# APPLYING CONCEPT MAPS TO ANALYSE THE LEVEL OF SUSTAINABLE DEVELOPMENT AWARENESS HELD BY POLICY MAKERS IN MALTA

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Abstract. There is the need to create a common purpose in the world's governmental sectors so that the world can adapt to future change. Various practices are being adopted worldwide to promote sustainable development. Such practices should also be upheld in Malta, so that like other countries, it can contribute effectively to building a sustainable future. The road to sustainable development requires both an understanding of this concept and a commitment from all the policy makers. This study was conducted to explore the level of awareness of sustainable development held by policy makers. It also looks into the sustainable practices promoted by them in their workplace and in their personal lifestyle. Concept maps were used to identify key ideas and underlying interconnections between the policy makers' perceptions of sustainable development and whether they have developed the necessary values and attitudes required to promote sustainability. The study brings valuable insights into issues related to sustainable development at both local and national level. It provides suggestions that focus on educational target points required to improve current practices of sustainable development to make this a successful agenda in the Maltese Islands.

# 1 Introduction

Today, more than ever before, the majority of the world leaders have understood the need for sustainable development. Cooperation by all states is also required to respond to the special circumstances and particular vulnerabilities of countries, especially small island countries, through adequate and specific approaches. As an EU and SIDS (Small Island Developing State) member, Malta is expected to adopt sustainable practices and adhere to the national sustainable development programme. One of the main concepts inherent within definitions of sustainable development is 'Quality of Life'. A good quality of life rests on three interrelated components: environment, society and economy. Nowadays sustainability is also incorporating the cultural dimension. Malta has an obligation to provide a good quality of life for its current citizens and build a better future for the forthcoming generations. This can be done by putting the country on a sustainable pathway. Although in recent years 'sustainability' has become the latest 'buzz' word and is being referred to as the 'latest fashion accessory'' (Hawkins & Shaw, 2004), many nations have, in fact, recognised the value of sustainable development and today work together striving to attain a good 'Quality of Life'.

In Malta, only a collaborative effort by policy makers and citizens, who have a heightened education about the subject, can steer the island towards sustainability. However, smallness and insularity produce specific behavioural responses (Sultana & Baldacchino, 1994). Although Local Agenda 21 insists that sustainability should be tackled through a top-down, bottom-up approach, the Maltese population tends to have a predominant mentality that change has to come from above, rather than from the grassroots. Malta's archipelago scores as one of the smallest island states in the world. However, Malta's strategic position, placed in the middle of the Mediterranean, has always fuelled interest in various powers that sought to dominate the Mediterranean arena. Following hundreds of years of domination by foreign powers, it seems to have become engrained in the Maltese generations to be followers rather than rulers.

As is typical of developing post-colonial states, there is in Malta an observable tendency to emulate and mimic the behavior of foreign significant others. (Sultana & Baldacchino, 1994.p.15) Unfortunately, Maltese citizens are still rather limited in exposure and inclusion of ideas. Public opinion and confidence in citizen power quickly changes and develops in countries such as Luxembourg which are similar in size to Malta but benefit from constant communication with larger neighboring countries. However, in Malta citizens tend to have lower expectations about the importance and influence of public participation. The younger generation should, however, be getting a better experience and understanding of the world. Various reports suggest that there is a level of concern about sustainable issues in the Maltese Islands, especially environmental ones, among the Maltese citizens. However, this is not often translated into individual action (MEPA, 2005, p.1). It is usually NGOs who try to make a stand and promote a sustainable vision. Although sustainable development features in many official Maltese agendas and policy documents, prior to this study, no investigations regarding awareness and commitment of policy makers to promoting sustainability had been conducted. Although the National Strategy towards Sustainable Development was set to start in 2007, the political will to implement it seemed rather slow. Achievement of its goals seemed sporadic; sometimes also uncoordinated and conflicting. For example, while government commissioned a report on the abatement of greenhouse emissions (Climate Change

Committee, 2008) the Ministry of Infrastructure, Transport and Communications signed a contract for the building of a diesel-engine for the power station which runs on heavy fuel oil (Falzon, 2009). This did not seem congruent with Malta's international obligation towards building a sustainable future.

In a country like Malta which is basically run by individuals, the actions and efforts of every individual matter – especially those of policy makers. Policy makers have the responsibility to devise, fund and implement the national sustainable development strategy. They need to orientate their existing practices to address sustainability.

Bearing in mind the above sociological perspectives, this study was conducted to explore the level of awareness of sustainable development of people in governing bodies as I believe that a positive attitude and awareness of the necessity of sustainable development at this level is imperative to jump start the required changes in my country.

The first aim of this study was to explore whether the level of awareness of sustainable development and related practices of policy makers has an influence on the progress of sustainable development in Malta. The research examined the degree of sustainable development being promoted in the workplace of each interviewed policy maker and in his/her personal lifestyle. It brings valuable insights into issues related to sustainable development implementation in Malta. The second aim of this research was to compile suggestions that focus on educational target points required to improve current practices of sustainable development to make this a successful agenda so that Malta can also contribute effectively to the efforts made worldwide to promote sustainable development.

## 2 Methodology

#### 2.1 Research Design

The methodology undertaken in this study was primarily qualitative. This was preferred to quantitative analysis as besides focusing on whether there is a statistically significant relationship between two concepts, qualitative analysis goes further in revealing whether the relationship between them is appropriate (Cañas et al, 2004). This study was planned to investigate Maltese policy makers' concepts regarding sustainable development through the use of open-ended but structured interviews which took an average of forty-five minutes to one hour. "The empirical studies that the actual roles planners adopt and use in practical situations reveals both the real demands for a policy makers' knowledge and competence, and the tensions planners face in trying to further the goals of sustainable development" (Brasouillis, 1999, p900).

An analysis of policy makers' commitment to sustainable development practice as reflected in their lifestyles, their current work and their agenda for the future was conducted. Through the use of interviews and data analysis, the study aimed to develop a detailed picture of issues influencing decision-making. The study provides insight on why certain decisions concerning sustainable development are or are not taken.

The structured but open-ended interview was chosen on the grounds that it allows for greater depth than the other methods of data collection (Cohen & Manion, 2000). The questions were grouped into four sections:

- A. Sustainable Development Awareness
- B. Inclusion of Sustainable Development in Personal Lifestyles
- C. Inclusion of Sustainable Development in Work Activities
- D. Awareness regarding Sustainable Development Policy Making

Questions in Section A were planned to elicit the policy makers' knowledge about sustainable development concepts at a national level. Section B and C comprised questions that allowed interviewees to think about their commitment towards sustainable development, their achievements so far and their future aspirations. These sections also allowed me to probe the feelings and thoughts that support their actions. Questions in Section D were tailored to determine the interviewees' knowledge about implementing and sustaining this concept on a local level. They also allowed participants to voice their concerns about local policy making and difficulties encountered during implementation.

## 2.2 Participants chosen

The research targeted policy makers as I believe that they have an impact on various aspects involved in preparing Malta for the challenges of the 21st century. It is pertinent that the attitudes and values of all those involved in moulding Malta's future understand what the course of sustainable development entails. At the root of my choice, there was not a desire of finding some definite answers through the policy makers' responses, but to develop a deeper understanding of their commitment towards sustainable development through their personal reflections and expertise.

The policy makers chosen where: members of parliament, green leaders, local councilors and mayors from both political parties – 13 men, 7 women; 2 Gozitans, 18 Maltese. Politicians have a say on a national basis and are direct stepping stones to laws being passed in favour of sustainable development. Local councils set up in 1993 in response to LA21 are managed by local councillors who have specific control in their locality and ensure that their locality implements sustainable strategies on a local level. Green Leaders were approached to participate in this study since they were appointed by the government in 2005 to create environmental awareness and promote environmentally-friendly practices within their Ministries. The selection of participants was determined by random sampling and it was ensured that both sexes and political parties were represented in accordance with the actual governmental system. Although all respondents were expected not to let their political bias influence their replies, I did notice that some of them were subjective so their political inclinations were included. Obviously, this had to be done with all the respondents to avoid signalling out any individuals.

It was very difficult to find people willing to participate – over 100 emails were sent, 47 replied. As informed consent was required, before arranging for the interviews, an e-mail was sent to the forty-seven respondents to advise them of the topic and purpose of the interview. Once informed about the thesis, the number of participants decreased to 20. People involved were high profile people and probably feared they could have been identified. Some also commented that sustainable development strategies were not in their line of work and were reluctant to be interviewed. The views presented in the thesis reflect the thoughts of the twenty policy makers who accepted the request. This leads one to assume that, to some extent, the majority of the respondents felt confident being interviewed about sustainable development as they had a certain amount of knowledge on the subject. It is interesting to note that the Maltese government has declared that sustainable development should be given a horizontal priority on all policies and should therefore be incorporated in the agendas of all ministers and members of parliament. The NCSD advocated national sustainable development should be a cross-cutting strategic issue and for sustainable practices to be successful, they should be given priority on everyone's agenda.

#### 3 Data Analysis

#### 3.1 Using Concept Maps

The data collected was analyzed after transcripts were approved by the relevant interviewees. This research generated a large amount of information that could not be sorted into neat categories. To make analysis simpler, key concepts were identified. The main concerns identified by the individual participants where categorized according to which of the three main sustainable development sectors (i.e. the environmental, the social and the economic) they fell under. In qualitative research, voluminous amounts of data need to be reduced to a manageable form without losing the embedded meaning. For this reason concept maps for the individual participants were constructed to determine what the participants understand by 'sustainable development', their readiness to collaborate with others to promote sustainable development policies and their commitment in setting an example. They were also used to highlight what, in their opinion, is hindering the progress of sustainable development in the Maltese Islands.

Concept maps (Novak's tool developed to represent the expert knowledge of individuals – amongst other uses) were used to reduce the qualitative data so as to facilitate the process of understanding key ideas (eg. Figures 1, 2 and 3). They were also used as an efficient way of presenting findings. The maps therefore allowed analyses of key themes. Reducing the data to a one page concept map per participant facilitated the process of outlining similarities and highlighting differences when focusing on the participants' meaning. The Cmaps made it easier to see the underlying interconnections between the emerging concepts. The vertical links displayed how the participants different areas of sustainable development and sustainable practices.



Figure 1. Concept map developed for Policy Maker 1



Figure 2. Concept map developed for Policy Maker 2



Figure 3. Concept map developed for Policy Maker 3

The Cmaps provided an insight to the policy makers' perceptions of sustainable development and whether they have developed the necessary values and attitudes required to promote sustainability. They also indicated whether the decisions taken by policy makers are rooted in a clear understanding of the holistic nature of sustainable development. The degree of horizontal linkage for each participant also brought to light whether the policy makers recognize that sustainable development involves complex schemes that are multidisciplinary and require long term goals.

### 3.2 Interviewees' Perceptions of Sustainable Development

When analysing the collective feedback that emerged through the Cmaps there seemed to be quite a substantial amount of knowledge of what sustainable development entails. However, one needs to bear in mind that all the data gathered reflects the views of all policy makers. When viewed individually, few were those who managed to give due importance to all three major pillars of sustainable development. Apart from these few, the rest across the board were very knowledgeable in a particular aspect of sustainable development and slightly less knowledgeable in others. This mostly depended on their area of expertise due to the position in which they were delegated.

Policy makers have different perceptions and experiences that together shape their views of what constitutes sustainable development. Environmental concerns prevail in the majority of Cmaps. This indicates that, to a certain degree, environmental concerns have become an important part of the political agenda. On the other hand, it is still a thwarted image of sustainable development and a possible explanation why sustainability projects undertaken up to now were predominantly concerned with environmental issues.

The Cmaps clearly illustrate that the majority of respondents interpreted the social dimension of sustainable development in terms of social welfare with minimal or no reference to the notions of social equity and justice. In the case of economic development, most interviewees were conscious of environmental objectives being compromised by economic pressures and pointed out that economic development usually prevails in decision making. Improving the existing levels of education on sustainable development was the only issue common to all respondents. Other domains required for a good, sustainable economy (eg. improving the efficiency of the public sector, better work conditions, and more women in the workforce) were completely omitted by the majority of policy makers.

The underlying concept seems to be that due to its perceived environmental slant, sustainable development policies limit social and economic development. Consequently when policy makers are faced with tough decisions concerning the social and/or economic forum (e.g. unemployment and boosting the tourism industry) environmental concerns are considered as a liability. Although not an easy task, policy makers need to understand that development that is not sustainable, i.e. that does not integrate the three concerns so as to create a balance between them, is not true development. If any one of the aspects is ignored, the impact of this negligence will return to erode any achievements made by the sustainable development adopted.

One might argue that the causes of a country's unsustainability are often, though not solely, traceable to political decisions. Although some politicians try to do their bit for its promotion, sustainability is often compromised at government level (as indicated in some of the Cmaps) because of "clashing interests", a "fear of diminishing popularity" and "loss of votes". These 'priorities' can easily be given precedence over planning choices thus hindering objective sustainable proposals. This reality has an even greater impact in a Small Island State with a very high population density like Malta.

It is ultimately the government who has the resources to enable the implementation of the required sustainable changes to take place. In reality, sustainability is usually dependent on the political whim and personal convictions of individuals in power. People in authority, who aim to provide good governance, need to place values and attitudes conducive to sustainability before their personal interests and opinions. Stalling sustainable development policies and their implementation will ultimately be to the detriment of the nation's environment, economy and society.

Many of the Cmaps illustrating the local councillors' perceptions of sustainability and related practices confirmed that politically motivated conflict and clash of egos are not that common among council members. Analysis of the information shown in these Cmaps indicate that it would be easier to agree on good sustainable practices at the local level, where the prime concern of councillors is to improve the quality of life of all their locals. Therefore, the necessary authority should be primarily invested in local councils particularly if the required decisions for a sustainable future are not being addressed at a higher level.

Most of the councillors argued that they feel that they are not being considered as policy makers. Their contribution is a secondary role: they feel that they are being presented with a fait accompli and that decisions have already been taken when asked for their contributions. They also feel restricted in the initiatives they take at a local level because of limitations, such as lack of proper funding.

Another valid point that emerged through analysis was that it is not enough to introduce good sustainable development policies; they also have to be faithfully implemented and monitored. It was suggested that qualified persons should be employed just to oversee sustainable development incentives in all government departments. A common complaint was that the job of monitoring sustainable development practices in the different departments was entrusted to persons already holding a full day's work load with the result that the additional sustainable development chores are placed on the back burner. In essence, this was the reason why the Green Leader initiative did not effectively achieve the targets it was set up for. If sustainable development is a national priority for Malta, ensuring its implementation should not be left to chance or to sporadic initiatives, but meticulously planned and monitored.

Policy makers should not shoulder all the responsibility of steering a country towards sustainability. Almost all Cmaps reveal a common key concept: the government should have a major role in instituting sustainability, implying that a top-down approach is essential. This is because the government owns the financial and human resources to enable good policy making. However, it was also noted that the public has to demonstrate active citizenship by showing initiative and ownership. This implies that many policy makers also believe in a bottomup approach. Civil society was mentioned by all interviewees as an important stakeholder. The general feeling among the participants was that they are at opposing ends with the public and they feel that they are swimming against the current when it comes to introducing new practices to the people. True to human nature, most interviewees shifted the blame to their superiors (politicians when this was applicable) or their subordinates (the citizens).

Analysis of this data draws attention to the need of an equally synchronized commitment from both ends to achieve an optimal result. Policy makers must understand that if they expect the public to cooperate, they themselves must be capable of sharing their knowledge with the public in an explicit and coherent manner.

Sustainable development puts the individual at the centre of any significant step towards sustainable lifestyles and hence promotes participation and partnership.

The government also needs to invest in methods or professionals that are capable of fuelling interest in citizens making them accountable and willing to participate in any sustainable projects. Citizens need education regarding sustainable development to help them understand that sustainability is a necessity and should be adopted as a way of life. It is only when citizens are themselves prepared to 'live sustainably' that the necessary behavioural, economic and social changes will be realized (IUCN, 1991). The concept of active citizenship is, once again, dependent on the government's readiness to decentralise power and allow citizens to voice their opinions in public debates, value their contribution and provide feedback on improved provisions.

As pointed out earlier Malta's progress towards sustainability is actively hindered by a mentality that considers citizens as followers rather than leaders – the legacy of Malta's foreign dominancy background. Achieving our commitments towards a sustainable future requires a radical change in the way we perceive ourselves, our responsibilities, our decision making practices and our lifestyles. At the heart of this radical change is the commitment towards ESD targeting policy makers' and citizens' sustainability awareness. This can lead to a new generation of leaders who are ready to take the necessary steps in the right direction for prompt implementation of sustainable practices. Some interviewees remarked that public involvement and implementation is hindered as not all policy makers are sufficiently knowledgeable about what constitutes sustainable development. If this is really the case, then it clearly indicates that there is a dire need for ESD among policy makers. The implications of the findings and the conclusions about policy makers' practices and awareness could be of use in considering what educational steps and research programmes need to be taken to expedite implementation of sustainable development in Malta.

# 4 Conclusion

This research analyses the commitment of policy makers towards sustainable development practices as reflected in their lifestyles, their current work and their future agendas. Concept maps were used in this qualitative research to condense and organise the large amount of data collected and to create key themes and categories. Cmaps were central in the data analysis, revealing clear interconnections between repeated concepts of knowledge regarding sustainable development and related practices. Analysis of Cmaps indicated that sustainable practices are being incorporated in Maltese policies yet there is the necessity to prioritize all the needs of sustainable development to facilitate its implementation. This can be done by providing the opportunity for both policy makers and the public to increase their knowledge and understanding of the purpose of Local Agenda 21.

It is hoped that this research reminds policy makers that actions speak louder than words and they therefore should orientate their existing practices to address sustainability. The challenge for any government is not only to make sustainable development the aim of its policy, but to attain the targets it sets in these policies within the stipulated time-frames. It is essential that sustainable development is not considered to be an add-on but it is seen as integral to our way of life. In decisions concerning society and life, there will never be a formula that will please all citizens and this also applies to sustainable development. For every policy that government decides on, there will always be opposing fronts who disapprove of the decisions taken. However, if policy makers become proficient in sustainable development and believe in what they are promoting, they will recognize and believe in the importance of small improvements alongside the major changes.

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