. The data records would not necessary yield the same results if they were repeated, however, since this was a specific case with a context that may not be copied. Another important view is that, during the interviews, the participants may have learnt from their experience and changed their views, and would perhaps reflect differently upon the questions if asked a second time. Though I did consider this issue when creating the research design, there are, however, other factors that play a role according to the validity and the reliability.

As Patton states: 'The validity and reliability of qualitative data depend at great extent on the methodological skill, sensitivity, and integrity of the researcher.' (1990, p. 11)

Even though I have great experience in using different interviewing tools within my occupation, there were several things to be aware of during the research interviews. There were a few aspects that I had not previously noticed, in

particular, the degree of being sensitive during the interviews. That made me somewhat insecure, though I believe I managed to hide this. Most probably, an experienced researcher would have had a more relaxed state of mind regarding the interviews and analysing the data. I do not believe, however, that this created a gap between the purpose of the aims of the research and the research design. The sampling, interview method and methodology created strengths in the gathering of data, despite my lack of my experience.

3.2   SAMPLING

In this section I will reveal how I have performed the sampling in this research.

As Michael Q. Patton (1990) describes, sampling is the selection of units to analyse. He presents purposeful sampling in which you can retrieve rich information (Patton, 1990, pp. 166-169). Merriam (2009, p. 76) suggests making a criteria-based selection by listing the attributes essential to the study and then locating the units that match. I made a flow chart covering what I was going to investigate, see Appendix 9.1 'The process and its participants'. The flow chart provided direction as to how I could gather useful information. It also outlined the structure of what to research and pinpointed the different actors involved in the process.

3.2.1   The interviewees

During the initial phase of research, I made an outline of what to research and pinpointed the different actors in the process who could provide useful information, see Appendix 9.1. This was based on, among other factors, how municipal organisations are structured with institutional-, strategic-, tactical- and operational levels (Amdam R. , 2011). In the end I altered the outline so it was congruent with how I conducted the research, see Appendix 9.2.

To find these answers I had to obtain more in-depth information from those handling the suggested proposition, as well as discovering upon what the politicians based their decision-making. As Merriam states:

> 'Triangulation using multiple sources of data means comparing and cross-checking data collected through observation at different times or in different places, or interview data collected from people with different perspectives or from follow-up interviews with the same people.' (Merriam, 2009, p. 216)

I decided that one-on-one interviews with the executive officers were important. To begin with, that meant four interviews because the social element of the municipal plan was common to four municipalities and I initially wished to compare them all. During the research process, I was forced to reconsider because one municipality did not wish to participate in the research. As I sought to compare via a case study and triangulation, my conclusion was that three municipalities would be sufficient. I could have used official records from the fourth municipality but found that it would not provide any new elements to the research. Furthermore, it would be more useful to examine the three available municipalities in depth.

The chief executives, as the heads of the administrations and relations to the processes, were of great importance. The propositions are formally forwarded and introduced to the politicians via the chief executives. I assumed that, if a chief executive does not agree to present a proposition, it returns to the case handlers. I discovered also an administration level consisting of officers. In the records, I found that they had a role in the processes of the propositions, representing the case instead of the Chief Executive. Then there were the actors who conducted the operational part of the propositions: the executives. I therefore found it necessary to conduct nine interviews on three different levels within the municipalities.

Next, I wondered which politicians to interview. I reviewed the processes of the single cases and identified that they all had been through a committee before ending in the Council. This helped me narrow down the scope to one section of the overall process. I could follow the proposition from the organisation of Morsa – to the administration level – to the Committee. To find the background of the proposition, an interview with the manager of the inter-municipal organisation of Morsa was needed. When it came to the politicians, I first considered interviewing the participants in the committees. Upon further research, however, I changed

direction. I found that a better approach would be to interview the mayors as representatives of the political perspective in the municipals. The reason for this was that all the other respondents had a counterpart role on the same organisational level across the municipalities, apart from the manager of Morsa. Therefore, I would be able to cross-analyse their responses. By adding the Mayor, I would have different aspects from each level. Furthermore, there would be too many respondents if I interviewed all the members of the committees. An alternative would be to focus interviews, but to coordinate an additional 20 people, in three groups, would be too time-consuming. Therefore, the mayors were deemed sufficient for this thesis. See Table 6, 'Purposeful and information-rich sampling'.

Table 6: Purposeful and information-rich sampling

Purposeful structure sampling	Information-rich units sampling
Background	The manager of Morsa
Administration	The Executive The Officer The Chief Executive
Political	The Mayor

3.3 RESPONDENTS OR INFORMANTS

Respondents are people with experience in the field under investigation. In contrast, informants have knowledge about a certain field (Jacobsen, 2010, p. 171). The key personnel I wished to interview in the municipalities have experience within the field under investigation. They could also possess knowledge relevant for the field, however, though my focus during the interviews was on their experience of the process within their own organisation, and their decision-making. Therefore, I refer to them as respondents. The representatives from the organisation who prepared the proposition contribute more on the level of informant. The reason for this is that the person contributes to the picture of the background of the proposition and is therefore not a part of the target area of the research. Background information provides essential meaning to the overall perspective and clarifies important aspects of the disciplinary field of the

proposition, i.e. the informant has knowledge of a certain field in context to the case (ibid.).

3.4   CHOICE OF INTERVIEW METHOD
In this section I will reveal the how I reached the interview method.

Merriam (2009) outlines three forms of interview structure to ensure the collection of useful data. To choose between these, a decision must be made as to what extent there is a need for structure during the interview process. With a highly structured and standardised questionnaire scheme, the questions are predetermined in wording and order through an oral form of survey. An unstructured and informal interview is open-ended, flexible and more like a conversation, often used when the researcher does not know enough about the phenomena. The third tool is the semi-structured interview, which has a mix of more and less structured interview questions used flexibly, but with specific data required from all respondents, guided by a list of questions or issues (ibid. p.89).

With a total of 13 interviews, and respecting the time of the respondents, I prepared the interviews to take a maximum of one hour. To manage the interviews and focus on the theme, in that narrow window of opportunity, I built an elementary structure into the interviews. At the same time, however, I wanted the possibility to obtain information from the respondents on topics that I had no previous knowledge of.

Therefore, I chose to collect empirical data using qualitative semi-structured interviews with interview guides designed for the different groups of informants.

To be able to perform the interviews, it was essential to conduct fieldwork, contacting the chosen municipalities for the research and obtaining consent for the interviews of the key actors.

3.4.1   Ethics
The ethical element of this research comes within the interviews of the key actors in the municipalities. According to Jacobsen (2005),

'In principle, the Norwegian research ethics today have three fundamental requirements concerning the relationship between the researcher and those objects for research: informed consent, request for the right of privacy, request for the right of correctly quoting.' (Jacobsen, 2005, p.45)

To ensure these principles, I used a formal draft devise a written consent form from each of the participants. This provided the respondents with information about the theme and purpose of the research, and their role in the data collection. It also provided an assurance of privacy. The forms were sent, along with a query about conducting the research in their respective municipality and organisation, to the chief executives and manager of Morsa. They forwarded the query to the parties involved and I followed this up by phone to make appointments for the interviews. Then I collected the consent forms that were signed before the interviews commenced. Furthermore, I put into consideration the ethical variables when preparing the interview guides and my own role in the interview process.

Because of the nature of using interviews and implicating ethical considerations, it was necessary to apply for approval from The Norwegian Data Protection Authority (NDPA) via the Norwegian Centre for Research Data (NSD). The application required a thorough description of the research, the planned respondents and questionnaire, and how securely the data would be kept and treated. The NDPA, via the NSD, pointed out that I had to add the information in the request-form that I sent to the municipalities that the recordings would be deleted after usage, which I did. Then the NDPA, via the NSD, gave their approval, see Appendix 9.3.

3.5 INTERVIEWS

In this section, I outline the preparatory work for the interviews, how they were conducted and reflect upon my own role as interviewer.

The preparatory work demanded careful scrutinising of the different aspects of the research problem and the research questions. I compared them with the

information provided by the theory, documentation and public records. Through this gap analysis, I identified core elements that needed answering.

Based on those elements, I created an interview guide with the following themes and aid probes:

Table 7: Themes and probes for the interview guide

Theme	Following
The process of the proposition	- Map it - Important issues you were aware of during the process
The core issues of the proposition	- How did you discover them? - Why these?
Public health in the municipal plan and the proposition	- Did you consider the municipal plan social section when you presented the proposition? - – In what way? - – Why not? - Was an HIA conducted for this proposition? - - Why? - - Why not? - IF YES - - Do you have procedures or guidance for HIa? - - Do you have tools such as checklists for HIa? - - What do you think about HIa in this case? - - Are there any aspects that, in retrospect, you would like added, or not included? - - What do you personally think about HIa? - IF NO - - Why not? - - Can you elaborate on that? - - What do you personally think about HIa?
Key reasons for decision of the proposition, HIA	- What do you consider were the key reasons for the conclusion of this proposition? - Why? - - Did HIa affect the result of this proposition? - - Would an HIa have had any effect on the result of this proposition?

3.5.1   Conducting the interviews

After receiving the approval from NDPA and NSD, I contacted the four municipalities I had considered. I called the chief executives and asked if I could send them an enquiry about participating in my research. They all agreed. After a

week, I called again to follow-up my enquiry and was told they all had to discuss within their organisation before I could receive an answer. After another week, I called once more. This time I arranged some appointments. One municipal, however, did not wish to participate.

Over a period of four weeks, I conducted the interviews, beginning with the manager of Morsa. This was a good choice, though my need for information, and the interesting subject, produced 11 pages of transcription.

The first interview was due to my time schedule. I had planned for one hour. The first interview took 77 minutes. Even though it was a productive interview, I could not continue to exceed the timeframe; out of respect to the time given by the respondents but also because of the need to structure the interviews. The next three interviews were within the timeframe and, as my experience grew, the time of the interviews decreased. The final interview was conducted via telephone and lasted only 15 minutes but provided me with the necessary information. It also allowed me to appreciate the impact of a face-to-face interview. Other aspects contributing to the decrease in time may have been that the final respondent had good knowledge of the issues of public health and health impact appraisals. At this point, thanks to the interviews, I had also accumulated the input and had already begun the analysing process.

I began transcribing the first interview immediately, and transcribed the rest during the interview period, with the final one on the same day as the interview. The transcriptions were time consuming and annoying. They provided a fair amount of information that I had not noticed during the interviews, however. I thought about why I had missed so much during the interviews and decided there were a few reasons that may have caused it. First, I had a voice recorder and had faith in its function. Second, I did not make notes during the interviews. I was aware of how the respondents might be curious about my taking notes, and perhaps alter their answers to what they thought I expected. Another aspect is the need to put the respondents at ease with the situation, which I believe a relaxed interviewer, sitting with hands in lap and smiling, is better able to achieve than one leaning forward across a table, making notes. At the same time, I had the opportunity to observe their reactions throughout the interview, and their body

language also. The purpose of this was not to analyse their credibility but to react to any moments during the interviews that made them uneasy. By doing this, I could make them relax again through simple gestures, such as a friendly smile, encouraging tilts with my head and eyebrows, or if needed, ensuring the respondent of my intentions. I did not manage to make all the respondent feel at ease during the entire process, however, and sometimes became so engaged that I forgot my own body language and leaned forward in eagerness. All the respondents experienced a few minutes of unease when I started the voice recorder. Some stopped after starting a sentence and looked at the recorder as if they were unsure what to say. The voice recorder effect faded over the next couple of minutes until it seemed completely forgotten. One respondent turned away from me and offered little, another gave the impression through their body language that they had more important things to do, and a third was quite domineering. Through my strategy of observing such reactions, I managed to resolve the situations by moving to the next question, being interested in their discipline and tilting my head.

3.5.2 Working with the transcriptions

After I had transcribed the interviews, I had to work through the material several times to gain an understanding of the whole. As Merriam (2009) states:

'An audit trail in a qualitative study describes in detail how data were collected, how categories were derived, and how decisions were made throughout the inquiry.' (ibid. p.223)

The interviews in all three municipalities were transcribed before being categorised into process, symbolic, instrumental, decision and placed in a scheme for the different roles and, thereafter, into a cross-sectional analytic scheme for deeper analysis, extracting recurring words, concepts and other similarities. This produced the following categories:

- HIa
- Social equity
- Recreational

- Tap-water quality
- Water-areas' quality
- Knowledge and training
- Surveillance
- Administrational, organisational considerations
- Politics
- Agricultural
- Decision-making
- Process
- Reflections

They were then arranged into the presentation of the interviews using keys from the research questions and the original transcripts to secure accuracy. The reason for not using the questions from the questionnaire is that the keys also serve as a link to the analysis of the interviews. These keys are as follows:

- Attributes in the HIa
- Process
- Master plan
- Decision.

There were some additional keys to reference. These were the organisation of Morsa, Knowledge, Action plans, Budget and Balanced Scorecard (BSC).

I have organised the documentation review from the municipalities and the interview with the manager of Morsa in the following chapter.

4 BACKGROUND AND DOCUMENTATION REVIEW

In this chapter, I discuss the information provided by the manager of Morsa. Then I examine the Regional Public Health Plan (RPHP) and master plan of the municipalities based on the records from the different municipalities, i.e. the proposals and the resolutions of case.

4.1 BACKGROUND PROVIDED BY THE MANAGER OF MORSA.

In this section I will present the background of the proposition.

To view the background for the proposition, I went to the websites of Morsa and interviewed the manager. Through the interview, I became aware of the complexity of the organisation and the diversity of challenges needed to be overcome for their work for a good ecological status of the water resources and streams. Even though I had set forth to narrow my scope in this research process by choosing a small single case I got aware the enormous impact this case might imply public health. This is a summary of the background contributed by the manager of Morsa, their web site (Morsa, 2015) and the action analysis of the water area of Morsa. (Vannområdeutvalget for Morsa, 2014)

Morsa is an inter-municipal organisation of eleven municipalities, two county municipalities and two county governments. It started up as a pilot-project in 1999 when four municipals challenged by unacceptable water quality in the largest lake of the county, called Vansjø, in the southeast of Norway, decided to make a coordinated effort to change the negative development. The four municipalities that shared the lake area had since the early 1960s tried to change the poor condition. They did not manage to do so, and in 2000, the situation got severe and they had to forbid swimming in the lake until 2007. The year in advance of the prohibition, they had started Morsa and the common efforts established to make actions that would matter. In 2003, they made a local regulation to decrease spread drainages, and they included some municipals with streams that ended in the lake. With the introduction of the EU water-directive in 2007, they expanded to the existing organisation. Now the area covers a large water-system within the same watersheds. Further, the area is a local watershed within the watershed area of Glomma.

The work documents of the area consist of a system of regional analysis, plans and action plans down to local analysis, plans and action programme. During the plan processes the different partners of the area, the municipalities, county municipalities and county governmental contributes through hearings. Morsa participates in the regional hearings by working out a hearing document for their partners by providing a draft for proposition of the hearing ensuring the

disciplinary knowledge and local interests. When it comes to the local watersheds, Morsa is responsible for the process of local analysis, planning and action programme as well as ensuring the following through of the action programme.

Morsa is organised with a board consisting of nine mayors of the municipalities, representatives of two county municipalities and two county governments, a representative from the Norwegian water resources and energy directorate and a representative from the Norwegian food safety authority. Further, there are observers from interest groups. The board delegate their resolutions to the manager that follow up and ensure the proper actions. The structure consists of different theme groups with representatives from the municipalities, scientists, governmental organisations, interest groups and professionals within the relevant disciplines. The theme-groups are agriculture, water and drainage, surveillance and ecology. The manager can organise the working-groups when needed.

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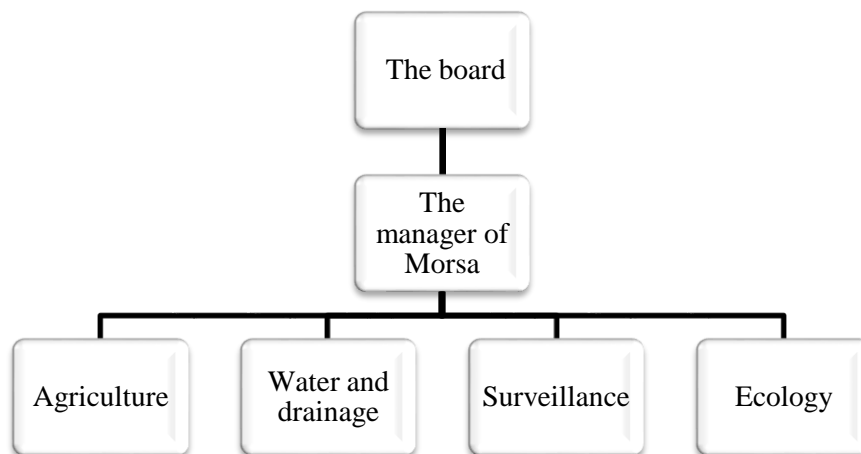
Figure 8: Organisation of Morsa

Morsa works for good ecological status within the watersheds. To achieve that, Morsa devised an action programme based on an action analysis of different areas of the watersheds. Within the area of public health, the action analysis highlighted some areas of importance (translated by author).

> 'The cost of this effort may not be so easy to count economically. The improvement of the water-quality, however, will have obvious results for the security of the tap-water resources for a population of 65,000.' (Vannområdeutvalget for Morsa, 2014, p. 45)

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Moreover, the analysis lists the following:

1. The value of clean swimming water.
2. Consistency in the fishing stock (relevant for fishers, and in Vansjø you also have professional fishers).
3. The recreational value is significant; the area provides this amenity for 100,000 people.
4. Negative media focus on flourishing algae and pollution has had negative consequences on the public and their ability to enjoy nature experiences such as hiking and outdoor activities.
5. The possibility to have an active and healthy life outdoors.
6. An effect on the development of public health that is of great significance to the national economy. (Vannområdeutvalget for Morsa, 2014, p. 45)

Governmental programmes financed Morsa as a pilot project together with two other water areas in Norway. The pilot project had great resources to build an extensive surveillance programme for the water area. They were the blueprint for other water areas based on the EU water directive. Today there are 105 water areas in Norway and the pilot period has ended. Therefore, the financing situation has changed, with a decrease of the grants in 2015 and even fewer in 2016. To continue the work of Morsa, the municipalities must finance the project themselves.

For a period, the government made announcements preparing for the reduction of the grants. Therefore, the manager informed the board and municipalities about the upcoming changes. To take charge of the change, a discussion about the extensive surveillance programme and eventual reduction was necessary. Over several years, the programme and other scientific research programmes had built up a wide range of data material that could be lost by the reduction of the surveillance programme. The theme group devised a new programme to prepare for the future. Then the board made a resolution that the manager, together with a work group, would prepare a common proposition concerning the financing of further surveillance. The manager sent the proposition to all the owners of Morsa,

so that each of the municipalities could process it. Morsa did not conduct a health impact appraisal of the proposition.

4.2 THE REGIONAL PUBLIC HEALTH PLAN

In this section, I will summarise the RPHP. The plan was retrieved from the website of the County Municipality of Østfold. The plan was made by the county municipality and linked to the planning in the municipalities as the county municipalities work with the municipalities when developing their plans. Its role in this thesis, however, is merely to provide background to the municipal plan.

The RPHP has the following purpose, (as translated by the author):

> 1. Public health shall be promoted as an area of political-, local- and regional priority within the County of Østfold and all the municipalities.

> 2. The partnership, as Østfoldhelsa, and the building of alliances will be developed, and will also mobilise new alliances besides the public services.

> 3. The regional plan is a tool whose purpose is to reach the aims of the county municipality master plan – Østfold towards 2050 – regarding sustainable development.

The RPHP defines the foundation of good health as well-being, safety and being part of a social, local community. Threats to this may be labour related, noise and contamination, and lack of education. Moreover, it points out that social equity is important and that the conditions and environment we live in are most important in regard our total health. 'This implies that the solution of the public health issues of tomorrow not only rest on the health sector, but is a concern within all sectors of society.' (Østfold County municipality, 2011, p. 11)

The linkage between the RPHP and the county municipal plan of land use is a reminder of the importance of public health for ensuring a green structure, as well as universal design and available recreational areas available to everybody, where people can engage in physical activities.

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The RPHP is divided into four themes with aims: the secure Østfold, the healthy Østfold, the vivid Østfold and the equitable Østfold. It has seven targets with strategies also. The aims are:

1. Increase the safety of the population through reducing damages, accidents, violence and crime.

2. Promote health by educating society to make better choices and emphasise individual responsibility for health and welfare. This is done by focusing on mental and physical health, and the use of tobacco and drugs.

3. Active, sustainable and vivid local societies where health, environment and culture are viewed in correlation.

4. Ensure that the entire population is provided with the same opportunities to maintain and increase their health. Social inequity targets are to be realised through the educational system, labour-market, health services and efforts towards equity within living conditions and adolescent conditions.

The targets are:

1. Anchorage – Public health will promote sustainable planning. One of the strategies is to make 'health in everything' obvious through cross-sectional and overarching sectoral work, including performing health impact appraisals

2. Partnership – Cooperation across disciplines and levels is strengthened

3. Health choices – Lifestyle and living habits that impact on health are improved. One of the strategies is to focus on quality of life, mental health and social relations, as well as on the correlations between these in the work of public health.

4. Local societies – Østfold shall have secure and vivid local societies. One of the strategies is to stimulate social, ecological and economic

sustainability in the development of society and public and private services.

5. Social inequity – Social inequity in health in Østfold shall be equalised.

6. Knowledge – The work within public health in Østfold shall be based on knowledge. One of the strategies is to be a promoter and piloting arena for the development of tools in overarching sectors.

7. Østfold County Municipality – Its role as regional actor and service provider within public health will be strengthened

4.3 THE MASTER PLAN OF THE MUNICIPALITIES

In this section, I will present the aims of the master plan of the municipalities. I have highlighted the main sections of the plan relevant to this thesis and that can be connected to health impact issues in a direct manner.

As presented, the social section of the master plan is common to the three municipalities, together with a fourth municipality. In the first paragraph of the plan there are three premises and objectives for cooperation (as translated by the author):

1. The region consists of four self-contained municipalities that will work out their own land use in the master plan based on the same groundwork.
2. The regional master plan forms the foundation of what shall be implemented in all municipal plans, general politics and strategic works.
3. The regional master plan builds on the county municipality plan "Østfold towards 2050".
    The regional master plan is first and foremost a strategic document. The plan does not address many of the important questions raised by the county municipalities' plan together with, detailed aims and recommendations. These will be treated in the long-term economy planning focusing on the priority of definite actions.

Thereafter, the plan sets out its main purpose that is to (translated by author);
'Build and maintain the power and ability of the region to act and follow through.'

To do this, they have main aims within different themes, which the municipalities work towards in the period between 2011 and 2015. The aims are divided into four main areas, where the themes of public health and living conditions are of greatest concern in this context, see Table 6.

To achieve their aims, the plan lists important factors in the initial phase of the themes. Among these factors are:

- Preventive health measures should positively contribute on behalf of individuals and society as a whole.
- Actions within public health in the region may contribute to enhancing the processes of living conditions.
- Increase the level of education to reduce differences in social equity within health.
- The municipalities cooperate with each other and different discipline-authorities concerning drug inhibiting work, accident prevention and health promotion actions.

Furthermore, there are seven targets with strategies for achieving the main aim of public health and living conditions. There were also other aims within the other themes of the master plan; however, in this research, public health was the targeted aim.

Table 8: Purpose, aims, targets and strategies in the social section of the municipal master plan

Municipal plan purpose, aims, targets and strategies			
Main purpose	Aims	Targets	Strategies
Build and maintain the ability to carry actions into effect.	1.Public health and living conditions. By 2022 the region will be a living local society with an active and engaged population and	1a. Social equity and quality of life for all	1ai. Equity of living conditions 1aii Stake on physical activity in the arena of Vansjø 1aiii. Establish social meeting-points for all ages

services that fulfil their purposes.		in the local environment
2.Capacity building and productivity 3.Environment and energy 4.Use of land area and infrastructure	1b. Positive social capital and good integration through cooperation with non-\governmental organisations	
	1c. Elderly people being self-reliant through spatial planning and strengthened social activities	1ci. Motivate and organise for physical activity
	1d. Increased growth and competence through a multicultural society	1di. Establish multicultural arenas for work and leisure activities
	1e. Universal design of meeting-points and land areas for public use with Vansjø as a centre of outdoor life	1ei. Establishing good meeting arenas and play areas with attractive placement
	1f. Strengthen the preventive and health promotion work to be able to slow down the production growth of public services within health and care	1fi. Safety of Østfold
	1g. Children and youngsters should grow up in developing environments and actively contribute to the local society	1gi. Strengthening low threshold activities to increase physical and social activities

4.4 THE PROPOSITIONS IN THE THREE MUNICIPALITIES

In this section I will present the document review of the proposition in the different municipalities.

On the official websites of the municipalities, I examined the protocols referring to Morsa. I found propositions related to Morsa in the municipalities M2 and M3; and in municipality M1, several documents of hearings related to Morsa. However, the latter did not process the proposition draft of 'Further financing of surveillance in the water area of Morsa' as a single case. Pursuing the cases, there were references to this draft in the documents, though there were several documents handling issues of Morsa in hearings of regional plans for the water areas.

4.4.1 Documents and HIa in M1

In M1, I found a hearing about regional plans for water management and a local action plan for the Morsa region. This was case 150/14 in the Committee of Environment, Technical and Transportation (CETT), 3rd December 2014. On the 15th of December the case, now referred to as 137/14, was heard in the City Council. In these presentations, the Executive Officer had, on behalf of the Officer representing the Chief Executive, prepared the case with an HIa called public health appraisal, as follows:

> 'Both the water areas of Morsa and the coastal-area are very important for leisure and recreational activities. Enhancement of the water quality will make these even more attractive and thereby positive for the public health.' (Case-assessment: Regional plan for water management in the water-region of Glomma 2016-2021 with corresponding action-program in accordance with the water directive. Case 150/14 and 137/14)

This case assessment had a Chief Executive appraisal highlighting that, among the environmental issues, the management plan for the region did not sufficiently take

into account the user-interests bound to the water areas, pointing out that Vansjø is unique in providing leisure and recreational areas for a population of more than 100,000. Moreover, it is the main source of tap water for a population of 60,000, and a secondary source in crises for an additional 120,000 in neighbouring municipalities. The Chief Executive appraisal also points out that she is worried that they could face there is a lack of sufficient financing in the future. A shortfall of financing would cause the environmental goals to detour, and thereby reduce, the lake of Vansjø for leisure and recreational activities, as well as a source of tap water (ibid.).

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4.4.1.1 *The hearing of the regional plan in the M1 Committee of environment, technical and transportation.*

During the presentation in the CETT, politicians made some comments on strengthening the regional plan in the following areas (as translated by the author):

- Develop a similar plan to the coastal plan for the lake areas, especially Vansjø.
- Vansjø conference to be held in the first half of 2015, prior to the municipal and county municipal election.
- That the municipality is particularly concerned about the flood situation and the consequences of streams when larger cultivated areas are flooded. This situation prompts the need for an assessment of alternative actions to repress flooding and thereby enhance water quality.
- Demanding that the plans are upgraded and adapted to incorporate increasing climate change.
- Ask the central government to place the main responsibility on a department to ensure continuance and clarity between the different sectors involved. (Case 150/14)

4.4.1.2 The hearing of the regional plan in the City Council of M1

The City Council, during their session with the case, added just one point to the proposition, though it was a point regarding health. This proposed to regulate the level of Vansjø at its lowest level during the autumn season until the risk of flooding ended. This concerned tap water and societal risk during flooding.

4.4.2 Documents and HIa in M2

With case number 142/14, the proposition 'Further financing of surveillance in the water area of Morsa', was presented in the Committee of Planning and Environment on 21st of October 2014. The M2 had used the incoming proposition to add themes called Universal Design, Public Health Perspective, Environmental Perspective, Cooperation, Act of Law and Documental Records. The Public Health Perspective is an HIa and states, 'High water quality is positive from a public health view, both when it comes to recreation, and by considering Vansjø as a source of tap water.' The proposition was unanimously passed with no remarks, and went as a referendum to the presidency before the Council and was also passed with no further remarks.

4.4.2.1 The hearing of the regional plan in M2

In M2, the Committee of Planning and Environment also held a hearing in Case 159/14 called 'Regional plan for water management in the water-region of Glomma 2016-2021, with additional action programme in regard of the water directive.' This hearing did have similarities to the hearing held in M1, though was presented with a proposition based on the note from the hearing held by Morsa. The note clarified the different aspects of the regional plan and the changes necessary for the sustainable management of the region and for the water area of Morsa. The proposition added an HIa that stated,

> 'To take care of the environment, and the water-environment in particular – determinants for all life-forms. Additional to this elementary perspective. the water-environment and quality of the water have great significance for public life and health, considering tap water, the production of food, recreation, aesthetics and nature.'

The proposition had the following suggestions:

1. M2 regards the work of securing a common sustainable use of the water resources across the governmental sections as positive, and wishes to be an active participant in achieving the aims of the water directive.

2. M2 stressed the need for strengthened economic resources from the central government to ensure the implementation of the water directive and following through of actions within the different sectors.

3. Point four in the suggested resolution from the Morsa note that is attached this case, is the foundation for M2 in our statement of the planning. (Case 159/14)

There were no remarks from the politicians, and the resolution of the proposition was passed unanimously.

4.4.3 Documents and HIa in M3

The proposition of 'Further financing of surveillance in the water area of Morsa', was presented to the Technical Committee as Case 83/14 on the 16th of October 2014 and to the Municipal Council as Case 058/14 on the 6th of November 2014. The proposition was presented as the incoming draft from Morsa but the Executive Officer had added appraisals with the themes of consequences for public users, economic consequences, personnel resources, environmental consequences and public health consequences. The HIA is the same as an HIa and states, 'The surveillance can contribute to highlighting water quality and the risks attached to poisonous algae and pollution for the population.' The proposed resolution, made by the Officer on behalf of the Chief Executive in the case, comprised three points:

1. M3 acknowledges the proposition of the further financing of surveillance in the water area Morsa.

2. The municipal financing is made of an allotment from the same financial key used to finance the administration of the water area.

This implies basing the financing on a combination of subsidy per capita and agricultural area of land within the water area.

3. The financing is formalised by a preliminary period of seven years, from 1st of January 2015 to 31st of December 2021. Notice of withdrawal of financing must be given at least a year before it is enforced. The commitment attached to the surveillance of the water area and the municipality is according to the water directive. (Case 83/14)

In the Committee, the politicians decided to address the proposition in the Municipal Council due to the long-term financial commitment of the resolution.

The resolution in the Municipal Council was unanimously passed without any remarks.

4.4.3.1   The hearing of the regional plan in M3

M3 held Case 099/14 on the 20th of November 2014, in the Technical Committee and Case 076/14 on the 8th of December in the Municipal Council. This was the hearing of the 'Regional plan for water management in the water-region of Glomma 2016-2021, with additional action programme in regard to the water directive.' The proposition was the draft that came from Morsa, with an additional HIa. The Executive Officer stated that there were 'No direct consequences for the public health.' The proposed resolution, made by the Executive Officer on behalf of the Chief Executive (as translated by the author) was:

'M3 accepts the suggested hearing notification to the regional plan of water management in the water-region of Glomma 2016 – 2021 with additional action programme provided by the project-managers in the water areas of Haldenvassdraget, Øyeren, Morsa and Glomma.' (Case 099/14)

The resolution was passed unanimously both in the Committee and the Municipal Council with no remarks.

5 THE INTERVIEWS

In the previous section, the background for the proposition was presented via an interview with the manager of Morsa and the documented processes of the proposition within the three municipalities. In this section, I will present the categorised interviews.

5.1 MAYOR 1

Mayor1 (MA1) was the Mayor of M1, which is the largest of the three chosen municipalities, with a population of approximately 32,000 (Thorsnæs, *Store norske leksikon*, 2016).

5.1.1 MA1 Attributes of the HIa

MA1 regarded the area of this case as important for health and recreation, and that it is highly relevant for the politicians to obtain information about the impact of health in their cases. He was unsure, however, whether the HIa contributes to decision-making in cases. He did hope that it contributes to the conclusion, and that politicians take the appraisal into account in most cases.

5.1.2 MA1 Plans

MA1 also explained that the propositions are 100% ruled by the administration until they come to the political table. And, that the HIa should be considered in the subconscious of every politician, but that they do not sit with the master plan before them at the meetings.

5.1.3 MA1 Process

According to MA1, this case was considered a straightforward case politically because it is important to continue the surveillance of the water areas. The Mayor stated that they weigh the costs against the contribution (or output) and that environmental cases like this are prioritised by the administration.

Then the MA1 confirmed that the financing of Morsa was embedded into their budget as a part of their economy plan and the proposition also. The economy plan and budget were proposed in December 2014.

5.1.4   MA1 Decision

MA1 stated that one of the roles of HIa is to show that political decisions sometimes have a negative impact on the populations even though they still get resoluted. The political decision is then made through an awareness of the consequences and impact on public health. MA1 explained that you choose it because other arguments weigh higher and that, for example, equal treatment of cases may weigh higher in the end.

The MA1 stated also that it was highly relevant for politicians to receive information about the impact on public health into their considerations. This should be considered along with the status of the water and streams through the appraisal of both the environment and health impact.

5.2   CHIEF EXECUTIVE1

Chief Executive1 (CE1) expressed a wide consideration on public health and believed that to use HIa is very good, however, CE1 stressed that there is a need for common agreement on what it means. There is a need to be more precise and say more about the impact of public health within the cases, and that it is good to be aware of what to do in an HIa.

5.2.1   CE1 Attributes of the HIa

CE1 stated that her core issue is social equity. This is to ensur|e that the new generation should have the best opportunities regardless of their background. She claimed that it may not be of the same relevance to other staff members, however.

Furthermore, CE1 believed that they have achieved much regarding public health and social equity. She underlined this as an important aspect within the social challenges in M1.

Other issues she believed affect health in this case are:

- The area as recreational
- Tap-water quality as an impact on public health
- Water quality in general

She claimed that the municipal has achieved more knowledge and this helps them to not get so standardised in their appraisal. There is also help available for the training of case handlers to use HIa in a better way. This is because the municipal has worked on HIa for a couple of years already and feel that they have improved how they operate HIa. She explained that M1 also participates in a project with the Østfold University College, which is known to have developed good indicators within the field.

5.2.2   CE1 Plans

In their action plan, CE1 said that M1 has a secondary target called ME2, which aims are to ensure that Vansjø is a recreational area providing good nature experiences and effects on public health. Moreover, that the characteristic wildlife should be preserved without splitting up the areas around the lake. To accomplish these aims, they would improve the water quality and, every second year, arrange a conference at Vansjø to improve the water quality, nature and wildlife.

When it comes to administrational planning, CE1 said that they have a variation of light BSC. BSC are indicators measured within a measurement frequency. It was uncertain, however, whether they would use that to any further extent. The reason is that the themes BSC focus on have great effect, but there might be just as important issues forgotten in the process, though CE1 believed that the KS (Association of Municipalities) is eager for the implementation of BSC. The municipality also have two, instead of one, period in their yearly planning. The action plan is due in the summer and the budget in December. According to the legislation, it is called an economy plan but this municipal called it an action plan.

CE1 said that the master plan is the platform for everything, and that they could not do anything that deviates from it without announcing it.

5.2.3 CE1 Process

When considering propositions, CE1 claimed that most cases are handled by the administration.

5.2.4 CE1 Decision

The decision, if a case goes before the Committee, is made by the Officer. In this case, there was never any doubt about continuing surveillance from a public health perspective. The case was anchored and well established both politically and in the administration. This was a case that the Officer could handle through his authority.

5.3 OFFICER1

Officer1 (O1) regarded public health as important and that it should be on the level as the economy and environment.

He believed that measuring public health is not easy without the use of environmental measures. There is a need for more consideration, however, about whether the area within the HIa is of favour for the public health or not. O1 clarified that when you are older, it is more important to think about the youth and upcoming generation. It is important to have this perspective to consider whether there will be positive or negative impacts on public health.

5.3.1 O1 Attributes of the HIa

The HIa attributes that O1 considers to have health impacts are:

- The water area is a wildlife area and recreational area for paddling, using it for physical activities, play and wildlife activities
- Tap water
- Important to make Vansjø as clean as possible, to prevent a situation where swimming is prohibited, as it was in 2000
- O1 also viewed it as unique area with one of the greatest lakes of Norway

5.3.2 O1 Plans

When it comes to planning, O1 said that they try to base things on facts. Each year they make a budget for a period of four years, and work out the action plan for the coming four years in the summer. They try to be concrete in their action plan and budget plan because the BSC is about assessing the system to evaluate whether they have achieved their aims. In the current plan, there are 32 focus areas with aims and measure indicators where green stands for acceptable, orange for not quite yet, and red for alert. In some areas, they have also conducted a risk analysis. One aim is better water quality for swimming, according to the norm set by national health authorities. Each year they make a report about how they have achieved their aims.

5.3.3 O1 Process

When it came to propositions in general, O1 explained that they have a template for the proposition with outlined themes, such as environment- and public health appraisals. The propositions are normally held firstly in the Committee of Environment, Technical Engineering and Transport, and thereafter are sent to the presidency.

5.3.4 O1 Decision

In this case, the proposition was put before the administration and O1 was not aware of the proposition from Morsa. They simply planned the financing into the budget for 2015 and 2016 with 40,000 NOK for the first year and 189,000 NOK for the coming four years. This was based on measuring and a cost analysis that the cleaner the water is, the lesser their financing of a purification-system will be. By 2020, in accordance with the EU directive, the water quality should be at the required standard.

5.4 EXECUTIVE OFFICER1

Executive Officer1 (EO1) believed that the HIa is not points you find anywhere. It is based on knowledge about the area. Further he stated that he knew that in all the

years it was poor water quality fewer visited the area, it was available boat mooring spaces and people did not swim there. It was not inviting to be on a wild life experience, because people wish to make coffee themselves with the water from the lakes and streams. Therefore, he regarded it as important to make the Morsa area attractive and thereby a positive contribution to public health.

5.4.1 EO1 Attributes of the HIa

EO1 claimed that there is a large focus on Vansjø and that health is implicit in the case.

- Both the Morsa and the coastal areas are very important for leisure-time and recreational areas.
- For recreational and leisure-time purposes, the region might be one of the most valuable recreational areas in Norway.
- That recreation, and to be out in the open, have a positive effect on public health is common sense.

EO1 explained that the efforts to enhance the water quality are important so the public can be able to use the water areas. This is done, generally, through environmental engagement and from an information aspect. There is also legislation about information being available to the public about environmental areas, and that the public do phone to check the status of the water quality and algae situation. EO1 previously worked at the Norwegian Institute of Water Research (NIVA), where the focus was on water quality. EO1 had never worked explicit with public health in the context and claimed that he was not familiar with any tools.

5.4.2 EO1 Plans

EO1 believed that there are cases where the municipal master plan is incredibly important and added that he checks that he refers correctly to the plan in regard what he writes in his cases. In this case, the financing is managed through the water and drainage budget and is thereby related to an existing system. They must

take into count legislation, regional plans, and other factors, however. Though he claimed to have cases where the municipal plan is not mentioned.

Furthermore, EO1explained that it is the economy and action plans that provide frames for the BSC. He also claimed that they are strict with the aims they have and work to improve them and their measurability.

5.4.3 EO1 Process

EO1 stated that an important network arrangement is the Vansjø conference with workshops. He also explained that they have no procedures, but rather a template for the propositions. The template has two methods to perform appraisal, the environmental and public health. He was in favour of there being an easy tool for HIa, but had not missed it. According to EO1, the importance of the case is to follow-up the actions because hundreds of millions of NOK have been spent on action-programmes. Therefore, they must know if the water quality will improve. The surveillance can provide them with some information about the water quality, which he regarded to be most important aspect of this case. He claimed also that surveillance of the streams is absolutely necessary or else there will be no control over the grants made by the tax- payers. When it came to this case, he explained that the executive officers of each municipality, due to their discipline knowledge from being seated in the surveillance group, knew about the case before it officially arrived.

5.4.4 EO1 Decision

That they did not consider public health during the handling of this case is the reason EO1 claimed that HIa had no influence on the case. Additionally, EO1 pointed out that they learnt the standpoint of the politicians through observing what the politicians supported and wanted, and the fact that the main aim was to improve the environment in Vansjø. EO1, through this process, knew that M1 wanted to contribute, from both the administrative and political standpoint, and formally asked the Officer how they should handle the case served by Morsa. The Officer answered that it was sufficient to describe the case in the budget. There was no need for a proposition because the politicians would acknowledge it in the

budget process and economy plan. The economy plan was voted on in early December 2014.

5.5 MAYOR 2

The Mayor2 (MA2) was Mayor in M2, the second largest municipality in this research, with a population of approximately 15,000. (Thorsnæs, 2016)

MA2, through the presidency, receives an annual report from Morsa. They make inquiries and assess the public health barometer once a year; though MA2 wondered how accurate they were, in contrast with the actual situation.

5.5.1 MA2 Attributes of the HIa

MA2 said that, through the proposition, they focused on:

- Physical activity in the water areas
- Pathways
- Common arrangements for disposal of waste
- Regulation of transportation by boats on the lake

They try also to preserve the area as well as possible and, at the same time, ensure availability to the public besides attracting tourism.

5.5.2 MA2 Plans

MA2 stated that it is obvious that the administration should use the master plan in the propositions. She explained that they have HIa in their templates for propositions and that it is one of the measures for municipal public health. Then she clarified that this proposition came from Morsa and that it was uncertain whether the case handler in Morsa had read the municipal plan.

According to MA2 the politicians were informed through documents, but since this is a complicated discipline she felt that one had to be sure of what one meant when disagreeing with Morsa proposals. She added that other aspects Morsa

contributed to increase the consciousness around the main highways E6 and E18 and the general knowledge in the population.

5.5.3 MA2 Process

MA2 talked about Morsa as important in contributing to the process. Despite sitting on the board, she believed it to be a top heavy organisational arrangement. Initially, this was an acceptable way to organise, hence the high connections in the municipalities. MA2 was no longer comfortable with this organisation, however, because she believed those who were most interested, and with discipline knowledge, should be sitting in the board. She believed also that Morsa contributed to increasing knowledge through raising the consciousness of politicians and the general population about biological diversity and supposedly small actions that have an impact on tap-water quality.

In her view, Morsa provided the groundwork that enabled municipalities to manage the challenges ahead. She thought that professionalism had grown within the disciplinary themes, so each municipality themselves do not hold the disciplinary capacity to manage the issues at hand.

She explained that was the reason why the case came as a common proposition from Morsa. Then the Executive Officer at the Department of Planning and Environment oversaw the case before it went before the presidency and the Municipal Council.

5.5.4 MA2 Decision

According to MA2, the financing would be entirely covered through the water and drain budget. Since there had been much information about the new financing during the process, and no disagreement between the municipalities, she believed that the politicians accepted the financing arrangement. She stated also that there was little debate about the theme, and that there was consensus about Morsa as a project, and that not to participate was not an alternative.

5.6 CHIEF EXECUTIVE2

Chief Executive2 (CE2) noted early that there were no conscious acts linking HIa and the municipal plan. Though CE2 believed they had managed to conduct a safe HIa without checklists and take sufficient care of the HIa and public health. He explained that the appraisal of public health, as well as the appraisal of the environment, are part of the proposition template. To make specific checklists for the case handlers requires more thorough training and follow-up by the public health coordinator, who only has instructions to supervise the HIa in single propositions. The public health coordinator cooperates also with other municipalities to improve the tools for HIA and HIa.

5.6.1 CE2 Attributes of the HIa

CE2 said that he did not consider the upbringing of children and youth as important in this context. He regarded the important theme areas to be:

- Leisure-time

- Recreation

- High quality of the water area to ensure the quality of tap water, which means a healthy environmental status for Vansjø and other lakes in the Morsa area and watersheds.

5.6.2 CE2 Plans

CE2 believed that the municipal master plan is the anchor of all the cases and claimed that it provided a good system for work on public health. There is a revision loop on the results, and this connects the master plan to the HIa through the public health coordinator. Therefore, the public health coordinator is part of CE2's staff.

CE2 claimed also that the case shows that the EU directive has an impact on Norway safeguarding their water resources. When referring to the proposition, he viewed this as a small case but an important contribution to show the controlling role of the municipalities.

5.6.3   CE2 Process

Through the administrative handling of cases, CE2 clarified that the decision about whether a proposition of a case should be made is decided together with the management team. In this case, it was a common case proposition from Morsa and an overview analysis around the Chief Executive's table with the chief executive management group. The Department of Environment and Technical received the assignment. Then the proposition went to the Committee of Planning and Environment before it was sent to the Presidency and ended in the Council.

5.6.4   CE2 Decision

CE2 believed the core issue of the case to be the surveillance and whether they should proceed with it or not. This was decided in discussions during a period in the working group of Morsa and internally in M2 leading to a decision about which path they wished to follow. The case was seen to be about the change of financial situation and a simple case about ensuring high quality tap-water resources. The alternative was that they would have had to do it themselves, which was more expensive. Therefore, CE2 stated that he approved the proposition because he believed it good enough. He claimed that aiming for 80% success, considering their limited time resources, was sufficient.

Other important issues raised by CE2 were the safety of the water delivery system and that water is important for health aspects. These are, according to CE2, political drivers born out of the wish for common responsibility for the water resources.

5.7   OFFICER2

Officer2 (O2) claimed that they can prove throughout their organisation that the Morsa network has an impact on public health and society in their municipality.

O2 explained his view by telling they divide the impacts on both environment and public health. He believed that they should use professionals to do HIAs on the impacts on public health in the cases of the water areas; they are obliged to do this in agriculture and other discipline areas. Furthermore, he claimed that if public

health is considered it must be always be via an HIa. O2 considered also that the impacts are mainly mentioned when they have positive effects on the environment and public health. He further argued that there should perhaps have been a more in-depth disciplinary discussion on the themes of public health.

Moreover, O2 stated that the main reason to work in public office is to work to contribute to better health for the population.

5.7.1   O2 Attributes of the HIa

O2 reflected that they could have a more systematic approach to public health and thereby be able to write more about it and not only point out what is relevant to health. For example:

- A swimming area
- Wildlife recreational area used for swimming, fishing and recreational activity
- Leisure-time activities in nature
- O2 stated also that Vansjø provides tap water for 60,000 people, so the quality of the water is important and sets demands on raw-water quality

Based on this, O2 believed it is important to track the environmental status of Vansjø, how the spaces are used, protection of the waterbeds and water quality. And in this case, the main issue was to ensure environmental surveillance of the water, especially Vansjø, to see if the actions had positive effects and to discover what works and what does not, and to change direction if necessary. Furthermore, he argued that having knowledge of the water resources with the aim of long-term sustainability is a good reason to maintain surveillance of the environmental status. O2 added that this shows that the EU directive has an impact on Norway safeguarding their water resources.

5.7.2   O2 Plans

Regarding the master plan and the proposition, O2 believed there are too many points to write about in the context of the proposition. Therefore, he believed it is better to focus on those of importance. In the action plan of Morsa, it is not easy

to find any points on public health directly relating to the municipal master plan. The action plan of Morsa does provide some main moments relating to public health, however, and a platform to build upon for the water area. In the thematic plan for the environment, he pointed out that you can find a link to public health. Here, public health is a critical success factor, and they report on public health and society. O2 said that from time to time they mention different areas when considering environmental cases that contribute to public health and society. Furthermore, he could tell that the municipal uses BSC with aims, areas of focus and critical success areas. Regarding this, they use the 'apple-book' annually. That is the quality system of the municipal, and the guidelines that the managers use. These are presented to all the managers in the municipal. Seventy managers gather once a year, and meet with the department officers throughout the year. The main points of, for example, ethical management systems etc., are followed up.

5.7.3   O2 Process
Within agriculture, O2 claimed that there are demands that assessments are handled by professionals to determine the need and the case for financing the surveillance they want because of the municipal need for surveillance of Vansjø. In cases with a higher impact on the economy, they must do more to pass a resolution in the act. O2 clarified that this was not needed in this case, however.

He stated also that this case was handled by the Executive Officer of the Technical Department, but that the Chief Executive is entirely responsible for every case. Normally, it is enough that the cases are raised with the Committee of Environment and Technical. In this case, however, it went all the way to the Municipal Council for resolution. O2 added that this case had little impact on the budget.

5.7.4   O2 Decision
According to O2, the key reasons for the decision were the need to support the opportunity of surveillance of their waters because the quality can change very quickly. Furthermore, he stressed that it is important to keep the knowledge of the

waters alive; mainly, the aspects of secure water quality and environment were considered most important. If there were a conflict of interest, however, the public health impact would be considered the most important.

5.8   EXECUTIVE OFFICER2

Executive Officer2 (EO2) believed the HIa to have at least the same influence in this case as with a case linked to health, but more indirect.

5.8.1   EO2 Attributes of the HIa

When it came to HIa areas, EO2 mentioned:

- Equity distribution
- Recreational area
- Public health, in the sense of Vansjø being a tap-water resource

EO2 stated also that an expert on public health could probably improve the HIa because the theme of public health is extremely broad and, according to her, covers:

- Water quality
- Drainage and sanitation
- Traffic
- Recreation
- Playgrounds
- Safe routes to school
- The psychological perspective

EO2 concluded that she did not know any definition of HIa because it was difficult to think in the terms of public health. She said that during the interview she became more conscious about HIa, and had trust in the appraisal she had done because she believed it important to highlight the relevant issues. She expressed that there should not be made templates of the HIa in advance, because they inhibit reflection.

5.8.2 EO2 Plans

EO2 claimed that it perhaps would be easier to view the perspective of public health when you did not have a long history of the case. EO2 meant that it is an important theme. When it came to the HIa in the case, EO2 stated that she mostly writes what she believes to be relevant without looking at the master plan. Furthermore, she reviews other cases to see how they may be different considering the HIa and that they were more structured and distinct than this case. EO2 believed she had become more conscious about the subject because, normally, the economy is a larger concern than public health. In this case, EO2 did not really consider the HIa because it was a part of the template for the proposition as an universal design.

5.8.3 EO2 Process

EO2 explained that the HIa has been a new point in the template for propositions the past year and a half. And, for the past year, they have had a public health coordinator and therefore have had more focus on the HIa. The template is in their archive system, where political cases are produced. In the template, they have rubrics regarding what the proposition is about, the appraisal of public health, universal design and environment. They therefore got the opportunity to copy-paste from a similar case even though there are no templates about how they should think about the HIa. Then the Officer approves the propositions before they are sent before the Committee. EO2 also provided a description of how a template should be a tool similar a checklist, a general helping-aid that functions everywhere.

5.8.4 EO2 Decision

EO2 stressed that the core of this case is to make sure there is a justifiable level of surveillance to see if their actions are conducted in the proper manner. They have been granted governmental financing for several years and because of this the largest fertilisers have shifted from water and drainage to agriculture. Therefore, EO2 believed the agricultural department should cover their part in the programmes. Furthermore, there have never been any questions asked about

whether they should participate in Morsa. The core in this case was the financing of it and not public health. She clarified that politicians accepted the proposal without any great resistance. She further explained that there had been a Morsa process in advance whereas one of their Executive Officers had attended all the assemblies.

5.9   MAYOR 3

Mayor3 (MA3) was the Mayor of M3, which is the smallest municipality in this research with a population approximately 7,000. (Thorsnæs, 2016)

M3 stated that they had not conducted an HIa in this case, but that an HIa is important and influences decisions. He wished to raise the theme of HIa regarding swimming water and providing a pleasant experience and a safe experience when using Vansjø. MA3 guessed that the levels were better than they were.

5.9.1   MA3 Attributes of the HIa

After viewing the HIa in the case, MA3 considered that an HIa with only one and a half sentences was too short. MA3 believed that it could say more about:

- Swimming
- Dangers
- Vansjø as a recreational area
- Fishing
- Boats

MA3 supposed, however, that most people did not consider the HIa in this case, but rather what it was about, i.e. the financing and the proposition to vote on. MA3 stated that when politicians found this sufficient, he believed they did not consider public health and environmental consequences. MA3 connected this to former practices when there were only economic considerations, whereas public health now has a larger role.

Other concepts that MA3 raised as relevant attributes of the HIa in this case were:

- Recreational area
- Tap-water area

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- That the region does not have alternative sources for drink-water, except in crises through cooperation with a couple of municipalities some 50 km further south of the region.

MA3 had lived in the water area all his life and believed it to be important for swimming, playing, fishing and other activities. He stated also that it is important as a principle alone to control surveillance of our waters and streams. He also expressed a belief in his administration, which was the reason why he and other politicians do not meddle into the process of propositions. By this, he meant that the manager of Morsa had done her job.

5.9.2   MA3 Plans

MA3 stated that it is important that the right interest organisations within agriculture and land owners are heard in regard to the plans of Morsa. Furthermore, MA3 felt that this case should be more concise because its length could result in it losing some of its important messages. Then MA3 considered that they should work the master plan into the administration for a common understanding of the context.

To maintain the public health aspect, the municipality has a public health coordinator who examines different cases. MA3 explained that they are working to develop the HIa tools and reflected that they may not have been able to do it properly, if they had attempted it earlier. He believed that it is important that the executive officers connect the master plan to the propositions. He claimed that the politicians do not have the time to do this, and that it would interrupt the process of the proposition. MA3 claimed also that politicians have too much to read and that the main aspect is to deliver the message concisely.

He explained that he hoped the politicians can connect the municipal plan and the cases. In everyday, stressful situations, however, he believed that it is important that the administration do it for them.

Therefore, MA3 stated that he did not consider the proposition in view of the master plan.

5.9.3 MA3 Process

MA3 had been informed about the case at an early stage through discussions in the board of Morsa. The case had also been raised in an owner meeting. Therefore, the case was processed by the administration in the Committee of Technical and thereafter in the Municipal Council.

5.9.4 MA3 Decision

MA3 claimed that engagement over several years and everyone having a relationship to the area creates knowledge other than the proposition in this case. They have a common understanding of the case, which helps them with their decisions.

5.10 CHIEF EXECUTIVE3

Chief Executive3 (CE3) claimed that they had worked with the aspect of public health since World War 2, albeit with another focus. CE3 believed that each case handler must employ common sense when performing an HIa.

5.10.1 CE3 Attributes of the HIa

When it came to this specific case, CE3 said that the issue of recreation is not the driving force of public health. He believed it more a side effect. He believed a more practical approach to be:

- Swimming area

Furthermore, he believed that if this case were about the use of water areas for recreational purposes and leisure-time activities, the aspect of public health would have been much broader.

CE3 explained that it has been a long-term project to improve the water quality. It has been a high priority for the municipality in general to consider sustainability and to protect their water resources, water areas and to ensure the quality of tap-water resources. Tap water has an important effect on public health, so the HIa was narrow but important to this case. The municipality have purification systems

that manage all sorts of tap-water qualities, however. Therefore, this was not an issue of quality.

Through the ongoing research project on HIa, CE3, and other representatives, participated in a seminar where they experienced good and bad HIa as a learning area, which served as an approach for the reinforcement of rather than receiving rules of conduct.

Furthermore, CE3 stated that this case was a part of a larger whole regarding surveillance, and is therefore not an important case in the main area of the Morsa collaboration. He declared that the new legislation is far more ambitious, however, and places demands on the municipalities to take responsibility, e.g. overview the local public health status. For him, this is of high prestige, together with quality assurance, and that they have a policy for improving water quality. He thought that the Executive Officer of the case did not have much to work with because it is a relatively new area within the municipal. CE3 then questioned how they should work with public health. This is because he believed that it is a challenge to have it as a long-term/long-range view within each sector. He also added that to see the results of an action can take years and it is a large disciplinary area of conduct but that the HIa makes you more informed.

CE3 also believed that this case is about control and does not concern public health, unless you do something wrong.

5.10.2 CE3 Plans
When it came to the administrational process, CE3 regarded it as being anchored by the climate and environmental plan, where there are some established principles on how to conduct cases. Earlier resolutions will then be second-hand. Then there is equity in public health. CE3 stated that it is not based on common sense in cases of similarity. In the moment, he believed that executives consider factors of environment and public health to ensure the quality of each case, based on the fact that the HIa in propositions should be short and must be done.

CE3 stated that public health monitoring was the municipal analysing tool. He further stated that all propositions should be anchored in the master plan and not

be in conflict. He said that in established cases, however, there was less need of the master plan, though it is important in cases concerning development. Furthermore, he could tell that the municipality had employed a public health coordinator to offer advice to the executives in their cases because there are few resources available to conduct assessments among the administrational staff. The managers in the sectors do the assessment work but it is not one of their primary tasks.

5.10.3 CE3 Process and decision

CE3 explained that all cases are built on the legislation of the area where the politicians create an action programme that is assigned to the administration. In this case, the government reduced their financing so the municipalities had to contribute to ensure further sustainability of Morsa. Since Morsa maintains the tasks needed to follow the EU water directive, the proposition was acknowledged. He argued that it ensures the surveillance function, the environmental aspects and ethical perspective. He believed that it is the municipal responsibility and the role of administrator that is important, followed by the interests of use of the water areas. Since the agricultural sector creates the main pollution through fertilisers the farmers have contributed to reduce their pollution.

CE3 clarified that this case was presented through an information sequence for the Discipline Committee by the representative within the discipline from Morsa. This presentation prepared for the coming development. Then the proposition arrived from Morsa and went to the Disciplinary Committee before being passed by the Municipal Council.

5.10.4 CE3 Decision

CE3 regarded this case as an environmental political issue with low economic consequences on strongly established politics with a consensus, and thereby relatively uncontroversial. He stated that this case is meaningful but does not engage great political attention.

5.11 OFFICER3

Officer3 (O3) believed that the HIa is based on common sense in reference the result of the supervision about what has an impact on public health. She argued that to think broadly enough about public health can be a challenge for all the staff.

5.11.1 O3 Attributes of the HIa

Regarding the health aspect in this case, O3 believed this to be about water quality and that suitable financing would enable further purification and thereby have an impact on water quality and how this affects health. She stated that the case was based on the EU directive of water.

5.11.2 O3 Plans

Regarding performing an HIa, O3 described how they receive statements if needed, or consider it with their own knowledge via discussion about themes within the discipline. In the case of financing surveillance, she believed there was little discussion because they had to follow-up the common proposition to obtain a resolution that held consensus. Furthermore, she explained that they have a public health coordinator, as well as a municipal medicine officer, who they consult with to provide information or when considering health issues. O3 stated that she is the Chief Executive within the cases of her responsibilities and only consults with the actual Chief Executive if there are any special considerations.

When it came to the master plan, O3 clarified that they do not work the master plan into the action plan of the section. O3 viewed this as being an arch between those two plans because they both have been through resolutions in the Council. Thereby, O3 believed they are covering what is of importance even though they have no organisational implementation of the master plan in the section. She knew that they use goal measurements in the main budget but not in the daily work of the sector.

5.11.3 O3 Process

According to O3, their organisational model consists of nine sectors beneath the Chief Executive; the O3 is responsible for one of them. There are rules of delegation that allocate the responsibilities. Two of those responsibilities are the municipal action plan and budget within the section that the Council passes. The section provides yearly a report of the section plan.

O3 claimed that the resolution of the financing was not prearranged. O3 stressed that the case was important due to it being within a work area of continuous surveillance and the register of water quality, and that the delegating system rules that the case should be sent to the Council.

5.11.4 O3 Decision

O3 stated that it was her decision to approve the case before it was sent to the committee since she operated as the Officer responsible on behalf of the Chief Executive within the section and area of delegated responsibility. She read through the case presented by the Executive Officer, based on the common proposition from Morsa. The proposition highlighted specific areas for the municipal and was sent to the Technical Committee.

5.12 EXECUTIVE OFFICER3

Executive Officer3 (EO3) knew that public health is an important theme in the municipal plan, but what it says or whether it would have any impact, she did not know.

5.12.1 EO3 Attributes of the HIa

EO3 believed that the appraisal was based upon what people are concerned about. Attributes such as:

- The water
- What people are supposed to drink
- Swimming and the surroundings

Factors such as pollution, the environment and danger of toxic exposure of the population were not subjects in the appraisal. EO3 believed it to be somewhat obvious, but the people who read it should see that there are some impacts attached even though there was not preformed any in-depth appraisal. EO3 said that we all understand the importance of clean water and regard it as natural and although the case is comprehensive, in the propositions it is only a small chapter.

5.12.2 EO3 Plans

Regarding the HIa, EO3 explained that they have a proposition template for appraisals within public health, economy, personnel and environment. They have no checklists and EO3 did not review the case in view of the master plan and the aims of public health.

EO3 explained how much one should write is often difficult to know because if you write too much many people would not read it, but if too little it is difficult to be comprehensive. She viewed it like a cost-benefit analysis, where the costs are vast and one should use the money in different areas for improved benefits for public health.

Furthermore, EO3 said that there exist checklists for performances of HIAs. She had used them when working at the office of the county government, where they also held hearings with the different interest groups that cases had health impacts upon.

5.12.3 EO3 Process

EO3 told about the organisation of Morsa and how they receive professional advice from NIVA about how to have sufficient and acceptable control on the water quality in swimming areas. EO3 regarded this as a public health issue and said it is important they receive support from the discipline groups who are engaged when conducting assessments of the needs, together with the other municipalities. Essentially, the whole case, according to EO3, is driven by the fact that they should improve the water quality. To achieve this, she said they must use the available competence, and confer with others when necessary. The core is,

according to EO3, to ensure surveillance, which polluters must pay for and thereby the work can be conducted properly, measuring the status with an overview of what that can be improved.

EO3 stated that you must have action-programmes for improving the water quality. To do this, she believed that one must document and know the initial measures and follow through with a long-term perspective. She explained her view as very holistic, where HIa is a part of the whole. She participated in the surveillance group of Morsa that forwarded the case and she edited the proposition to adjust it for the municipal. Then she sent it forward to be considered in the Technical Committee and the Council.

5.12.4 EO3 Decision

EO3 clarified that the job was to convince the politicians that they should make the decision about granting finance for surveillance. The process, which had been ongoing for long time, laid the groundwork for the decision. If the resolution did not pass, the HIa would have been too weak; but in this situation, it was a strong case to begin with. Furthermore, she claimed that the decision-makers had background knowledge of the case. It had an established foundation and, in contrast, if there were no surveillance and no financing, everything would go to waste.

6 ANALYSIS

In this chapter I will present the analysis and conclusion.

The analysis part of this thesis is divided in two. The first part through the document review and presenting the interviews and then this chapter. In this chapter I analyse the data revealed through the triangulation of the document review of the proposals, the master plan and interviews cross-municipalities and cross-organisational work flow (Mintzberg, 1989). To support the analysis, I use the theory from chapter two and discuss it in the context of the research problem and questions and present the findings.

6.1 CONCEPTS OF HIA, KNOWLEDGE AND TRAINING

In this section, I will analyse how the different roles use and view HIa, describing where their knowledge comes from and what influenced their view.

6.1.1 HIa systems

All three municipalities have developed a system for HIa with a bullet-point appraisal in the proposition templates. All three municipalities have a public health coordinator who can supervise the performance of the HIa. This is in accordance with the WHO method of conducting a rapid HIa. (World Health Organization, 1999, p. 6). The system did not provide any instructions or tools beyond the template of the proposition, however, and nobody asked their public health coordinator for guidance.

This became obvious when EO3 highlighted the difficulties of knowing how much to write. And the interview with EO2 revealed how she did not consult the master plan but consulted other cases and wrote what she believed to be relevant. EO1, however, was in favour a convenient tool for HIa but had managed without it.

These views imply that the HIa is created by interpretation based on individual frames of reference (Bolman & Deal, 2010, p. 287) (Strand T. , 2012, p. 153). The lack of sufficient tools leads to ambiguity, leading those conducting the HIa to search through their own set of definitions and values regarding public health. Another factor is that they share the same experience cross-municipalities and are all working in the operational level of the organisation (Mintzberg, 1989) which indicates a tendency that they do not make a direct connection to the public health in the master plan. EO2 did consider other similar cases, which is one of the crucial areas Negaard (2015) suggests those working a case should use, along with contextual and scientific knowledge.

In M2 and M3, the executive officers had conducted an HIa in the proposition 'Further financing of surveillance in the water area of Morsa', while M1 had processed the case administratively directly through the budget and, therefore, without an HIa. The Executive Officer of M1 had conducted an HIa in the hearing for the *Regional plan for water management in the water-region of Glomma 2016 – 2021*. The process of this hearing was interesting because of the direct link

between HIa and public health that EO1 had made in this case and, further, the HIa elements added by the CE1.

This suggests that CE1 had a distinctive view of the importance of the water area and Vansjø, and valued the public health perspective considering the user-interests. This illustrates a clear attempt to combine planning activities from the institutional level to the strategic level regarding public health attributes and down to the operational level with the important consideration of the finances (Amdam R. , 2011).

CE3 viewed it differently, however, if this were the case then the emphasis on public health would have been much broader.

His view suggests he did not consider the user-interests as part of this proposition, which highlights differences in the understanding of the content of an HIa in the case of 'Further financing of surveillance in the water area of Morsa'. Though this does not imply that he has another set of values or view on public health, it rather suggests that he regards the instrumental rational aspect of the case to be within the area of financing, and thereby be viewed merely in this context of understanding. This may be viewed as a decision following the interaction model of decisions by McCall and Kapland (1990). When we put the views of CE3 in the interaction-model we can see that he *recognises* the problem as instrumental financing where the *resources* are the finances and the *external pressure* is based on the multi-layered water issue. (ibid.)

6.1.2 HIa attributes and their validation

There are similarities in the three HIa accompanied by the CE1 appraisal. These similarities involve water quality, recreation, leisure, source of tap water and attractiveness as attributes of determinants, see Figure 3 (WHO Regional Office for Europe, 2013). The focus of each HIa, however, has distinctive differences. M1 and M2 focused on the positive activity traits in a public health view through their HIa, while M3 focused on the enlightening of water quality and the risks of pollutants. During the interviews the different respondents gave similar answers

when mentioning the positive activity aspects of the area, while some also mentioned enlightening aspects.

They gave purpose to the HIa by adding positive activity attributes and enlightening attributes in the context of the case. Some of the attributes came from the HIa in the cases; however, they also reflected upon the theme and said what they believed should have been in the HIa.

When we consider the attributes from the different municipalities, there is a tendency that they have the same frame of reference with which to highlight these attributes (Bolman & Deal, 2010) (Strand T. , 2012). Furthermore, the positive activity attributes are symbolic in their capacity, while the enlightening attributes are provided their capacity through instrumental tools. Such tools may be set parameters for measures of pollution, water quality, and statistics on, for example, how many people suffer from mental illness, spatial/land-use planning, policy making and risk analysis/management.

These attributes indicate a shared understanding across the municipalities and between the administrational respondents and political respondents of what to regard as important health impacts in cases relating to water and streams (see Table 9). The line between the natural environmental determinants and lifestyle and activities determinants, according to Figure three (WHO Regional Office for Europe, 2013), can in table nine be seen as crossing over. This is evident when it comes to the enlightening attributes, providing an understanding of how these cases are multidisciplinary. It could be claimed, however, that this does not take into account the different views the respondents on the different organisational levels had on the subject. And that may be accurate.

There were differences in how the respondents answered. These differences were apparent in the way each person had been involved in the processes of Morsa, and at which levels. Furthermore, all the mayors sat on the board of Morsa. Therefore, they all had knowledge of the water issues and they had participated in the board resolution for the proposition 'Further financing of surveillance in the water area of Morsa'.

Considering that EO1, EO3 and O2 had all been involved in the theme groups of Morsa, it suggests they have all been exploiting the themes of Morsa through this network and thereby increased their common knowledge and scientific views.

They all were actors promoting the actant (Feldman & Pentland, 2005) of Morsa that has become a symbol of the crisis of Vansjø, providing external and tacit (Lam, 2000) encultured knowledge (Blackler, 1995) (Blåka & Filstad, 2007) in a spiral of communication (Amdam & Veggeland, 2011) through generations. This indicates a mobilisation within the discipline of water areas creating concepts that incorporate the same frames of references within the health determinants.

Another interesting aspect is that both MA1 and CE3 had participated in seminars related to the research project on HIa. CE2, however, said that the public health coordinator cooperated with other municipalities to improve the tools for HIA and HIa. And MA3 said that they were trying to develop the HIa tools but they could not have done it earlier because they lacked the proper knowledge.

The fact that all three municipalities work in cooperating networks, and two of them within the strategic apex level of the organisations((Mintzberg, 1989) to develop the tools of HIA and HIa illustrates a top-down capacity building through social learning and mobilisation of the public health perspective, providing the participants with a common understanding and focus on the area with development of the HIA and HIa. (Amdam & Veggeland, 2011; Friedmann, 1987)

Aims in the master plan	Positive activity attributes/symbols	Enlightening attributes/tools
1a. Social equity and quality of life for all	Playgrounds	Drainage and sanitation
	Paddling	
1aii Stake on physical activity in the arena of Vansjø	Swimming	Environmental status of Vansjø, Morsa area and other waterbeds
1aiii. Establish social meeting-points for all ages in the local environment	Fishing	
	Leisure activities	Equity distribution
1ci. Motivation and adjusting for physical activity	Pathways	Pollutants
	Tap-water quality	Regulation of transportation by boats on the lake
1di. Establish multicultural arenas for work and leisure activities	Wildlife activities	
	Social equity	Risks
1e. Universal design of meeting-points and land areas for public use with Vansjø as centre of outdoor life	Recreational areas	Sustainability
		The psychological aspects
1ei. Establishing good meeting arenas and play areas with attractive placement		Traffic
		Water quality
1gi. Strengthening of low threshold activities to increase physical and social activities		Common arrangements for disposal of waste

6.2 HIA AND THE MASTER PLAN

In this section I will analyse the connection between the HIa and the municipal master plan.

It was not one of the executive officers that had used the aims in the master plan when conducting the HIa. Examining the aims of the master plan, however, there are several linkages to the positive activity attributes presented by the respondents (see Table 9). Furthermore, the enlightening attributes operate as the premise for the positive activity attributes that will help to achieve the aims of the master plan. The executive officers did not consciously connect the aims of the master plan to

the health impact appraisals, though it strongly suggests that they did unconsciously. The strength of this correlation, however, can be the subject to discussion because the organisations tend to be multi-layered, which leads to uncertainty and a weak correlation between action and result (Strand T. , 2012, p. 153). This raises the question of my role as researcher and my focus on finding a red thread, where one might possibly not exist. There is a need to scrutinise this problem further.

All three municipalities make their action plan every year, and M1 and M2 uses versions of BSC where they make targets that are measured throughout the year.

CE1 presented a target in the BSC system that promoted the area of Vansjø as a recreational area providing good nature experiences and effects for public health. But to accomplish these aims they would need to improve the water quality and to do so they would have to arrange a conference.

This indicates that M1 does incorporate the aims of the strategic master plan into the operational planning of action plans and budget (Amdam R. , 2011). These are activities that the sections and administrational personnel are measured by, and thereby are exposed to, providing them with a set of common frames of references.

O2 explained that in the thematic plan for the environment you can find a link to public health, which is a critical success factor, and a report on public health and society that considers environmental cases that contribute to public health and society.

Obviously, M2 also have a sort of BSC that contributes to strengthening the aims in the master plan. This indicates that they have an active operational relationship to the aims providing the administration with a set of common frames of references, with public health as an anchor.

O3 clarified that the municipality do not work the master plan into the action plan of the sections even though there could be considered to be an arch between the plans. Therefore, O3 believed that they cover what is of importance despite having no organisational implementation of the master plan in the section.

M3 do not provide the same indication of creating common frames of reference between the master plan and other operational planning activities. O3 stated there was an arch between the master plan and the action plan, but at the same time contradicts herself in the next section. This does not imply that they do not have one, however, but merely that it did not surface clearly in this context.

6.3 PROCESS AND DECISION IN THE ORGANISATIONS

In this section, I will clarify the organisational structure of the municipalities and how the process of the proposition passes through this structure. I will also clarify the formal structure and whether it has an impact on the correlation between the use of HIa and the master plan in each municipality.

6.3.1 M1 – the organisational process and decision

This municipality has a structure that has implemented major aspects of NPM in their organisation and planning activities. They have developed instruments and tools, such as BSC, which measure the planned activities of the sectors and units in the municipal administration with linkage to the master plan. They have detected a lack of wholeness, however, were this approach does not completely support the municipal role in development of the society. This indicates that the municipality view the need to move towards a WOG approach with both vertically and horizontal attention within the instrumental perspective as presented by Christensen and Lægreid (2006) and the symbolic as clarified by Negaard (2015).

Throughout their planning processes and organisational arrangements, they focus on public health, though the case of 'Further financing of surveillance in the water area of Morsa' did not have a public health view for the respondents. They considered HIa important and mentioned similar attributes during the interview, but the public health in view this case was not their main concern. They chose to process the case within the administration and not through a politically decision process, even though it would be treated inherent that the budget process was political decided. The process in this context ended with the middle line manager,

O1, based on his delegated formal authority from the strategic apex to make such decisions (Mintzberg, 1989).

He based his decision on the assumption of the political view, and used the room within the delegation and budget. The budget went through resolution in December and thereby the decision made by the administration for the financing was acknowledged by the politicians. Through this process there was not performed any HIa which indicates an ethical utilitarian decision and thereby instrumental approach.

When we consider the M1 hearing in regard to regional plans for water management and the local action plan for the Morsa region, this was processed all the way throughout the organisational work flow (ibid.). One of the reasons for this may be that the plans are placed at the institutional level as meta planning (Amdam R. , 2011). The Committee of Environment, Technical and Transportation had, in this case, an upstream view (Dahl, Berg, & van der Wel, 2014), but not one that evidently connected health nor the aims of public health and living conditions with the municipal master plan, except for the concern about water quality. The Committee was engaged in the plans, however. In contrast, the City Council added a point that can be viewed as a contribution to the HIa of the case concerning the tap water and society risk during flooding.

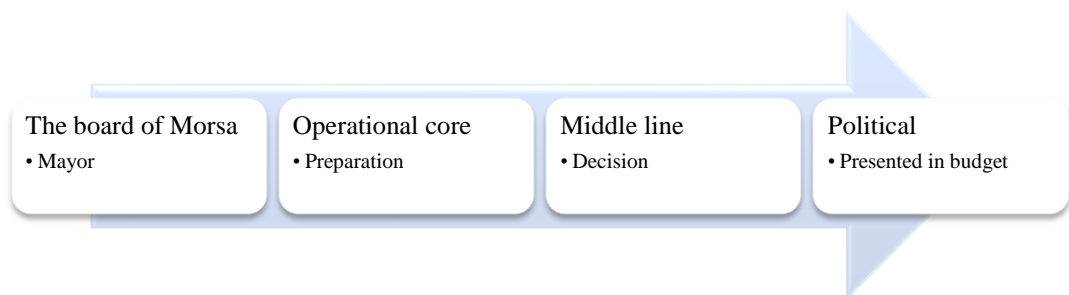| The board of Morsa	Operational core	Middle line	Political
• Mayor	• Preparation	• Decision	• Presented in budget

Figure 9: The process of the proposition in M1

6.3.2   M2 – the organisational process and decision

M2 uses BSC with aims, areas of focus and critical success areas. They have a quality system called the 'Apple-book' with guidelines for managers. (Aune, 2008) This was only mentioned by O2, however. in M2, the process of the

proposition went through the entire organisational workflow, though not in a straight line. First it was treated as an overview analysis in the strategic apex by the chief executive management team before they assigned the case to the middle line section of Environment and Technic. The middle line manager, O2, then handed the case to the Executive Officer in the Technical Department, the operating core (Mintzberg, 1989). EO2 then prepared the proposition with the HIa, among other appraisals, from the template, before O2 approved it and sent it to the Committee of Environment and Planning that made a resolution with no comments, then to the presidency and finally the Council with no further remarks. This together with the administrational view that this case was instrumental may indicate that it was a consensus in the organisation about the case and that the HIa played an insignificant role in the decision.

This view is strengthened by MA2, that told the politicians were informed in documents, but since this is a complicated discipline she felt that one had to be very sure of one's position to disagree with what Morsa proposes. This may indicate that the organisation of Morsa inherent an explicit embrained and encoded knowledge within the discipline of water-sheds that provides the organisation a three-dimensional power in the decision-process leaving the municipality with no ability to question the choice. (Blåka & Filstad, 2007; Lam, 2000; Amdam R. , 2011)

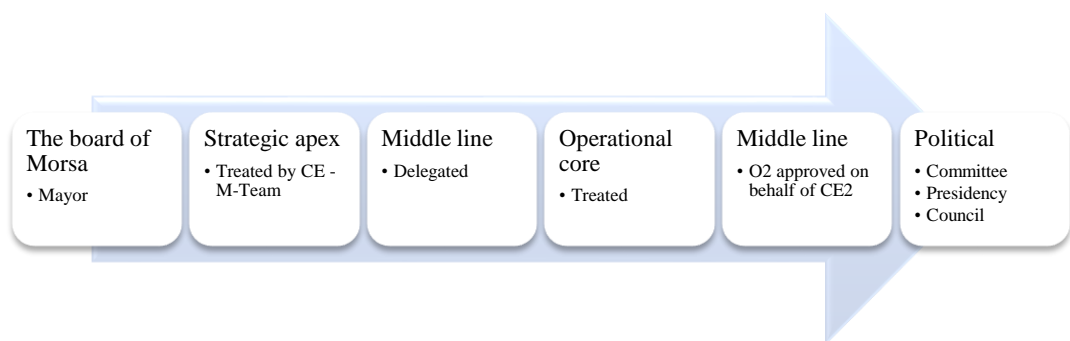| The board of Morsa	Strategic apex	Middle line	Operational core	Middle line	Political
• Mayor	• Treated by CE - M-Team	• Delegated	• Treated	• O2 approved on behalf of CE2	• Committee • Presidency • Council

Figure 10: The process of the proposition in M2

6.3.3   M3 – the organisational process
M3 is a two-level administrative organisation, that means CE3 only has one management level beneath him. CE3 is still in the strategic apex, however, and

O2 in the middle line (Mintzberg, 1989). The municipality does not work the municipal plan into the action plan or sectoral planning, though O3 believed there to be an overarching of the municipal master plan and the budget because both were treated in the Council.

Information was provided in the Technical Committee by a representative for one of the thematic groups of Morsa prior to the arrival of the proposition. Then EO3 prepared the proposition with the HIa, among other appraisals, before it was approved by O3 and sent to the Technical Committee and then to the Council. This indicates an involvement of the politicians that indicate they do work within the symbolic approach of WOG, however, it does not reveal if this information had a perspective besides the instrumental financing of the organisation of Morsa.

MA3 stated that he hoped the politicians do connect the municipal plan and the cases. In stressful, everyday situations, however, he believed that it is important that the administration do it for them. Therefore, MA3 stated that he did not consider the proposition in relation to the master plan. This bears evidence that MA3 have an organisational principal-agent view though unknown how it may play out within the dimensional arrangements of power since this case had consensus both within the administration as well as by the politicians. (Ringstad, 2007)

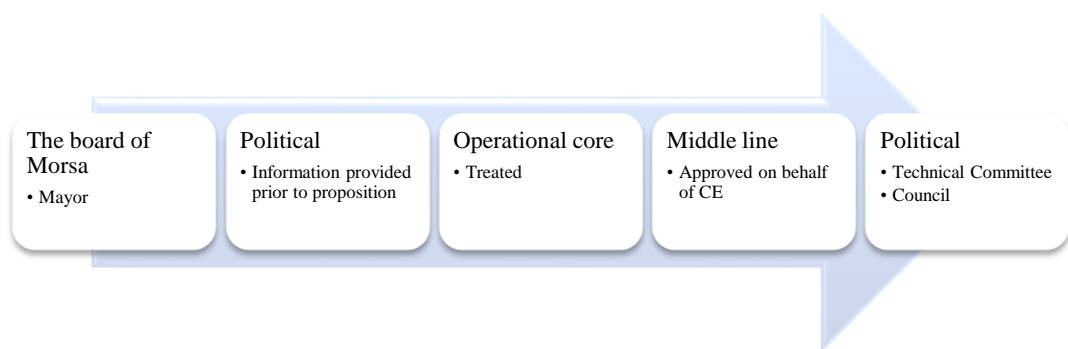| The board of Morsa	Political	Operational core	Middle line	Political
• Mayor	• Information provided prior to proposition	• Treated	• Approved on behalf of CE	• Technical Committee • Council

Figure 11: The process of the proposition in M3

6.3.4 Linkage to the master plan through values and common knowledge

This mobilisation through time and space provided common knowledge and understanding, which emerged into values that connect society across the municipalities, disciplines and provide a frame of reference that combines the

health impacts, the aims of the master plan, the suggested proposition and the decisions made by all the different actors in the processes. They all agree that the work in the water areas is important and they all use concepts that are found in the aims of public health and living conditions in the master plan, in connection to the health impact of the 'Further financing of surveillance in the water area of Morsa'.

6.4 THE CONCLUSION

In this section I will present the answered and not answered of this thesis.

Through this analysis it has been revealed how the actors in the municipality view HIa and the process of the proposition 'Further financing of surveillance in the water area of Morsa' within the municipalities. The analysis has also gone through the different research question in regard the connection to the public health and living conditions in the municipal plan. Through a recurrent view at the research problem though the answer may not be straight forward. The research problem is as following,

> *'Is there a red thread created by health impact appraisals between the political enactment aims of public health in the municipal society plan and the decision-making process of propositions?'*

Through the process of the thesis, I quickly became aware that the different actors in the process of the proposition did not place the same emphasis on the HIa. Neither did any of them have a view on the aims of public health and living conditions in the municipal master plan. The way the HIa were conducted seemed to be rather subjective and arbitrary. The officers and chief executives appeared content that there had been conducted an HIa or that it was not necessary to conduct one. Furthermore, the representatives of the political decision-makers, the mayors, were also rather content that an appraisal had been conducted according to the templates for the proposition in the cases where it had been brought up as a single case. They reflected on the HIa in view of the master plan only when asked about the connection and admitted there was no conscious binding of the two. Therefore, there was no red thread created by the HIa between the enacting of the

political aims of public health in the municipal master plan and the decision-making process of propositions concerning the financing of water-area surveillance. Or at least, not a straight-line connection. But, who claims that a red thread must be linear, or hierarchical?

 If we alter the viewpoint, as in mixed-scanning (Etzioni, 1967), and adding a new dimension, zooming out of our detailed orientation, to a three-dimensional view, we discover another aspect of the thread. The findings hold indications that the red thread is spinning a web, looping both in time and history, and the space of networks in the local societies of all three municipalities.

7 DISCUSSION

In this chapter I will reveal discuss my conclusion within different aspects before I raise the issue of trustworthiness, weakness and strengths with this research.

7.1 THE READ THREAD THROUGH TIME AND SPACE FOR PUBLIC HEALTH

In this section I will explore and discuss the conclusion in view of theory.

Since the 1960s, there has been an awareness by the public, as well as politicians, of the challenges facing water areas, culminating in the prohibition of swimming in Vansjø in 2000. This had an impact on the population in all three municipalities. This shared concern bear evidence of a mobilised cooperation and strengthened the work that began in the late 1990s with a political initiative. This suggest that it turned into a great collective effort through organisational networking. Through the pilot project of Morsa, however it may appear that the issues and concepts of the theme of water sheds, local water areas, environment, ecology and health have an increased consensus. This may be due the cooperation involving different disciplines, involved professionals, private actors, interest organisations and the general public over the course of five decades. Over this period, determinants such as recreational, leisure activities, tap-water quality, swimming-water quality, fishing, and the environment, grew into commonly

known attributes linked to health. Together with the area of Vansjø and other local water areas these attributes appear to have become symbols used by different actors within the municipalities, across the municipalities, as well as in the master plan and the local action plans for the water sheds. (WHO Regional Office for Europe, 2013; Bolman & Deal, 2010; Strand, 2012)

7.1.1 Common knowledge through communicative planning

This common knowledge of the attributes on issues of health also suggest that they have an impact on the decisions made in the municipalities during the process of the proposition. Decisions were made on different levels based on a common understanding of the importance of continuance of the project even though it entailed increased local financial commitment. In perspective of the policy process we can view the municipal need of Morsa as a promoter of the watersheds as important to the municipalities because of the accumulated knowledge through time. This may be viewed as a power projected into the objectives of the municipalities and with utility and sustainability as main core influence. A parallel need of the municipalities is the public health perspective that as well are within the municipal objectives and together these objectives are placed through the proposition into the inputs of the municipality. Issues to assess during the process is the final outcomes – or impacts and the outcomes or results. (Amdam, R., 2011)

There were no obvious questions of whether the financing should continue however and thereby the health impacts not important for the different actors. There were concerns raised, however, from the politicians about whether the state government should contribute with more finance to ensure the continuance of the work in the local water areas. This reflects the importance of the water areas for the nation and not solely for the local water area, or on the contrary only a utilitarian wish influencing the decision making from a municipal perspective to receive governmental instrumental funding. (Selart, 2010)

7.1.2 Consensus through networking and capacity building

What importance do this knowledge have? The findings of this thesis show that there is a common consensus throughout the municipalities and across the municipalities regarding the theme of the water areas. How this consensus has emerged may partly be explained by the focus over time through planning, cooperation between the municipalities on a political level, and capacity building through the organisational networking of the local water area in partnership with the private sector and interest organisations, as well as individuals and professionals. (Feldman & Pentland, 2005)

These may be viewed as institutional factors that contribute across different levels and create foundations through communication and planning activities based on the consensus of participants, stakeholders and the public. These factors seem to have grown with the focus on the importance of the water area, and therefore what it means for their welfare through user-interests, and thereby public health. (Amdam & Veggeland, 2011)

Furthermore, there is also the importance of how the theme is reflected through the municipal master plan and incorporated into the operating plans of the sectors in the municipalities.

It also illustrates the idea of the importance of capacity building of knowledge throughout a region and how it impacts on the consensus needed to release financial actions in cooperation between different municipalities and governmental levels.

7.1.3 The importance

This thesis has developed into something other than I originally predicted. My belief was that there should be a conscious connection between the municipal master plan through the case handling and decision-making process in single cases regarding HIa. Through the research process, however, my conscious has grown in view how the development of the concepts in the interaction of case-building activities between the administration, politicians, interest parts and public in time and space is more important. The municipality as a community builder has many tasks and areas of importance. To select certain areas of more importance

than others, and to make commitments, is done through the democratic process of planning, hence the master plan, which also has been developed through the interaction of politicians, administration, public and interest groups.

7.1.4 Further research

I believe this thesis has provided insight about how there is a red thread between the master plan and an HIa in a single municipal case for proposition, however not a thread that is linear. There are other important findings in this research, however, that make it even more interesting. This study evolved to bear evidence of how development of common sense knowledge and mutual understanding, through interaction between participants, media display and the engagement of the community, can rise as an expanding spiral. This idea builds on the bifocal view and research of Etzioni (1967), together with the spiral view of building of knowledge through communicative, planning and action by Amdam and Veggeland (2011), adding the time of history into a three-dimensional model. Another aspect is the importance of user-interests and how they provide a linkage to concept building across municipal borders, regions, organisations and professional areas. Different spirals can be seen to have merged into a single spiral, and that single spiral has connections to other spirals, touching branches and intertwining on different levels of the 'tornado'. This research is merely an indication of the existence of such a model, but it should be interesting to research further the applicability of it in other areas where there is a conceptual common understanding derived into actions of decision-making. The area of such research may be broad and fall into other topics and disciplines, including public health within other disciplinary fields.

7.2 TRUSTWORTHINESS OF THE RESEARCH

In this section I will clarify the trustworthiness and discuss weaknesses and strengths of this research.

When it comes to qualitative research, trustworthiness is essential (Merriam, 2009, p. 210).

As Patton says, '…the trustworthiness of the data is tied directly to the trustworthiness of the evaluator who collects and analyzes the data.' (Patton, 1990, p. 476) Further Merriam (2009) says that the external validity is tied up to transferability and how generalizable the study is even though a qualitative research is not replicable in the same way as a quantitative study. (ibid. pp.219-223)

This research has been a learning journey of experience and evolved to become something I had not imagined at the beginning. This I regard as a strength, providing evidence of growth both in the research and in myself as researcher. It indicates also that I have been able, as a researcher, to detach from my own assumptions and enter an objective state of mind, however, my lack of experience may be viewed as shortcommings within the research and me as a researcher. In view of that the research has a weakness influencing the trustworthiness.

The research design and use of triangulation, however, have provided enough relevant data to for an in-depth analysis. The theoretical frame, however, could perhaps have benefitted from other relevant theoretical insights to help explain the data, and I felt sometimes that I lacked some connections to the in-depth knowledge I had reviewed and worked with, yet chose to exclude. Furthermore, the choice to interview only the mayors and not the committees may have altered the totality of this research. I do also have a feeling that the view of public health and health impact appraisals may have detoured into the background of the research, which I do regret. Public health and how we, the society view it is important inherent the future.

However, the research also inherent a great strength through descriptions of the course of actions during the research process and the presentations of documents and interviews providing the reader with the ability to draw their own conclusions. Further the results of the research have taken a quite different direction than I had imagined and provides the research with a transferability to arenas in a wide range of disciplines. It has also provided me with the interest to research further based on the findings and how they have emerged during the process. In view of this I believe my research have a trustworthiness that will make it of value to others and hopefully work as inspiration. By altering the view

of the results a bit outside the box this thesis may reveal areas that mathematicians and physicists as well as marketing and researchers within organisation and management will find interesting.

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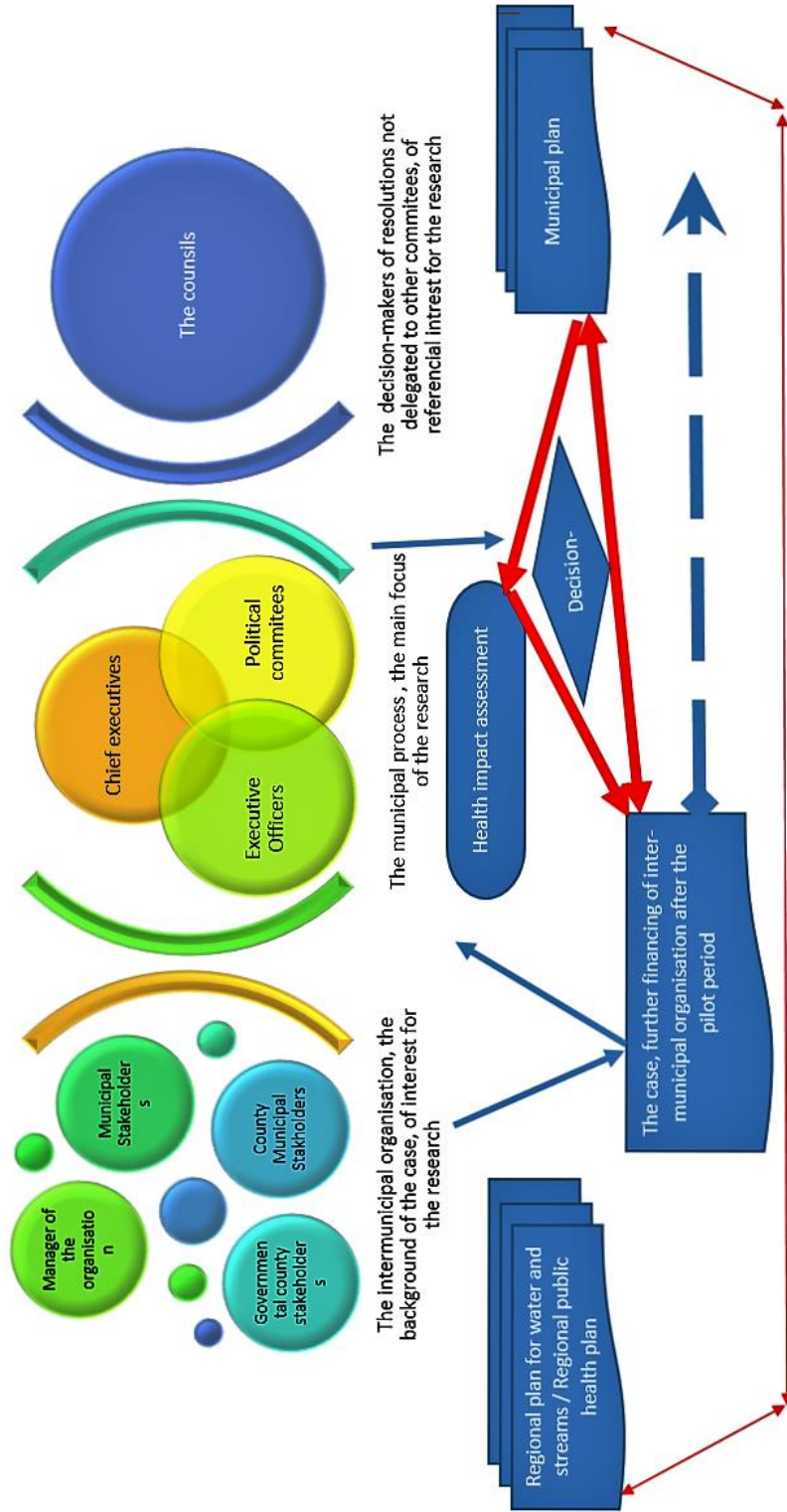Selart, M. (2010). *A leadership perspective on decision making.* Cappelen Damm AS.

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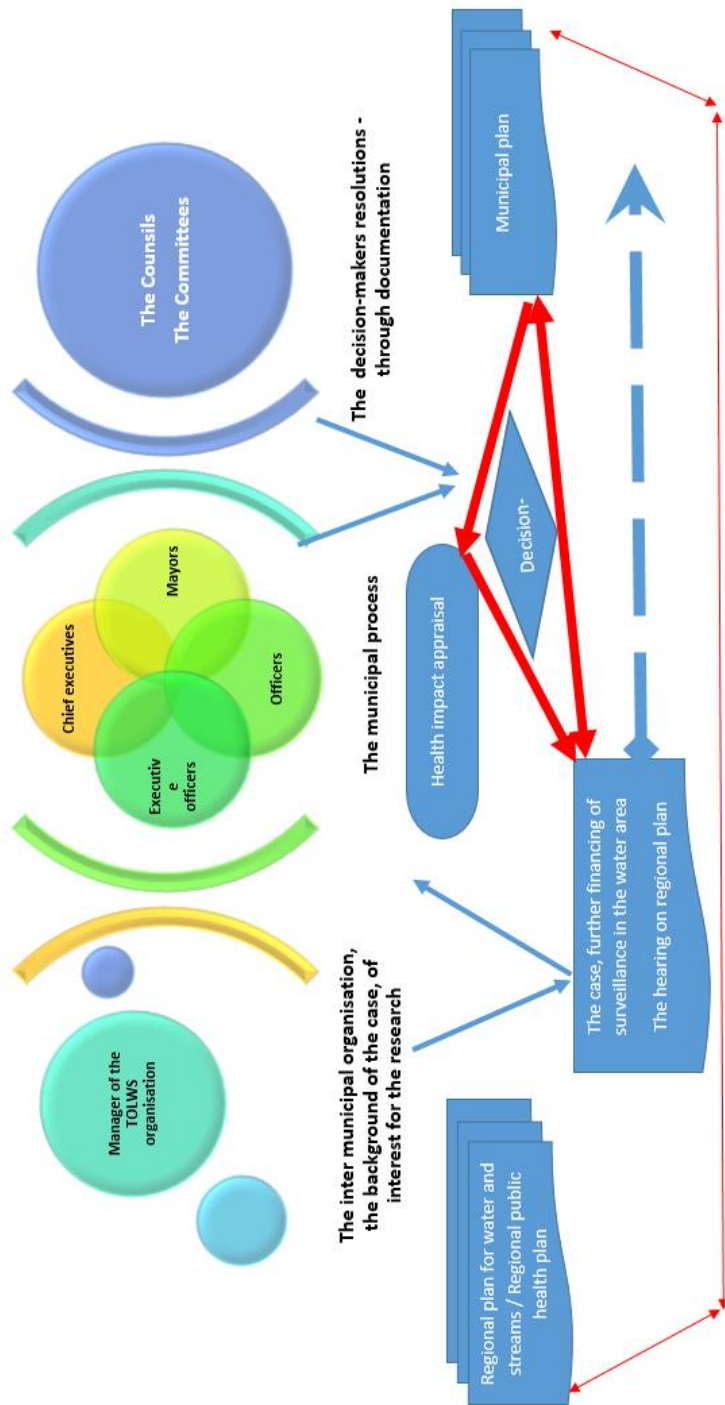
9 APPENDIX

9.1 THE PROCESS AND ITS PARTICIPANTS AT STARTPOINT

The process and its participants.

9.2 THE PROCESS AND ITS PARTICIPANTS IN THE END

The process and its participants.

The Counsils
The Committees

Mayors

Chief executives

Officers

Executiv
e
officers

Manager of the
TOLWS
organisation

The decision-makers resolutions -
through documentation

Municipal plan

Decision-

Health impact appraisal

The municipal process

The inter municipal organisation,
the background of the case, of
interest for the research

The case, further financing of
surveillance in the water area

The hearing on regional plan

Regional plan for water and
streams / Regional public
health plan

9.3 RECEIPT FROM THE NSD - NORWEGIAN CENTRE FOR RESEARCH DATA

Personvernombudet for forskning

Prosjektvurdering - Kommentar

Utvalget vil bestå av saksbehandlere, rådmenn, politikere og organisasjonsrepresentanter. Data skal innhentes ved intervju, individuelt og i grupper. Personvernombudet forutsetter at taushetsplikten ikke er til hinder for at informantene kan omtale enkeltsaker de intervjues om.

Det skal også foretas analyse av offentlige dokumenter, som sakslister, møteprotokoller osv.

Utvalget informeres skriftlig og muntlig om prosjektet og samtykker til deltakelse. Informasjonsskriv og samtykkeerklæring er noe mangelfullt utformet. Vi ber derfor om at følgende endres/tilføyes:
- at lydopptak slettes og at datamaterialet anonymiseres ved prosjektslutt.

Revidert informasjonsskriv skal sendes til personvernombudet@nsd.uib.no før utvalget kontaktes.

Datamaterialet vil kunne inneholde sensitive personopplysninger om etnisk bakgrunn eller politisk/filosofisk/religiøs oppfatning.

Personvernombudet legger til grunn at forsker etterfølger Høgskolen i Østfold sine interne rutiner for datasikkerhet. Dersom personopplysninger skal lagres på privat pc/mobile enheter, bør opplysningene krypteres tilstrekkelig.

Forventet prosjektslutt er 20.12.2015. Ifølge prosjektmeldingen skal innsamlede opplysninger da anonymiseres. Anonymisering innebærer å bearbeide datamaterialet slik at ingen enkeltpersoner kan gjenkjennes. Det gjøres ved å:
- slette direkte personopplysninger (som navn/koblingsnøkkel)
- slette/omskrive indirekte personopplysninger (identifiserende sammenstilling av bakgrunnsopplysninger som f.eks. bosted/arbeidssted, alder og kjønn)
- slette lydopptak

9.4 ENQUIRY TO PARTICIPANTS OF THE INTERVIEWS

Forespørsel om deltakelse i forskningsprosjektet

"The red thread of municipal plan and health impact assessment in decision-making"

Bakgrunn og formål

Østfold fylke sammen med kommunene Moss, Fredrikstad, Råde, Trøgstad og Våler er i disse dager i gang med et forskningsprosjekt på helsekonsekvensutredning. Høgskolen i Østfold er forskningsinstitusjonen som følger opp prosjektet fra det vitenskapelige perspektivet. Da jeg studerer master i organisasjon og ledelse ved Høgskolen i Østfold har jeg fått følge prosjektet underveis. Dette har ført til at jeg ønsker å undersøke nærmere beslutningsprosessen i en sak sett i lys av folkehelseperspektivet gjennom helsekonsekvensutredning og kommuneplanen. Min undersøkelse er ikke en del av det pågående prosjektet, men min veileder Arve Negaard er prosjektleder for prosjektet.

For å gjøre mine undersøkelse har jeg kommet fram til at det er interessant med kommuneplanen som er felles for Moss, Rygge, Råde og Våler kommune og valgt en sak som er i utgangspunktet lik for alle, og alle har behandlet høsten 2014. Saken jeg har valgt gjelder Morsa.

Du dette er en kvalitativ studie har jeg hatt gjennomgang av sakspapirene, og ønsker nå å snakke nærmere med de som har vært involvert i saksprosessen for å få et dybdeperspektiv.

Hva innebærer deltakelse i studien?

I din kommune ønsker jeg å intervjue deg da du har kjennskap til saken. Tidsperspektivet for intervju vil være inntil 1 time. Spørsmålene til intervjuene vil omhandle;
- Sakens prosess
- Kjerneområder i saken
- Folkehelse i kommuneplanen og saken
- Nøkkelårsaker til beslutninger i saken, hku

Jeg ønsker å ta forbehold om at temaene kan endre seg noe da med bakgrunn i nye opplysninger jeg kommer over underveis i intervjurundene mine.

Jeg ønsker å bruke lydopptaker i intervjusituasjonen, dette for at jeg skal kunne gå grundig gjennom intervjuet i ettertid. Opptakene vil bli slettet etter gjennomført avhandling, og er kun et hjelpemiddel for min skriveprosess.

Hva skjer med informasjonen om deg?

Alle personopplysninger og innsamlet data vil bli behandlet konfidensielt, og det vil kun være jeg og min veileder som vil ha inngående kjennskap til de svarene som blir gitt. Alle data som blir innsamlet vil bli lagret på en løs minnepinne og ekstern harddisk som vil være nedlåst i et skap når disse ikke er i bruk. Minnepinnens innhold og filene på den eksterne harddisken vil bli slettet etter at materialet har blitt bearbeidet. Lydopptak vil bli slettet og datamaterialet anonymisert ved prosjektslutt.

Prosjektet skal etter planen avsluttes senest 20. desember 2015

Frivillig deltakelse

Det er frivillig å delta i studien, og du kan når som helst trekke ditt samtykke uten å oppgi noen grunn. Dersom du trekker deg, vil alle opplysninger om deg bli anonymisert.

Dersom du ønsker å delta eller har spørsmål til studien, ta kontakt med student Anne Kolseth Martinsen på telefon 90102914 ev. veileder Arve Negaard på telefonnummer 90647670.

Studien er meldt til Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste AS.

Samtykke til deltakelse i studien

Det vil være fint om du vil gi ditt samtykke over telefon og at denne skrives under når jeg kommer til intervju.

Jeg har mottatt informasjon om studien, og er villig til å delta i intervjuet/ gruppeintervjuet (stryk det som ikke passer).

(Signert av prosjektdeltaker, dato)

For deltakere i gruppeintervju sett kryss og skriv ditt navn bak.

	Jeg samtykker til å delta i gruppeintervju – (Navn)
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