Policy integration in practice: some experiences of integrating transport, land-use planning and environmental policies in local government

Dominic Stead, Evert Meijers

Delft University of Technology
OTB Research Institute for Housing, Urban and Mobility Studies
PO Box 5030
2600 GA Delft
The Netherlands
d.stead@otb.tudelft.nl; e.meijers@otb.tudelft.nl
Tel +31 15 2782540
Fax +31 15 2783450

Abstract

There is widespread acceptance that integrating decisions across different sectors of policy is crucial for sustainable development. This is certainly the case in the area of transport, land-use planning and environment policy and is exemplified in various high-level reports on transport and sustainable development. Despite these calls for policy integration, however, information about policy integration in practice, the experiences of policy-makers with policy integration in this field and the mechanisms or tools for policy integration that could help to lead to more integrated policy are all difficult to find. This paper attempts to shed some light on these issues and reports on some recent experiences of policy integration in local government in Denmark, England and Germany. The main focus of the paper is on methods and instruments that help to promote policy integration, including impact assessment techniques and policy targets and indicators. The material is based primarily on in-depth interviews carried out with key actors involved in policy making in the selected case study areas. The paper reflects on how different methods and instruments can affect policy integration, focusing particularly on the integration of transport, land use and environment policies. The methods and instruments covered in this paper include various impact assessment techniques, methods and instruments based on targets and indicators, and public participation techniques.
1. Introduction

There are increasing calls for greater policy integration at a time when decision-making is facing increasing complexity as a result of various concurrent trends. Some of these trends are toward globalisation and greater centralisation of decision-making, whilst other trends are toward fragmentation and decentralisation of decision-making. A variety of factors have increased the number of actors involved in the policy process, such as the emergence of the information society, greater emphasis on public participation and the increasing role of non-governmental organisations, pressure groups and agencies in the decision-making process. All these developments make policy integration increasingly difficult but more compelling to achieve.

It is frequently argued in the area of land use planning, transport and environment policy that integrating decisions across these sectors is crucial for sustainable development. The final report of the ECMT-OECD project on Implementing Sustainable Urban Travel Policies for example states that ‘sustainability requires that policy-making for urban travel be viewed in a holistic sense: that planning for transport, land-use and the environment no longer be undertaken in isolation one from the other’ (European Conference of Ministers of Transport, 2001:19). It notes that ‘without adequate policy co-ordination, the effectiveness of the whole package of measures and their objectives is compromised’ (ibid). The Johannesburg Plan of Implementation of the 2002 World Summit on Sustainable Development urges governments to ‘promote an integrated approach to policy-making at the national, regional and local levels for transport services and systems to promote sustainable development, including policies and planning for land use, infrastructure, public transport systems and goods delivery networks…’ (UN, 2002: para 21).

Despite the emphasis of various documents on policy integration (for a review of European policy documents, see Geerlings and Stead, 2003) and a sizeable academic literature on policy integration, albeit spread across a variety of academic disciplines (see Meijers and Stead, 2004; Stead et al, 2004), research concerning the integration of land use planning, transport and environment policies is relatively scarce and evidence of any translation of rhetoric and theory into practice is difficult to find.

In this paper, we examine the issue of policy integration in three urban-regions in Denmark, England and Germany (Copenhagen, Cambridgeshire and Peterborough and Freiburg respectively). The feature that the three case study areas share is that they have responsibility for planning at the urban-region scale. The Danish and the German case study areas, Greater Copenhagen and Freiburg (Regierungspräsidium) respectively, have responsibility for strategic land use and transport policy. Cambridgeshire and Peterborough, within the English case study area, produce strategic land use policy jointly but produce transport policy separately. The material presented in this paper is based primarily on in-depth interviews which were carried out with key actors involved in policy making in these three case study areas (see Stead et al, 2004 for further details of the interviews).

Although policy integration is important in all three case studies, information collected during the interviews suggests that the driving forces for policy integration are somewhat different in the three areas. In Copenhagen, the driving forces are more international in nature and include directives on strategic environmental appraisal and water, although local driving forces such as Local Agenda 21 are also important. The driving forces for policy integration in Cambridgeshire and Peterborough are more national and include policy guidance (in the form of planning policy guidance and other government advice on policy such as Local Transport Plans and Air Quality Management) and national policy reports (such as the 1998 national Transport White Paper). In Freiburg, the driving forces for policy integration are primarily regional and local in nature.
city’s status as an environment city and the existence of a large number of environmental groups in the city are two important factors here.

The analysis of the influence of methods and instruments on policy integration is presented in this paper under three main headings: (i) impact assessment techniques; (iii) techniques based on targets and indicators; and (iv) public participation techniques. Before turning to the issue of methods and instruments, however, we briefly examine the concept and definition of policy integration.

2. The meaning of policy integration

Whilst the term ‘integrated policy-making’ is rather uncommon in the theoretical literature, a number of better known and more or less synonymous concepts can be found: coherent policy making (OECD, 1996), cross-cutting policy-making (Cabinet Office, 2000), policy co-ordination (Challis et al, 1988; Alter and Hage, 1993), concerted decision-making (Warren et al, 1974) and holistic government, also known as joined-up policy (Wilkinson and Appelbee, 1999) or joined-up government (Ling, 2002). Other related concepts in the organisational literature that have potential relevance for research concerning the integration of sectoral policies within and between organisations include inter-organisational co-ordination (Rogers and Whetten, 1982), inter-organisational collaboration (Alter and Hage, 1993; Huxham, 1996), inter-governmental management (see Agranoff, 1986) and network management (Kickert et al, 1997). Inter-organisational policy-making and intra-organisational policy-making are similar to a considerable extent when it comes to integrating issues that are cross-sectoral. After all, within one organisation, different sectoral departments often operate as different organisations with their own specific professional styles, approaches, needs, agendas and modes of operation. The main difference is that the inter-dependence within an organisation is subject to a larger amount of control than between organisations. Our view is that there are a number of distinct terms concerning policy integration and a hierarchy of terms, namely:

- policy co-operation, at the lowest level, which simply implies dialogue and information
- policy co-ordination, policy coherence and policy consistency – all quite similar, which imply co-operation plus transparency and some attempt to avoid policy conflicts (but do not necessarily imply the use of similar goals)
- policy integration and joined-up policy – includes dialogue and information (as in policy co-operation), transparency and avoidance of policy conflicts (as in policy co-ordination, policy coherence and policy consistency) but also includes joint working, attempts to create synergies between different sectors (win-win situations) and the use of the same goals to formulate policy

This hierarchy of terms is summarised in Figure 1 below. For the purpose of this paper, we regard policy integration as the management of cross-cutting issues in policy-making that transcend the boundaries of established policy fields, and which often do not correspond to the institutional responsibilities of individual departments. It refers to both horizontal sectoral integration (between different departments and/or professions in public authorities) and vertical inter-governmental integration in policy-making (between different tiers of government), or combinations of both. However, the focus of this paper is mainly on horizontal sectoral integration.

Figure 1: Integrated policy-making, policy co-ordination and cooperation
3. Methods and Instruments for Policy Integration

This section is concerned with methods and instruments currently in use in the case study areas that can affect integration of land use planning, transport and environment policy. Three main types of methods and instruments are distinguished. The first relates to impact assessment techniques, such as strategic environmental assessment (SEA) and sustainability appraisal. The second type of methods and instruments concern targets and indicators, such as Best Value Performance indicators used to assess the local authority service delivery in England, and benchmarking. The third relates to the impact of public participation on policy integration. One of the main observations here is that there are a relatively large number of methods and instruments in England that interviewees consider important for policy integration, whilst there are relatively few in both Denmark and Germany. However, this does not necessarily mean that policy integration is any more advanced where more methods and instruments for policy integration are used. Methods and instruments are just one aspect of policy integration – other aspects include individual factors, economic and financial constraints, institutional conditions and political factors – some of these are examined elsewhere (see Stead et al, 2004).

3.1 Impact Assessment Techniques

In England, planning policy guidance draws attention to the need for policy integration (Nadin and Seaton, 2004). This policy guidance determines much of the content (and sometimes the structure) of planning and transport policy documents. Policy guidance therefore acts to ensure that all key issues are included in local policy documents. A number of techniques relating to various forms of impact assessment can be found in the policy guidance, including sustainability appraisal, transport impact assessment, air quality management and ‘causal chain analysis’. These are examined in turn below.

Sustainability appraisal

One of the important ways of ensuring consistency between policy in the UK (between land use and environmental policy in particular) and ensuring that environmental considerations are adequately taken into account is through sustainability appraisal, required as part of the process of preparing regional planning policies (see Nadin and Seaton, 2004). In the case of the joint structure plan for Cambridgeshire and Peterborough, a sustainability appraisal was carried out by consultants on behalf of the planning authority (an internal sustainability appraisal was also carried out before this). In order to carry out the sustainability appraisal, a series of 19
‘sustainability objectives’ for Cambridgeshire and Peterborough were developed that the plan should aim to achieve. These objectives were grouped under the following four themes:

1. safeguarding the environment through effective protection
2. providing for future generations through prudent use of natural resources
3. supporting communities through social progress which recognises the needs of everyone
4. promoting prosperity for all by maintaining high and stable levels of economic growth and employment

Using the above objectives, a review of each of the policies in the draft structure plan was carried out. In addition, the sustainability appraisal also considered how well the policies ‘fit together’ to provide a coherent plan for the development of Cambridgeshire and Peterborough. Alongside the sustainability appraisal, a health impact assessment of the structure plan and the Cambridgeshire Local Transport Plan was also carried out. This included an assessment of the impact of policies on social inclusion, safety and access to services and facilities.

In Germany, various kinds of impact assessments are standard components of planning procedures at most levels of policy-making (Schleicher-Tappeser et al, 2004). The primary role of these assessments is to prevent negative impacts on other policy fields and are usually carried out after the design of a programme or plan. According to the interviewees, these assessments are generally considered a necessary but tedious additional burden within policy-making.

**Transport impact assessment**

Under current planning policy guidance for transport in England (PPG13), transport assessments are required to be submitted alongside the planning application for new developments with significant transport implications (DETR, 2001). For small schemes, the transport assessment must outline the transport aspects of the application. For major proposals, the assessment should illustrate accessibility to the site by all modes and the likely modal split of journeys to and from the site. It should also give details of proposed measures to improve access by public transport, walking and cycling, to reduce the need for parking associated with the proposal and to mitigate transport impacts. This new requirement provides an interesting and important opportunity for transport and land-use agendas to come together. One potential problem here, however, is that these assessments do not always identify spillover or knock-on effects for adjacent authorities (Stead, 2003). Strictly speaking, however, this technique is not part of the policy-making process: it provides a way of assessing the impacts of new development.

**Causal chain analysis**

According to government guidance on preparing local transport plans (LTPs) in England, monitoring arrangements need to be considered as an integral part of the document (Department of the Environment, Transport and the Regions, 2000). It states that LTPs should show a clear link between objectives, measures and outputs. In this respect, the guidance advises that authorities may find it helpful to use causal chain diagrams (a flowchart linking measures to objectives). Peterborough’s LTP adopts such an approach as a way of trying to ensure that all the schemes in the LTP work towards achieving the overall objectives of the document. Each package of the schemes in Peterborough’s LTP is assessed against the objectives using a causal chain methodology (Figure 2).

**Air quality management**

The UK Air Quality Strategy plays a role in influencing a more integrated approach to land use, transport and environment policy (Department of the Environment, Transport and the Regions, 2000a). The strategy requires air quality considerations to be taken into account when preparing land use development plans and when planning transport. In areas where air quality is poor (or is
forecast to be poor in the future), local authorities must designate an air quality management area (AQMA) and prepare an action plan setting out how the air quality problem will be tackled. This involves planning and transport considerations. The situation is somewhat complicated by the fact that local authorities have the responsibility for air quality, while responsibility for transport and strategic planning sometimes rests with the next tier of government (the county level). Decision-making for transport, land-use and environmental policy is thus fragmented between two different levels of government.

3.2 Techniques based on Targets and Indicators

In England, plans and strategies are now more target-based (e.g. air quality, road traffic, use of brownfield land) than in the past. This has advantages in terms of focusing on policy outcomes but it does not always lead to desirable outcomes from a transport and environmental perspective. Brownfield land, for example, is not by definition urban, unpleasant or polluted – it can also be rural, green and pleasant (e.g. a disused quarry). Thus, targets for development on brownfield sites do not necessarily have benefits for transport reduction or the environment. The message here is that targets are useful tools but choosing which ones to use needs some care.

According to the interviewees, the approach of setting targets, and to develop policies in order to attain these targets, appears to be less commonly used in German and Danish policy-making than in England. Having said this, the use of targets was an integral part of developing integrated transport and environment plans in Denmark in before being gaining popularity in the UK (Sørensen, 2004). Such an approach requires the capacity to formulate and to maintain a shared commitment for achieving these targets, effective monitoring and good communication. In Freiburg, some interviewees believe that many of these prerequisites are missing and there is only weak support for target-oriented policies.

Figure 2: An example of causal chain analysis from Peterborough’s Local Transport Plan
Benchmarking is considered useful in helping inform policy development and assessment in two of the three case study areas. In Peterborough, a group of five similar English authorities for new towns has come together to form a benchmarking forum for their Local Transport Plans. The aims of the forum are to share information about best practice, identify how to improve performance, and to work together to develop targets and monitoring processes. Benchmarking is also considered important for policy development and assessment in Copenhagen (see for example Öresundskomiteen, 2001). As well as allowing authorities to track the progress of policy outcomes, benchmarking also helps to disseminate information about policy-making processes and illustrate different policy options. This is considered important by a number of interviewees.
Best Value

Best Value is a recent approach designed to promote improvements in local authority functions in England. As part of the Best Value process, local authorities are required to carry out a regular review of their functions in terms of:

- why, how and by whom services are provided
- the performance of the authority in comparison with other authorities
- the views of service users and the local community on service provision
- how efficient and effective services are provided

The process is based on more than 100 Best Value Performance Indicators (BVPIs) which cover most aspects of services provided by local councils. These include indicators for transport and planning (see Box 1). There are however no indicators of environmental quality (except for some indicators on waste and whether a Local Agenda 21 plan has been adopted), although Cambridgeshire have nevertheless carried out a review of their environmental programme using Best Value criteria.

Box 1. Examples of Best Value performance indicators

<table>
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<th>Transport:</th>
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<tr>
<td>Cost of highway maintenance</td>
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<tr>
<td>Cost per passenger journey of subsidised bus services</td>
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<tr>
<td>Condition of principal roads (proportion in need of repair)</td>
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<tr>
<td>Local bus services (passenger journeys per year)</td>
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<tr>
<td>Proportion of dangerous roads and pavements repaired within 24 hours</td>
</tr>
<tr>
<td>Proportion of pedestrian crossings with facilities for disabled people</td>
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<tr>
<td>Proportion of total length of footpaths/other rights of way which are easy to use</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Planning:</th>
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<tr>
<td>Proportion of new homes built on previously developed land</td>
</tr>
<tr>
<td>Planning cost per head of population</td>
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<tr>
<td>Proportion of planning applications determined within 8 weeks</td>
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<tr>
<td>Average time taken to determine all planning applications</td>
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Some officers believe that this process has resulted in more ‘joined-up’ government by increasing the focus on service delivery for the authority as a whole. On the other hand, however, the indicators are predominantly sectoral and do not encourage much thinking beyond current professional or departmental boundaries. And indicators sometimes focus on symptoms rather than their underlying causes (e.g. the frequency of street-sweeping, rather than ways to keep the streets clean).

Best practice

Best practice guides, issued by national government in England, provide a way of identifying how to develop and implement policy. Examples include ‘PPG13: a guide to better practice’ (DoE/DoT, 1995), ‘Planning for sustainable development: towards better practice’ (DETR, 1998) and ‘Sustainability Appraisal of Regional Planning Guidance’ (DETR, 2000b). As in the case of benchmarking (see above) these guides help to disseminate information about policy-making processes and illustrate a range of different policy options available. Some similar guidelines have also been produced in Denmark although these are not specific to land use planning, transport and environmental policies. Examples from the Spatial Planning Department of the Ministry of Environment include guidelines for Local Agenda 21 (Strategi for lokal Agenda 21 – en vejledning), guidelines for strategic municipal planning (Strategi og kommuneplanlægning...
Implementation studies

In March 2001, consultants (Roger Tym and Partners) were commissioned by Cambridgeshire County Council, the East of England Development Agency and the Department for Transport, Local Government and the Regions, to give guidance on how the higher level of growth required through Regional Planning Guidance can be delivered. The study concentrated on the Cambridge sub-region and looked at how to ensure effective co-operation between the private and public sectors to provide the full range of infrastructure investment needed to provide a high quality of life (schools, affordable housing, country parks, public transport systems). According to some interviewees, the study has contributed to thinking in terms of policy integration in the sense that it has helped the authority to identify how to provide transport infrastructure in advance of new development taking place.

3.3 Public participation techniques

Many interviewees in the three case study areas share the view that officers can have a strong role in pushing forward the issue of policy integration. However, achieving popular support from politicians and the public for policies that do not have short-term results or effects can be difficult.

In England, local authorities are increasingly involving the public in the planning process, often more than the statutory minimum. Authorities such as Cambridgeshire and Peterborough are keen to move away from the 'decide-announce-defend' system of introducing new planning policy by involving the public early in the decision-making process: this is not without problems, however. Canvassing public opinion often results in multiple, conflicting, unachievable goals (more spacious homes and gardens in rural locations; protection of the countryside against development; freedom to use a car; less pollution and congestion). Some local authority officials feel that inter-disciplinary solutions and policy development are sometimes difficult for politicians and/or the public to understand or accept, especially when they appear counter-intuitive (e.g. how can a reduction in road-space capacity alleviate congestion?).

In England, the Secretary of State appoints an independent panel to conduct the Examination in Public (EiP) of a structure plan. This EiP takes place over several weeks and involves a large number of invited participants including representatives of interest groups and developers, local councillors, academics, government agencies and members of the public. Following the EiP, the panel presents its report of recommendations to the planning authority. The planning authority then has to respond to the recommendations of the EiP Panel and propose a set of modifications to policies and proposals. The resources of the organisations involved in the EiP obviously differ very substantially. For example, development interest groups may devote substantial amounts of resources for research or publicity to support their arguments, whereas environmental groups, on the other hand, often have very limited resources and capacity for research or publicity to support their case. Like all other structure plans in the UK, the structure plan for Cambridgeshire and Peterborough was subject to statutory public consultation, which allowed wider scrutiny of the policies. The authority produced a consultation pack for this purpose, which included an interactive CD-ROM, an information booklet and a questionnaire. Information was also made available on the council’s website and through a number of staffed displays in different locations across the area.
In Germany, the strongly formalised planning procedures mean that opportunities for dialogue with stakeholders and the public are at a rather late stage of planning process. The strong reliance on legal procedures sometimes leads to extended court cases. Increasing attempts to involve the public at an earlier stage in the planning process (as in the case of Freiburg) are still rare.

4. Conclusions

Although there is increasing attention being given to the issue of policy integration, the concept remains fuzzy for many policy-makers, somewhat analogous to the concept of sustainable development. Underdal noted as early as 1980 that, despite calls for policy integration, explanation about what policy integration exactly means and how it can be achieved remains elusive (Underdal, 1980). More than two decades later, this is still very much the same. As is the case of sustainable development, there is widespread consensus that policy integration is a good idea but a rather limited understanding about what exactly it is or precisely how to achieve it or monitor it. Despite frequent recent claims of policy integration, little has changed in terms of policy-making processes or implementation. There is therefore something of a rhetoric and reality mismatch in terms of policy integration. Everyone seems happy to sign up to the idea of policy integration, perhaps because the concept is fairly illusive, and claim that it is going on.

There is no formal monitoring of policy integration in the case study areas. This is due to the fuzzy nature of the concept of policy integration, a rather limited understanding about what it is and how to achieve it. Guidelines, procedures, indicators and best practice documents may help in this regard.

Sustainability appraisal is a technique similar to SEA to systematically examine the social, economic and environmental implications of policies. It is required as part of the regional planning process in England but is also carried out at other levels of decision-making, as in the case of the preparation of the joint structure plan for Cambridgeshire and Peterborough. External consultants carried out the sustainability appraisal of the structure plan for Cambridgeshire and Peterborough as well as a health impact assessment. The approach is generally thought to be useful for policy integration, particularly in terms of land use and environment policies. The usefulness of appraisals and assessments depends strongly on the policy development phase in which they are carried out. A reasonable range of policy alternatives needs to be analysed.

Benchmarking is one way in which authorities can learn and exchange information about policy-making and implementation. Peterborough is one of a group of five similar English authorities for new towns that has come together to form a benchmarking forum for their Local Transport Plans. The Øresund region (including Copenhagen) is one of a group of four regions across Europe to carry out an environmental benchmarking exercise. Benchmarking does not necessarily lead to policy integration but can help by allowing for exchange of information and extending professional networks. In general, benchmarking may be important for policy integration if it is sufficiently broad and if it stimulates understanding or co-operation between decision-makers in different sectors.

As in the case of benchmarking, participation does not necessarily lead to policy integration but can in some cases help, especially in providing a means of public scrutiny of policy. Acceptability of policy is likely to increase as a result of participation, although the measures may sometimes become more diluted (and consequently less effective) as a result of participation processes.
In Denmark, the case study of Copenhagen illustrates that there is quite a long tradition of cooperation between land use and transport planning professions and departments. In general, policy integration in Copenhagen appears to be the result of a general national framework for policy integration in combination with initiatives taken by key individuals, in association with a supportive organisational and political environment (e.g. the Transport and Environment Plan for Copenhagen). However, the lack of legal status for Transport and Environment Plans in Denmark has made them vulnerable to political change: the current government has now scrapped economic incentives for Transport and Environment Plans.

In England, integration of sectoral policies is still generally weak despite various mechanisms for policy integration that seem potentially useful. At the national level, where emphasis on policy integration (or joined-up government) is greatest, there are often some clear divisions among the three sectors of land use planning, transport and environment. There are also considerable divisions even within these sectors, particularly the environment sector, with numerous largely separate strategies and plans. Many of the mechanisms for promoting policy integration involve establishing consultation among agencies or joint working arrangements. Little of this is systematic and much depends on informal liaison. The planning system offers opportunities for policy integration at the project implementation stage but there is wide recognition that improved mechanisms for policy integration are needed. Much emphasis is being placed on the potential of spatial strategies at the regional level, although the details of this approach still need to be worked out. In the meantime progress has been made in providing better co-ordination between transport and land use policy, especially at the local level.

In Germany, decision-making is more complex compared to many other European countries, partly due to the fact that 5 or 6 policy layers are involved. In terms of general policy statements, integrated policy making has a high priority but in practice, integration proves to be very difficult. Policies tend to remain very sectoral, especially at the national and Länder level. Policy integration through setting of targets and objective-oriented management and public participation remain difficult in this context. However, the need for change has been recognised. The need for more dynamic and pro-active decisions as well as financial constraints are leading to experiments with more flexible management methods in public decision-making.

The methods and instruments for policy integration, whilst important, are not the only influences on policy integration and are by no means a guarantee that policy integration will occur with these in place. No single measures or techniques can bring about policy integration alone. Different approaches may result in similar levels of policy integration. And similar approaches in different settings may have different effects in terms of policy integration. A range of factors can affect the impact of different approaches, including cultural, political and organisational issues. It is also important to stress that, whilst policy integration is of key importance for sustainable development, policy integration is not an end in itself. Policy integration is just one means by which decisions can be made more sustainable: it is equally important that implementation is consistent with integrated policy if outcomes are to be more sustainable.

5. References


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Local communities can use benchmark planning. Redefining spatial planning systems with a range of criteria such as those set. Integrating ecosystems into spatial planning positively. When exploring opportunities for significant land use, affects quality of life and provides essential support change or natural resource extraction, taking ecosystems and habitats (EEA 2009). With this type of alternative land use plan, communities can generate income from mining while sustaining biodiversity and ecosystem services. The strategy was implemented with the help of national and local NGOs and foundations. This enabled the communities to get their minerals certified by FAIRMINED and sell it at a premium in the growing market for low-impact mined minerals.