



SYNAPS[©] systems analytical process oriented tool for sector integration

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1 Introduction

“Sustainable development” is mentioned in most documents concerned with society and progress. However, in today’s society there are many conflicting views concerned with what sustainable development *is* and especially *how* it may be achieved.

Region Skåne, responsible for the development of SYNAPS, believes methods and tools to help illustrate and illuminate the interrelationships between the three dimensions of sustainable development are fundamentally important to both try and explain what sustainable development is but in particular in trying to facilitate the *how*. It is the firm belief of the people behind SYNAPS that sustainable development is about taking responsibility for our actions and decisions and to do so by acknowledging that environmental, social and economic issues are mutually reinforcing, sometimes counteracting each other, but often dependent upon each other. One feasible way to take such responsibility is to apply methods that may allow for consequence analysis of various decisions upon society and its development.

As a regional public body responsible for all developmental issues in Skåne, Sweden, Region Skåne has a responsibility towards its citizens, its 33 municipalities and the various different actors of this region to make sure that great efforts are made into reinforce means and resources that can ensure that the region develops in a sustainable way. This in turn implies the need for new ways of working with society and progress by, for instance, trying to develop methods and model as well as to measure sustainable development and to engage different interested parties in this process at a very early stage.

SYNAPS is the result of a two year process involving a range of different actors - from different sectors but also from different political levels i.e. local, regional, national and international. SYNAPS aims to offer a concrete form of how to practically work with sustainable development at several different levels of society, weighing both objective as well subjective components together and to turn rethorics into action.

2. Contextual background

The organisation Region Skåne is an organisation characterised by regional self-governance. This means that Region Skåne consists of one political organisation and one organisation of civil servants and represents the interest of Skåne towards the rest of the country and in particular towards the government and its different department. Region Skåne also represents the interest of the region towards other regions, national as well as international.

The organisation has recently been commissioned by the Swedish government to be *the* responsible public organ for *all* developmental issues in this region and this has a trial period that extends in the year 2010. This extended commission is believed to increase the efficiency in the work of regional development and to establish strong democratic anhorage amongst its different actors and where the overall aim is to ensure the development of a sustainable Skåne[1]. The

organisation consists of 149 members of parliament who are elected every four years by the inhabitants of Skåne in a general election, hence the new governance definition. Further, Skåne is one of two regions in Sweden that has the right to impose taxes from its inhabitants which equippes the organisation with powerfull economic incentives when steering the development of the region.

3. The political commission leading to SYNAPS

“Environmental issues often gets treated as if they were separate from the rest of society. This is due to how the environmental problems used to look like...The environmental quality objectives has a weakness in that in reality they have to be integrated with all other objectives of society such as objectives to acheive economic growth, public health, health and medical care, energy supply, building and physical planning, traffic, infrastructure and technology supply, safety and security, culture and history and other objectives which all aim to increase our quality of life. If we want to move forward in the environmental field, then environmental issues has to be discussed from this perspective and balanced against all other objectives of society and thus bring about what is commonly known as sustainable development...The different sectors of society should be the starting point of this programme in order to shed light on the different relations [or indeed lack of relations] between these, balance and weigh different objectives against each other and from that identify which measures different sectors must take in order to optimise the conditions for Skåne to develop in a sustainable way.”[2]

This is an extract of the actual commission given to civil servants of the Regional Development Board in January 2004 by the politicians of Region Skåne. The commission calls for the development of a proposal for an Environmental Strategy Policy Program for Skåne (ESPP) and for it to be developed in collaboration with a wide range of interested parties within and outside the organisation. The aim of the ESPP is to develop strategies for a sustainable Skåne by *integrating* environmental objectives with all other political objectives (social and economic), significant to consider for sustainable development[3]. Hence, this policy programme will place environmental issues in a larger context, where they may be balanced against other objectives of society.

Key functions of the ESPP will be the identification of positive synergy effects and conflicts between/within political areas, functions which ultimately will facilitate the identification of which measures different sectors in Skåne should prioritise in order to optimise the conditions for Skåne to develop in a sustainable way.

Today, Region Skåne has a draft proposal for an ESPP consisting of a systemic and integrated approach towards achieving a sustainable region, which is called SYNAPS©(*Systems Analytical Process oriented tool for Sector integration*). A very important feature of SYNAPS is that it besides being a political instrument to achieve sustainability, it should also be an approach, which the different sectors themselves should be able to apply and implement in their respective organisations. Hence the emphasis on the programme being developed in collaboration with a wide range of interested parties.

4. Design and applicability of SYNAPS

In order to be able to meet the aim and objectives of the political commission, it quite early became apparent that this was not going to become a “traditional” policy programme. This was going to equip different actors with a readiness to act – to integrate environmental issues into their own organisations and businesses irrespective of prior knowledge to these issues and irrespective of which sector one belongs to. This in turn led to the realisation that ways of effectively integrating environmental issues with all other political objectives important to consider for sustainable development had to start with finding a suitable method and tool which would facilitate this. A method, which would allow for consequence analysis of various decisions upon society as a whole. Thorough investigations of already existing methods and tools within the area showed that none of these were sufficient in accordance to the aim and objectives of the commission. Neither could any of them take the holistic, integrated and indeed societal approach towards environmental issues, as was intended by the commission. Hence, the development of SYNAPS.

SYNAPS is based on the principles of systems thinking and ways of quantifying and weighing subjective values. The people responsible for its development argue that it is of great importance in the work of sustainable development to acknowledge that ultimately all decisions are based upon human values and that is why it’s fundamentally important to illuminate these in order to achieve transparency in our decisions. Transparency in our decisions is important for sustainable development as it can help us learn from past mistakes, but perhaps most importantly help us learn from our successes and to disseminate this information in a concise, correct, concrete and comprehensible way to other decision makers and the general public. Thus, transparency in the case of SYNAPS can be shown both by it being an inclusive tool as its validity increases with the number of different disciplines involved when it’s being applied. It also forces decision makers to actively take responsibility for sustainable development by making them motivate the reason for a certain decision, with references being made to the different aspects of SD and to document this for others and themselves to learn from. It’s also through this particular approach and in combination with SYNAPS being based on the method of sector integration that one is allowed to effectively analyse the interrelationships between and within different political objectives, and detect positive synergy effects and conflicts between different interests in early decision-making processes. This is the key function of SYNAPS and it will help decision-makers avoid sub- optimisation of different political initiatives and more effectively plan for long-term sustainability on behalf of the society as a whole. As well as being a proactive method for sustainable development, SYNAPS also has a follow-up function, whereby decisions, has to be audited.

Further, SYNAPS is especially suitable for interdisciplinary discussions and processes at fairly strategic levels, which implies that it, more than being merely a technical tool such as most checklists for example, it is a method – a new way of working with societal issues whereby different stakeholders should be engaged early on in different decisions processes. From

experience, when applying SYNAPS in particularly interdisciplinary contexts, it has become apparent that often it is the actual process of individual growth and realisation of what sustainable development is and what societal aspects it actually entails that is the real contribution to sustainable development. It's especially rewarding to work with SYNAPS when it's clear that people whom normally wouldn't use the concept "sustainable development" starts to discuss the importance of looking at social, economic and environmental issues as being mutually reinforcing and dependent upon each other and how time and scale are significant determinants of what such an analysis will look like. It's particularly rewarding when the representatives from the different fields of ecology, economy and social issues learn from each others' perspectives and can reach an understanding in how certain decisions should later be carried out. Hence the P in SYNAPS.

Finally, SYNAPS is based on the method of *sector integration*, which is a commonly applied method for integrating one political objective with any other number of political objectives. In SYNAPS, the environmental quality objectives[4] (16) has, as according to the aim of the commission, been integrated with all other political objectives important to consider in order to "...to optimise the conditions for Skåne to develop in a sustainable way."

These other objectives has been based upon the Swedish strategy for sustainable development and its correspondence at the regional level, the Regional Development Programme for Skåne, *A Dynamic Skåne*.

The Swedish strategy for sustainable development is Sweden's contribution to the global agenda on sustainable development. Its first edition was a contribution to the world summit in Johannesburg in 2002[5] whereby the UN declared sustainable development to be the superior principle to underpin all the work undertaken by the UN. Hence, it is a national document based upon international agreements of what sustainable development is and what should be done to get there. The Swedish parliament has signed and approved its content, which makes it a very powerful tool for the future work of sustainable development in Sweden.

5. Conclusion

Today, Region Skåne has a draft proposal for an ESPP consisting of a systemic and integrated approach towards achieving a sustainable region, which is called SYNAPS© (*Systems Analytical Process oriented tool for Sector integration*). A very important feature of SYNAPS is that it besides being a political instrument to achieve sustainability, it should also be an approach, which the different sectors themselves should be able to apply and implement in their respective organisations.

A systemic and integrated approach as the one the authors offer to share at this ICSMM 2006, involves great complexity due to existing interrelations, or lack of interrelations between different actors/sectors of society but also in terms of time and scale. SYNAPS© is an attempt to try and measure, model and evaluate a complex and dynamic system within the human-

environment duality. It will work as strong tool for making integrated assessments.

SYNAPS[®] is currently under development as an Internet based software tool, for improved dissemination and use. It will also be available in several languages bridging the gap between regions in neighbouring countries.

You are invited to discuss the practical implications of SYNAPS in the context of sustainable regional development and watch a demonstration of the software.

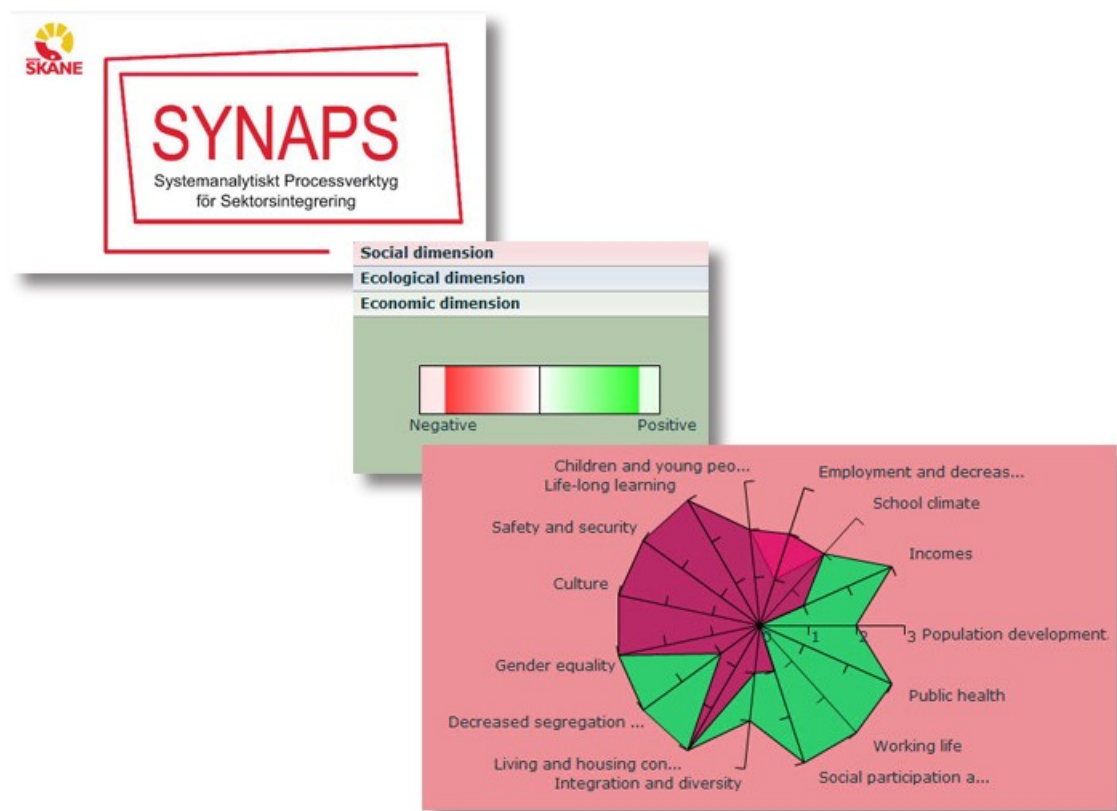


Figure 1: Some selected screen shots of details of the English software version of SYNAPS[®]

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