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Social Impact Assessment: A Look into Finnish Experiences

1. Introduction

The first law on environmental impact assessment (EIA) in Finland will possibly take effect during the summer of 1994. In the proposal for the EIA-legislation environmental impacts are defined, among other things, as impacts on **human health, living conditions, amenity, community structure and cultural heritage**. If this part of the definition on environmental impacts is included in the final EIA-legislation it will hopefully have the effect of social impacts being taken into account more thoroughly in the future. At the moment Finland is striving towards an integrated approach to impact assessment, which means that, for example, EIA's and social impact assessments (SIA) would not be done separately.

The National Research and Development Centre for Welfare and Health is carrying out a research project (1993-1994) on the development of SIA in Finland. The aim of the project is to try out the SIA-process and methods in various cases (eg. land-use, road planning). This paper is based on a report written half-way through the research project in January 1994 (Juslén 1994).

The research project has come up with a framework for documenting experiences in the cases. This framework has been used to analyse case studies and will be developed further to be used in reviewing the quality of EIS's from the the SIA viewpoint. In this paper four areas of the framework will be looked into: the impact assessment process, assessed impacts, SIA-methods and public participation. The cases that have been analysed at this stage of the research project are the EIAs on the Maantiekylä land-use plan, the Hormajärvi land-use plan, and the road plan for Mainroad 4 between Lepistönmäki and Kalliola.

In this study *social impacts* have been defined as impacts on people, communities and society, which have an effect on well-being. In the cases these "well-being effects" have of course been specified according to the situation at hand. *Social impact assessment* is defined as the identification and assessment of social consequences caused by projects, plans or programmes. However, no single definition can adequately describe an area of research such as SIA. Therefore a list on the basic features of SIA is presented

- SIA is anticipatory, therefore it is a part of the planning stage,
- is interested in the effects a project/policy may have on the people or communities
- is interested in change and the effects of change,
- is future-oriented,
- is systematic, multi-disciplinary, politically oriented,
- studies the socio-economic environment,
- explores unintentional impacts,
- is a planning tool.

2. History and legislation

The Finnish history of social impact assessment dates back to the 1970's when one of the first impact assessments, which included social aspects, as well as ecological and economic aspects, was commenced. This assessment was on the Master Plan for the Vuotos Reservoir (1974). At the time it was decided that the reservoir should not be built. This decision was however overruled in 1992 and a new impact assessment is underway.

In 1982 a working group on developing environmental impact assessment published its report, in which suggestions concerning the EIA-procedure, assessment methods and public participation were made. The report recommended that impact assessment should be an integral part of all planning processes. However, the time was not yet right for such changes in 1982. Ten years later in 1992 a new working group finished its report concerning EIA-legislation at the project level. This controversial law proposition was debated on for two years, and has finally made its way to parliament in 1994.

Even without an EIA-legislation, impact assessment was practised in several cases during the 1980's. An example of a sound impact assessment was the Iijoki-study (1985) which assessed the alternatives and consequences of constructing hydroelectric power plants on the middle and upper course of the river Iijoki in northern Finland. The assessment was highly valued because, in addition to ecological and economic impacts, it focused broadly on the social impacts of the construction project.

Road planners have also gained distinction in the field of social impact assessment. Several impact assessments have been done in this field especially in the beginning of the 1990's. For example, an impact assessment of a bridge construction project was done in 1991 (Paukkunen). This assessment was the first of its kind in Finland because it assessed the possible effects of the building-project on the well-being of an island population. Never before had the effects on the well-being of people been assessed so thoroughly in road planning. Qualitative research methods played a central role in the assessment.

At present social impact assessment is spreading rapidly in Finland. This tendency can be seen in the field of research; during 1993 at least four studies specifically on social impact assessment have been started compared to almost none during previous years. Consulting firms and experts are also beginning to recognize the importance of SIA or at least that there is a lot of money to be made in it. At present consulting firms are practising SIA in various cases around Finland.

The legal **basis for social impact assessment** can be found in several new acts which will be enacted in 1994 and 1995. *The Act on environmental impact assessment procedure*, which will possibly be enacted in september 1994 states in Section 2, Definitions, that

Environmental impact means the direct and indirect effects inside and outside Finnish territory of a project or operations on

- 1) **human health, living conditions and amenity**,
- 2) soil, water, air, climate, organisms, interaction between them, and natural diversity,
- 3) the **community structure**, buildings, landscape, townscape and the **cultural heritage** and
- 4) utilization of natural resources.

Strategic environmental assessment has also been included in the act.

Section 24, Policies, plans, programs:

Environmental impact shall be investigated and assessed to a sufficient degree when an authority is preparing policies, plans and programmes which may have significant environmental impact once implemented.

The Act to amend the building act, which will be enacted in the beginning of 1995 states that,

when an authority is preparing a land-use plan, environmental, economic, **social, cultural** and other impacts shall be investigated and assessed to a sufficient degree.

(source: Environmental Impact Assessment; report for the EIA '92 working group. Helsinki 1992)

In addition to the aforementioned changes in legislation, 11 other law proposals are being made to change legislation in accordance with the act on environmental impact assessment procedure. These changes will affect, for example, the water act, the environmental permit procedures act, the mining act and the public roads act.

3. The research approach and objectives of the study

The general objective of the study is to investigate how social impact assessment can be done in various planning situations as part of a broader environmental impact assessment, or as a separate assessment. The purpose of this study is to increase knowledge and experience on SIA in Finland. This is being done by looking into the following features of social impact assessment: the process, assessed impacts, methods and public participation.

In order to fulfill the objective of the study a reciprocal approach is used, where theory is tested in practice, and developed if necessary, then tested again. As one of the central parts of the study, the researchers strive to find qualitative, institutional and theoretical demands of a successful social impact assessment.

The hypotheses of the study are the following: The status of social impact assessment in the field of impact assessment is low. The reasons for this state of affairs are in theoretical incoherence, underdeveloped methodology, the prevailing planning tradition, and lack of experience.

The research method used in this study is participatory in nature. The research method is named "activity research". In practice this means that the researchers have two roles in the study; they more or less actively take part in social impact assessment cases, and simultaneously make notes on experiences throughout the assessment process. This dual role is seen as the only way to get an inside view of the cases and be able to experiment with social impact assessment methods. In practice the researchers active roles differ from case to case, depending on the portion of the assessment that is their responsibility. Data for the case analysis has been gathered by participant observation and documented in a research diary. The experiences have then been analysed according to the case-analysis framework.

4. A framework for reviewing Finnish impact assessments

This framework was formulated at the beginning of the research project to be used as a method of documenting and analysing experiences in the various projects. This framework includes all the features of social impact assessment that are seen as relevant in Finnish social impact assessment. In formulating this framework various references were used to get a broad picture of what such a framework should look into. These references included, for example, a framework used by Heaney (1992) to study social impact assessment in British environmental impact statements, Lee's & Colley's (1990) views on reviewing the quality of environmental impact statements, Wildmans (1990) article "Methodological and social policy issues in SIA", Finsterbusch, Llewellyn & Wolf's (eds.) (1983) book on social impact assessment methods, and several Finnish sources. The framework was also commented on by leading Finnish impact assessment specialists. When comparing the framework with other frameworks on EIA in general, the main differences are in the emphasis of methods and assessed impacts. In most other frameworks these features were not stressed. They are, however, a central part of this framework, because specialised methods and qualitative impact investigation are seen as the basis of SIA.

The contents (in cursive) of the framework used to analyse the cases are the following:

Process

The timing of the impact assessment in planning has a crucial effect on the success of the assessment. If the impact assessment does not proceed at a reasonable pace with the planning process, it will be ineffective.

Looking at *which stages take place* in an assessment is also important, because the success of a SIA also depends on whether the basic stages of the assessment were carried out at all. If some stages were missing, what was the effect on the assessment?

The planning of Post-SIA is an important, but often missing part of an environmental statement. Monitoring and auditing are not always planned, and seldom carried out in SIA and EIA.

Impacts

The scope of the definition of an impact is analysed because definitions on what is and what is not an environmental impact differ greatly. *Assessed impacts* are of interest: which were assessed, which were left out, how were scoping decisions justified?

Public participation in scoping of impacts. The results of scoping depend on who participate in it. Did all relevant groups participate?

Were *impact dimensions*, such as regional and demographic distribution and time-span, taken into account?

Alternatives

What are the *objectives* of the alternatives? Have they been presented? Without objectives it would be quite difficult to compare alternatives.

The *diversity of alternatives*. Are alternatives clearly different and do they represent the views of various groups?

Are the alternatives realistic, or is there perhaps only one alternative that can be carried out?

Methods

Which *methods were used* in the assessment process?

At which *stages, were methods used*?

The *usefulness and suitability of a method*: It is important to document at which stage a certain method was found useful.

Public Participation

What was the *level of public participation* in the process? Can it be characterised as manipulation, therapy, one-way information, two-way communication, interactive planning, co-operative planning?

Who participated in the impact assessment process?

Which *methods of public participation* were used?

During *which stages* of the process did *public participation take place*?

Effectiveness of public participation. Did public participation have an effect on the content and results of the assessment?

Attitudes towards public participation. How did the authorities and different groups feel about public participation?

The *role of the authorities and experts*. Which role did authorities and experts take toward other groups? How did they support public participation?

General features

The *presentation of the statement and process*. Have social impacts been illustrated? How have alternatives been presented? Is the impact statement understandable?

Conflict mediation. What kinds of conflicts arose during the assessment? How were they dealt with?

Effectiveness on planning and decision making. Did the impact assessment have an effect on planning? Was it taken into account in decision-making?

Fulfillment of objectives. What were the objectives of the impact assessment? Were they fulfilled?

Was the assessment logical and well-founded? Are the results of the assessment well-founded? Have the results been achieved in a logical manner?

Proponent-pays principle. Who paid for the assessment? It should have been the proponent.

The effect of the decision-making situation. Various situations in planning and decision-making tend to have significant effects on the assessment process. These should be documented.

5. SIA in Finland: case-analyses results

In this section some results of the research project are presented. The project is still underway, therefore final results cannot be presented in this paper; they will be reported on at the end of 1994. For example, findings from an ongoing case on the social impact assessment of public transportation planning are not included in this paper.

The case studies that have been analysed at this stage of the research project are the EIAs on the Maantiekylä land-use plan, the Hormajärvi land-use plan, and the road plan for Mainroad 4 between Lepistönmäki and Kalliola. The analysis of these cases is centred on questions concerning social impact assessment. These cases are all situated in southern Finland.

5.1. The impact assessment process

The impact assessment process presented below was the basis for the analysis of the processes that took place in the case studies. The stages of the social impact assessment process are the following:

SCREENING AND PLANNING THE ASSESSMENT

- a) Screening
- b) The assessment programme

BASELINE DATA-COLLECTION

- c) Baseline data-collection and presentation

IDENTIFICATION AND SCOPING

- d) Identification of impacts
- e) Scoping of impacts and alternatives

ASSESSMENT OF ALTERNATIVES AND IMPACTS

- f) Impact prediction and significance
- g) Assessment of alternatives
- h) Mitigation

IMPACT STATEMENT

- i) Impact statement
- j) Review of impact statement

- k) Final impact statement
- l) Decision-making

MONITORING AND AUDITING

- m) Monitoring
- n) Auditing and post-project analysis

In the case studies most stages of the SIA-process took place, however, in a variety of ways. The stages of SIA were the same as the ones that were followed by the rest of the impact assessment. Therefore there was no problem in integrating the SIA and EIA processes. This was, however, not the case in integrating the impact assessment process into the planning process. The schedules of the planning processes were unclear, and sometimes unpredictable, and this caused problems. For example, in one land-use case the tight planning schedule caused the assessment stage to be rather superficial. On the other hand flexibility in the assessment schedule is a must, if the assessment is to have an effect on decision-making.

It should be self-evident that the impacts looked into during different stages of the assessment process should be the same ones. This, however, was not the case in one of the land-use planning cases. The impacts that were a result of scoping were not those that were considered during the assessment stage. This mistake was found in another Finnish impact assessment as well.

In all the cases the comparison of alternatives, in view of different impacts, was rather difficult. A versatile assessment, which assesses all significant impacts, was attempted, but succeeded only partially. The problems were numerous: the EIA-group members appointed to supervise the assessment decided on their favourite alternatives early in the process. This was the case among most of the citizen participants and authorities appointed to the group. Once they had made this decision a broad, versatile assessment of all the alternatives was difficult to pull through. This state of affairs made the SIA-experts work of striving towards a neutral, broad and versatile comparison of alternatives very difficult. Finally as a result of the processes one alternative was usually chosen and recommended to the decision-makers.

This "chosen" alternative was usually the alternative favoured by the proponent. One reason for this seems to be in the fact that, for example, in road planning EIAs the same consulting firm is hired by the proponent to both take care of the road plan and do the EIA. Therefore it is in the interests of the consultant to arrive at an alternative which is favoured by the proponent. When local citizens are up against such forces it is not surprising that they are often left to bare the negative impacts of the development.

Environmental impact statements were either integrated into the land-use plan document or published as separate documents, as was the case in road planning. There seems to be a clear trend wherein land-use planners put all the information on a plan in one document, whereas road planners keep technical planning documents separate from impact statements.

The monitoring and auditing stage has naturally not yet been carried out in any of the cases because building the development projects has not yet commenced. Monitoring and auditing have, however, been planned. Time will tell whether they are carried out. Monitoring and auditing will probably seldom take place since the only legal sanctions, in the forthcoming law on EIA, concerning monitoring and auditing, have to do with the planning of this stage. This seems to be the problem

worldwide; once the proponent has received a permit to carry out the development, he loses interest in financing monitoring and auditing.

General findings concerning the impact assessment process are the following:

- SIA and EIA can be done as an integrated assessment
- The same impacts should be looked into during different stages of the assessment process.
- When conflicts arise, especially at the end of the assessment process, "sound" social impact assessment is forgotten.
- The assessment of alternatives should be based on logical, systematic comparison.
- The SIA and EIA should be done by a neutral, independent group.
- In land-use planning the social statement is usually integrated into the planning document. This affects the quality of the statement unfavourably.

5.2. Assessed impacts

Social impacts were handled in various ways in the cases. In the road planning case, the high status of social impact assessment remained throughout the process, partly because the social assessors had a dominant role throughout the assessment process.

In both land-use cases, the status of social impacts reduced as the process neared the end. In the impact statements on land-use plans social impact assessment was reduced to assessing one general impact. In one case the only term for social impacts was "the wishes of locals", in the other case social impacts were reduced to "human impacts".

There seems to be a misunderstanding among planners, that the social impacts of a project are the same as information gained through public participation. This should not be the case, because, with all respect towards citizen's views, it is also important to do an in-depth analysis based on other information as well. By other information I am referring to secondary data, social science theories etc.

When investigating social impacts it became clear that there is no universal list of social impacts that would suit every case. The lists presented below prove this to be true. A checklist was, however, found useful in scoping, but each case had its own specific features which affected what was seen as a significant social impact. Impact lists from the case studies are presented so that the reader can get some idea of what social impacts are in Finnish cases.

The following list is from the road planning SIA-case (Mainroad 4, 1994). In this case social impacts were assessed as part of the broader impact assessment. Goals were set for the significant impacts. These goals were the basis of the assessment of different alternatives. Without specified goals the comparison of alternatives, in view of various impacts, would be quite difficult.

SOCIAL IMPACTS AND GOALS SET

conditions of living

local spirit and community cohesion remain
compulsory migration at a minimum

local contentment

noise & pollution effects as small as possible
recreation possibilities remain
nature is preserved

traffic

traffic safety is improved

services

services are improved
public transportation remains

This can be compared to a list (below) from a previous study (Juslén 1993) in which four impact assessment statements were analysed. This older list shows us which social aspects were considered in Finnish impact assessments during 1985-1991. Other, than social impacts, are not included in this list. They did, however, form a major part of the assessed impacts.

In the impact statements of this period other types of impacts were generally considered much more thoroughly than social impacts. In the earlier study a preliminary analysis of 30 statements was carried out, and 4 impact statements were chosen for further analysis. The reason for this was that most statements did not include social impacts at all. This trend is gradually changing so that social impacts are accommodated more thoroughly than before.

By comparing the two impact lists one can see that the content of assessed social impacts has remained quite the same. The difference between 1985-91 and the present is in the increased inclusion of social impacts in EIAs. The following list is from Juslén's 1993 study. The impacts have been divided into different categories but one must keep in mind that the line between these categories is rather vague.

The following social impacts were considered in the case studies:

- group cohesion
- contentment with ones neighbourhood
- emotional values
- the amount of people forced to move
- insecurity, safety, traffic safety
- disturbances, mischief
- the weakening of ones identity
- the possibility to maintain relationships
- increase in freedom and equality

The impacts on the following socioeconomic factors were considered:

- services
- taxes
- employment
- trade
- different industries

The following cultural or esthetical features were considered:

- impacts on the landscape
- the preservation of the uniqueness of the region
- the preservation of the village landscape

The following impacts connected with land-use were considered:

- areas to be flooded (left under water)
- effects on transportation
- effects on real estate
- effects on leisure activities
- the splitting of farms

In all the cases of the earlier study (Juslén 1993) the emphasis in the consideration of impacts was in objective impacts. This means that subjective views on impacts were often left uninvestigated, values were not included in the assessment etc. Only two out of the four cases included subjective impacts. The situation was the same with the spatial, demographic and chronological distribution of impacts. When looking into the chronological distribution of impacts the cases tended to focus on post-project impacts while impacts occurring during the construction phase were not considered. (Juslén 1993.)

Almost any type of impact, be it on the noise level, on services, on nature, can be seen as a social impact. The viewpoint depends on the assessor. A road planning engineer may see the problem of noise as follows: everything is alright as long as the legal noise level is not exceeded. He will therefore argue that if noise standards are fulfilled nobody should complain. A local citizen may see things differently: she may think that even a small rise in the noise level of her home is too much. Here the experts view is the technical one, and the citizen's view concerns social impacts on the peacefulness of a neighborhood.

General findings concerning social impact were the following:

- Social impacts are most important to citizens, least important to authorities and planners.
- The views of the public are generally seen as equivalent to the social impacts of a development. This should not be the case.
- Social impact illustration and presentation should be developed. This would help participants comprehend them, and increase their "status".
- The self-esteem of citizen participants is weak, they often believe their information on possible impacts is not relevant.
- The status of social impacts is rising.

- Questions concerning the demographic distribution and time-span of social impacts are seldom considered.
- Almost any type of impact, be it on the noise level, on services, on nature, can be seen as a social impact.

5.3. Methods

Basic social science methods, such as interviews, surveys and secondary data analysis were mostly used in the cases. Experience was also gained in social impact illustration and screening. Traditional SIA-methods were found very useful at various stages. When striving for in-depth data, interviews were found to be more fruitful than surveys. On the other hand surveys seemed more scientific to experts of other fields. This belief actually influenced the choice of methods in one case.

A screening method used by the Asian Development Bank (Guidelines for Social Analysis... 1991) was developed further for use in the cases (see annex). The results of this screening method, which is in table form, can be interpreted in order to report on:

- appropriateness of project goals and purposes
- likelihood of subgroups within the project area being willing and able to accept/participate in the proposed project
- whether or not a detailed Social Impact Assessment (SIA) needs to be undertaken to maximize positive impacts or minimize negative impacts
- what the focus of the SIA should be

For example, in the road planning case, rapid social analysis (RSA) was used to decide whether or not the social impact assessment process should be carried out. Prior to this screening method, the decision to do an impact assessment was based on varied reasons: the authorities simply wanted to gain experience on SIA, public pressure was intense, the development would clearly have significant environmental impacts. The RSA is a tool for the systematic consideration of impact significance, public needs etc.

In scoping a cyclic process was used to decide on impacts to be assessed. The social assessment experts first used a checklist to pick out significant impacts. The chosen impacts were then sent as a survey to experts and local residents, who were given the opportunity to comment on it by adding or discarding impacts. This feedback was then analysed and a new list was presented at an informal public meeting in order to double-check the results of the analysis. The objective of the process was to ensure that all significant impacts are included in the assessment. Of course the process also had a positive effect on further co-operation with the public.

Social impacts were illustrated with the help of map-presentation. Maps were also used as a public participation method in land-use planning by letting citizens draw proposals in informal meetings. The planners and assessors were present at these meetings. Map-presentation was used in a road planning case to illustrate social features of the baseline situation and the results of the assessment. In the map on Mainroad 4 social impacts are presented in a way that gives information on the geographic distribution of possible social impacts (Figure 1.). This map was used to help in understanding the possible consequences of building a new route for Mainroad 4 in southern Finland. The information presented in the map was based on the social impact assessment.

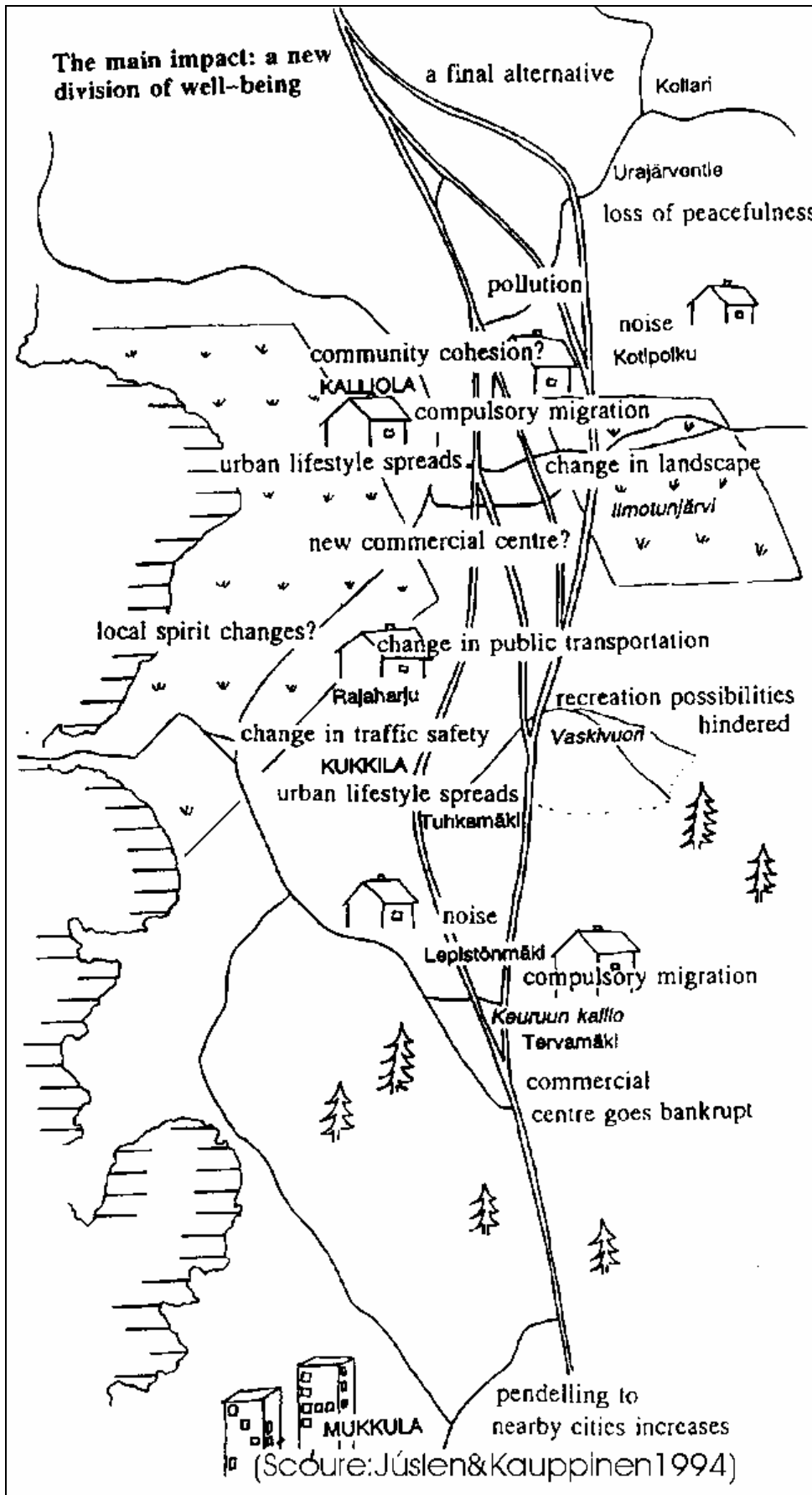


Figure 1. An areal illustration of possible social impacts (Júslen & Kauppinen 1994).

Local problems, which could be dealt with through land-use planning, were illustrated by the social assessment expert in "image maps". The map in figure 2 is a three-dimensional map, which has been drawn in a fashion that is easy to understand. Social features, difficult to illustrate, have been presented with the help of naive caricatures. The objective was to make a map that is useful in public participation, and can be understood without a legend.

Due to their abstract nature social impacts are often difficult to present. With the help of image maps, the social assessor can present social information in an understandable way.

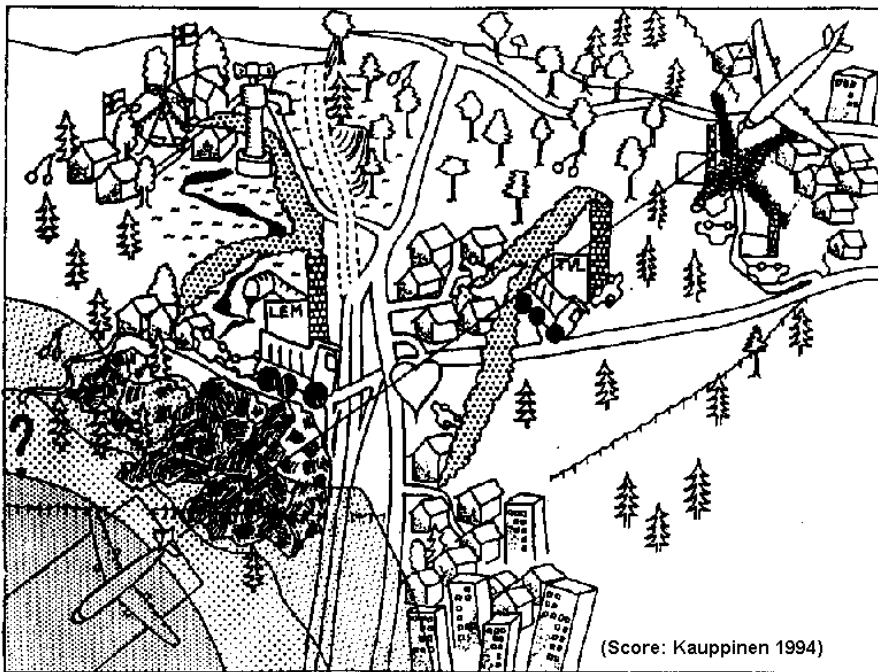


Figure 2. Social impact illustration in land-use planning (Kauppinen 1994).

Various SIA methods can be used at different stages of the assessment. There are no strict rules on which method is best at a certain stage of the process. Every assessment situation is different, and decisions on methods must be made according to the specific needs of the case at hand.

Lee (1989, 30-32) has presented certain criteria which are relevant to choices concerning methods.

a) **Appropriateness:** The assessment method chosen should be appropriate to the specific task for which it is to be used. Therefore, in choosing methods, one must be aware of the "output" which the selected methods should ideally produce - for example, whether the output should be quantitative or qualitative (or both), its desirable temporal and spatial distribution, its required degree of accuracy, etc.

b) **Replicability:** Ideally a method should be sufficiently free from assessor bias that different assessors, using the same method, would obtain similar results if carrying out an assessment of the same project. One must however bear in mind that some methods leave more opportunity than others for the intrusion of the assessor's own subjective judgements and are likely to be less satisfactory from this standpoint.

c) Consistency: Ideally, a method should be capable of being consistently applied to alternative forms of the same project. This is desirable if alternatives are to be compared on a consistent basis.

d) Economy: A method should be cost-effective in the sense of enabling an impact assessment of the required quality for a project to be completed as economically as possible.

The ranking of alternative assessment methods, according to the above criteria, may differ. For example, considerations of economy may conflict with those of appropriateness, replicability and consistency. If this is the case, a trade-off between these different goals will have to be faced. However, often this is not a serious problem because the most sophisticated and resource demanding methods are often in practise not the most appropriate ones. (Lee 1989, 30-33.)

In the cases the main criteria for choice of methods was appropriateness and economy. The methods were mainly chosen according to the "output", the quality, of information that was desired, and by considering economical aspects. The demand for replicability is more difficult to satisfy because the results of qualitative methods do differ between researchers. Contrary to the demand for replicability, is the demand that the same assessor should carry out all the stages of the process (eg. baseline data, assessment, monitoring) to ensure that information from different stages is comparable.

The following list is an example of the typical methods used at different stages of a Finnish social impact assessment:

Stage	Method
screening and planning the assessment	RSA-table, expert-work
baseline data collection	secondary data analysis, interview, survey, map presentation, field work
identification and scoping	checklist, survey, interview, group work
assessment of alternatives and impacts	participant observation, secondary data analysis, interview, survey, hearings, informal public meetings, matrix-assessment, map-presentation
impact statement	expert-work, group work, hearings
monitoring and auditing	(no experience)

General findings concerning SIA-methods:

- Information from surveys is useful in scoping and assessment.
- The integration of surveys and hearings is an economical way of gathering data.
- The "depth" of data obtained by interviews is better than in surveys.
- a screening method called "Rapid social analysis" was found useful.
- In scoping a cyclic process was found useful.
- Map-presentation, photographs, and matrixes were found useful in impact illustration and assessment.
- Illustration methods should be further developed because the public find it difficult to understand planning and assessment documents.

- Every assessment situation is different, and decisions on methods must be made according to the specific needs of the case at hand.
- In the cases the main criteria for choice of methods was appropriateness and economy.

5.4. Public participation

In practise public participation is acknowledged as an important part of EIA and SIA in Finland. This means that it is never forgotten when planning or carrying out the impact assessment process. The differences from case to case are found in the quality, depth and methods of participation.

Legal sanctions concerning public participation include only the possibility to express views on the assessment schedule and the assessment report.

According to section 8 of EIA law-proposal (Environmental Impact Assessment... 1992), "the liaison authority shall see to it that commencement of the environmental impact assessment procedure is publicly announced within the probable area of impact of the project. The public announcement shall state where the assessment schedule is being kept on public display and how views on it can be expressed".

In section 11, the following is said about hearings on the assessment report: "everyone shall be entitled to express views on the assessment report. The liaison authority shall see to publication of the assessment report through public announcement in the project's probable area of impact. The liaison authority shall also ensure that the necessary opinions are requested on the assessment report and provide an opportunity for views to be expressed on the adequacy of the investigations and the environmental impact of the alternatives studied."

One can summarise the situation by saying that there are no legal sanctions for public participation in EIA, except the possibility to express views concerning the assessment schedule or report (=impact statement). Therefore the situation, especially from the SIA-viewpoint, is rather poor. Without some level of public participation in all stages of the assessment process, it is difficult to do a sound social impact assessment. Perhaps because of this state of affairs, most impact assessments have included more public participation throughout the process than is necessary according to legislation. It seems that to achieve a good assessment the assessor is forced to arrange more complex public participation.

In all the cases analysed, public participation always took place in more stages of the impact assessment process, and in more varying ways, than are stated in the EIA law-proposal. In both land-use and road planning cases an EIA-group including citizens, authorities and experts, was formed to supervise and make certain decisions concerning the assessment process. This group was, for example, consulted on the scoping of impacts. Scoping decisions were often also based on results from surveys and interviews. Public hearings were usually arranged atleast twice during the SIA and informal meetings with local residents and business took place. Surveys and interviews were used to gather baseline data.

The cyclic method of impact scoping was found useful in the scoping stage. First a checklist was used to pick out the impacts seen as significant by SIA-experts. This list of impacts was then sent as a questionnaire to locals and authorities, and they were asked to comment on it. The information from this survey was then analysed and the results presented to the same group that filled the

questionnaires. This process was carried out to ensure that significant impacts are the basis of the assessment, and there is a consensus on scoping results.

Public participation or at least the gathering of information from the public took place in almost all stages of the assessment, except for screening, monitoring and auditing. The effectiveness of public participation on the results of the assessment and planning in general, has been a disappointment for many citizen participants. They do not criticize the social impact assessor, the criticism is aimed at the proponents and decision-makers, who do not take the results of the social impact assessment and public participation into consideration well enough.

In addition to this the authorities and planners tend to try to persuade citizens to change their point of view, instead of taking these views into account. In public participation this should not be a role taken by the planner and authorities. They should strive to understand, not underrate, local views.

Often the attitude towards public participation has turned from positive to negative as the impact assessment process has proceeded. This is true of both the public and planners and could partially be dealt with through conflict mediation.

General findings concerning public participation were the following:

- In order to do SIA well more public participation was needed than is necessary by law.
- The task of the expert is not to persuade citizens to change their point of view.
- Public participation ranged from one-way information to planning together.
- Methods of public participation ranged from hearings to surveys/interviews and group work.
- Public participation did not generally take place in the screening, monitoring or auditing stage.
- The positive attitude towards public participation faded as the assessment proceeded.
- The role of authorities remained too expert-like.
- The effectiveness of public participation on the assessment and the results varied.
- Rules for public participation should be decided on in the beginning.
- Public participation works best in informal situations.
- A conflict mediation system will have to be developed in the nearby future.

6. Conclusions and the future of SIA in Finland

In the cases valuable experience was gained in various tasks of social impact assessment. In addition to trying out traditional SIA-methods, new ones were developed, for example, in impact illustration, scoping and screening. There is, however, a lot to be done especially in the presentation of social impacts. In Finland serious development of SIA has begun so recently that we still have a long way to go before it is properly established in the field of impact assessment.

This task is all the more difficult because of the abstract nature of social impacts when compared to impacts on nature, for example. This can also be seen as a conflict between different planning traditions. Since the prevailing tradition is rationalistic in nature, it stresses the importance of so-called objective, scientific research. In view of this situation, it is not surprising that the "SIA-invasion" has not commenced rapidly.

The rivalry between the "old" EIA, which assessed impacts on nature, and the newer EIA, with a broader impact definition, is underway. Time will tell whether Finland's impact assessment process evolves into an integrated approach to impact assessment. In this case it would include the assessment of impacts on nature, economic impacts, social impacts etc. The other alternative is that EIAs and SIAs are done separately, as for example, in the United States and Canada.

There is also the conflict between traditional planning, and the new way of planning, into which EIA and SIA are integrated. The results of this conflict can be seen in the effectiveness of impact assessment on planning and decision-making, which is still rather weak. There is a lot of work to be done in this area, because at present, impact assessment results seldom make a difference in decision-making, especially if the proponent has a strong view on the matter. Usually the results of an assessment will affect decision-making on alternatives, if no single alternative is better than the others from the proponents viewpoint. However, in most cases the economically powerful proponent has a clear view on the which is the best alternative, and not so surprisingly this is usually chosen.

Conflict mediation in impact assessment is underdeveloped in Finland. There are no rules or methods for conflict mediation, but this is an area that must be developed in the near future. At present conflicts are often resolved in favour of the proponent, and this has a unfavourable effect on the public's attitudes towards impact assessment. In land-use planning the conflicts grew so intense that the functioning ability of the EIA working group was in jeopardy. There were conflicts between the authorities and citizen-representatives, and between the authorities and EIA/SIA-experts. No constructive method was found to deal with these problems.

The overall success of social impact assessment does not depend solely on the learning and development of SIA-methods. It is a question of overcoming institutional constraints and traditional working procedures.

Since SIA is spreading rapidly in the hands of consultants and planners, it is necessary to develop a criteria for the evaluation of SIA, and a control system to keep up set standards.

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