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Sustainable Development Indicators and Local Government

Lesley Rowan

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**Department of Management and Organisation
University of Stirling**

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Chapter 5

Sustainability Indicators for Fife: Rich Description

SUSTAINABILITY INDICATORS FOR FIFE



*Measuring the quality of life
and the quality of the environment in Fife*

5.1 Introduction

Chapter 5 addresses the same Fife case study as Chapter 4 but applies new tools for framing and analysing the data. A new 'rich description' of the case is written up as a series of dialectical research cycles within the framework of a hermeneutic spiral as discussed in Chapter 2. This approach illuminates the impact of issues of process on the indicators selected for the purpose of recording and evaluating sustainable development practice in Fife Region.

The new approach to framing and analysing the data collected during the Sustainability Indicators for Fife project highlights the impact of the time frame for consultation, the institution's vision of the role of consultees and the resources devoted to the project as factors affecting the scope for genuine participation of a diverse range of stakeholders. These factors can shape which issues are chosen as locally important and the indicators that are used to determine sustainable development trends on the selected priority issues. These factors also have an important impact on the sustainable development framing of the indicators document as a whole. An ability to represent the iterative and cyclical nature of the influence of the process adopted to developing individual indicators (the parts) on the framing of the sustainability indicators report (the whole), and vice versa, is a key feature of the dialectical research cycle diagrams developed to map the processes of the project.

Section 5.2 looks at the development of a single indicator - Sewage Treatment - using material available through the formal documentary processes of the pilot including notes of meetings of the Sustainability Indicators Working Group (SIWG), drafts of the Sustainability Indicators for Fife Report and comments from 'official' consultees.

Section 5.3 contrasts a linear view of the development of the Sewage Treatment indicator with a cyclical view which recognises that the same stages of indicator development were revisited on several occasions before the indicator was finalised. A diagram is presented to show the development of the indicator as a series of micro-research cycles. This diagram is further developed using the research cycle stages adopted by Rowan (1981) and Reason (1988), assigning a colour code to the dialectical research cycle stages of PROJECT, ENCOUNTER, THINKING, MAKING SENSE and COMMUNICATION. The mapping of the development of an indicator as a series of dialectic research cycles gives a richer picture than the thin description used in the Study Report but still leaves important issues unexplained. These include the lack of time series data, changes in the evaluation of trend on the indicator, and the impetus behind the move to a more holistic and global framing of the Sustainability Indicators for Fife report in the final weeks of the pilot project. To gain a better understanding of these issues requires an examination of the development of the Sustainability Indicators for Fife report as a whole.

Section 5.4 explores the patterns of the whole report, looking at changes in the 'evaluation of trend' and length of time series data used in each draft of the Sustainability Indicators for Fife Report. This material highlights that issues raised with regard to the Sewage Treatment indicator also occur in the development of other indicators. These patterns cannot easily be explained by looking only at the 'formal processes' of the indicators pilot.

Section 5.5 sets out a chronological overview of the pilot project process and includes a recognition of the influence of informal processes and unofficial consultees on the Sustainability Indicators for Fife Report. Using the dialectic research cycle framework the location of, and participation in, the processes of THINKING and MAKING SENSE are described and the impact of this on

COMMUNICATION is identified. This section uses the introductory material contained in each draft of the Sustainability Indicators for Fife Report to track the changing definition of sustainable development in use at each stage supplemented with notes taken in SIWG meetings. Interwoven with this process is my shifting role and identity (BEING) over the course of the project. This reflects the value-laden nature of undertaking research into sustainable development indicators, which becomes interwoven with the value-laden nature of sustainable development indicators themselves as measures of progress. Case Stories are used to illustrate my changing perspective as Researcher/Consultant during the project process. The project is framed as four stages: Stage I: Getting to grips with the pilot process; Stage II: Local Priorities or Local Agenda 21; Stage III: What to do about critical feedback; Stage IV Going for Global. This section concludes by summarising the ways in which wider project process (the whole) influences the development of any individual indicator (the parts).

Section 5.6 returns to individual indicator examples illustrating the way in which the dialectic research cycle diagrams can be used to map indicators which had different patterns of development. 5.6.1 traces the development of the indicator which had the most stages of development: the Homelessness indicator. The mapping of this indicator includes the impact of informal processes and unofficial consultees making it relatively straight forward to locate the processes of THINKING and MAKING SENSE. This highlights that location of the MAKING SENSE process outwith the SIWG for much of the later development of this indicator, one of the two examples chosen by the SIWG to represent the work of the Fife project in the LGMB Report of the Pilot Phase. Section 5.6.2 shows the much shorter cycle of the Tree Preservation Orders indicator which was rejected early in the pilot. Section 5.6.3 traces the multiple stages involved in trying to secure appropriate indicators for the issue of 'community decision making' demonstrates the extent of the 'hidden workload' within the Fife project.

Considerable time and energy was invested by staff and consultees in seeking to shape indicators felt to be more appropriate than those originally pursued from the LGMB menu of options and in this case there was little to show in the final Fife report for this investment of effort. Section 5.6.4, the Energy indicator, shows the way in which new issues began to be introduced and indicators sought in the final weeks of the Fife project once the balance of indicators developed for inclusion in the report had been reviewed.

The key findings arising from the use of the dialectic research cycle structure and mapping as a tool of analysis for the Fife Sustainability Indicators pilot are presented at the beginning of Chapter 6.

5.2 Developing An Indicator: The Sewage Treatment Example

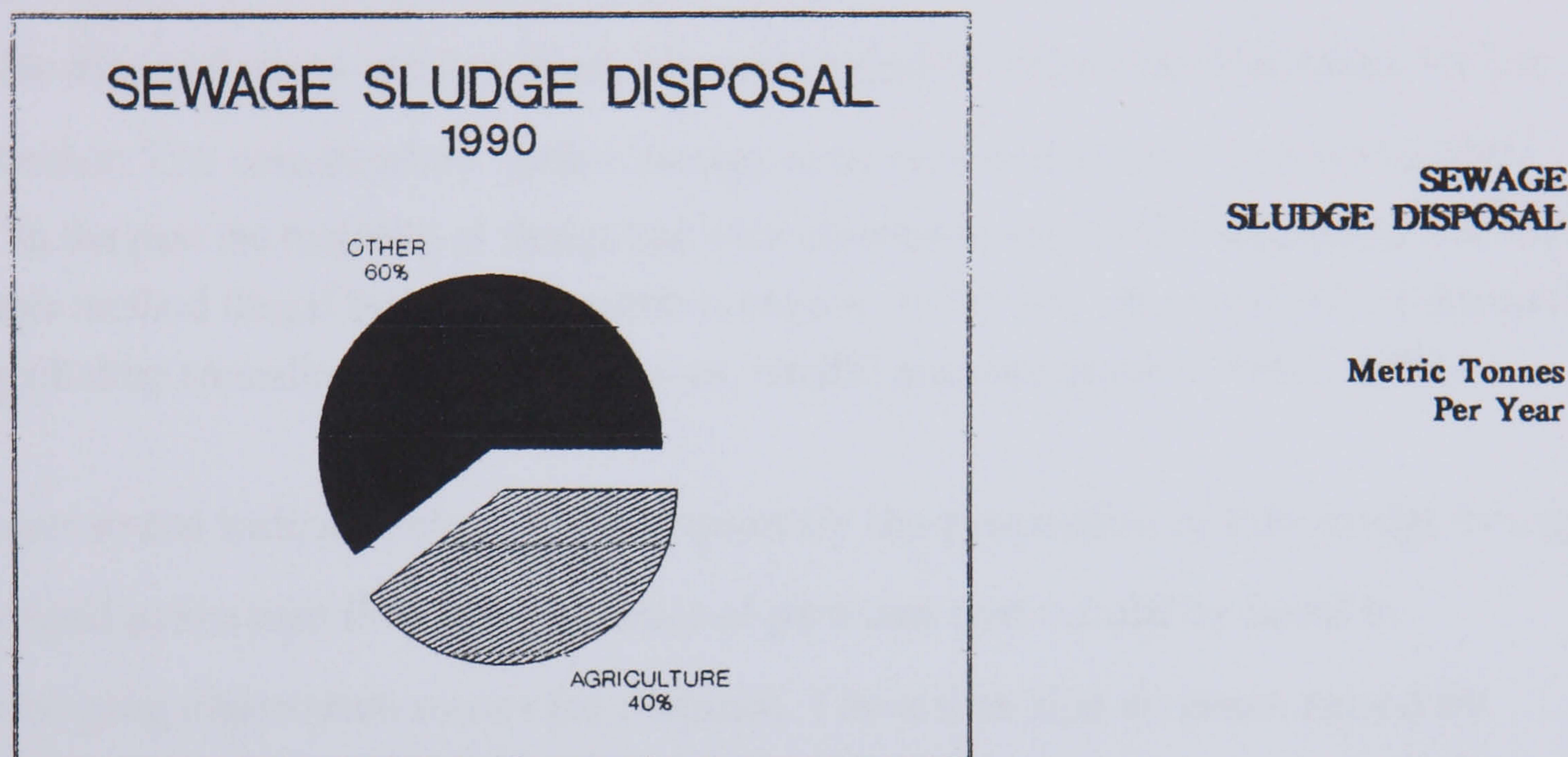
The decision making process behind the development of each indicator sheet contained in the final 'Sustainability Indicators for Fife' Report can be traced using the documentary evidence from meetings of the SIWG and the consultation drafts of the Fife-wide report. This can be illustrated using the following example of the development of an indicator for pollution.

Under *Theme 2 Pollution is limited to levels which natural systems can cope with and without damage*; the 15th August SIWG meeting selected as a category A indicator (for which information was thought to be readily available):

2.5 Tonnes of sewage discharged untreated or incinerated.

This indicator was discussed at the 10th October SIWG as one which appeared to present difficulty as a source of appropriate data had not yet been identified (FRC, 1994g). At the 7th November SIWG meeting an indicator sheet was presented. This

Figure 5.1 Sewage Indicator presented to the 7th November SIWG
(FRC, 1994 k)



DESCRIPTION

Efficient and non polluting disposal of waste is essential to a sustainable society. A considerable volume of such waste (both from households and from industry etc) is conducted by water and, following treatment, an inevitable result is a quantity of solid material, known as sewage sludge, which ~~sludge~~ has then to be disposed of harmlessly and efficiently.

BACKGROUND

Water-borne waste disposal (of which sludge is an integral part) is the responsibility of Regional Councils in Scotland and is controlled by both UK and EU Legislation. In the past the majority of sludge has been dumped at sea but EU legislation will make this method illegal by 1995. Research is ongoing to develop other methods of disposal including spreading on agricultural sites, landfill and incineration.

ANALYSIS

Limited information is available from published sources on sludge disposal in Fife. In 1990 4,300 tonnes of dried sewage sludge were produced in Fife of which 40% was spread on agricultural land. A limited quantity was also incinerated at Methil Power Station (mixed with coal slurry) on an experimental basis. On the basis of this very limited evidence it can only be said, at present that the trend is neither toward or away from sustainability.

LINKAGES

Disposal of sludge at sea damages marine environments, fish and plant communities. Disposal to landfill can produce substantial quantities of methane - a greenhouse gas, whilst excessive spreading on land may lead to the build up of long lasting heavy metals (e.g. cadmium) and other toxic substances in soils.

DATA AND INFORMATION SOURCES

The Scottish Environment

included a pie chart which depicted the disposal route of sewage sludge in the year 1990. This was simply divided into 'Agriculture' 40% and 'Other ' 60%. (See Figure 5.1). Working Group members questioned whether it was useful to have only one year of data, giving no opportunity to identify any trend, and with 60% of the disposal route unidentified. No sustainability trend was identified for the indicator. The commentary under Background on this indicator text states that;

"In the past the majority of sludge has been dumped at sea but EU legislation will make this method illegal by 1995. Research is ongoing to develop other methods of disposal including spreading on agricultural sites, landfill and incineration." (FRC, 1994 k)

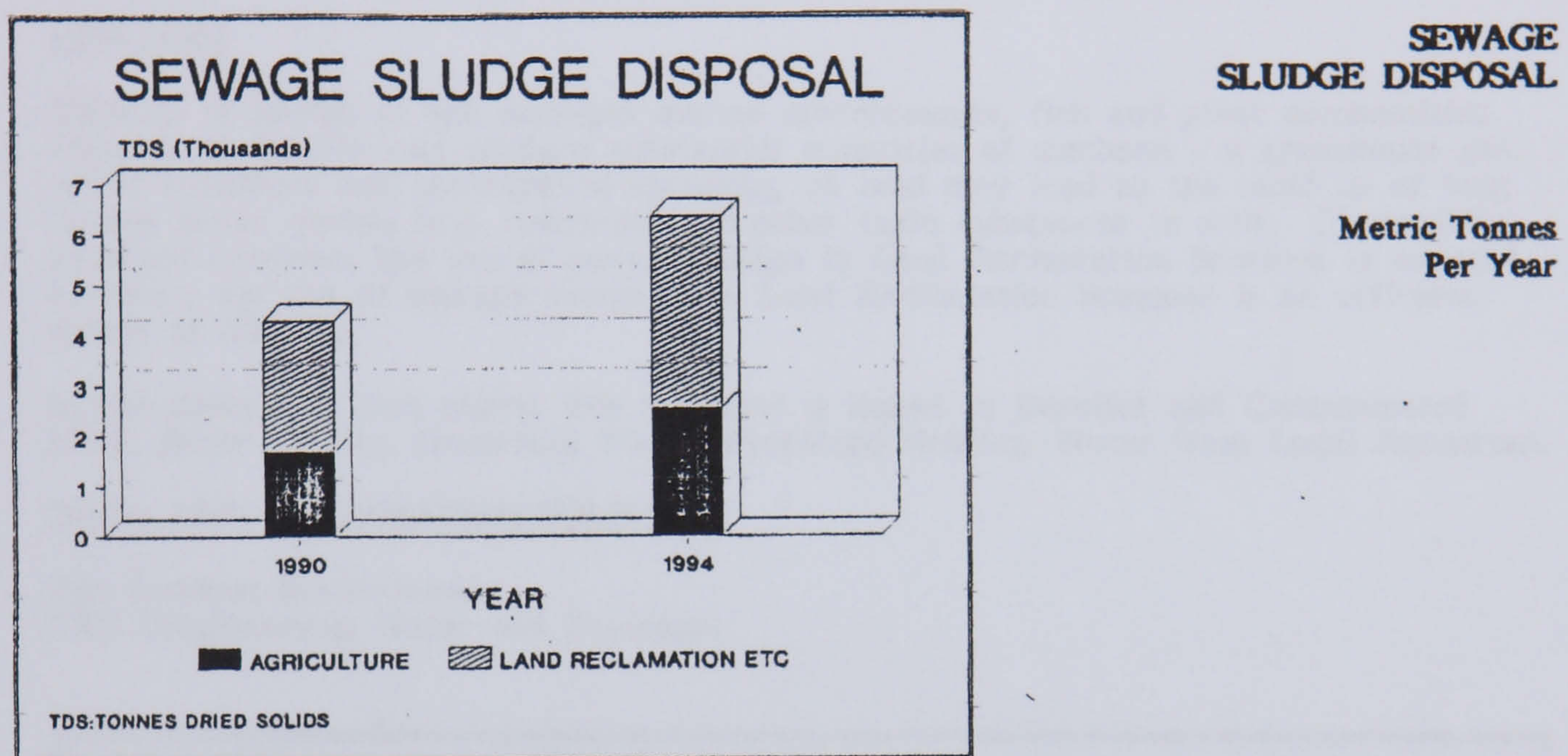
However the indicator sheet did not quantify the proportion of Fife sludge being dumped at sea and therefore the scale of problem that would be faced in developing alternative routes for disposal. There was also an issue, raised by SIWG members, about the lack of clarity in the way in which the terms weight and volume were used in this indicator sheet.

The 1st Consultation draft (Nov. 1994) used a bar chart of Metric Tonnes of Sewage Sludge disposed of to two routes (Agriculture and Land Reclamation) in the years 1990 and 1994 (Figure 5.2a and b) In the 'Description' part of the indicator text figures were given for Scotland for the routes by which sewage was disposed of although no source of comparable data for Fife had been identified. Despite this, the trend for the indicator was stated as "Towards Sustainability".

At the 28th November SIWG meeting members asked that the current indicator be replaced by identification of the percentage of the population served by primary, secondary and tertiary treatment over time (FRC, 1994j). As these figures had been published in the current copy of the Fife Regional Council in-house magazine, as one of the performance indicators on which the authority had to report to the Scottish Office, they were known to be available for at least one recent year.

Figure 5.2a Page 1 of the Sewage Indicator included in the 1st Public Consultation Draft of the Sustainability Indicators for Fife Report (FRC, 1994 1)

POLLUTION



DESCRIPTION

Efficient and non polluting disposal of waste is essential in a sustainable society. A considerable volume of such waste (both from households and from industry etc) is conducted by water and, following treatment, an inevitable result is a quantity of solid material, known as dried sewage sludge, which has then to be disposed of harmlessly, efficiently and if possible productively. Water-borne waste disposal (of which sludge is an integral part) is the responsibility of Regional Councils in Scotland and is controlled by both UK and EU Legislation. In the past the majority of sludge has been dumped at sea but EU legislation will make this method illegal by 1998. Research is ongoing to develop other methods of disposal including spreading on agricultural sites, landfill and incineration.

In Scotland, 10,000 dry solid tonnes of sewage sludge is applied annually to agricultural to agricultural land. This represents approximately 15% of the 78,900 dry solid tonnes produced annually. Of the remainder, 75% is disposed of to sea; 9% goes to landfill sites and 1% is incinerated. The provisions within the Urban Waste Water Directive are forecast to produce an increase to 185,000 dry solid tonnes per year (+134%) by 2005.

ANALYSIS

Limited information is available from published sources on sludge disposal in Fife. In 1990 4,300 tonnes of dried sewage sludge were produced in Fife of which 40% was spread on agricultural land. A limited quantity was also incinerated at Methil Power Station (mixed with coal slurry) on an experimental basis. In 1994, 6,360 tonnes were produced of which 40% was again spread on a agricultural land. Almost all of the remainder in both years was used in Land Reclamation Schemes within Fife as a low yield fertiliser/soil improver. This method of disposal has increased in importance in response to new EU legislation.

EVALUATION

On the basis of this limited evidence it can be said, at present that the trend is towards sustainability.

Figure 5.2b Page 2 of the Sewage Indicator included in the 1st Public Consultation Draft of the Sustainability Indicators for Fife Report (FRC, 1994 1)

LINKAGES

Disposal of sludge at sea damages marine environments, fish and plant communities. Disposal to landfill can produce substantial quantities of methane - a greenhouse gas, whilst excessive and uncontrolled spreading on land may lead to the build up of long lasting heavy metals (e.g. cadmium) and other toxic substances in soils. If carefully managed however, the use of sewage sludge in Land Reclamation Schemes is an aged however, the use of sewage sludge in in Land Reclamation Schemes is an efficient means of disposal.

In the context of this report this indicator is linked to Derelict and Contaminated Land, River Quality, Household Waste, Protected Habitat, Water from Local Resources.

DATA AND INFORMATION SOURCES

The Scottish Environment
FRC (Engineering; Water and Drainage)

COMMENTS

By its nature, sewage sludge disposal can fluctuate considerably from year to year. Further data will be required to determine long-term trends.

Data on this indicator is important in relation to the development of alternative methods of sludge disposal. At a Regional level a land availability schedule is necessary, linked with the local waste management plans.

For the 2nd public consultation draft the graphic for sewage sludge disposal to agriculture and land reclamation was supplemented with a pie chart showing the proportion of the Fife population who were served by facilities for 'Full' treatment (15.6 %), Primary / septic tank treatment (27.5%) and the proportion whose sewage went Untreated into the sea (56.9%) (Figure 5.3 a & b). No year is given for the pie chart data. A clear statement was made below this new graphic:

“Almost 60% of Fife's sewage us (sic) discharged, largely untreated, into the sea. As this proportion is reduced ways will have to be found to dispose of more sewage sludge.” FRC, 1994 m

The indicator text does not clearly differentiate between sewage and sewage sludge and between water-borne and land borne disposal routes. The statement could have been clarified by adding “...on the land or by incineration” to the sentence. However, the addition of this statement, and the comments in the 'Analysis' section of the text does at least highlight that there are problems with the recent sewage disposal strategy, which was not made clear in the previous versions of the indicator sheet. It is stated that:

“This is unacceptable and the Regional Council have been undertaking measures to develop modern sewage treatment works to serve all major urban areas. Major new treatment works have been established, in the last five years, in the Kirkcaldy, Levenmouth and Dunfermline areas. " FRC, 1994 m

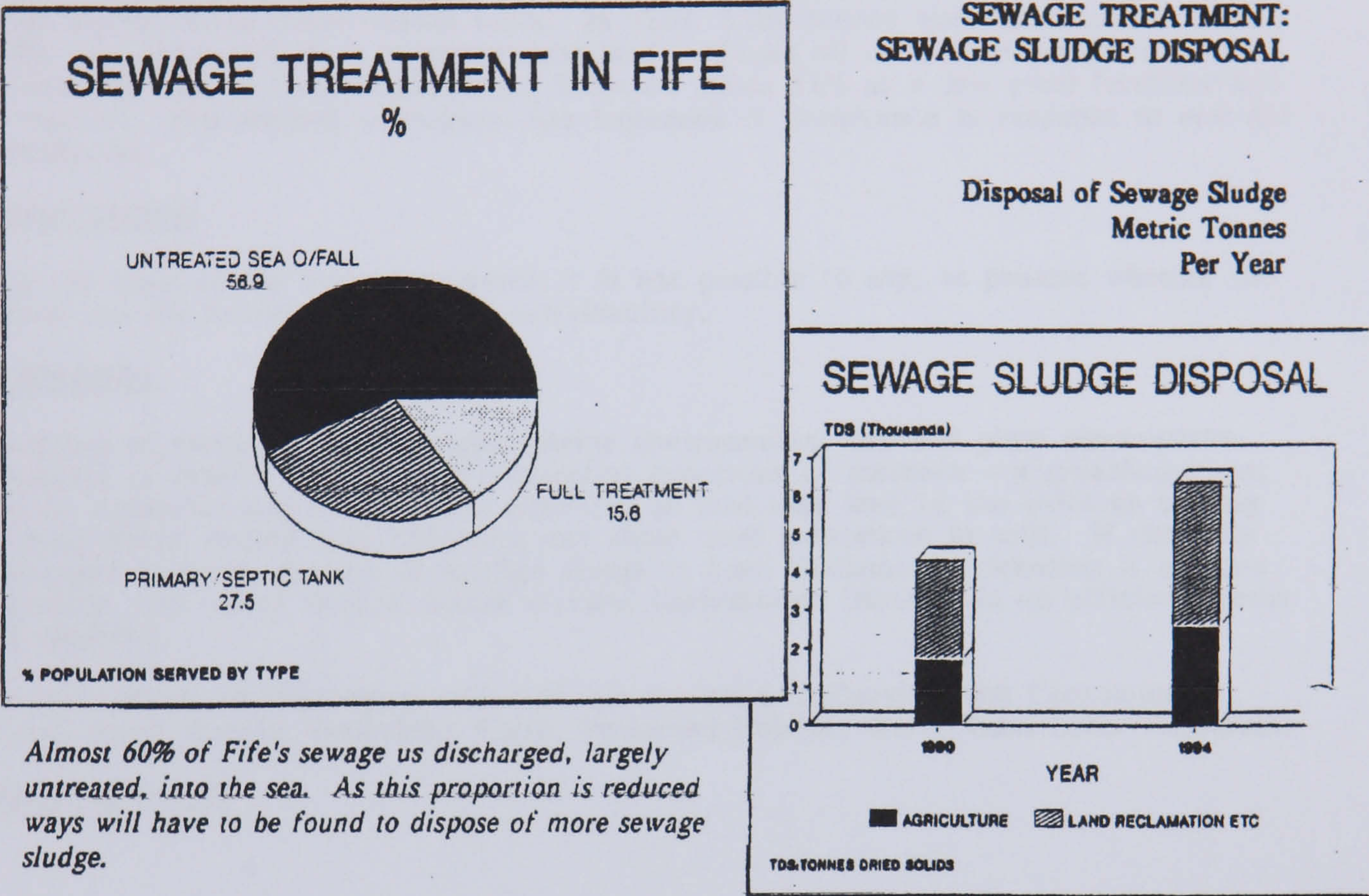
The 'Linkages' section was also stronger on the problems commonly presented by different sewage disposal routes. The 'Description' section of the indicator sheet had been rewritten, with the data for the EU ban on sewage disposal to the sea was now stated as 1998 and in the 'Comments' section it was identified that:

"Further data will be required to determine long-term trends"; FRC, 1994 m

Recognition that the snapshot presented in the pie chart, plus the early attempts to develop approaches to land based disposal were an insufficient basis for drawing

Figure 5.3a Page 1 of the Sewage Indicator included in the 2nd Public Consultation Draft of the Sustainability Indicators for Fife Report (FRC, 1994m)

USE OF RESOURCES



DESCRIPTION

Efficient and non polluting disposal of waste is essential in a sustainable society. A considerable volume of such waste (both from households and from industry etc) is conducted by water and by outfall to the sea without treatment. The remainder receives primary or secondary treatment before the waste water is discharged.

An inevitable result of this process is a quantity of solid material, known as dried sewage sludge, which has then to be disposed of harmlessly, efficiently and if possible productively. Water-borne waste disposal (of which sludge is an integral part) is the responsibility of Regional Councils in Scotland and is controlled by both UK and EU Legislation. In the past the majority of sludge has been dumped at sea but EU legislation will make this method illegal by 1998. Research is ongoing to develop other methods of disposal including spreading on agricultural sites, landfill and incineration.

In Scotland, 10,000 dry solid tonnes of sewage sludge is applied annually to agricultural to agricultural land. This represents approximately 15% of the 78,900 dry solid tonnes produced annually. Of the remainder, 75% is disposed of to sea; 9% goes to landfill sites and 1% is incinerated. The provisions within the Urban Waste Water Directive are forecast to produce an increase to 185,000 dry solid tonnes per year (+134%) by 2005.

ANALYSIS

Currently, in Fife, nearly 60% of all sewage is discharged, largely untreated into the sea. This is unacceptable and the Regional Council have been undertaking measures to develop modern sewage treatment works to serve all major urban areas. Major new treatment works have been established, in the last five years, in the Kirkcaldy, Levenmouth and Dunfermline areas.

Figure 5.3b Page 2 of the Sewage Indicator included in the 2nd Public Consultation Draft of the Sustainability Indicators for Fife Report (FRC, 1994m)

Improved sewage treatment produces more sewage sludge but only limited information is available from published sources on sludge disposal in Fife. In 1990 4,300 tonnes of dried sewage sludge were produced in Fife of which 40% was spread on agricultural land. A limited quantity was also incinerated at Methil Power Station (mixed with coal slurry) on an experimental basis. In 1994, 6,360 tonnes were produced of which 40% was again spread on a agricultural land. Almost all of the remainder in both years was used in Land Reclamation Schemes within Fife as a low yield fertiliser/soil improver. This method of disposal has increased in importance in response to new EU legislation.

EVALUATION

On the basis of the limited evidence it is not possible to say, at present whether the trend on this indicator is towards sustainability.

LINKAGES

Disposal of sludge at sea damages marine environments, fish and plant communities. Disposal to landfill can produce substantial quantities of methane - a greenhouse gas, whilst excessive and uncontrolled spreading on land may lead to the build up of long lasting heavy metals (e.g. cadmium) and other toxic substances in soils. If carefully managed however, the use of sewage sludge in Land Reclamation Schemes is an aged however, the use of sewage sludge in Land Reclamation Schemes is an efficient means of disposal.

In the context of this report this indicator is linked to Derelict and Contaminated Land, River Quality, Household Waste, Protected Habitat, Water from Local Resources.

FUTURE STEPS

DATA AND INFORMATION SOURCES

The Scottish Environment
FRC (Engineering; Water and Drainage)
Fife State of the Environment Manual

COMMENTS

The volume of sewage sludge produced and the means of its disposal are useful measures of sustainability. Since the volume of sludge produced will increase as methods of treatment and the volume of sewage treated increase.

By its nature, sewage sludge disposal can fluctuate considerably from year to year. Further data will be required to determine long-term trends.

Data on this indicator is important in relation to the development of alternative methods of sludge disposal. At a Regional level a land availability schedule is necessary, linked with the local waste management plans.

conclusions about a sustainability trend, meant that no trend arrow was now presented for this indicator.

The responses to the questionnaire circulated with the 2nd consultation draft report included:

17 where the Sewage Disposal indicator was felt to be useful and 1 where it was not felt to be useful.

14 of the responses agreed that this was the best way to measure this issue and 3 did not.

12 of the responses felt that the identified direction of trend as "Inconclusive" was appropriate, but 4 did not.

The comments included with the questionnaire returns regarded the Sewage Disposal indicators as generally helpful but several respondents were keen to see more action on the issue:

"Useful to know proportion of treated to proportion untreated"

"I feel treatment of sewage is improving, especially all the work on reed beds."

"We agree with this indicator. We would like the report to contain a section on indicators covering beaches and sea water quality which we believe is important in the Fife area."

"Long-term 100% treatment/recycling instead of 'dumping' in the sea."

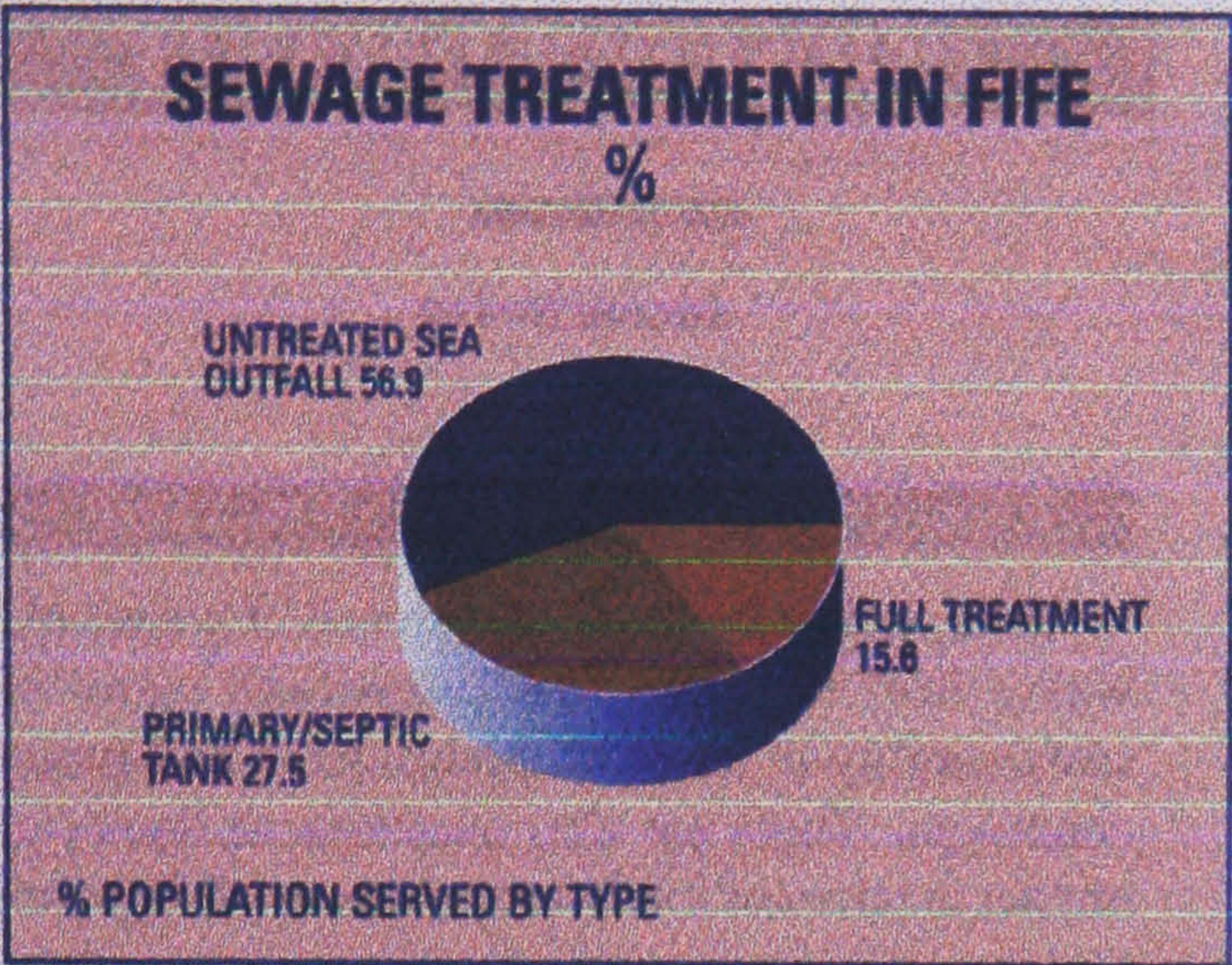
"Reducing sewage and then recycling sewage produced as natural fertilisers."

"But could be dealt with in one of two ways - dried off or pumped further out to sea"

At the 9th January SIWG meeting the need for a longer time series on the Sewage indicator was again highlighted. However, the snapshot pie-chart remained in the final published version (Figure 5.4 a & b). The text of the indicator was

Figure 5.4a Page 1 of the Sewage Indicator included in the Sustainability Indicators for Fife Report (FRC, 1995a)

Use of Resources



SEWAGE TREATMENT AND DISPOSAL

Percentage of the population whose sewage is discharged, untreated or partly untreated into the sea.

BACKGROUND

Most of Scotland's sewage is disposed of into the sea, largely untreated. Even when sewage is treated the dry sludge which results from treatment has to be dealt with. At present 75% of dry sludge is also dumped in the sea. Of the remainder, 15% is spread on agricultural land, 9% goes into landfill sites and 1% is incinerated.

SUSTAINABILITY ISSUES

Each of the conventional methods of disposal of sewage has negative impacts on the environment.

Disposal of sewage into the sea damages marine environments, fish and plant communities. European Union legislation will make dumping at sea illegal by 1998.

Disposal to landfill can produce substantial quantities of methane - which increases global warming. It also causes local environmental problems and takes up land.

Incineration produces carbon dioxide which also increases global warming, and incineration can also result in toxic air pollution.

However, sewage does not have to have negative environmental impacts, and can be a useful resource.

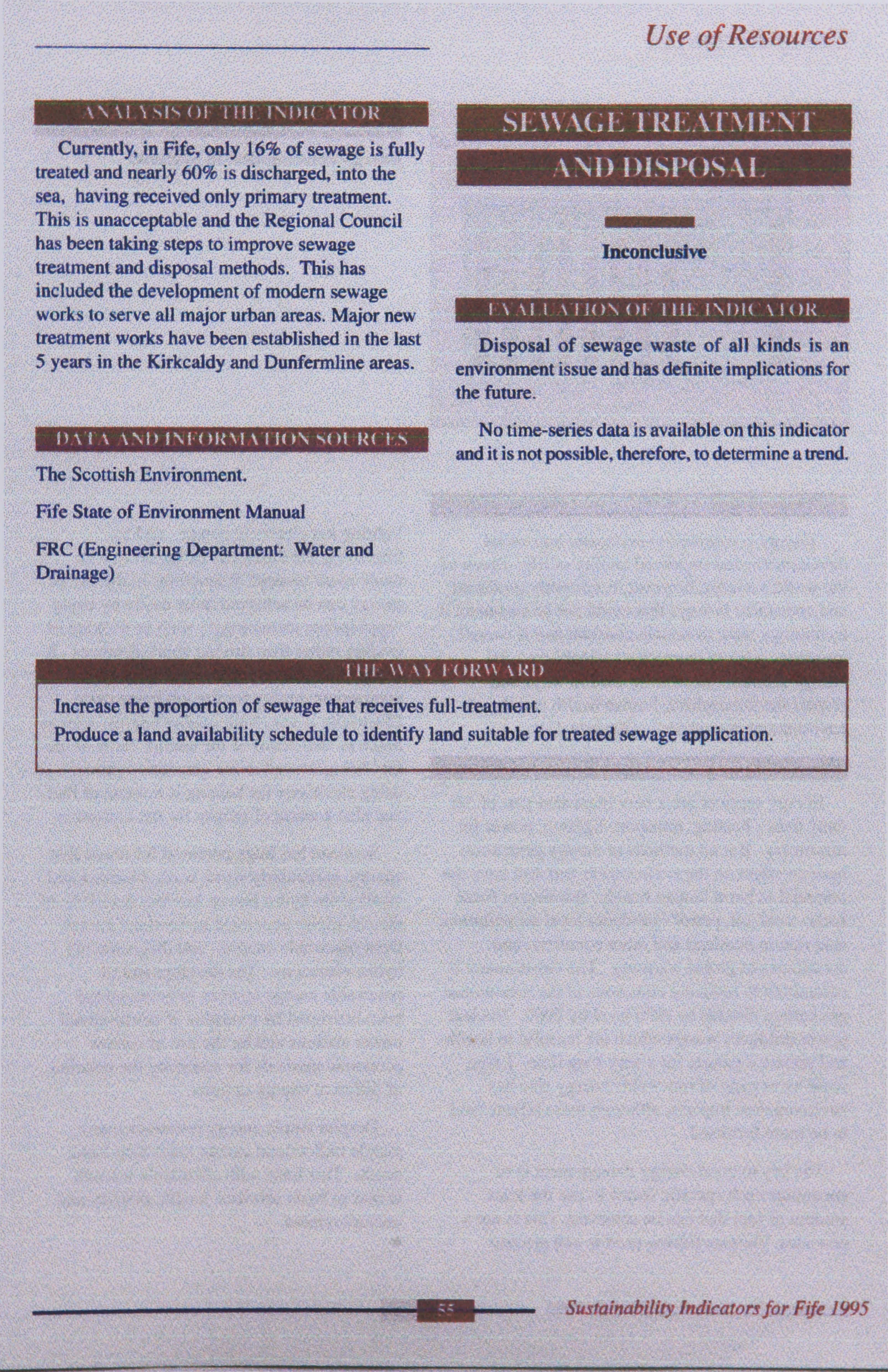
Sewage can be treated using the "natural technology" of reed beds. Fife Regional Council has received funding from the EU through the LIFE programme for the development of the Valleyfield reed beds.

Sewage sludge can be used, in combination with fly-ash, for land reclamation. In 1994 approximately 4,000 tonnes of sewage sludge was incorporated in land reclamation projects in Fife. This was an increase from 2,800 tonnes in 1990.

Sewage sludge can also be spread on agricultural land as a fertiliser, and 2,500 tonnes of sludge was spread on agricultural land in Fife in 1994, an increase from 1,800 tonnes in 1990. Using sewage sludge on agricultural land requires careful management as excessive and uncontrolled spreading on land can lead to the build-up of long lasting heavy metals (eg cadmium) and other toxic substances in soils, as well as causing local nuisance (e.g. smell). However, it can replace fertilisers derived from non-renewable resources, which has global as well as local impacts.

Sewage sludge can also be sprayed on forests as a fertiliser, composted with straw as a land improver, or made into bricks. Methane produced from decomposing sewage can be used as a fuel and this has been used for combined generation of heat and power, and in motor vehicles.

Figure 5.4b Page 2 of the Sewage Indicator included in the Sustainability Indicators for Fife Report (FRC, 1995a)



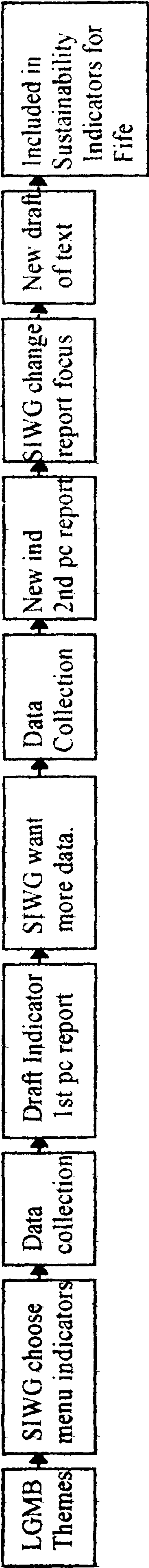


Figure 6.5 Developing an indicator for sewage treatment: a flow chart

reformatted to fit with the revised way each indicator sheet was to be presented but the data included in the commentary was largely unchanged from the 2nd consultation version. Because of the lack of time series data the indicator trend was stated as "Inconclusive". The indicator used in the final report was very similar to the choice originally made from the LGMB menu despite the digression into sewage sludge disposal.

The stages of development of the sewage treatment indicator can be summarized and depicted as a flow chart (see Figure 5.5). This simplified linear view can be useful in that it emphasizes that the process was not as straightforward as identifying an issue, collecting data, and presenting it. However, because of the linear presentation it does not make clear that the process cycled around the same stages several times and that these iterations were an important part of the indicator development process.

5.3 Mapping the Iterative Stages of Indicator Development

Chapter Two discussed the research cycle model developed by Rowan, and subsequently used by Reason and others. Reason (1988) observed that the research cycle diagrams developed by Rowan (1981):

“do not really show the development of (the) projects through their multiple cycles of action and reflection. They tend to show inquiries as simple, linear affairs, rather than as the complex and at time chaotic webs of action and reflection, reason and emotion, individuality and collectively that they really are.” Reason, 1988:227

Reason does not really offer a solution to this problem other than to observe that the map of their inquiry made by Marshall and McLean “shows this complexity and multiple cycling rather well.” (See Chapter 2 Figure 2.4). Marshall and

McLean’s research cycle is similar to that used by Gummesson (Figure 5.6) in describing the role of the Researcher/ Consultant working on a project.

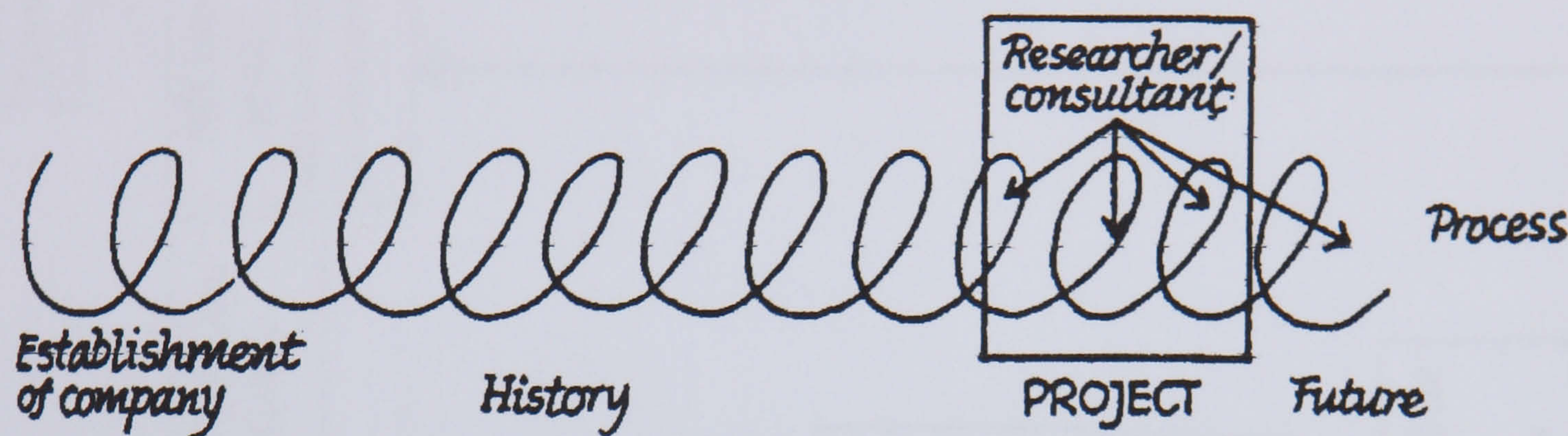
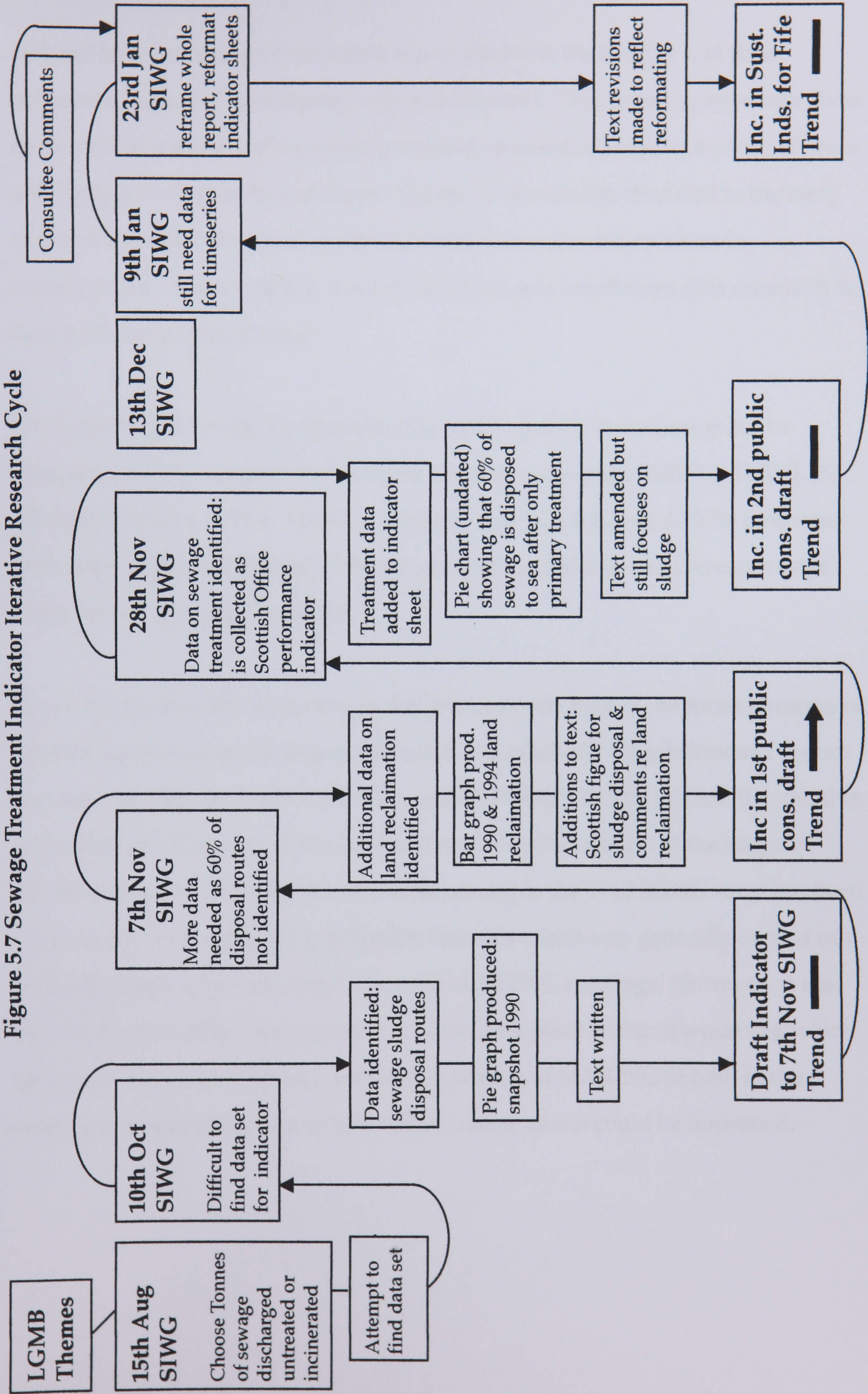


Figure 5.6 Focusing on the present and future from the inside.

Drawing on Gummesson’s recognition that there is a temporal dimension and a process of cycling around recurring developmental stages within a research project the Sewage Treatment example can be depicted as a cyclical rather than a linear process. Figure 5.7 has been designed to provide a clear visual summary of the process upon which the final indicator Sewage Treatment indicator sheet was based. The process of selecting the initial indicator, presenting it to the SIWG and the public consultees and undertaking repeated revisions of the indicator sheet is shown as a series of micro-research cycles. The formatting recognises where similar stages are being revisited.

The cyclical approach of Figure 5.7 illustrates much more clearly than the linear approach of Figure 5.5 that producing a single indicator sheet for the Sustainability indicators for Fife report on sewage treatment and disposal was a lengthy and complex process. This visual record of the requests for additional data, identification of additional and alternative data sources, repeated redrafting of the



text and later reframing of the whole report illustrate the lengthy and time consuming nature of developing suitable indicators. This mapping approach gives an accessible overview of a process previously presented in four A4 pages of notes and 7 pages of draft indicator sheets. Figure 5.7 also makes clear that in the early drafts of the report the trend of this indicator was evaluated as towards sustainability, in later drafts it was felt that there was insufficient data on which to base a determination of trend.

The format used to map the iterative stages of preparing an indicator can be straightforwardly adapted to reflect the research cycle stages BEING, THINKING PROJECT, ENCOUNTER, MAKING SENSE, and COMMUNICATION presented by Rowan (1981) and Reason (1988) by assigning a colour to each research stage using the key given in Figure 5.8.

Figure 5.9 applies this colour key to the iterative cycle map of the formal process of developing the sewage treatment indicator. It is relatively straightforward to map the stages of PROJECT, ENCOUNTER, and COMMUNICATION onto the iterative cycle diagram. It is more difficult to be clear about the location of the stages of THINKING and MAKING SENSE. In this example the THINKING stage has been equated with the search for appropriate data sets which was generally carried out by the Research & Information Officer outwith SIWG meetings. However, at the 28th November SIWG the data identification took place within the meeting which became an ENCOUNTER and a collective process of MAKING SENSE of the existing indicator sheet and of THINKING about how it could be improved.

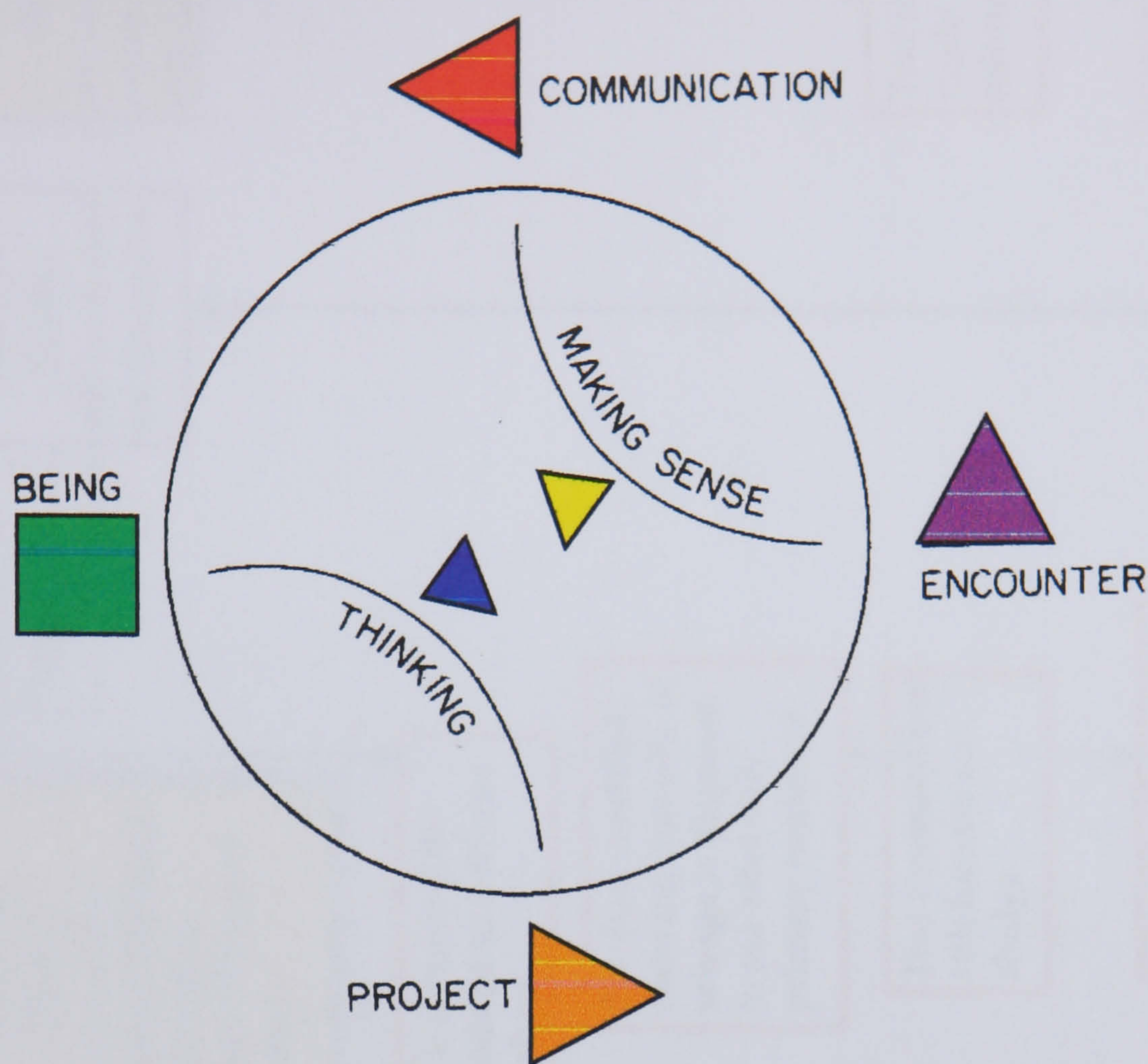
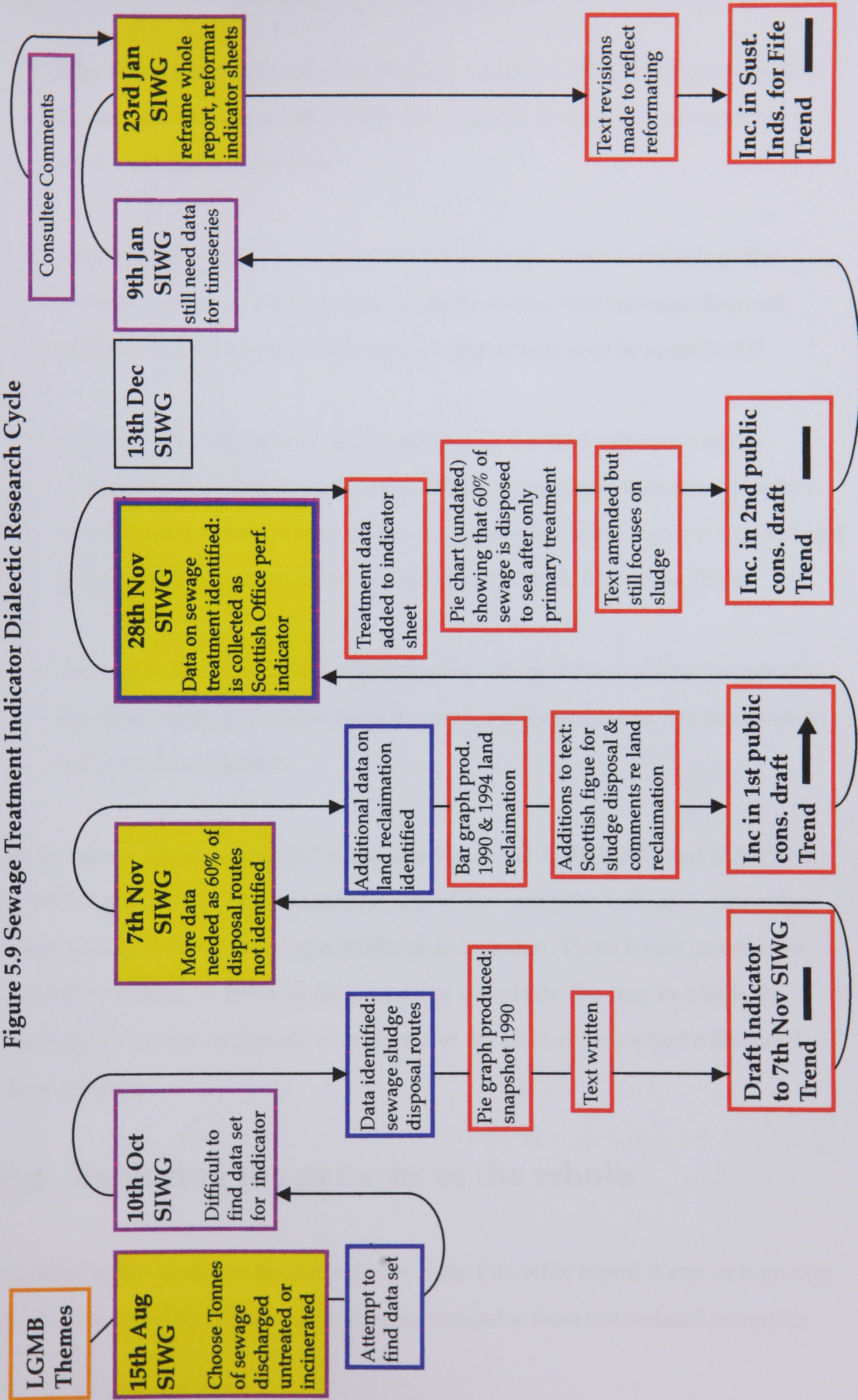


Figure 5.8 Dialectical research cycle: colour key

The SIWG meetings are identified as the location of the MAKING SENSE process for the Sewage Treatment indicator although the development of the Sustainability Indicator for Fife report was not discussed at every SIWG.

As with all models the quality of the data presented by the model is only as good as the quality of the data that goes into the model. Using the documentary evidence of the formal meetings of the SIWG, the comments from consultees and the various drafts of the indicator sheets gives a richer picture of the development of the Sewage Treatment indicator than the thin description contained in the study report. However, it still leaves important issues unexplained:

Figure 5.9 Sewage Treatment Indicator Dialectic Research Cycle



- why was a trend towards sustainability identified for the indicator used in the first public consultation draft even though no data for the parameters used was available for Fife?
- why does the indicator sheet move from a very positive analysis of the current position in Fife to a later recognition that Fife's sewage disposal strategy is unacceptable (although a trend cannot now be identified)?
- why was only one year of data presented in the final report when the indicator being used was a Scottish Office performance indicator for which several years of data would have been reported by Fife Regional Council and ought to have been available to the Research and Information Team?
- what was the nature of the revisions and reformatting made to the report in the final weeks of the pilot project period and what impact did this have on individual indicators?

These issues, which are related to the location of the THINKING and MAKING SENSE stages of the micro-research cycles of devising the indicator, cannot be addressed by looking at a single indicator in isolation. These issues can only be tackled by looking in detail at the process of the whole, the way in which the framing of the report changed over time and the kind of issues that influenced these changes.

5.4 Exploring the patterns of the whole

Looking at the evidence from the drafts of the Fife-wide report it can be seen that the issues raised by the sewage treatment indicator were not isolated examples.

5.4.1 Evaluating Trends Towards and Away from Sustainability

Figure 5.10 shows that the proportion of indicators evaluated as having a trend towards sustainability varied considerably between iterations of the Fife wide report. In the first public consultation draft report 63% of the indicators were evaluated as having a trend towards sustainability. By the 14th February SIWG meeting this figure had fallen to only 9% of the indicators. However, by the time the report was published in June the proportion of indicators showing a trend towards sustainability had increased to 20 percent. This was partly because the number of indicators in the final report had been reduced from 23 to 20, and partly because the trend on the nursery education and infant mortality indicators had been reassessed as being towards sustainability rather than 'inconclusive'.

The highest proportion of indicators presented in which the evaluation of the indicator showed no clear trend was in the second public consultation draft, where 13 indicators comprising 54% of the total were deemed inconclusive. In the 7th November draft one-third of the indicators had been labelled as inconclusive, and this dropped to just under one-quarter for the first public consultation draft. By the final published report only 30% of the indicators were inconclusive. This was partly because several of the indicators on which a data set could not be accessed were dropped from the main body of the report and were instead placed in an annex at the back of the report as "indicators (which) have still to be developed." (FRC, 1995a: 61).

In the early months of the project there were few indicators that were evaluated as having a clear trend away from sustainability. In the first three drafts less than 30% of the indicators were viewed as showing a trend away from sustainability, including only 15% of indicators in the first public consultation draft. However, in the later stages of the pilot this figure rose to around 50%, with 11 out of 23

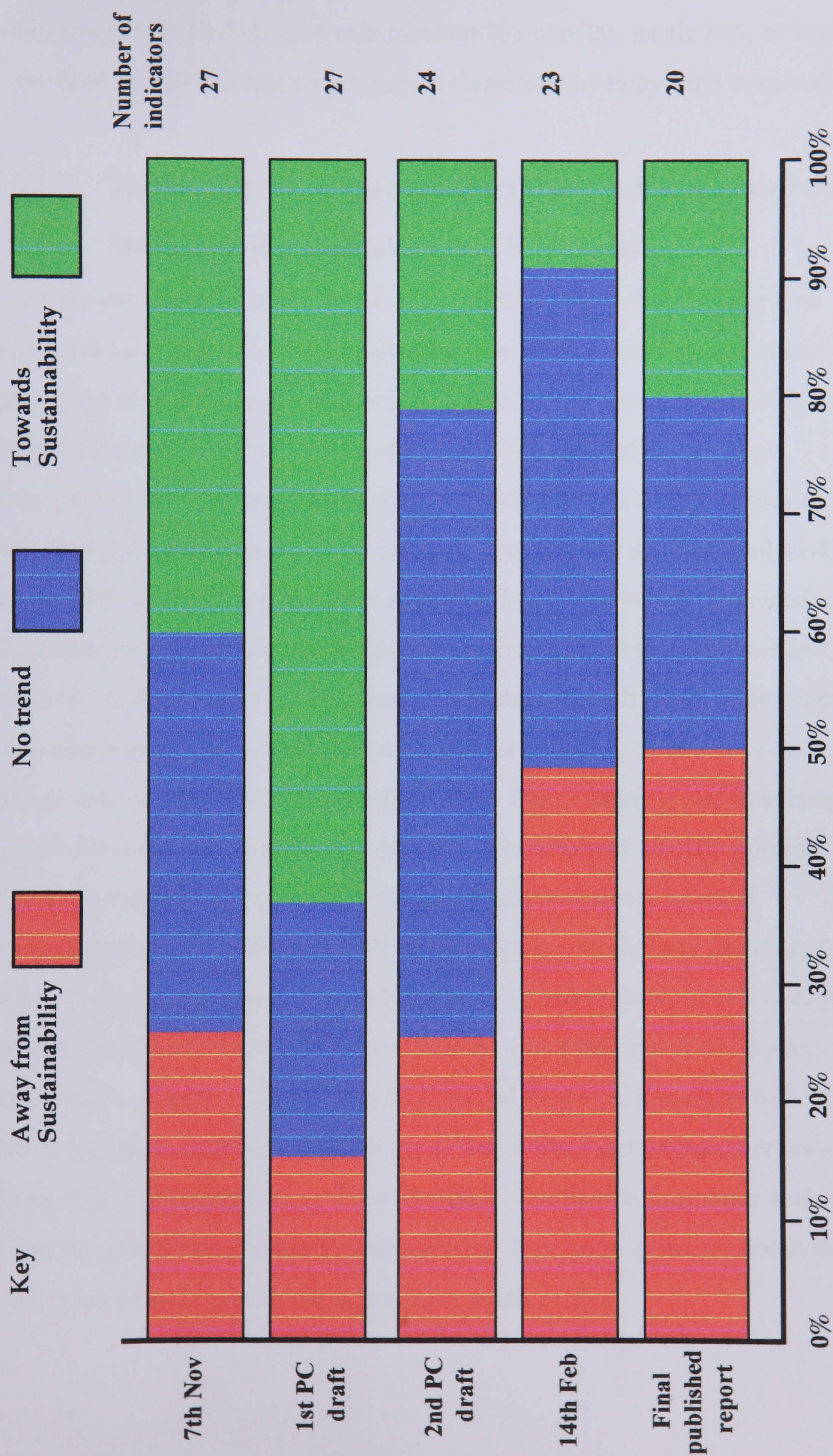


Figure 5.10 Evaluation of indicator trends in each iteration of the Fife-wide Report

indicators in the 14th February collation and 10 out of 20, exactly 50%, of indicators in the final published report having an evaluated trend away from sustainability.

5.4.2 The Length of Timeseries Data Used in Iterations of the Sustainability Indicators for Fife Report

There is a comparable pattern that can be identified regarding the length of timeseries data upon which the evaluation of trend is based. Figure 5.11 shows the percentage of indicators in each iteration of the Fife-wide report according to the length of timeseries used. In the earliest draft of the report it is perhaps unsurprising that data sets had not been identified for some of the indicators. At this stage just over a quarter of the indicators had no data set identified, and a further 30% used only a one year snapshot of data. However, for the remainder of the indicators presented only 7% had a timeseries of more than 10 years and none had a timeseries of more than 20 years. When dealing with issues of development, particularly sustainable development, temporal issues are clearly important. The formal notes of the early SIWG meetings show that working group members repeatedly asked for longer timeseries data to be obtained both for specific indicator examples and across the indicators for the report as a whole.

By the first public consultation draft the proportion of indicators presented for which there was no data set had reduced to 11% , and those with only a snapshot to 14%. The biggest increase was in indicators with a time trend of 2-5 years, which now comprised 37% of the total. This did, however, mean that 62% of the indicators sheets were based on 5 years or less of trend data, yet as mentioned above 63% of the indicators in that first public consultation draft were evaluated as having a clear trend towards sustainability. This raises questions about the basis upon which the evaluation of trend is being made.

In the second public consultation draft the proportion of the indicators based on 5 years or less of trend data was down to 45%, with 12% using 6-10 years data and a substantial increase to 33% in the indicators using 11-20 years data. There were two indicators using more than 20 years data.

In the final published report one indicator (affordable warmth) continued to be included although there was no data available for Fife. Four indicators (alternative means of transport, air quality, household waste and sewage treatment/disposal) comprising 20% of the total had only a one year snapshot of information giving no opportunity for a trend to be evaluated. The proportion of indicators with data sets of 6-10 years had increased to 20% and the proportion with more than 10 years data was now at 45%. Of this 2 indicators (10% of the total) offered a data set of 20-49 years (agriculture and fisheries) and a further two offered data for more than 50 years (land quality and biodiversity) although both of these indicators were based on a very small number of data points taken over a long time period. The land quality indicator sheet used an assessment of the growth in urban areas as the data set and there is little doubt that there has been a net increase. However in the case of the biodiversity indicator which used a data set of counts of submerged plant species at selected Fife lochs there are hazards in making a clear determination of sustainability trend based on three sets of readings spread over a period of over 80 years. With no data on the amount of annual variability over this period it is of questionable scientific validity to assume that drawing a line through three points constitutes a trend.

However, the general point still holds that more effort was put into identifying longer timeseries for the indicator sheets presented in the later stages of the pilot period than in the early stages. Only 33% of the indicators in the 7th November draft had a timeseries of more than 5 years and this figure had risen to 65% of the indicators in the published document Sustainability Indicators for Fife.

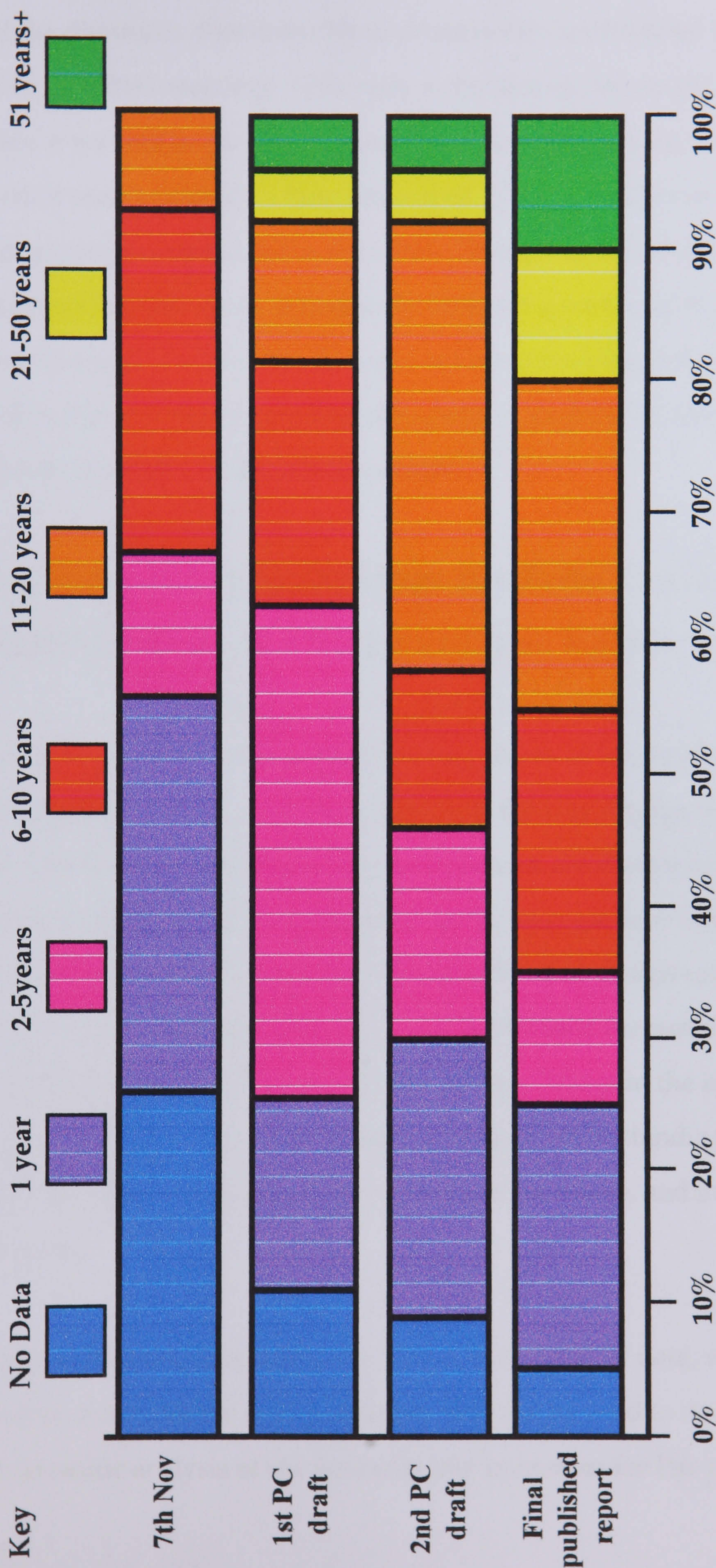


Figure 5.11 Percentage of indicators in each iteration of the Fife wide report in each timeseries category

Some of the discussion that drove these changes can be identified in the formal process of the SIWG meetings. Although, as the sewage treatment indicator illustrates, it was not as simple as other SIWG members asking the Research and Information team to identify a new data set or a longer time series. The same group of people were involved in the SIWG throughout the pilot period yet the indicator trends varied quite dramatically between reports and the emphasis of the report changed considerably. In order to understand the basis for the changes in the content of the report over time it is useful to explore the dialect and hermeneutic dynamics of the project process.

5.5 Sustainability Indicators for Fife: Dialectic Research Cycles in a Hermeneutic Spiral of Inquiry

As described in Chapter 2 dialectical thinking places all the emphasis on change. It explores process and movement and presents the way change takes place as through conflict and opposition. Dialectical theories are always looking for contradictions within people or situations as the main guide to what is happening. The Study Report did not reveal the discontinuities and disagreement that underlay the development of the document that became the sustainability indicators for Fife report. The hermeneutic process brings in the influence that that culture, timing and preunderstanding have on understanding, and the need to look at the relationship between the parts and the whole, and indeed the whole and the parts.

In my role as Project Consultant I collected a wide range of data, written and experiential, quantitative and qualitative, that can be used to develop a dialectic and hermeneutic analysis of the Sustainability Indicators for Fife process.

To understand why the emphasis changed so much over a relatively short time period it is necessary to explore the informal as well as the formal processes that took place. It is also necessary to look at the shifting location of the 'making sense' process in the development of individual indicators and for the report as a whole. Interwoven with these processes were my shifting roles and identity as Project Consultant.

The data I will use to explore these processes will include:

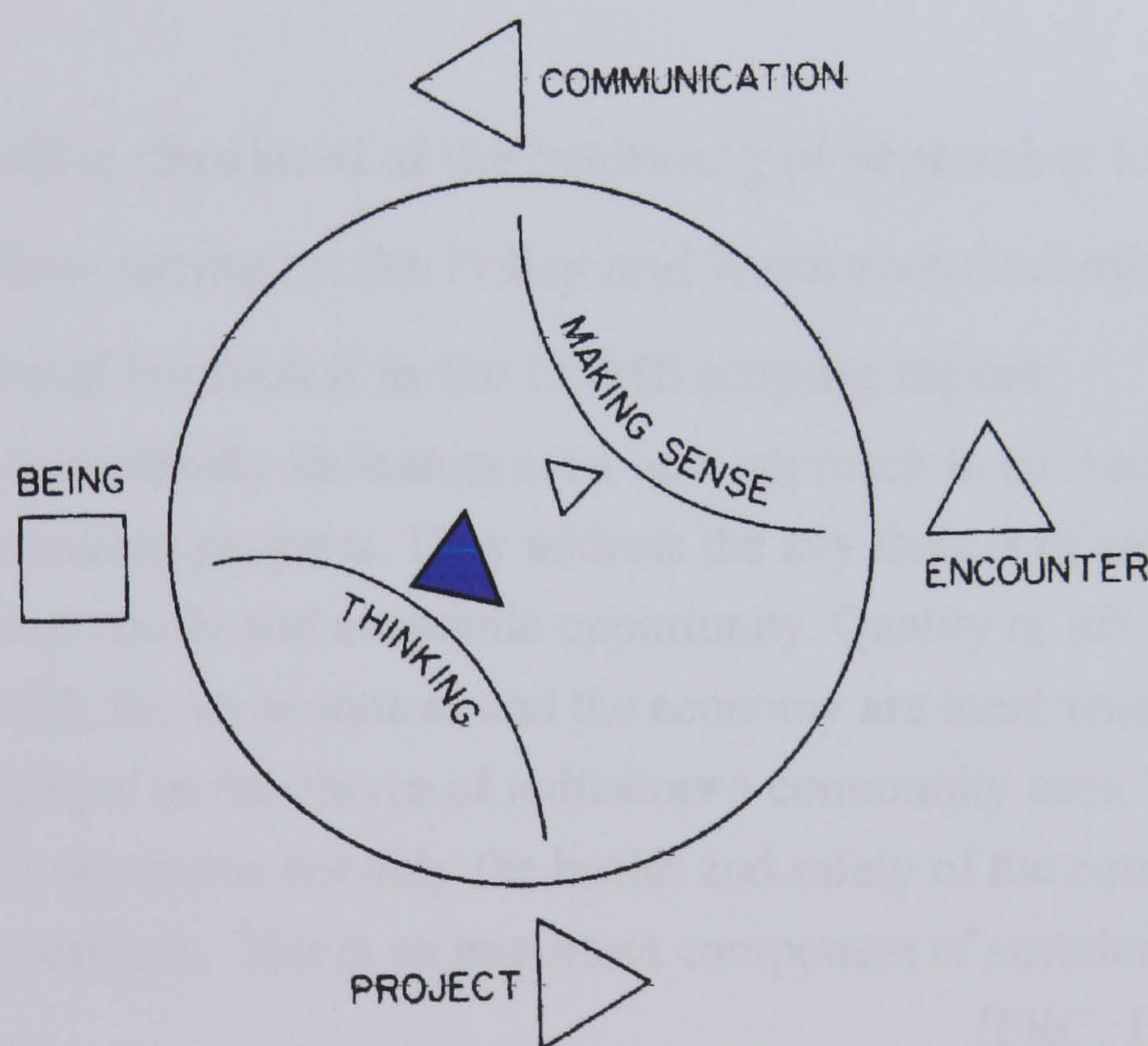
- using the introductory material contained in each iteration of the Fife-wide report to track the changing definitions of sustainable development underpinning the report;
- using the detailed notes of meetings to identify the shifting location of the making sense process and the impact of authorship on the evaluation of trend towards or away from sustainability;
- providing case stories that set out key incidents and exploring how these may have had an impact on the pilot project process;
- describing my perspective as researcher/consultant and how this impacted on the development of the Fife-wide report and individual indicators, using the research cycle model stages;
- tracking the iterative development of another example indicator in which the informal processes, the role of unofficial consultees and unconventional ways of working played a significant role: the indicator for Homelessness.

5.5.1 Stage I: Getting to grips with the pilot process

THINKING - The framing of the Fife-wide report and concepts of sustainable development

The framing of the Fife-wide report in terms of the concepts and definitions of sustainable development which underpinned it can be described in terms of THINKING. However, as 10 people were involved in the SIWG and they were in turn influenced by official and unofficial consultees the THINKING stage became a heterogeneous and dynamic process.

Figure 5.12 THINKING I



In the earliest meetings of the SIWG there was no specific mention of the definition of sustainability upon which the indicators project would be based. At the first meeting of the SIWG on 27th June the guidance notes to pilots were discussed. This included the statement that:

“Indicators must have a reasoned relationship to sustainability at both a local and a global level;” LGMB, 1994b

Nothing was included in the note of this meeting regarding discussion of this underpinning reasoning.

At the 15th August SIWG , as well as selecting 39 indicators for monitoring, the group discussed the scoping report prepared by the Consultants to the LGMB project (LGMB 1994a). This document did contain discussion of different definitions of sustainable development and of the framing that had been adopted by the LGMB steering group prior to their selection of indicators to make up the menus being tested by the pilot local authorities. However, this comprised 2 pages of an 84 page document. There was no discussion recorded in the note of the 15th August meeting regarding the adoption of a specific definition of sustainable development for the Fife work.

The briefing circulated at the beginning of September to the elected Fife Region Councillors sitting on the Policy and Resources Committee was based strongly on the material contained in the LGMB scoping report:

“Sustainability indicators are a new approach to conventional thinking about ways of measuring progress. They address the key themes of environmental responsibility, social equity and economic opportunity. Quality of life is a uniting theme; human health, the environment and the economy are inextricably linked and should be reflected in the choice of indicators a community uses. The state of the environment will determine not only the health and safety of the current generation but also future generations. This is an important component of sustainability.”

(FRC, 1994f)

The first draft of this briefing was written by the LGMB Consultant allocated to Fife so it is unsurprising that she had drawn on the scoping report for this definition. However, it does not necessarily mean that this definition was now owned by the SIWG members. The members’ briefing was agreed by the Depute Director, rather than the whole SIWG, prior to being circulated.

A Fife Regional Council Policy on Sustainable Development was completed in August by the Planning Officer (Environment Services) for presentation to the Policy and Resources Committee (although it did not actually go to committee until 20th October). The paper included a 12 page appendix giving background information and relating sustainable development to the work of Fife Regional Council (FRC, 1994p). The policy paper states that:

“Sustainable development is a very complex subject, which is continually evolving. Put simply sustainable development is about creating and maintaining a way of life which will not only allow for beneficial economical development but will also protect the environment. It should ensure that the natural resources we currently rely on for ourselves and our economy to function and prosper are not overused to their lasting detriment. It also means ensuring that the quality of the environment and its resources are maintained for future generations.

It is the aim of the Regional Council to make Fife a better place in which to live and work. The concept of sustainable development is therefore fundamental to this. Sustainable development is about improving the quality of life for current and future generations. Sustainable development is most often defined as:-

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

(Brundtland Commission, 1987)

The policy paper then goes on to say:

“It is recognised that the Regional Council is limited in what it can do in Fife in making progress towards sustainable development by legislative and financial requirements enforced by Central Government and the European Union. However as a user of resources and a service provider the Regional Council can lead by example and can create the conditions for others to take action. “

and:

“The Regional Council will also want to consider the consequences of the weighting of decisions towards sustainable development principles in its decision making process. Due regard will have to be given to current economic and social considerations.” (FRC, 1994p)

The appendix that was attached to the policy paper recognises the global dimensions of sustainable development and explores the concepts of inter-

generational equity and carrying capacity, and identifies that:

“Sustainable development requires a change in values, in lifestyles and in levels of consumption”.

However, the policy statement which formed the substantive decision making element of the document was as follows:

“THE POLICY

- (a) Fife Regional Council will support the concept on (sic) sustainable development
- (b) Fife Regional Council will adopt the following basic principles
 - to minimise the use of finite resources;
 - to minimise energy consumption;
 - to reduce, reuse and recycle waste;
 - to minimise pollution.
- (c) These basic principles will be applied to all of the Regional Council’s activities and functions i.e. resource use, policy making and service delivery.
- (d) The Regional Council will strive for change and continual improvement in its activities and functions in line with the principles of sustainable development.
- (e) The Regional Council will implement the above by developing a programme of action which will be regularly monitored. “ (FRC, 1994p)

Comparing this, and the conceptual statements that preceded it, against the sustainability spectrum used by Pearce (1993, 18-19) cited in Chapter 1 it appears to fit most closely with a ‘Technocentric accommodating’ position, also labelled as ‘Weak Sustainability’. The policy statement focuses on a resource conservationist and ‘managerial’ position, and although there is recognition of intergenerational equity with its reference to the Brundtland definition, intragenerational equity is only recognised implicitly in terms of improved quality of life. The view of nature is instrumental - i.e. its value is determined according to its usefulness to humans. No clear statement is made regarding the impact of activity in Fife upon the social and ecological conditions elsewhere on the planet.

The imminent adoption of the Policy on Sustainable Development, and the time and effort put into drawing it up, meant that those members of the SIWG who had been most closely involved in drafting it (particularly the Planning Officer (Environment Services) the principal author, and the Depute Director who had approved the document to go to committee) felt it should be the basis for the framing of the Fife-wide document.

I had been given a copy of the draft policy document at my interview in early September. I sought to discuss it with the Planning Officer (Environment Services) one-to-one meeting on the day I started my contract on 26th September. When I broached the subject of the 'weak' definition of sustainable development used I received a curt response that it had been agreed (although she did not say by whom), was going to committee, and wasn't going to be changed any time soon.

I was torn between my feelings that a stronger definition was essential as the base of a strong sustainability document, and concern at the effects of pushing for this too early in the project for fear of alienating a key member of the SIWG team. This exchange with the Planning Officer (Environment Services) illustrates that relying on formally recorded notes of meetings and policy statements provides a trail of evidence of decisions but it only gives a limited picture of the processes influencing how these were arrived at as it omits the informal exchanges and the issues not minuted in meetings which can be very important in shaping the underlying ethos of a project.

For this reason I will include a series of 'Case Stories' which are intended to give access to the informal processes and interpersonal interactions and recognise the roles I was seeking to balance as researcher/Project Consultant:

Case Story One - Don't Show Those to (the Depute Director)

I had read the available background information on the LGMB pilot and the work undertaken by Fife on the pilot thus far in the period between being interviewed and starting my contract. I spent day one meeting some of the members of the SIWG based within the Economic Development and Planning Department individually and I was asked to participate in a meeting of all the ED&P staff involved in the project the following day.

It was my understanding that I had been appointed to the role of Project Consultant largely on the basis of my contribution to the CoSLA conference 'Reporting on Sustainability'. I wanted to try and transfer my learning leading up to that event. I also wanted to explore the scope for using more innovative approaches to community participation in the Fife pilot project. With this in mind, on the evening of my first day, I prepared a short paper for circulation and discussion at this meeting (Figure 5.13 a, & b). Keeping in mind my researcher role I also had a series of questions (Figure 5.14) which I hoped could be discussed. My PhD research had been discussed at my interview and I felt it best to be open about the areas I was seeking to cover.

One of my SIWG colleagues, the Planning Officer (Environment Services), expressed surprise prior to the meeting when I said I had prepared a paper for discussion, as this was not usual practice for a new member of staff. She asked to see it and I was happy to let her in the hope of gaining some feedback ahead of the meeting. When she had read through both she handed me the questions and said "Don't show those to (the Depute Director)". When I asked why she said he wouldn't like them and it would hinder my acceptance as part of the project team. This was the first of many times when I came up against the unwritten rules of engagement within the department

Figure 5.13 a 27 September Paper shown to ED& P SIWG members

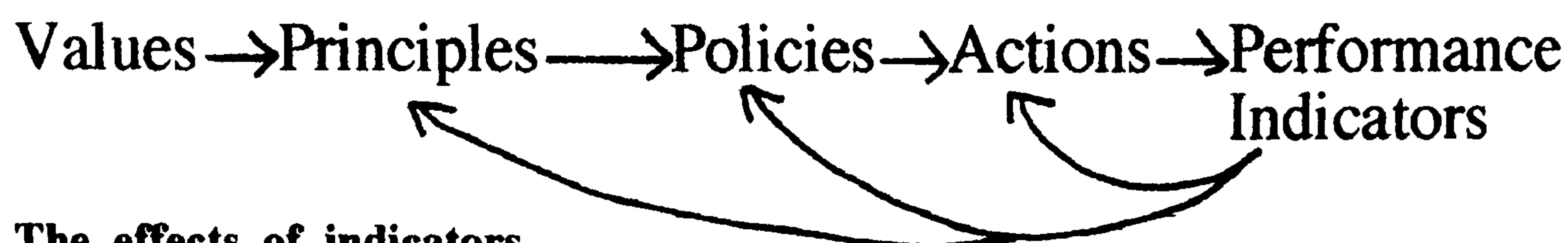
Page 1

Issues behind Sustainability Indicators

The role of indicators

Indicators are basically information which can be used to understand past performance, learn from it and improve future performance.

Indicators provide feedback on the effects of the values and principles that organisations hold their policies and the actions they carry out.



The effects of indicators

In many organisations, including local authorities, performance indicators are often focused primarily on efficiency of services in cost terms or on compliance with particular standards.

The type of performance measure used can make a big difference to the achievement of sustainability. For example power utilities in the UK are obliged to use the amount of energy they have sold as their most basic measure of performance. Energy utilities in other countries see their role differently, and therefore select different performance measures. They see their role as the provision of energy services - heat, light, motive power for machinery and so on. This means that they can improve their performance without having to encourage increased energy consumption. This is good for the customers, who can get the same services while consuming less energy. It is good for the environment as less consumption should mean less environmental damage. It also makes very good economic sense for the energy companies, as energy saving measures are much more effective than building new generating capacity.

For performance indicators to avoid building in unsustainable practices they need to be based on values and principles which underpin sustainability.

Uses of indicators in promoting sustainable practice

The measures of performance used also need to recognise what the point of the particular service or project was in the first place, and what it is like to be on the receiving end. Increasingly local authorities are measuring:

Effectiveness - is the service doing what it is supposed to do? and

User Experience - how does it feel to the public to use the service?

These trends could be useful in developing partnerships with other departments. They will put more emphasis on meeting peoples needs and offer more potential for more creative ways of looking at issues. For example in Seattle the Roads and Transport now focuses primarily on mobility because that is the best way they feel they can meet peoples needs and tackle environmental problems.

Recognising existing 'good practice'

Experience in other Scottish Local Authorities suggests that the ability to recognise and praise existing good practice (whether or not it was actually done for environmental/social reasons) is helpful in making people less nervous about change. If it can be shown that they are getting it at least partly right at least some of the time then they have some useful experience to build on. Indicators can be a useful part of this, identifying how the organisation is performing compared with those elsewhere, or compared to its own past record. This should not be an excuse for inaction, but a way of building the measurement of sustainability into day to day practice.

Communities, indicators and sustainable development.

Active participation by local people is widely recognised as being essential to the achievement of sustainable development (eg Agenda 21). Getting people to identify the issues that affect them, and develop ways of monitoring whether these things are getting better or worse may be a good starting point in raising awareness and helping people to believe that change is possible.

Figure 5.13b 27 September paper shown to ED&P SIWG members Page 2

Methods of participation

The other pilot/shadow authorities involved in the LGMB project do not seem to be doing anything very innovative in the way of community participation (press releases, community meetings and questionnaires) to test the usefulness of the menu of indicators.

Good work is currently being carried out in Scotland on community consultation, particularly in small rural communities.

One option within the sustainability indicators pilot is to test the applicability of these techniques to work on sustainability. This learning process would be particularly valuable if the indicators project was being used as an integral part of the wider work on Sustainable Development/Local Agenda 21.

Using more participative approaches in the community consultation may still be of great value even if the indicators project is treated as separate. It would increase the possibility that the process would really be testing whether the indicators chosen are good measuring tools. The danger of a more traditional approach to the consultation is that it simply assesses whether or not people understand what they are being asked.

Figure 5.14 27 September Questions - not shown at ED&P meeting

Questions

Is the sustainability indicators pilot independent of or integral to the Local Agenda 21 process in Fife?

Which approach is likely to be most effective in achieving an agreed set of values and principles, and ownership of the process of change towards sustainability:

- identifying local issues and ways of measuring whether conditions are getting better or worse

or

- testing whether people will accept indicators chosen by others.

What scope is there for innovative community consultation approaches?

What scope is there for legitimate participation of young people in the consultation?

- they have local knowledge & local acceptability
- they can reinforce local people's interest in the work
- they are generally more aware of sustainable development issues

What scope is there for working within existing initiatives and service delivery mechanisms?
Can partnerships be negotiated which deliver improvements for all partners?

Is there scope for a genuine shift in priorities - with a focus on equity of opportunity, quality of life and maintaining the local and global environment, or will standard of living/conventional economic growth continue to dominate?

in which the pilot was based. "We don't do it like that here" became a recurring refrain.

The Planning Officer (Environment Services) continued to assume a role as my advisor on matters of language, protocol and style within the Department. I was grateful for this, especially in the early stages of the pilot, as my strategy of engagement with the project made it essential that I gained acceptance with key members of the project team. But I also felt very frustrated at the number of constraints I was expected to work with whilst seeking to carry out work that was explicitly intended to be innovative.

Although I found aspects of the organisational situation frustrating I was acutely aware that, as I was only on a short-term contract, the longer term success of the project would depend upon the permanent members of staff retaining a strong sense of ownership of the sustainability indicators development process. If they did not have a strong sense of ownership the work undertaken within the pilot period would stall once I left. Because I saw the ownership issue in this way I was prepared to go to considerable effort to try and develop a shared sense of ownership across as much of the project team as possible. I had not been asked shape the Fife-wide report or to write indicators for it - this role had been allocated to the Research and Information staff. My role was initially defined as one of documenting the process of the Fife-wide report and shaping the community indicators pilots by advising on community consultation approaches.

The reaction to the paper I circulated at the meeting was muted. Those present skim read it and I gained the impression that they thought there was really nothing new in it for them. I had made no mention of strengthening

the sustainability definition that would underpin the report because of the exchanges the previous day with the Planning Officer (Environment Services). The paper did include the diagram which draws a direct linkage between principles, policies and performance indicators that I had used in my CoSLA presentation but this was not explicit enough to prompt a debate around the definition of sustainable development on which indicators work would be based.

The only area of the paper on which people raised questions was around the potential for more innovative approaches to community consultation. This led to a discussion about the usefulness of a questionnaire which had been prepared for circulation to a list of Consultees across Fife. The questionnaire had been prepared by the Research and Information Officer within ED&P. However, other staff on the SIWG felt it would not elicit the kind of information that the Working Group were wanting. The version already prepared turned the titles of the 13 themes set out by the LGMB into a series of statements and then asked consultees to rank these on a scale of 1-5 according to whether the consultees felt the issue was 'very important' or 'unimportant' to sustainability. One of the problems highlighted was that consultees could answer that all 13 issues were 'very important' to sustainability, which would not help the SIWG in developing the indicators work.

As a result of the discussion of the questionnaire I was asked to prepare a revised version (see Chapter 4.4.2) which was structured to encourage consultees to prioritise the issues.

BEING and the researcher/project consultant role

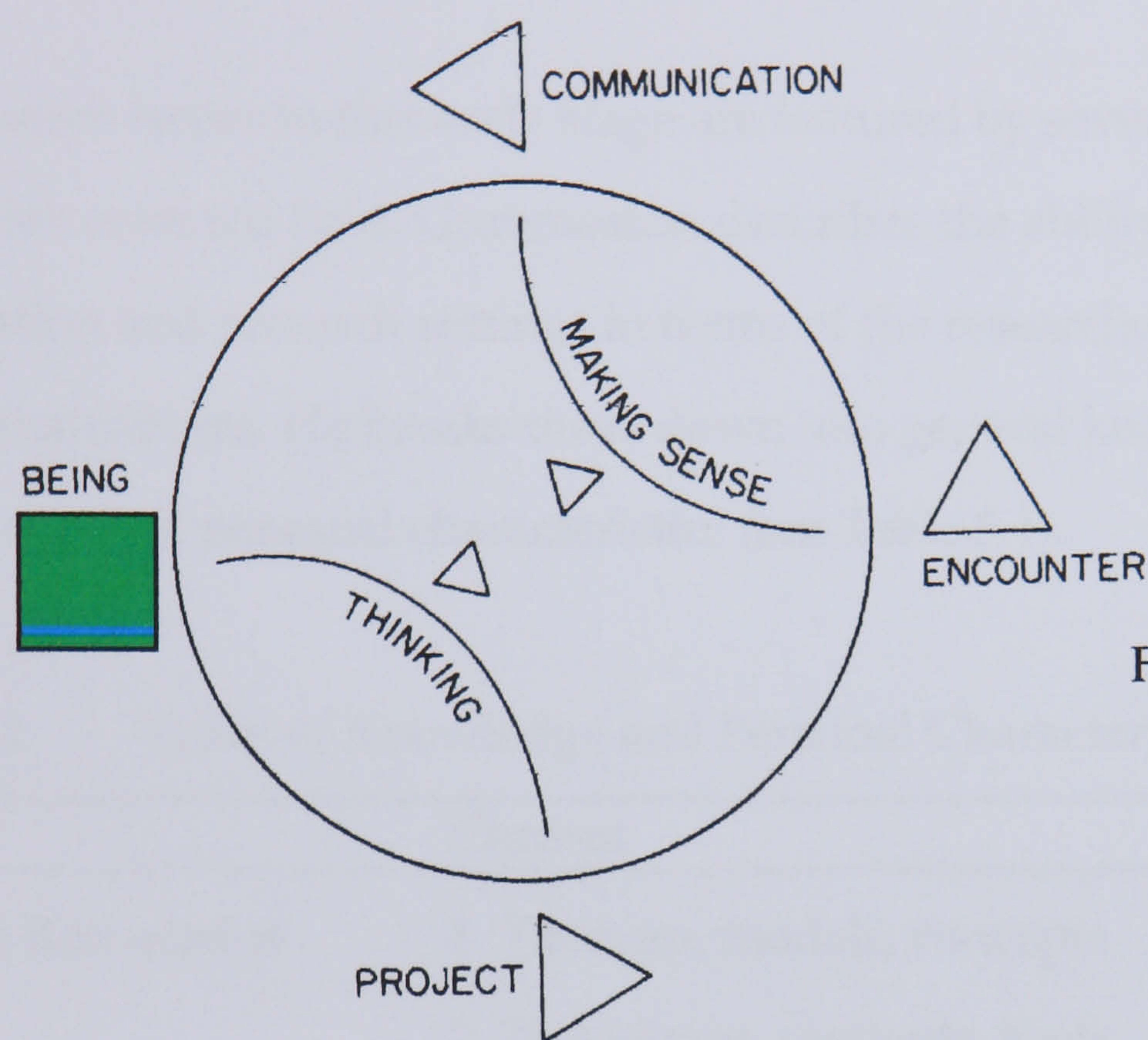


Figure 5.15 BEING I

As the case story illustrates, I got early exposure to the issues of institutional conditions and the constraints that this would place on me in conducting research which went beyond the framing of the project given by the LGMB and the SIWG. The early weeks of the project required me to combine several tasks in parallel. I had to develop my detailed understanding about how the project was being conducted by Fife, beyond the written information about the project I had been given to me to read prior to starting work.

I had to learn how the members of staff in Fife operated individually and within the Sustainability Indicators Working Group (SIWG). I also needed to prove myself as a useful member of the team, this largely involved trying to provide information and skills of use to the project team and to build up individual working relationships with as many members of the team as possible. Whilst

carrying out all these tasks I had continually to seek to avoid speech or actions deemed ‘inappropriate’ according to the tacit conventions of the department in which I was based as I feared these would undermine my acceptance within the organisation.

The research issues in this early stage are featured by several writers in the qualitative research field. Gummesson describes the ability to gain access to information and research settings in terms of the researcher’s knowledge and personal attributes. He breaks these down into general knowledge, specific knowledge and personal characteristics (see Table 5.1).

Table 5.1 Types of Knowledge and Personal Characteristics

Type	Content
General Knowledge	1. Theories, models, concepts
	2. Techniques, methods, tools
Specific Knowledge	3. Institutional conditions
	4. Social patterns
Personal attributes	5. Intuition, creativity, vitality, social ability

(adapted from Gummesson, 1991: 63)

Knowledge of theories: Understanding theories, including concepts, models and approaches which help to identify, define, analyse and diagnose major factors and relationships, mean the researcher is better able to provide structure to a given situation and to pass on this understanding to others (Gummesson, 1991: 63). My pre-understanding was largely around approaches to framing up new processes for developing indicators rather than how to undertake process intervention when a project for developing and applying indicators was already underway in an established institutional setting. I sought to use my knowledge of definitional

issues around sustainable development to encourage a stronger definition of sustainable development to underpin the indicators report. However this was hampered by the strong sense of ownership by some SIWG members of the Sustainable Development policy they had just completed. My contribution to structuring the process was also limited by my late involvement in the project and the tight external timescales. In the early weeks of the project, before I had learnt enough about the conventions of the SIWG members and the organisation as a whole, I felt as though I was restricted to a damage limitation role as it would be inappropriate to challenge directly the framing already agreed by the SIWG.

Knowledge of techniques: This includes the ability to use techniques and tools, such the ability to as use a computer program to carry out a specific task or to carry out a community consultation exercise to assess local opinion on an issue. The absence of such knowledge may greatly increase the time it takes to carry out an operation or may mean it is done ineffectively (Gummesson, 1991: 63).

The Quality of Life Questionnaire, mentioned above, was an example of this. This document was given considerable importance in the conduct of the pilot by some SIWG members. There did not appear to be an option to seek to change the decision to carry out a postal questionnaire survey of the consultees, even though at the meeting on 27th September several of the ED&P staff present were questioning how useful the information gained would be as the 13 themes were interlinked and difficult to deal with in isolation. A decision had been taken by the SIWG to produce a postal questionnaire - so one would have to be written and issued. I therefore applied my 'knowledge of techniques' to writing a questionnaire which was framed to require people to prioritise which of the themes they felt were most important and which the least. When the questionnaire returns began to arrive I also intervened at the data presentation stage. I recommended that bar charts be used to display the information on returns (that

would retain all the information regarding the number of returns and pattern of expressions of preferences) rather than using the mean and standard deviation to two decimal places as was proposed by the Research and Information staff.

Knowledge of Institutional Conditions: This comprises knowledge of customary practice, key decision makers and other specific mechanisms and factors relating to a particular organisation. Institutional knowledge enables the choice of the appropriate tools and techniques to match the reality that is confronted and avoidance of inappropriate or ineffective approaches for that setting. Gummesson describes this as “the highly detailed type of knowledge that is acquired mainly through experience” (Gummesson, 1991: 64). These institutional issues are explored more intensively by Denzin who describes the process of getting to grips with institutional conditions as ‘situating interpretation’. He breaks this process down into three key elements:

1. **Temporal mapping** which involves determining the temporal sequencing and organising of actions in the setting - who does what, with whom, when and where.
2. **Locating settings and persons in space** involves learning his/her way into the social structure of the project or setting - Denzin describes this as “part of the process of living one’s way into the phenomenon being interpreted” (1989:67)
3. **Learning the language and its meanings** involves gaining an understanding of the group’s idiolect, its special language (Barthes, 1967). This language will contain terms or concepts that are not commonly spoken in other groups and will also contain special meanings attached to everyday words. There may also be a code or set of rules for putting words together. In this sense the language will have an institutional and historical heritage which the researcher must uncover. “Because every group is a distinct

language community, researchers must begin by learning the language that is spoken." (1967) Language is important because it structures and creates the process of understanding and interpretation. Experiences cannot be shared if the language and means that organise the experience are not understood.

This latter point overlaps with Gummesson's forth type of knowledge:

An Understanding of Social Patterns in which he points out that each organisation creates it own cultural value system of rules (which are often tacit) of co-operation, social intercourse and communication. Social relationships between colleagues may be friendly, indifferent or antagonistic. There are also informal hierarchies and different types of personalities. Gummesson takes the view that it is very difficult for researcher/consultants to gain a deeper understanding of the social patterns in an organisation that is new to them.

ENCOUNTER

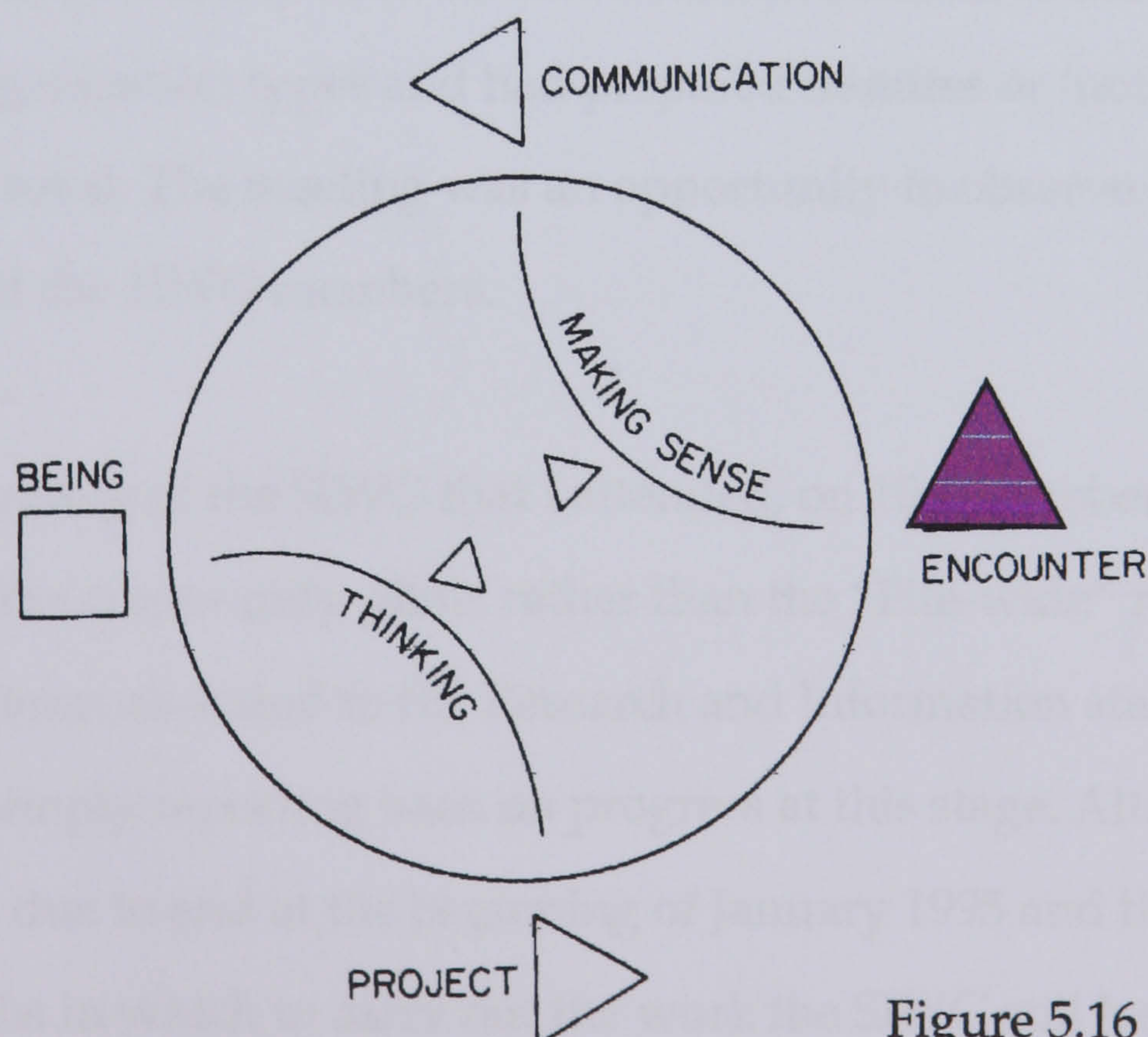


Figure 5.16 ENCOUNTER I

The encounters during the project were of three basic forms. There were set piece SIWG meetings. There was formal and informal contact with members of the SIWG, individually and in small groups, outwith the set piece SIWG meetings. There was also formal and informal contact with consultees and staff of agencies who were information providers for the Fife-wide report.

SIWG Meetings

The SIWG meetings were all held at Fife House, a glassy modern office block in Glenrothes new town, which was also my work base. Meetings lasted 3-4 hours. The meetings had a formal pre-circulated agenda and they were chaired by Rob Terwey, Depute Director of the Economic Development and Planning Department. I was the note-taker at the meetings and produced a formal 'note of meeting' which detailed the decisions taken and any key points of discussion. This note had to be formally approved at the start of the subsequent meeting. This was the only forum in which all the SIWG were present. I was rapidly comfortable in this setting. I had previously been involved formal decision making meetings in a wide range of organisation types and had prepared minutes or 'notes of meeting' for formal approval. The meeting was an opportunity to observe the interpersonal dynamics of the SIWG members.

The first meeting of the SIWG that I attended, on 10th October 1994, focused quite heavily on the community pilots rather than the "Fife-wide" report. The Fife-wide report had been allocated to the Research and Information staff to produce and they were simply reporting back on progress at this stage. Although the pilot period was due to end at the beginning of January 1995 and there were only 3 more months in which to carry out the work the SIWG still had ambitious ideas about the range of work that was possible - including the production of separate Sustainability Indicators reports for East Neuk, Glenrothes and Benarty (the three community pilot areas) and a separate Healthy Fife report. This was in addition to

the 'Fife-wide' report and the study report. As this programme of work was set out at my first SIWG meeting I did not feel in a position to challenge it as I felt it would suggest a lack of commitment on my part.

At the 10th October SIWG, a Seattle-style format was selected for the presentation of the Fife-wide report (see Chapter 4 Figure 4.2). Implicit in this decision was that an attempt would be made to identify a trend "Towards sustainability" or "Away from Sustainability" for each of the indicators. Guidance was also given at that meeting that "The focus (of the report) will be on quality of life". This quality of life focus implicitly narrowed the definition of sustainable development that could be applied. There was no explicit discussion of definitions at the SIWG meeting and I felt constrained by being at my first formal meeting of the group and wary of raising a potentially controversial issue at this stage.

However, the same afternoon there was a meeting between some members of the SIWG, the LGMB consultant and staff from Strathclyde Regional Council who were also involved in the LGMB indicators pilot process as a 'shadow' authority. I had worked closely with two of the Strathclyde staff around the CoSLA/SANGEC 'Reporting on Sustainability' Conference and was more confident of getting into theoretical discussions with them as we had done this on several occasions with regard to sustainable development and indicators issues. At this meeting there was discussion of definitions in relation to Strathclyde's difficulty in generating acceptance for the role of social as well as environmental indicators in their report. I offered to circulate a journal article which contained a 'four principles' definition of sustainable development encompassing social and ecological dimensions (Bosworth, 1993 cited in Chapter 1 above). I hoped that reading this paper would encourage SIWG members towards the adoption of a strong rather than a weak definition of sustainable development. However, as only a few members of the SIWG were present this had little impact at this stage. It did represent my learning

following the paper I presented on 27th September - that sharing my ideas was less effective than providing people with articles written by others. From here on I always sought out other 'experts' and reference material to back up theoretical positions or ideas for practice. This approach was eventually successful and the definition used in the Bosworth papers was adopted for use in the Final Sustainability Indicators for Fife Report: however this strengthening of the definitional frame of the report did not take place until January 1995.

At the next meeting of the SIWG on 7th November the LGMB consultant reported on the process of writing up the LGMB pilot report and the requirements the LGMB had for participating local authority pilots. The discussions regarding the community pilot areas at the 7th November meeting focused on disappointment that progress was not being achieved more quickly.

A first draft of the Fife-wide report was presented to the SIWG and the report was considered indicator by indicator. Comments were made about the content and presentation of each indicator but little time was spent on the overall impact of the report. The Research and Information staff were asked to add an introduction and definitions of key terms to the report. Informal discussions later that day raised questions about whether the trends identified were really representative of what was happening in Fife. Of the 27 indicators presented 18 were identified as having a clear trend. Of these 11 showed a trend towards sustainability and 7 showed a trend away from sustainability. SIWG members questioned what the basis was for identifying such trends.

The comments made on the 7th November meeting were to be acted upon in preparing the first public consultation draft of the Fife-wide report to be issued in mid-November. Discussion of the questionnaire returns focused on the priority placed by a majority of respondents on basic needs issues. As these were not well

covered by indicators already selected it was agreed that more time and effort should be invested in developing strong basic needs indicators. I saw this as an opportunity to bring in a 'stronger' sustainability perspective and I offered to get involved in developing new basic needs indicators and this was agreed.

Learning my way into the institutional conditions of Fife Regional Council and the SIWG in particular was certainly a challenge. During the early weeks my thinking was based on my pre-understanding: my reading, thinking and experiences relating to sustainability indicators and performance review prior to starting as Project Consultant in Fife. Although I had experience of working in local government and of consultancy teaching I did not have direct experience of the types of department in which I was based or of taking a Project Consultant role in local government. Because I was used to approaching sustainable development issues from a non-government organisation (NGO) campaigning perspective I found that this meant I was used to looking at issues from a stronger sustainability frame than several of my SIWG colleagues. This meant my pre-understanding required some refinement in order to adapt to institutional conditions and language. It also meant that I frequently approached problems from the perspective of 'how to get SIWG members to adopt a strong sustainability frame' for the report rather than taking a more neutral facilitator/ process advisor role.

Formal contact with SIWG members outwith SIWG meetings

In the early stages of the pilot the majority of my formal contact outwith SIWG meetings was regarding the community indicators pilots. I was keen to explore the scope for innovative community consultation approaches, and as this was the area in which SIWG members expressed most interest I put a lot of time into helping other members of Fife staff with ideas and preparation for work in community pilots. I saw this as part of the process of 'proving myself useful' in order to be accepted as part of the indicators team. I had one-to-one meetings with the Planning Officer (Environment Services) on the Glenrothes pilot, the Depute Director

on the East Neuk and with the Research and Information Officer on the early stages of the Benarty work before the Community Education staff took on co-ordinating the Benarty pilot. I also carried out follow-up work, generally preparing written materials, as a result of each of these contact. These discussions were not directly about the Fife-wide report, but spending time discussing sustainability and participation issues with them did influence my working relationship with them when it came to discussions in the SIWG.

My desk was in the open plan office of the Planning Section, the Environment Coordinator and the Depute Director were in offices just along the corridor from the planning office. The Research & Information team were based one floor upstairs. This meant that most contact with ED&P SIWG members was face to face rather than by phone or in writing. All the other SIWG were based outwith Fife House - elsewhere in Glenrothes or in Dunfermline. As I did not have responsibility for the Fife-wide report I did not have specific reasons to meet with non-ED&P staff outwith the SIWG until later in the project.

Informal contact with SIWG members

Gummesson emphasises the importance of informal contact in establishing close working relationships:

“It is essential that the researcher/consultant make use of these informal opportunities since the establishment of close working relationships by purely formal contact gives inadequate access.” (1991: 43)

Gummesson does , however, add the following caveat:

“There is naturally also the question of one’s own ambitions as well as mental and physical stamina.” (1991: 43)

I was well aware of the necessity of developing informal contact opportunities, but there were practical constraints to the extent to which I could immerse myself in social contact with SIWG members.

Formal contact with consultees and staff of agencies who were information providers for the Fife-wide report.

In the early weeks of my involvement in the pilot I had formal meetings with the Director of Public Health of Fife Health Board regarding the health indicators and with the Manager of Fife Money Advice Project regarding Basic Needs indicators. In addition I communicated by letter and phone with a number of other potential information providers for other indicators. I also had meetings regarding the community pilots including a student representative from Glenrothes College, the management committee of the Glenrothes Tenants and Residents Federation, and a Community Education worker with Sustainable Development interests who was working with youth clubs. These gave me some insight into non-Fife Regional Council staff's perceptions of Fife's activities on sustainable development.

Contact with others working on sustainable development

I continued to have contact with people outwith Fife and the LGMB Sustainability Indicators pilot who were working on sustainable development related activities. Outwith my Fife responsibilities I attended conferences run by the Scottish Academic Network on Global Environmental Change (People, Forests and Biodiversity), Scottish Education and Action for Development (Communities and the Environment) and also acted as a 'social auditor' for the New Economic Foundation's review of their own activities. I participated in a working group of the Scottish Environmental Forum as co-organiser of a forthcoming conference on Community Participation and Sustainable Development. I also taught on a 'Management and the Environment' degree module at Stirling University. This kept up the pressure on me to look at sustainable development issues from a perspective other than that being adopted within the LGMB project.

COMMUNICATION

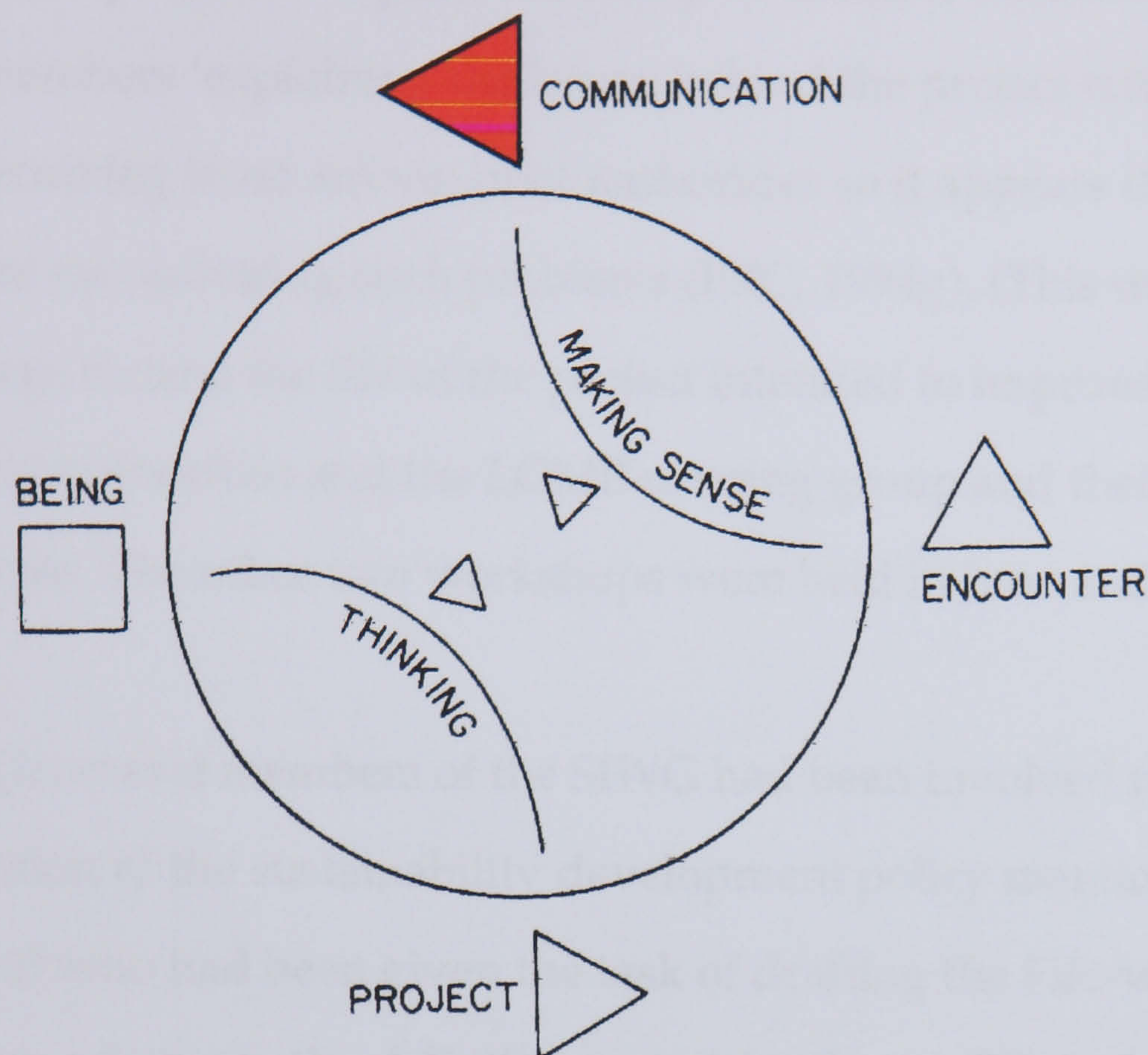


Figure 5.17 COMMUNICATION I

The introductory material defining sustainability or indicators was added in time for the first public consultation draft which was issued in mid-November. The cover of the first full draft of the Fife-wide report carries the by-line *Measuring Quality of Life in Fife and the Quality of the Environment in Fife*. The introduction of the report contained a very short definition of sustainability (see Figures 5.18a, b & c). The definition of sustainability used in this first public consultation draft (1st PC draft) was drawn from the introductory material for the LGMB sustainability indicators pilot. At my interview and at later informal meetings the Depute Director had commented that he felt some of the language being used by the LGMB consultants was inappropriate for elected members or for a Fife-wide audience. However, in practice throughout the early months of the pilot the language used was largely based on that contained in LGMB materials. This may have reflected a lack of confidence in expressing the concepts of sustainability in other ways on the part of Fife staff or simply pressure on time to generate written material whilst carrying out a range of other tasks.

In the minute of the 10th October SIWG meeting it was reported that at an LGMB Sustainability indicators pilot workshop in London attended by one of the Fife SIWG members 'explaining the issues behind the project without using jargon' was a recurring issue among pilot authorities so it appears that it was not only Fife that were encountering such problems (FRC, 1994g). (This was one of three workshops during the life of the project intended to improve the links between the pilot local authorities and the LGMB steering group and their appointed consultants. The other two workshops were held in June and December).

Although several members of the SIWG had been involved in the drafting and presentation of the sustainability development policy mentioned above, it was not these staff who had been given the task of drafting the Fife-wide report. This may have been a factor in the definitions used for the 1st PC draft focusing on LGMB rather than in-house material. The introductory material in the first consultation draft focuses on indicators and on the process of conducting the pilot project rather than on defining sustainability as a concept. This reflects the focus on process rather than content at this stage in the pilot as Fife staff sought to keep pace with the LGMB timescales despite most of the work having to be compressed into the final three months of the LGMB pilot period.

As stated in section 5.4 above the first public consultation draft contained 27 indicators. 17 of these (63% of the total) were judged to be moving towards sustainability. 6 indicators (22%) for which no trend was identified, and 4 (15%) which were judged to be moving away from sustainability. In terms of the timeseries data on which these judgements were being made 3 (11%) of the indicators offered no data and 4 (14%) used a one year snapshot. A further 10 (37%) used 2 -5 years of data. This did, however, mean that 62% of the indicators sheets were based on 5 years or less of trend data, yet 63% of the indicators were evaluated as having a clear trend towards sustainability. Although the first public

Figure 5.18a Introductory Material: First Public Consultation Draft
Sustainability Indicators for Fife Report FRC, 1994k

SUSTAINABLE FIFE

MEASURING QUALITY OF LIFE IN FIFE

1.0 THE INDICATORS PROJECT

- 1.1 Fife Regional Council is a pilot authority in a UK Sustainability Indicators Project.
- 1.2 The pilot project in Fife is being used to find out:
 - which issues are most important to people
 - which measures are felt to be most useful in monitoring these issues
 - whether there is data available on these indicators, and what else it would be useful to collect.
- 1.3 The pilot period is being used as an opportunity:
 - to learn more about effective means of public consultation
 - to develop links with other organisations and other initiatives working on aspects of quality of life in Fife.

2.0 WHAT ARE INDICATORS?

- 2.1 Indicators can be used to provide information which helps us to see a "big picture" of what is happening around us by looking in detail at a specific part of it. For example the number of salmon in a river is a good indicator of quality of the water and the condition of the surrounding catchment area.
- 2.2 Developing ways of measuring whether social, economic and environmental conditions in Fife are getting better or getting worse is an important step in identifying which problems need to be tackled and monitoring the impacts of activities already taking place.

3.0 WHAT IS SUSTAINABILITY?

- 3.1 Sustainability encompasses
 1. economic opportunity;
 2. environmental responsibility and
 3. social equity.

This is why measuring the sustainability of Fife is being approached from the point of view of quality of life and the quality of the environment. Everyone has an opinion on these matters and the issues which improve or damage them.

4.0 WHAT MAKES A GOOD INDICATOR?

- 4.1 Good indicators

reflect something basic and fundamental to the long term social, economic or environmental health of a community over a long time period;

Figure 5.18b Introductory Material: First Public Consultation Draft
Sustainability Indicators for Fife Report FRC, 1994k

can be easily understood and can be accepted by the community as appropriate and useful;

have interest and appeal for use in monitoring, publishing and analysing general trends towards or away from sustainable practice;

can be reliably measured

5.0 THE PURPOSE OF THIS REPORT

5.1 This report is one of a series which will be produced as part of the sustainability indicators project. The purpose of this report is to examine a range of indicators about the social, economic and natural environment of Fife Region as a whole, and of equality of opportunity and access for its residents - in short to measure quality of life in Fife.

5.2 Other reports will examine this same quality of life "in particular parts of Fife - the East Neuk, Glenrothes and the Ballingry area, although the approaches used in each case will be different. Another report will look at the issue of Health in Fife.

6.0 QUESTIONNAIRE

6.1 In the original guidance documents for the study the Study team were given a number of "menus" or themes about the environment of Fife and a range of "indicators" within each theme. The instruction was to select at least one indicator within each theme.

6.2 The team felt that there was a need to understand more about the importance that people in Fife would give to each of the "themes". A questionnaire (Appendix 1) in which the original "themes" were changed into sixteen statements was designed about the environment and sent to a broad group of people who had already expressed an interest in the environment of Fife.

6.3 In total 161 questionnaires were sent out and, by 21st November, 106 had been returned, although in a number of cases, interested groups had returned additional copies of the original questionnaires.

6.4 People who were sent the questionnaire were asked to rank each of the statements in order of importance (A,B,C,D,). The results were scored and placed in order of importance, as seen by those people who responded. The final order of importance is shown in the table (Figure 2).

7.0 THE INDICATORS

7.1 The results from the questionnaire were used in two ways. The indicators of sustainability (quality of life) in Fife, chosen from the original lists, were placed in order, based on the scores from the questionnaire, and a number of new indicators have been defined or are under development to reflect conditions in Fife.

7.2 The final list of indicators used in this report, grouped into broad categories (eg. Basic Needs) which broadly reflect the statements in the questionnaire, is shown in Figure 2. It is emphasised that this is just a "working list" and that any suggestions that you have about other ways in which the environment and the quality of life in Fife could be measured and reviewed will be welcomed.

Figure 5.18c Introductory Material: First Public Consultation Draft
Sustainability Indicators for Fife Report FRC, 1994k

8.0 THE PROCESS OF CONSULTATION

- 8.1 This report is specifically being issued to encourage people and organisations in Fife to comment.

If you think there are errors, omissions or other deficiencies please tell us. Your comments are very important. Where we are already aware of a need for further work or problems with existing data this is highlighted in the comments.

Your comments will be used to prepare another draft of the report which will be published in February 1995 - this will be widely distributed to the residents of Fife.

Please send you comments to:

Simon Hart
Senior Planning Officer
Department of Economic Development and Planning
Fife Regional Council
Fife House
GLENROTHES
KY7 5LT

Tel: 01592 414141 Ext 6321

consultation draft was issued in mid-November few responses were received until early December when the second consultation draft was already being finalised for circulation.

MAKING SENSE

In the early weeks of my involvement in the pilot the making sense process was largely happening outwith the formal meetings of the SIWG. The draft indicators were being prepared by the Research & Information team and the SIWG had a reactive role: going through a large document indicator by indicator and asking for changes. As these meetings were also spending considerable time on the community pilots, and on the relationship with the LGMB pilot process, few of the SIWG had a strong sense of ownership of the Fife-wide document. This dynamic began to change towards the end of November.

5.5.2 Stage II: Local Priorities or Local Agenda 21

Case Story Two - You Can't Do Local Agenda 21

By late November I felt I had built up strong working relationships with some members of the project team. On the morning of 21st November I met with the Environment Co-ordinator and the Planning Officer (Environment Services) at their request to discuss how the work on the sustainability indicators pilot could most effectively contribute to their areas of responsibility outwith the pilot. The Environment Co-ordinator had responsibility for reviewing the Environmental Action Plan and integrating this into a wider Local Agenda 21 strategy. The Planning Officer (Environment Services) had written the sustainable development policy that had been agreed at committee in October. The meeting started by looking at the way the recommendations in the study report would meeting the LGMB and Fife Regional Council's needs in terms of the sustainability indicators pilot project. All three of us were enthusiastic about the scope for using the sustainability indicators pilot as a platform for building future LA21/ Sustainable Development work.

The two principal themes discussed were: ways of building in the learning processes experienced through the pilot into wider work on consultation, community capacity building and partnership working; and, how to develop policy with a particular emphasis on the need to look at values issues around sustainable development policy. There was a recognition that there had historically been insufficient linkage between different policy documents approved by the council that related to sustainable development issues. There was also recognition of a need for in-house consultation and training in order to improve linkages in future. The Environment Co-ordinator was keen that a new Local Agenda 21 strategy should develop from existing experience drawn from the four environmental action programmes to date, the sustainability indicators pilot and other work including social strategy developments in other departments.

I found the tone of the meeting and the willingness of these two members of staff to seek to involve me in developments in work areas over which they had responsibility reassuring. I felt by the end of the meeting that I had reached a positive turning point. I felt I had now been accepted by key

members of the SIWG team and had developed sufficient credibility to be trusted by them as a team member and contributor to their work.

On the 23rd November I was taken aside by the The Planning Officer (Environment Services) to say that the Depute Director had just come from a meeting with the Director of Economic Development and Planning at which he had been told "You can't do Local Agenda 21". This was attributed to personal and departmental ambitions with regard to the forthcoming local government reorganisation, although this is difficult to substantiate. This created considerable tension and confusion for the ED&P members involved in the indicators pilot. There we were, one of six pilot local authorities on a national pilot exercise on Local Agenda 21 being told that we weren't allowed to do Local Agenda 21! Most of the staff were also not supposed to know that the Depute Director had been told this, so it could not be discussed with members of staff outwith ED&P which excluded several of the SIWG members.

That evening I phoned a London based friend who worked closely with one of the LGMB consultants and who had considerable experience of LA21 work in UK local authorities. He expressed great surprise at such a decision stating that he "had never come across that happening in any other local authority". I felt very terribly despondent about this, a reaction which emphasised the extent to which I had come to feel an insider at Fife. I now felt accountable for the public image of Fife with regard to sustainable development issues.

I spoke to the Environment Co-ordinator by telephone on 25th November to try and work out what could be done. We were angry at the decision and upset that it made us feel powerless to control the work for which we were formally responsible. We discussed various tactics for trying to overcome this 'decision' although we agreed it was unnecessary and unhelpful to do anything hasty at this point. We agreed to ask for an informal meeting with the Depute Director to establish his position on the LA21 issue and to work out how much impact the decision would have on our work.

The SIWG took place on the morning of 28th November and several of the staff were more subdued than usual, but could not publicly discuss the LA21

decision or the impact it would have on the pilot. This was particularly frustrating for the members of the working group who had met a few days earlier to develop plans to strengthen the sustainable development policy framework upon which it was based. The meeting focused on going through a draft of the Fife-wide report indicator by indicator with many critical comments offered but without any proposals for a more fundamental reframing of the focus of the report.

Early the same afternoon an informal 'crisis meeting' about LA21 took place involving the Depute Director, the Planning Officer (Environment Services), the Environment Co-ordinator and I. The Depute Director expressed his frustration at the decision and agreed with us that it could present major problems for the project if it meant all 'LA21 type' work had to stop. We discussed the policies that had already been agreed by committees of elected members in the council, including the sustainable development policy and the long standing programme of work on the Environmental Action Plan and on Social Strategy which it would be hazardous for even a Director of a department to publicly overturn. We concluded that "most of the cat was out of the bag already". We agreed that we already had sufficient room for manoeuvre to continue even if this may require caution in the use of the term Local Agenda 21 in connection with the sustainability indicators pilot. We did not believe a decision 'not to do Local Agenda 21' could be sustained for more than six weeks or so, but caution was urged in the short term and this was particularly frustrating given the short timescale of the indicators pilot.

The issues within the case story illustrate the way in which my view of myself, the stage BEING, in relation to the Fife project had changed over time.

BEING II

It is difficult to know what would have happened within the sustainability indicators project had the LA21 problem not arisen. My memory was that it damped down the enthusiasm of those SIWG members who were discussing how to implement a stronger policy framing for sustainable development. But the evidence of the discussions in the subsequent SIWG and activities following on

from this suggest that the recorded data accords this incident a much lower impact on the overall process. With hindsight the incident was more illustrative of my

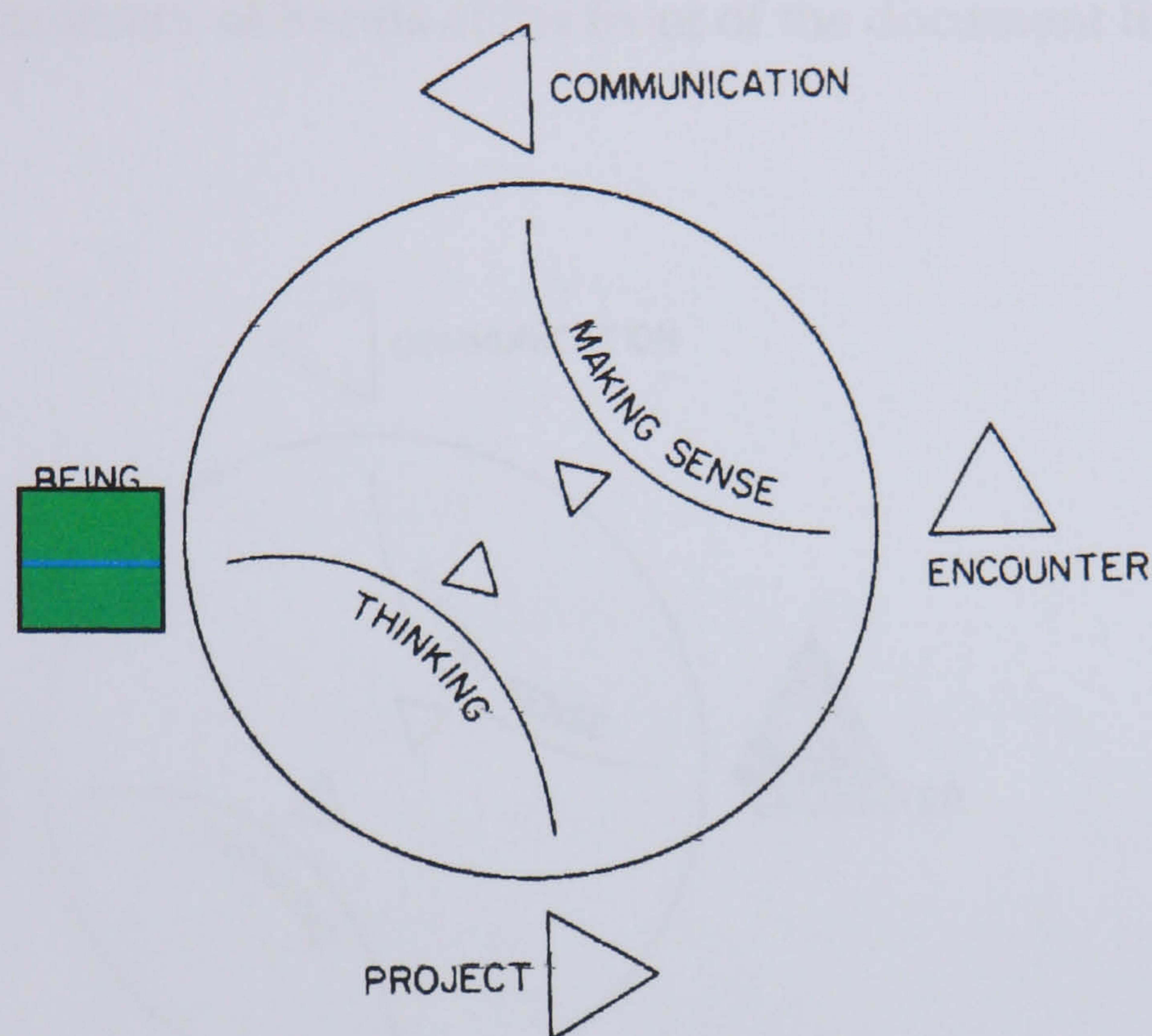


Figure 5.19 BEING II

changing identity within the role of Consultant/Researcher than of a major setback to the project as a whole. The incident made me conscious that despite my short-term and semi-detached role as Project consultant I felt publicly accountable for Fife’s actions in relation to the Sustainability Indicators project. I felt I had a reputation to uphold among my peer-group of sustainable development activists and I felt I had to make the Fife project ‘work’. In the final weeks of 1994 it became clear that it would not be possible to deliver broad based community participation within the pilot project timescale my focus of attention shifted to seeking to strengthen the Sustainability Indicators for Fife Report.

ENCOUNTER II

SIWG meetings

At that 28th November SIWG meeting there was a lengthy discussion about the shortcomings of the first public consultation draft of the report. Following a debate about the summary of trends at the front of the document the following

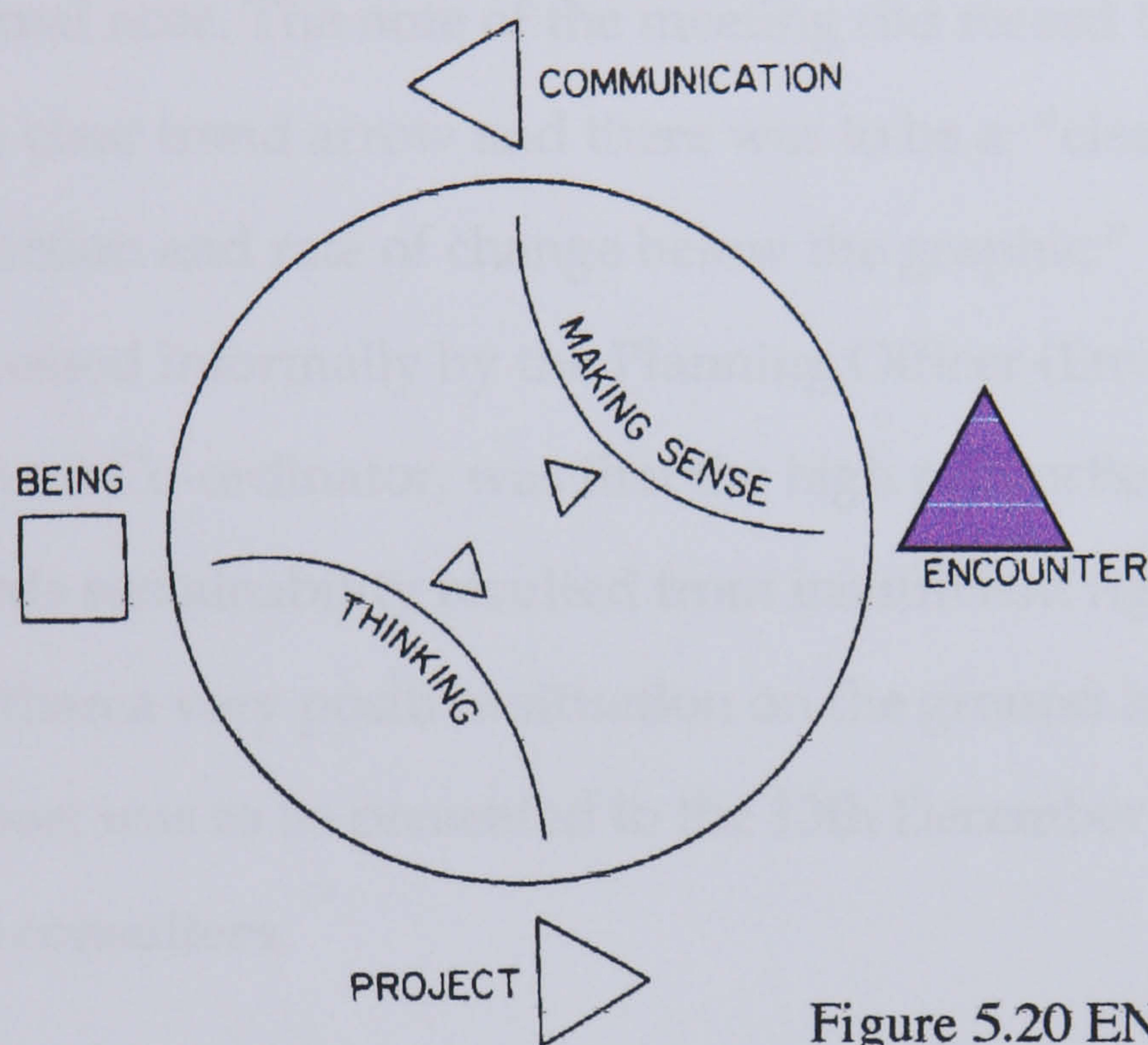


Figure 5.20 ENCOUNTER II

comments were agreed as part of the formal note of meeting:

“Need to be more rigorous about when a towards sustainability arrow is chosen bearing in mind:-

- (i) ambiguity of data;
- (ii) timescales chosen;
- (iii) rate of change;

This provoked a wider discussion about:-

- (i) directions of change;
- (ii) thresholds;
- (iii) location of impacts” (FRC, 1994j)

This discussion gave the opportunity to raise the issue of the impact of actions in Fife on people elsewhere in the world. I introduced the concept of the ‘ecological

footprint' and offered to circulate a 6 page summary article which explained this approach (See Appendix 5A).

My handwritten notes from which the meeting note was prepared also record the "suggestion that are being too generous" with respect to the high proportion of indicators that were showing a trend towards sustainability although this was not put in the formal note. The note of the meeting did record that each indicator sheet was to have a clear trend arrow and there was to be a: "clear succinct statement about the direction and rate of change below the graphic." (FRC, 1994j) The concern, expressed informally by the Planning Officer (Environment Services) and the Environment Co-ordinator, was that the high proportion of indicators showing a trend towards sustainability resulted from insufficient rigour in evaluating the trend, rather than a very positive situation on the ground in Fife. An updated draft of the full report was to be presented to the 13th December SIWG prior to circulation to consultees.

Formal contact outwith the SIWG meetings

"You can't do Local Agenda 21" did prove to be a temporary crisis. Shortly after this edict the Director of Economic Development and Planning received three letters, including one from the Chief Executive of North East Fife District Council, all asking for details of Fife's plans to implement Local Agenda 21. There was some speculation by SIWG members about the interesting timing of these letters, and whether the authors had somehow got news of what had happened. But no-one pursued this with any vigour and it was treated as a fortuitous coincidence!

Around this time I was asked to prepare 'monitoring report': a summary of Fife's progress so far for the forthcoming LGMB review workshop on 1st December. The report was aimed at being of help to the LGMB's consultants in writing up their report of the pilot phase. This is included as Appendix 5B. (This material was also

subedited to form an article published in the January issues of *Scotland's 21 Today* the newsletter covering the development and implementation of Local Agenda 21 (Appendix 5C)). The monitoring report did not go into any detail of the iterative process of indicator development but it did identify the need to:

“focus on outcomes rather than inputs or outputs.”

The debate around definitions of sustainable development was also raised:

“There is also felt to be a need to be able to identify impacts at different geographical levels, including outwith Fife - possibly based on the ‘ecological footprint’ model.”

This report was agreed by the Depute Director for use at the workshop. It was the first time a stronger definition of sustainable development was proposed in material to go outwith Fife in relation to the pilot.

There was a team meeting (of the ED&P staff involved in the project) on 6th December. The Depute Director was in a much more positive mood when he reported back on his experience of the 1st December LGMB workshop. He stated that Local Agenda 21 staff of the LGMB were impressed with the progress of the project and were interested in publishing Fife's report in full and were interested in seeing the revised draft. There was also discussion of the need for a more structured approach to seeking feedback on the second consultation draft of the report as the level of response so far had been low. There had been around 50 requests for information as a result of an article in the ‘Fife Insider’ (Fife Regional Councils information paper delivered to all households) however this was not seen as very good from a population of 350,000 people. Few responses had so far been received from the consultees who had received the first public consultation draft. A questionnaire would be enclosed with the next draft which would ask the questions:

(i) does the indicator address the issue?

(ii) does the indicator trend reflect their perception of what is happening in Fife?

FRC 1994o

There was also discussion about the need to make clear linkages with other activities that related to Local Agenda 21. It was suggested that separate projects may need to be set up beyond the end of the indicators project and formal partnerships established in relation to LA21 and it was proposed that the Study Report detail how these would be developed and what would be taken forward. This was to specify how indicators would be related to policies and what the process would be for making proposals and policies. It was also recognised that there was also a need to raise awareness of the policies that had already been passed.

At this meeting I was also given clear instructions as to what should be included in the Study Report, this included identifying how indicators had been developed for each of the 13 LGMB themes, summarising the feedback from the themes questionnaire, and exploring the issues raised with regard to the themes. Overall the aim of the Study Report was to be to document the learning process experienced through the pilot process. This discussion raised the need to check what the current coverage of the report was in relation to the LGMB themes now that some indicators had been discarded and new ones introduced.

MAKING SENSE II

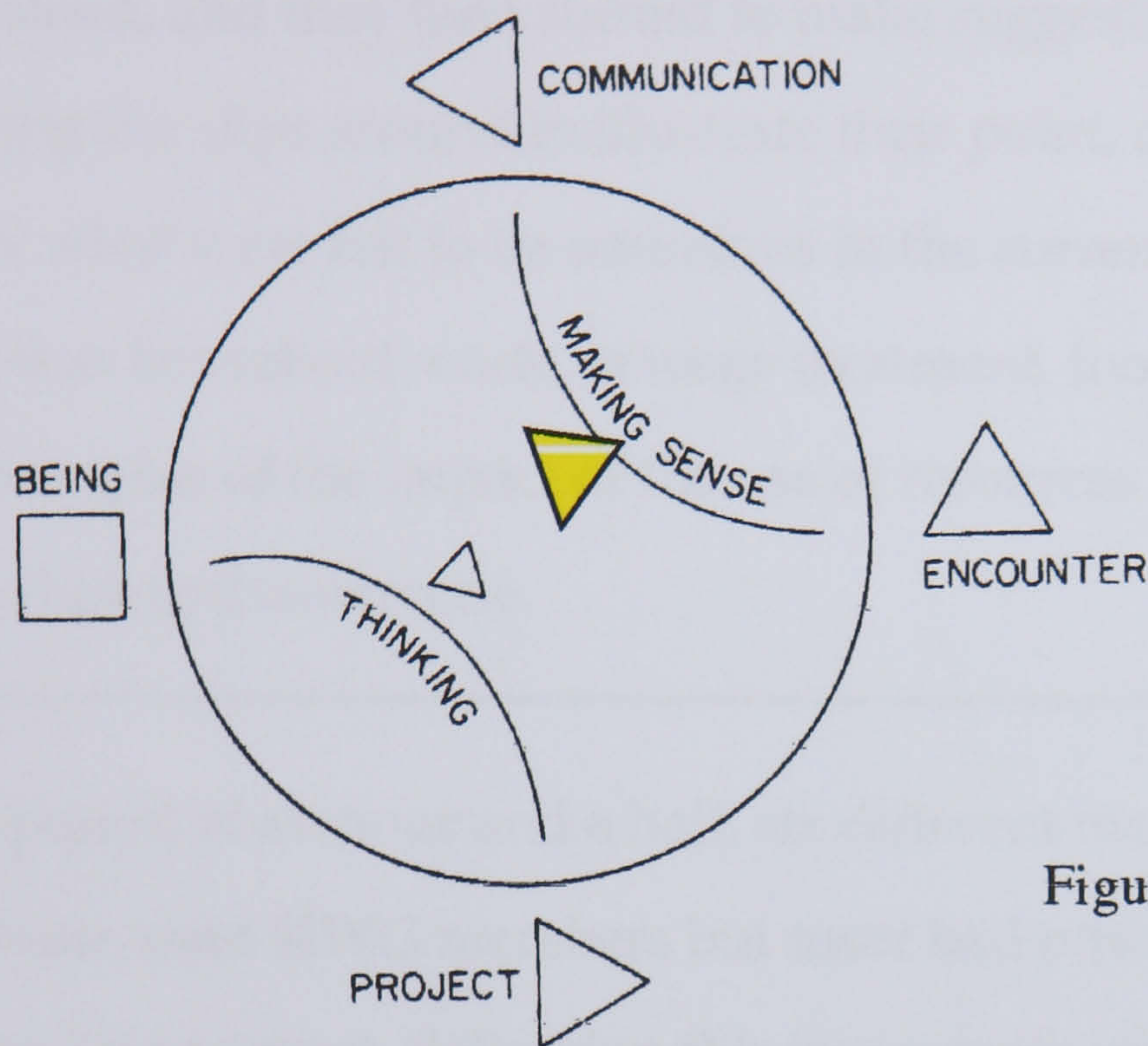


Figure 5.21 MAKING SENSE II

Case Story Three - Making Sense as a Shared Process

Following the team meeting on 6th December I sat down to work out the relationship between the indicator choices going forward to the second public consultation draft and the 13 LGMB menus. I was working from my desk in the Planning Office where I did not have access to a computer (it was a traditional local authority setup with handwritten notes being passed into a typing pool). As I worked through which issues were covered by the current indicators and what potential gaps there were I found simply writing these out as lists on and A4 page restrictive - as I had to rewrite the list to keep a legible copy. I shifted to ripping A4 scrap paper into 8 pieces and writing each issue on one slip. Then doing the same for each indicator. This meant I could move them around easily. I realised the potential for grouping indicators to make the report more readable using 'Basic Needs', 'Community', 'Quality of the Environment', and 'Impact of the Use of Resources' as headings.

Because this was a slightly unusual way of working staff who shared the open plan office were curious about what I was doing and came over to ask. I explained, and they then started to make suggestions, reaching down and moving the slips around to illustrate their point, or making suggestions to cover what were felt to be omissions in the current issues and indicators. The idea that household waste, sewage treatment, food supply and energy were all examples of the impact of the use of resources were raised for the first time during this exercise.

Over a period of an hour and a half, six different members of staff joined in this way - some were SIWG members but most had other responsibilities within the Planning Department. Following this impromptu exercise in participation the staff in the office took a much greater interest in the progress of the indicators project. This exercise resulted in the structure adopted for the final Sustainability Indicators for Fife Report and the suggestions for new indicators (Box 5.1).

The SIWG met again on 13th December. The early part of the meeting was spent on feedback from the LGMB workshop held on 1st December. The note of the meeting records that:

“Favourable comment was made at the workshop.

(i) about the layout and content of the level 1 report, particularly the work specifying why each indicator is important, identifying the linkages between indicators, and the directional arrow in the top right-hand corner of each page.

(ii) that FRC was the only authority to try and find out people's views on the 13 themes.

(iii) regarding the level 2 work consulting particular communities.

(iv) the overall view was that Fife had generally carried out the pilot project well.

Good teamwork and the background knowledge developed in work on related projects were felt to be key factors.” (FRC, 1994n)

Box 5.1 Results of the restructuring exercise for the Fife-wide Report
6th December 1994

* denotes new indicator needed

Heading	Issue	Indicator(s)
Quality of Life	Food	
	Water	
	Shelter	Homelessness Rented Accommodation
	Fuel	
	Income	*Earnings (Top/Middle/Bottom 20%s) *% on benefits Long term unemployment
	Accessibility	*Location of key services Access to public transport Cycling Disabled access
Community	Health	*Life expectancy (infant mortality) Road traffic accidents Cervical cancer screening
	Crime	Reported: Violent Crimes, Burglaries & Rape/indecent assault
	Education	Nursery/pre-school School leaving destinations Adult education Library use
	Community Orgs	Voluntary organisations Community Grants
	Local Decision Making	Voting in local elections * Community economic development
Quality of the Environment	Land	Derilict and contaminated land Semi-natural habitat Land lost to urban development * Develop land quality index
	Water	River quality Water quality in boreholes
	Air	
Impacts of the Use of Resources		Energy production Food supply Household waste Sewage treatment

This reinforced a sense among some members of the SIWG that the work on the Fife-wide report was nearing completion. The feedback from the workshop then led into a discussion about the future direction of the project:

“...it was emphasised that this project is not an academic exercise. It is designed to achieve action. It is therefore important to:

(i) identify objectives which take account of key thresholds/critical levels relating to particularly indicators or issues, and also take account of the need for objectives to relate to people's experience.

(ii) identify policies and proposals relating to each issue/indicator which will result in progress towards sustainability.

These points will be incorporated into the study report.

There was discussion about whether there should be an attempt to set targets for the improvement of particular issues/indicators. This could be an aspect of future consultation on the project in the terms "What should FRC be trying to achieve".

This will be incorporated into the Study Report. (FRC, 1994n)

That these were seen as issues for the Study Report rather than improvements to the current version of the Fife-wide Report re-enforces the sense that this document was seen as almost complete, as does the note of the subsequent discussion of the 'ecological footprint' concept based on the briefing that was circulated at the meeting (see Appendix 5A mentioned above). It was concluded that:

further investigations will be undertaken about incorporating this concept into future work on the indicators project.

The deadline for comments on the first consultation draft report was the 14th December, and because of a wish to get the second consultation draft out before the Christmas/New year break, the second consultation draft was in the final stages of preparation. However, the short timescale for the consultation process meant that very few consultee's comments had been received in time for them to have any impact on the second consultation draft.

The Fife-wide Report was discussed again at the end of the meeting - as this was where it appeared on the Agenda:

“Report now restructured under 4 themes. It is easier to read. It summarises relevant work done locally. There is however still a need for the report to be more focused, and possibly for it to contain fewer indicators. This needs to be raised in the next round of consultation.” (FRC, 1994n)

This discussion was curtailed because the meeting, which had started at 2.30pm was running beyond 5pm. This was quite short for a SIWG meeting. Usually they began at 10am and ran until at least 1pm, sometimes later. The SIWG meetings were long partly because of the different levels at which the project was operating. There was discussion of the relationship between the LGMB project and the Fife pilot, of the Fife-wide indicators report and of each of the three community area pilots. There was also an ongoing discussion of what sustainable development actually meant. This cropped up frequently in the guise of discussion of elements of individual indicators, or in terms of issues that needed to be addressed and individuals' perspectives on them. These discussions were not recorded in the note of meeting as they were seen as providing illustration of points that were taken into account when a decision was actually made.

The length of these discussions mitigated against contemporaneous note-taking and the time constraints of the project work meant there would have been little time to write up such notes immediately after the event. However, not having a record of these discussions is probably my biggest regret in relation to my participation in this project. It was several meetings before I realised the extent to which these discussions were not only shaping the decision making within the project but were also illustrating the pre-understanding of the other SIWG members on sustainable development issues. With hindsight, had it been possible to tape and transcribe the dialogue of these discussions, it would have provided a rich research data resource. Particularly revealing was the tension created by

practical conflicts between the lifestyle of full-time professional local government employees who drive cars, shop in supermarkets, have foreign holidays and see these as features of 'normal life' for most of the people they come into daily contact with and the lifestyle changes and resource consumption patterns that may be necessary to achieve strong sustainability visions less dependant on a fossil fuel economy. This opportunity to explore the social commitments of key participants in the decision making sustainable development indicators would have made an interesting project in its own right.

Formal contact with SIWG members outwith the SIWG meetings

Because the 13th December SIWG ran out of time before there was the opportunity for a detailed discussion of the indicators contained in the current draft of the Fife-wide report an informal meeting was called on 19th December that involved only the Depute Director, the Planning Officer (Environment Services), a Research Officer and I. This meeting took the role of going through the draft page by page. In some cases the comments to be added focused on keeping consultees informed that further work was being undertaken to develop other indicators, particularly for the Basic Needs section of the report. Many of the Community indicators also needed a lot more work as it had proved difficult to find appropriate data sets.

At the end of this meeting I was asked by the Depute Director to prepare a letter in response to one of the most critical consultee comments so far received. It came from the chair of the Freuchie Community Council - the village where the Depute Director lived - this local connection appeared to be important as I was not asked to reply to any of the other consultees who made critical comments.

Freuchie Community Council 9/12/94

"1. Sustainable development vs Sustainable society vs quality of life / fair society. It is important to separate out the four very disparate strands alluded to on the title page

Indicators are needed for (a) Quality of Life, (b) Quality of our Environment, (c) Sustainability of our Environment (d) Implications on the Sustainability of the Environment (local and/or global) of our behaviour and lifestyle. A high quality of life may well be unsustainable; poor environmental quality may be, nevertheless, sustainable etc. The question of how people feel about and/or perceive things (1.2) is another, separate, set of questions.

2. Responses to questionnaire

We had great difficulty completing the questionnaire. For example whether or not paid employment should be available to all becomes more or less important depending on the access-to-resources implications of being not in work and this is not necessarily clear. Similarly everyone agrees that basic needs should be available to all at an affordable price (whether to consumer or taxpayer). Whether or not one believes that "local decisions should be taken locally" is more or less 'important' than this depends on one's confidence in the ability of a more remote government to organise this effectively and in sympathy with actual local-needs. Thus our response was not to diminish our view that meeting needs is important but rather that we do not have confidence that a less than very local decision making process will achieve this - as our experience bears out.

Specific indicators:

Thus all the indicators listed and/or others could be reorganised to recognise which of the factors cited they are indicating. We would suggest the following approach:

Quality of Life / Healthy Society	Quality of the Environment
(c) infant mortality	(b) vacant public sector dwellings
(d) cervical cancer screening	(i) derelict & contaminated land
(e) road traffic accidents	(m) take up of Environmental charter grants
(g) domestic violence	(n) tree preservation orders
(k) nursery preschool provision	(o) disabled access to public buildings
(p) library use	(u) access to public transport
(r) long-term unemployment	
(aa) voluntary activity levels	
Sustainability of our Society	Sustainability of our activity / environment
(a) food, water, shelter & fuel availability	(q) loss of open land
(f) crime	(s) area in SSSI &c.
(h) sewage sludge disposal	(t) investment in public transport
(j) river quality	(v) cycles routes
	(w) ratio of indigenous food consumption produced
	(x) ratio of indigenous water consumption produced

End note

Sustainability means not using up finite resources; it means reducing our negative impact on the environment; it means everyone accepting their social responsibilities -

not surrendering them to others (cf questionnaire response to voluntary work etc.); it means leaving future generations more able to achieve a high quality of life than we have been; it means undoing damage we and previous generations have done to the earth.

Any examination of so-called social equity would be better viewed from the perspective of social responsibility. Economic opportunity and social equity may be desirable but they have little or no bearing on the sustainability of the global environment nor even of the local environment other than indirectly through a possible total breakdown in society. We note that there is no attempt in this document to analyse Fife's impact on the global aspects of social equity or economic opportunity (i.e. Fife's global social responsibility). This is hypocritical.

The correct approach is to define true indicators of sustainability and adapt the way we do things within that context to promote equity, opportunity etc. in so far as we consider these things to be important.

These comments should not be seen as exhaustive due to short time available for reply.

Although the Depute Director seemed somewhat frustrated at the attitude being taken by the author of the letter he wanted a constructive and conciliatory reply written - and would rather I undertook the task than the Research & Information Officer. I suggested I include the ecological footprint material as this was consistent with the decision at the 13th December SIWG to explore using this in further work, and the Depute Director agreed to this.

Other feedback from consultees

Other comments received before the second public consultation draft was finalised were as follows:

Townhill Community Council 9/12/94

“ Your letter of 24th November gives little time for us all to study the draft report. Looking at it briefly, we have the impression that some of the indicators are too narrow to be usefully extrapolated and do not consult a wide enough range of sources, many of which ‘Data and Information Sources’ seem to be very limited in scope.”

Elizabeth Riches, Regional Councillor 12/12/94

“Thank you for sending me the draft report on the above which I read with interest. I have one or two comments to make and I refer initially to the pages headed 'Sustainable Fife'.

Under 2.2, 'What are Indicators', my initial concern is that in order to measure whether any conditions are getting worse or are improving the monitoring of activities obviously has to take place over quite a long time in order to get a base with which to compare any movement.

Under 6, which relates to the questionnaire, I note that the questionnaire was sent to a broad group of people who had already expressed an interest in the environment of Fife. I should be very interested to know how these people were chosen and also whether they are an atypical group if they have already expressed a concern in the environment. There is no mention made of the ages of the people or of their sex, and I also think this would be interesting to know ((....detailed questions about individual issues/indicators follow)).”

Elizabeth Riches' comment regarding the need for longer timetrends of data accorded with the discussions already taking place in the SIWG on this issue. A reply was written by the Research & Information Officer giving some detail about the consultees although no data was available on age and little on gender.

The other formal contact I had with SIWG members outwith SIWG meetings was with the Community Education Department representatives on the SIWG who were based in Dunfermline. A first meeting on 9th December was to discuss possible ways of developing the work in Benarty beyond the questionnaire. I met with them again on 22nd December along with a Community Participation consultant I had recommended with the aim of exploring the use of 'Participatory Rural Appraisal' review and planning techniques. This involved a slide presentation and a discussion regarding how these techniques could be of value in local circumstances. Although the focus of the meetings was all around the community pilot it was still a useful opportunity to develop the working relationship with two further members of the members of the SIWG.

Formal contact with consultees and staff of agencies who were information providers for the Fife-wide report.

The Manager of the Fife Money Advice Project about the basic needs indicators; Pittenweem Fishermen's Mutual, Scottish Agricultural Colleges, New St. Andrews House Library for information on fish landings for the Food: Fisheries indicator; Heatwise Fife, Age Concern Scotland, Energy Action Scotland, the Scottish Low Pay Unit and Scottish Homes for the affordable warmth indicator; Community Business Fife and Economic Development staff within Fife Regional Council regarding the Local Economic Development Initiatives indicator.

Contact with others working on sustainable development

On 9th December when I was working at Fife House I received a fax from a Research Officer with the City of Glasgow Housing Department. I was writing a course on Housing and the Environment for delivery to Housing Diploma students at the University of Glasgow. We had been discussing issues around definitions of sustainable development in relation to the theoretical framing of the course. Through these discussions I had introduced her to the article by Bosworth on Local Authorities and Sustainable Development (Bosworth 1993) and she had incorporated a version of Bosworth's '4 principles' definition of sustainable development into her work. The fax I received was a copy of a policy statement agreed that day with her directorate on sustainable development and its implications for City Housing. The significance for Fife was that it used the Bosworth definition of sustainable development. I was able to show this to SIWG members to illustrate that what I was proposing could not really be too radical if City Housing Glasgow were happy to adopt it.

COMMUNICATION II

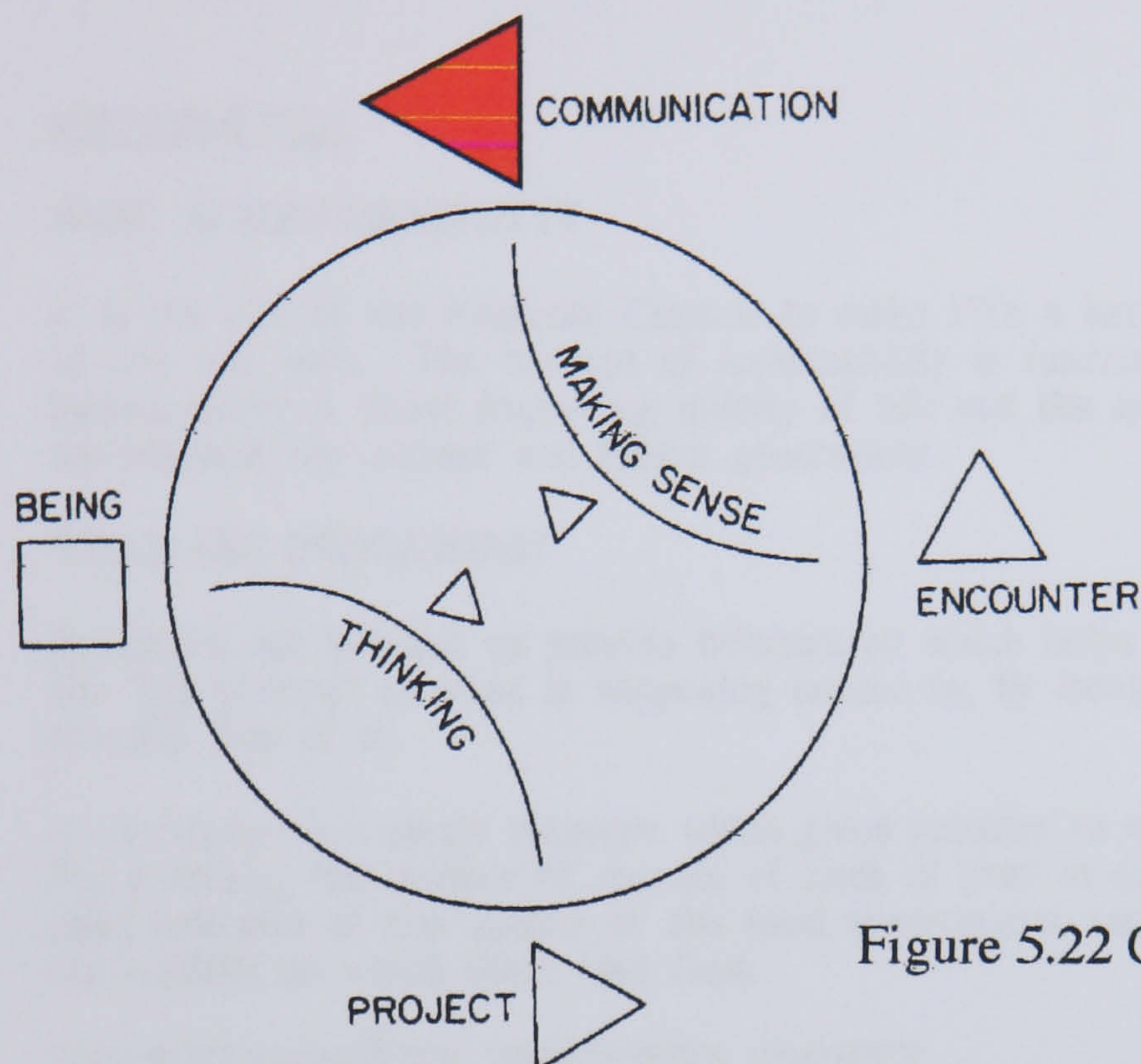


Figure 5.22 COMMUNICATION II

The introduction to the second public consultation draft (see Figures 5.23 a, b & c) was written by the Planning Officer (Environment Services), the Environment Coordinator and I. The introduction used in the first draft had been written by the Research and Information Officer Yet the definition of what the project sought to achieve was becoming less rather than more global. The sections on 'The Sustainability Indicators Project' makes clear that the project is linked to the UN Commission on Sustainable Development and the 'Links with other Fife Regional Council work on Sustainability' also places considerable emphasis on Agenda 21, and its relationship to the Earth Summit. The Fife Sustainable Development Policy is also mentioned. All this can be linked back to the Director of Economic Development and Planning's statement that "You can't do Local Agenda 21". The primary purpose of this introduction was to put on record the various connections to Local Agenda 21 that had already been approved by committees of elected members of Fife Regional Council: In effect setting out exactly how much of the cat was out of the bag.

Figure 5.23a Introductory Material: Second Public Consultation Draft,
Sustainability Indicators for Fife (FRC, 1994 m)page 1

1.0 INTRODUCTION

1.1 WHAT IS SUSTAINABILITY?

It is the aim of the Regional Council to make Fife a better place in which to live and work. The concept of sustainability is fundamental to this. Sustainability is about improving quality of life and the quality of the environment for current and future generations.

1.2 WHAT ARE INDICATORS?

Indicators can be used to provide information which helps us to understand the "big picture" of what is happening around us, by looking in detail at a specific part of it.

An indicator is a single measure which gives pointers to other conditions. For example, the number of species of birds of prey in an area may be a good indicator of the quality of the local environment and the condition of the wildlife on which these birds feed.

1.3 THE SUSTAINABILITY INDICATORS PROJECT

Fife Regional Council is one of six pilot authorities in a UK wide Sustainability Indicators Project being organised by the Local Government Management Board on behalf of the UN Commission on Sustainable Development.

The pilot project in Fife is being used to find out:

- which issues are considered by local communities to be the most important;
- which measures are felt to be most useful in monitoring these issues;
- the extent to which there is data available on these indicators and how reliable it is;
- what actions are appropriate to ensure a move towards sustainability in terms of the indicators identified.

1.4 LINKS WITH OTHER FIFE REGIONAL COUNCIL WORK ON SUSTAINABILITY

At the Earth Summit in Rio in 1992 an agreement was reached on an "agenda for action in the 21st Century" commonly known as Agenda 21. Since so many of the problems and solutions being addressed by Agenda 21 have their roots in local activities, Agenda 21 calls for the participation and cooperation of local authorities in fulfilling its objectives. It is expected that by 1996 most local authorities in each country should have undertaken a consultative process with their populations and achieved a consensus on a "local Agenda 21" for the community.

The indicators project has been used as an opportunity to develop skills and knowledge which will be useful in the development and implementation of a local Agenda 21. This has included learning about more effective means of enabling and encouraging community participation and developing partnerships with other organisations working on aspects of sustainability.

Figure 5.23b Introductory Material: Second Public Consultation Draft,
Sustainability Indicators for Fife (FRC, 1994 m)page 2

Fife Regional Council have also adopted a Sustainable Development Policy which focuses on the authority's own activities as a resource user and its functions as a service provider. Through taking action itself the Regional Council wishes to set an example to local businesses and households and to create appropriate conditions for others to take action towards sustainability.

1.5 THE PURPOSE OF THIS REPORT

The purpose of this report is to set out and examine a selection of indicators which measure the quality of life and the quality of the environment in Fife.

In addition to this document reports detailing local issues and indicators are also being prepared for Glenrothes, the East Neuk and the Benarty area as part of the Sustainability Indicators Project.

1.6 THE STRUCTURE OF THIS REPORT

For ease of use four themes have been used as headings for grouping the indicators. This is for presentation purposes only as the concept of Sustainability requires all themes to be looked at together. The themes are:

Basic Needs

Community

Quality of the Environment

Use of Resources

For each indicator there is a sheet which contains the following elements:

GRAPHIC - showing the a trend over time or a 'snapshot' of the current position if no time series is available;

DESCRIPTION - outlining the importance of the indicator and what is being measured;

ANALYSIS - which interprets information shown on the graphic;

EVALUATION - which assesses whether the trend is towards sustainability, away from sustainability, or inconclusive;

LINKAGES - which identify relationships with other issues and indicators within this report;

DATA AND INFORMATION SOURCES - which are guides to where more details can be found; and

COMMENTS - which identifies the strengths and weaknesses of the indicator and ways in which it could be improved.

All the indicators are summarised in Figure 1, with arrows showing whether the trend is moving towards sustainability, away from sustainability, or is inconclusive.

1.7 THE PUBLIC CONSULTATION PROCESS TO DATE

The guidance documents for the UK wide Sustainability Indicators Project identify 13 menus of indicators. As a pilot authority within the project Fife was required to select at least one indicator from each menu.

Figure 5.23c Introductory Material: Second Public Consultation Draft, Sustainability Indicators for Fife (FRC, 1994 m)page 3

Rather than start the public consultation process with the presentation of detailed indicators, it was felt to be valuable to get feedback on the relative importance of the issues behind the 13 menus. To do this a range of organisations and individuals were asked to rank sixteen statements in order of importance. The questionnaire used is contained in Appendix 2. The questionnaire was sent to 161 individuals and organisations including Community Councils, environmental interest groups, and national and local voluntary groups. By 21st November 1994 106 questionnaires had been returned, although in a number of cases, interested groups had returned additional copies of the questionnaire.

The results of the questionnaire are shown in Figure 2. These results have been used to focus this report on issues felt to be of particular importance in Fife. For example, additional work is going into the development of basic needs indicators as this theme was given the highest priority in the questionnaire returns.

1.8 GIVING YOUR VIEWS ON THIS REPORT

This is a draft report. If you think there are errors, omissions, or other deficiencies please tell us about them. Where we are already aware of the need for further work, or problems with existing data this is identified in the comments box.

A questionnaire is provided to help you to structure your reply. Please add any comments which you think will help to improve this document and its contents.

Your comments will be used to prepare the final draft of this report which will be published in Spring 1995.

What Makes a Good Indicator?

Good indicators

- *reflect something basic and fundamental about the long term social, economic or environmental health of a community over a long time period.*
- *can be easily understood and are accepted by the community as appropriate and useful;*
- *have interest and appeal for use in monitoring, publishing and analysing general trends towards or away from sustainable practice;*
- *can be reliably measured.*

Yet given this detailed coverage of the international provenance of Fife's indicators pilot, the coverage of sustainability as a concept was very weak. The section

'What is sustainability? States that:

"Sustainability is about improving quality of life and the quality of the environment for current and future generations." (FRC, 1994m)

Which is fine as far as it goes, but in this case it does not appear to consider going any further than Fife. This was raised by several of the consultees (see below). The other changes from the first public consultation draft were less significant. The ordering of the sections was changed so that it started with the project. The 'What are indicators?' section had been simplified and birds of prey used as an illustrative indicator species rather than salmon. There was more use of the term local communities, for example (my emphasis):

The pilot project in Fife is being used to find out:

which issues are being considered by local communities to be the most important;

and

What makes a good indicator?

Good indicators

- reflect something basic and fundamental about the long term health of a community over a long time period.
- Can be easily understood and are accepted by the community as appropriate and useful;

This reflected the shifting emphasis of the pilot project as a whole. By early December the size of the task of achieving effective community involvement in three large areas whilst also undertaking the Fife-wide report was recognised to be unrealistic. Instead of attempting to complete all the programme of work initially envisaged for the Fife pilot within the LGMB timeframe the focus changed to establishing firm foundations upon which further work could be built in relation to community development and sustainable development. The second consultation draft was mailed out on 23rd December (immediately before the staff Christmas lunch!).

5.5.3 Stage III: What to do about critical feedback?

Case Story 4 “It’s really not very good...”

Once the second public consultation draft was ‘out of the door’ the Fife Council staff involved in the SIWG stopped working for the Christmas/ New Year holidays. The ED&P staff were on leave until the 9th January and Fife House was closed. However, as I was feeling under increasing pressure to make progress with the Study Report, as well as taking on more of a role in writing material for the Sustainability Indicators for Fife report, I borrowed a FRC laptop and tried to make progress during the ‘break’.

During this 2 week period I was also preparing the Housing and Environment course with the Research Officer from City Housing Glasgow. I gave her a copy of the 2nd Public Consultation draft of the Sustainability Indicators for Fife report to read and asked for her comments. I had previously been critical of the pace of change in some of the local government policy work in which she had been involved: I therefore felt that I could not really object when she said “I hate to say this, but it’s really not very good is it” I was tempted to try and deflect responsibility for the shortcomings of the report onto others - as preparing the Sustainability Indicators for Fife Report was not principally my responsibility - but I realised that I hadn’t given her much space in similar situations. We had previously had several conversations in which she attempted to explain the labyrinthine nature of policy making within City of Glasgow Housing Department with regard to sustainable development and I had protested that it surely couldn’t be so difficult to generate change within Local Government. When she was critical of the 2nd Public Consultation Draft of the Sustainability Indicators for Fife Report I knew her criticisms were valid and this made me feel very uncomfortable because I couldn’t see how we could secure the drastic improvements in the report that appeared to be required.

When I returned to work on the 9th January I found that several responses to one, or both of the public consultation draft reports had been received. Several consultees were also critical of the definitional framing of the report and the quality of the indicators being presented.

I didn't get much opportunity to digest these comments as the SIWG met at IOam that first day back. Very little time at this meeting was spent on the Sustainability Indicators for Fife report. The attention that was given to the report was at the level of typographical errors and some questions about the appropriateness of particular indicators - but not about the framing of the whole report. I had to present the preliminary recommendations of the study report to the SIWG for the first time. As there was no opportunity to sound out staff during the Christmas break I was nervous about how the recommendations would be received. I was, therefore concentrating on the Study Report rather than the Sustainability Indicators for Fife report. I didn't believe there was any change in the SIWG members view regarding the local focus of the report and did not want to start the meeting by provoking anyone's wrath by trying to push for new changes.

Considerable time was also spent in the meeting discussing the three community pilot areas, and on setting the timetable for the concluding stages of the LGMB project as a whole. The LGMB Consultant explained that pressure was being put on the LGMB's consultants to accelerate the timescale for writing up the project report so it could be published to coincide with a speech being made by Prince Charles in early March.

The final element of the meeting was the discussion of the recommendations to be made in the study report. This focused on the most effective mechanisms for reviewing and publicising the indicators and for broadening the discussion of sustainable development issues more generally. This was quite positive as there was a consensus regarding the need to integrate the development of Sustainability Indicators into the corporate strategy and performance review processes of Fife Regional Council. From my pre-understanding regarding performance indicators and performance review systems I recognised that this was important if the work on creating indicators was to be of ongoing value and lead to practical action. I was keen to incorporate these comments into the Study Report, but I remained uncomfortable about the quality of the Sustainability Indicators for Fife Report as a basis for assessing trends towards or away from sustainability.

I spoke with the Planning Officer (Environment Services) after the meeting about my concern that the Sustainability Indicators for Fife Report was drifting and that other SIWG members seemed to recognise that it had

shortcomings in its current form, but that they did not appear prepared to put effort into turning the report around at this late stage. She said that I shouldn't take it personally, and that it was part of a pattern with regard to project work in the department. The Depute Director in particular liked the high profile roles that went with national pilot projects but became easily bored with the detail of seeking to manage projects when problems arose. We discussed whether it was possible to reengage his interest, and that of other key project members. The Planning Officer (Environment Services) was of the opinion that this was possible, that a part of the problem was simply the timing of the meeting - the morning of the first day back after 2 weeks of leave. She suggested that I would need to find a way of focusing their attention on the Sustainability Indicators for Fife report.

I had lunch in the Fife House canteen with the LGMB consultant assigned to the Fife pilot. We spoke about the quality of the Sustainability Indicators for Fife Report. The LGMB Consultant had not been at the 13th December SIWG and had only received the Second Public Consultation draft in the post at Christmas - along with the Fife consultees. She felt that although the Depute Director was correct in reporting that the LGMB Local Agenda 21 staff were keen to publish the first consultation draft that they had seen at the 1st December LGMB workshop this could be interpreted as illustrating their keenness to have outputs from the LGMB project, despite the very short timescale, rather than necessarily a reflection on the quality of the draft Fife report. She was very constructive about the Fife Report as it stood, but shared my reservations about the weaknesses of the framing of the current report and of a number of the indicators currently included.

ENCOUNTER III

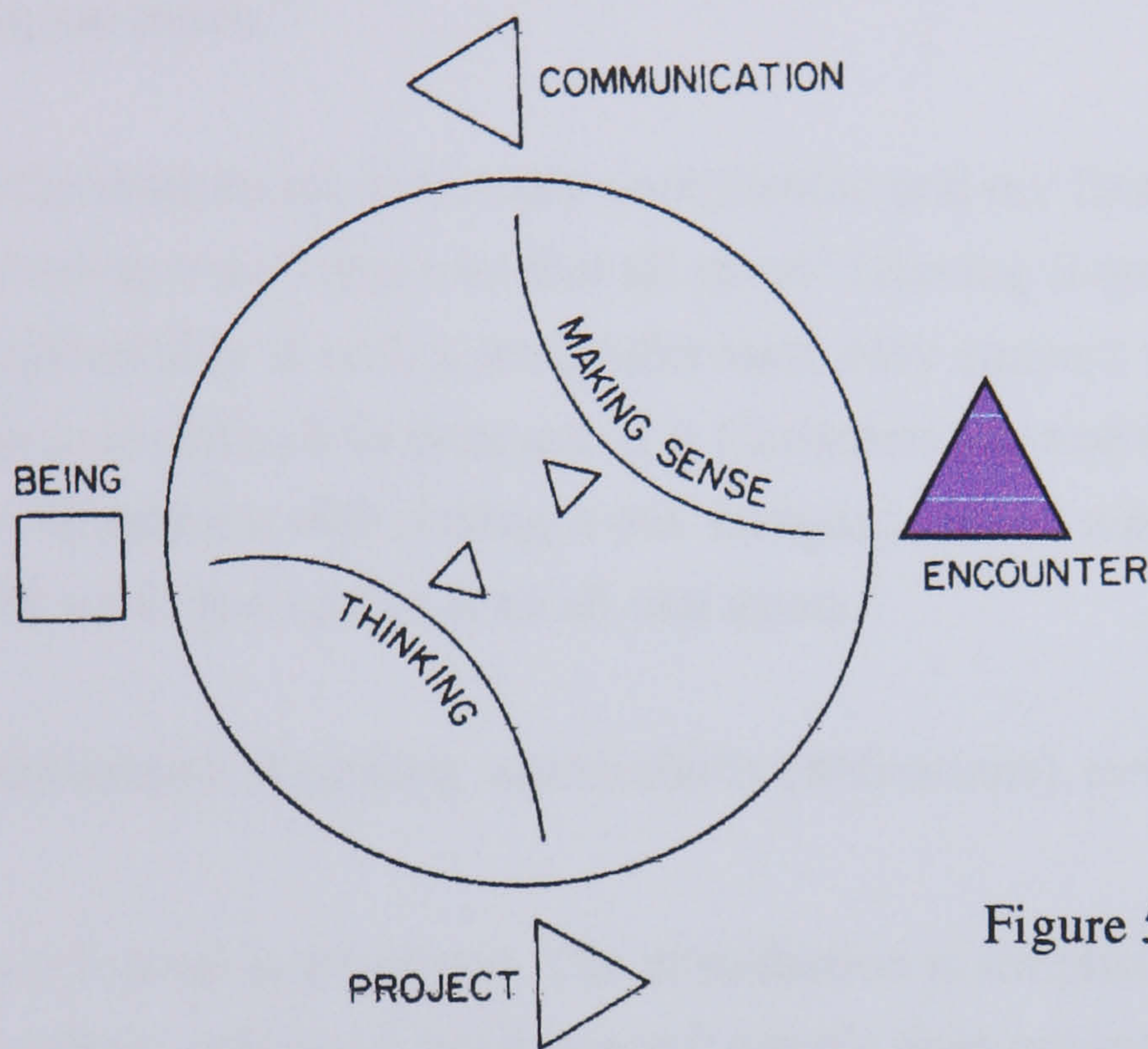


Figure 5.24 ENCOUNTER III

The timescale had been very short for responses to the first consultation draft given the length and complexity of the document. Because of the low response rate from consultees a questionnaire was sent out with the second draft in the hope of encouraging more feedback (Figure 4.9 in Chapter 4 above). As a result of these two factors most of the responses to the two drafts came in together from late December well into January although some were not received until February. Several of the consultees had responded to both the first and second consultation draft over the festive period and their comments were awaiting the SIWG members on our return.

When consultees responded using the questionnaire provided they did not always put their name on the form - therefore some of the comments are anonymous.

Several of the comments emphasised that the Fife sustainability indicators team had certainly not succeeded in pitching the material effectively to reach a diverse audience at this stage:

“It is initially off-putting because of its length, and its insistence on defining and explaining too much.”

“Lots of the sections are extremely complicated and my first comment when I finished reading was “what was that all about” (Having forgotten the introduction by then)...sustainability is such a straightforward, easy concept on a global scale. Why on earth is it so difficult to measure. It is Christmas eve and this has given me a headache. Good luck with sorting it out. Language in the report is a problem - shorten the sentences and treat us all like idiots.”

“More introduction regarding sustainability (definitions), environment, economics.”

“The report in total is simplistic. The introduction is simplistic and apparently (sic) does not contain sufficient detail. Keep it simple does not mean make it simple. The strengths that report may have are obscured by simplistic language. A full glossary and an index would be useful. The current glossary is frankly patronising as is suggestions for further reading.”

There were also comments about the timescale of the consultation process and the length of the document:

“Sorry this is late in being returned - it has taken a long time to plough through it.”

“The whole report could be condensed - a precis would suit most readers better and use less paper!”

“This is a fairly lengthy document and each part requires time to read, digest and form opinions - certainly not bed-time reading!”

Townhill Community Council 5/1/95

“As with the first draft, you give us little time to circulate it widely.”

Some respondents made generally favourable comments:

“The report is a good idea with a long way to go. Much can be achieved if the results are dealt with in the proper manner. The results should be made freely available for public perusal.”

“I am very glad to see this is being done and hope it has a high priority.”

“Excellent”

“An excellent, well-compiled, comprehensive Document - congratulations”

Balmullo Community Council 27/12/94

“I consider that the Indicators listed in every case to be useful, and detailed in the best way to provide easy understanding of the report... and in the main reflects the views of this Community Council. I thank you for giving us the opportunity to comment on the Draft report.”

Director of Supplies & Transport, Fife Regional Council 6/1/95

“Having read the second draft of the report I consider it an excellent document and give it my complete endorsement.”

Several respondents made detailed comments on specific aspects of the report and the pilot process as a whole. The use of the term sustainability was questioned by some consultees:

“Basic definition using the word SUSTAINABILITY is incorrect and misleading and typical consultants jargon. The verb sustain means to keep from falling or sinking or to hold up for a prolonged period - hence the adjective sustainable. The basic objective is to IMPROVE the quality of life and the quality of the environment NOT to SUSTAIN these qualities at the existing level.

I have purposely not responded to the questions on indicator measurements. Indicators need to be more clearly thought through since QUALITY is usually a function of a number of inter-related variables. e.g. Quality of the Environment

affects health - Road Traffic Accidents may be improving but the increase in road vehicles is acting in the opposite direction as far as the environment is concerned.”

Townhill Community Council 5/1/95

“The explanation and definition of sustainability in this draft was helpful, but still one feels that it is an unfamiliar term, and it is not clear why it was chosen, and it does tend to put the layman off. (I appreciate that with this subject, or range of subjects, everybody is a “non-layman”, but those who regularly use the jargon are less “lay” than the rest of us). Having said that, we ought to suggest alternatives but suitable terms are not easy to find: “health”, “viability”, vitality”, “continuance” all have narrower, special meanings, but I suspect that most of us would get along better with “indicators of health” than of “sustainability”, with “trends towards/away health”.

“Sustainability definition is very misleading.

Sustainability is more about responsibility, education and balance:

- ensuring that our needs are in balance with the needs of our environment;
- ensuring that our activities show a responsible use of, especially, non-renewable resources;
- ensuring that the local community is educated to a level at which the community can recognise its impacts and the need for balance and responsibility.

Sustainability is about improving quality of life and the quality of the environment for current and future generations ONLY IF the improvements are carried out in a ‘sustainable’ way!

In many instances “sustainable” should be replaced by “desirable” - many of the indicators are about a desire, upstanding and “Christian” society and have no bearing on a sustainable society! Consequently, as a non-politician, I do not feel qualified to comment upon some of the indicators. As an environmentalist, some of the indicators are positive in a desirable society but may actually be moving away from an “environmentally sustainable” society.”

Desmond Whymys submitted a series of detailed comments regarding individual indicators and followed this with a concluding statement regarding an approach to sustainable development that he found useful:

“As a general conclusion, I would like to refer to some suggestions by the Canadian Community Health Consultant Ronald Labonte:

Labonte suggests a Sustainable Development Indicator could look something like this:

$$\frac{\text{Kg Coal (CO}_2\text{, SO}_2\text{, NOx)}}{\text{PQLI}} \times \frac{1}{\text{gini coefficient}} \times \frac{\text{births/immigrations}}{\text{deaths/emigrations}}$$

Kg Coal (CO₂, SO₂, NOx) = Kg coal equivalent: sum of per capita energy use CO₂, SO₂, NOx and particulate emissions.

PQLI = Physical Quality of Life Indicator, combining literacy, infant mortality, and life expectancy at age one.

gini coefficient = this is an indicator of after tax income equality. Countries with the best gini coefficient (i.e. the smallest gap between rich and poor) have the best overall health indicators independent of absolute income levels.

In summary, the whole aim of this initiative can be said to be to promote health in the long term. Health in its widest sense; social, psychological and emotional and not merely the absence of disease. The genuine determinants of health are the economics and environmental factors from which a culture develops. As such the three-way interrelationship between health = economy, health = environment and environment = economics must be constantly considered when choosing and assessing indicators and planning changes.

It is essential that sustainable development is not seen merely as a way of achieving some short sighted compromise between environmental degradation and continued economic growth, as suggested in the DoE consultation document UK Strategy for Sustainable Development, July 1993.

There are many issues contained in and linked with this initiative, for which accurate indicators may not (ever) exist. The issues are, however, too important not to be considered and planned for regardless of the lack of scientific evidence. Consequently the value decisions have to be explicitly made and used to guide actions.

Labonte suggests 12 principles for decision making relating to sustainable development and health:

1 Principle based decision making. Scientific data is incomplete and can only inform, not predict or dictate.

2 Inclusiveness of information. Data should encompass a broad pattern of complex relations: the three-way interrelationship between health economy (equity

assessment), health = environment (risk assessment) and environment = economics (full-cost accounting).

3 Shrinking global inequities.

4 Shrinking national inequities.

5 Empowering equally.

6 Producing fairly and healthily.

7 Sustaining communities. Increasing social interaction and networks, diversify community's economic base, increase proximity between production, consumption and disposal, support active democratic involvement and empowerment.

8 Replenishing and replacing.

9 Internalising all the costs. As far as possible this means employing full-cost accounting and internalising all externalities - a concept traditional accounting will find difficult to grasp. It should include assessments of pollution clean up, replacement and recycling of resources, health implications etc. Consideration should go across time as well as resource base. Social Audit may be a useful way forward.

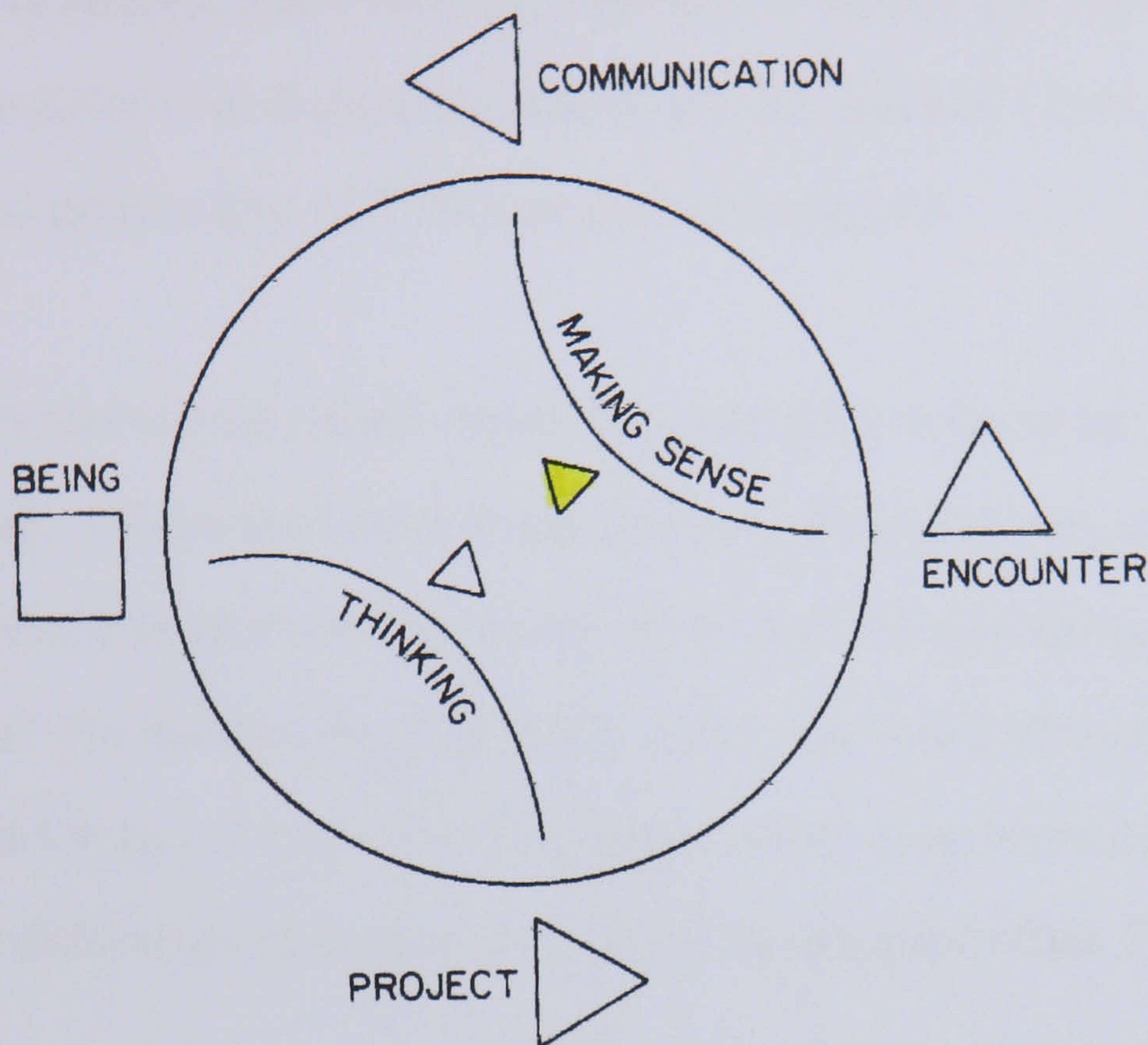
10 Sustaining diversities. Sustainable ecosystems need as wide a diversity as possible, culturally, ethnically, etc. Shifts towards uniformity and monoculture are regarded as moving away from sustainability.

11 Nurturing intangibles. This attempts to take account and make explicit the cultural, aesthetic, spiritual or other factors affected by developments.

12 Planning across generations.”

The combination of the comments from official and unofficial consultees meant that despite SIWG members leaving for the Christmas break with a sense that the Sustainability Indicators for Fife Report was almost complete I now felt under pressure to find ways to make radical improvements despite the short timescale remaining.

MAKING SENSE III



On the afternoon of 9th January there was a meeting involving the Depute Director, the LGMB Consultant, the Planning Officer (Environment Services) and I to look in more detail at the Sustainability Indicators for Fife report as this has received scant coverage in the SIWG (for the 2nd consecutive meeting, this meant that the full SIWG had not considered the Sustainability Indicators for Fife Report in detail since 28th November). Issues raised at this meeting included:

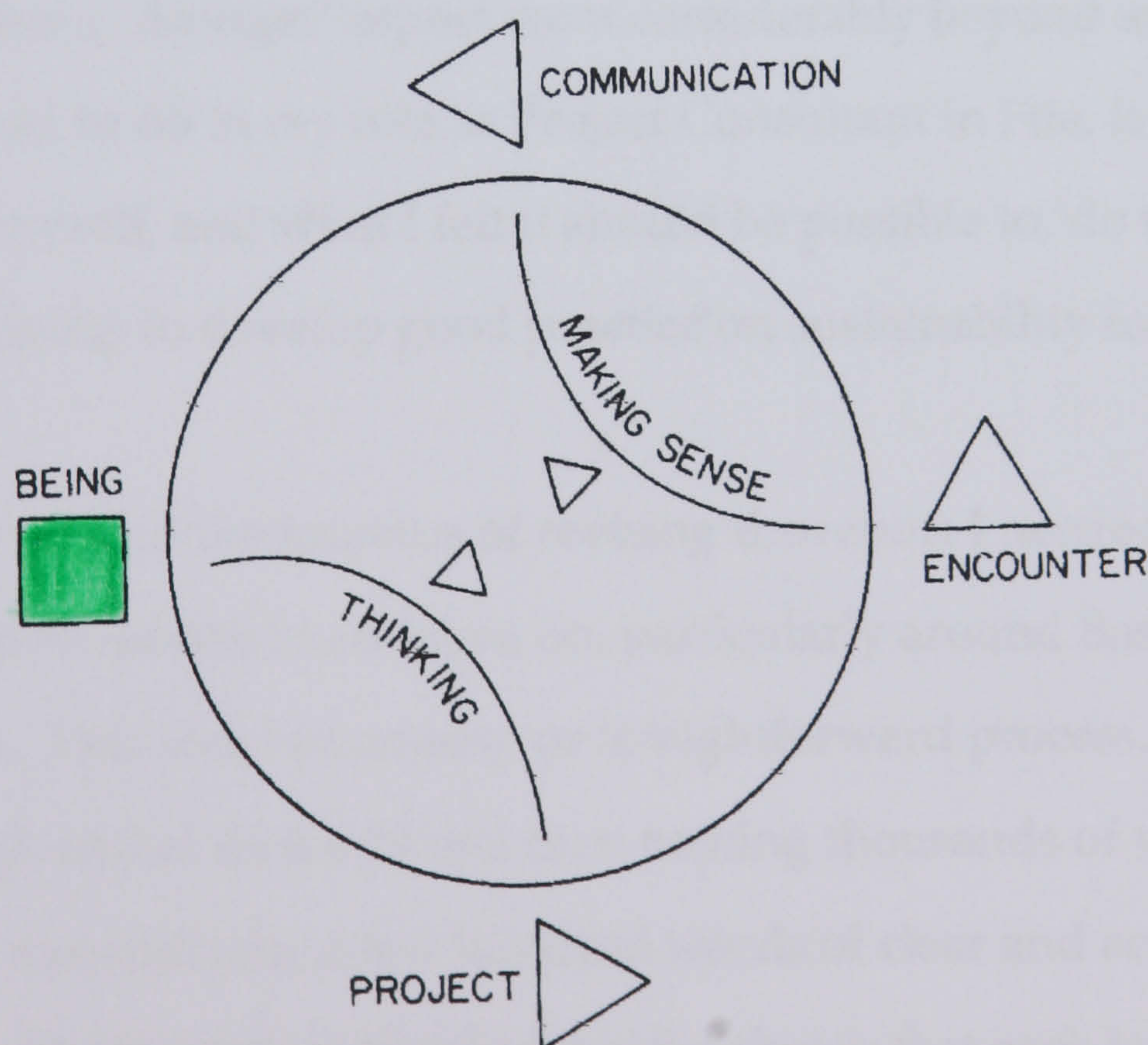
- why so many indicators had no clear trend;
- the need for the introduction to take a more integrated approach to sustainability;
- the need to include more background about what sustainability means; and,
- the need to identify actions that should be taken on sustainable development issues and mechanisms for such actions.

I was asked to concentrate on the basic needs indicators: homelessness, fuel poverty, average income and long-term unemployment. The Research and

Information Officer was to concentrate on access to basic services, cycle routes and access for people with disabilities, the Environment Co-ordinator was to look at health outcomes - age at death, teenage pregnancies and also to review the work on Road Traffic Accidents. The Planning Officer (Environment Services) was to look at nursery placements and destinations of school leavers. I was also to take on finding out the proportion of YTS leavers unemployed.

There were several issues raised regarding a need to reorganise the report to make it easier to read. Decisions taken at the meeting included returning to using only one graphic per indicator and the need for work to be undertaken to improve the presentation of the indicators. I offered to work on this (although I was expressly warned by the Depute Director not to spend much time working on the desktop publishing of indicators sheets as that could be done by other Fife staff).

BEING III



I had taken the criticisms of the Sustainability Indicators for Fife Report quite personally. Although I had not been formally assigned the task of preparing the report - my focus was supposed to be the study report and helping with the community pilot - in practice it was clear that it was to be on the quality of the Sustainability Indicators for Fife Report that the whole Fife pilot project was likely to be judged. I felt I would be judged harshly by my sustainable development community peers outwith Fife if the Sustainability Indicators for Fife report was perceived to be poor. I did not feel I could try and explain away any shortcomings by blaming the unrealistic timescale or management issues that were not in the public domain as this would just sound as though I was making excuses. I felt I had to find a way to turn the report around.

I was clearly very committed to achieving a strong sustainable development definition as a basis for addressing criticisms of the 2nd public consultation draft of the Sustainability Indicators for Fife Report. To achieve this required engaging the support of SIWG members and it was difficult to see how this could be achieved at this late stage. My commitment to finding a way of engaging the enthusiasm for a 'stronger' report went considerably beyond anything I had been formally asked to do in my role as Project Consultant in Fife. It was about what I expected of myself, and what I felt it should be possible to 'do with' the Fife pilot as an opportunity to develop good practice on sustainability indicators.

In order to maintain the impetus of revising the report I needed to produce indicators on the issues I had taken on, particularly around Basic Needs and Use of Resources. This was not an easy or straightforward process. It involved researching potential data sets and then turning thousands of words of background material into a few hundred words of clear and accurate text. Even with all the relevant data to hand I would estimate that each indicator sheet took around 10 working hours to write up in an appropriate form for the Sustainability Indicators for Fife Report. Partly because of the tight timescale and partly because

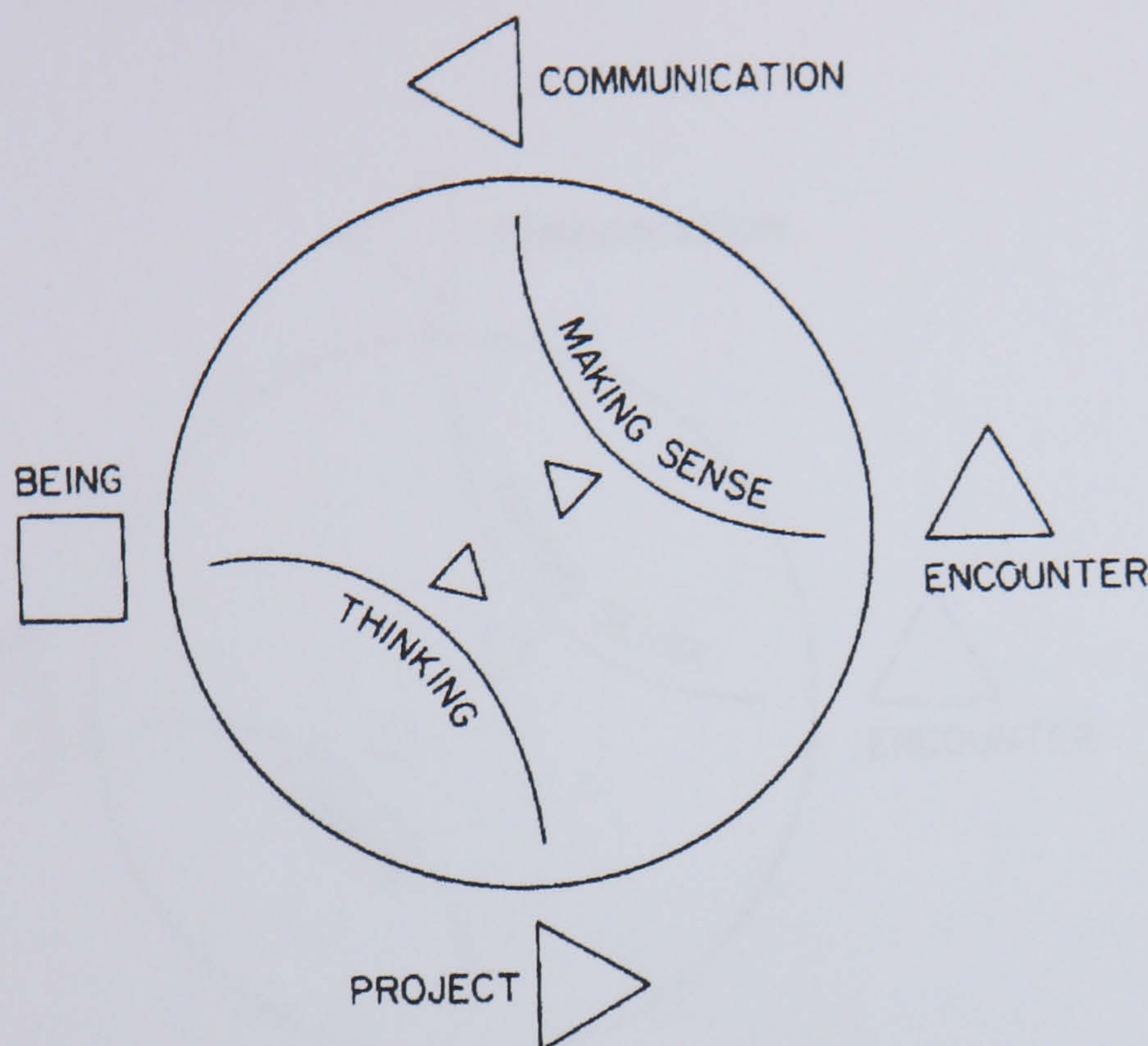
of the breadth of issues that it was felt to be important to have covered in the Fife report I was increasingly involving people from outside Fife Regional Council, on an informal basis, to get specialist advice on data sources and issues that needed to be addressed in writing up indicator sheets. This included a network of contacts, made during my involvement in the Scottish Green Party and SANGEC.

In parallel to work on developing new indicators I was working on the Study Report checking the 13 LGMB themes were covered and how the selection of that were proposed for inclusion in the Sustainability Indicators for Fife Report related to the LGMB Menus of indicators, and summarising the experience of the three community pilot areas.

I was also working with the Environment Coordinator to identify recommendations regarding working with existing interest groups regarding sustainable development issues and establishing new structures for participation - these were needed to tie into the 4th Environmental Action programme which was to become the LA21 action programme. The Environment Coordinator was unable to attend 23rd Jan SIWG meeting so this had to be negotiated beforehand.

As a result of the workload in dealing with the various reports I did not write up and circulate the notes of the SIWG meetings of 9th and 23rd January and 14th February. This means there is not an agreed record of the decisions taken and I have to rely on my handwritten notes in order to trace the decision-making in the final 5 weeks of my contract.

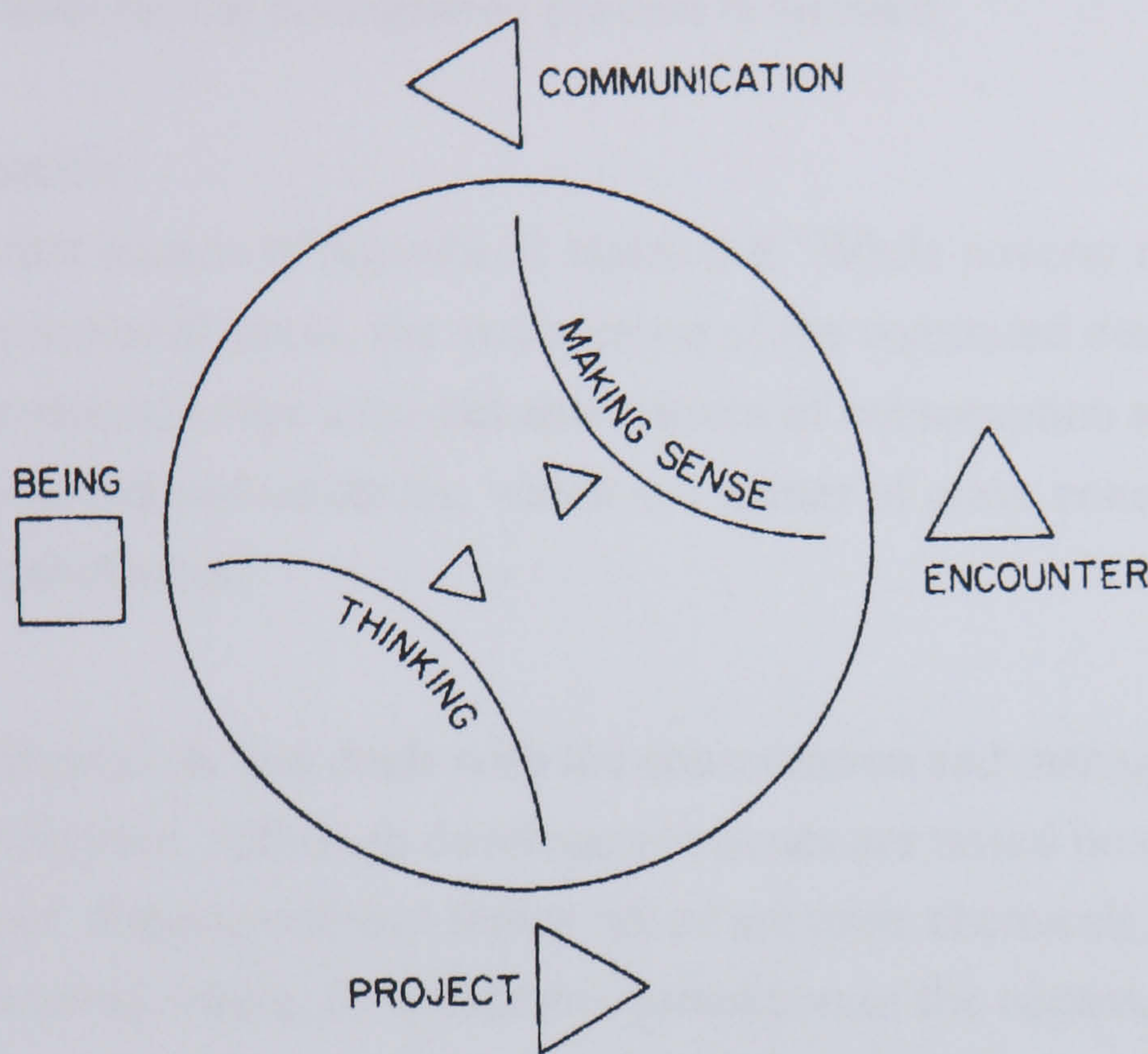
THINKING III



I saw the need to improve the presentation of the indicators as a possible opportunity to re-engage the interest of SIWG members by demonstrating what was possible. I had desk-top publishing experience and access to a suitable computer. I put a lot of effort into working up 4 new indicator sheets prior to the 23rd January meeting. I also made sure that the Sustainability Indicators for Fife Report was the first substantive item on the agenda. For each of the indicator sheets I wrote I sought clear presentation, a good choice of data sources, long timeseries data. As a key part of this process I also rewrote the introduction to the report, including a Environment/Future/Equity/Participation definition of sustainable development and the ecological footprint concept explained in plain english. I then sought to establish a clear relationship between the definition of sustainable development in the introduction and the evaluation of the trend towards or away from sustainability for each indicator.

5.5.4 Stage IV: Going for Global

ENCOUNTER IV



By the final week in January we had received further comments from consultees to the Second Public Consultation Draft Report. The Freuchie Community Council response in particular called for a more globally focused approach. I saw this as vindicating the attempt to base the report on a clearer and more holistic definition of sustainable development.

Freuchie Community Council	Comment on Second Draft	21/1/95
A General		
Freuchie Community Council has decided not to complete the questionnaire on the second draft report in any detail because our view is that Fife Region is exacerbating its move in the wrong direction. This is well illustrated in Paragraph 1.1 which has nothing at all to do with sustainability. Beverley Hills is, no doubt, a lovely place to live and work - but that does not make it sustainable. The footprint approach (a photocopy about which you were kind enough to send) has got to be, in general, the right way forward - with any quality of life issues contained within and completely predicated upon the limits set by the adoption of that approach. Quality of life indicators do not give any insight into the extent of environmental degradation or depletion.		

It is also important to note our objection to the time scale offered for the response to the questionnaire. While we do work by delegating the shredding of reports to one member or a sub- committee, we find it useful to bring the draft report back to the Council for further discussion if desired. This response is late because we would not otherwise have had this opportunity. For the future it is essential that an appropriate timetable for the consultation process is allowed.

B Specific

The first section of Agenda 21 states that "While poverty results in certain kinds of environmental stress, the major cause of the continued deterioration of the global environment is the unsustainable pattern of consumption and production, particularly in industrialised countries, which is a matter of grave concern, aggravating poverty and imbalances".

The second section deals with the conservation and management of resources for development. Although development issues are raised here it is in an environmental context. Among relevant topics raised are toxic chemicals, hazardous (including radioactive) waste, deforestation, protection of the oceans, air etc.

To illustrate the extent to which this second draft has things back to front we need look no further than the first indicator.

The draft states: 'In a sustainable society every resident should be able to meet their basic needs for food, water, shelter and fuel at a price which they can afford ' Clearly it is possible to achieve this by (a) depleting finite resources, (b) reducing the cost by degrading the environment, (c) exploiting slave labour abroad, (d) outsourcing supplies and degrading the producer environment. Even where these needs were met in a sustainable way at the moment, it is quite possible to anticipate that enhanced 'needs' or an increased population each member of whom had the same requirements would lead to an unsustainable situation.

The correct statement here would be: 'In a sustainable society, the demands of the population for food, water, shelter and fuel could be met from their own environment without degrading or depleting it and this would be true as far into the future as could be foreseen; the population would be only at such a level as that for which this would be true.

Fife Region should not be ashamed of stating the problems baldly and, wherever appropriate, acknowledging its own powerlessness in the face of e.g. central

government and/or EU constraints or even the limits of public understanding and/or acceptance including financial constraints - for this will be the lever for forcing these bodies to make the necessary resources/facilities available or recognising the nature of the strategy which needs to be adopted to create the right framework for progress.

Freuchie Community Council cannot help but feel that the real Agenda 21 is being hijacked by Fife Regional Council for its own political purposes rather than for the original purposes of the UN as illustrated by Agenda 21.

The Head of Policy Planning and Special Projects also responded to the second consultation draft raising several important issues and seeking to be more closely involved in the process of devising indicators.

“I have read with interest the second draft report of the UNA/LGMB sustainability indicators project.

The report is very detailed and requires some considerable thought and unfortunately within the timescale allowed it has not been possible to give the amount of thought and analysis it deserves.

The project is a very ambitious one and it is extremely difficult, for example, to define precisely the "Quality of Life". It seems to me that this has led to some indicators being included and others which are equally valid are not mentioned, e.g. cervical cancer screening being only one of three health indicators. Other forms of screening, access to medical facilities, hospital beds per head of population etc. could all be used to indicate quality of life.

My general feeling is that it would be better to concentrate initially on the factors relating directly to the environment, make sure that these are appropriate and accepted by all professionals, communities etc. and then develop the study into the more general areas which are more difficult to define.

Having made these comments in relation to this study the indicators on quality of life which have been used have direct relevance to the social needs strategy, and I would be grateful therefore if you could advise me of future meetings so that we can be involved in the development of the indicators.”

I met with the respondent, the Head of Policy Planning and Special Projects, to discuss the project. It turned out that she had been contacted in the initial stages of

the Sustainability Indicators pilot project period with a view to her participation in the SIWG. She declined to become involved as she expected the work to be focused heavily on environmental issues, and did not have high expectations of the quality of work on social issues. She subsequently attended the 14th February SIWG, at which she was very positive in her support of the Basic Needs indicators being proposed for the final report.

21/1/95

Reasonable but not very good at inspiring involvement...

Seems largely based on what the Region have responsibility for not on what is directly relevant to communities becoming more sustainable.

European Affairs Direct, Smith & Nephew 20/1/95

“May I first compliment you on the above project and the Study Report, which is one of the better overviews on sustainability I have read. It does appear to be trying to keep its feet on the ground and provide practical advice. I would certainly be interested in the Fife-wide Indicators report due in March.

I found it a little surprising that business actually was only involved directly with 11 menus out of the 101 listed. We believe in Smith & Nephew we should link much more with our local communities and various initiatives are already taking place. However we very much appreciate any advice and guidance on how we could improve our relationship with our local communities, particularly on environmental issues.”

Ladybank Community Council 23/1/95

“Some of our members have reservations about the original questionnaire and the responses have reinforced their unease. The inclusion of biological necessities for survival - food, water, health - and some frankly utopian statements e.g. “everyone has access to satisfying work with fair pay” mean that real concerns about the quality of life are inevitably pushed into lower priority.

However ambivalent people are about voluntary work Ladybank would be greatly impoverished without it. and the somewhat unenthusiastic response to “Everyone has to opportunity to spend more time with family and friends” suggests a neurotic rather than a healthy society.

However we do appreciate the considerable methodological problems that arise and we shall follow the project with interest.”

Several of the consultees clearly had considerable knowledge around concepts and definitions of sustainability, although their responses were not always seen to be helpful in shaping the process of the project:

Professor R H Gray, Director of The Centre for Social & Environmental Accounting & Research, University of Dundee 10/1/95

Quality of Life Indicators

Thank you very much indeed for the draft copy of the Quality of Life booklet. It presents a fascinating insight into life in Fife. I enclose the questionnaire but I have not been able to complete it because of, what I see as, a fundamental problem in the report.

There is a very distinct difference between "quality of life" and "sustainability" in Fife. The report and other related documents appear to use the terms interchangeably. I am sure this is wrong. It seems to me that there are four, obviously related, elements within the report which could usefully be clarified. These are:

1. the needs of the present;
2. the wants of the present;
3. the state of the environment;
4. the needs of the future.

The needs of the present are dealt with in an excellent way. However, issues such as earnings and infant mortality, whilst clearly related to the wants of the present, are probably moving us away from sustainability. For example, Fife having lower average earnings is pro sustainability because it means that Fife folk consume less economic resources. This is an obvious demand of sustainability. Similarly, although infant mortality may be an issue of the needs of the present, it does raise the question of increased population which reduces sustainability.

It seemed to me, therefore, that the report needs to be very clear about which of the four aspects it was addressing. The report might have four sections dealing with each element. In the end, the report only touches on very few sustainability issues.”

This letter caused some consternation because of the infant mortality example. While conceptually he is right the notion of trying to explain to Fife citizens that higher infant mortality in Fife could be publicly expressed as a good thing was seen as an academic example too far by SIWG members.

COMMUNICATION IV

At the beginning of the 23rd January SIWG I circulated a proposal for a new introduction for the report (Figure 5. 29 a, b, c & d) and several new example indicators, these included Food: Agriculture, Food: Fisheries, and Homelessness, Alternative Means of Transport: Cycling, Affordable Warmth and Energy, although most of the focus of the meeting became a detailed discussion of a single indicator Food: Agriculture. Unfortunately I cannot find a copy of the indicator sheets that were under discussion that day.

MAKING SENSE IV/THINKING IV

The discussion at the 23rd January SWIG began with a focus on providing feedback on the presentation of the indicators. But in seeking to improve both the presentation and focus further the meeting developed into a detailed discussion of the specific purpose of each individual component of an indicator sheet. The new EVALUATION section was seen to be helpful in developing the argument for using a particular indicator as well as giving a basis for deciding the trend. It was felt to be useful to explain in more detail how the indicator relates to the Environment/Future/Equity/Participation definition of sustainable development being proposed for the introduction of the report.

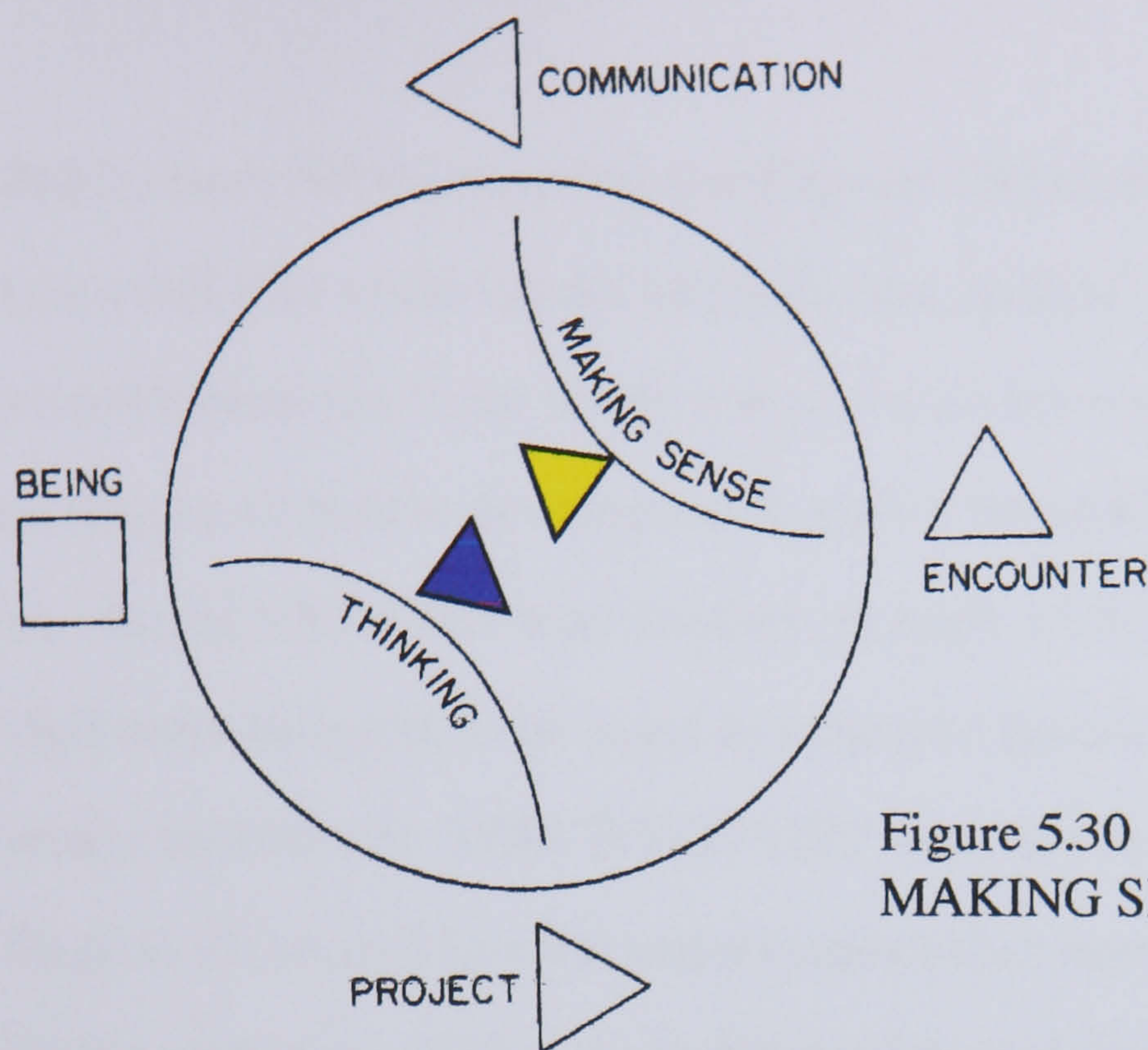


Figure 5.30
MAKING SENSE IV and THINKING IV

The ANALYSIS of the indicator needed to explain why the particular data set was being used for the issue. The description section was retitled BACKGROUND and was to be particularly about Fife and the issues of sustainability. The problems and constraints to tackling the issue were to be identified.

Because of the accelerated LGMB timescale each of the pilot local authorities was asked to provide two example indicators by the end of that week. The willingness of SIWG members to embrace the more global '4 principles' (Environment/Future/Equity/Participation) definition of sustainable development may well have been pushed on by the pressure to make decisions ahead of this deadline. The SIWG had been very cautious throughout the project process, apparently reluctant to appear to be 'too radical'. However now that indicators had to be selected to go into the public domain there appeared to be a sense from several members of the SIWG that if a more global perspective was not adopted it would be questionable whether the indicators report would really be addressing 'sustainable development' at all. The consultees comments (above) had been circulated to SIWG members in mid-January and the criticisms made by some

consultees appeared to have had an impact on some of the SIWG members' views of the existing focus of the report.

In the 23rd January SIWG meeting the Depute Director stated that we didn't need to produce a full Fife-wide report immediately so that we were not rushed into using indicators known to be weak. He was also keen to emphasise that implementing sustainable development policy needed to involve setting targets for action. An ACTION box was needed on each indicator which identified the actions that were thought to be need to improve the indicator, this was subsequently retitled the 'WAY FORWARD' box. Some of these actions would be for Fife Regional Council but for some issues other agencies had the primary responsibility and it would be inappropriate to seek to set targets for others.

Work towards sustainable development was to be seen as a learning process and part of this process was around learning how to work with a wide range of other organisations in the Fife area. Where it was found that Fife Regional Councils' scope for action was inhibited there was a need to explain why. The Depute Director stressed that the purpose of participation in the LGMB Sustainability Indicators pilot had been to promote more effective action towards sustainable development, not simply to improve the accuracy with which we were tracking decline. The Depute Director suggested that the introduction to the Sustainability Indicators for Fife Report should state that there would be a programme of public consultation after the report was published - and that comments and proposed revisions were welcome - in order to emphasise that the publication of Sustainability Indicators was a starting point rather than an end point in a wider programme of work.

After some discussion it was agreed that the two indicators that would go forward as Fife's contribution to the LGMB report were Homelessness and Food: Fisheries .

In finalising the revised presentation of individual indicator sheets it was agreed that GRAPH should go in a box, the EVALUATION should go in a box and the WAY FORWARD should be a box.

The Sustainability Indicators for Fife report with all revisions and indicators currently missing was to be ready for 10th Feb for circulation prior to the SIWG meeting. Indicators on all 16 themes identified in the quality of life questionnaire were to be covered if possible. Linkages needed to be developed which showed the web of interconnections between different indicators/issues.

At the 23rd January SIWG meeting there was also a discussion around consumption issues. This had been highlighted as an issue in several consultees' comments and it was agreed that the revised introduction to the Sustainability Indicators for Fife report presented to the SIWG would be used as a way of beginning to address this. The revised introduction, which I had prepared along with the 4 new indicators, used the term 'global footprint' (this was seen as slightly less jargonistic than the term ecological footprint). The importance of consumption issues in relation to sustainable development was also felt to be an issue for inclusion in the committee report containing conclusions and recommendations from the pilot.

It was proposed that in the introduction to the Sustainability Indicators for Fife report it should be pointed out that the approach taken in the pilot period had been heavily influenced by the LGMB project indicators project, especially with regard to timescale. With the conclusion of Fife's pilot authority obligations Fife would now be going their own way with future indicators work.

BEING IV

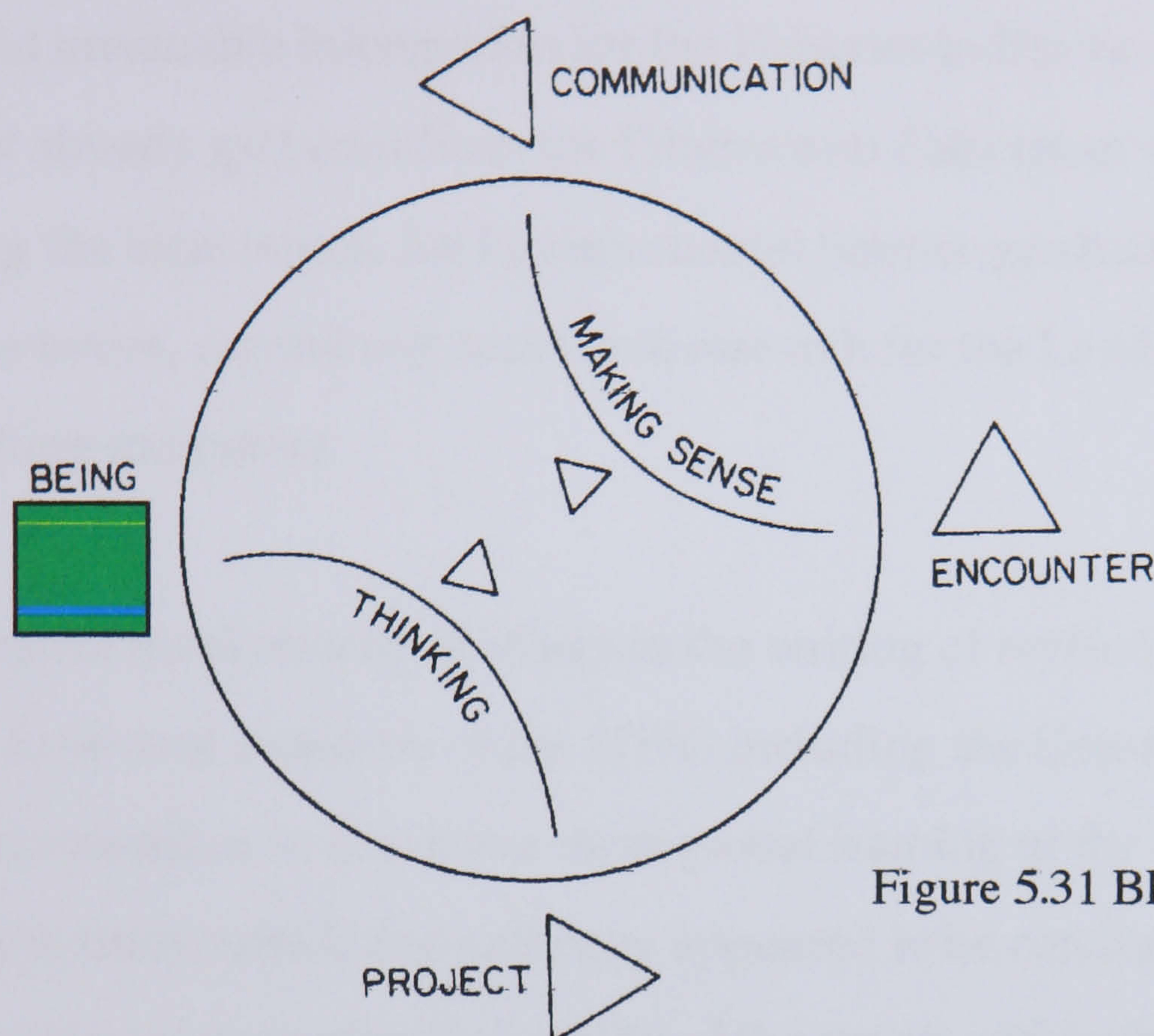


Figure 5.31 BEING IV

I was delighted at having succeeded in re-engaging the enthusiasm of SIWG members in the pilot project, and in securing agreement for a stronger framing of the Sustainability Indicators for Fife Report. I was, however, horrified at how little time was left to complete it before the end of my Project Consultant contract on 17th Feb. At the time I was in the middle of a major community campaigning and 'Planning for Real' exercise in my home community. I was also teaching a new Housing Diploma course at Glasgow University. These inflexible commitments were in addition to my involvement in raising my young son. So although I was delighted with the turn of events at the 23rd January SIWG was also unsure how to capitalise on opportunity whilst also completing the Study Report for the same deadline.

One of the tactics I used to address the time pressure/expertise problem was informally to enlist help from friends and ex-colleagues. The Policy Officer at City

Housing Glasgowe was enlisted to write the Homelessness indicator and also made a major contribution to the indicators on Affordable Warmth, People Living in Poverty, and Unemployment. The Fisheries speaker for the Scottish Green Party, provided invaluable information for the Fisheries indicator, amplifying the material already gathered from the Pittenweem Fisherman's Mutual Association covering the local issues. An Environmental Science graduate with an interest in land use issues, carried out additional research for the Land Quality and Food: Agriculture indicators.

My informal involvement of others in the writing of revised indicator sheets was known to several members of the SIWG including the Depute Director. Once the decision was taken to move to a more global framing of the report my use of specialists from outside the authority appeared to be condoned as it was contributing to improving the quality of the report within the short remaining period of my Project Consultant contract. This was tacitly acknowledged by the Depute Director in the information he provided for the LGMB Sustainability Indicators Project:

“Fife found their consultant valuable in extending their range of contacts”

LGMB, 1995a: 25

Case Story 5 A tussle for 'ownership' of the report

After a frantic three weeks between the 23rd January SIWG meeting and 14th February SIWG meeting I finalised the indicators on Homelessness and Food: Fisheries had them approved by the Depute Director and sent down to the LGMB. I also prepared a new introduction for the Sustainability Indicators for Fife Report and new, or substantially revised, indicators on Affordable Warmth, People Living in Poverty, Unemployment, Provision for Cycling, Pre-school education, Community Economic Development, Food:

Agriculture, Sewage, Energy and Household Waste. This was in addition to seeking to complete the Study Report.

During the process of drafting and redrafting indicators I found that I kept coming up against the problem of 'acceptable language'. It appeared to be common practice that everything was written in a form of words that was designed to avoid Fife Regional Council being able to be held accountable for anything. This presented particularly difficulties when drafting The Way Forward boxes. On the one hand the direction from the Depute Director was that these were to be about ACTION on the other hand I was not to commit Fife in writing to actually doing anything. I found this very frustrating.

For most of this period I was working from home so I had access to a computer on which to work on the indicator sheets. As I completed drafts I faxed and/or posted copies through to the Research and Information Officer so that they could be circulated ahead of the 14th SIWG meeting. When I arrived at Fife House just prior to the meeting I was disturbed to find that none of these indicators had been circulated and other SIWG members presumed that I had not completed the work. There was no time to speak to the Research and Information Officer before the meeting and I felt uncomfortable confronting him in the meeting. I was very angry but did not want to risk losing my temper with him in public. When the Research and Information Officer was asked in the meeting why he had not circulated the indicators I had prepared he said that none of them were finished. When I disputed this he said that they all needed redrafting and proceeded to show changes he had made to the Homelessness indicator sheet. As this was one of the indicators that had already been approved by the Depute Director and posted to London two weeks previously it was clear that there was a major rift regarding the Research and Information Officer's perception of what was appropriate to go in an indicator sheet and my own. As the indicators had

not been pre-circulated the SIWG meeting could not carry out a detailed review of individual indicators. The meeting focused on the LGMB pilot process, the draft recommendations of the Study Report and how the current work was to relate to subsequent activity on Local Agenda 21.

After the meeting the Research and Information Officer was asked to meet with the Depute Director in his office. They were there for over an hour.

After that meeting the Research and Information Officer was instructed to prepare a list of what was left to do to achieve completion of the Sustainability Indicators for Fife Report.

With hindsight friction had been building up for some time before this meeting. The Research and Information Officer had had responsibility for the Sustainability Indicators for Fife report from August, when the initial indicator choices were made, until late December when the second public consultation draft report was issued. It was a major part of his workload and he had put a lot of time into drafting and revising indicator sheets. By seeking to make wholesale improvements to the framing of the report and devise new indicators in January I had cut across his sense of ownership of the report and he was unhappy about this. I was certainly receiving support in doing this from inside the SIWG team, especially from the Environment Co-ordinator, and to a lesser extent from the Education Officer and the officer from Engineering (Roads) who had not been involved in the informal meetings but made it clear that they supported a more global and holistic framing. This stronger sustainability framing was also clearly supported by several of the official consultees. For example a detailed set of comments was received from Friends of the Earth (Dunfermline) in the final days of my contract as Project Consultant.

Fife Friends of the Earth 13/2/95 Comments on second draft

A) GENERAL COMMENTS

1. Definition of Sustainability

We believe that the definition of sustainability, in paragraph 1.1, is inadequate in reflecting the purpose of the Project.

A sustainable local area would be one which tends towards self sufficiency and has the capacity to be sustained and maintained indefinitely without putting at risk the well being of future generations; or the environment. This goes further than measuring the quality of life against conventional economic indicators,

2. Nature of the Indicators

Paragraph 1.5 states that the report sets out to examine indicators measuring the quality of life and the quality of the environment. Only one of these indicators reflect sustainability others are concerned with desirable social goals.

The report should discuss what measures can be used to determine whether these goal are being, or can be, addressed in a way that is compatible with sustainable development;

Other indictors are concerned with empowerment. The report should explain how this will lead to a more sustainable society; for example, because people will be less apathetic and care more for their environment.

3. Development Model

In some instances, particularly regarding local economic development initiatives, we believe that the development model is too conservative.

We appreciate that there are problems regarding identification and collection of data. However, ideas for future indicators should be stated as other local communities within the UK, or FRC at a later date, may be able to take these forward ,

4. Local Indicators

We would like the indicators, where appropriate, to be developed for communities within Fife as well as Fife-wide; as priorities may be different in each community.

5. Think Locally

Given that the Project arises through the UN; there should be an investigation of some indicators which show the local community supporting the global environment. For example, consumption of hardwoods (if only in the public sector) and the availability of fairly traded goods with the third world. (We note that this is touched on briefly in the section on food).

The change in focus that arose from the deliberations at the 23rd January meeting called for a lot of new work to be undertaken to a tight deadline and implicitly criticised the quality of work that had previously been undertaken. The Research and Information Officer was not pleased. As the problems came to a head right at the end of my contract as Project Consultant there was little time to address or seek to resolve them. This was unhelpful as it was the Research and Information Officer who was given the responsibility of completing the report for publication - a process that was to take until June.

5.5.5 Mapping the Processes of the Whole

Mapping the dialectic stages in colour is useful in providing a visual overview of the location and timing of activities. The approach recommended by the LGMB for the pilot authorities can be equated with the standard alienated research cycle characterised by Rowan (1981) (see Chapter 2.3.2). As a pilot authority Fife were given a problem in which the THINKING, the choice of definition framing the work and the menus of indicators to be tested, had been carried out by others. The Fife (through the SIWG) were to undertake the process of MAKING SENSE of which of the LGMB menu indicators were most appropriate to test locally and what data sources to use. They were then to organise the collection and presentation of this data in preparation for the COMMUNICATION of the local

indicators which would be the basis for an ENCOUNTER with the views of consultees. The feedback from this process was to be a stage of COMMUNICATION to the LGMB team who would undertake the process of MAKING SENSE of the experience of all the pilot authorities as the basis of COMMUNICATION of the project findings to a wider audience. This 'alienated' research encounter is sketched out in Figure 5.32.

If participation in this limited cycle of 'research' had been all that was required of the pilot authorities the 6 month timescale for the pilot stage could be argued to have been tight but realistic: 3 months to choose indicators collect the necessary data and present it (or highlight that data could not be collected for an issue) , 2 months to gain feedback, 1 month to collate the feedback. Fife broadly achieved this selecting indicators in mid August, presenting the First Public Consultation draft report in late November and receiving feedback in January. However, it was a clear prerequisite of the competitive process of selection as a pilot that participating local authorities had wider ambitions for the use of the sustainability indicators work. This created obvious conflicts in terms of the relationship the authority was seeking to develop with consultees with regard to a wider Local Agenda 21 process and potential to develop sustainability indicators as a local 'performance review' mechanism. The impact of a single alienated encounter with a relatively weak and under developed set of local sustainability indicators could have seriously undermined longer term sustainable development work. Had Fife stopped developing the indicators after the First Public Consultation draft the report would have offered 60% of the indicators based on 10 years or less of timeseries data, over 60% of the indicators being evaluated as towards sustainability, and many of the indicators being described, both by members of the SIWG and external consultees, as weak.

The approach recommended by the LGMB of selecting indicators from the menus and 'testing' them did not give much opportunity for reflection on the sustainable

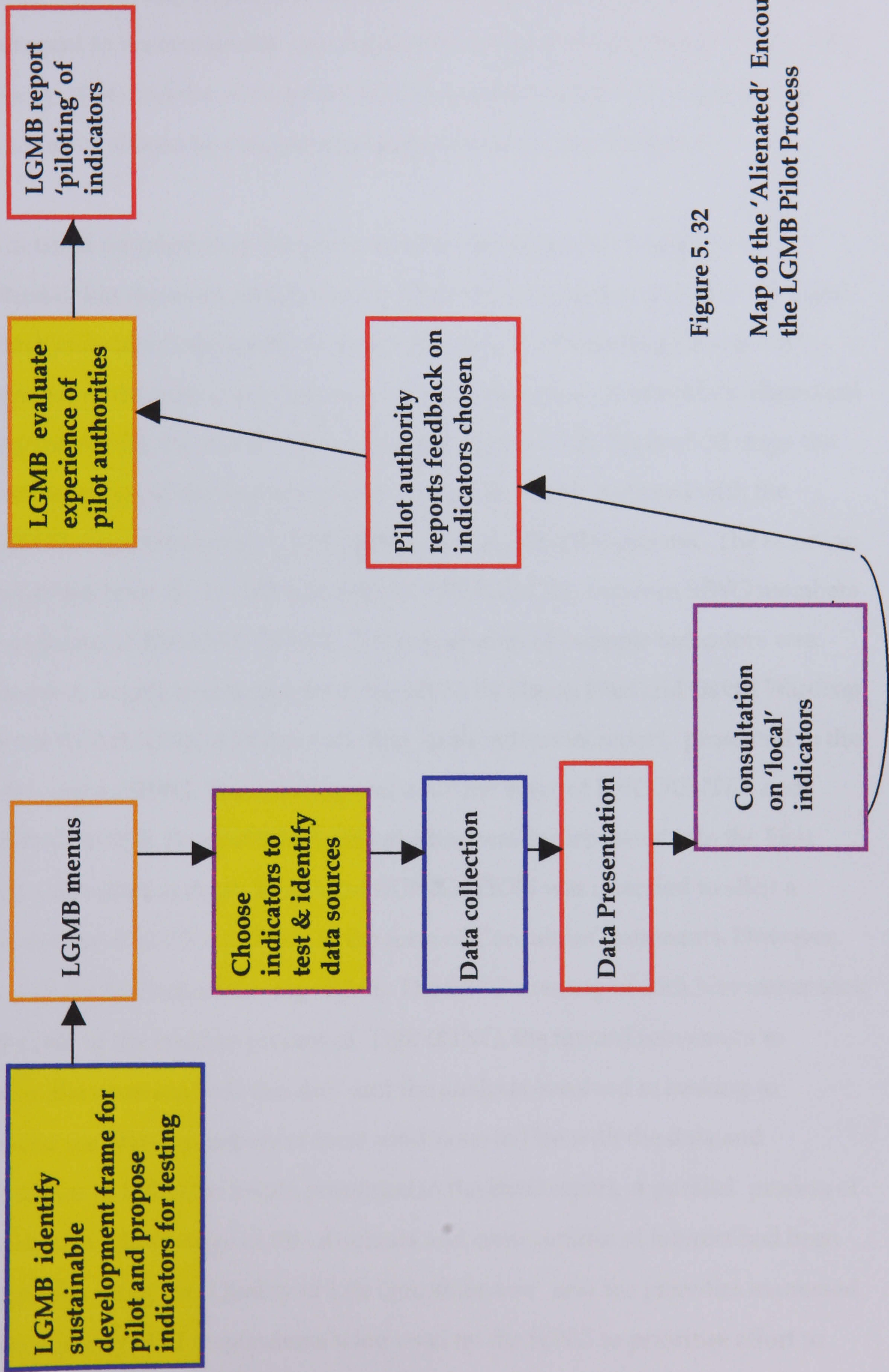
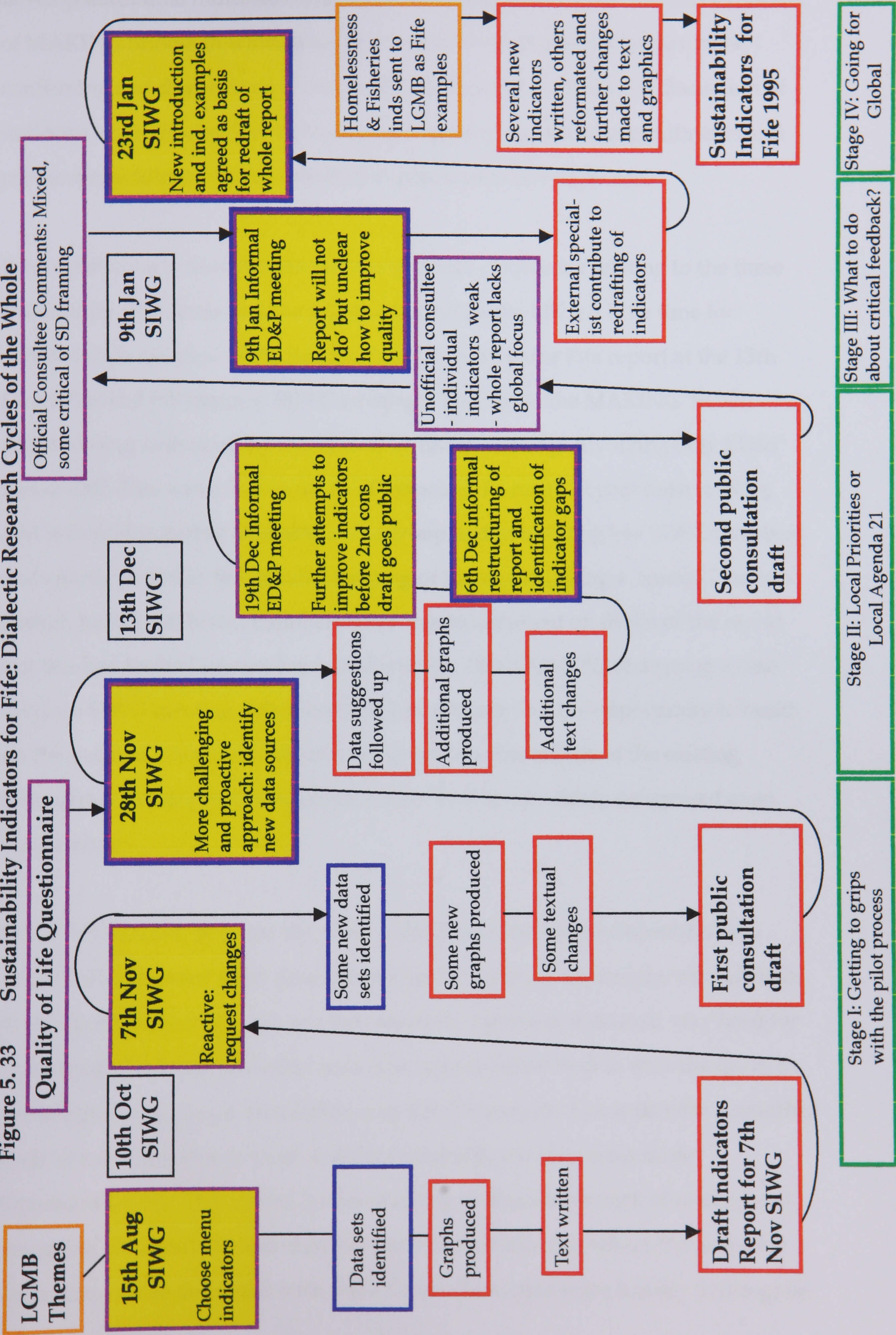


Figure 5. 32
Map of the 'Alienated' Encounter of
the LGMB Pilot Process

development framing of the work. Such a discussion within pilots does not appear to have been considered necessary by the LGMB which is perhaps surprising given the lengthy debates that took place in the LGMB Steering group with regard to the sustainable development framing of the pilot stage (Shaw, 1994, McHarry, 1994) and the widespread lack of agreement about how sustainable development should be defined or achieved discussed in Chapter 1.

The detailed description of the process of the Fife project in Chapter 5 has illustrated that the work undertaken by Fife went a lot further than the 'alienated research encounter' apparently envisaged by the LGMB Steering Group. Fife's experience of the pilot phase has much more in common with Rowan's 'dialectical engagement with the world' (also set out in Chapter 2.3.2). Figure 5.33 maps the dialectical stages of the development of the whole report. It started with the PROJECT stage, the choice to participate in the LGMB pilot process. The selection of indicators from the LGMB was both an ENCOUNTER between SIWG members and a process of MAKING SENSE. The preparation of example indicators was carried out, largely in isolation from the SIWG by Simon Hart and David Wardrop until the COMMUNICATION of the first draft indicators report, presented to the 7th November SIWG. This meeting was a further stage of ENCOUNTER and MAKING SENSE. Feedback from this meeting was incorporated into the First Public Consultation draft. This COMMUNICATION was intended to elicit a further stage of ENCOUNTER - in the form of Consultees' comments. However, only 6 of the 35 Consultees responded. The SIWG meeting of 28th November took on the role of the creative process of THINKING, the inward movement to address the question 'will this do?' and the analysis involved in seeking to reconcile the SIWG members of local conditions in Fife with the data and evaluations of indicator trends presented in the draft report. A parallel process of consulting a wider range of Fife residents and communities of interest had been undertaken using the 'Quality of Life Questionnaire' and the priorities expressed by the majority of respondents were used by the SIWG to prioritise effort to

Figure 5. 33 Sustainability Indicators for Fife: Dialectic Research Cycles of the Whole



develop additional indicators. The 28th November SIWG was a collective process of MAKING SENSE in which a range of views were expressed, participants confirming and disconfirming one another's ideas and, amidst the discussion of indicator examples, beginning to share glimpses of our social commitments and pre-understandings of issues relating to sustainable development.

It was particularly unfortunate that the pressure of material relating to the three community pilot areas and the LGMB pilot across the UK left little time for detailed consideration of the Sustainability Indicators for Fife report at the 13th December and 9th January SIWG meetings. This led to the MAKING SENSE process being addressed by the smaller informal meetings involving only ED&P based staff. This was a loss in terms of reducing the range of pre-understanding and technical expertise available in the group and in isolating key SIWG members from participation in the detailed shaping of the report during a crucial 2 month period. Individual SIWG members were able to comment on drafts of the report but this had limited impact compared with the ENCOUNTER of arguing a case within a SIWG meeting. Had the SIWG collectively had the opportunity to build on the detailed discussions of 28th November the limitations of the existing definitional framing of the report may have been more widely recognised at an earlier stage.

The ENCOUNTER between the written drafts and the formal Consultees was restricted by the very short timescale for turning around the lengthy consultation draft reports limited the value of the consultation process. It made it very hard for Community Councils and other consultee organisations to deal with the drafts in anything approaching a democratic way. For Community Councils with a monthly cycle of meetings, two to three months is probably the shortest realistic turnaround time. This allows for one meeting to allocate the task of reading and preparing comments on a document, and a further meeting where the proposed comments can be discussed with other Councillors, plus some leeway to recognise

that the date when the report arrives and the timing of the next meeting will not necessarily co-incide, and that not all community councils meet every month. With only a month between the First and Second Consultation drafts, and the Second draft being issued at the point when the pilot period was supposed to be within days of completion it is difficult to see how this process could genuinely be designed to engage participation.

In early January there was recognition that the report did not really meet the original objectives set out for the project. The presentation of a new draft introduction and new, and newly formatted, indicator examples acted as a catalyst for a detailed discussion at the 23rd January SIWG meeting of what the PROJECT was actually about for Fife and what the report was seeking to COMMUNICATE. This collective process of THINKING about the appropriateness of different theoretical approaches, relating to different definitions of sustainable development, and MAKING SENSE of the technical issues inherent in individual indicators enabled the adoption of the more global and holistic approach both to the framing of the whole report and the framing of individual indicators.

To see the impact of the changes in the whole on the shaping of individual indicators a selection of further examples will be presented in Section 5.6. The additional example indicators presented build on the dialectical analysis of the process which shaped the whole Sustainability Indicators for Fife report and illustrates the significant impact of informal processes and unofficial consultees in shaping an individual indicator.

5.6 Further Indicator Examples

It would be a huge task to trace the development of every one of the 63 different indicators that were explored in detail during the the project process and then to map each one as a dialectic research cycle diagram. As well as being very time

consuming this would be a very repetitive process that would risk submerging the key lessons in the sheer volume of detail being presented. The indicator examples presented here have been selected to illustrate the extremes of the project process. The 'longest' LGMB menu indicator in terms of process was what developed into the 'Homelessness' indicator (section 5.6.1). This was selected by Fife as one of the two example indicators from the Fife Pilot process to be included in the LGMB report of the pilot phase.

The 'shortest' LGMB menu indicator was Tree Preservation Orders (TPOs) rejected after the first Public Consultation draft (5.6.2 below). The process of retaining and refining indicators or rejecting them as inappropriate was not usually as straightforward as the TPO example. Section 5.6.3 illustrates in graphic detail the amount of work that was put into seeking to identify indicators for 'Community' issues, in particular the LGMB themes *11 All sections of the community are empowered to participate in decision making*. Data was collected and presented on a range of indicators and there was considerable feedback from consultees on individual indicator proposals. Attempts were also made to introduce a new indicator related to this topic (Community Economic Development) late in the pilot. However, none of the indicators presented was felt to be of sufficient value to be included in the main body of the report. Comments on the indicators were relegated to a 'holding sheets' on Decision Making and Community Economic Development in an Annex at the back of the Sustainability Indicators for Fife 1995 report.

5.6.1 Developing an Indicator: The Homelessness Example

The LGMB themes include theme 5. "Everyone has access to good food, water, shelter and fuel at reasonable cost". At the 15th August meeting SIWG members chose two indicators from the LGMB menus under this theme:

- 5.1 Number of homeless households in temporary accommodation

5.3 Percentage of local authority dwellings empty

7th November Draft

At the 7th November SIWG meeting an indicator sheet was presented for menu choice 5.3 'Vacant Public Sector Dwellings' (see Figure 5.34). The graphic was a bar chart showing the number of vacant public sector properties in the three District Council Areas within Fife in March 1993. The text included a figure that "2,440 households were assessed as homeless or potentially homeless in 1993" (FRC, 1994k). No time trend data was offered and it was stated that: "no conclusive information is available on trends towards or away from sustainability." SIWG members questioned the appropriateness of focusing only on public sector dwellings and it was suggested that further data should be sought for this issue.

First public consultation draft - mid November

A different graph was used in the version of the report put out for consultation in mid-November (see Figure 5.35). The graphic this time was a bar chart showing vacant public sector dwellings in each of the three District Council areas for each of the years 1990, 1991, 1992 and 1993. A 'Comments' box was added to the text which stated that :

"The indicators proposed in the LGMB menus were not felt to adequately cover the basic needs issue in Fife. As this was the issue ranked highest in the questionnaire it is appropriate to develop one or more local indicators". (FRC, 1994l)

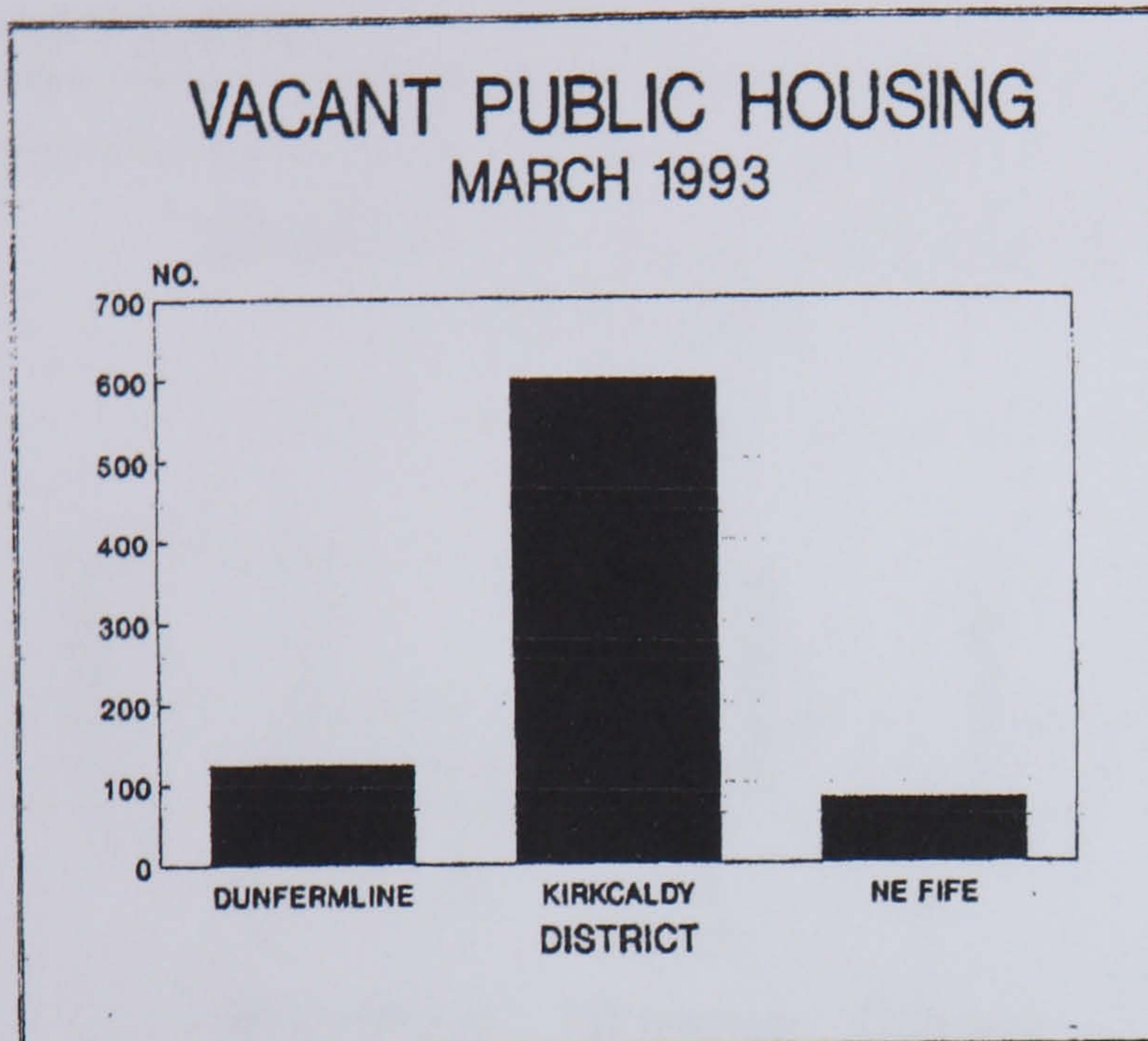
An evaluation of trend was now made for the indicator:

"From the limited data available, on the basis of the fall in vacant stock, the trend would appear to be towards sustainability, but the high level of potential homelessness would need to be examined." (FRC, 1994l)

28th November SIWG meeting

At the 28th November meeting, the first opportunity to formally comment on the version that went out as the first consultation draft, SIWG members continued to

Figure 5.34 Vacant Public Sector Housing Indicator presented to the 7th Nov. SIWG (FRC, 1994k)



VACANT PUBLIC SECTOR DWELLINGS

Public Sector Dwellings
Vacant As Percentage
of Total Stock

DESCRIPTION

A sustainable society must provide adequate and efficient housing for its population. Although a small proportion of dwellings are likely to be vacant for "frictional" reasons (ie. people moving home, houses recently constructed etc.) a high level of vacancy, particularly in local authority dwellings, may reflect other underlying social and economic problems.

BACKGROUND

Homelessness is a serious problem facing society in general and local authorities in particular. By definition, public sector housing is of benefit to those unable to purchase their own homes. A high level of vacant stock therefore can be seen as an inefficient mismatch of resources and need. The available dwellings may be of the wrong size or type, or in the wrong location, to meet the identified need.

ANALYSIS

In March 1993, there were some 804 vacant public sector houses in Fife representing 1.9% of the total public sector stock. By comparison there were 2,440 households assessed as homeless or potentially homeless. The problem may be even more acute, as the stock which is sold to existing tenants will tend to be of higher quality. At the most simplistic level even if all the vacant stock were to be occupied, however, this would still leave 1,636 households as homeless or potentially homeless in Fife. At this stage no conclusive information is available on trends towards or away from sustainability.

LINKAGES

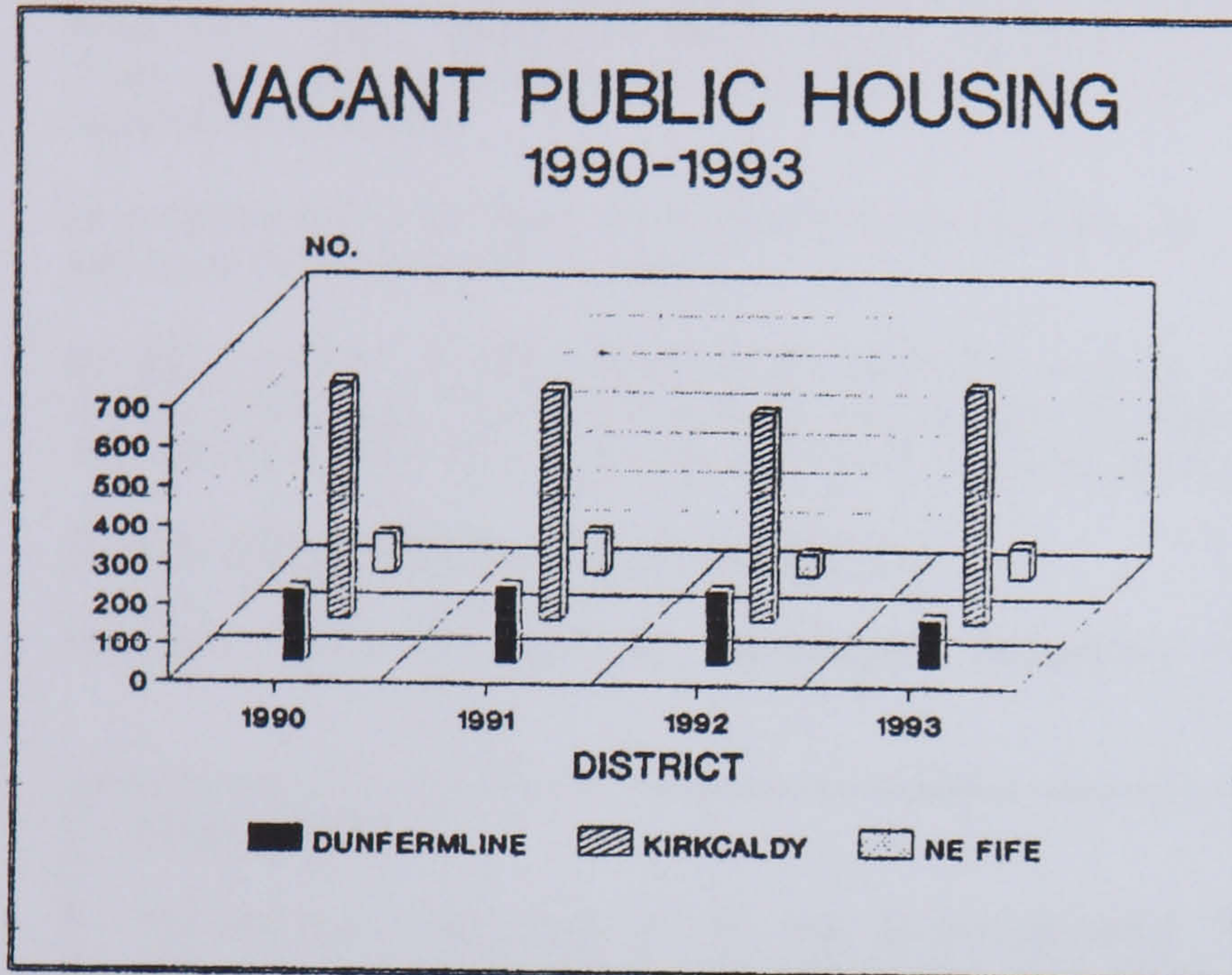
A high level of vacant public sector housing stock can be costly in social and economic terms. Homeless families may have to be housed in unsatisfactory and expensive temporary accommodation. High levels of vacant stock can result in lost revenue to local authorities, and may be connected with poverty and with poor health for homeless or poorly-housed households.

DATA AND INFORMATION SOURCES

Scottish Office Environment Department Statistical Bulletins (Housing Series)

Figure 5.35a Vacant Public Sector Housing Indicator included in the First Public Consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994) page 1

BASIC NEEDS



VACANT PUBLIC SECTOR DWELLINGS

Public Sector Dwellings
Vacant As Percentage
of Total Stock

DESCRIPTION

A sustainable society must provide adequate and efficient housing for its population. Although a small proportion of dwellings are likely to be vacant for "frictional" reasons (ie. people moving home, houses recently constructed etc.) a high level of vacancy, particularly in local authority dwellings, may reflect underlying social and economic problems.

Homelessness is a serious problem facing society in general and local authorities in particular. By definition, public sector housing is of benefit to those unable to purchase their own homes. A high level of vacant stock therefore can be seen not only as inefficient, but is also indicative of a poor match between available resources and measurable need. The available dwellings may be of the wrong size or type, or in the wrong location, to meet the identified need.

ANALYSIS

In March 1993, there were 804 vacant public sector houses in Fife representing 1.9% of the total public sector stock this compares with 891 vacant houses in 1990, and represents a fall of 10% in that period. For comparison there were 2,440 households assessed as homeless or potentially homeless in 1993. The problem may be even more acute, as the houses from the original stock which have been sold to existing tenants will tend to be of higher quality. At a simplistic level if all the vacant stock were to be occupied this would still leave 1,636 households in Fife as homeless or potentially homeless.

The highest number of vacant dwelling were in Kirkcaldy District, 10% of total public sector stock) but the pattern was similar for all three Districts.

EVALUATION

From the limited data available, on the basis of the fall in vacant stock, the trend would appear to be towards sustainability, but the high level of potential homelessness would need to be examined.

Figure 5.35b Vacant Public Sector Housing Indicator included in the First Public Consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994l) page 2

LINKAGES

A high level of vacant public sector housing stock can be costly in social and economic terms. Homeless families may have to be housed in unsatisfactory and expensive temporary accommodation. Young families may be forced to live with older relatives. High levels of vacant stock can result in lost revenue to local authorities. They may also be connected with poverty and with poor health for homeless or poorly-housed households.

A relationship has been established between general deprivation and high levels of vacancy in Fife (1991 Census).

In this context of this report this indicator may be related to the health indicators (Infant Mortality, Cervical Cancer Screening), Crime, Open Land Lost to Development, Access to Public Transport and Voting in Local Elections.

DATA AND INFORMATION SOURCES

Scottish Office Environment Department Statistical Bulletins (Housing Series)

COMMENTS

Before any long term trends can be established, it will be necessary to obtain longer time series data. To determine any causal relationships it would be necessary to evaluate local conditions and circumstances.

It is doubtful whether a sample measure, such as vacant local authority houses as a percentage of stock, is a meaningful indicator of sustainability unless it is linked with a genuine measure of demand and need (homelessness and "concealed" households). The latter cannot be derived from published information with any certainty. Surveys would be difficult to control and very costly.

be unhappy with the indicator as it stood. They were not convinced that a statement that "the trend would appear to be towards sustainability" accurately reflected what was actually happening in Fife. There was agreement that Vacant Public Sector Dwellings were not, on their own, a useful indicator of access to housing.

SIWG members discussed whether it was possible to identify the fall in the total stock of public sector houses as a result of 'Right-to-Buy' legislation. This would require time series data on public sector dwellings going back to at least 1980. The

SIWG also wanted an indicator of the availability of housing for rent as Fife was affected by the reduction in the amount of Coal Board housing, which was low rent, but was withdrawn when deep mines in Fife closed.

These specific data requests were part of a wider debate about the quality of information that was available for this indicator as there are no absolute measures of homelessness. It was suggested, however, that as the Scottish Office produce statistics on Homelessness, using their own definitions, looking at their data sets for Fife may be helpful.

It was also agreed that census data would be sought from the 1980 and 1990 on housing available for rent in both the public sector and the private sector. Public sector vacancies would be shown as a percentage of public sector availability. It was proposed that staff also “investigate obtaining data on the percentage of income spent on housing and the changing size and tenure of rural homes” (FRC 1994 j).

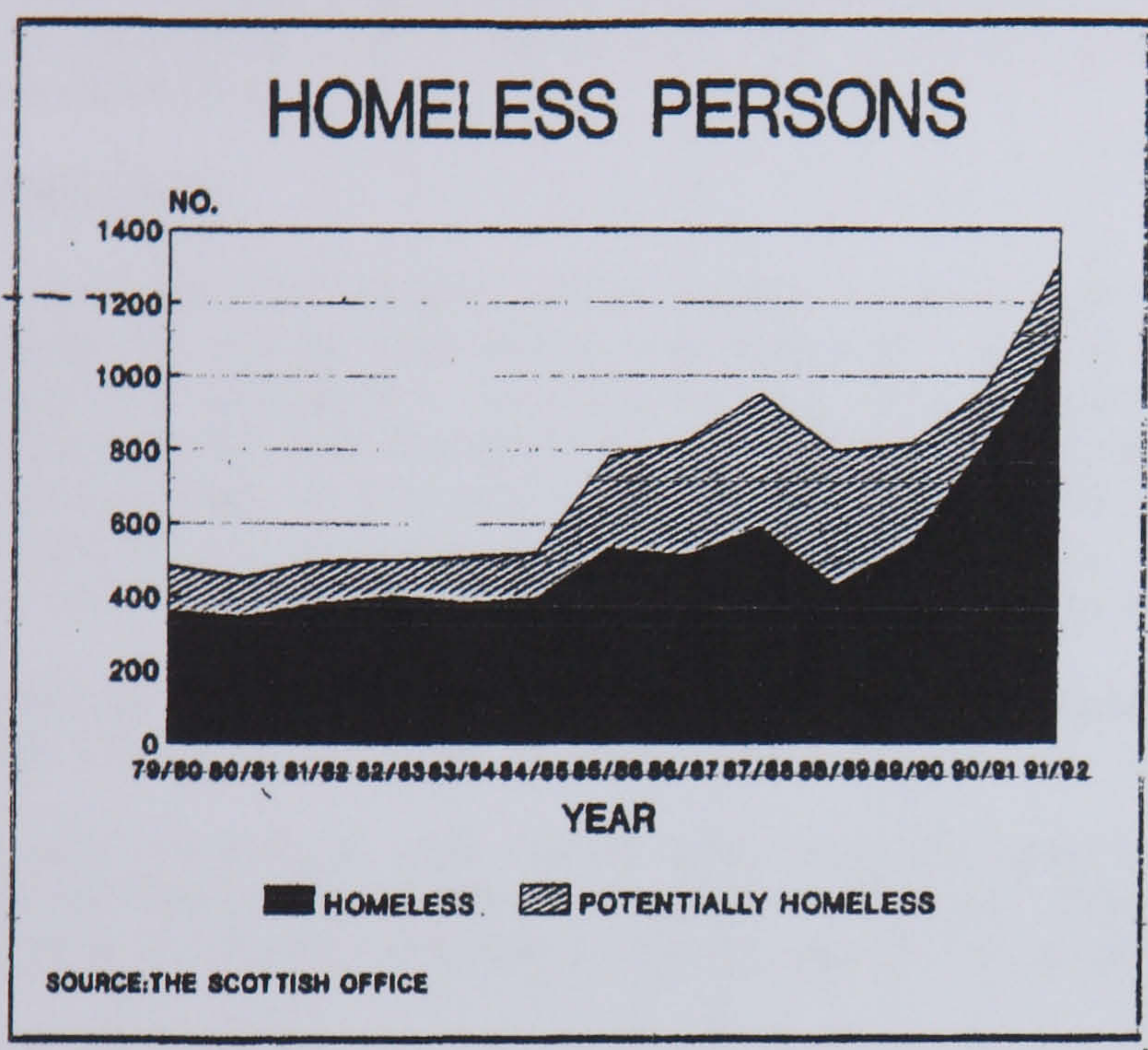
Second public consultation draft - mid December

The second draft of the Fife Sustainability Indicators report included a ‘Vacant Public Sector Housing’ indicator (Figure 5.36). Although the indicator sheet now included a graph showing homeless and potentially homeless people in Fife each year from 1979/80 to 1991/92 drawn from Scottish Office figures the focus within the text was still on public sector housing stock issues. A second graph showed the amount of housing of different tenure types for the years 1971, 1981 and 1991 drawn from census data.

Before this indicator sheet was issued as part of the Second Public Consultation draft report attention was drawn to it at an informal meeting of some SIWG members on 19th December. The indicator was criticised for downplaying the homelessness issue. It was too late to produce a radically revised indicator but it

Figure 5.36a Vacant Public Sector Housing Indicator included in the Second Public Consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994m) page 1

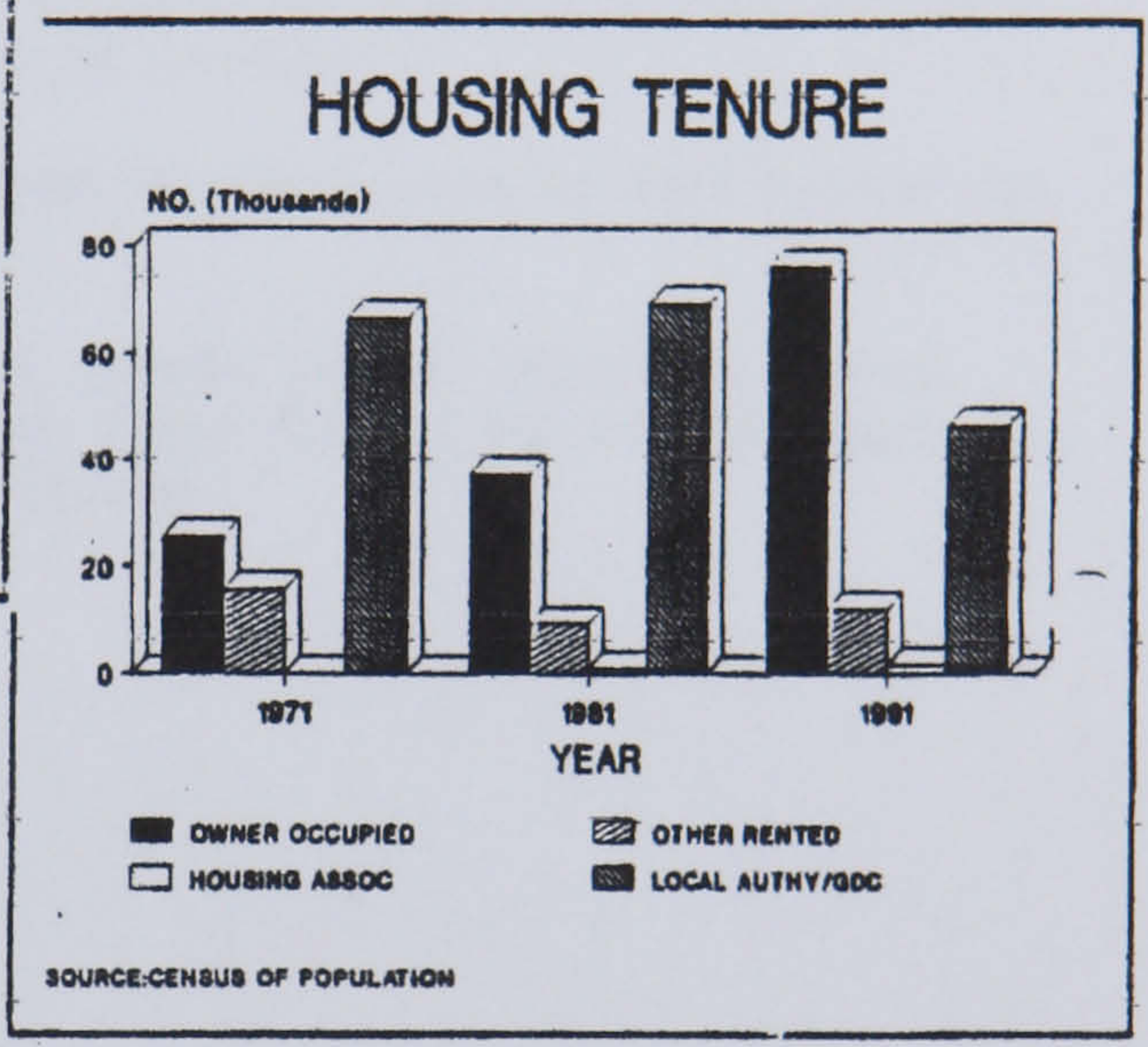
BASIC NEEDS



There is an increasing problem of homelessness in Fife.

HOMELESSNESS

% of public sector vacant housing stock related to households in Fife who are homeless



DESCRIPTION

A sustainable society must provide adequate and efficient housing for its population. Homelessness is a serious problem facing society in general and local authorities in particular, and represents a fundamental breakdown in the structure of society. The aim, therefore, in a sustainable society must be to eliminate homelessness.

Even where a number of people (or families) are homeless a small proportion of dwellings are likely to be vacant for "frictional" reasons (ie. people moving home, houses recently constructed etc.). However, a high level of vacancy, particularly in local authority dwellings, may reflect underlying social and economic problems.

By definition, public sector housing is most likely to be of benefit to those unable or unwilling to purchase their own homes. A high level of vacant stock can therefore be seen not only as inefficient, but also as indicative of a poor match between available resources and measurable need. The available dwellings may be of the wrong size or type, or in the wrong location, to meet the identified need.

ANALYSIS

Public sector housing represents about 38% of the total housing stock in Fife. In March 1993, there were 804 vacant public sector houses in Fife representing 1.9% of the total public sector stock. This compares with 891 vacant houses in 1990, and represents a fall of 10% in that period. The highest number of vacant dwelling were in Kirkcaldy District, 10% of total public sector stock) but the pattern was similar for all three Districts. There were, however, 1,310 households assessed as homeless or potentially homeless in 1992. Since 1979/80, as the above graph indicates, homelessness has increased substantially, especially since the mid-eighties. The problem may be even more acute, as the houses from the original public sector stock which have been sold to existing tenants will tend to be of higher quality.

Figure 5.36b Vacant Public Sector Housing Indicator included in the Second Public Consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994m) page 2

EVALUATION

From the data available, it is possible to make an assessment of trend since 1984. This indicates that homelessness has worsened and suggests a move away from sustainability.

LINKAGES

A high level of vacant public sector housing stock can be costly in social and economic terms. Homeless families may have to be housed in unsatisfactory and expensive temporary accommodation. Homelessness is also related to poverty, illness, family stress and breakdown, and isolation from society for those involved. Young families may be forced to live with older relatives. High levels of vacant stock can result in lost revenue to local authorities. They may also be connected with poverty and with poor health for homeless or poorly-housed households.

A definite statistical relationship has been established between general deprivation and high levels of vacancy in Fife (1991 Census).

In this context of this report this indicator may be related to the health indicators (Infant Mortality, Cervical Cancer Screening), Crime, Open Land Lost to Development, Access to Public Transport and Voting in Local Elections.

FUTURE STEPS

DATA AND INFORMATION SOURCES

Scottish Office Environment Department Statistical Bulletins (Housing Series)
Population Censuses (1971, 1981 and 1991)

COMMENTS

To determine any causal relationships it would be necessary to evaluate local conditions and circumstances, which could be time consuming and complicated.

It is doubtful whether a sample measure, such as vacant local authority houses as a percentage of stock, is a meaningful indicator of sustainability unless it is linked with a genuine measure of demand and need (homelessness and "concealed" households). Surveys would be difficult to control and very costly.

was agreed that a statement should be added immediately below the graphs to make clear that:

“There is an increasing problem of homelessness in Fife.” (FRC, 1994m)

The statement regarding the trend now read “From the data available, it is possible to make an assessment of trend since 1984. This indicates that homelessness has worsened and suggests a move away from sustainability”.

The ‘Comments’ box for this draft of the indicator however repeated the statement contained in the first public consultation draft that:

“To determine any causal relationships it would be necessary to evaluate local conditions and circumstances...”

To which the words “which could be time consuming and complicated” have been added. The comments box then goes on to repeat the statement used in the earlier draft that:

“It is doubtful whether a sample measure, such as vacant local authority houses as a percentage of stock, is a meaningful indicator of sustainability unless it is linked with a genuine measure of demand and need (homelessness and “concealed” households). Surveys would be difficult to control and very costly. “ (FRC, 1994m)

The statement “The latter cannot be derived from published information with any certainty” had now been removed as a published data set had been identified. This gives the indicator sheet included in the second public consultation draft the appearance of being very much a cut-and-paste work in progress.

This was one of the indicators that was robustly criticised by Jane Brooke when she commented on the Second Public Consultation draft. As a housing specialist who had been working specifically on sustainable development issues in the post Earth Summit period she was well placed to comment on the weaknesses of the ‘Vacant Public Sector Housing’ indicator.

The questionnaire circulated with the second consultation draft of the Sustainability Indicators for Fife report described this indicator as covering the topic of 'Homelessness'. The comments received were as follows:

16 where the Homelessness indicator was felt to be useful and 3 where it was not felt to be useful.

11 of the responses agreed that this was the best way to measure this issue but 6 did not.

14 of the responses felt that the identified direction of trend Away from Sustainability was appropriate, but 3 did not.

Some consultees' comments appeared to support the issues being raised by SIWG members who wanted the indicator to look at homelessness as an issue rather than restricting coverage to public sector dwellings:

"Vacant public sector housing (psh): Society's responsibility does not need to be met though the ps. Government's task is to provide access to housing, however this is done. PSH is also of benefit to those who choose not to buy and those who do not wish to rent at full commercial rents."

"The indicator relates only to 38% of the housing stock. Owner occupied, housing association and private rented information should be fairly easily available. 'Concealed' homeless information would be expensive to gather, as you state and probably not worth gathering."

"Being homeless is an important indicator as a homeless person is almost totally disempowered."

"We agree that homelessness is a sustainability indicator, however we would like to see the indicator linked with other factors which would encourage housing developments to be undertaken in a sustainable way including repair and building work undertaken by local businesses and the homeless themselves working on self build schemes, and the use of energy efficient house designs and materials and the non-use of hardwoods. The range and types of new houses being built is also a factor."

"Quality ('health') of housing also an issue"

There were, however critics of the way the indicator had been developed for the second public consultation draft:

“Homelessness: Indicator as given seems ill defined and does not correspond with graphical data given.”

“Disappointed in “Homeless People” There are no future steps!! Comments - timeconsuming, complicated, very costly, difficult to count. All very NEGATIVE SOMETHING HAS GOT TO BE DONE!”

Some comments were either very specific, or more broadly focused and had less direct influence on the redrafting of the report:

“Many homeless (eg single people) are not regarded as priorities for housing allocations. A high percentage of empty properties exist on estates. The village of West Wemyss being a striking example”

“To my mind nobody seems to give a damn”

“Many are not honest about being homeless”

“It is imperative to take account of ‘self-induced’ homelessness and omit such persons from the figures”

The formal and informal feedback regarding the weakness of the homelessness indicator, and the wider concerns about the lack of coverage of global impacts resulting from local decisions in what purported to be a sustainable development document, created an opportunity to reassess the framing and content of indicator sheets.

At the informal meeting of SIWG members on 9th January I was given responsibility for redrafting the Homelessness indicator. I proposed a new format for the indicator sheets - 2 pages for each indicator, rather than the single page used in Sustainable Seattle in order to increase the amount of space to communicate how the issue related to sustainable development and the rationale for the

selection of the indicator as a monitoring tool. The introduction to the report was rewritten to reflect global as well as local issues (see Figure 5.29 in section 5.5 Stage III above). It was my intention that each indicator sheet would be rewritten to tie in with this stronger definitional frame.

In order to draft several new indicators within a very short time period I knew I would need help from subject specialists who were familiar with applying a strong sustainable development frame within their own work. The Policy Officer at City Housing Glasgow was the obvious person to ask for help with the Homelessness indicator. We discussed the scope for developing new indicators when we were preparing teaching material for the University of Glasgow course we were drawing up. She travelled to Stirling one evening and worked on my home computer writing a new Homelessness indicator sheet. As she was familiar with the ‘future/environment/equity/participation’ definition of sustainable development it was a relatively straightforward task for her to use the same Scottish Office data set as the Second Public Consultation draft of the Report and to write a completely new text that related to the framework I was proposing for the revised Sustainability Indicators for Fife Report. I do not have an exact copy of the draft of this indicator that was presented at the 23rd January, but Figure 5.37 a & b shows a slightly later version which includes revisions to take account of the 23rd January discussions and further handwritten amendments made by the Planning Officer (Environment Services) and faxed to me.

A comparison of Figure 5.36 and 5.37 illustrates the more holistic and more global approach being used in the later version. Figure 5.37 begins with a quote from Agenda 21:

“Access to safe and healthy shelter is essential to a person’s physical, psychological and social wellbeing...The right to adequate housing as a basic human right is enshrined in the Universal Declaration of Human Rights...”

The data on public sector housing stock was dropped in the new indicator sheet

Figure 5.37a Homelessness Indicator revised draft of 23rd January
Indicator with handwritten amendments page 1

Basic Needs

HOMELESSNESS

Number of Households
Registered as Homeless

BACKGROUND

"Access to safe and healthy shelter is essential to a person's physical, psychological social and economic wellbeing. . . The right to adequate housing as a basic human right is enshrined in the Universal Declaration of Human Rights.."

Agenda 21 Section 6

Homeless people are those sleeping rough, those staying in temporary accommodation, such as night shelters, hostels and bed-and-breakfast hotels, those sleeping on friend's floors, as well as those in overcrowded or poor housing conditions whose homelessness is ~~often~~ ^{often} hidden ~~from view~~.

or staying with relatives,

Homelessness has many causes, these include family breakdown, discharge

from care, prison or hospital without access to appropriate housing support, ~~with no access to~~ and a shortage of suitable affordable housing for people who wish to live independently.

A Scotland wide survey found that homeless applicants were likely to have one or more of the following characteristics: families with children often headed by a single parent; female; aged under 30; on a low income.

if checking more married couples

SUSTAINABILITY ISSUES

Homelessness is bad for people's health. Sleeping rough, living in damp, unhygienic or overcrowded accommodation and poor nutrition can lead to or exacerbate a range of health problems. Homeless people also encounter difficulty in gaining access to many health services.

Figure 5.37b Homelessness Indicator revised draft of 23rd January
Indicator with handwritten amendments page 2

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Basic Needs

HOMELESSNESS

Homelessness makes holding down a job very difficult, making homeless people even less able to improve their situation by their own efforts.

Other issues related to access to safe and healthy accommodation are affordability, security of tenure, energy efficiency and a clean and safe neighbourhood. This indicator therefore has linkages with affordable warmth, long-term unemployment, income, access to basic services and crime.

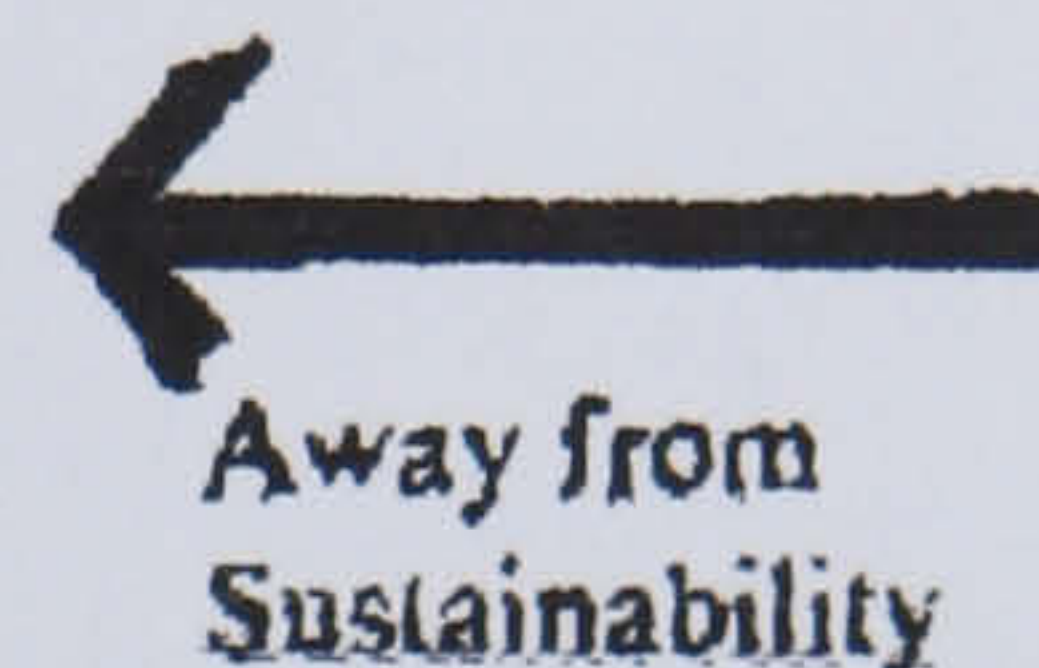
health

ANALYSIS OF INDICATOR

Homelessness is the most fundamental measure of whether everyone has access to safe and healthy shelter. In 1991/92 nearly 1500 households in Fife were recognised by their District Council as being homeless at some point in the year. The number of homeless households in Fife has increased substantially since 1979/80 and especially since 1988/89.

The official homelessness figures are normally regarded as being an underestimate of the actual number of homeless households as they do not include those people in insecure or seriously inadequate accommodation who have not approached their District Council for help. ^{those who} are not entitled to do so because they are deemed to have made themselves homeless.

Number of Households
Registered as Homeless



Away from
Sustainability

EVALUATION OF INDICATOR

Homelessness is primarily an equity indicator. ~~Fife has the resource base to ensure that everyone has access to safe and healthy housing but this is not being achieved.~~ Homelessness has a serious negative impact on people's ability to participate in wider society. The substantial increase in the number of homeless people in Fife mean that this indicator is moving away from sustainability.

DATA AND INFORMATION SOURCES

Homelessness in Scotland : Scottish Office 1990

Homing in on Health: Campaign for the Homeless and Rootless 1994

Scottish Office Environment Dept. Statistical Bulletins (Housing Series)

THE WAY FORWARD

Removal of current restrictions on District Council funding arrangements in order to allow them to build new housing stock.

Ensure a closer match of housing need to housing stock in terms of quantity and type to housing needs.

Encourage an increase in affordable housing schemes to buy or rent.

and the focus of the text shifted from public sector housing issues to Homelessness. There was a new section in the indicator sheet titled 'Sustainability Issues' which made clear links between homelessness and health, and access to health services, and employment opportunities. The Homelessness indicator was explicitly linked to other indicators included in the redrafted report: affordable warmth, long term unemployment, income, access to basic services and crime.

The Analysis of the Indicator section now concentrated on homelessness as a fundamental measure of safe and healthy shelter, although it stressed that the Scottish Office figures were likely to be an underestimate of the real problem and explained the reasoning for drawing this conclusion.

The 'Evaluation of the Indicator' section is now tied to the 'future/environment/equity/participation' definitional framework basis for making an evaluation decision. In the 7th November and First Public Consultation drafts it had not been deemed possible to evaluate a trend. In the Second Public Consultation draft the evaluation "suggests a move away from sustainability", in the 23rd January draft the evaluation statement was now much more strongly expressed:

"Homelessness is primarily an equity indicator. Fife has the resource base to ensure that everyone has access to safe and healthy housing but this is not being achieved. Homelessness has a serious negative impact on people's ability to participate in wider society. The substantial increase in the number of homeless people in Fife mean that this indicator is moving away from sustainability."

It was selected at the meeting as one of the two example indicators that should go forward from Fife for the LGMB report on their Sustainability Indicators pilot project. Although the Evaluation statement was revised by the Planning Officer (Environment Services) removing the sentence "Fife has the resource base to ensure that everyone has access to safe and healthy housing but this is not being achieved." A new section was added to the 23rd January draft identifying 'The Way Forward'. This was intended to make clear that monitoring and reporting

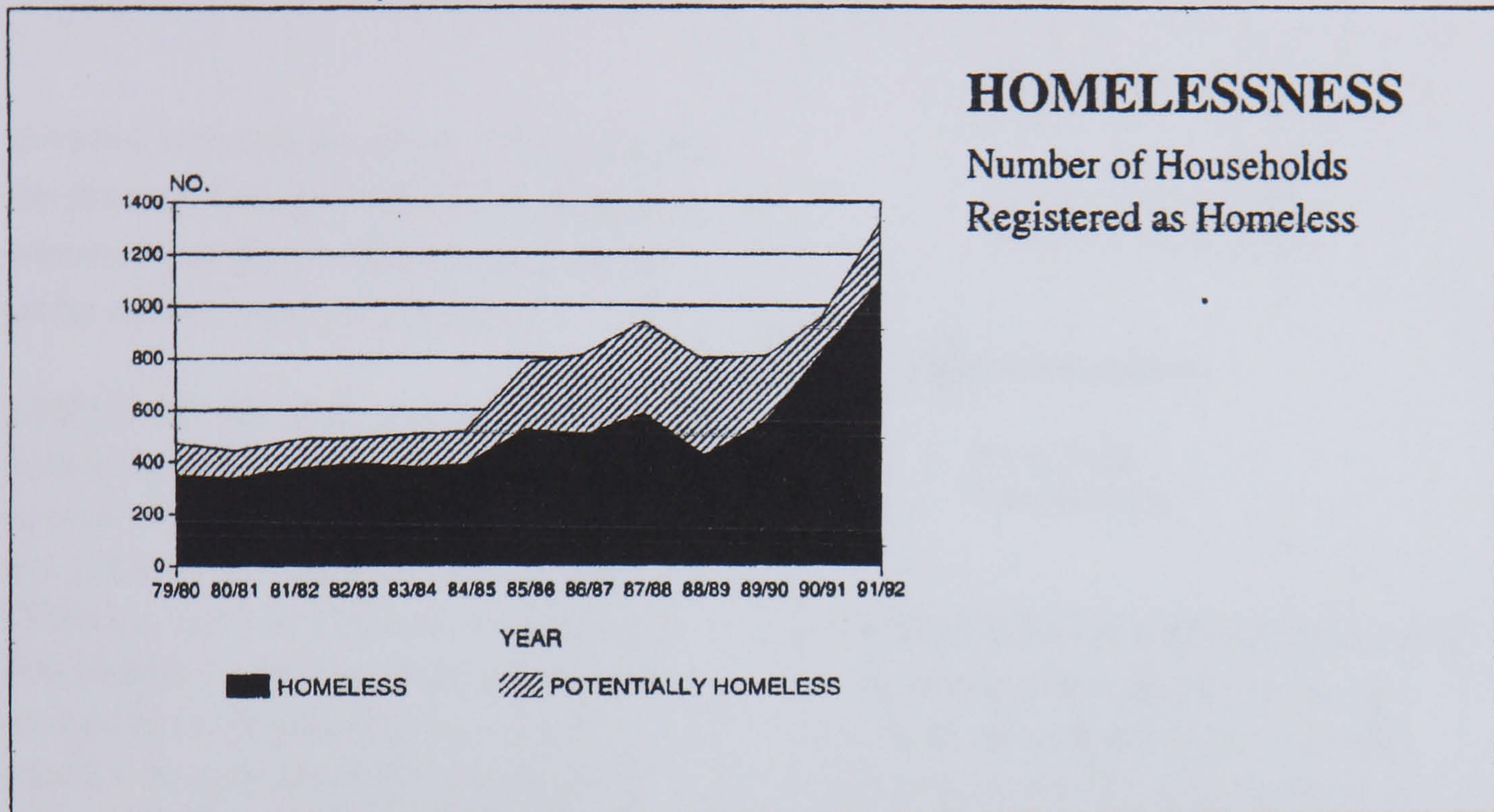
homelessness data was part of a process of securing action on this issue, rather than just undertaking a recording exercise. It was acknowledged at the 23rd January meeting that issues included in 'The Way Forward' box would relate to whichever agency or agencies were most relevant to action rather than being restricted to the current responsibilities of Fife Regional Council. In the case of the Homelessness indicator this was seen to be particularly appropriate as the new Fife Unitary Authority would take on responsibility for housing and homelessness as a part of local government reorganisation in April 1996 with the abolition of the 3 Fife District Councils. Figure 5.38 shows the revised version of the Homelessness indicator that was included in the LGMB report of the Sustainability Indicators Project: Pilot Phase.

There was a final twist in the tale of the Homelessness indicator. Prior to the 14th February SIWG the Research and Information Officer rewrote the text of the indicator to "tone it down and make it more appropriate". He passed a single copy of this revised version around those present at the 14th February meeting. He refused to circulate copies of other indicators I had prepared for the meeting as, in his opinion, they still required further work. The Research and Information Officer's revision of the Homelessness indicator was criticised by the Depute Director as he had already approved the version shown in Figure 5.38 and it had been sent to London for inclusion in the LGMB report at the end of January. This incident provide a useful illustration of the self-censorship that took place among Fife staff involved in the project on the basis of what they felt was appropriate for the authority to agree to, rather than actually based on instructions from more senior staff.

The decision that the LGMB version was to be the 'final' version was largely respected in the 'Homelessness' indicator published in Sustainability Indicators for Fife 1995, (Figure 5.39). The text had been reformatted to fit with the final style adopted for the Report. The Agenda 21 quote was shortened, omitting the

Figure 5.38a Homelessness Indicator included a Fife Example in LGMB Sustainability Indicators Project Report LGMB 1995a page 1

Fife



BACKGROUND

"Access to safe and healthy shelter is essential to a person's physical, psychological, social and economic wellbeing. . . The right to adequate housing as a basic human right is enshrined in the Universal Declaration of Human Rights.."

Agenda 21 Section 7.6

Homeless people are those sleeping rough, those staying in temporary accommodation, such as night shelters, hostels and bed-and-breakfast hotels, those sleeping on friend's floors or staying with relatives, as well as those in overcrowded or poor housing conditions whose homelessness is therefore hidden.

Homelessness has many causes, these include family breakdown, discharge from care, prison or hospital without access to appropriate housing support, under occupancy and a shortage of suitable affordable housing for people who wish to live independently.

A Scotland wide survey found that homeless applicants were likely to have one or more of the following characteristics: families with children often headed by a single parent; female; aged under 30; on a low income.

SUSTAINABILITY ISSUES

Homelessness is bad for people's health. Sleeping rough, living in damp, unhygienic or overcrowded accommodation and poor nutrition can lead to or exacerbate a range of health problems. Homeless people also encounter difficulty in gaining access to many health services.

Homelessness makes holding down a job very difficult, making homeless people even less able to improve their situation by their own efforts.

Other issues related to access to safe and healthy accommodation are affordability, security of tenure, energy efficiency and a

Figure 5.38b Homelessness Indicator included a Fife Example in LGMB Sustainability Indicators Project Report LGMB 1995a page 2

clean and safe neighbourhood. This indicator therefore has linkages with health, affordable warmth, long-term unemployment, poverty, access to basic services and crime.

ANALYSIS OF INDICATOR

Homelessness is the most fundamental measure of whether everyone has access to safe and healthy shelter. In 1991/92 nearly 1500 households in Fife were recognised by their District Council as being homeless at some point in the year. The number of homeless households in Fife has increased substantially since 1979/80 and especially since 1988/89.

The official homelessness figures are normally regarded as being an underestimate of the actual number of homeless households as they do not include those people in insecure or seriously inadequate accommodation who have not approached their District Council for help, or those who are not entitled to do so because they are deemed to have made themselves homeless.

HOMELESSNESS

Number of Households
Registered as Homeless



Away from
Sustainability

EVALUATION OF INDICATOR

Homelessness is primarily an equity indicator. Homelessness has a serious negative impact on people's ability to **participate** in wider society. The substantial increase in the number of homeless people in Fife mean that this indicator is moving away from sustainability

DATA AND INFORMATION SOURCES

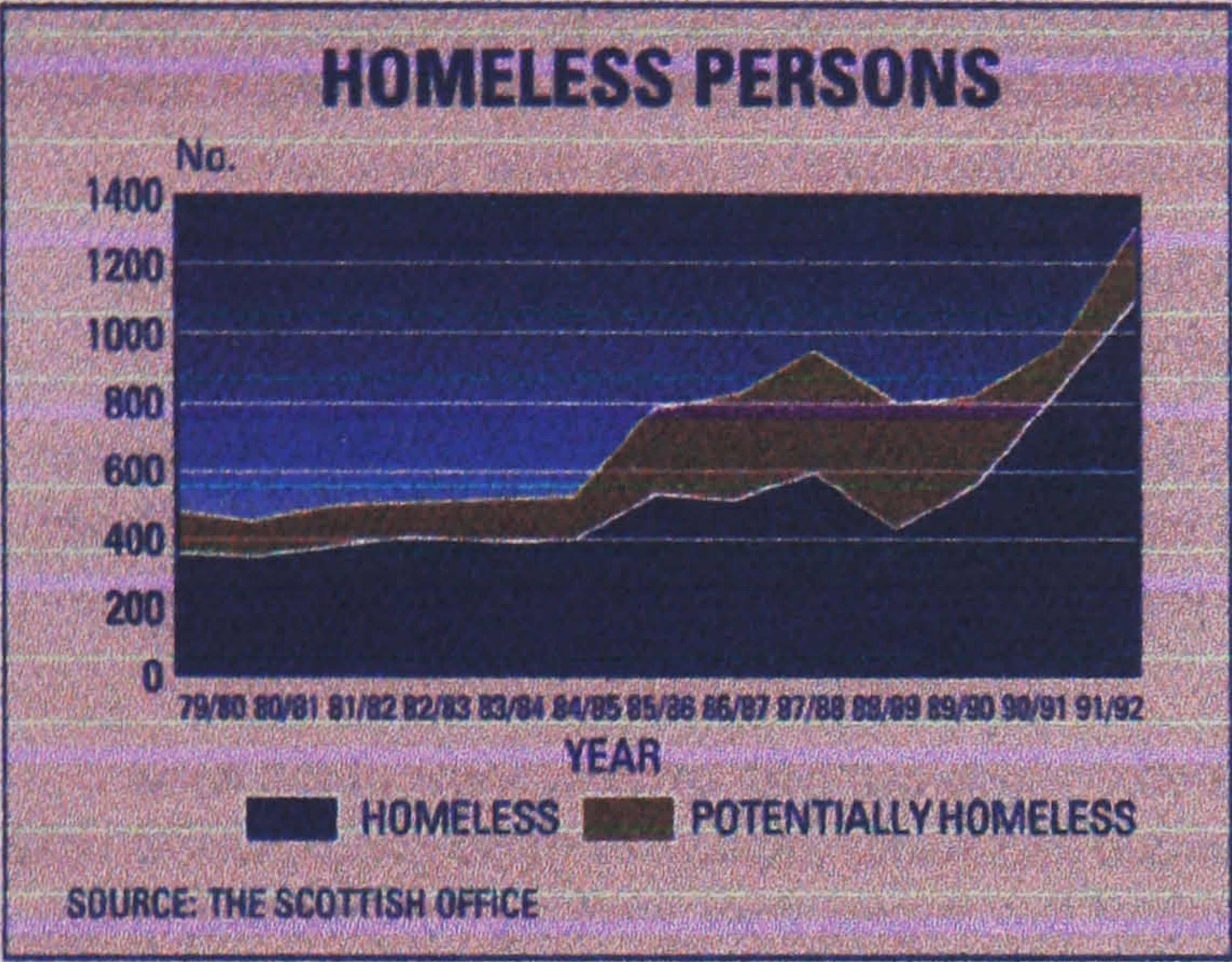
Homing in on Health: Campaign for the Homeless and Rootless 1994
Scottish Office Environment Dept. Statistical Bulletins (Housing Series)

THE WAY FORWARD

Removal of current restrictions on District Council funding arrangements in order to allow them to build new housing.
Ensure a closer match of housing stock to the quantity and type of housing need.
Encourage an increase in affordable housing to buy or rent.

Figure 5.38a Homelessness Indicator included in Final Sustainability Indicators for Fife Report (FRC, 1995a) page 1

Basic Needs



HOMELESSNESS

Number of Households Registered as Homeless.

BACKGROUND

Homelessness is a major problem.

“Access to safe and healthy shelter is essential to a person’s physical, psychological social and economic well-being”.

(Agenda 21 Section 7.6).

Homelessness has many causes, and does not only involve people sleeping rough or living in temporary accommodation. Families with young children who wish to live independently but who are forced to share with relatives or friends are homeless, in terms of their real needs, because of a shortage of affordable and suitable housing. This is an aspect of homelessness which is frequently hidden from view. People who are released from prison, care or hospital without access to adequate accommodation also frequently become homeless.

Recently a Scotland-wide survey found that the most likely characteristics of a homeless applicant were that they were a single parent; female; aged under 30; and on a low income.

SUSTAINABILITY ISSUES

Homelessness can cause bad health. Sleeping rough or living in damp, unhygienic, overcrowded accommodation with poor nutrition can lead to or exacerbate health problems. Homeless people can have difficulty in getting access to health services and to social welfare support.

Homelessness can also make it very difficult to hold down a job, which can mean that homeless people are even less able to improve their circumstances by their own efforts.

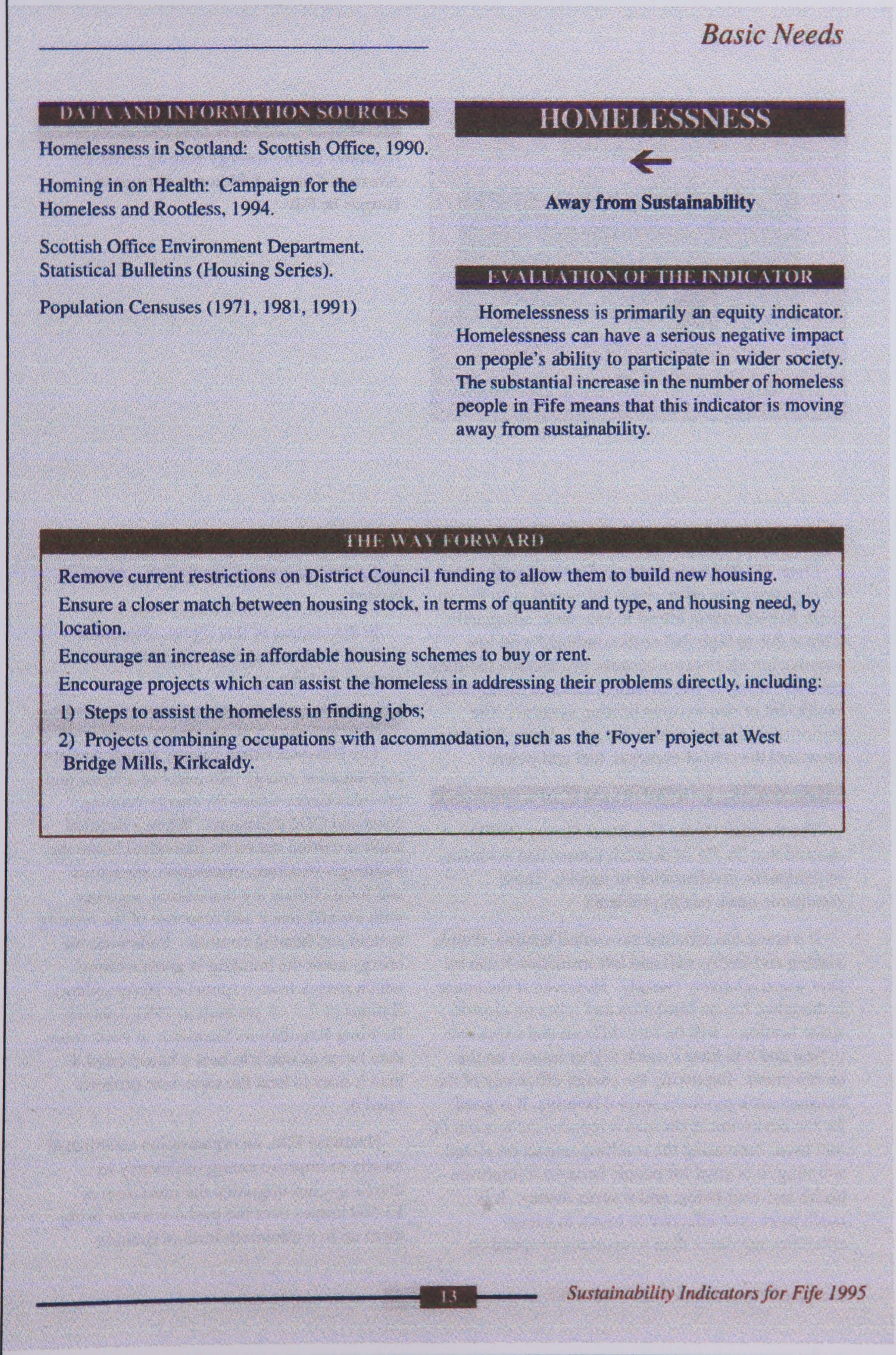
Homelessness is linked with issues of costs, security of tenure, energy efficiency, health, and clean and safe environments. This indicator is closely linked with other indicators in this report which are concerned with affordable warmth, long-term unemployment, poverty, access to basic services and crime.

ANALYSIS OF THE INDICATOR

Homelessness is the most basic measure of access to safe and healthy accommodation. In 1991/92 nearly 1500 households in Fife were recognised by the District Councils as being homeless at some point in the year. The number of homeless households in Fife has increased substantially since 1979/80 and this trend has become marked since 1988/89.

The official homelessness figures are generally regarded as being an under-estimate of the actual number of homeless households, because they do not include people or families in insecure or seriously inadequate accommodation who cannot, or have not, approached their District Council for help.

Figure 5.38b Homelessness Indicator included in Final Sustainability Indicators for Fife Report (FRC, 1995a) page 2



statement: "The right to adequate housing as a basic human right is enshrined in the Universal Declaration of Human Rights." However, the redrafting of the text in the Background and Analysis of the Indicator sections retained the original emphasis and information, the changes focused on making it read more smoothly, and the Evaluation section remained unchanged. In The Way Forward section an additional section had been added:

"Encourage projects which can assist the homeless in addressing their problems directly, including:

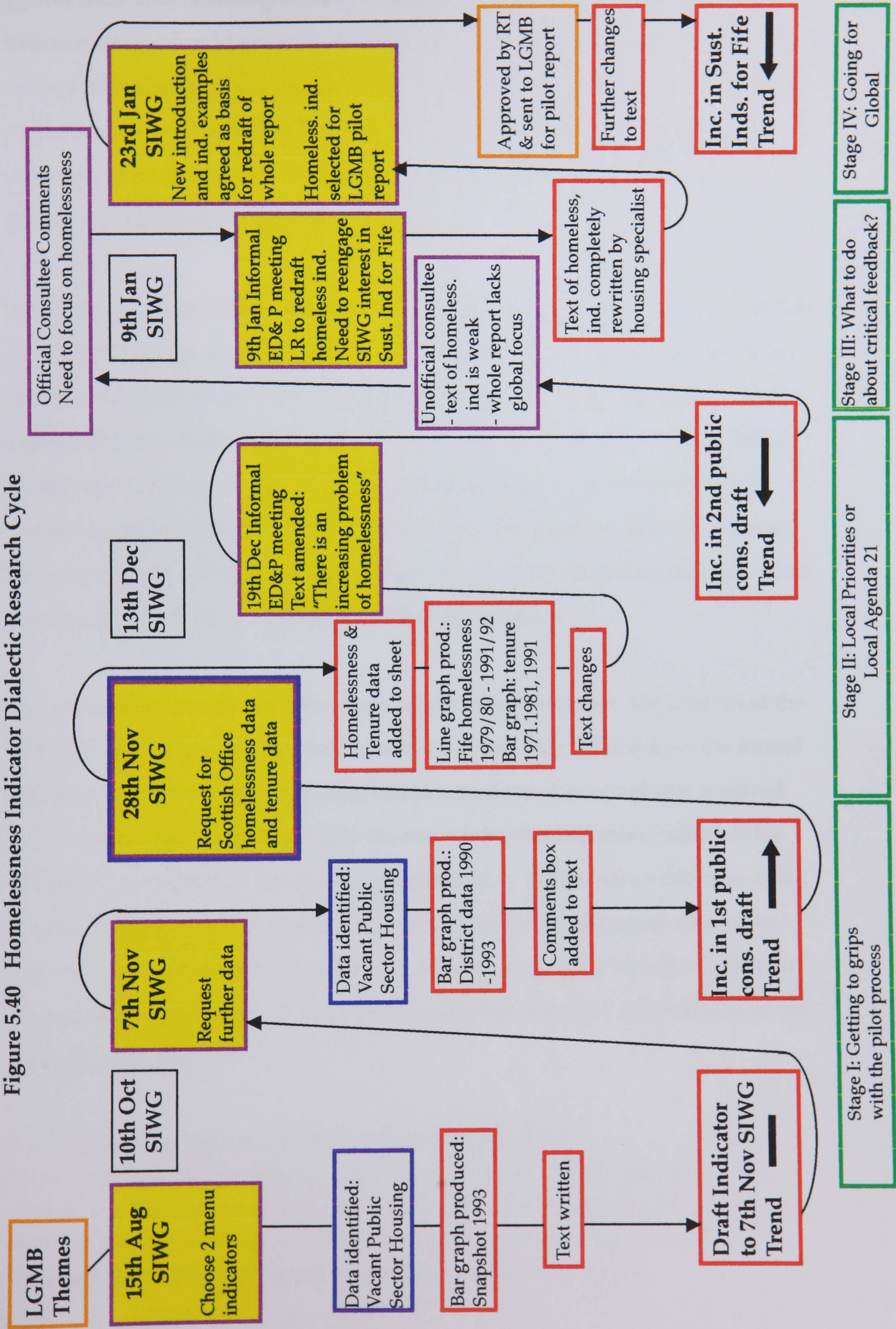
- 1) Steps to assist the homeless in finding jobs;
- 2) Projects combining occupations with accommodation, such as the 'Foyer' project at West Bridge Mills, Kircaldy. (FRC, 1995a).

This appeared to be an attempt to reflect a current policy initiative in the text of the indicator.

The review of the development of the Homelessness indicator documents the extent to which informal processes and unofficial consultees influenced the indicator sheet presented in the Sustainability Indicators for Fife 1995 report. Figure 5.40 maps this material as a dialectical research cycle.

The development of the indicator started as an external PROJECT. The first ENCOUNTER was at the 15th August SIWG. This meeting was also a stage of MAKING SENSE of the possible options contained in the LGMB menus and how they related to Fife as the group sought to identify appropriate indicators for data collection. The selection of 2 indicators for housing issues suggests the group did not feel that the LGMB menus offered a single appropriate indicator for this issue. The identification of a suitable data set that matched the SIWG's menu choice is described as THINKING and the production of a graph and writing of text by the Research and Information Officer are a stage of COMMUNICATION. This draft indicator sheet is then presented to the SIWG on 7th November and this meeting becomes another ENCOUNTER. The SIWG members appraised the draft indicator

Figure 5.40 Homelessness Indicator Dialectic Research Cycle



against their understanding of local housing conditions and requested further information that would go beyond public sector housing. This initiated a further cycle of data identification, preparation of a graphic and making changes to the text - a further cycle of THINKING leading to COMMUNICATION and the presentation of an indicator sheet for inclusion in the First Public Consultation draft of the Sustainability indicators for Fife report.

Before any feedback had been received from external consultees there was another ENCOUNTER with the SIWG at the 28th November meeting. The discussion can be described as a collective process of MAKING SENSE of the indicator, and this process elicited continuing dissatisfaction with the focus on Vacant Public Sector Dwellings and the evaluated trend towards sustainability. The THINKING, in terms of identification of alternative data sets for investigation also took place at this meeting, rather than being left to the Research and Information staff who were now given the task of COMMUNICATION of this material.

The use of colour in the dialectic research cycle diagram shows the location of the MAKING SENSE process for the Homelessness indicator shifting from the formal meetings of the SIWG and becoming located in informal meetings that involved only some members of the SIWG. In the case of the Homelessness indicator this omission was addressed through an informal route - Jane Brooke's criticism of the existing indicator and her preparedness to put time into drafting an alternative became a part of the process of reframing the report around a stronger definition of sustainable development to which the evaluation of individual indicator trends was explicitly tied.

5.6.2 Shortest Process: Tree Preservation Orders

At the 15th August SIWG meeting, under Theme 13 *'Places, spaces and communities combine meaning and beauty with utility. Settlements are "human" in scale and form. Diversity and local distinctiveness are valued and protected.'* a Category A indicator (for which information was thought to be readily available) was chosen:

13.8 No. of tree preservation orders and nos. breached.

An indicator sheet was developed for this and presented at the 7th November SIWG meeting. The graphic showed the number of tree preservation orders, by district, that were in force in October 1994 (Figure 5.41). Despite there being no time trend on this data a view was taken “that the situation is probably not deteriorating”. A further comment was made that :

“The transfer of substantial areas of woodland in Glenrothes to the Woodland Trust in 1994 probably tips the balance toward increasing sustainability on this indicator.” (FRC, 1994 k)

The text of the indicator sheet was amended for the first public consultation draft report and a comments box was added which stated that “The data on this indicator is very limited. Moreover the very specific nature of the measure calls into question the validity of this as a measure of sustainability.” However, the Evaluation section of the indicator read:

“Although the evidence is very limited on this indicator on balance the trend is probably towards sustainability.” (FRC, 1994 l)

Some of the respondees to the first consultation draft referred to the TPO indicator:

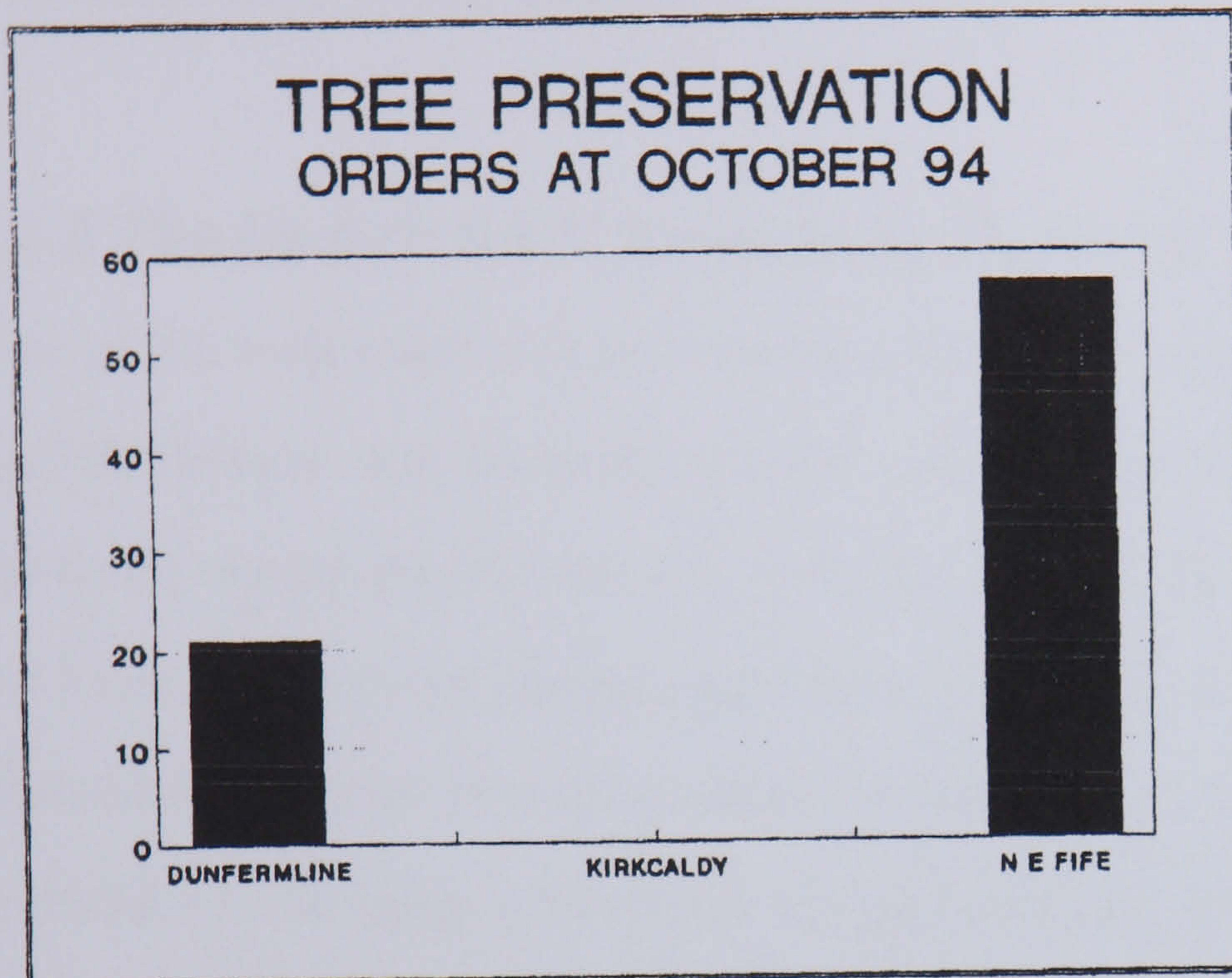
“Your letter of 24 November gives little time for us all to study the draft report. Looking at it briefly, we have the impression that some of the indicators are too narrow to be usefully extrapolated and do not consult a wide enough range of sources, many of which ‘Data & Information Sources’ seem to be very limited in scope. ‘Tree Preservation Orders’ is an example; lots of accurate data about planting, culling and tending trees are available from Countryside Rangers, Parks Departments and others in District Council Offices, and Fife regional Council Engineering Department has a lot to do with roadside trees.”

“Tree Preservation Orders

I found the use of these as a sustainability indicator questionable.

I sympathise with the principle of TPO’s but to me their use is a short term measure because trees, like all other living things, have a finite life span and TPO’s do not take account of the need to maintain a range of ages of trees to sustain a landscape or wildlife feature in perpetuity.”

Figure 5.41 Tree Preservation Orders Indicator presented to the 7th Nov. SIWG (FRC, 1994 k)



TREE PRESERVATION ORDERS

Numbers of Designations
By District

DESCRIPTION

The presence of mature trees makes an important contribution to the quality of the environment, particularly in urban areas. Trees are also important because they provide local habitats for birds, small animals, insects and other species. Many hardwood species of trees can take up to fifty years to reach maturity and they are particularly at risk on the fringes of urban areas, where there can be conflicts with housing and other developments.

BACKGROUND

Mature trees can be protected by the designation of Tree Preservation Orders (TPOs) by local planning authorities. The penalties for disregarding such designations are not high but on the positive side, agreement is often reached between major developers and local authorities on this issue as existing mature trees can considerably enhance the visual quality of new housing areas, in particular, when they are retained.

ANALYSIS

The number of Tree Preservation Orders in Fife is not high (probably less than 100). Moreover the available information is insufficient to determine any trends although substantial areas of parkland with mature trees in many Fife towns suggest that the situation is probably not deteriorating. The transfer of substantial areas of woodland in Glenrothes to the Woodland Trust in 1994 probably tips the balance toward increasing sustainability on this indicator.

LINKAGES

Apart from improving the general quality and appearance of urban areas, trees in towns provide important local wildlife habitats.

DATA AND INFORMATION SOURCES

District Councils (Planning)

At the 28th November SIWG there is a one-word comment in the meeting note regarding Tree Preservation Orders “remove”. Figure 5.42 shows the short dialectical map of this indicator.

5.6.3 The Search for ‘Community Decision Making’ Indicators

One of the major difficulties encountered in devising the Sustainability Indicators for Fife Process was identifying appropriate sustainable development indicators the issue of community decision making. Although 6 indicators were selected from the LGMB menus for testing and several other lines of enquiry regarding possible alternative indicators were pursued none of these indicators was ultimately included in the body of the final report, although 2 were published in an Annex as indicators requiring further work. The process of developing indicators from this selection will be taken together as it serves to illustrate the difficulty of developing appropriate ‘Community’ indicators within the pilot period.

Under *Theme 11. All sections of the community are empowered to participate in decision making*; the 15th August SIWG meeting selected two Category A indicators (for which information was thought to be readily available):

11.6 Percentage of electorate voting in local elections;

11.7 No. of responses to (environmental) charter

Category B indicator (Indicators expected to require further work. Within the remit of the project work was expected to be focused on definition and appraisal):

11.3 No. of voluntary groups

And a Category C indicator (Category C - indicators which were felt to have interesting potential for further exploration):

FRC5 Attendance/frequency of Councillors surgeries

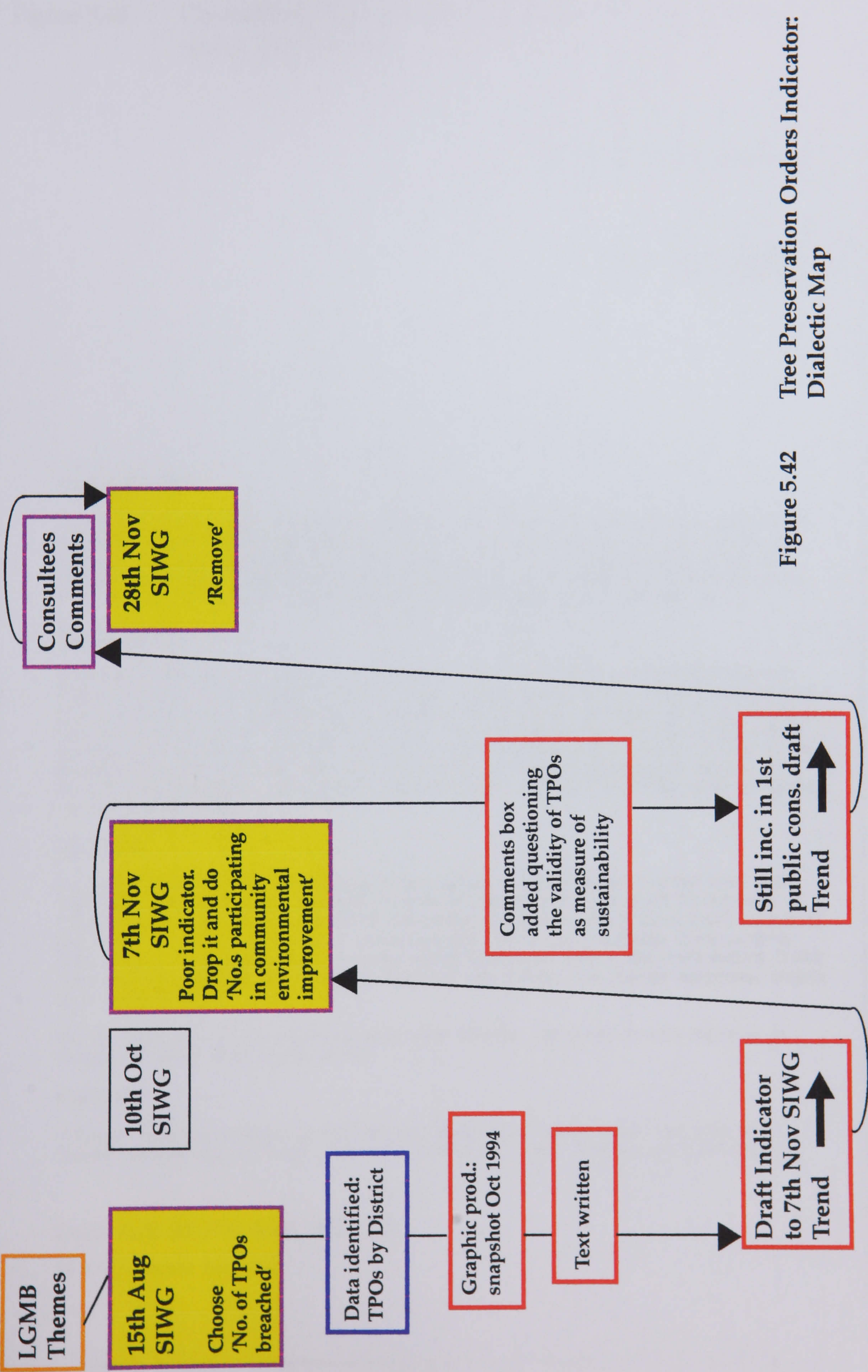


Figure 5.42 Tree Preservation Orders Indicator: Dialectic Map

Stage I: Getting to grips with the pilot process

Figure 5.43 Councillors Surgeries indicator presented to the 7th Nov.
SIWG (FRC, 1994 k)

COUNCILLORS' SURGERIES

Frequency and Attendance
By Constituents

DESCRIPTION

In a sustainable society contact between residents and their elected representatives is an essential link in the process which enables people to ensure that their views and opinions can influence decisions. At a local level this is reflected by the contact which takes place at Councillor's local "surgeries" where electors can discuss issues face to face which many may find easier than making written submissions.

BACKGROUND

In recent years publicity given to events including Rio Earth Summit, the Regional Council's Charter Programme, and major ecological problems (eg. Braer) have increased public concern about environmental matters. This concern is likely to be reflected in the issues presented to local Councillors by their constituents. At this stage only a preliminary evaluation has been possible, concentrating on the frequency of Councillor's surgeries but investigations are also being made of more comprehensive means of recording and analysing the nature of constituent's enquiries, including those concerning environmental issues.

ANALYSIS

The information on this indicator is very limited. Two principal sources have been identified. The Member's Services Division of the Regional Council's Department of Corporate Services keep a record of the times and places where Councillor's Surgeries are held. As might be expected some Councillor's use this approach more actively than others. The most recent records, which date from before the most recent (1994) election, indicate that 28 of the 46 Regional Councillors hold regular surgeries, usually on a monthly basis.

On the basis it is not possible to determine whether the trend on this indicator is towards or away from sustainability.

LINKAGES

Frequent contact between Councillors and their constituents would link with a healthy democracy, but might also be indicative of social and economic problems.

DATA AND INFORMATION SOURCES

FRC (Corporate Services)

The first of the 'Community Decision making' indicators to be rejected was 'FRC5 Attendance/frequency of Councillors surgeries'. An indicator sheet for this was presented at the 7th November SIWG meeting (Figure 5.43). It was agreed that this indicator "did not show much" and should be taken out.

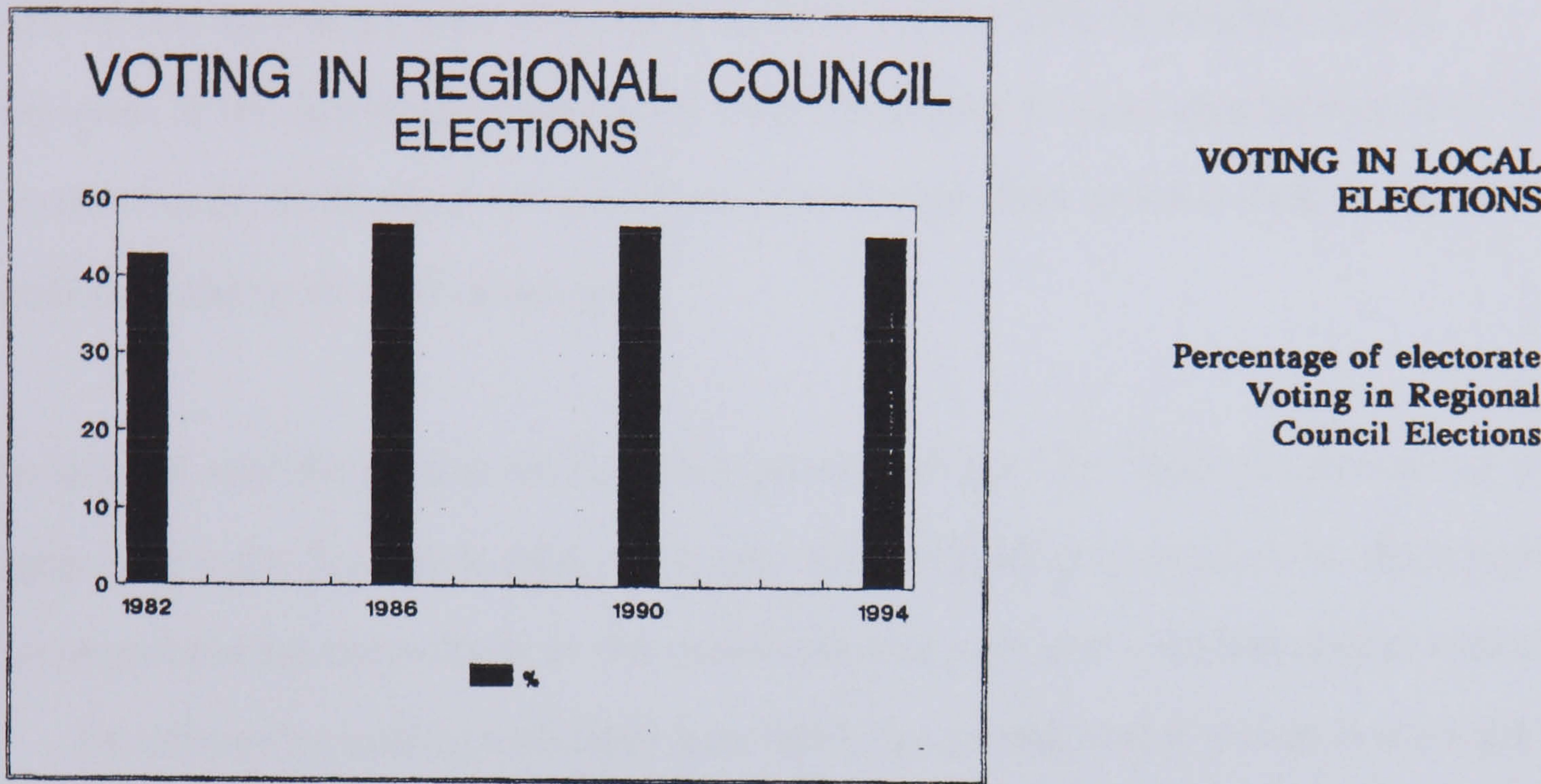
Voting in Local Elections/Local Decision Making Indicator

An indicator sheet was prepared for 7th November SIWG meeting for 'Voting in Local Elections' (Figure 5.44). The graphic showed voter turnout in Regional Council Elections for 1982, 1986, 1990 and 1994. There was a marginal downward trend in the years 1986, 90 and 94 and although the 1990 figure was higher than the Scottish average the trend on the indicator was identified as being away from sustainability. At the 7th November SIWG a request was made to include figures for District Council elections.

District Council election data was included in the indicator sheet for the first public consultation draft and a longer time series was provided for both election types (Figure 5.45). The Analysis of the indicator points out that turnout in District Elections was usually lower than for Regional elections. The turnout levels were identified as being fairly consistent since 1974. This time the trend was identified as being inconclusive. The Comment box highlights the ease of collecting data for this indicator but also the questionable nature of its validity because of factors such as uncontested seats affecting overall voting figures. At this stage the validity of it as a sustainability indicator was not raised.

At the 28th November SIWG meeting the only comment was a need to "Identify possible impact of local government reorganisation." A statement about this was included in the Analysis section of the indicator sheet included in the second consultation draft (Figure 5.46). The Comments box drew attention to issues of diversity in voting levels within the Region:

Figure 5.44 **Voting in Local Elections** indicator presented to the 7th Nov. SIWG (FRC, 1994 k)



DESCRIPTION

In a democratic society the level of voting in elections is an important measure of the extent to which people feel able to and actually do take part in decision-making. This reflects the strength of political and social institutions. High or increasing voter participation reflects a general trend toward sustainability. Low or decreasing turnout in elections can reflect indifference or, alternatively, a feeling of powerlessness to promote positive change. Active participation in decision-making is a critical element in recent environmental initiatives, following the Rio "Earth Summit" in 1992 which, if successful, may be reflected in voting activity when environmental issues are being discussed.

BACKGROUND

In the context of sustainability the level of participation in local elections can be regarded as particularly important since environmental issues are appearing more frequently on the political agenda. In some cases environmental issues have been key issues in local elections.

ANALYSIS

Voting in Regional Council elections since 1982 has been relatively consistent. In 1994, the most recent election, the percentage of the local electorate who voted was 45.7%, compared with 46.8% in the previous election (1990). This compared favourably with a Scottish average of 46% in that year, but followed a turnout of 46.9% in 1986 in Fife. On balance, therefore, the trend on this indicator is away from sustainability.

LINKAGES

Poverty, social and economic problems, such as crime and unemployment are probably linked to falling levels of voting, reflecting a lack of interest in community and therefore environmental issues.

DATA AND INFORMATION SOURCES

FRC (Corporate Services)

“Further surveys on patterns of voting and other political activities might be considered to determine the significance of low response or geographical variations in voting patterns.” FRC, 1994 m

None of the indicators was discussed in detail at the 13th December SIWG.

However, at the informal meeting on 19th December it was commented that “All the community indicators are poor” and that other data sets for local community decision making should be sought.

The lack of confidence shown by those present at the 19th December meeting was borne out by the feedback received to the Second Public Consultation draft report. The responses by consultees to the questionnaire sent out with the report included:

14 where the voting indicator was felt to be useful and 4 where it was not felt to be useful.

13 of the respondents agreed that this was the best way to measure this issue and 2 did not.

14 of the respondents felt that the identified direction of trend as inconclusive was appropriate and 2 did not.

There were a number of comments made about this indicator which added to the impression that measuring voter turnout was not a straightforward indicator of trend towards or away from sustainability:

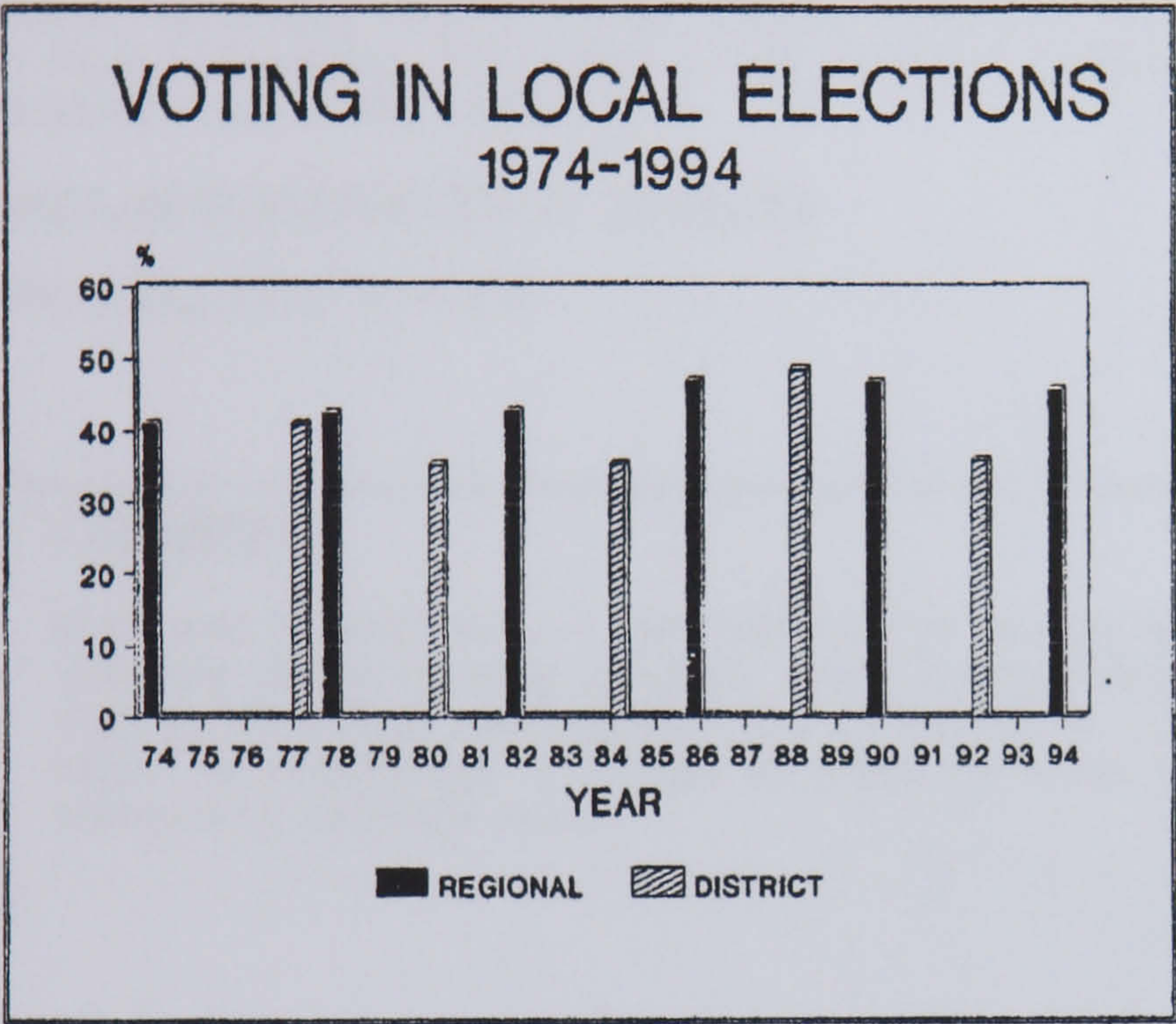
“Voting is a trend affected by other trends.”

“Some proposed indicators do not fit at all: Voting in Local Elections - a high turnout might imply a highly divided society. Low turnout may be a sign of satisfaction with the status quo or dissatisfaction with all the candidates. Measures of voter satisfaction would be better done by independent professional public opinion survey.”

“Voting - low level reflects low faith in existing structures.”

Figure 5.45a Voting in Local Elections indicator included in the First Public consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 I) Page 1

DECISION-MAKING



VOTING IN LOCAL ELECTIONS

Percentage of electorate
Voting in Regional
and District
Council Elections

DESCRIPTION

In a democratic society the level of voting in elections is an important measure of the extent to which people feel able to and actually do take part in decision-making. This reflects the strength of political and social institutions. High or increasing voter participation reflects a general trend toward sustainability. Low or decreasing voter turnout in elections can reflect a feeling of powerlessness to promote change.

Participation in local elections is of particular importance in the context of seeking sustainable development as local democracy offers the opportunity to "think globally and act locally".

ANALYSIS

Voting takes place alternately in Fife at both District and Regional Council elections. In general District elections tend to result in a lower turn out and the proportion who vote is strongly influenced by the number of Councillors who are returned unopposed (which in 1980 and 1984 District elections was 18 or nearly 20% of all councillors and related to the lowest turnout).

Voting in local elections since 1974 has been relatively consistent. In 1994, the most recent election, the percentage of the local electorate who voted was 45.7%, compared with 46.8% in the previous Regional election (1990).

EVALUATION

On balance the trend on this indicator is neither towards nor away from sustainability.

Figure 5.45b Voting in Local Elections indicator included in the First Public consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 1) Page 2

LINKAGES

Poverty, social and economic problems, such as crime and unemployment are linked in some cases to falling levels of voting - reflecting alienation, or simply a need to focus on individual coping strategies rather than participation in the wider community.

Within the context of this report this indicator is linked, in particular with Cervical Cancer Screening (health issues), Crime, Domestic Violence, Nursery Provision, Access to Public Transport, Responses to the Charter, Voluntary Groups, Community Grants, Disabled Access and Library Use.

DATA AND INFORMATION SOURCES

FRC (Corporate Services)

COMMENTS

Data and information on this indicator is readily available. As a single indicator there is some question about validity because of uncontested seats etc. which affect the overall level of response. Variations at a local level might be interesting if related to other variables or indicators (eg. unemployment, community schemes etc.).

“Voting in local elections - we regard this measure as concerning empowerment rather than sustainability.

Some comments were generally about people’s views on voting:

“ Voting: it’s the only answer.”

“Voting (a) better to ask those who don’t bother to vote; (b) it is long past time that voting was made compulsory as in other European countries.”

Other respondents made suggestions about what other issues should be looked at in relation to *Theme 11. All sections of the community are empowered to participate in decision making*:

“Decentralisation of decision making to the lowest practical level is a desirable trend which influences community involvement and encourages local social and economic initiatives which may be more efficient in use of resources. This project should investigate whether it is possible to measure this trend.”

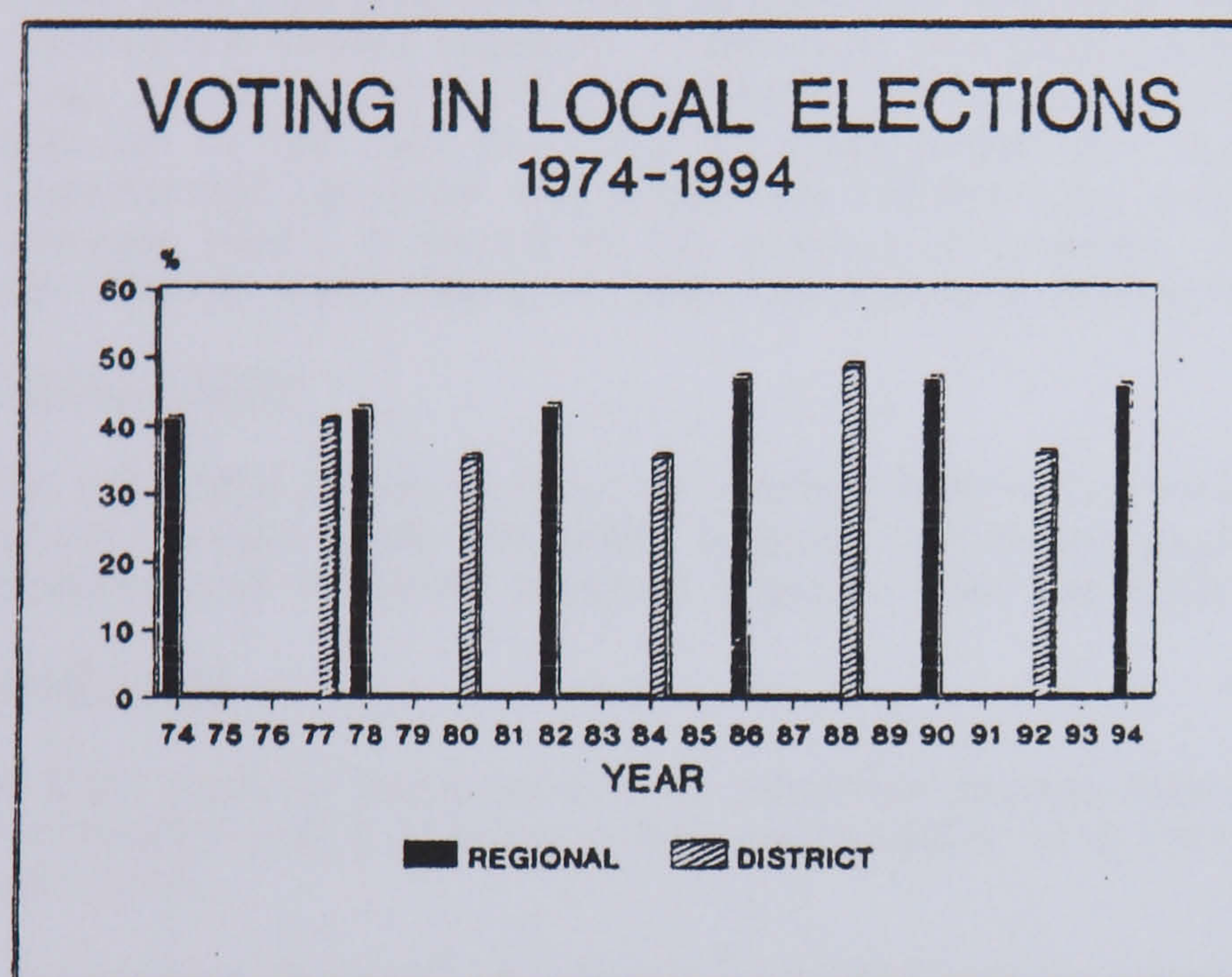
“General point re need for additional indicator:

Something to do with consultation. This can always be improved. Adverts in newspapers, libraries/shops and consulting with pressure groups (including political parties) or those in the know does not produce much consultation. This may be considered an advantage by some branches of local and national government! Real consultation also involves speaking to people on the street during the week and weekend, as well as seeking out those not found on the street. ...Perhaps a measure of the number and type of consultation exercises could be developed.”

At the 9th January SIWG meeting a general comment was made that “Community indicators still need more work”, although this task was not allocated to a named individual at the informal meeting later that day and no further progress was made until 14th February SIWG meeting. At this meeting it was agreed that it was not possible to find an appropriate data set for local decision making and Simon Hart was asked to prepare a ‘holding sheet’ for the final report (Figure 5.47). The dialectical research cycle map of the search for a Local Decision Making indicator is set out in Figure 5.48.

Figure 5.46a Voting in Local Elections indicator included in the Second Public consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 m) Page 1

LOCAL DECISION-MAKING



VOTING IN LOCAL ELECTIONS

Percentage of electorate
Voting in Regional
and District
Council Elections

Voting in local elections in Fife has remained constant.

DESCRIPTION

In a democratic society the level of voting in elections is an important measure of the extent to which people feel able to and actually do take part in decision-making. This reflects the strength of political and social institutions. High or increasing voter participation reflects a general trend toward sustainability. Low or decreasing voter turnout in elections can reflect a feeling of powerlessness to promote change.

Participation in local elections is of particular importance in the context of seeking sustainable development as local democracy offers the opportunity to "think globally and act locally".

ANALYSIS

Voting takes place alternately in Fife at both District and Regional Council elections. In general District elections tend to result in a lower turn out and the proportion who vote is strongly influenced by the number of Councillors who are returned unopposed (which in 1980 and 1984 District elections was 18 or nearly 20% of all councillors and related to the lowest turnout).

Voting in local elections since 1974 has been relatively consistent. In 1994, the most recent election, the percentage of the local electorate who voted was 45.7%, compared with 46.8% in the previous Regional election (1990).

The effect of the forthcoming re-organisation of local government (1996) will reduce the frequency of voting because of the introduction of a single-tier authority. The effect on voting levels will have to be kept under review.

EVALUATION

On balance the trend on this indicator is neither towards nor away from sustainability.

Figure 5.46b Voting in Local Elections indicator included in the Second Public consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 m) Page 2

Since 1991 the Regional Council has also promoted three programmes under the Community Grants Scheme. These are the Community Environmental Improvement Fund, the Community Planting Fund, the Nature Conservation Fund. These are in addition to the fund for Town Schemes which has been in operation since 1984. Considerable publicity and promotion efforts have helped the level of take-up on these schemes which, in terms of the number of projects, has increased steadily, although the take-up and funding on some individual schemes has fallen.

EVALUATION

On the basis of the limited available evidence on these joint indicators particularly in terms of time-scale the trend is inconclusive, although the increasing number of schemes and residents involved suggests that the trend should be towards sustainability.

LINKAGES

A high level of participation in voluntary groups may be associated with strength of community and a healthy social environment in a very wide range of sectors and activities.

Involvement in local environmental initiatives is probably linked to education, voting and participation in local political activities and to a degree with unemployment in terms of available time).

Within the context of this report, in social and economic terms, this indicator is linked with Cervical Cancer Screening (Health Awareness), Crime, Voting in Local Elections, Responses to Charter, Community Grants, Disabled Access and Library Use, whilst in environmental terms this indicator is linked, in particular, with Protected Habitats.

FUTURE STEPS

DATA AND INFORMATION SOURCES

FRC (Social Work)
FRC (ED & P)

COMMENTS

Information on this indicator is readily available but is relatively unco-ordinated. The high profile on quality of life for all sections of the community makes this indicator an interesting indicator of performance. Comparison with the results of the analysis of deprivation from the 1991 Census of Population and with the evaluation of DSS (Benefits Agency) data at a local level would be interesting. Research should also be extended to cover other voluntary activities outwith FRC (eg. Fife Furniture Stockpile).

In environmental terms this is a key indicator and is a good measure of local involvement in decision-making and implementation at a local level.

It must be said, however, that the role of the voluntary sector is not universally accepted as a measure of a healthy society. This is worthy of much deeper analysis.

Figure 5.47 Holding Sheet for Decision Making included in Annex of Sustainability Indicators for Fife 1995 Report (FRC, 1995a)

<div>DECISION-MAKING</div> <div>DEVELOPMENT OF AN INDICATOR ON THIS ASPECT IS STILL BEING CONSIDERED.</div>	
<div>BACKGROUND</div> <div><p>The extent to which people feel able to and actually do take part in decision-making about society and the environment is widely felt to be an important measure of the “health” of a democratic society. It reflects the strength of political and social institutions.</p><p>In the context of Agenda 21 participation in decision-making is important to the basic principle “think globally and act locally”. Decentralisation of decision-making to the lowest practical level has been suggested as a desirable approach which would promote community involvement in the development of sustainability by helping to encourage local social and economic initiatives, and the forthcoming re-organisation of local government may offer opportunities in this direction.</p><p>The important role of local voluntary bodies in supporting the social and economic vitality of Fife will also need to be given further consideration.</p></div>	
<div>NEXT STEPS</div> <div><p>A number of indicators suggested in the initial reports for the project, prepared by the Local Government Management Board, were considered, but were not found to be useful or relevant to local circumstances including Voting in Local Elections, responses to Fife Regional Council’s Charter for the Environment, and numbers of Voluntary Groups receiving grants. Investigations will continue to identify and measure a suitable indicator for this aspect.</p></div>	

Responses to the Environmental Charter Indicator

An indicator sheet was presented at the 7th November SIWG meeting (Figure 5.48). The graphic showed responses to the Fife Regional Council Charter for the Environment Initiatives in the years 1991-1994. The increase in listings of events and in responses to questionnaires “reflects a movement towards sustainability”. At the meeting the only recorded comments were around how to build in Local Agenda 21 work.

For the first consultation draft a clearer bar chart was used as a graphic to show the same data as the above. The text was largely unchanged but a Comments box had been added stating:

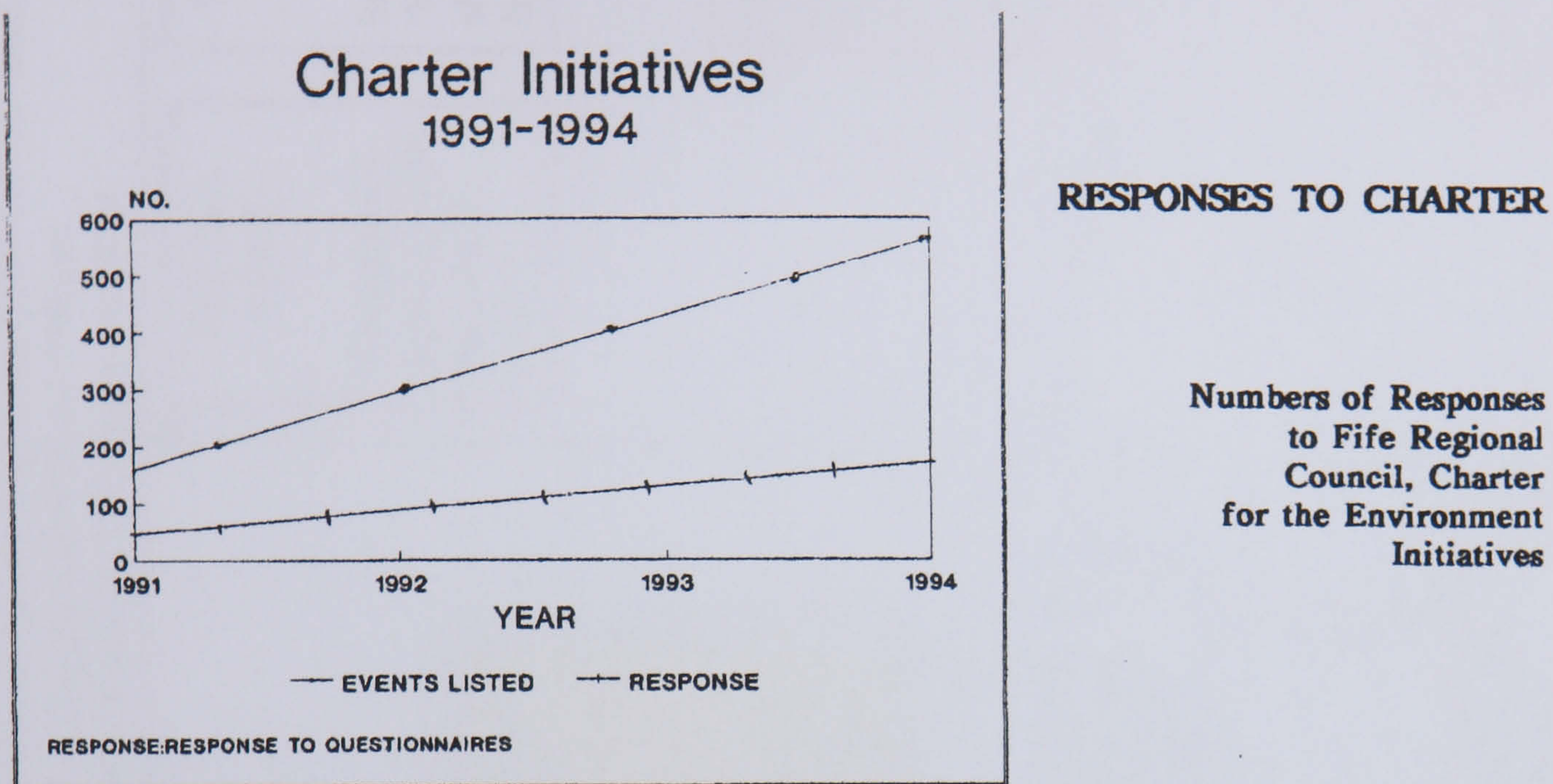
“The trends on this indicator have been derived from very limited data. It will be important to maintain more accurate and detailed records on responses etc if the indicator is to be developed.”

One specific comment was received to this indicator sheet:

“Some of the proposed indicators do not fit at all: Response to Charter Initiatives - There are many things going on which, for a variety of good reasons, will not interact with the charter initiative. Fife Region should, of course monitor this response to assess the ongoing value of the initiative; but response is not a good indicator of sustainability per se.”

At the 28th November SIWG meeting it was suggested that the trend line of events used in the earlier draft be brought back and the bar graph inserted alongside it. However the indicator does not appear in the second consultation draft. After this point it was treated as part of the group of community indicators that were preceived to be poor, but no specific action was taken. This process was mentioned in the ‘holding sheet’ on Decision Making included in the Sustainability Indicators for Fife 1995 report (see Figure 5.47 above). Figure 5.49 shows the dialectic map for this indicator process.

Figure 5.48 Charter for the Environment Responses indicator presented to the 7th Nov. SIWG (FRC, 1994 k)



DESCRIPTION

In a sustainable ^{society} ~~community~~ all residents should be able to take an active part in decision-making about environmental matters, at all levels, in order that their views and opinions are accurately reflected in the priorities of statutory and other bodies.

BACKGROUND

Fife Regional Council have taken the opportunity over the last four years, to try to involve Fife residents in decision-making about the environment. It is the Regional Council's intent, that public participation will continue to play an important role in definition of its environmental policies and priorities. The Environmental Events diary plays an important part in this process, providing opportunities for people who are interested to take part in environmental activities organised by a wide range of interest groups and organisations.

ANALYSIS

In the original consultation programme on the Charter for the Environment, in Spring 1990, the Regional Council received 34 written responses from individuals and bodies on the established list of consultees and a further 50 requests for Charter documents from people not on the consultation list. A further round of consultation is to be undertaken in Winter 1994/95 and a higher level of response is expected.

Two environmental questionnaires have been issued on specific issues. In 1991/92 a postal questionnaire to charter consultees received 48 replies (a 23.2% response rate) and during National Environment Week in May 1994 170 replies were received in effect an increase of over 350% in the number of replies.

In the Events Diary in 1991/92 a total of 161 events were listed in two issues, while, in 1994, 563 events were listed in three issues; in effect, another increase of 350%.

The satisfactory, and increasing, levels of response to Charter initiatives reflects a movement toward sustainability.

LINKAGES

Fife's Charter for the Environment is a key link between the local authority and the community. Through this channel information can be passed in both directions: the Events Diary and other documents list opportunities and initiatives: public responses to the Charter are both a measure of the success of the initiative and an important sources of new ideas and information from which the process can be developed.

DATA AND INFORMATION SOURCES

Fife Regional Council, ED & P, Environment Section

Figure 5.48 Local Decision Making Indicator:
Dialectic Research Cycle

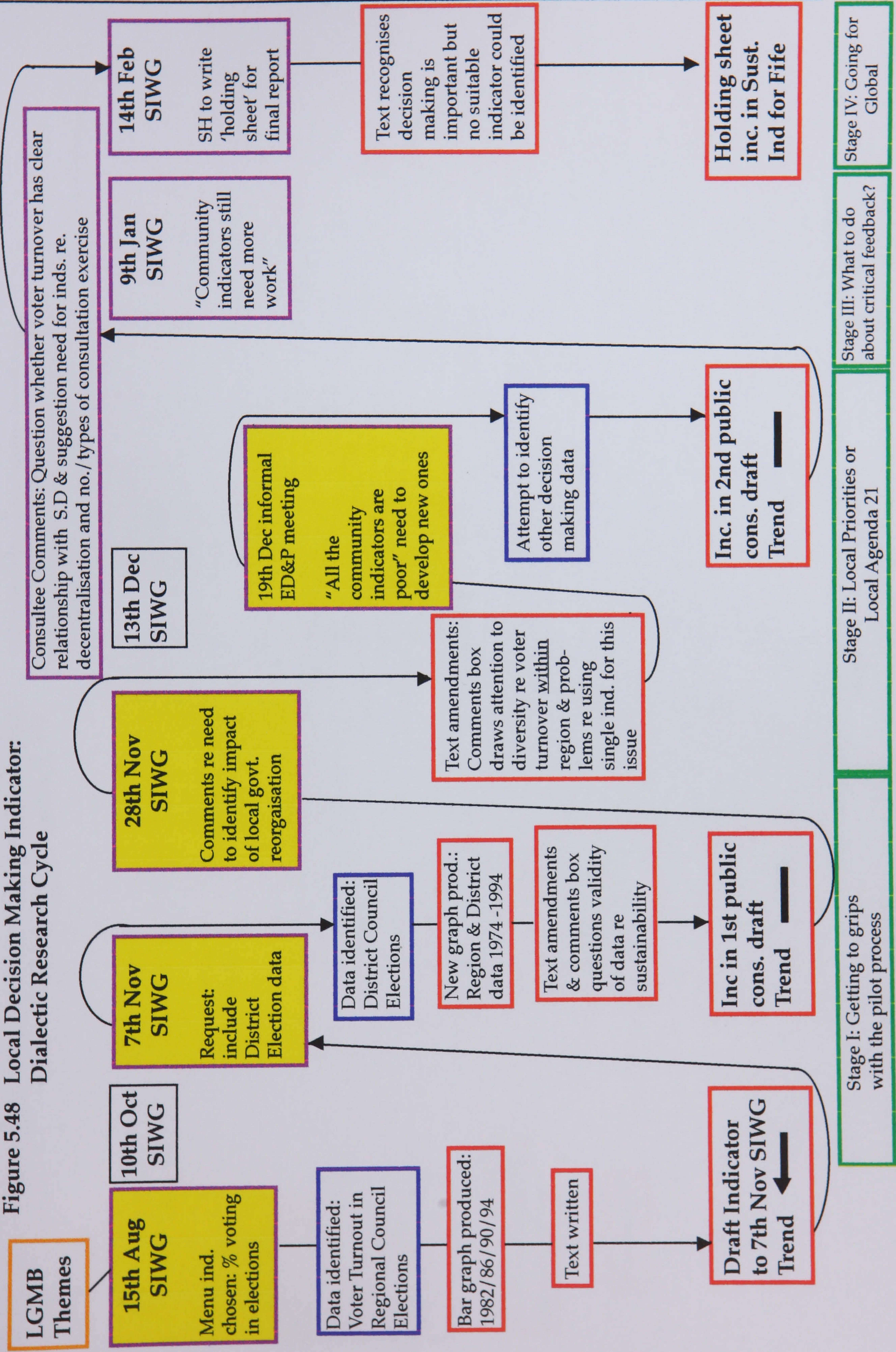
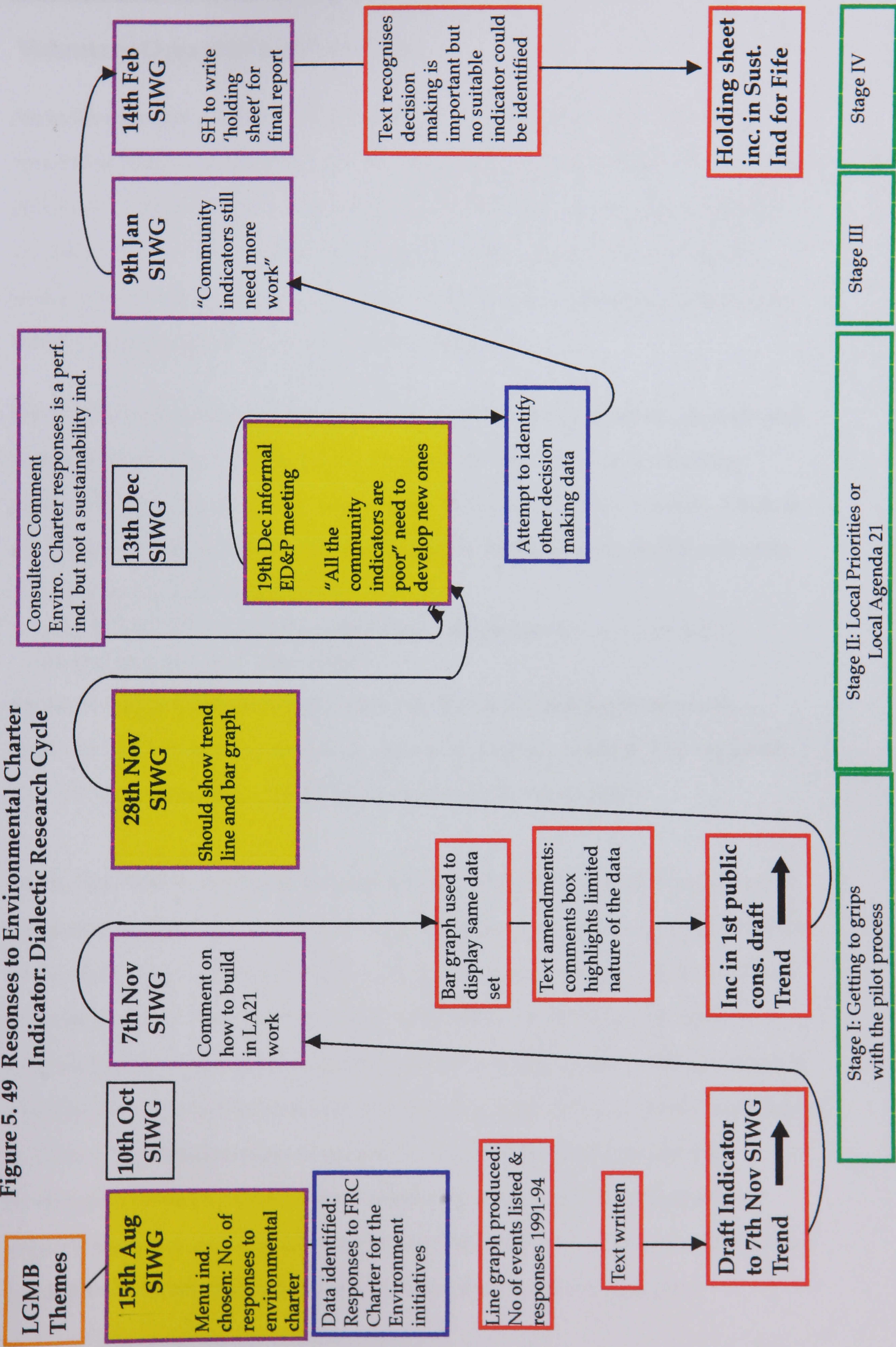


Figure 5. 49 Resonances to Environmental Charter
Indicator: Dialectic Research Cycle



Voluntary Organisations Indicator

An indicator sheet for Voluntary Organisations was presented at the 7th November SIWG meeting (Figure 5.50). Despite the absence of data for the chosen indicator - the number of voluntary groups - the trend was identified as being towards sustainability. The text of the indicator sheet focused on increased resource demands by voluntary organisations and new organisation starts. The SIWG meeting expressed a view that this was a good start.

For the first consultation draft report two graphics were presented: requests and grants of funding to voluntary organisations, and the number of voluntary organisations being funded by Fife Regional Council (Figure 5.51a & b). Because the number of organisations and the amount of funding being distributed were both increasing it was stated that:

“On the basis of the available evidence the trend on this indicator is probably towards sustainability.” FRC, 1994 1

Statements in the Comments box about the scope for looking at voluntary organisations in deprived areas and voluntary activities outwith Fife Regional Council reflect interest in the SIWG in exploring this area further.

At the 28th November SIWG meeting it was commented that the time series for the data presented was very short. The grant figures used in the graphic were for social work only and were rising due to ‘care in the community’ policies rather than the health of the voluntary sector as a whole. It was requested that information on community education was also included and an attempt made to develop the scope of this indicator. The negative aspects of a growth in numbers of voluntary organisations also needed to be covered. It was requested that information on environmental improvement grants currently presented as a separate indicator be incorporated into the Voluntary Work indicator. Efforts also needed to be directed at activity levels rather than quantifying inputs.

Figure 5.50 **Voluntary Organisations** indicator presented to the 7th Nov. SIWG (FRC, 1994 k)

VOLUNTARY ORGANISATIONS

Numbers of Voluntary
Groups

DESCRIPTION

The health of a sustainable society cannot be measured only in economic or money terms. Many of the most important initiatives are supported by people who take part for no financial reward: their commitment and interest is confirmed by this. In these terms, the well being of a region could be said to correlate with the number and diversity of voluntary activity.

BACKGROUND

Voluntary bodies, by their nature, rely on highly motivated volunteers to survive and development.

Demand for resources from voluntary bodies has been increasing year on year and this indicator would show a developing and inovatory voluntary sector.

Each year new groups emerge and are given "start-up" funding from Social Work, Economic Development, Equal Opportunities or Corporate Services (Policy Planning) these grant awards are recorded in Committee Reports and/or grant schedules and the number and type of new groups can be measured.

ANALYSIS

The vitality of the voluntary sector in Fife can therefore be measured on the basis of the number of new organisations, where they operate and which sector of the population benefit from their activity (e.g. young people, ethnic minorities, people with disabilities etc).

Social Work alone, contributes, annually some £1.2m to voluntary organisations. These groups are widespread throughout Fife and cater for a wide variety of social needs. On the basis of the available evidence the trend is probably towards sustainability.

LINKAGES

A high level of participation in voluntary groups is associated with strength of community and a healthy social environment in a very wide range of sectors and activities.

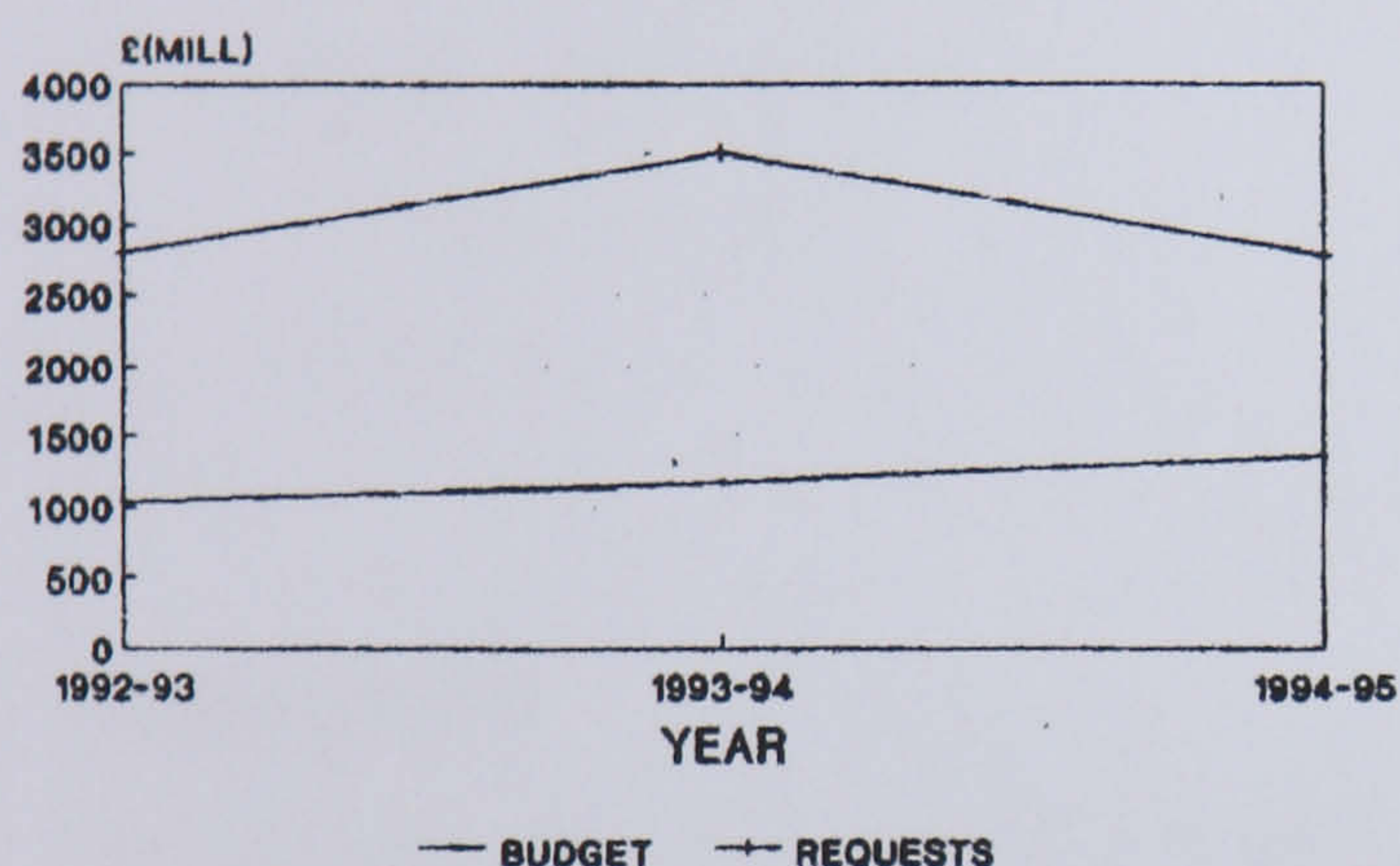
DATA AND INFORMATION SOURCES

FRC (Social Work)

Figure 5.51a Voluntary Organisations indicator included in the First Public consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 1) Page 1

VOLUNTARY WORK

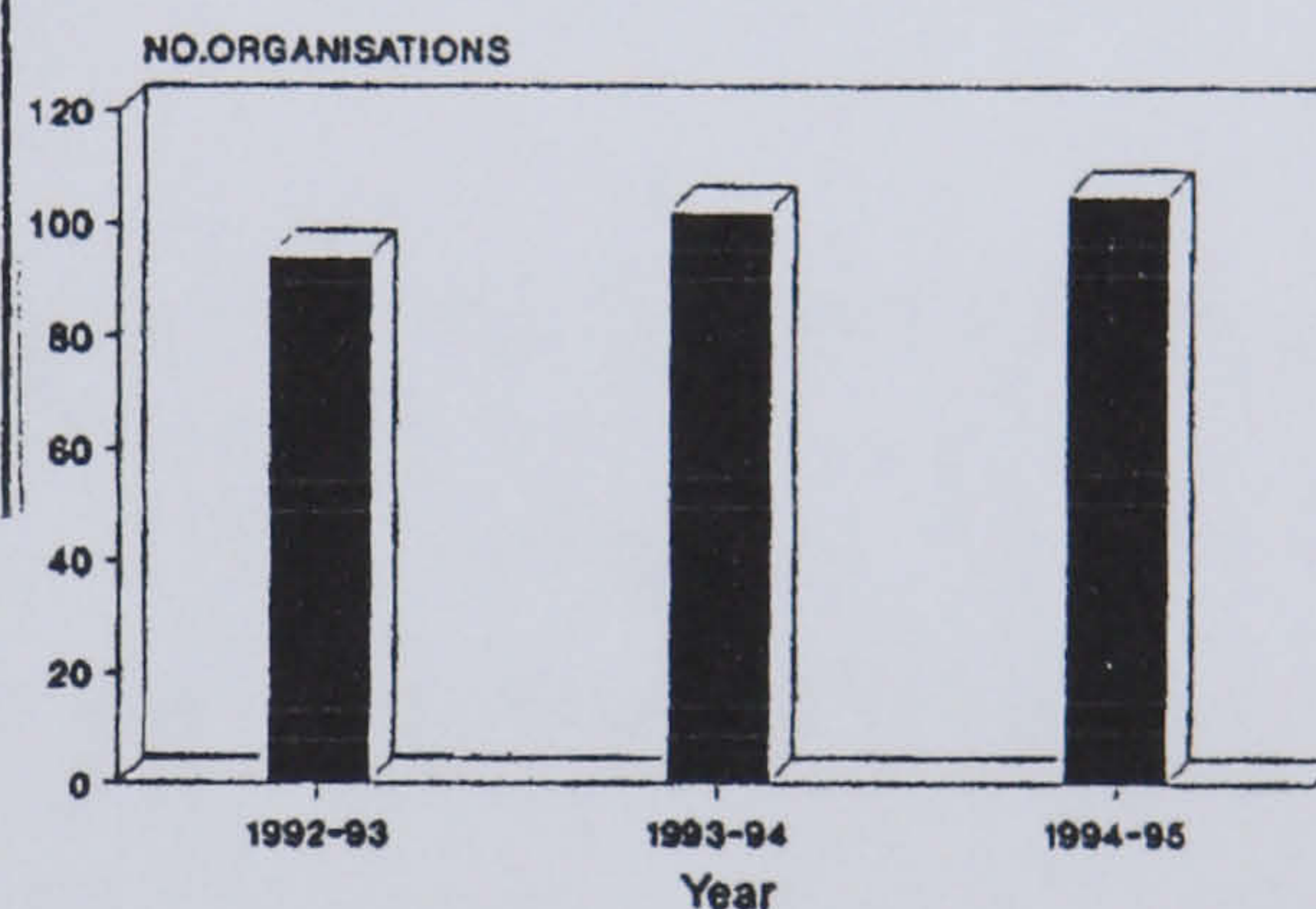
VOLUNTARY ORGANISATIONS GRANTS



VOLUNTARY ORGANISATIONS

Numbers of Voluntary Groups, Budget and Requests for Funding

VOLUNTARY WORK NO.OF ORGANISATIONS



DESCRIPTION

The health of a sustainable society cannot be measured only in economic or money terms. Many of the most important initiatives are supported by people who take part for no financial reward: their commitment and interest is confirmed by this. In these terms, the well being of a region could be said to correlate with the number and diversity of voluntary activity.

Voluntary bodies, by their nature, rely on highly motivated volunteers to survive and development. Fife Regional Council, in co-operation with Fife Health Board and the District Councils, runs a scheme for funding and supporting these organisations.

Demand for resources from voluntary bodies has been increasing year on year and this indicator shows a developing and innovatory voluntary sector.

Each year new groups emerge and are given "start-up" funding from Social Work, Economic Development, Equal Opportunities or Corporate Services (Policy Planning) these grant awards are recorded in Committee Reports and/or grant schedules and the number and type of new groups can be measured.

ANALYSIS

The vitality of the voluntary sector in Fife can be measured on the basis of the number of new organisations, where they operate and which sector of the population benefit from their activity (e.g. young people, ethnic minorities, people with disabilities etc). In the current year (1994/5) 105 bodies have applied for grants totalling £2.78m against a budget of £1.36m.

This represents an increase of 11 bodies (+12%) and £0.33m (32%) over the 1992/93 figure.

Figure 5.51b Voluntary Organisations indicator included in the First Public consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 I) Page 2

In the current year (1994/5) the breakdown of grant aid by category is as follows:

	%
Community Services for Older People	17.5
Community Services for Adults	14.0
Children and Families	19.0
Home Care Services	4.5
Offender Services	0.5
General	44.5
	<hr/> 100.0

EVALUATION

On the basis of the available evidence the trend on this indicator is probably towards sustainability.

LINKAGES

A high level of participation in voluntary groups is associated with strength of community and a healthy social environment in a very wide range of sectors and activities.

Within the context of this report this indicator is linked with Cervical Cancer Screening (Health Awareness), Crime, Domestic Violence, Voting in Local Elections, Responses to Charter, Community Grants, Disabled Access and Library Use.

DATA AND INFORMATION SOURCES

FRC (Social Work)

COMMENTS

Information on this indicator is readily available.

The high profile on quality of life for all sections of the community makes this an interesting indicator of performance.

Comparison with the results of the analysis of deprivation from the 1991 Census of Population and with the evaluation of DSS (Benefits Agency) data at a local level would be interesting.

Research should also be extended to cover other voluntary activities outwith FRC (eg. Fife Furniture Stockpile).

Part of this work was carried out for the second public consultation draft report and a considerable amount of the text was rewritten (Figure 5.52 a & b). The evaluation of the trend of the indicator was now much more reserved:

“On the basis of the limited evidence on these joint indicators particularly in terms of time scale the trend is inconclusive, although the increasing number of schemes and residents involved suggests that the trend should be towards sustainability.”

FRC, 1994 m

The Comments box also now carried a more cautious statement about the usefulness of these data sets as the basis of an indicator:

“In environmental terms this is a key indicator and is a good measure of local involvement in decision-making and implementation at a local level.

It must be said, however, that the role of the voluntary sector is not universally accepted a measure of a healthy society. This is worthy of much deeper analysis.”

FRC, 1994 m

The responses to the questionnaire circulated with the second consultation draft report were as follows:

16 who felt the Voluntary Organisation indicator was useful and 3 who did not;

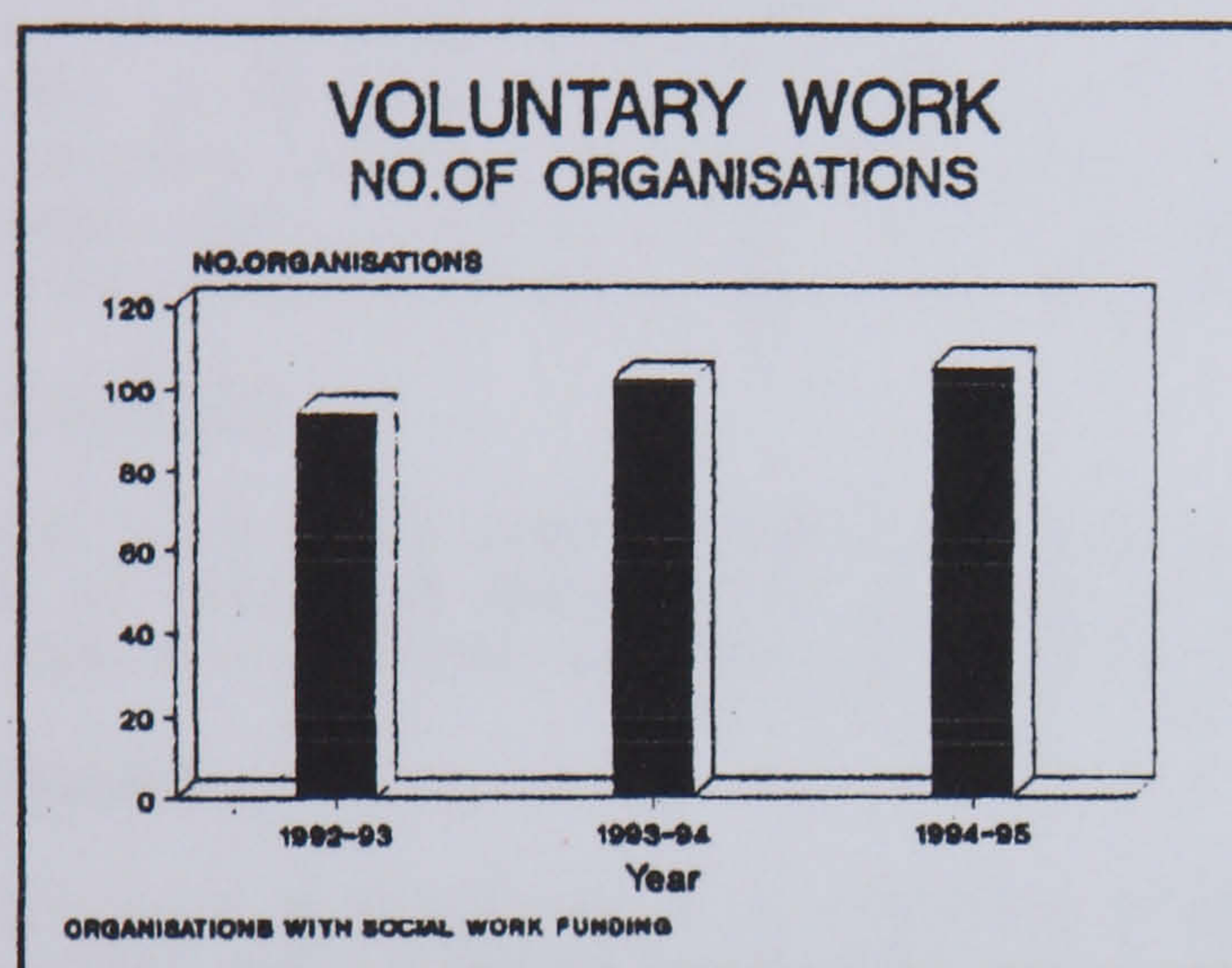
13 respondees felt that this was the best way to measure this indicator and 4 did not;

12 of the respondees felt that the identified direction of trend as inconclusive was appropriate and 5 who did not.

The volume and level of detail of the written comments on the voluntary organisations indicator was the highest for any of the indicators presented. This may well reflect the group of consultees used as many had clear opinions on the voluntary sector. Many of the consultees highlighted the pitfalls of using the current data sets as a way of assessing *Theme 11. All sections of the community are empowered to participate in decision making.*

Figure 5.52a Voluntary Organisations indicator included in the Second Public consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 m) Page 1

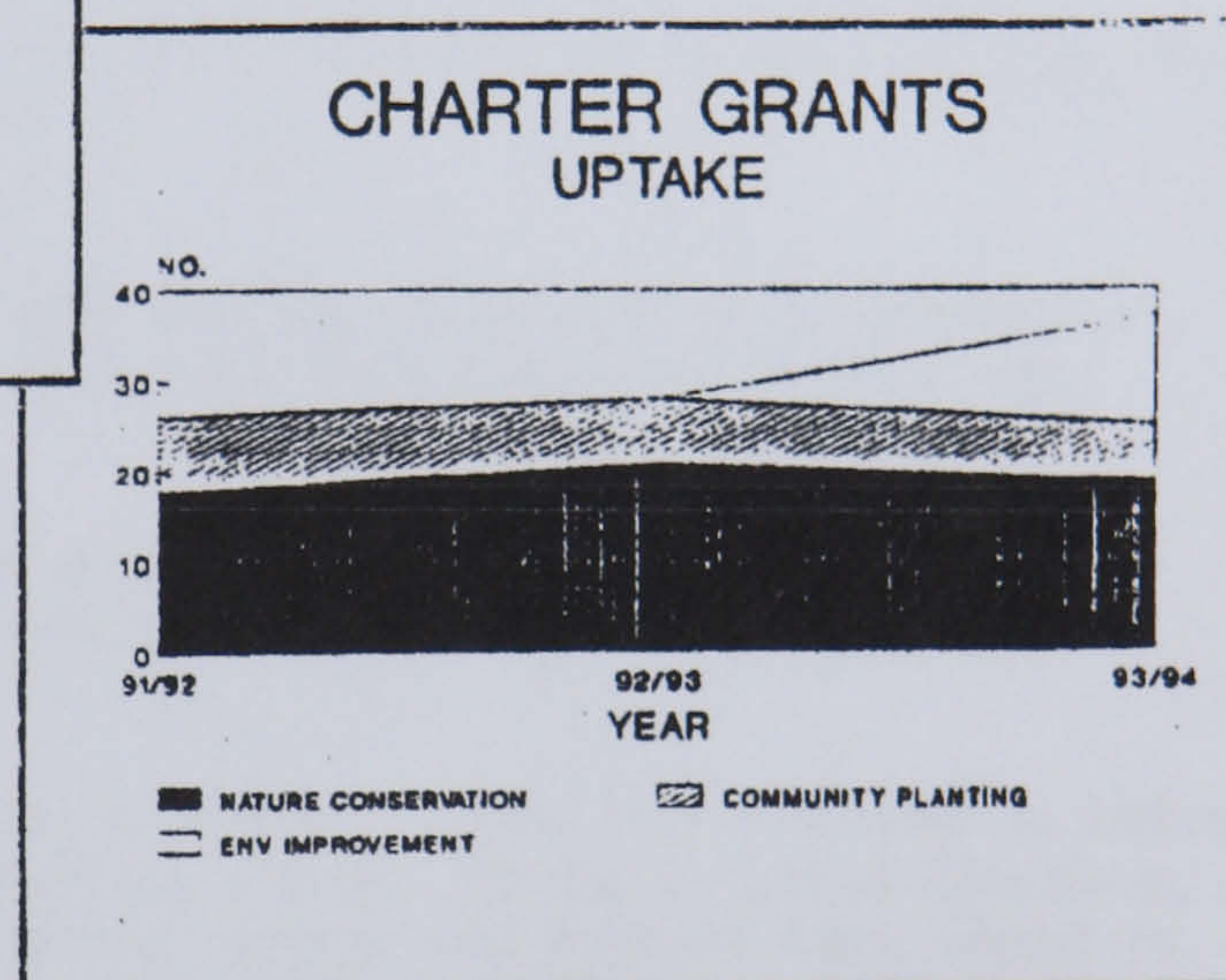
COMMUNITY ORGANISATIONS



There is an active, and expanding voluntary sector in Fife.

VOLUNTARY ORGANISATIONS

Funding and take-up of
Voluntary Groups,
and environmental
improvement schemes



DESCRIPTION

The health of a sustainable society cannot be measured only in economic or money terms. Many of the most important initiatives are supported by people who take part for no financial reward: their commitment and interest is confirmed by this. In these terms, the well being of a region could be said to correlate with the number and diversity of voluntary activity. Voluntary bodies, by their nature, rely on highly motivated volunteers to survive and develop although, in many cases, paid workers are employed to co-ordinate activities. Fife Regional Council, in co-operation with Fife Health Board and the District Councils, runs a scheme for funding and supporting these organisations. Demand for resources from voluntary bodies has been increasing year on year and this indicator shows a developing and innovatory voluntary sector. Each year new groups emerge and are given "start-up" funding from Social Work, Economic Development, Equal Opportunities or Corporate Services (Policy Planning) these grant awards are recorded in Committee Reports and/or grant schedules and the number and type of new groups can be measured.

A distinct though related area of activity is the Regional Council's initiative under the Charter for the Environment, Agenda 21 programme. In a sustainable society towns and other communities must be pleasant and worthwhile places in which to live, there are considerable benefits to be derived from enabling schemes to proceed which implement specific improvements at a community level. To further this policy initiative the Regional Council has implemented a number of specific programmes, the principal purpose of which is to aid local schemes, by providing funding for local projects.

ANALYSIS

The vitality of the voluntary sector in Fife can be measured from the number of new organisations, where they operate and which sector of the population benefit from their activity (e.g. young people, ethnic minorities, people with disabilities etc). In the current year (1994/5) 105 bodies have applied for grants totalling £2.78m against a budget of £1.36m. This represents an increase of 11 bodies (+12%) and £0.33m (32%) over the 1992/93 figure.

Figure 5.52b Voluntary Organisations indicator included in the Second Public consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 m) Page 2

Since 1991 the Regional Council has also promoted three programmes under the Community Grants Scheme. These are the Community Environmental Improvement Fund, the Community Planting Fund, the Nature Conservation Fund. These are in addition to the fund for Town Schemes which has been in operation since 1984. Considerable publicity and promotion efforts have helped the level of take-up on these schemes which, in terms of the number of projects, has increased steadily, although the take-up and funding on some individual schemes has fallen.

EVALUATION

On the basis of the limited available evidence on these joint indicators particularly in terms of time-scale the trend is inconclusive, although the increasing number of schemes and residents involved suggests that the trend should be towards sustainability.

LINKAGES

A high level of participation in voluntary groups may be associated with strength of community and a healthy social environment in a very wide range of sectors and activities.

Involvement in local environmental initiatives is probably linked to education, voting and participation in local political activities and to a degree with unemployment in terms of available time).

Within the context of this report, in social and economic terms, this indicator is linked with Cervical Cancer Screening (Health Awareness), Crime, Voting in Local Elections, Responses to Charter, Community Grants, Disabled Access and Library Use, whilst in environmental terms this indicator is linked, in particular, with Protected Habitats.

FUTURE STEPS

DATA AND INFORMATION SOURCES

FRC (Social Work)
FRC (ED & P)

COMMENTS

Information on this indicator is readily available but is relatively unco-ordinated. The high profile on quality of life for all sections of the community makes this indicator an interesting indicator of performance. Comparison with the results of the analysis of deprivation from the 1991 Census of Population and with the evaluation of DSS (Benefits Agency) data at a local level would be interesting. Research should also be extended to cover other voluntary activities outwith FRC (eg. Fife Furniture Stockpile).

In environmental terms this is a key indicator and is a good measure of local involvement in decision-making and implementation at a local level.

It must be said, however, that the role of the voluntary sector is not universally accepted as a measure of a healthy society. This is worthy of much deeper analysis.

“Voluntary Organisations - although this is a good indicator there are problems with it. A thriving voluntary sector is always a good thing. However if there is a change in emphasis between local/national government and the voluntary sector the indicator becomes less useful, until stability is achieved (if it ever is). This indicator is also affected by disillusionment with politicians. People who think that politicians are useless will tend to do something themselves.”

“Voluntary organisations (a) volunteers are not always there through first choice most would prefer to be ‘paid’ workers; (b) less people are volunteering now as they feel the government as shifting the burden of responsibility to them.”

“Voluntary organisations: define.”

“May need to take number of members into account.”

“It’s always necessary in this day and age.”

“It is more and more difficult to get people involved with voluntary organisations.”

“Voluntary Work: I am interested that you feel the trend on this indicator is probably towards sustainability. I feel that the number of new organisations which are currently applying for grants etc. are quite often a reflection of the times in which we live. The public sometimes perceives the voluntary side as providing very useful backups and facilities which are not provided by local authorities, health boards, etc. From that point of view I would feel that the more voluntary organisations there are starting up the more this indicator is probably a move away from sustainability.”

“As I mentioned when we spoke I found the information relating to the project very interesting. However, I would like to query some of the points relating to the indicators for voluntary work.

Throughout the section there seems to have been an assumption that voluntary organisations = volunteers. In 1994/5, Fife Society for the Blind will receive around (pounds) 215K in grants from FRC and Fife Health Board, and spend some (pounds) 240K on staff salaries. Volunteers are an important aspect of our work. However, the idea that “*Voluntary bodies, by their nature rely on highly motivated volunteers to survive and develop*” does not recognise the very diverse character of voluntary organisations.

This diversity might be illustrated as follows:

a victim support group is formed in X to help victims of violent crime

an organisation is set up which is aimed at encouraging young people in Y to take an interest in nature and local wildlife

Both of these new bodies will result in increases in the indicators for grant requests and number of voluntary organisations, and yet they cannot both correlate to “*..Strength of community and healthy social environment...*” (In fact the draft report recognises the “linkage” between voluntary groups/domestic violence).

As well as this sort of diversity of purpose, the assertion that demand for resources equates to a “developing and innovatory voluntary sector” may be rather simplistic. Pressures on (and even failure of) statutory service providers, reductions in voluntary income and increasing costs can all push demands for grants to progressively higher levels, possibly reflecting attempts to survive rather than develop.

Perhaps the indicators need to be split according to those organisations that are responding to social needs and those that hope to enhance social and cultural development.

I’m sorry that I cannot come up with any concrete alternative indicators. Arguably the ‘third sector’ is more diverse than the private sector, which at least has the pursuit of profit as a prevailing link. You will no doubt be aware of the difficulty in comparing one commercial organisation with another, and many of the ratios and measures used there have money as a common denominator.

It may be that I have completely missed the point in that you are trying to assess literally the amount of ‘voluntary work’, under the assertion that it is a ‘good thing’ per se. I could see how this would make sense from the point of view that in a society that is sufficiently developed, people might feel they are in a position to “put something back”. If this is what you are trying to measure, then the indicators chosen certainly won’t do it for you. I would imagine that most voluntary organisations would be able to provide some sort of data on volunteer numbers/hours worked, but this would encompass a far greater range than those bodies which receive grants from FRC. Furthermore, such figures would need careful interpretation - not in the least due to some level of volunteering/unemployment link.”

“However ambivalent people are about voluntary work Ladybank would be greatly impoverished without it.”

“Volunteers are often the same people in different organisations. Lots of them are pensioners.”

“We are surprised at your selection of ‘Voluntary Organisation’ indicators. One could argue that a vigorous VO is less likely to ask for a grant than an ailing one, and other factors are probably more important. It is clearly false to say that the vitality of the voluntary sector can be measured by the number of new organisations; it is their continued existence after a couple of years that indicates, along with other factors, their vitality. It is relatively easy to start a new VO.”

“Voluntary Work - especially in NE Fife - many voluntary groups have a very large, very vocal membership who are not willing to get their hands dirty - this includes conservation groups. Very difficult to gauge effectiveness of groups. Also some groups are supported by other bodies or organisations. Unemployed individuals may also be very willing but unable to find transport.”

“Voluntary Organisations - Cutbacks force people to work unpaid in important work no longer funded. Increase in voluntary work can reflect increased need (unsustainable) or decrease in Government/local authority assistance.”

“Voluntary Organisations - It is not clear whether a measurement of the activities of the voluntary sector would provide any definitive view of a trend towards/away from sustainability (except in the case of environmental organisations such as Dunfermline FoE of course!)

As an extension of the voluntary sector, which is driven by private individuals and groups and not government bodies, could be a measure of empowerment; particularly a group trying to change an aspect of the community.

Alternatively, an increase in voluntary organisations could be regarded as a trend away from sustainability where the activity would be better undertaken by a local council or other public body.

The activities of voluntary organisations is not a measure of the total voluntary/unpaid work which exists in the community e.g. carers.”

“As being disabled through deafness I wish there was more done in Fife alone for people with disabilities. I now have a dog for the deaf and rely on Honey a lot to give me the quality of life I need as without her I would live a lonely and terrifying life. As the dog is 2,500 pounds to train we need a lot of fund raising done as we get no government help at all.”

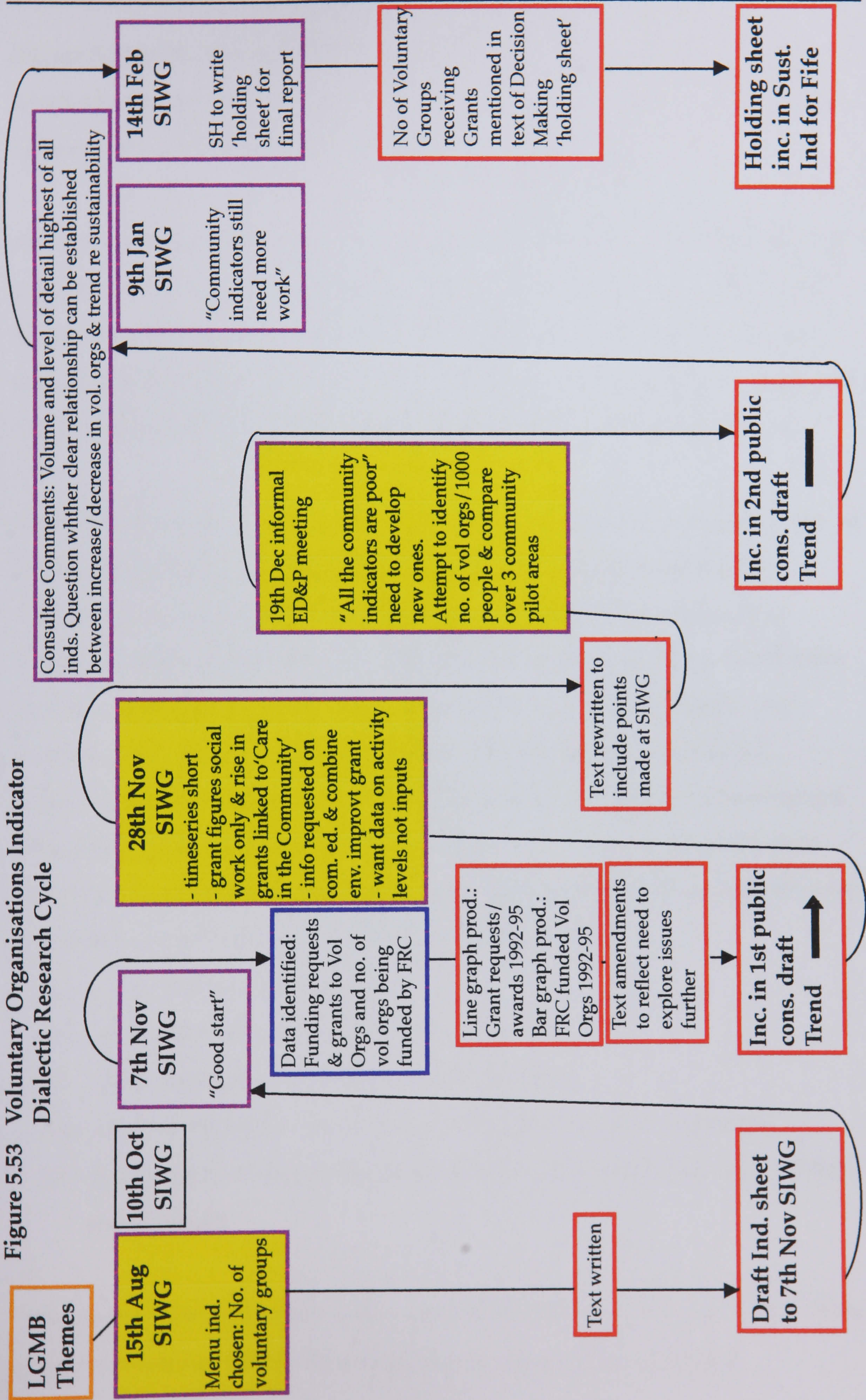
By mid-December, in parallel with the production of the second consultation draft report it was already being recognised by pilot staff members that “all the community indicators were poor”. A European report on voluntary sector activity, which identified the number of voluntary organisations per 1000 population in different communities was seen as a possible way forward with this indicator. It was suggested that the patterns of voluntary organisations in the three community pilot areas be identified to test out this model locally. Although a clear statement was made about the “need to devise new indicators” in practice no further progress was made on this indicator and it was only mentioned in the Decision Making Annex of the Sustainability Indicators for Fife 1995 report as an area still needing further work. The dialectical research cycle map for this indicator is shown in Figure 5.53.

Community Economic Development Holding Sheet

By early December it was becoming apparent that the indicators selected from the LGMB menus to address *Theme 11. All sections of the community are empowered to participate in decision making* were problematic. On the 6th December, when I was reviewing the balance of the indicators proposed for inclusion in the Second Public Consultation draft of the Sustainability Indicators for Fife Report (Case Story Three page 304) the idea of developing an indicator for Community Economic Development initiatives arose. A similar indicator had been presented as an LGMB menu choice ‘Numbers participating in Local Economic Trading Systems (LETS), community businesses, etc.’ but this was presented under *Theme 6 Everyone has the opportunity to undertake satisfying work in a diverse economy. The value of unpaid work is recognised, whilst payments for work are fair and fairly distributed.*

A sheet for this indicator was included in the Second Public Consultation draft of the Sustainability Indicators for Fife Report under the title ‘Local Economic Development Initiatives’ although no data had been secured at that stage

Figure 5.53 Voluntary Organisations Indicator Dialectic Research Cycle



Stage I: Getting to grips with the pilot process	Stage II: Local Priorities or Local Agenda 21	Stage III: What to do about critical feedback?	Stage IV: Going for Global
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(Figure 5.54 a&b). The indicator sheet was not mentioned on the questionnaire which accompanies the Second Public Consultation draft Report and there were no specific comments submitted with regard to this indicator.

As I had an active interest in LETS and related organisations I was keen to see an indicator on this issue included in the report. However, I was also aware of the limitations of simply counting the number of LETS systems in the area (2 at that time, St Andrews LETS and North East Fife LETS) or even counting the number of LETS members, as this would say nothing about the level of trading activity.

I met with the Manager of Community Business Fife and with a member of the Fife Regional Council Economic Development staff with responsibility for Community Economic Development initiatives. I was provided with a lot of written information and had several lengthy discussions about the most effective way of quantifying 'sustainable development' with regard to this issue. Our conclusion was that to simply count the number of initiatives would be too simplistic. However, to make a more sophisticated evaluation of the contribution of such initiatives would require baseline data that simply was not available at that time. One example of this is quantifying the contribution of a community run 'out of school care' initiative. Should this be counted:

- (a) as one community business;
- (b) on the basis of how many staff it employs;
- (c) on the basis of how many hours a year it runs;
- (d) on the basis of the number of childcare hours per year it provides;
- (e) in terms of how many parents are able to work because they have reliable and childcare.

Community businesses, credit unions and LETS systems also differed in scale - from small volunteer run LETS with no staff or premises to large community

Figure 5.54a. Community Economic Development Indicator text included in the Second Public Consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 m) Page 1

LOCAL DECISION-MAKING

LOCAL ECONOMIC DEVELOPMENT INITIATIVES

QUANTIFICATION OF THIS INDICATOR IS
-- STILL BEING INVESTIGATED.

DESCRIPTION

A sustainable society will have well-organised systems involving all sections of the community in a wide range of initiatives. Local economic development can achieve a range of positive outcomes, from establishing the conditions in which employment can be created to help people take advantage of new opportunities. Such involvement can also help to build the basis for community activity and make a valuable contribution to civic and social life. Local economic development is mainly concerned with addressing inequality within the economy arising from low income, employment experience, educational background, gender or race. Initiatives focus on improving access to economic opportunity, and identifying new routes into the labour market.

ANALYSIS

Local economic development forms part of the Regional Council's Economic Development Strategy. Fife Enterprise, local Enterprise Trusts, and the three District Councils have related areas of activity, and there is liaison between the bodies concerned. As far as the Regional Council's strategy is concerned work is being undertaken in five key areas - Abbeyview, Dunfermline; the Kirkcaldy; and Levenmouth. Community workers have been appointed for each of these areas.

EVALUATION

Although monitoring has been established as an essential part of the programme no data is yet available to determine any trend towards or away from sustainability.

LINKAGES

Active participation in local economic initiatives is undoubtedly linked with the social and economic health of communities and with active involvement in local activities, as well as voting in local elections. It is also universally associated with crime and other indications of social stress.

Figure 5.54a. Community Economic Development Indicator text included in the Second Public Consultation draft of the Sustainability Indicators for Fife Report (FRC, 1994 m) Page 1

In the context of this report this indicator is linked with Average Weekly Earning, Benefits, Long-Term Unemployment, Crime, Voluntary Organisations, Community Grants and Voting in Local Elections.

FUTURE STEPS

Development of the Regional Council's Economic Development Strategy

DATA AND INFORMATION SOURCES

FRC (Economic Development and Planning)

COMMENTS

The actual and potential role of countryside services in promoting local environmental initiatives, is important.

businesses such as the Fife Furniture Stockpile with 11 staff and a cash turnover of tens of thousands of pounds.

As a data set could not be agreed, but the issue was still considered to be important it was put into the Sustainability Indicator for Fife report as a 'holding sheet' (Figure 5.55). The short research cycle diagram for the Community Economic Development indicator process is set out in Figure 5.56.

Seeking Indicators of Community Decision Making: Reflections

The preceding 30 pages have illustrated the amount of work that was invested in securing appropriate indicator for Community Decision Making issues. The fruits of this work, in terms of the Sustainability Indicator for Fife report were two

Figure 5.55 Holding Sheet for Community Economic Development included in Annex of Sustainability Indicators for Fife 1995 Report (FRC, 1995a)

COMMUNITY

ECONOMIC

DEVELOPMENT

BACKGROUND

Community economic development initiatives work to meet social and environmental needs, rather than simply judging their performance in terms of economic returns.

Initiatives currently running in Fife include:

Community businesses, such as Heatwise Fife, which has fitted basic draught proofing and insulation to 13,600 homes in Fife in the past 4 years; Fife Furniture Stockpile - which refurbishes and redistributes second hand furniture; community cafes and a community store; after-school clubs; and a disabled transport service.

Credit Unions - community owned savings and loan organisations that charge much lower rates of interest than commercial sources of credit.

Local Exchange Trading Systems (LETS) - community owned local currency systems through which goods and services can be traded without needing cash.

SUSTAINABILITY ISSUES

What food we buy, who we can borrow money from and on what conditions, whether we can earn a living and what conditions we have to work under to do so are all sustainability issues. Community economic development initiatives have an important role in enabling people to make decisions in all of these areas and to participate in decision making about issues which affect them.

Community economic development initiatives can help people gain access to basic needs and can, therefore, improve equity of access.

Community stores and food cooperatives provide local supply of low-cost food. After schools clubs may enable parents to work when otherwise they may be precluded from doing so due to child care commitments. LETS enable people to buy a wide range goods and services requiring little or no cash, and enable people to earn local currency at times and in ways which are convenient to them rather than requiring fixed working hours, thus making the system accessible to those who cannot work fixed hours.

Some community businesses combine social and environmental benefits. The work of Heatwise Fife has improved the comfort and affordability of 13,600 homes through improving draught proofing and insulation. This also saves fuel and reduces global environmental impacts of energy use. Fife Furniture Stockpile enables people to get second-hand goods that they may not otherwise be able to afford, and saves resources.

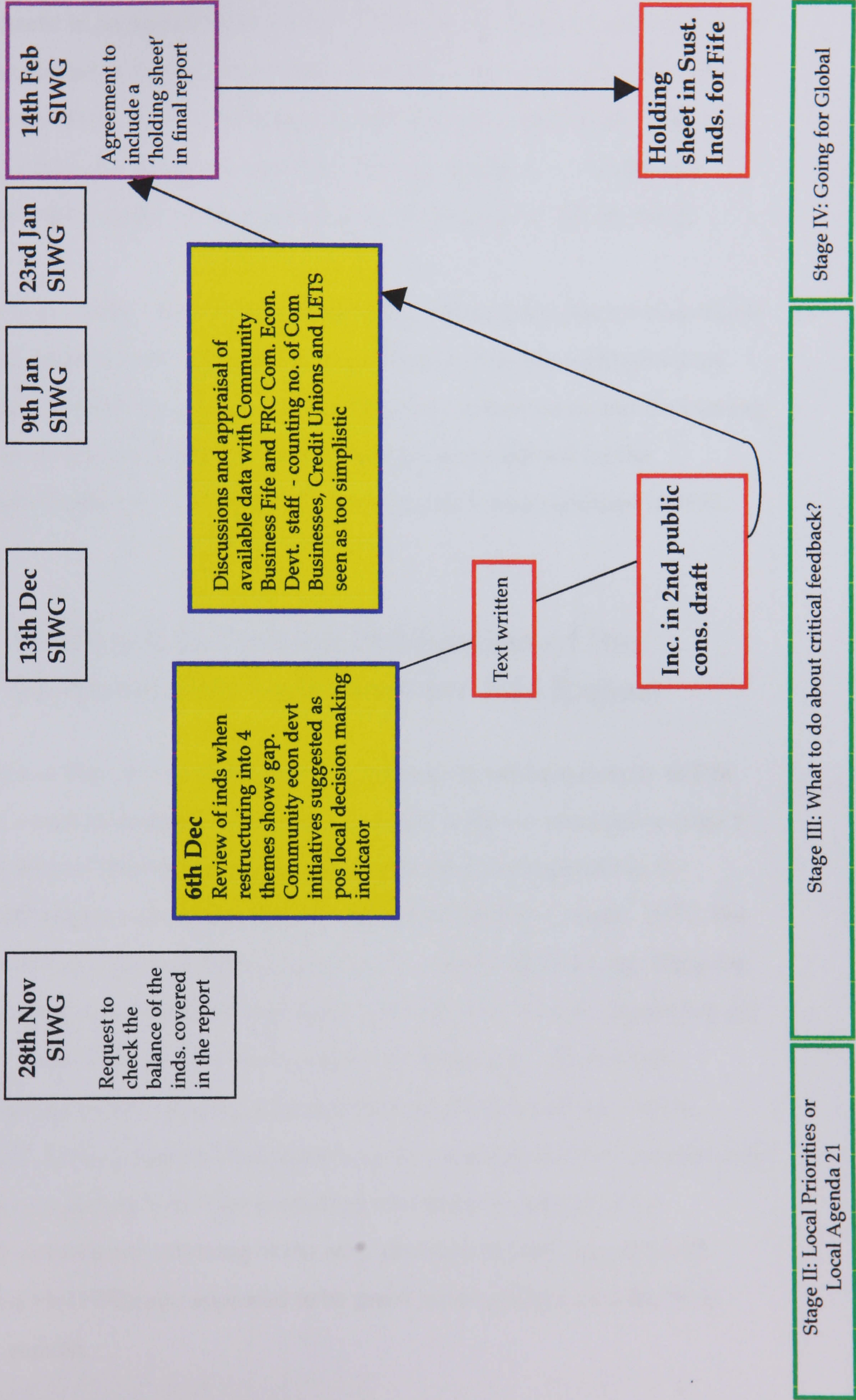
Community economic development initiatives also look to the future. By maintaining economic activity in the community for the benefit of the community, by encouraging mixing of people of a wide range of ages, and by encouraging the sharing of skills and resources the ability of future generations in that community to meet their own needs should be enhanced.

NEXT STEPS

The principal difficulty with identifying an indicator for this aspect has been the short period over which many of these schemes have been operating. Liaison will continue with all agencies concerned to identify the best means by which the impact of, and progress on these initiatives can be measured and monitored in terms of sustainability.

Figure 5.56

Community Economic Development Indicator:
Dialectic Research Cycle



'holding sheets' in an Appendix at the back of the report. This investment of effort could be attributed to the weakness of the indicators offered on this topic in the LGMB menus. While this was clearly a problem, it was a feature of wider and continuing difficulties faced in identifying effective indicators of 'sustainable community' (see Chapter 6.2 for Local Quality of Life Counts (DETR, 2000)).

Sections 5.1-5.6 of this Chapter have offered rich, and lengthy, descriptions of how the crafting of individual indicators was undertaken. This has highlighted the interlinkages between the development of individual components and the framing of the whole Indicators Report. Section 5.7 will present feedback on the Sustainability Indicators for Fife Report received after it was published in 1995.

5.7 Feedback Following Publication of the Sustainability Indicators for Fife Report

The majority of the written feedback on the 1995 report was sent directly to Fife Regional Council in response to the specific request to do so contained on page 8 of the final report. These were subsequently included as an appendix in the October 1997 edition of Sustainability Indicators for Fife (Fife Council, 1997). The comments included general statements about the report and views regarding the presentation, the need for targets and scope for development of the report (set out in Box 5.2). There were also comments on specific indicators. The full 1997 summary of comments including those on individual indicators is set out as Appendix 6C of this Chapter. The comments were on the whole very positive. It is interesting to note that two of the consultees who had been critical of the sustainable development framing of the early drafts of the 1995 report (Mr D Hanson and Mr D Whyms) appeared to be much more satisfied with the Final published version.

Box 5.2 Comments Received by Fife Regional Council Staff in Response to the Sustainability Indicators for Fife 1995 Report

General

“The report is extremely interesting and very well produced in what must have been a very tight time schedule. Very impressed by the emphasis placed on equity issues. Also the clear benefits of clustering individual indicators into meaningful groups, thus avoiding some of the perils of aggregation.

Environmentally Sustainable Systems (Counsultants)

“Welcome the tone and content of the report. The report is an excellent first step.”

Mr D Hansen

“The report makes interesting reading and provides a useful if sometimes provocative basis from which to consider further the current sustainability debate.”

Oxford Brookes University

“It should be widely disseminated to stimulate discussion among political representatives, opinion formers, voluntary organisations, and the general public as a whole.”

Director of Social Work (FRC)

[FRC Response: “Agreed. 1000 copies of the first edition of the report have already been distributed amongst the general public, Community Councils and interest groups, education establishments, the private sector and government bodies and organisations. In addition the report, and other information about the Indicators Project, has been distributed to many organisations outwith Fife.”]

“Perhaps sustainability ‘seminars’ might be held in local communities beyonds those of Benarty, St Monans and Glenrothes to explore the issues raised by the report and to define indicators of particular relevance to each community.”

Director of Social Work (FRC)

[FRC Response: Noted. The three communities identified are pilot areas; it is intended that the lessons learnt in each could be applied elsewhere in Fife.]

“The indicators strongly, and crucially demonstrate the interconnectedness of economic planning, community development, environmental protection and service delivery at the strategic level.”

Director of Social Work (FRC)

[FRC Response: Noted. It was considered essential that the linkages between social, economic and environmental issues and specific indicators be made clear.]

“Further development of the macro level indicators and their linkage with specific local concerns is awaited with interest”

Director of Social Work (FRC)

[FRC Response: Noted. It is intended that these will be developed as part of an ongoing process.]

“Very much welcome the Council’s efforts in developing indicators and its early commitment to Local Agenda 21. Encouraged by efforts to seek views of the local community and national bodies. Indicators reflect community values and objectives.”

Royal Society for the Protection of Birds

“Impressed at the Council’s approach to this issue - to see that the Council has prioritised it and is addressing it in a systematic way. The report itself demonstrates the rigour and quality of planning and efforts that have gone into it.”

Mr D Whyms

Presentation

“The presentation of the final version is excellent and helps to make a fairly complex subject fairly easy to understand.”

Director of Personnel and Management Services (FRC)

“The report is well presented.”

Director of Social Work (FRC)

Targets

“Indicators are of little value without targets for their maintenance, enhancement or recovery . The government through the UK Biodiversity Action Plan is currently developing targets for priority species and habitats. LA21 needs to adapt the national targets to local circumstances. This process together with the co-ordination and implementation of policies and actions to achieve targets is best pursued through a biodiversity action plan or nature conservation strategy. We would strongly urge the preparation of such a plan.”

Royal Society for the Protection of Birds

Observations

“What in the recent past were close knit communities of people with mostly local employment, local ties, and a shared investment in the future of their own community, are now, more often just loose knit associations for essentially unrelated people with their only common feature being that of residence, however temporary somewhere in the locality.

Generalisation are rarely found to provide the visible answers to the diverse problems of what often are locally specific issues of real people and their own communities. Therefore, whilst accepting the lessons of experience but not taking the validity of comparatives for granted each individual community (locality) requires anew its own full and interrelated appraisal to be undertaken.

With more precise information and also a restructured focus, the problematical area of devising multiple, appropriate and meaningful indices could perhaps be divided, and, as an alternative, the more exciting potential of developing a GIS based multifactoral matrix with perhaps a single index for each locality community and their sub groupings could even be explored?

Oxford Brookes University

[FRC Reponse: The possibility of such an approach sounds very interesting. Further information on GIS based multifactoral matrix will be sought.]

In addition to the comments received directly by Fife I have come across a small number of additional published comments regarding the 1995 Sustainability Indicators for Fife Report.

ECOS , the quarterly journal of the British Association for Nature Conservationists published a special edition in Autumn 1995 'Sustainability - a guide for the perplexed' (BANC, 1995). This edition included a brief review of the Sustainability Indicators for Fife report:

“This pilot study contributed to a range of indicator projects sponsored by the Local Government Management Board (LGMB). It is an excellent first attempt at selecting and presenting a suite of 20 indicators for a largely rural and agricultural region of Scotland. Included are clusters of five indicators for each of basic needs, community, quality of the environment and use of resources. During public consultation basic needs were ranked highest by residents responding to an initial questionnaire. This was borne out by the findings of increasing long-term unemployment, homelessness and poverty and that the condition of housing and low incomes makes it difficult for people to heat their homes adequately. It is generally assumed that Fife is moving away from sustainability in terms of basic human needs; however, community indicators suggested general, if slight improvements. It was not possible to develop social indicators for community skills, participation or economic development, and all of these are likely to show complex patterns of gains and losses.

The quality of the Fife environment is shown to be deteriorating, as indicated by accelerating loss of open land to development and declines in freshwater macrophytes.”

Connections - the newsletter of the United Nations Environment and Development UK Committee included a summary of the Towards a Sustainable Scotland Conference run by Friends of the Earth (Scotland) and held in Fife. This review focused on the trends identified rather than the quality of the report:

“Lesley Rowan presented the findings of the Fife Sustainability Indicators Project. Out of twenty indicators, only four concerned with community well-being were considered to be moving towards sustainability. In the other categories, basic needs,

quality of the environment and use of resources were either on a downward trend or there was insufficient information available to provide any meaningful conclusions.”

Not all the public comments on the Sustainability Indicators 1995 report were made in writing. The Director of the Centre for Human Ecology, University of Edinburgh, when making the opening presentation at the April 1996 Indicators of Sustainability: Linking Local Action with Global Change Conference commented on the Sustainability Indicators for Fife Report (Birley, 1996). His initial reaction was that “some of the indicators were very simplistic - cycle routes and pedestrian and cyclist safety in particular”. However, his reaction once he had read the whole report was that “it amounted to much more than the sum of its parts”. Looked at as a whole he felt that the Report made an important contribution to the debate around how to move towards practical action on sustainable development.

Stewart, 1998 in an article addressing accountability in community contributions writes about the Fife Community Pilots:

“The Local Government Management Board has supported a project examining the scope for appropriate indicators and this work illustrates the scope for community involvement in what some might have seen as a largely technical issue. Fife Regional Council (now the new Fife unitary authority) used the sustainability indicators exercise as the opportunity to test the potential for developing locally specific indicators for differing localities within the authority. Widespread community consultation in three localities is leading to an indicators system which aims to provide local communities with indicators suited to local needs and chosen by local people (Rowan, 1995).”

It is difficult to see how Stewart could have come away with such a rosy picture of what had been undertaken in the three community pilots. It was certainly the intention at the beginning of the Fife pilot period to produce indicators reports for Glenrothes, the East Neuk and Benarty but the study report is quite clear that this aspiration was not achieved in the timescale of the pilot (see Chapter 4.6 above).

Chapter 6 sets out the Conclusions of the thesis based on the theoretical framework set out in Chapter 1.

Chapter 6

Conclusions and Recommendations

6.1 Introduction

Chapter 5 set out a detailed description of the interwoven strands of process and content involved in the creation of the Sustainability Indicators for Fife report.

Section 6.2.1 presents the conclusions of the study of the Fife Sustainability Indicators pilot process based around the framework developed in Chapter 1 of this thesis. These conclusions explore the extent to which the Fife Sustainability Indicators were embedded in a decision making process that provided clear routes to accountability and management of performance. An assessment is also made of the productivity of the use of sustainable development indicators in the Fife case, in terms of promoting institutional action.

Section 6.2.2 presents conclusions regarding the research contribution of the dialectic and hermeneutic rich description of the Fife process framed around Gummesson's (2000) 'Quality Criteria for Case Study Research' that were set out in Chapter 2. This material value of the dialectic and hermeneutic theoretical framework for research developed in this thesis and its applicability the value-laden research area of sustainable development indicators.

Recommendations: Good Practice and Further Research

Section 6.3 sets out recommendations arising from this research and identifies further areas for study.

6.2 Conclusions

6.2.1 To what extent were the Fife Sustainability Indicators embedded in a decision making process that provided clear routes to accountability and management of performance?

- *What was the visioning process towards sustainable development upon which the Fife Sustainability Indicators were based?*

Promoting community involvement was identified as being a fundamental reason for undertaking the indicators pilot in Fife. However, in practice the community had only a very limited involvement in shaping the 'vision' of sustainable development that underpinned the selection of indicators as 'measures of progress' towards a more sustainable Fife.

Consultation of 161 'interested' individuals and organizations on the Charter for the Environment mailing list using a 'Quality of Life Questionnaire' on the perceived priority of different themes within sustainable development was a limited and limiting way of engaging people in visioning. The findings of this consultation exercise were used principally to highlight the local importance of meeting basic human needs and additional work was put into developing indicators in this area. There was some publicity in the Fife Council newspaper about the sustainability indicators pilot and there was limited circulation of drafts of the Sustainability Indicators for Fife report. However, the comments received were seen only by SIWG members and not by other consultees preventing consultees from building on points made by others responding to the documents or working co-operatively to develop alternative 'visions' for Fife.

The definition of sustainable development upon which the Sustainability Indicators for Fife report was framed is really the closest Fife got to a 'vision' for a Sustainable Fife. The use of this definition emerged from the iterative process of looking at the 'whole' report, individual indicators as 'parts', which in turn influenced views of the framing of the whole report. The definition that was chosen was influenced by: the menus of indicators offered by the LGMB to pilot authorities; the discussions that took place in the Sustainability Indicators Working

Group; and, the feedback on issues and indicators received from official and unofficial consultees. This iterative route resulted in a definition being used in the Sustainability Indicators for Fife report that was an effort to represent a diversity of views within a coherent theoretical framework. However, the actual definition, and the process of reaching it, was not widely owned by the officer and members of Fife Regional Council, the Council that would have taken forward the implementation and appraisal of action towards sustainable development.

- *What was the project timescale and how did this link with other related activities?*

The Fife Sustainability Indicators pilot echoes the problematic governance issues around sustainable development identified by Littlewood and While (1997) in having a project timescale too short to make an effective contribution to the development of practice. The Fife pilot was intended to be completed in 6 months, but the summer holiday period and resourcing constraints meant work in Fife only really got underway almost halfway through this pilot period. This greatly restricted the range of participation processes that were possible and the decision to work both a Fife-wide and in 3 pilot communities further fragmented the engagement process.

The impact of the consultation process on the development of the Sustainability Indicators for Fife document was seriously affected as consultees had only a very short time to respond to a long and complex document, and little opportunity to involve a range of people within an organization in formulating a response. This had the effect of making the consultation appear somewhat tokenistic to some respondents, and may have reduced the number of responses received.

The timescale added to the pressure to 'get on' and start by choosing indicators on which to collect data, rather than begin with a much more comprehensive local visioning process. This approach created a considerable increase in the overall workload of the staff. Work on identifying data and writing up indicator sheets was carried out then binned as the views of the SIWG members on what the report should contain changed in the later months of the pilot.

The LGMB argued that as the remit of pilots was to 'road test' their menus of pre-selected indicators, a lack of time for wider visioning was not a serious issue. However, recommendations with regard to the role of indicators arising from more recent sustainable development and neighbourhood regeneration work (set out in Chapter 1) make it clear that the effectiveness of indicators as tool to support programmes of practical action comes from both a visioning process involving a diversity of people and organisations engaged using a variety of methods AND a clear process of negotiation and conflict resolution, formal agreement of tasks and roles, prior to the identification of indicators and targets. It would clearly not have been possible to carry out all these stages within the 6 month pilot project timescale offered by the LGMB, even in a target area much smaller than Fife.

Too short a time frame is not simply an issue of 'relative quality' but presents a risk of 'catastrophic failure'. For work on sustainable development, which is framed at an international level as relying on active engagement by a diverse range of stakeholders, this is a serious failure. Of the LGMB pilot authorities only those that were already engaged using sustainability indicators within a wider process of performance management, and saw the LGMB pilot process as an opportunity to showcase this work, were not seriously restricted by the 6 month timescale of the pilot.

- *What evidence was there of integration of policies across social, economic and environmental issues?*

The LGMB menus did cover a range of social, economic and environmental issues within the 13 themes approach. The Fife Sustainability Indicators report focused on issues and indicators rather than policies. The final report contained the following definition of sustainability:

“The Future - in any activity we carry out we must consider the effects of that activity on the ability of future generations to meet their needs and aspirations;

The Environment - in any activity we carry out we must also take into account the full environmental costs of these actions;

Equity - We must aim for a for distribution of, and access to, resources, services and opportunities;

Participation - We must aim to ensure that all people are able to share in decision making about decisions which affect the quality of human life and the environment.”

(FRC, 1995a: 2)

This ‘4 principles’ definition was used as the basis of evaluating the trend of individual indicators towards or away from sustainable development. The definition above implies the inclusion of social and ecological as well as economic components of sustainability, however, the process limitations compounded by local government reorganization meant that there was only a limited impact on policy integration across the Fife Regional Council as a result of this pilot work.

- *What evidence was there of sharing of interests, both within the local authority and across local organizations and communities of interest to achieve sustainable development?*

Within Fife Regional Council there was some evidence of sharing of interests through the use of a cross-departmental Sustainability Indicators Working Group involving staff from the Departments of Economic Development and Planning, Education, Community Education, Engineering (Roads) and Social Work. The Chair of the SIWG identified this cross-departmental approach as a positive aspect of the project process. However, it was an approach that was dependant upon staff in other departments having an interest in 'sustainable development', and having some faith in the ability of the department of Economic Development and Planning to be able to deliver something useful from the project relating to other Departmental areas of responsibility. In the latter stages of the pilot period it emerged that staff from the Social Strategy unit had declined to participate in the SIWG as they felt, given the previous environmental focus of the work of the department of Economic Development and Planning, the project was unlikely to make a useful contribution to social policy and practice. However, had they participated they may well have brought in a focus on, and knowledge of, existing social policy work that would have been very valuable and increased the scope for policy integration. It is difficult to develop corporate working when a project is being lead by a single department.

The sharing of interests with other organizations included several meetings with Fife Health Board over possible health indicators that might be appropriate for use in the report. Telephone discussions with a range of local organization to identify data and improve the commentary on individual indicators, and the written comments made by consultees who were issued with public consultation drafts of the Sustainability Indicators for Fife Report. However, the use of the SIWG as the main mechanism for the sharing of interest also missed an opportunity to integrate the Environmental Charter Steering Group more fully with the Sustainability Indicators pilot. The Charter Steering Group was an existing corporate structure for addressing environmental issues involving Fife Regional Council Staff and

business, voluntary and community based organization across Fife. As this group had already been involved in drawing up and reviewing two rounds of Environment Action Planning this might, have provided a more diverse and more grounded contribution to the development of the Sustainability Indicators pilot process than the SIWG plus consultees approach that was used. The broader sustainable development focus of this piece of work could have been addressed by developing the representation on the group by people and organizations knowledgeable about social and economic issues relating to sustainable development. Instead this process was identified as a recommendation of the Sustainability Indicators Project Study Report and the Environmental Charter Steering Group was subsequently reformed into a Local Agenda 21 Roundtable.

- *What was the distribution of power between partners involved in the Sustainability Indicators project?*

As the above information on the sharing of interests highlights, the distribution of power between partners in the indicators project was skewed heavily in favour of Fife Regional Council in general and the Department of Economic Development and Planning in particular. External organizations had only a 'consultee' role, being able to comment on information they were supplied with, but not being invited to shape the process or contribute to the 'vision' of what sustainable development should mean for Fife. The mapping of the dialectical cycles of the whole (Figure 5.33) illustrates both the limited mechanisms and timeframes of input from consultees external to Fife Regional Council, and the way in which decisions were taken at informal meetings of Department of Economic Development and Planning staff, rather than the SIWG throughout a crucial period of December and much of January.

Department of Economic Development and Planning staff had a limited view of what the role of consultees in the early stages of the project, possibly influenced by the rather rigid and adversarial nature of formal planning consultations at that time. However, despite this imbalance the consultees, with support from members of the SIWG did exert significant influence on the final version of Sustainability Indicators for Fife report. This can be illustrated by the improvements in the quality of evidence presented, the more global perspective adopted and the more critical review of Fife's progress towards sustainability compared with the 1st public consultation draft of the report.

The balance of power in the three community consultation pilots was similarly skewed. Fife Regional Council staff selected the pilot areas and community groups were not initially consulted about which community areas would be expected to participate in the pilot process. During the pilot when community groups in Benarty did express an interest in developing the work further through the use of Participatory Rural Appraisal tools this option was blocked when agreement could not be reached by two FRC departments over which should cover the cost.

- *What was the approach to community participation – who were the participants and how were they involved?*

The approach to community involvement at a Fife-wide level was limited to a consultee role. In addition to the rather blunt tool the Quality of Life Questionnaire mentioned above, only 39 individuals and organizations in Fife received copies of the two 'public consultation drafts' of the Sustainability Indicators for Fife Report.

Some of these consultees expressed a view that the consultation was no more than a public relations exercise and consultees comments were not really intended to

have an impact upon the Sustainability Indicators for Fife report. This was not the view of all members of the SIWG although their concerns were initially well founded as the early drafts of the report lacked a long-term and global perspective or a sound basis of evidence upon which to make claims of progress 'towards sustainability'.

Over the pilot period I sought to increase the receptivity of SIWG members to the potential for the use of a 'stronger' sustainable development definition, circulating written material (Bosworth, 1993; Wagnack and Rees, 1994), encouraging discussion within SIWG meetings of patterns of individual 'social commitment' and presenting practical examples of how 'problems' that were presented by consultee's responses could be tackled (by undertaking research and writing on new basic needs indicators). To back up these arguments responses made by the more critical consultees were used to support the case for a more long term and global perspective and as a result had rather more impact on the final report than those who praised the report in the form it took in the first and second public consultation drafts.

- *Were there clear mechanisms for negotiation and conflict resolution between different interests?*

The Case Stories in chapter 5 highlight tensions at various stages of the pilot project process. The mechanism for reviewing progress on Fife pilot project, the SIWG, was a formal meeting in which it was not seen as appropriate to raise 'issues of conflict' directly, so instead the symptoms of unresolved dispute over the framing, progress and management of the project became a barrier to effective working within the project team. The feedback from both official and unofficial consultees provided ammunition for different factions within the team at various stages within the project. Viewed in the light of a theoretical framework which

emphasizes the need for issues of leadership, ownership and independence to be resolved iteratively (Rowe, 2000; Carley, 2000) this inability to get to grips with inevitable conflicts that were generated within the project process can be seen as a substantial failing.

It is clear, however, that this was not simply a failing on the part of the management of the Fife pilot, but a symptom of the whole LGMB guidance process on Local Agenda issues. A high level of shallow participation has been secured for UK Local Agenda 21 work and the issues of a focus on outputs rather than outcomes and on public awareness raising rather than on developing clear routes by which findings can be developed into a consensual programme of action and implemented have been identified as limiting factors in taking effective practical action of sustainable development issues at a local level in the UK (Brugmann, 1997; Roseland, 2000; Selman & Parker, 1999; Carley 2000 & undated).

- *How were objectives for action identified, and how did they relate to the visioning process?*

No formal targets for improvement were identified as part of the indicators process. The contents of the 'Way Forward' boxes of the indicators sheets were the closest the project got to identify objectives for action. The Way Forward boxes were a late addition to the process, being added as a result of the review undertaken in the 23rd January SIWG. The content of these boxes was then left to hurried drafting by members of the SIWG. This contrasts markedly with the City of Santa Monica process in which objectives, and the indicators to be used are developed from the earlier stakeholder stage by city staff and task force members (Brugmann, 1997). The Santa Monica approach offers scope for increasing ownership of the objectives and indicators by those who will have to manage the performance review systems in which they are embedded. In the Fife case the staff

of departments across the Council who would have been involved in managing the performance review systems in which the objectives and indicators were embedded may have had not direct involvement in the discussion and decisions contained in the Sustainability Indicators for Fife Report. Heads of Service did read consultation drafts of the report but this passive role would not have promoted ownership by staff further down the lines of command. That SIWG members felt that the phrasing in the Way Forward boxes should carefully avoid actually committing the Council to taking any particular action illustrates the lack of political and institutional commitment to change resulting from the pilot process.

- *What was the mechanism for reviewing progress towards these objectives and for publicizing this information?*

It was recommended that an annual update be produced to the Sustainability Indicators for Fife Report. As the role of Project Consultant ended in 1995 I had no involvement in the development of the subsequent work in Fife.

An updated Sustainability Indicators for Fife Report was produced in 1997 (Fife Council, 1997) and a new set of indicators addressing only the Quality of the Environment theme were produced in 1999 (Fife Council, 1999). Changes were made to the indicators used in the 1997 document compared with 1995 - these changes are set out in Appendix 6C. These changes largely reflect the development of new indicators that had been sought during the 1994/5 pilot period. These include indicators for Community Economic Development Initiatives, Access to Basic Services, Incidence of Asthma in Children Under 5, How Fife People Travel to Work and the proportion of Household Waste Recycled. However, the report did not use the environment/future/equity/ participation definition as a basis for

evaluating the indicator trend and any explicit reference to the global impacts of activity in Fife.

The 1997 report presented 20 indicators: 5 with a trend towards sustainability (1 more than 1995), 6 with no trend (the same as 1995) and 9 with a trend away from sustainability (1 less than 1995). The proportion of indicators using more than 10 years of data has also dropped from 45% in 1995 to 35% in 1997.

The Quality of the Environment Indicators Report published in 1999 contained 18 indicators (rather than 5 used in the Quality of the Environment sections of the 1995 and 1997 reports) and covered the issues of air quality, water quality, urban and rural environment and biodiversity. The indicator trends were 9 with a trend towards sustainability, 5 with no trend and 4 with a trend away from sustainability. This compares with 4 with a trend away from sustainability and 1 inconclusive indicator in the Quality of the Environment section of the 1995 report and all 4 indicators in the 1997 report with a trend away from sustainability.

These reports were publicised in Fife Council's newspaper issued to all households, with copies of the report being made available on request and a summary of the information going on to the Council's website in 1999. The lack of continuity between the indicators presented, and the basis upon which the assessment of trend towards or away from sustainability was made would make it difficult to use the process to hold Fife Council to account, or for Fife to use the indicators trends to support an argument that local conditions were improving.

- *What processes were adopted to share learning from the Sustainability Indicators for Fife pilot and embedding this learning in future Council practice?*

The processes formally adopted centered on the recommendations made in the Study Report of the Sustainability Indicators pilot project. In particular the development of the LA21 roundtable developed a broader programme of action planning and targets covering social and economic as well as environmental issues for work in the new Fife Council. Informally the learning arising from the process of engagement in the SIWG was reported to have strongly influenced future practice by individual officers (MacDonald [personal comment] McGregor [personal comment] Knowles[personal comment]).

The limited engagement of the pilot with the mainstream decision making structures of the Council and the interests of other organizations meant that LA21 continued to develop as a parallel and somewhat peripheral process rather than becoming more integrated into the political mainstream of either Fife Council in particular or the processes of local governance in general. In 2001 work on Local Agenda 21 was subsumed into the Community Planning process. Community Planning is a UK government initiative in which local authorities take a lead role in developing local multi-agency partnerships for service planning and delivery with the stated aim of moving the organisation of services around the needs of citizens and communities.

How productive was the use of sustainable development indicators in the Fife Case, in terms of promoting institutional action?

- *How did the learning from Sustainability Indicators for Fife affect processes for decision making and participation in Fife Regional Council;*

Comparative research on the effectiveness of sustainability indicators as a tool (Brugmann, 1997) makes a case that it is the decision making process, and the role

of indicators within this, rather than any statement of the intended purpose of a set of indicators that determines their practical usefulness.

It created a problem for Fife as a pilot authority, using the indicators pilot as their first LA21 initiative, that the model offered by the LGMB was flawed. The LGMB promoted Sustainable Seattle's public awareness raising led approach, but proposed that pilot authorities achieve this on a very short timescale which severely limited the range of participation tools that could be applied. The LGMB's focus on publishable outputs also undermined the community involvement aspects of the pilot.

Subsequent research studies have proposed that a performance management based process in which indicators have a more focused role in providing feedback as 'measures of progress' is more effective in supporting practical change. Yet in Fife the sustainable development work, of which the indicators project was a part, was not sufficiently woven into the political systems of decision making and resourcing to be carried through to any significant extent. As a result the monitoring process that was carried on after the pilot period would at best have been able to track the lack of practical activity; in itself not very effective at raising public awareness that positive change towards sustainable development was possible.

The experience of the Fife Sustainability Indicators pilot of difficulties in gaining agreement to use a global and holistic definition of sustainable development to underpin the indicators report highlights the challenge that will be faced in a Community Planning process where 'what sustainable development is' and 'what would constitute progress towards it' would need to be addressed by organisations constituted with very diverse aims including the Local Enterprise Company, the Tourist Board, Fife NHS Trust and Scottish Natural Heritage.

- *What evidence is there of changes in actions and outcomes that can be reasonably attributed to the Sustainability Indicators for Fife project.*

There is little evidence of changes in actions and outcomes within the geographical area of Fife that can be attributed to the Sustainability Indicators pilot. Viewed in the light of the theoretical framework set out in Chapter 1 this outcome is not really surprising. In sustainable development projects in general the negative impact of poor local governance processes has been well documented. This is not a result of individual lack of commitment but the effect of timescales that are too short, policies that are not integrated, interests that are not shared, power being unevenly shared within partnerships (Littlewood and While, 1997: 114). In such circumstances there is insufficient 'tender loving care' to enable the sustainable development tree to keep growing, so whatever mechanisms are established to count the fruit they cannot, on their own, sustain the tree, let alone enable it to flourish (Pollit, 1997).

6.2.2 How should research into these sustainable development indicators issues be approached to explicitly recognize the value-laden nature of devising 'measures of progress' and of research?

- *Readers should be able to follow the research process and draw their own conclusions;*

This is important in dealing with the value-laden nature of both devising measures of progress and of research. The sheer volume of material generated during the pilot period created need to find appropriate structures for presenting and shaping the analysis of the material, a challenge that has been identified by other researchers in this field:

“The benefit of the holistic approach (to working with sustainability indicators) is that we can deal with complex wholes without losing their complexity or ‘killing the whole’ (also recognised in Hardi and Zdan, 1997), and we can ask wider questions than those that relate to individual parts. The downside for our analysis is that analysis itself becomes terribly difficult and so can lose all sense of focus and organisation if the practitioner is not careful.” (1999: 85)

The approach that was taken was to present a *rich description* of the Sustainability Indicators for Fife process (Chapter 5) designed to meet the criterion of *a comprehensive account of the research process*. An account of decision making processes, both formal and informal is built up through cycles reviewing the development of individual indicators, and the dialectic research stages of the whole. A description of the theoretical basis for the choice of the dialectical and hermeneutic approach to data collection, analysis and interpretation is set out in Chapter 2 and the methods used are further described in Chapters 3 , 4 and 5. The results of the research are presented in Chapter 5 and in Section 6.3 Conclusions.

The limits of the research project focus around the relative novelty of the research approach compared with the norm of using of thin description to present work on sustainable development indicators. Presentation of rich description created challenges regarding the types of contemporaneous evidence that would be required to support any assertions made (see Section 4.7.3). In an effort of overcome this problem Case Stories were used in the text as mechanism for presenting ‘opinions’ which were hard to support using the existing trail of external evidence.

The length, and level of detail, involved in presenting a rich description of the case required some thought as to how best to hold the attention of the reader. The thin description of Chapter 4 is useful in presenting a chronological overview of the project and the various strands of work and outputs within it. Diagrams are used

at various stages throughout the thesis to help to orientate the reader. The colour adaptation of Rowan's (1981) dialectical research cycle diagram is also used as a recurring signpost in the exploration of the processes that shaped the framing of the Sustainability Indicators for Fife report as a whole. The volume of material available also made it necessary to select a limited number of indicator examples to track through the process of devising Sustainability Indicators for Fife. This sampling approach can be justified as addressing the task of illuminating issues that relate to the process based research questions posed at the start of the research.

The time-consuming nature of the stages of PROJECT, MAKING SENSE and COMMUNICATION meant that only one case is presented. Gummesson (2000), however, recognises this as a hazard of a 'rich' case study research approach:

"it is generally not possible to carry out more than one or a very limited number of in-depth case studies in a research project." (2000: 86-87)

Gummesson does not see this as a major problem. He states that:

"with good descriptive/analytical language to grasp the interaction between various parts of the system it is possible to generalise from one or very few cases" (2000: 89).

Gummesson also makes a case that where the research audience are managers who must understand and implement the research findings (such as Councillors and Service Managers in Local Government) a case study approach which seeks to arrive at specific types of conclusions regarding a single 'case history' can be very valuable.

The adoption of Gummesson's (2000) qualitative case study methodology, with the use of Rowan's 1981 dialectical research cycle to provide a framework for the

challenges of focus and organization in presenting rich description, are approaches that would be of value to other researchers in presenting research on the process of devising sustainability indicators so that readers can follow the research process and draw their own conclusions.

- *Researchers should present their paradigm and preunderstanding;*

The value-laden nature of devising 'measures of progress' means that it is helpful for the research to present their paradigm and preunderstanding.

The personal and professional values held in the early stages of the research project are set out in Chapter 3. The impact of my paradigm and preunderstanding on how I engaged in the role of Project Consultant/Researcher comes through in the rich description of the Fife Sustainability Indicators pilot. The use of the theoretical frame of dialectical research cycles within a dynamic hermeneutic spiral process of research provided a clear framework for presenting evidence of the changes in the theoretical and conceptual framing of the Sustainability Indicators for Fife report over the course of the project using repeated iterations of the introductory sections from report drafts. However, this approach did raise difficulties about how to delineate what is pertinent information to include. Studies by a range of authors applying qualitative approaches to management research (Krim, 1988; Reason, 1988; 1994a, 1994b; Torbert 1987, 1991; Torbert and Fisher, 1995; Gummesson, 2000) do not offer a consensus around what is an appropriate balance regarding the level of detail to include as 'rich description' and what constituted excessive autobiography.

The level of 'appropriate autobiographical detail' for inclusion in a rich description is an area for further work on the use of dialectical and hermeneutic research approaches applied to the field of sustainability indicators research.

- *The research should possess credibility*

This is a quality criteria that the researcher can attempt to meet in terms of process, but the judgment regarding whether these endeavours have succeeded has to be left to the reader.

In presenting the rich description of the Fife Case the written comments of all consultees regarding the Sustainability Indicators for Fife report were presented verbatim. Copies of all the drafts of introductory material for the report and all the iterations of indicator sheets for the sample of indicators tracked through the development process have been presented in full.

The dialectical approach encourages honest presentation of alternative interpretations and contradictory data by placing the emphasis on recognising and working with contradictions rather than seeking to deny or bury them. The data upon which the analysis and interpretation were based is set out using the approach of cycling between individual indicators (the parts), and the sustainable development framing of the Sustainability indicators for Fife report (the whole). These cycles are described in prose, supported by documentary evidence, and also summarised into dialectical maps that make it easier to see patterns within the dialectical research cycle stages. For example the addition of colour to the dialectical research cycle maps highlights the relationship between the shifting location of the MAKING SENSE process and the stalled development of a process of 'co-operative inquiry' into the most appropriate framing of the Sustainability Indicators for Fife report as a whole.

Kjellen and Sodermann (1980) comment on the potential benefits of a case study method to address the holistic nature of the research questions posed:

“The detailed observations entailed in the case study methods enable us to study many different aspects, examine them in relation to each other, view the process

within its total environment and also utilise the researcher's capacity for "Verstehen" (understanding). Consequently, case study research provides us with a greater opportunity than other available methods to obtain a holistic view of a specific research project."

(Kjellen and Sodermann, 1980: 35 quoted in Gummesson, 2000: 99)

Based on the experience of the Sustainability Indicators for Fife research the qualitative case study method appears to offer a credible research approach for similar and related work on devising sustainable development indicators and performance management systems.

- *The researcher should have had adequate access;*

Access was one of the key strengths of this research process. Fife's participation in the LGMB Sustainability Indicators pilot offered an unusually good chance to experience 'from the inside' how the process of devising indicators was conducted. The LGMB pilot had a national profile within local government organisations and brought with it a high level of management commitment. These factors would have been very difficult to recreate for an individual research project.

The role of Project Consultant/Researcher gave very good formal and informal access to SIWG members, to written records of the project, and to written comments from formal consultees. This role also provided an opportunity to witness the unrecorded verbal information and nonverbal cues which were a part of the context of decision making but could not have been accessed without being present in a wide range of settings within the organisation and building up a trust relationship with SIWG members.

The Project Consultant/Researcher role did present some access constraints. There

was little contact with staff more senior than the level of Depute Director within Economic Development and Planning and only limited informal contact with non-SIWG staff outwith the ED&P department. Access to formal consultees was also limited by the predominantly paper-base consultation approach adopted

Access is a crucial issue if qualitative case study methodology is to be applied. This may be a limiting factor for other researchers in this field if such access cannot be secured, in which a different methodology would become more appropriate.

- *There should be an assessment of the generality and validity of the research;*

At issue is whether the findings of this research are limited in their applicability to a single local authority (Fife), or to local government as an organisation type. Examples of other research into the process of generating and using indicators as tool within the broad field of sustainable development were set out in Chapter 1. A number of UK Sustainable Development Indicators initiatives have taken place since the publication of the Sustainability Indicators for Fife report, several of which have built on aspects of the LGMB (1995) Sustainability Indicators work. These include Indicators of Sustainable Development for the United Kingdom (DoE, 1996), Communities Count (NEF, 1998), Quality of Life Counts (DETR, 1999) and Local Quality of Life Counts (DETR, 2000).

Probably the most relevant of these initiatives, because of its local government focus, is 'Local Quality of Life Counts'. This document set out 29 indicators:

“from which local authorities may wish to consider using a selection for reporting their LA21 and Community Strategies. The indicators build on extensive work already carried out at local and national levels and have been developed by a joint initiative between local and central government.” (DETR, 2000)

The project work upon which the Local Quality of Life Counts is based was run by a similar team of organisations (NEF/ENVIRON/IDEA & Local Government Association), using broadly the same process as the 1993-5 LGMB Sustainability indicators Project. The pilot local authorities were asked to select indicators from a draft set provided by the Local Quality of Life steering group. The pilot authorities were then to gather data, engage with local partners, record and share their experience of working on each indicator and present this information, including feedback on resource requirements and local reaction to indicators to the Local Quality of Life steering group. The pilot phase of the project started in October 1999 and was expected to be completed in January 2000. This very short timescale during the winter and over the holiday period suggests that the issues of timescale for stakeholder participation in IDEA local government pilot work is still an issue:

“The project has been demanding on all involved. Some pilots felt the time available for testing the indicators was too short and therefore the testing phase was not as inclusive of the community and other stakeholders as it could have been. But in some authorities the carrying out of the pilot did stimulate successful cross-working with different parts of the council. “ (DETR, 2000)

A section in the Local Quality of Life Counts report on ideas put forward by the pilot local authorities based on their experience states that indicator development is a long process, taking up to two years (DETR, 2000). This has resonance with Monaghan's conclusions with regard to performance indicator systems that several years is a realistic timescale for effectively establishing a new indicator system (Monaghan, 1995).

The Local Quality of Life Counts report adopting a similar approach to that used in the Fife 1995 study, including an Appendix containing issues that were addressed in the pilot but where a practical indicator was not found or agreed. These were:

- distance traveled by locally produced commodities - e.g. food miles
- social networks *
- involvement in decision making *
- minority group representation
- demonstration of cultural interest *
- local job opportunities for young people *
- locally owned business
- training in employment *
- journeys made by mode *

Those marked with * were explored in Fife but data could not be obtained. This suggests that it is not only issues of process but also technical and data issues linked to the development of suitable indicators that still present a challenge.

On this basis this study of the Sustainability Indicators for Fife work has both generality and validity in Gummesson's terms. This doctoral study can therefore be framed as seeking to make a contribution to an ongoing debate within the UK and international sustainable development, indicators and local governance fields. The linkages identified between the role of performance management processes within local government and the developing Community Planning mechanisms of local governance create clear opportunities to explore the application of this research to other organizations.

- *The research should make a contribution;*

Researchers have highlighted major weaknesses in the process of communication of many sustainable development initiatives as tools for learning in other settings. Young (1996) and Sharp (1999) both highlight the lack the contextual information as an important barrier to learning:

“an approach based on highlighting pioneering initiatives across countries implies that imaginative solutions can be transplanted not just from city to city, but from one political system to another... Studies that emphasise pioneering initiatives do not explain why different countries and cities have embedded in their bureaucratic cultures different ideas about what is technically possible and politically acceptable. Often these are seen as technocratic, management issues, as institutional barriers that can be overcome. If innovative ideas are to be adopted more widely researchers need to move on from policy initiatives to address a range of broader, contextual factors.” (Young, 1996: 355-6)

“British local government is placing a new emphasis on local action for the global environment. In the literature addressing these development limited attention has been paid to the contested nature of sustainability, or to the local context in which initiatives arise... Authorities are depicted in terms of their progress towards sustainability, but the wide variations in their interpretations of this goal are seldom emphasised... it is suggested that most of these descriptions are apolitical, that they lack the contextual information to suggest which factors enable and constrain the development of policy in particular directions.”

(Sharp, 1999: 139)

These weaknesses in other contemporary studies are specifically addressed by this thesis. By adapting Rowan's (1981) dialectical framework for THINKING about, MAKING SENSE of, and COMMUNICATION of the written and experiential data generated in the process of devising a framework of indicators of sustainable development, this study offers a new approach to making explicit the impact of context on the selection of indicators. The development of this dialectical research approach into 'maps' highlighting the location of the dialectic stages within the iterative process of developing individual indicators is particularly useful in recognising the influence of rationale for using sustainability indicators (as a tool for awareness raising, or for performance management), and the impact of pre-understanding of participants, informal processes and both 'official' and 'unofficial' consultees in shaping a set of indicators.

The contribution made by the development of the dialectical research model for use in writing up and visually mapping processes of creating frameworks of sustainable development indicators relates well to the points made by Normann in relation to the generalisability of research:

“If you have good descriptive or analytic language by means of which you can really grasp the interaction between various parts of the system, the possibilities to generalise also from a very few cases, or even one single case, may be reasonably good. Such a generalisation may be of a particular character, it might be possible to generalise a statement of the type “a system of type A and a system of type B together comprise a mechanism which tends to function in a particular way.” On the other hand one cannot make any generalisation about how common these types of systems and interaction patterns are. But the possibilities to generalise from one single case are founded in the comprehensiveness of the measurements which make it possible to reach a fundamental understanding of the structure, process and driving forces rather than a superficial establishment of correlation of cause-effect relationships.” (Normann, 1970: 53 quoted in Gummesson, 2000:89)

One area for further research will be to use the dialectical research cycle framework and mapping approach in the process of devising, and recording the context of, frameworks of sustainable development indicators other organisations including in other local authorities.

6.3 Recommendations

Sustainable development indicators have been promoted as a tool for focusing public awareness around sustainable development issues. For this to be successful there needs to be a clear process by which these findings will be developed into a consensual programme of action and implemented. In the absence of such a process the indicators will not command sufficient political and management support to become the basis of internal and external reporting. They become peripheral to the performance management process and are doomed to have only a limited impact upon behavioural change, individually and institutionally.

Serious consideration should be given to the use of tools other than sustainable development indicators where there is currently insufficient political and management support to sustain behavioural change.

Where indicators are not embedded in clear management and decision-making processes, the range of indicators that could be chosen is huge. This approach offers a direct route into the, potentially overwhelming, value-laden morass of deciding what sustainable development means and how to measure it. While this can be a fascinating intellectual exercise for those who are inclined towards this activity it is very difficult to translate the scientific justification for any particular indicator choice to a non-specialist audience in an engaging way. This has been identified as a particular problem within UK sustainable development work and this contrasts with the model of sustainable service planning characteristic of international local governance approaches. The tension between the need for collective exploration of radical options for sustainable futures, and the need to make an immediate and measurable improvement to local environments should be addressed by separating the stages of visioning and of identifying appropriate measures of progress. A process of negotiation and conflict resolution should follow visioning between stakeholders, formal agreement must then be secured over actions that will be undertaken and where responsibility for resourcing and implementing these actions rest. Indicators should then be identified, along with targets for improvement. These should then be used to review the effectiveness of actions and share learning about the implementation process. Using indicators as a feedback mechanism embedded within such a process defines the role each indicator is being used to perform, and the purpose of using indicators in the wider process. It is these issues of governance, and the quality and approach to governance that is required that is at the heart of achieving effective action towards sustainable development:

If sustainable development indicators are to be promoted as a public awareness raising tool this should not be a primary or even a first phase objective, but a later option for using sustainable development indicators that are well embedded in performance management processes. Stakeholders in processes of accountability can then use the progress, or lack of it, that is being achieved in evidence.

Experience in the use of performance management systems in a variety of settings highlights the value of vigilant, robust and well-informed support networks to the success of effort to promote individual and institutional behavioural change.

The model of local governance that has emerged in the UK presents considerable barriers to the implementation of sustainable development. For these barriers to be removed timescale need to be much longer, policies need to be more effectively integrated, considerable institutional change is needed to enable power to be more evenly shared within partnerships and ways in which communities (whether of locality or interest) are empowered, or disempowered, to participate in decision making needs to be kept under continual scrutiny.

Meaningful participation requires that all concerned and affected stakeholders be provided the information and resources they require to influence, and contribute to, the decision-making process, and that planning and decision-making processes must be designed and implemented to foster comprehensive stakeholder participation.

Further Study

A. The conclusions and practice recommendations contained in this thesis should be used as a foundation for research evaluating work on sustainable development indicators in the changing context for local governance created by the 'Community Planning' initiative.

B. The dialectic and hermeneutic approach developed in this thesis for presenting a rich, context-laden description of process and content should be applied to processes of devising sustainable development indicators in other local government settings and in other types of organisation.

C. The dialectic and hermeneutic approach should also be extended to assess its value for addressing the need for contextual information to facilitate transferable learning between organisations with regard to sustainable development initiatives other than indicators.

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Appendices

Relating to Chapter 3

- 3A Programme for the 'Reporting on Sustainability: The Challenge for Local Authorities' Conference
- 3B 'Issues Behind Indicators' paper presented at the 'Reporting on Sustainability: The Challenge for Local Authorities' Conference
- 3C Workshop Leader's Notes for the 'Reporting on Sustainability: The Challenge for Local Authorities' Conference
- 3D Indicator ideas developed within the workshop groups at the 'Reporting on Sustainability: The Challenge for Local Authorities' Conference
- 3E Conference Report of the 'Reporting on Sustainability: The Challenge for Local Authorities' Conference
- 3F Programme for the SANGEC/New Economics Foundation/ Friends of the Earth 'Reporting on Sustainability Conference'

Relating to Chapter 4

- 4A Local Government Management Board Sustainability Indicators Pilot: Menus of Indicators
- 4B Conference paper: 'Sustainable Development: the need for a New Professionalism'
- 4C Conference paper: 'Sustainability Indicators for Fife'

Relating to Chapter 5

- 5A Ecological Footprint Summary
- 5B Monitoring Report: Fife Sustainability Indicators Pilot
- 5C Measuring sustainability article: 21 Today
- 5D Introduction to the Sustainability Indicators for Fife 1995 Report

Relating to Chapter 6

6A Flier to advertise Sustainability Indicators for Fife

6B Summary and Conclusions Report: Sustainability Indicators for Fife

6C Feedback on the Sustainability Indicators for Fife 1995 Report published in Sustainability Indicators for Fife 1997



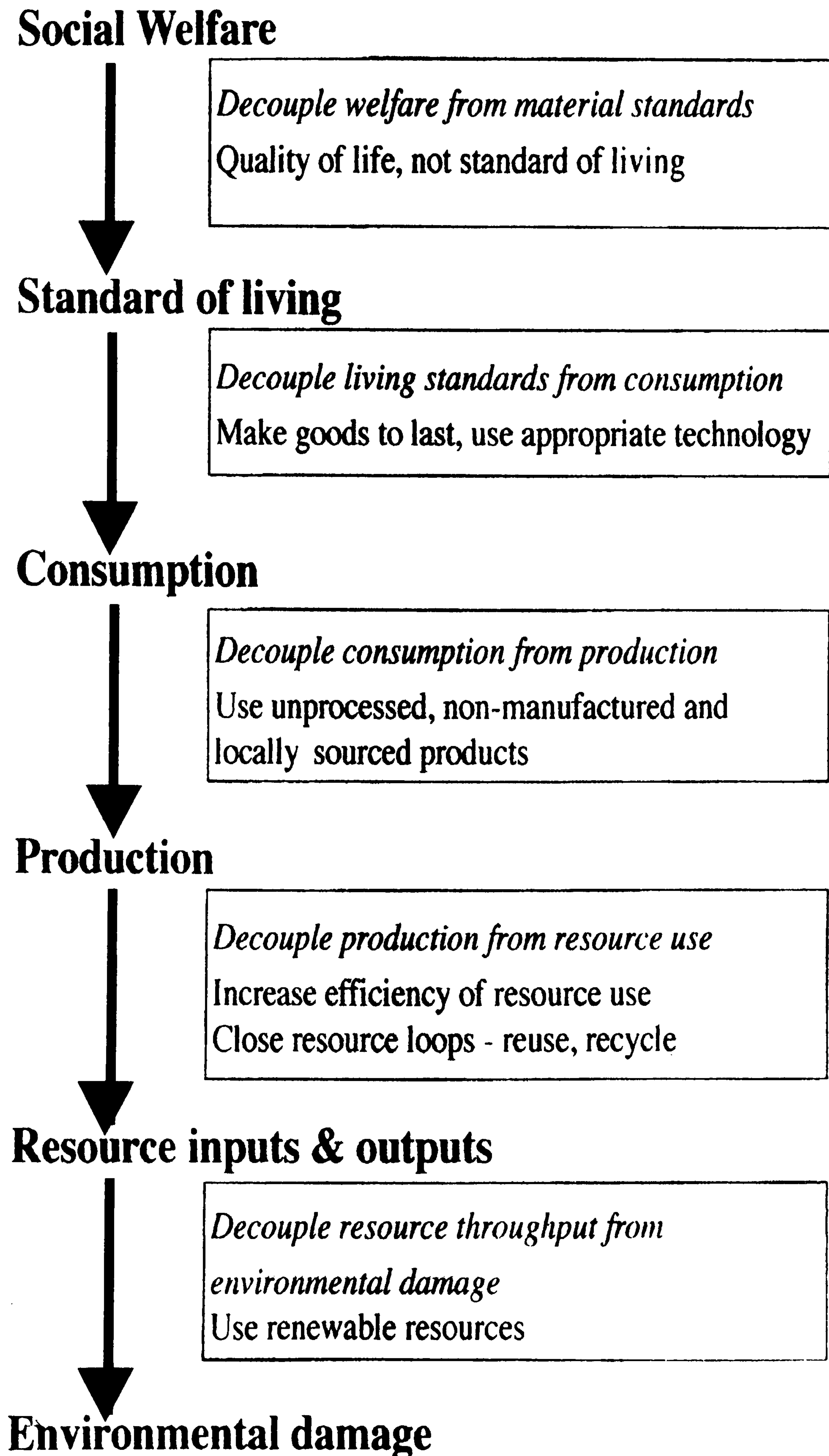
REPORTING ON SUSTAINABILITY - THE CHALLENGE FOR LOCAL AUTHORITIES
WEDNESDAY 6th APRIL 1994



Artwork by Ingebjorg Smith
8 Hamilton Park Avenue
Glasgow
041 357 5536



Figure 1



Performance Indicators

Effectiveness

is the service doing what it is supposed to?

Efficiency

Is the required standard of service being provided at the lowest cost?

User experience

How does it feel to the public to use the service?

Indicators of sustainability therefore need to be helpful in judging:

Performance Indicators

for sustainability

Effectiveness

Is the service meeting social welfare needs within ecological balances

Efficiency

Is the required standard of service being provided at the lowest environmental and social and economic cost?

User experience

How does the service contribute to the service user's quality of life?

What difference does the type of performance measures used make to the achievement of sustainability? Take the example of Scottish Power. The main measure of performance they are currently obliged to use is basically how much energy they have sold

Energy utilities in other countries see their role differently, and therefore select different performance measures. They see their role as the provision of energy services - heat, light, motive power for machinery and so on. This means that they can improve their performance without having to encourage increased energy consumption. (Figure 2)

This is good for the customers, who can get the same services while consuming less energy. It is good for the environment as less consumption should mean less environmental damage. It is also makes very good economic sense for the energy companies, as energy saving measures are much more cost effective than building new generating capacity.

Issues behind indicators

Lesley Rowan - University of Stirling

The context of seeking sustainability

Many people who receive services from, or who work for, local authorities are unclear about:

- what sustainability is?
- why sustainability is important?
- how sustainability is different from what they do at the moment?

Adrian has already looked at the first two issues. I will focus on how sustainability is different from the way that we do things at the moment ?

Many people perceive a conflict between social welfare and the environment. This is based on chain of commonly held assumptions. It is assumed that social welfare is dependent upon standard of living; that standard of living is dependent upon consumption; that consumption is dependent upon production; that production is dependent upon resource inputs and outputs; that resource inputs and outputs inevitably mean damage to the environment.

If this set of assumptions really apply, then to improve social welfare we have to accept that damage to the environment is a kind of "occupational hazard".

But do these assumptions really apply? They certainly fail to recognise that damaging the environment reduces social welfare. What else do these commonly held assumptions fail to recognise?

To me they fail to recognise that we are part of a complex interconnected web of social and environmental elements and that we cannot simply ignore the impacts of our actions. It is like poking your finger into an inflated ballon - the air has to go somewhere, so the sides will stretch and bulge out to accommodate your actions - or maybe the ballon will go bang.

If what we are interested in is welfare then we can do much better than we are at present without laying waste to the environment.

The assumptions behind people versus the environment are just that - assumptions - we can decouple each and every one of these linkages. (Figure 1)

We can decouple welfare from material standards - by focussing on quality of life. At present we tend to count how much people earn and how much people own. We do not tend to assess how useful these things really are to people.

For example, "rush hour" journeys into the centre of Edinburgh that could be done by bus in 15 minutes in the 1950s now take over an hour by car. Measuring standard of living sees more and more cars as an ever increasing improvement. Whereas focussing on quality of life brings into question why so many people are travelling so much, and what means of transport would be most effective in meeting people mobility needs.



CONFERENCE on

REPORTING ON SUSTAINABILITY - THE CHALLENGE FOR LOCAL AUTHORITIES
WEDNESDAY 6th APRIL 1994

PROGRAMME

LOUNGE

9.30 Registration - Coffee

COMMITTEE ROOM 1

- 10.25 Chairman's Opening Remarks
Questions will be taken after each speaker
- 10.30 The Government Perspective
Ed Reavley - Scottish Office
- 10.50 Why Sustainability Indicators ?
Adrian Shaw - Strathclyde Region
- 11.10 Local Government Sustainability Indicators Research
Project
Robin Millward - Consultant
- 11.30 Issues Behind Indicators
Lesley Rowan - Stirling University

VARIOUS

12.00 Workshop: Choosing Workable Indicators

COMMITTEE ROOM 2

1.00 Lunch

COMMITTEE ROOM 1

2.00 Indicators in Practice

Housing and Urban Development

Jane Brooke, Glasgow District

Rural Sustainability

Mike Halls, Ettrick and Lauderdale District

Sustainability Indicators in Canada

Wendy Simpson, Environment Canada

VARIOUS

2.45 **Workshop:Using Indicators to Measure
Progress in my Authority**

COMMITTEE ROOM 1

3.45 **Concluding Discussion**

4.00 **Close**

We can decouple living standards from consumption - by making things that last. An example of this is the well built tenements and houses that can be found in many Scottish towns and cities that have already been homes for two or three generations, and with a little maintenance could provide secure shelter for several more generations.

Another way of decoupling living standards from consumption is to use appropriate technology to do things. For example doing short journeys on foot or by bike instead of by car. 61 % of all car journeys are under 5 miles and 32 % of all journeys are under 1 mile.

We can decouple consumption from production by avoiding unnecessary processing of goods. Did you know that you can get porridge in a tin these days. Unless you like cold porridge it probably saves you no more than a minute or two of cooking time. This small time saving is at the cost of a tin can, the environmental cost of transporting it, and the fact that you will pay about 10 times more in cash terms.

Using locally sourced products will save the energy of transporting products from farther away as well as offering the opportunity to boost the local economy.

To decouple production from resource inputs we need to reduce the amount we use to achieve the level of service that we need. A very recent example of how reducing resource use can have indirect as well as direct benefits is the £600,000 saving made by a Regional Council over a two year period through energy efficiency measures. They were then able to redirect money and pay for seat belts to be put in school transport.

Another approach to decoupling production from resource inputs is to close the resource loops by reusing and recycling materials. It is important to stress that the order of priority is reduce, reuse, recycle, otherwise the total amount of material treated as waste will still rise.

Finally, to decouple resource inputs and outputs from environmental damage we need to look at the kind of resources we are using. By using renewable resources such as energy instead of fossil resources we not only reduce the impact of harnessing the energy, but we also reduce the impacts of using it. Burning fossil fuels at a rapid rate is not only depleting the resources available to future generations, but is also putting pollution into the atmosphere much more rapidly than the natural balancing mechanisms of the planet are able to deal with.

So by changing our assumptions about the way that we do things, improving social welfare whether in Craigmillar or in Ethiopia does not need to damage the environment. Nor does improving social welfare in Craigmillar have to be at the expense of people in Ethiopia.

The role do indicators play in the process of achieving sustainability?

Indicators are basically information which help you to judge the effectiveness, efficiency and user experience of a service.

Figure 2

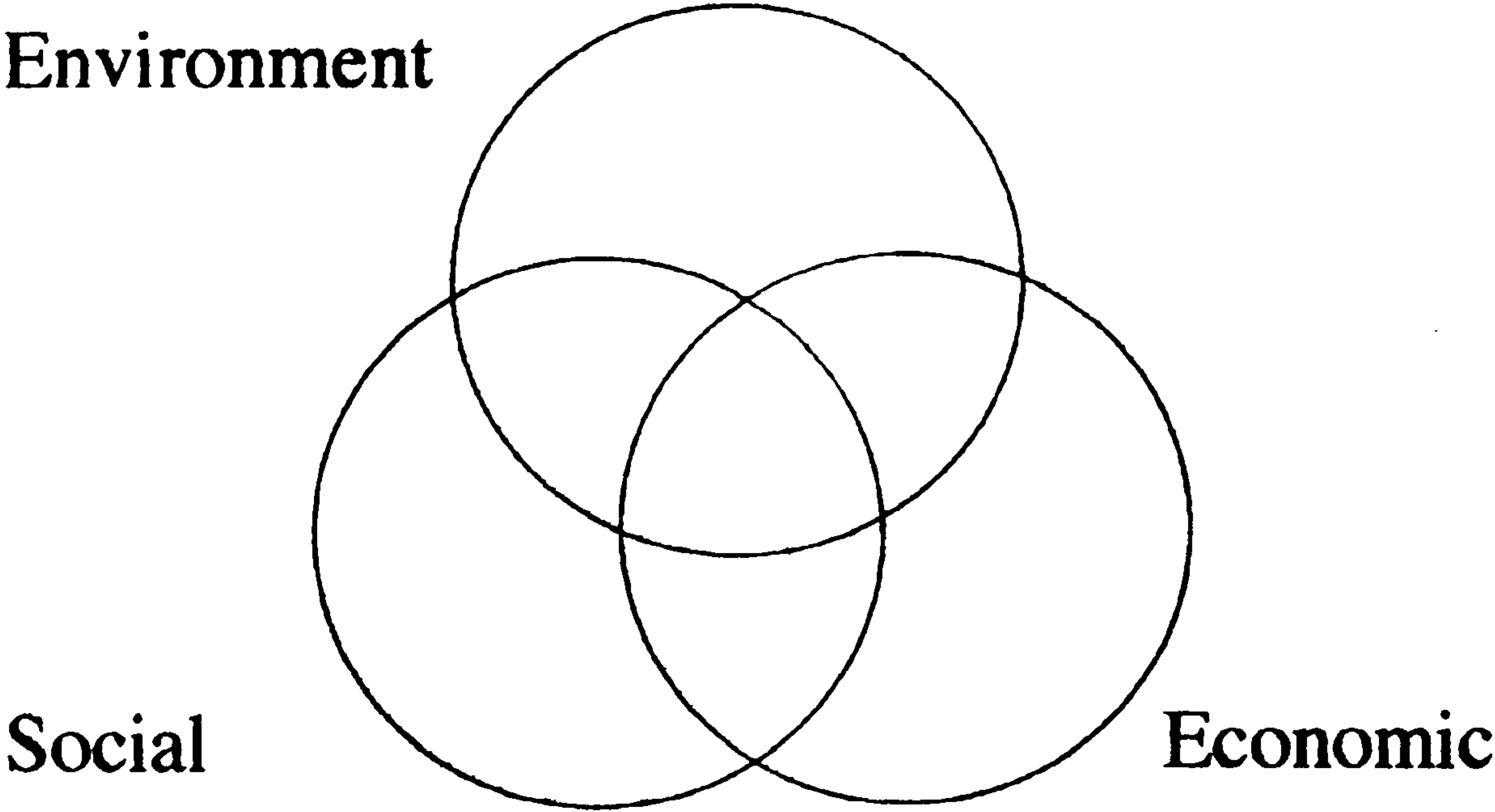


Figure 3

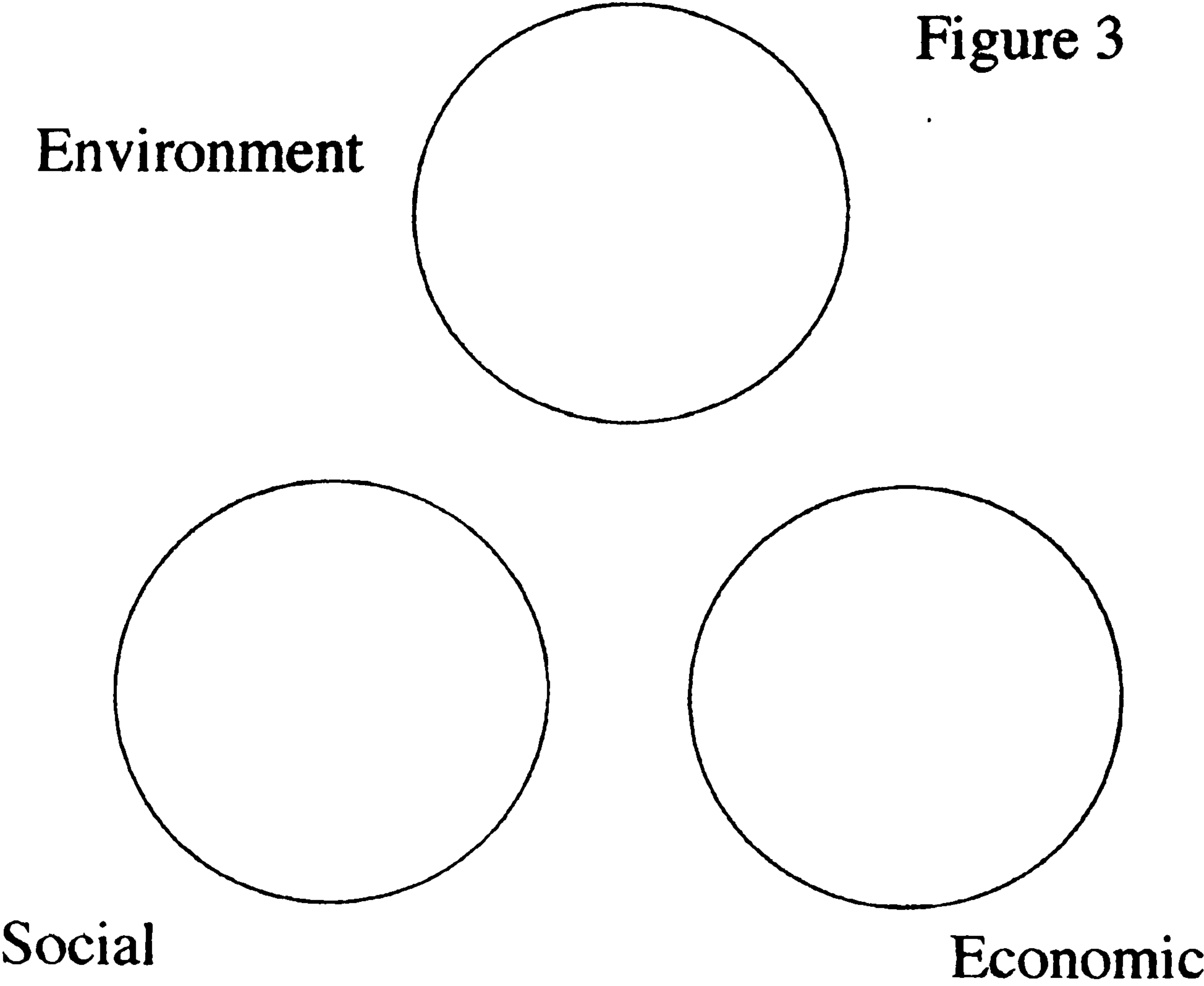


Figure 4

Audit
Commision
Citizen's
Charter
Indicators

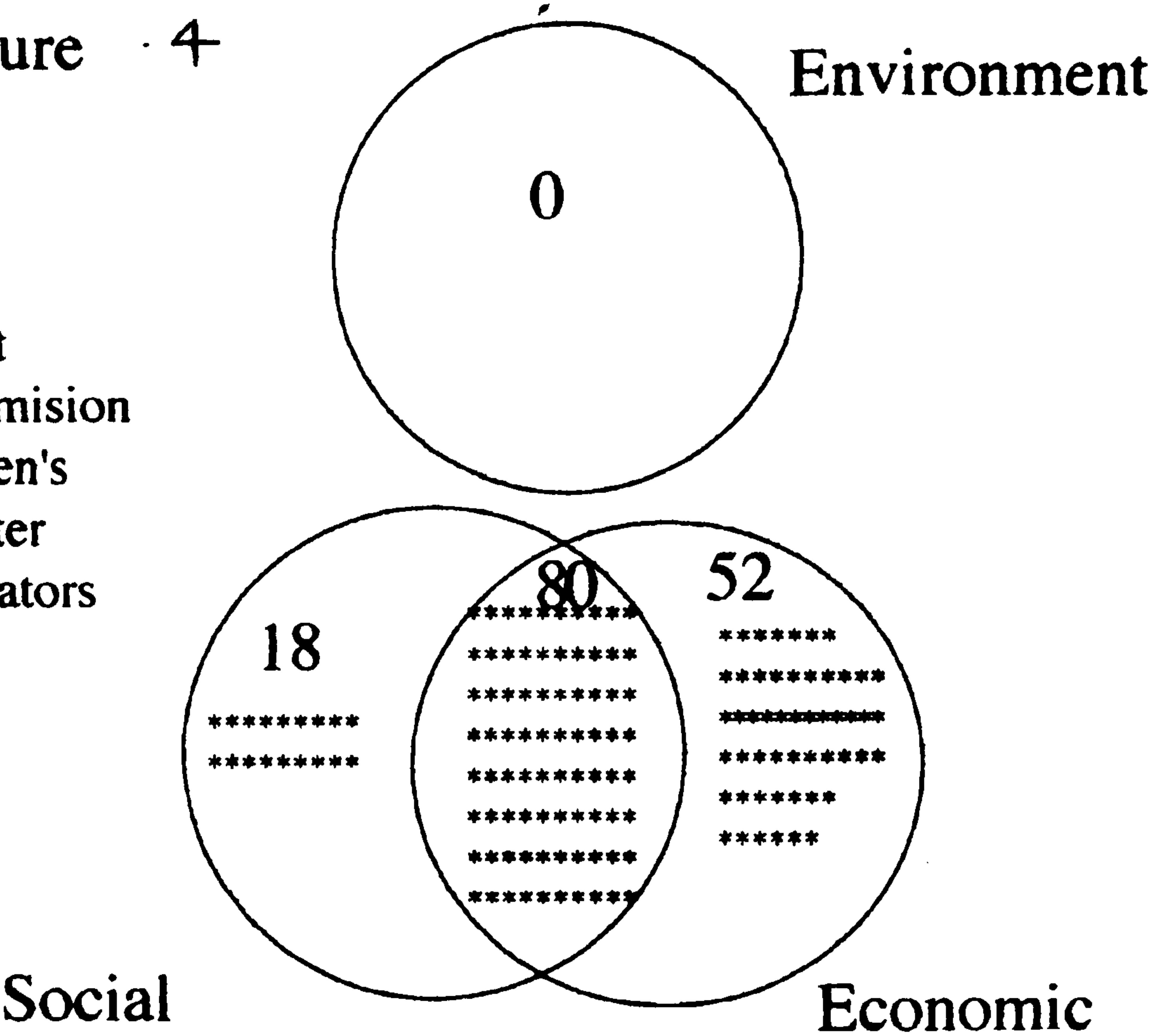
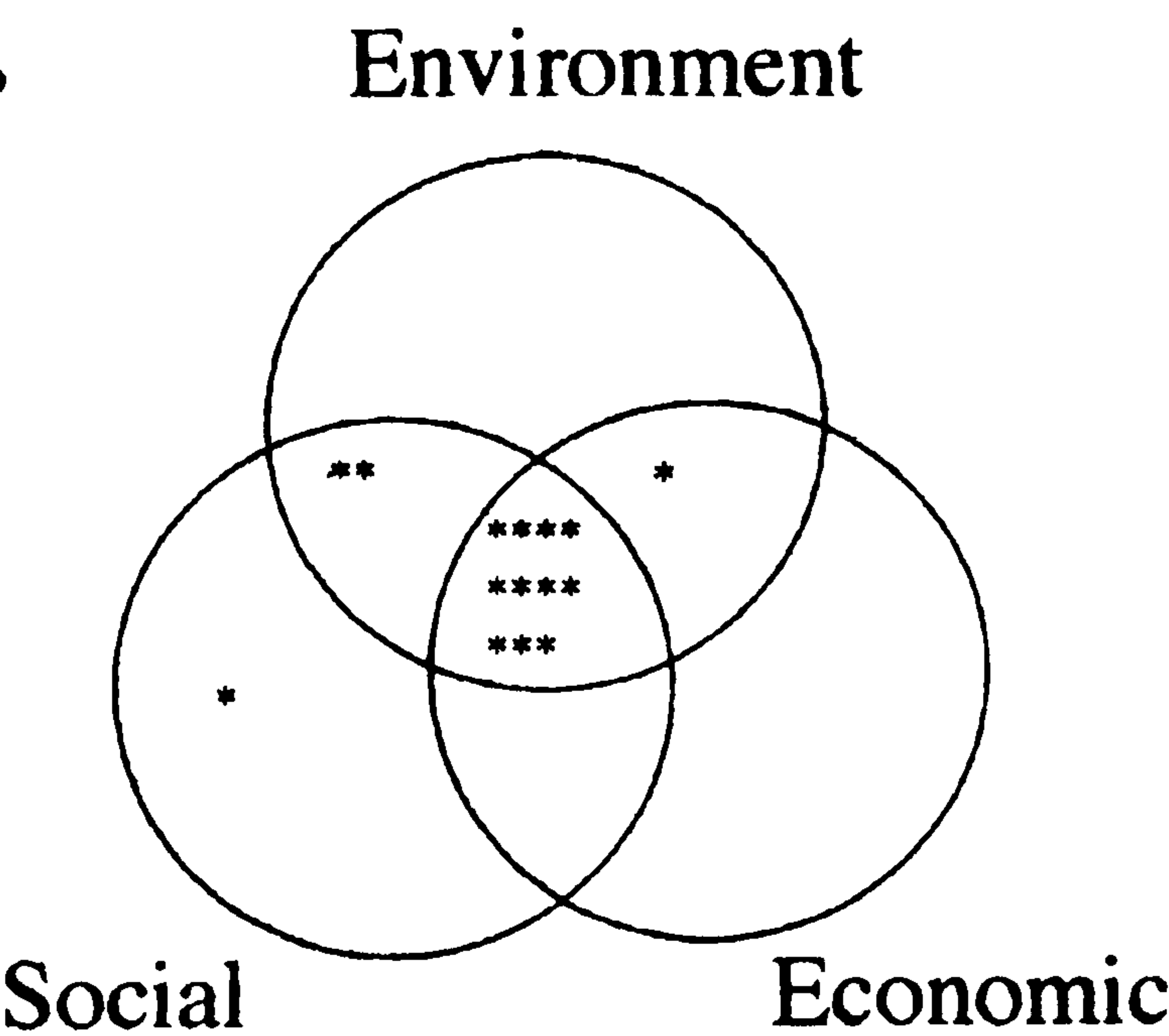


Figure 5

Central
Region
All Change
Transport
Strategy
Issues



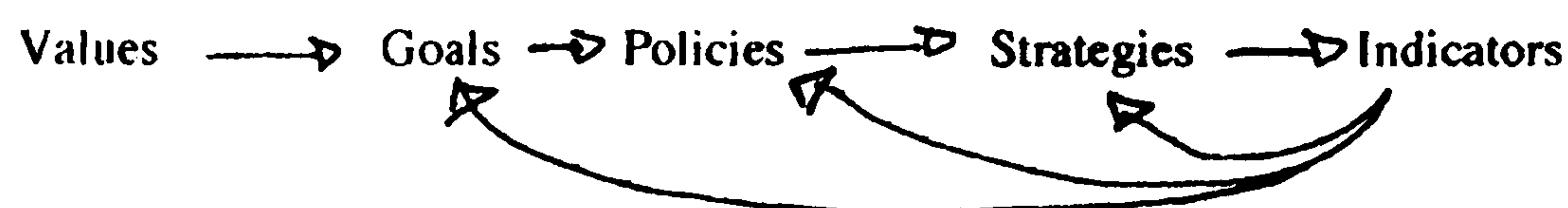
However, if we look at the kind of measures of performance currently in use, we find that they are fragmented, tending to focus on economic, or social, or environmental themes (Figure 3) and they take little or no account of the need to assess the effectiveness of services in meeting social welfare needs.

For example, when I looked at the Audit Commission Citizen's Charter Indicators to see where they fitted in terms of the primary issues they are designed to measure, I found the pattern illustrated in Figure 4. While I am the first to agree that this is a subjective exercise, the pattern does suggest that the Audit Commission has a rather narrow focus of what it is important for Local Authorities to achieve. It also shows that environmental issues are not a great concern.

For comparison, I tried the same exercise with the issues being covered by the Transport Strategy adopted in Central Region, known as *All Change!* The strategy identifies the problems of increasing car use in Region, and instead of advocating yet more road building, the solution being pursued is to encourage greater use of alternative means of transport. It is a radical programme not least because it intends to switch a lot of the new spending on transport away from roads and car-parks to specific projects for, traffic calming, and improved facilities for those walking, cycling and travelling by bus and rail. I should stress that this diagram is based on the the policy points not on indicators, as indicators have not been developed for all elements of the strategy. It does, however, serve to illustrate what a more integrated approach looks like in this framework.

The process of developing appropriate indicators of sustainability

Many authorities have experience of developing local indicators, to measure the effectiveness of local action in pursuit of locally defined objectives and policies.



Indicators should be one element in a comprehensive process of managing services and of managing change. They have a specific role in providing feedback on the implementation of policy.

To improve local authorities performance in achieving sustainability, the focus needs to be on how to meet social needs within the ecological balances of our planet, and how to provide services efficiently, in resource as well as economic terms, as well as how to ensure that it is the quality of life of people at both local and global levels that shapes the services that are provided.

Today we have an opportunity to explore ways of developing indicators of sustainability. The framework we will use in the workshops highlights the interconnectedness of social, economic and environmental issues.

There is no single right answer to what the pattern should be: just as we are not seeking to find one ideal form of sustainable society. We need to build on cultural and ecological diversity to find many forms of sustainable society.

This is a learning process for all of us. I hope we can support each other in the process of finding ways of living, of delivering services and of planning for the future as if people, the economy and the planet mattered.

LOCAL AUTHORITIES INDICATORS CONFERENCE

WORKSHOP LEADERS' NOTES

Participants will be advised that 6 workshops are available, each with a slightly different locus.

There will be 1 on each of the following topic areas :

- Planning (Bob Reid, Depute Director of Planning, Grampian).
- Transport (David Spaven, Transport Consultant).
- Environmental Policy (Allan Speedie, Environment Charter Officer, Central Region).
- Social Policy/Poverty (Jean Bareham, Scottish Education and Action for Development).
- Environment and Energy (Richard Dixon, Community Service Volunteers Environment).
- Indicators and Performance Review (Claire Monaghan, Management Science, Stirling University).

Participants will be encouraged to join the group in which they have some expertise but we need to keep numbers fairly even - about 10 persons per group.

Session 1

1 Hour

Developing Indicators
of Sustainability

1. Introductions

Who people are, what job they do, why they have come to the Conference.
5 mins

Select a Scribe

2. Working in threes, participants draw up lists of indicators they use in their department. 5 mins

3. Each threesome selects the 2 of its indicators which are most important in the influence they have on decisions in their department. Leader writes up 10 on flipchart.

(Note - just in case participants dry up completely, it would be prudent to have a list of fairly general indicators, eg GNP, unemployment rate etc up your sleeve. Lesley Rowan, will have other lists available at the Conference you could draw from).

4. Leader re-states the role of the 3 circles on the chart - Economy/Society/Environment. If an indicator reflects a social goal, it would benefit ordinary service users eg % increase in incomes. If an economy goal, it would benefit national economy eg % potential rent collected; if an environment goal, it would benefit the natural world eg species diversity in nature reserve.
5. Group discusses the list developed in (3) and places each indicator in a circle. Some will fall into more than 1 circle eg change in unemployment would fall into both society and economy circles, but would have no necessary relationship to the environment. Note that most items in conventional lists fall into separate circles, predominantly in 'economy' unless the list has been drawn up by Environmental Health! ("Post-it" notes are available if you want to use them).
6. New flipchart with linked circles. Leader re-emphasises that "environment is not negotiable".
7. Group tries to come up with indicators which fall into the centre of the linked circles - satisfying criteria for environment, society and economy together. You could work in threes again if you like. Try to tease out qualitative as well as quantitative indicators.

Model answers might include :

% houses achieving high standards of energy efficiency
 % food produced locally
 pedestrian/cyclist deaths per year etc.
 satisfaction with neighbourhood

8. Group discusses the pattern which the indicators make - some good suggestions may only meet 2 rather than 3 criteria. Why?

Well done to get to this point!

Session 2

1 Hour

But will it fly?

(Participants may change groups if they must, but are recommended to stay with their original group).

(Note - if the group hasn't got to stage 8, keep going if at all possible. Stages 9 onwards are useful and valuable, but if the group digressed in the morning, try to get them to reach at least stage 8 by the end of the afternoon).

Select a Scribe

9. Review morning's achievements. Note any further thoughts about the pattern emerging.
10. Group to assess the importance of each of their list of indicators.

What does indicator X mean for the environment/society/economy. Is it trivial or would it change anything if people started to seriously use it?

Note comments/deletions. What difference would they make. Why?

11. Group assesses the balance of the revised list.

Has something important been left out; does the basket of indicators feel coherent; does anything stick out like a sore thumb. Why?

Note comments and reasons.

12. Group considers the practical implications for daily work of using these indicators.

Are they easy to understand?

Can the material be easily/cheaply collected?

Can service users/community groups be involved in collection?

Would there be any undesirable consequences from managing these indicators?

Note comments and reasons.

13. Assuming everyone's happy, fill in the format sheet with the chosen indicators/who collects/how/under what circumstances.

Well done!

14. Consider the points the group wants to make to the SANGEC Team. Delegates will get written feedback mailed to them.

Have a well-earned cup of tea. We'll try to hold a short de-briefing for workshop leaders at 4.00pm

Possible "Indicators" In Measuring Progress Towards Sustainability: Workshop Group - Planning

Planning Measure	Which circle			Who Collects/ Could Collect	How	How Easy to Use	How Used	Problems
	Environment	Society	Economy					
TRAVEL MODAL CHOICE	•	•	•	L.A. N. GOVT	Travel Counters Surveys Tickets	Easy	Quality of Life Resource Depletion Safety	Dereg Buses
BUILDINGS AT RISK REGISTERED	•	•	•	Historic Scotland L.A. Civic Trust	Available Already Annual Survey	Easy	Heritage Protection Re Use	Few
ACCESSIBILITY	•	•	•	L.A. N. GOVT	GIS Time by Mode	Complex	Plan public transport Networks Land Allocation	Target Thresholds
RATE OF UPTAKE OF BROWNFIELD LAND	•	?	•	L.A. Private Sector Government	GIS Backword Data Available	Easy	Recycling Indicator Accessibility Anti-Sprawl	Condition of Brownfield land (Contamination)
RATE OF UPTAKE OF GREENFIELD LAND	•		•			Easy	Negative Indicator the less the better	
TOURISM VISITOR NUMBER BY SITE	•	•	•	Private Sector L.A. Government	Survey Interview Self completion	Easy	Compare with carrying capacity	Easily viewed as an economic indicator only

Possible Indicators in Measuring Progress Towards Sustainability: Workshop Group - Environment and Energy

Measure	Which circle			Who Collects/ Could Collect	How	How Easy to Use	How Used	Problems
	Environment	Society	Economy					
OVERALL ENERGY BALANCE :- Recycling - Re.Use - Reduction -	* * *	*	* * *	L.A., Power/Fuel Companies, Private Sector, Recycling/Re.Use Companies	L.A. / Cent. Govt. Regulatory	Easy	Focus on Waste/ Wastefulness	Fly-Tipping
TOTAL ENERGY USE	*				Sales Figures	Easy	Focus on Energy Consumption	Too Broad an Indicator
% OF ENERGY FROM RENEWABLE SOURCES	*	*		Power Companies, L.A.'s	Stats, Sales	Easy	Focus Attention on Global Warming CO 2 Emissions	
NUMBER OF YEARS OF NATURAL RESOURCES LEFT	*	*	*	Fuel Company Stats.	Stats.	Easy	Focus attention on Non Fuel Resources, Fuel Resources, New Technology.	Calculating Resources. Public awareness perceptions.
SATISFACTION WITH PUBLIC TRANSPORT	*	*	*	Public Surveys, Transport Authorities, L.A.'s,	Survey of.	Reason. Easy	Focus Attention on Problems (Inconvenience etc. of public network) Infrastructure	Variety of Reasons for Lack of use by Public
% OF HOUSING REACHING AN AGREED STANDARD OF ENERGY EFFICIENCY	*	*	*	L.A.'s, House Builders, Estate Agencies.	Housing Survey and Energy Audit	Reason. Easy	Focus Attention on Effective Household Efficiencies, Poverty.	
PASSENGERS KM. TRAVELLED BY MODE OF TRANSPORT e.g. CARS or PUBLIC TRANSPORT	*	*		Public Transport, L.A.'s, Employers, Traffic Commission	Audits / Surveys	Easy	Focus Attention on Energy / Pollution Reductions	Infrastructure of Public Transport Such That Drastic Change Difficult

Possible "Indicators" In Measuring Progress Towards Sustainability: Workshop Group - Environmental Policy

Measure	Which circle			Who Collects/ Could Collect	How	How Easy to Use	How Used	Problems
	Environment	Society	Economy					
ACCESS TO TRANSPORT	•	•	•	LA's	Survey of provision			
WASTE DISPOSAL AND RECYCLING % RECYCLED	•		•	LA's Trade Associations	Trade Data LA Survey			
ENERGY CONSERVATION ARE LA's SETTING /MEETING TARGETS	•	•	•	LA's	Energy Monitoring			
HEALTH STANDARDS ARE STANDARDS RISING/ FALLING	•	•		Health Boards	Surveys GP/Hospital Data			
INCOME LEVELS ARE INCOMES CHANGING		•	•	Nat Government LA's	Income Returns			
NATURE CONSERVATION PRE-SPECIES HABITATS DECLINING	•	•		Conservation/ Heritage Agencies	Survey			
HOUSING STANDARDS	•	•						

Possible "Indicators" In Measuring Progress Towards Sustainability: Workshop Group - Performance Review

Measure	Which circle			Who Collects/ Could Collect	How	How Easy to Use	How Used	Problems
	Environment	Society	Economy					
MAINTENCE OF WILDLIFE SPECIES IN SPECIFIED AREA	•	•		Voluntary	Survey			Specific
% OF PEOPLE IN LOCAL COMMUNITY WHO ARE HAPPY WITH THEIR ACCESS TO GREEN SPACE	•	•						
HOSPITAL ADMISSION IN 1st YEAR OF LIFE (ASTHMA CASES)	•	•	•					
VOLUME OF ENERGY USED FROM FOSSIL FUELS AND NUCLEAR SOURCES PER CAPITA	•		•					
WASTE MINIMISATION DOMESTIC WASTE/ LOCAL COUNCIL POPULATION	•	•	•					
ENERGY MINIMISATION ENERGY EXPENDITURE/ COUNCIL BUDGET	•		•					
ENERGY EXPEND BY TENANTS/ COUNCIL RENTS	•	•	•					

Possible "Indicators" In Measuring Progress Towards Sustainability: Workshop Group - Social Policy

Measure	Which circle Environment	Society	Economy	Who Collects/ Could Collect	How	How Easy to Use	How Used	Problems
No CLAIMING BENEFIT		*	*					
HOSPITAL ADMISSION IN 1st YEARS OF LIFE	Could be	*	*					
% OF INCOME SPENT ON FUEL AND FOOD	Could be	*	*					
% OF PEOPLE WITH LONG TERM LIMITING ILLNESS	Could be	*	*					
% OF PEOPLE WHO FEEL THEY CAN AFFORD HEALTHY FOOD	Could be	*	*					
ACCESS TO EMPLOYMENT OPPORTUNITIES		*	*					
NO OF LARGE FIERCE DOGS ON A LEAD	*	*	Could be					

REPORTING ON SUSTAINABILITY
THE CHALLENGE FOR LOCAL AUTHORITIES

EDINBURGH

6 APRIL 1994

T H E C O N F E R E N C E R E P O R T

**Lesley Rowan
Jane Brooke
Adrian Shaw**

This Conference was supported by :

- COSLA**
- Friends of the Earth (Scotland)**
- Scottish Academic Network on Global Environmental Change**

BACKGROUND

The Conference "Reporting on Sustainability - the Challenge for Local Authorities" was held as COSLA's contribution to the Edinburgh International Science festival. It formed the first day of three days of specialist and public fora designed to give the opportunity to debate the role of various different approaches to reporting on sustainability.

Local Authorities are increasingly under pressure to promote "Sustainable Development". Agenda 21, the European Union's Fifth Environmental Action Programme and the UK Government's Strategy for Sustainable Development have all highlighted the need for Local Authorities to take action.

It was the view of the conference organisers that it was important that reporting on sustainability within Local Authorities should emerge from existing good practice in performance review, and practical policy development.

AIMS

- to increase awareness about sustainability issues
- to increase people's understanding about the role of indicators in monitoring the effects of their practice towards or away from sustainability
- to build people's confidence that appropriately chosen indicators can be of value in shaping good practice
- to begin to explore approaches to devising useful, context-specific indicators of sustainability in local government in the UK.

TARGET AUDIENCE

This conference was not aimed at "experts" but at anybody who is interested in promoting sustainable development in Local Authorities. The list of delegates is attached (APPENDIX 2).

APPROACH

It was the view of the conference organisers that indicators of sustainability are simply one component in a management process. They need to be embedded in a framework which starts with values, and leads to actions. The role of indicators is to give feedback on the impacts of actions so that the relationship between these impacts and identified needs and policy priorities is explicit.

Indicators of sustainability are tools for assessing the condition of human and natural systems, the stresses upon them and the impacts of policy responses and practical actions.

Choosing appropriate indicators then becomes specific to the local context and the processes that are being managed. There is an important learning component in both devising and using indicators. By being involved in the process of assessing which measures may be appropriate, explaining them to others and monitoring the data which is collected, people can develop their awareness and understanding of the issues they are dealing with to a much greater extent than if they simply use externally generated checklists or procedures.

Issues around sustainability require us to deal with problems at many levels and in many ways at once. This creates a need for many people to understand the issues and recognise that they have a responsibility to make changes to their current practice. There are over 5 million people in Scotland making decisions on sustainability every day. We do not have the capacity to give them all a checklist or a set of indicators against which they can measure their every action. What we can do is to develop a framework which encourages understanding of the issues around sustainability and enables people to make positive decisions in favour of sustainable practices.

An attempt was made to extend the conventional framework for performance indicators to incorporate sustainability issues.

Performance indicators for sustainability need to take account of :

Effectiveness

Is the service meeting social welfare needs within ecological balances?

Efficiency

Is the required standard of service being provided at the lowest environmental, social and economic cost?

User experience

How does the service contribute to the service user's quality of life?

However, the measures of performance currently in use are generally both fragmented and incomplete, tending to focus on economic or social or environmental themes.

For example, an exercise to plot the Audit Commission's Citizen's Charter Indicators on the basis of the primary issues they are designed to measure produced the pattern illustrated in Figure 1. It is accepted that this is a subjective exercise but the pattern suggests that the Audit Commission has a rather narrow focus of what it is important for Local Authorities to achieve. It also shows that environmental issues are not a great concern.

For comparison, the same exercise was carried out with the issues being covered by the Transport Strategy adopted in Central Region, known as All Change! The strategy identifies the problems of increasing car use in the Region, and instead of advocating yet more road building, the solution pursued is to encourage greater use of alternative means of transport. It is a radical programme, not least because it intends to switch a lot of the new spending on transport away from roads and car-parks to specific projects for traffic calming, and improved facilities for those walking, cycling and travelling by bus and rail. It should be stressed that this diagram is based on the policy points not on indicators, as indicators have not been developed for all elements of the strategy. It does, however, serve to illustrate what a more integrated approach looks like in this framework (FIGURE 2)

This way of trying to make explicit the extent to which particular measurement approaches take account of environmental, social and economic elements was used to frame the workshop discussions.

The workshops began by looking at performance indicators currently in use by local government and exploring how these differed from indicators developed with the explicit intention of measuring performance on sustainability. Participants were asked to assess where they felt various indicators fitted in terms of social, environmental and economic objectives. It was suggested that by attempting to focus on policy making and performance measurement that has useful social and environmental and economic outcomes we move away from setting up conflicting policy streams and start to develop policy and practice that builds in accounting for sustainability.

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Six parallel workshops were offered, each with a slightly different locus. The workshop leaders were from a variety of disciplines representing a broad spectrum of those who will be developing practice and policy on sustainability in their own work. They were :

- Planning (Bob Reid, Depute Director of Planning, Grampian).
- Transport (David Spaven, Transport Consultant).
- Environmental Policy (Allan Spedie, Environment Charter Officer, Central Region).
- Social Policy/Poverty (Jean Bareham, Scottish Education and Action for Development).
- Environment and Energy (Richard Dixon, Community Service Volunteers Environment).
- Indicators and Performance Review (Claire Monaghan, Management Science, Stirling University).

The main purpose of the workshops was not to generate a definitive list of indicators. It was intended to be a learning tool which can help participants to clarify their ideas about indicators and begin to develop indicators appropriate to their own circumstances.

However, we attach examples of the indicators which were generated in the workshops to give an idea of the kind of outputs and issues which this approach generates. It is fair to say that most of the workshop participants felt ready to start addressing how to develop appropriate indicators by the end of the workshop sessions. The outputs are not necessarily what people would wish to go back to work and use. The aim was to develop the learning process not to come out with a definitive checklist.

SPEAKERS

Ed Reavley of the Scottish Office Environment Department reviewed development in Central Government (both Department of the Environment and Scottish Office) since the publication of the UK Sustainable Development Strategy. The Government is committed by the strategy to developing sustainability indicators and initial steps toward this objective have been taken.

Robin Millward of Touche Ross outlined the work to date on the Local Government Management Board's Sustainability Indicators Project.

Adrian Shaw of Strathclyde Regional Council suggested reasons why sustainability indicators could be useful in local government and stressed how the subject integrated environmental, economic and social issues. Problems associated with fishing were presented as an example of an unsustainable local economy that led not only to environmental damage, but economic and social problems.

Lesley Rowan of Stirling University examined a framework for looking at sustainability which seeks to decouple improvements in social welfare from increased environmental damage. The presentation then demonstrated how performance indicators can be adapted to incorporate sustainable development, and introduced the approach to be used in the workshops.

Three speakers in the afternoon gave examples of sustainability indicators in practice. **Jane Brooke** of Glasgow City Housing described how indicators could emerge from a model of the relationships between poverty, health and housing in Glasgow. A research programme - jointly funded by the City Council, the Greater Glasgow Health Board and the OECD, is about to start. This is intended to inform policy makers and the public about change within the model and the impact of public policy and expenditure.

Mike Halls of Ettrick and Lauderdale District Council presented a report on the Rural Sustainability Project in Borders Region. This project which is supported by a variety of bodies including Scottish Enterprise, Scottish Natural Heritage, Rural Forum, Borders Regional Council and Ettrick and Lauderdale District Council has developed a variety of sustainability indicators relevant to rural sustainability issues. A full report is expected to be made public in the near future.

Wendy Simpson-Lewis of Environment Canada State of the Environment Unit has been involved in preparing the Federal Government's State of the Environment reports. The unit now has several years' experience in developing environmental indicators. This experience is of great relevance to UK central government and local authorities both in the choice of indicators and method of development (including extensive public consultation).

What Happens Next?

The story so far

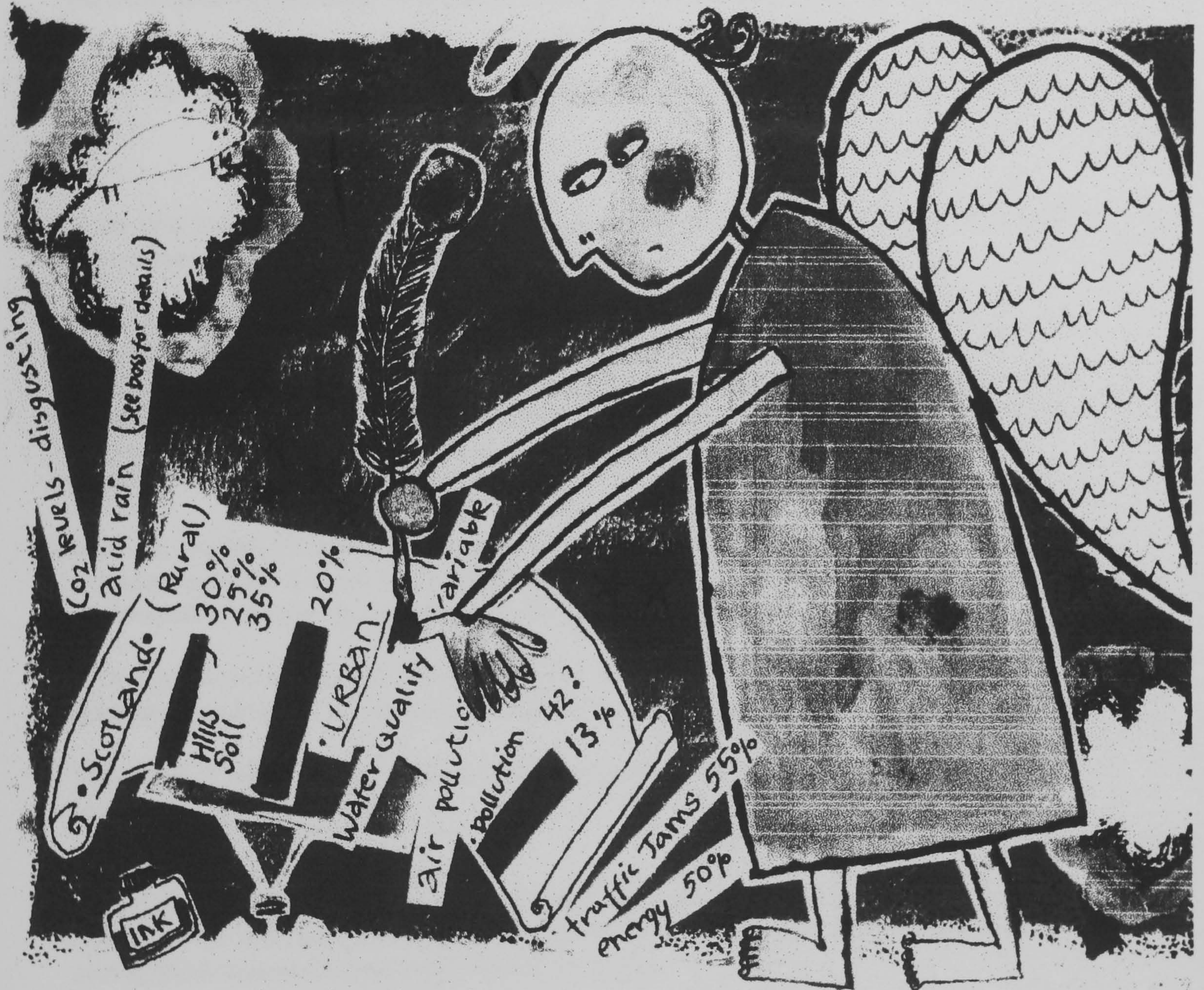
1. The process of organising the conference has already encouraged communication between a wide range of people including many who had not previously realised that measuring sustainability was of interest to them!
2. The process of developing the workshops and the comments from participants suggest that there is value in developing training materials
 - (a) for use by local authority staff
 - (b) for use by Elected Members
 - (c) for use by Community Councils/the publicThose interested in any aspect of this work should contact Lesley Rowan - 0786:467368.
3. Participants from a social policy background proved to be particularly adept at making the linkages between the impacts of environmental and social policies. This has already stimulated the Scottish Environmental Forum to focus forthcoming work on Communities and Sustainability.
4. The outputs of the Conference are being presented to the Steering Group of the LGMB Sustainability Indicators Project for consideration in their discussions.

SG/650/CM/JB
10 May 1994

**SCOTTISH ACADEMIC NETWORK ON GLOBAL ENVIRONMENTAL
CHANGE**

REPORTING ON SUSTAINABILITY

**SANGEC*/NEW ECONOMICS FOUNDATION/
FRIENDS OF THE EARTH SCOTLAND
JOINT CONFERENCE**



**Senate Room, Old College Quadrangle, South Bridge
Wednesday 6 April 7:30 p.m./Thursday 7 April 9:30 a.m.
University of Edinburgh**

**Details from: Indicators Conference, SANGEC, Department of Latin American
Studies, University of Glasgow, Glasgow G12 8QH.**

SCOTTISH ACADEMIC NETWORK ON GLOBAL ENVIRONMENTAL CHANGE

REPORTING ON SUSTAINABILITY

SANGEC/NEW ECONOMICS FOUNDATION/ FRIENDS OF THE EARTH SCOTLAND

Modern government manages the world to numbers, "indicators".

Current favourites are economic indicators: balance of payments, size of the money supply, rate of unemployment, rate of growth.

But even successful economic management is making its contribution to the spread of environmental crisis.

As Governments take on board the dangers, the search for alternatives takes wing.

At the 1992 Earth Summit in Rio, world leaders agreed to move towards the creation of "indicators of sustainable development"

Preparations are now underway. The UN Commission on Sustainable Development wants to use indicators to frame governments' annual reports. The OECD and EC are drawing up lists. The World Bank has commissioned reports and conferences. The UK Local Government Management Board is studying local authority sustainability indicators. The Scottish Office has commissioned research on indicators covering Scotland's uplands, lowlands, waterways and the country as a whole.

In the UK, the New Economics Foundation led the campaign to extend the list of economic indicators to cover social and environmental needs. WWF has asked it to draw up a report for the EC Structural Fund and the Commission on Sustainable Development.

In Europe, Friends of the Earth Netherlands has developed a series of indicators to rationalise developed countries' use of "environmental space" to make way for development in the South.

World-wide, Canada's State of the Environment Reporting Unit is recognised as a pioneer in the field of environmental reporting.

The NEW ECONOMICS FOUNDATION, FRIENDS OF THE EARTH SCOTLAND and the SCOTTISH ACADEMIC NETWORK ON GLOBAL ENVIRONMENTAL CHANGE are joining forces to present a panoramic view of the debate.

"REPORTING ON SUSTAINABILITY" will explain the background, take issues raised by the 1991 State of the Scottish Environment Report, look for tests of public accountability and participation, and provide a chance for Scottish academics and campaign groups to influence NEF's proposals.

COSLA and SANGEC are jointly organising a separate day conference on Wednesday 6 April on local authority indicators and sustainability strategy.

Both conferences will benefit from the presence of Wendy Simpson Lewis, of Canada's State of the Environment Reporting Unit.

SANGEC gratefully acknowledges the support of the Economic and Social Research Council.

REPORTING ON SUSTAINABILITY Final programme for speakers and chairs

April 6, 7, 8
Senate Room, Old College Quadrangle, South Bridge
University of Edinburgh

Wednesday 6 April

- 9:30 am COSLA-SANGEC conference on local authority indicators, COSLA offices.
4:00 pm COSLA conference closes.
- 2:00 pm Meeting of conference chairs, Centre for Human Ecology
3:00 pm SANGEC AGM
- 6:00 pm Supper in Centre for Human Ecology for conference speakers.
- 7:30 pm **Public meeting:**

A Scottish State of the Environment Report for a Scottish Sustainability Strategy?

Chair: Professor T.C. Smout, Institute of Environmental History, St. Andrews.
Kevin Dunion, Director, Friends of the Earth Scotland
Wendy Simpson Lewis, Canada's State of the Environment Reporting Unit
Dr. T. Dargie, consultant, State of the Scottish Environment (1991)
Ed Mayo, Director, New Economics Foundation

Thursday 7 April

9:30 Registration and Coffee

10:00 Introducing the Indicators Debate

Chair: Dr. Jacqueline Roddick, Coordinator, SANGEC
Ed Mayo, New Economics Foundation: **History of the Debate**
Dr. Malcolm Slessor, Edinburgh Centre for Human Ecology: **The European Indicators Project**
Jacky Karas, NEF: **The NEF Proposals**
Comments: Paul Gill, Stirling U. Dept. of Economics.

11:30 Preliminary Workshop on the NEF Proposals

2:00 State of the Environment Reporting in Canada and Scotland

Chair: Professor Loening, Edinburgh Centre for Human Ecology
Wendy Simpson Lewis, Canada's State of the Environment Reporting Unit
Dr. T. Dargie, consultant, *State of the Scottish Environment Report 1991*
Comments: Dr. Chris Hope, Judge Institute of Management Studies, Cambridge

The "State of the Environment Reporting" workshop will follow this session in the Centre for Human Ecology after coffee.

4:00 North-South Pressures on Negotiating Indicators

Chair: Dr. Mark Imber, Department of International Relations, St. Andrews U.
Dr. Chris Hope, Judge Institute of Management Studies, Cambridge U:
Environmental Indices for Development;
Dr. Jacqueline Roddick, Institute of Latin American Studies, Glasgow U:
National Reporting Guidelines at the CSD.

6:00 Supper in Centre of Human Ecology for conference speakers.

7:30 **Public meeting:**

Poverty and Sustainability in Scotland

Chair: Canon Kenyon Wright, KAIROS.

Cathy McCormack, Easthall Community Association, Easterhouse, Glasgow.

Jane Brooke, Glasgow District Council Housing Department.

Larry Henderson, Central Regional Council, "All Change" Transport Programme.

Friday 8 April

9:30 Last registrations and coffee.

10:00 **Friends of the Earth Europe: "Environmental Space"**

Chair: Ed Mayo, New Economics Foundation

Friends of the Earth Scotland and Norway

Comments: Chris Church, Sustainable Communities Project, UNA UK.

11:30 **Local Authority Indicators of Sustainability:
COSLA/SANGEC Conference conclusions.**

Chair: Linda Gray, Director, Scottish Education and Action for Development.

Adrian Shaw, Strathclyde Region Environmental Policy Manager:

Lesley Rowan, Stirling U. Department of Management Studies

Jane Brooke, Glasgow District Council Housing Department:

Comments: Friends of the Earth Scotland

2:00 **Workshops 1, 2, 4**

(Workshop 3, State of the Environment Reporting, is being held Thursday at 4:00 pm in the Centre for Human Ecology)

1: Participation: choices and consequences

Facilitator: Dr. Jacqueline Roddick, SANGEC

Presentation: Brooke/Rowan/Shaw

Place: Senate Room.

2: Regional indicators of sustainability in Europe

Facilitator: Jacky Karas, New Economics Foundation

Place: Centre for Human Ecology.

4: Presenting indicators to the public [single or composite?]

Facilitator: Paul Gill, SANGEC.

Place: Centre for Human Ecology.

4:00 **Plenary: Reports from Workshops and final discussion**

Chairs: Jackie Roddick and Jacky Karas.

5.1 Resources are used efficiently and waste is minimised by closing cycles

Ref	Indicator	Comment
1.1	Number of households practising composting of kitchen and garden waste.	Sustainable development requires changes in behaviour. This indicator not only focuses on positive action - waste reduction - but also stresses the need to 'close cycles'.
1.2	Domestic waste production per capita per annum.	The overall aim is to minimise the amount of waste produced. Over time this indicator will show whether waste levels are falling.
1.3	Amount of material collected for recycling as a percentage of total domestic solid waste.	Shows progress towards the Government target for this particular waste stream.
1.4	Amount of industrial/commercial waste which goes through transfer stations per annum.	As an indirect measure of efficiency, it is desirable that attention is given to this larger waste stream. Definitions will vary, as will reporting procedures.
1.5	Number / percentage of companies participating in recycling schemes.	An indirect measure in relation to resource use, but when defined, it is a useful indicator of changes in environmental awareness and corporate performance.
1.6	Water abstraction rate per capita/per capita consumption.	Continual increases are unsustainable.
1.7	Per capita energy consumption in the home (e.g., gas, electricity, coal, oil) [both average and individual figures].	Energy consumption is one of the major issues of sustainability. The indicator is something individuals can measure for themselves, and it might prompt energy efficiency. It should indicate increasing sustainability providing any decline is not due to poverty(or the amount consumed is related to heating sub-standard housing).
1.8	Installed renewable energy capacity - windmills, biogas, solar panels.	Diversification in type of energy supply is required as well as a shift to less polluting technologies. Units of measurement, for example, kilowatt hours need to be defined.
1.9	% of housing stock with energy rating of 8 or greater.	Energy rating schemes are being introduced. This shows the direct effects of efforts to improve energy efficiency.
1.10	Area of open land lost to developments.	Land is a resource. Continual loss by conversion to urban areas and major development programmes, including road-building, is unsustainable. This indicator will require defining at the local level.

5.2 Pollution is limited to levels which natural systems can cope with and without damage

Ref	Indicator	Comment
2.1	Carbon dioxide (CO ₂) emissions per household (average/per capita).	Energy use in buildings is the UK's biggest source of CO ₂ emissions. Individuals could calculate their own carbon 'balloon' (examples are available which help convert the amount into something tangible for householders). Including transport is an option but this would make it harder to aggregate community figures. As with energy use, fuel poverty should be considered.
2.2	Air quality indicators - sulphur dioxide, oxides of nitrogen, carbon monoxide, volatile organic compounds, particulates, ozone, PAHs, PCBs, dioxin etc. - concentrations (substances as appropriate locally).	Good air quality is a pre-requisite for human health and the well-being of the environment as a whole. A straightforward measure of local pollution loading.
2.3	Number of cars failing MOT emissions test as a percentage of total.	A rise would show failure to improve performance but might be due to tightening of standards. Could be hard to measure.
2.4	Quantity of CFCs collected for recycling.	A short-term indicator as the aim should be to phase-out CFCs.
2.5	Tonnes of sewage discharged untreated or incinerated.	Raw sewage has undesirable health and environmental impacts. A reduction clearly shows increased sustainability. (Alternative methods that utilise the nutrients are positive too.)
2.6	Number of prosecutions and enforcement notices for breaches of pollution regulations.	A decrease should show improved performance, but might reflect enhanced "policing" arrangements /resources.
2.7	Number of reported pollution incidents (total and "serious").	The indicator requires careful interpretation because growing public awareness and publicity about how to report incidents might lead to a rise in reported incidents.
2.8	Area of contaminated land.	Quality of land is a key sustainability issue. A decrease over time reflects a positive trend. The indicator could also measure land brought back into a usable state.
2.9	Expenditure on pollution control/prevention technology.	Good response indicator, but probably only usable where companies are reporting environmental performance.
2.10	Percentage of river mileage in Class One.	Key indicator reflecting the healthiness of freshwater ecosystems. Rivers are classified by the NRA, an important data source..
2.11	Numbers of beaches failing EU Blue Flag standard.	Good provocative indicator but does not necessarily indicate sustainability.
2.12	Numbers of bathing waters failing EU Directive standards.	Good provocative indicator.

5.3 The diversity of nature is valued and protected

Ref	Indicator	Comment
3.1	Percentage of the population with gardens gardening organically.	Gardens are an important refuge for many species.
3.1	Number of domestic ponds with frogs.	Amphibians are key biological indicators, so this would be an indirect indicator of the health of the local environment and people's interest in wildlife.
3.3	Maintenance or percentage increase of populations of characteristic species/indicators of species assemblages.	Good indicator of 'health' and/or effectiveness of management, but may be expensive to collect data and must be linked to changes in area of natural/semi-natural habitat.
3.4	Changes in areas of natural/semi-natural habitats as % of total area.	Requires local definition of key habitats, including unofficial 'natural greenspace'.
3.5	Area of protected natural or semi-natural habitats (SSSIs, ESAs, Local Nature Reserves etc.).	Loss of habitat is major indicator of loss of species diversity.
3.6	Change in population of Red Data Book species.	Good provocative indicator.
3.7	Percentage of farmland covered by farm conservation plans.	Good response indicator.
3.8	Percentage of land farmed organically.	The soil is a key biological resource.

5.4 Where possible, local needs are met locally

Ref	Indicator	Comment
4.1	Percentage of allotments in use/Waiting time for allotments.	Allotments are perceived by the wider community to be important uses of land, particularly in urban areas. Shortages exist in some areas, over-supply in others. Information gathering may need to reflect whether land allocated for this purpose is being redeveloped.
4.1	Percentage of income spent locally.	Reflects a complex set of issues linked with individual lifestyles, behaviour, people's needs, local provision of services etc.
4.3	Percentage of local demand for water met from local resources.	Demand for public water supply is projected to rise 10% between 1992 -2012. Ensuring adequate water resources are available is identified as a key sustainability issue. This indicator is clear and easy to understand as a measure of supply.
4.4	Percentage of local demand for building materials met locally.	The construction sector is major user of resources.

5.5 Everyone has access to good food, water , shelter and fuel at reasonable cost

Ref	Indicator	Comment
5.1	Number of homeless households in temporary accommodation.	Local authorities are legally required to assist people in defined areas of " priority need" (Families with young children, pregnant women, and those made vulnerable through old age, physical disability, mental handicap, illness.) Easy to understand indicator but information gathering needs to set the context.
5.2	Percentage of housing stock needing major renovation in public/private sector.	Shows unmet need, but not response. Will require greater definition.
5.3	Percentage of local authority dwellings empty.	Audit Commission Indicator: may stimulate action
5.4	Percentage of population with drinking water quality below EC standards.	Clear and easy to understand as a measure of quality. A clearer picture may emerge if a time element is introduced. For example, length of time or number of occurrences when standards are breached, rather than using a definition which implies quality to be permanently below the standards.
5.5	Percentage of homes heated to agreed standard for less than 10% of household disposable income.	An indicator developed and used by Glasgow Housing Dept. within the context of anti-poverty strategy.
5.6	Percentage of dwellings disconnected from water/electricity/gas supplies.	Links quality of life, with potential health impacts and poverty/income difficulties. The indicator measures the extreme position (it masks those still vulnerable but who avoid disconnection by setting up an alternative arrangement with the utility).
5.7	Income needed to purchase/meet basket of basic household needs.	Defined and measured by official statistics (Retail Price Index) but this has limitations. Developing a more localised indicator may show interesting results. Will require careful definition .

5.6 Everyone has the opportunity to undertake satisfying work in a diverse economy. The value of unpaid work is recognised, whilst payments for work are fair and fairly distributed.

Ref	Indicator	Comment
6.1	Percentage living below poverty line.	There is a widening poverty gap across vulnerable groups in many areas. This will reflect unmet needs and therefore failings in the local situation and a possible stress on other sectors (health, social services etc).
6.2	Rate of long-term unemployment.	A good 'conventional' indicator but information needs to reflect current limitations.
6.3	Jobs created/lost.	In terms of full time equivalents (FTEs).
6.4	Percentage of businesses failing within 3 years.	The reasons may be complex and linked to national circumstances. It could also indicate, particularly for small businesses, a lack of local support structures and economic incentives.
6.5	Percentage of workforce working in top 5 largest companies.	Reflects the structure of local economy. Local economies are vulnerable to the collapse of a few big employers. Greater diversity is usually preferable.
6.6	Number of businesses with environmental strategy.	Many businesses have adopted voluntary environmental management practices as a response to public pressure but also in recognition that improving environmental performance can increase competitiveness. 'Strategy' will require careful definition.
6.7	Numbers participating in Local Economic Trading Systems (LETS), community businesses, etc.	Indicators of changing economic structure and 'empowerment'. Measurement and definition will need careful consideration.
6.8	Total number of child day care spaces available.	Provision of workplace nurseries, and day care facilities is an important measure of equity.

5.7 People's good health is protected by creating safe, clean, pleasant environments and health services which emphasise prevention of illness as well as proper care for the sick

Ref	Indicator	Comment
7.1	Percentage of smokers.	Trends relating to a reduction may show positive results from national/ local/ workplace health education programmes .
7.2	Percentage of overweight children.	The welfare of future generations has a central role in sustainable development. This indicator highlights potentially declining health and is important for ameliorative action programmes.
7.3	Infant mortality/1000.	Understandable, conventional and probably provocative.
7.4	Low birth weight/1000.	Has important correlations with other social factors such as poor maternal nutrition, access to pre-natal care, low income, maternal habits (smoking etc.) Can reflect race/ethnicity differences.
7.5	Child asthma/1000.	Thought to reflect pollution, although exact causation under dispute.
7.6	Heart disease/1000.	Reflects stress of modern life.
7.7	Percentage of population covered by cervical cancer/breast cancer screening programmes and take-up rate.	Good response indicator to availability of preventative health care.
7.8	Ambient noise levels breaching EC standards.	An often overlooked form of pollution. Absolute levels and change are both of importance.
7.9	Road traffic accidents/1000.	Understandable. Will require careful definition as to mode of transport and severity.

5.8 Access to facilities, services, goods and other people is not achieved at the expense of the environment or limited to those with cars.

Ref	Indicator	Comment
8.1	Percentage of population within 400 metres of public transport.	Will need to reflect quality and frequency of service.
8.2	Average travel to work distance.	Reduction should indicate increase in sustainability.
8.3	Percentage of population within X metres of basic services (e.g. health centre, food shop, PO/bank, school).	The biggest increase in traffic growth is linked to non-work trips. The indicator comments on the provision of basic services, central to everyday life, and people's access. Will need to vary X in rural/urban areas and define services. Could investigate number/frequency of trips walked.
8.4	Percentage of town centre or length of streets pedestrianised.	Demonstrates planning policies sensitive to non-car users. Problems of comparability.
8.5	Kilometres of dedicated cycle routes.	Good response indicator of local priorities.
8.6	Investment in public transport as a percentage of expenditure on roads.	Good response indicator of local priorities., but must bear in mind national (DoT) expenditure on local trunk roads.
8.7	Non-road freight as a percentage of total freight. (tonne/km.)	Would reflect a shift from road to rail/water.
8.8	Number of companies offering subsidies/loan for use of bikes, public transport.	Could reflect shift away from car culture.
8.9	Passenger miles by mode per capita.	Passenger travel has more than trebled in the last 40 years, with all the growth in private car usage. A major issue in planning for sustainability is to meet needs for access and mobility in ways which do not place unacceptable burdens on the environment. Selected routes may be the most pragmatic approach.
8.10	Percentage of population living within 1 km of recycling facility (or served by kerbside collection).	Recycling saves energy but the savings can be diminished by car journeys specifically undertaken to deliver materials to the recycling centre. Easy access to facilities makes householder participation more likely.

5.9 People live without fear of personal violence from crime or persecution because of their personal beliefs, race, gender or sexuality.

Ref	Indicator	Comment
9.1	Percentage of population feeling safe to go out at night.	A subjective but valuable indicator of freedom. Contributes to overall public perceptions of local quality of life.
9.2	Violent crimes/1000	Audit Commission indicator.
9.3	Burglaries/1000	Audit Commission indicator.
9.4	Annual increase in cost of property insurance (household, business).	Increases in premiums would reflect growing problems (actual or perceived).
9.5	Number of reported racially motivated attacks.	Despite problems of measurement a vital indicator of community relations.
9.6	Numbers of reported rapes/indecent assaults.	Justice is a crucial equity issue for sustainability but there are problems with measurement. Public safety is generally regarded as measurable.
9.7	Numbers of tribunal cases for discrimination/harassment.	This could indicate good industrial/community relations (but might mask out-of-court settlements or cases not proceeded with).
9.8	Numbers knowing community policeman by name.	Provocative indicator.

5.10 Everyone has access to the skills, knowledge and information needed to enable them to play a full part in society

Ref	Indicator	Comment
10.1	Children under 5 in nursery/pre-school as a percentage of total.	Audit Commission indicator.
10.2	Pupil/teacher ratio.	Basic measure of quality of education.
10.3	Percentage of adult population in full/part time education or training (including evening classes).	Measurement could address the split between higher education students, unemployed on training courses, and 'traditional' adult education. Indicator could be skewed by presence of universities.
10.4	Percentage of 18-21 year olds in further/higher education or training.	The same comment as above is applicable.
10.5	Percentage of schools which have undertaken environmental education programmes, or in service training (INSET) in the last two academic years	Commitment to addressing environmental issues through local schools.
10.6	Publication of local Environment Strategy, State of the Environment Report, etc.	Easily understood; does this lead to measurable action rather than simply "good PR"?

5.11 All sections of the community are empowered to participate in decision-making

Ref	Indicator	Comment
11.1	Percentage of population attending community for a.	Would need trend over several years to be meaningful.
11.2	Membership of specific voluntary groups.	Groups to be specified.
11.3	Number of voluntary groups.	Indirect measure of community involvement, but not necessarily in decision-making.
11.4	Ethnic minorities as a percentage of total school governors related to mix of pupils.	Ethnic integration important but hard to measure.
11.5	Number of neighbours known by name.	Provocative indicator for urban areas.
11.6	Percentage of electorate voting in local elections.	Provocative indicator: perceptions of the relevance of voting?
11.7	Number of responses to Local Plan or similar public consultation document.	Indicates degree of actual participation.

5.12 Opportunities for culture, leisure and recreation are readily available to all.

Ref	Indicator	Comment
12.1	Area of semi-natural greenspace available for community use/1000	Most valued kind of open space in urban areas.
12.2	Percentage of population living > 1km from accessible green space of recognised ecological value.	Relevance and ease of measurement will vary greatly between authorities.
12.3	Percentage of public buildings with disabled access or facilities for physically impaired.	Audit Commission indicator. The only indicator in this listing reflecting an important quality of life issue of disabled people.
12.4	Library use per capita.	Audit Commission indicator.

5.13 Places, spaces and objects combine meaning and beauty with utility. Settlements are "human" in scale and form. Diversity and local distinctiveness are valued and protected.

Ref	Indicator	Comment
13.1	Numbers participating in community environmental improvement schemes (e.g., Environment Week).	An indirect measure of care for the local environment.
13.2	Membership of local amenity/residents groups.	An indirect measure of care for the local environment.
13.3	Percentage of land designated for landscape quality or amenity value.	Would include AONBs/National Scenic Areas, National Parks Heritage sites, conservation areas.
13.4	Area of semi-natural greenspace versus area devoted to cars.	A measure of sustainability within settlements.
13.5	Percentage of historic buildings on 'at risk' register.	Good measure of state of historic built environment, but easy only if register exists.
13.6	Number of developments breaching Local Plan.	Assuming local plans are trying to protect the quality and character of the environment (based on PG 13 etc.), large numbers of breaches would indicate failure and a lack of response to sustainability concerns from businesses.
13.7	New trees planted per capita.	Could consider survival rate after one year.
13.8	Numbers of tree preservation orders (TPOs) and numbers breached.	

Sustainable Development: The need for a New Professionalism

1

Lesley Rowan,
Dept of Management & Organisation, University of Stirling

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The challenge is to upend our thinking, to turn values on their heads, to invent and adopt new methods, and to behave differently. The frontiers are personal and professional, requiring changes which are radical but quite surprisingly practicable: to question our values; to be self-critically aware; to see simple as often optimal; .. to help people to do their own analyses; ..to test and use participatory approaches, methods and procedures; to encourage decentralisation.

Robert Chambers, 1993

1. The need for sustainable development

"We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill-health and illiteracy and the continuing deterioration of the ecosystems on which we depend for our well-being. "

Agenda for Action in the 21st Century, UNCED 1992

The major problems currently facing us can be summarised in terms of social justice and sustainability:

How can the needs of current and future human populations be met?

How can the ecological balances of the planet be sustained?

For tens of thousands of years humans have altered the natural environment by hunting, fire and agriculture, but most of the change has been gradual, reversible and local. Over the past three centuries population growth and industrialisation have greatly increased the extent and severity of human impacts. In 1700 the total human population was around 680 million (Turner et al 1990). Currently the population is over 5,500 million and this figure is increasing by nearly 90 million people each year (Brown et al, 1994).

The complex and finely balanced set of structures and process that form our natural support systems are now threatened by the numbers and the lifestyles of the planet's human population. Urbanisation, industrialisation, over-intensive land use and fishing, industrial accidents and the dumping of waste are all taking their toll on the natural diversity of the planet that has taken 4,600 million years to develop (Sarre & Smith, 1991).

But despite the current scale of human impact on the planet a large number of the human population lack the basic amenities to support sound health. And because it is our life support systems we are damaging we are further hindering the ability the planet to absorb ever increasing human pressures.

The rich countries of the world, such as Scotland, consume far more of the planet's resources than their fair share. The 20% of the world's population who live in the rich countries consume 70% of the world's energy, 75% of its metals and 85% of its wood and paper. At the same time approximately one-fifth of the world's human population are currently living in absolute poverty,

this is defined as being the income level below which a nutritionally adequate diet and essential non-food items are not affordable (per capita income of under £206 per year) (Carley & Christie, 1992). Even in high income countries wealth is not distributed in such a way as to ensure that the basic need of the people are met, in the UK, for example, one in five children are defined as living in poverty (Hewitt and Leach, 1993).

It is not only the current problems of meeting basic human needs without destroying our complex ecological support systems that are of concern. One third of the world's human population is entering its reproductive years during the 1990s (Population Concern, 1993) and projections for the next hundred years range from a total human population of 8 to 14 billion before a leveling off takes place (Carley & Christie, 1992). The rate of urbanisation, particularly in low-income countries, is also escalating rapidly. Within the next decade half the world's population will live in cities. In the huge cities of low-income countries a high proportion of the inhabitants live in what are officially categorised as slums, and the lack of adequate food, fuel, clean water and safe means of waste disposal means that health problems are endemic.

There are clear linkages between industrialism, population growth, environmental degradation, urbanisation, and increased resource consumption (Figure 1) and with the globalisation of trade and the governments of middle and lower income countries demonstrating their keenness to promote industrialisation the linkages are becoming cyclical - with a positive feedback loop fueling human induced ecological and social destruction.

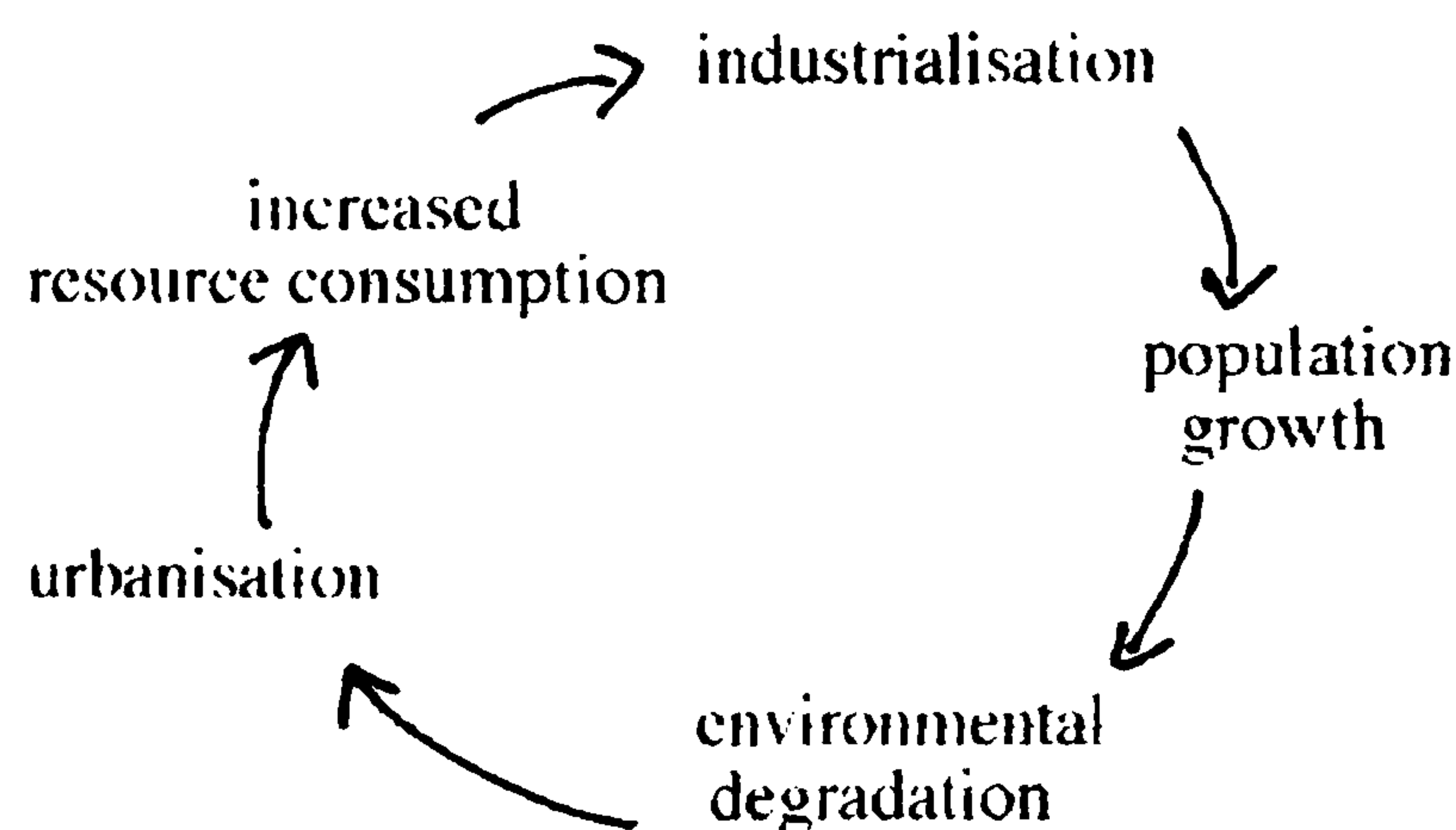


Figure 1
The destructive
cycle of global
industrialisation

The task of finding ways of sustaining the ecological balances of the planet in the face of the growing demands of the world's human population have come to be described as "sustainable development".

The term originally came to public attention when the World Commission on Environment and Development (commonly known as the Brundtland Commission) reported in 1987, although it had been in use for at least a decade before then. WCED defined sustainable development as:

"Development that ensure the needs of the present without compromising the ability of future generations to meet their own needs". (WCED, 1987)

The need for a shift towards sustainable development was recognised by 160 governments at the 1992 United Nations Conference on Environment and Development, the 'Earth Summit'.

A key outcome of the Earth Summit was 'Agenda 21' - a programme of action towards sustainable development. Agenda 21 makes it clear that all sectors of society need to work together to achieve successful change. It stresses the need to involve certain key sectors - women, youth, trade unions, local authorities, business, scientists, indigenous people and citizens groups. It is the first time that a major international agreement has accepted that political change involves such groups. As a part of the Agenda 21 process local authorities across the world are supposed to be developing a local plan of action, a 'Local Agenda 21', in partnership with local communities.

2. The values and practice of sustainable development

"...if we are going to reform the world, and make it a better place to live in, the way to do it is not to talk about relationships of a political nature, which are inevitably dualistic, full of subjects and objects and their relationship to one another; or with programmes full of things for other people to do...The social values are right only if the individual values are right. The place to improve the world is first in one's heart and hands, then work outwards from there."

Robert M. Pirsig (1978)

The achievement of sustainable development depends upon the recognition of four basic values:

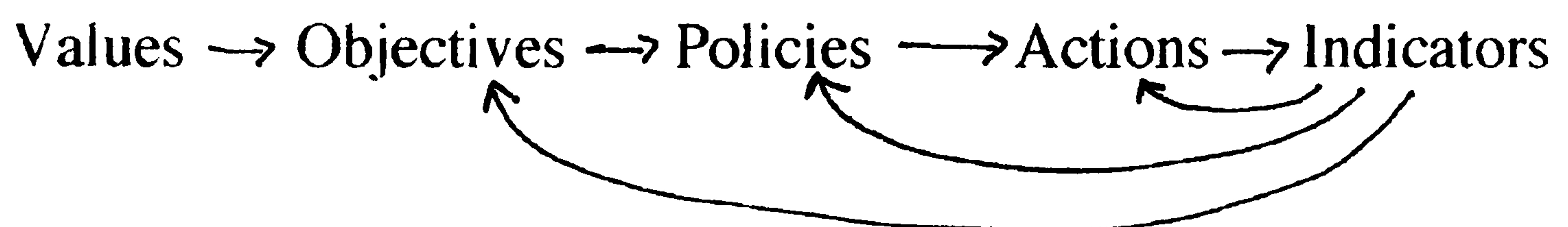
The Future - that the effects of an human activity on the ability of future generations to meet their needs and aspirations must be considered;

The Environment - that the full and true environmental costs of any human activity must be taken into account;

Equity - that control over resources must be more evenly distributed both within and amongst countries;

Participation - that development requires that people can share in decision making about goals and about the means of development, and that they can also take an active role in pursuing them. This implies an element of education within the process of development.

(Adapted from Bosworth, 1993)



Being clear about these core values makes it possible to review policies and actions against them, and to look at ways of changing what is done so that we get closer and closer to living by these values (Rowan, 1994). It is important that the review process is honest. The use of indicators is made meaningless if the priority becomes massaging the figure to make things look better, rather than dealing with the underlying problems. Feedback is a very important part of learning, so it is essential that the indicators of performance used reflect the values and imperatives of sustainable development.

3. Normal Professionalism and Barriers to Sustainable Development

Robert Chambers has written widely on issues of development, perceptions of reality, and approaches to effective participation (eg Chambers, 1992; 1993; 1994a, b, c, d; 1995). In particular he has drawn attention to the effects of the thinking, values, methods and behaviour dominant in a profession or discipline, which he terms 'normal professionalism'. Chambers argues that the importance of 'normal professionalism' is the way in which power, wealth, knowledge and professionalism are intimately linked, and that in individual perception, choice and behaviour deep biases operate (Chambers, 1993)

Normal professionalism values things more than people, numbers more than judgements, high technology more than low, and whatever is urban, industrial, clean and hard more than whatever is rural, agricultural, dirty and soft.

Although much of the work upon which the paradigm of 'normal professionalism' is based has been among the poor in 'third-world' countries, it can be seen to have much wider applicability.

and will be used here as a framework for exploring the entrenchment of existing structures and practices which, it will be argued are underpinning widespread unsustainable development.

Putting things before people

Standard of living, cash and material rewards are becoming more highly valued than quality of life. For many people their status and identity are now based on high levels of material consumption. Maintaining these levels of 'comfort' is resulting in the institutionalised destruction of the environment, short term wants being traded off against damage to ecological systems that have taken millions of years to evolve.

The current focus of many organisations is on inputs and outputs not on outcomes. The issues that are monitored are patterns of spending and staff allocation, and conformance with pre-set timescales for projects, the building of infrastructure, the production of reports and creation of new monitoring systems. But this monitoring often fails to identify whether the service is really effective. Is it meeting peoples needs? Is it doing so at the lowest possible environmental or social cost? Is operating in a way that is sustainable in the long-term? (Rowan, 1994).

Putting numbers before judgements

For example cost-benefit analysis reduces complexity to single figure monetary comparisons and forecasting techniques turn complex causality into assumptions of simple lineal relationships. These approaches turn genuine political problems into bogus technical problems and are used to maintain an apolitical and value-free stance in dealing with what are, more than anything else, problems of power and values. People's health, the environment and the future can be traded off in an opaque process of generating single measures or criterion for decision making.

Blueprints for development

Standardised blueprints for development are used in top-down organisations, they are designed by experts and are felt appropriate for widespread implementation. This approach can fail to take account of widely known local conditions. One example is that many of the system built housing tenements in Glasgow are of a design inappropriate for a cold wet climate, this has resulted in widespread problems of fuel poverty and ill health for the people who have to live in them. For many years the housing authority blamed local people for the problems of damp and condensation they were experiencing, rather than recognise that the problems were structural rather than social (Brooke, 1994).

Centralisation, power and control

The desire for control leads to specialisation of subject and physical territory, and the use of jargon which makes information incomprehensible to the non-specialist. A narrow focus is used for the teaching and training of new entrants based on the existing status quo, there is emphasis on the acquisition of qualifications which in turn re-inforces existing custom and practice. Centralisation rewards those who are already 'inside' the system, and discourages diversity and inventiveness, this reinforces the compartmentalisation of different 'disciplines'.

Gaps occur in the work that is carried out, particularly in focussing on the needs of the poor, of women and children, and of geographical peripheries.

The desire to retain power and control leads to the benefits of alternatives being hidden, distorted or ridiculed. For example those attempting to promote the harnessing of renewable energy sources in the UK have had to deal with falsification of cost information to make non-renewables appear uncompetitive and the dismissal of technologies seen as mainstream in other countries, such as combined heat and power, as marginal (Rowan, 1991).

Co-option and assimilation are also practiced to maintain control. Damien Killeen of Strathclyde Poverty Alliance provides a salutary example, when questioning whether sustainable development is really set to become the panacea seen by some:

"I am reminded of the 1970s epidemic of Structure Planning in Britain with major, legally required, public consultation processes which purported to involve the whole community. I tracked the process in Coventry where bureaucrats became skilled in raising any specific issue identified by the public to a level of generality that became meaningless and in reducing general issues to a complexity which confused anyone's ability to pursue them." quoted in Church (1995)

4. Local Agenda 21 in the UK: the persistence of normal professionalism?

Because so many of the problems and solutions being addressed by Agenda 21 have their roots in local activities, the participation and co-operation of local authorities is seen as a determining factor in fulfilling its objective (UN, 1992). However, examining current on Local Agenda 21 in the UK suggests that in most local authorities there is little progress being made in shaking off the institutionalised practice of the 'normal professional'.

Despite the clear guidance in Chapter 28 of Agenda 21 that: 'by 1996, most local authorities in each country should have undertaken a consultative process with their populations and achieved a consensus on "a local Agenda 21" for the community' (UN, 1992) there are a number of examples of authorities drawing up a document in-house with little or no reference to local people and describing it as "a local Agenda 21".

Some of the better developed Local Agenda 21 exercises have made considerable efforts towards accessibility and empowerment through roundtable structures, working groups, community conferences and regular reporting in the local media (eg Vision 21, Gloucestershire). But the majority of work to date in UK local authorities involves only a tiny fraction of the local population, employs methods that restrict participation to those with higher than average levels of formal education, and has not yet succeeded in turning the rhetoric of empowerment, participation and community capacity building into effective practice. It does not appear to be lack of money that is the primary problem, rather a lack of willingness for those who currently control budgets, staff and physical resources to relinquish the power and control built into existing ways of working.

The manner in which Local Agenda 21 is being promoted to and pursued by local authorities in the UK serves to stress that having well worded international policy frameworks is far from enough. Existing problems include:

- Competition for status and resources between various individuals and organisations operating as consultants in the field of 'sustainable development'. This is leading to territoriality and discouraging a shared learning process, as the emphasis can be on dismissing the work of the 'opposition' rather than building on experience and progress.
- Various attempts to 're-define' the nature of sustainable development and create specialisms within it on peoples own terms, perhaps with the intention of giving established organisations a competitive advantage in this 'marketplace'.
- A focus on short-term projects and blueprints that have little time for local capacity building and in this respect can do considerable damage by raising false hope and increasing local people's sense of dependence on professionals. For example the pilot phase of the Sustainability Indicators Project run by the Local Government Management Board was particularly intended to assess the development of indicators of sustainability at a community level - yet the time frame for the pilots was 6 months, with pressure for early reporting and instant results to meet top-down objectives of good media coverage and personal profile.

5. A 'new professionalism'

"It is not that we should simply seek new and better ways for managing society, the economy and the world. The point is that we should fundamentally change how we behave."

Vaclav Havel

It is clear from section one that sustainable development problems in low-income and high-income countries are interlinked. The destructive cycle of global industrialisation touches the lives of people right across the planet. However, this common thread offers the opportunity to seek interlinkages in potential solutions to the problems of sustainable development.

Increasingly the traditions of low-income countries adopting high-technology westernised 'solutions' to problems are being reversed by the transfer of methods and structures which promote diversity, empowerment and local initiative from low-income to higher income countries. For example Scottish Education and Action for Development promote learning by sharing

experiences with activists from low income countries who have expertise in developing methods of popular participation and building alliances among disparate groupings (SEAD, 1995). These approaches fit with the alternative paradigm presented by Chambers, that of 'new professionalism' which reverses the existing norms of behaviour and methodology. New professionalism includes:

Putting people before things, and poor people first of all

There is a need to focus much more directly on quality of life and whether people have access to basic services, rather than on indices of wealth and consumption.

Work on sustainability indicators has sought to focus attention on whether the basic needs of local people are being met; the effects of the lifestyle of local people on the ability of people in other places to meet their needs; whether local people are being encouraged to improve their quality of life; and whether the environment is being cared for to ensure that future generations are able to meet their own needs. The issues for which indicators were developed, and the trends in terms of sustainability are shown in Figure 2 (Sustainability Indicators for Fife, Fife Regional Council, 1995)

Decentralisation, democracy and diversity

Rich (1994) argues that there is a growing perception that neither local or global economic and ecological systems are predictable from the standpoint of the state, which in turn means that the world cannot be managed through conventional centralised projects of administration and control. Decentralisation means that resources and discretion are devolved enabling needs and priorities to be identified and tackled locally.

Diversity in methods and practices is necessary to reflect the differences in social and natural environments that we face on a regional, let alone a global scale and to deal with complexity, and rapidly accelerating rates of change in ecological, economic and social conditions. The need for diversity emphasises the need to value local knowledge and ensure it is incorporated into decision making processes. The importance of diversity relates to the concept of fit explored by researchers in the fields of business policy and organisational design.

Increasingly work on sustainable development has focused on the need for an improved participation in order to achieve effective action (eg Carley and Christie, 1992; Brooke & Rowan, 1995; Church, 1995), and this 'improvement' generally rests on a shift towards 'empowering participation'.

"Active participation of local 'stakeholders' is considered to be an important part of effective, efficient and equitable development projects and programmes. Experience has shown that participation cannot be imposed but must be developed through a process of joint analysis and constructive dialogue between the relevant actors (local people, external agents, etc) and that there are a range of principles, concepts and techniques that can assist adoption and application of effective participatory methodologies." Mitlin & Thompson (1994)

Work on 'Participatory Learning and Action' (PLA) methods adaptable to rural and urban contexts in low and high income countries is developing rapidly. The approaches involve facilitators handing the initiative over to local people, who are encouraged to use their first hand knowledge and expertise of practices and priorities to construct charts, maps and matrices, all of which yield information making it easier to plan for the future. This analysis often uses highly visual pattern languages unique to particular communities. In many cases, the problem-solving strategies that result are innovative, successful and sustainable. These PLA approaches are felt to have much in common with soft systems methodology (Checkland 1981 quoted in Chambers 1994c; Pretty, quoted in Lamb, 1993). As Pretty, of the Sustainable Agriculture Unit of the International Institute for Environment and Development (IIED) points out:

'Both ideas operate on the premise that problems are endemic and don't stand still; they can't be conclusively solved by blanket techniques or exorcised for good by troubleshooters. The solution in both cases is to equip people who face such problems with the confidence to tackle them as a group through an organised process of enquiry. The resulting knowledge can be applied without further involvement from outsiders and adapted creatively to suit changing circumstances.'

Local Initiative

"Behind nearly every successful community struggle lies a wealth of collective energy drawn from a coalition of residents, volunteers, activists and community groups. Looked at this way, community power is a power shared by many. Its strength lies in the horizontal connections among many people and many groups. The key processes are networking, partnerships, cooperation and interdependence. The structures are open, shifting, spontaneous and non-hierarchical. Contrary to the belief that power-sharing means giving up power, power sharing means gaining more power by building solidarity, vision and community purpose." Nozick 1991

There are a number of examples of such grassroots initiatives operating in Scotland at present. Local Exchange Trading Systems (LETS) can help to make local economies more self-contained. This means that money circulates locally, bringing benefits to local traders and suppliers, retaining jobs and profits locally, and encouraging skills and expertise to be retained. By trading using a local currency people don't have to compete directly with the economies of scale and the subsidies which large companies ensure always play to to their advantage. Even taking a small percentage of trading in local currency may give a company the breathing space it needs to survive. By encouraging local trading, and the use of local land and natural resources, it is possible to keep a much closer eye on the benefits and problems it brings, and to reduce the negative impacts on other parts of the planet (Rowan, 1995). Other examples of local initiatives that can underpin a shift towards sustainable development include: Credit Unions, Food Co-ops, Housing Co-ops, Fair-trading networks, Anti-poverty networks, Volunteer Bureau, Youth Networks and Community Education Projects.

Development through flexible and adaptive learning processes rather than blueprints

The participatory learning and action methods, and the direct and very personal experience people gain from involvement in local initiatives are well suited to a more adaptive and iterative style of development. Instead of mechanistic implementation of a set plan the emphasis is on learning and changing, on empowering local groups and on demand from below (Korten, 1980). This fits with organic organisation style which is flexible and adaptive to a changing environment.

6. New professionalism and the challenge of sustainable development

"The question that must be addressed...is not how to care for the planet, but how to care for each of the planet's millions of human and natural neighbourhoods, each of its millions of small pieces and parcels of land, each one of which is in some precious way different to all the others. Our understandable wish to preserve the planet must somehow be reduced to the scale of our competence - that is, to the wish to preserve all of its humble households and neighbourhoods" Nozick 1991

Agenda 21 makes a clear statement of the need for all sectors of society to work together to achieve successful change. It is the first time that a major international agreement has accepted that political change needs the active participation of a wide range of stakeholders to be successful. Agenda 21 also stresses the importance of capacity building - improving the ability of individuals and groups to actively participate.

This paper has emphasised the difficulties of moving towards sustainable development in the face of the vested interests of those who currently have status, wealth and power within existing structures. It is also clear that bottom-up approaches are insufficient on their own to achieve lasting change on the scale that is required. They can be too easily undermined by top-down decision making. Community based initiatives struggle under the burden of trying to build capacity whilst continually fire-fighting the negative impacts of business as usual.

What is needed is a much more sophisticated interaction between the community based knowledge of what works and what doesn't and the enabling policy framework (Carley, 1995). A shift to new professionalism in policy making, practice and behaviour could provide the most effective route for achieving this.

It is important that any transition does not simply attempt to wrest power from those currently in control. There are numerous examples of such revolutionary approaches, but violent transition and imposition of ideology worsens the conditions for people and planet. Rapid change is most damaging to the most vulnerable, and the uncertainty and instability make capacity building and long-term planning yet more difficult.

The extension of practice of new professional methods and behaviour offers an opportunity for a non-violent transition towards sustainability.

Through the adoption of participatory learning and action approaches, there is considerable scope for a changed but very important role for the professional. The nature of the tasks and the sources of status would be altered, but there is ample opportunity for gaining respect and reinforcing self-worth. The experience of participatory learning and action increases people's awareness of shared interests, and local action-centred contact networks give confidence to generate further cycles of improvement. This is the true basis of 'sustainable development'.

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FoE Sustainable Scotland Conference 7th November 1995 Sustainability Indicators for Fife

Lesley Rowan, on behalf of Fife Regional Council

"...because so many of the problems and solutions being addressed by Agenda 21 have their roots in local activities, the participation and co-operation of local authorities will be a determining factor in fulfilling its objectives. As the level of government closest to the people, they play a vital role in educating, mobilising and responding to the public to promote sustainable development."

Chapter 28, Agenda 21

Local Government Management Board Sustainability Indicators Project

It is estimated that over two-thirds of Agenda 21 commitments cannot be delivered without the commitment and co-operation of local government (Gordon, 1993). The Local Government Management Board (LGMB) identify 6 principle steps for local authorities in making progress towards sustainability, of which one is 'measuring, monitoring and reporting on progress towards sustainability', which is where indicators come in (LGMB, 1995).

Indicators can be seen as having two primary roles:

benchmarking - measuring progress in relation to externally set standards.
For example per capita energy consumption for a region.

feedback - as a way of learning whether locally chosen policies and actions are effective in dealing with sustainability issues.
For example measuring whether a campaign increase walking, cycling and public transport usage and car-sharing is actually resulting in a reduction in miles travelled by car by those living in a particular community. The ownership of the process of identifying issues, solutions and appropriate indicators of progress is much more important with feedback indicators.

The aim of the Local Government Management Board Sustainability Indicators Project was to learn more about the ways in which indicators can be selected and used so that they are effective in informing choices and actions. The project included research into good practice in other countries, the development menus of issues and of indicators, and a six month pilot phase in 6 pilot local authorities: Cardiff, Fife, Hertfordshire, Mendip, Merton, Oldham and 4 additional local authorities who 'shadowed' the process, Bedfordshire, Lancashire, Leicester, Strathclyde.

The project began in November 1993, and the phase involving pilot local authorities took place from June 1994 to January 1995. Two reports are available from LGMB covering the findings of the scoping phase and the pilot phase of the project.

Fife Regional Council - Sustainability Indicators Project

Fife have had an Environmental Charter since 1990 and have published 4 Action Programmes which set out plans for future work and review practical action to date. Fife won the Scottish "Green Local Authority" award in 1993. They have a "Green Business Fife" Network, and are currently piloting the Environmental Management and Audit System (EMAS) to help improve internal environmental management systems.

Fife Regional Council sought to be a pilot authority for the LGMB project as it was considered that it would assist in developing work towards a Local Agenda 21 Plan for Fife and would also contribute to the monitoring and review of the Council's own practices in their Policy Statement on Sustainable Development.

It was recognised that participation in the LGMB Sustainability Indicators Pilot exercise would be an opportunity to explore effective approaches to community involvement, which is a fundamental element of sustainability. The emphasis on the project as a chance to LEARN, and on the importance of the role of indicators informing ACTION were a recurring theme of the work.

A Sustainability Indicators Working Group was set up to run the project. It included representatives from the following Fife Regional Council Departments: Economic Development and Planning Department, Corporate Services, Engineering (Roads), Education and Social Work.

The Fife Sustainability Indicators Project set out to:

- ~ assess the issues which are considered to be important by local communities and how these relate to sustainability;
- ~ identify ways of measuring whether Fife is moving towards or away from sustainability on a range of issues;
- ~ find out whether data was available to assess trends on these issues;
- ~ identify what actions are appropriate to ensure a move towards sustainability.

Fife has a population of 350,000. It was felt to be impractical to try attempt to achieve widespread community involvement in the development of sustainability indicators at a Fife-wide level within the pilot stage of the project. For this reason work was split into two levels:

Fife wide

Where the role of the indicators was primarily benchmarking and the role of the public consultation process was to assess the issues on which indicators should be developed.

Community pilots - Benarty, the East Neuk, and Glenrothes

In which different approaches to community involvement were tried, with the aim of learning more about how to develop indicators as a process of feedback on the effects of policies and actions at a local level.

Fife Wide - 'Sustainability Indicators for Fife 1995'

The development of the 'Sustainability Indicators for Fife 1995' report was not a nice, neat, linear process which could just follow the menus and check list generated by the LGMB project. At various stages the members of the Indicators Working Group wrestled with the what the ideas behind sustainability actually meant in practice, how these related to current lifestyles and expectations, how develop a global focus without imposing ideas top-down, and the constraints on action within local government in the midst of a major re-organisation exercise.

The LGMB project guidelines required pilot authorities to select indicators from a menus of 105 indicators grouped under 13 themes, and attempt to collect data on them. Fife selected 39 indicators to seek to collect data on. Of these 8 were included in the final draft of the report, and 6 were included in a revised form. A lot of staff time was put into this early data collection and presentation. With hindsight the menu-driven approach was felt to have pre-empted wider discussion of which issues are most important to sustainability in relation to Fife.

The short-timescale for the pilot project, and the pressure to produce evidence of progress to LGMB meant that there was initially a reliance on easily accessible published data source. These predominantly relate to inputs (money, materials, staff time) and outputs (reports, conferences etc) but there is relatively little easily accessible information on outcomes or on quality of service. This could have masked the need for better information on outcomes, as it was not initially being sought.

The LGMB menus are relatively strong for quality of the environment and some aspects of use of resources and basic needs, but the indicators recommended for 'community' issues are very weak. This lead to the collection of data for indicators which really do not measure sustainability issues effectively.

Public Consultation

The process of compiling the 'Sustainability Indicators for Fife' report included a consultation exercise regarding the relative importance of the issues behind the 13 themes identified by the LGMB project. To do this organisations and individuals were asked to rank 16 statements (based on the 13 themes) in order of importances. 161 of these questionnaires were returned by individuals, Community councils, environment interest groups and national and local voluntary groups.

The issues identified as most important to the respondents in this exercise were:

1. Food, water, housing and fuel are available to everyone at an affordable price;
2. Everyone has access to health care that promotes health and cares for the sick;
3. People are free from crime and persecution;
4. Damage to the environment by pollution is kept to a minimum.

The findings of the survey were used to focus the report on issues felt to be of particular importance in Fife. For example, additional work was put into the development of 'Basic Needs' indicators.

Key Principles of Sustainability and the Global Footprint concept

The discussions within the Indicators Working Group highlighted the need have a clear definition of sustainability which would underpin both the selection of indicators, and the assessment of whether for any particular indicator the trend was felt to be towards or away from sustainability. The following principles and the concept of the global footprint were used.

Key Principles of Sustainability -

The future - in any activity we carry out we must consider the effects of that activity on the ability of future generations to meets their needs and aspirations;

The environment - in any activity we carry out we must also take into account the full environmental cost of these actions;

Equity - we must aim for a fair distribution of, and access to, resources, services and opportunities;

Participation - we must aim to ensure that all people are able to share in decision-making about issues which affect the quality of human life and of the environment.

Global Footprint

Local activities have global consequences. What we buy, how we travel, what we eat and how we heat our homes have effects both locally and globally. We can describe these effects as our "global footprint". Our global footprint includes both social and environmental effects.

The use of this concept in the Fife-wide report was to try and emphasise that it is not just the local environment and local quality of life that need to be taken into account.

The Indicators

The information for each indicator that was used in the final report was divided into the following section:

Graphic - this shows the trend over time;

Background - this outlines the importance of the issue in fife or in Scotland;

Sustainability issues - this section explains the relationship between the issue and the principles of sustainability, and draws together linkages with other issues and indicators covered in the report;

Analysis of indicator - this section explains why this particular indicator is being used to measure the issue, what the data means, and how the issue might be measured more effectively in the future;

Evaluation - this section uses the four principles of sustainability to make an assessment as to whether the trend of this indicator is towards sustainability, away from sustainability or inconclusive;

Data and information sources - these notes provide a guide to where more information can be found;

The Way Forward - This section identifies actions which could be taken to move this indicator towards sustainability. Actions were not identified for all the indicators, and views about appropriate actions were sought as part of the continuing consultation and updating process around the Sustainability indicators for Fife Report.

Trends of the Sustainability Indicators for Fife 1995

Of the 20 indicators selected:

10 were moving away from sustainability:-

(homelessness, long-term unemployment, poverty, land quality, biodiversity, quality of surface and underground water, pleasant urban environment, food supply: agriculture, food supply: fisheries, energy)

4 were moving towards sustainability :-

(life expectancy, infant mortality, nursery education, safety for pedestrians and cyclists)

and 6 were inconclusive: -

of which one was due to there being no clear trend in the data (crime), and 5 were due to data not being available in a comparable form for more than one year (affordable warmth, alternative means of transport, air quality, household waste, sewage treatment and disposal).

It is proposed that a revised second edition of Sustainability Indicators for Fife will be produced in 1996. This should enable some of the data availability problems to be tackled. It is also hoped that additional indicators can be developed for issues that were felt to be important but for which it was not possible to develop an appropriate indicator during the pilot project,

these included access to basic services, skills and training, decision-making and community economic development.

Consultation on sustainability issues and indicators is being explored through an existing network of Fora run through the Chief Executive's Department of Fife Regional Council, involving women, people with disabilities, ethnic minorities and the elderly as a part of the development of work on Local Agenda 21 within Fife. The 3 Fife District Councils and the Regional council are working together through their Environmental Liaison Group to prepare a report for the Fife Council on how to take forward Local Agenda 21.

Community pilots
- Benarty, the East Neuk, and Glenrothes

The large population and the diversity of the communities within Fife makes seeking meaningful involvement very difficult at a Fife-wide level. There is no Fife-wide newspaper, umbrella groups and community councils do not exist everywhere. For this reason it was agreed that three local pilot areas would be chosen that would give scope for more detailed consultation.

The local areas were selected on the basis of geography, the types of issues likely to arise and the existing community networks. The three community areas pilots were:

Benarty - 4 ex-coalmining communities, where the project was co-ordinated through the existing local service network, with Community Education taking the lead.

Glenrothes - a new town, where the project was co-ordinated through the Tenants and Residents Associations and the local media.

East Neuk - 13 coastal communities, where the project was co-ordinated via the Community councils and their liaison group.

Different techniques for consultation and involvement were used in the community pilots, these involved adaptations of the 'sustainability themes' questionnaire for local use; meetings of Community Council Chairs to explore what was felt to be good and bad about the local area and specific actions that should be taken to deal with problems and enhance good characteristics; work with a Student council representative and contacts for a network of youth clubs.

Due to the lead in times for developing community involvement and the workload of community groups on other issues it was not possible to develop local indicators in any of the community pilots within the timescale of the LGMB project. Since the end of the pilot period further consultation exercises have taken place in Glenrothes and the East Neuk to explore the use of 'Participatory Learning and Action' tools in exploring local sustainability issues and developing indicators. The experience of the community pilots have been useful in informing on-going work towards a Local Agenda 21 for Fife.

As a result of the Fife-wide consultation exercise and the work undertaken in the community pilots it was felt that future work could usefully be focused around exploring effective techniques for identifying:

- ~ Are the basic needs of local people being met?
 - ~ Does the lifestyle of local people compromise the ability of people in other places to meet their own needs?
 - ~ Are local people being encouraged to improve their quality of life?
 - ~ Is the environment being cared for to ensure that future generations are able to meet their own needs?

Issues Arising from the LGMB Sustainability Indicators Project

Ownership

"The major finding of the project has been that while indicators are no substitute for action to achieve sustainability, they do act as a useful tool in identifying areas of concern, and help target necessary action. But indicators are only truly useful if they are 'owned' by the local community and measure issues of relevance locally. The importance of ensuring local 'ownership' of any indicators work does mean that it is impossible to be prescriptive about what indicators should be used."

Cllr Tony Coleman

Forward to the LGMB Sustainability Indicators Project
Report on the Pilot Phase

Project timescales

Although one of the primary purposes of the LGMB project was to promote community involvement in, and ownership of, progress towards sustainability, the six month timescale of the project made it very difficult to achieve this. To devise and undertake a comprehensive exercise of identifying issues, negotiating local solutions and the agreeing the most effective ways of monitoring progress was beyond the scope of the project, however, it did enable some useful experimentation and learning about the earlier stages of this process.

Additional Issues Arising from the Fife Sustainability Indicators Project

Data Availability

It was found to be very difficult to obtain time series data for a number of indicators. this problem has become more difficult for certain issues, such as energy consumption, in recent years due to privatisation of previously public utilities.

It is also difficult to obtain data on outcomes for many issues, as opposed to information on inputs and outputs.

Communication

Sustainability is about basic issues, and needs to be discussed in plain language. Jargon confuses and alienates people, yet is found in many presentations and publications about sustainability. Communication is not just an issue of the language which is used to present ideas, but also whether the process is structured so that there is felt to be something worthwhile to communicate about. It is difficult to get effective local involvement by communities unless the process really has the power to make positive changes in the practice of local authorities and other agencies. Staff in Fife have recognised that different ways of working are important to securing community involvement, and are taking time to think through effective ways of working which do not raise false expectations.

Demands on Staff Time

To follow through an effective programme of identifying and reviewing Sustainability Indicators at Regional and local level is a long term commitment and will require a lot of staff time. It is important that these activities are, as far as possible, integrated into existing programmes to improve public participation and decentralise services, rather than requiring substantial additional resourcing.

The difficulties of reconciling local quality of life/quality of the environment work and global issues and impacts

There are a variety of tried and tested methods for identifying people's views on local quality of life and quality of the environment issues. However more work is needed on approaches which secure effective community involvement in relating local actions to global impacts.

The value of the project as a learning process for future action

The cross departmental working undertaken in this project was felt to have been a very effective way of securing co-operation and open-working. Other benefits of the project include developing new contacts in a wide range of organisations, the experience of trying to engage with communities to develop indicators, and the discussions entailed in the development of the Sustainability Indicators for Fife Report. These are all proving useful in developing further work towards a Local Agenda 21 and other related projects.

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Further Reading**Sustainability Indicators for Fife 1995**

Fife Regional Council, Department of Economic Development and Planning

Study Report: Sustainability Indicators Project

Produced by Lesley Rowan for Fife Regional Council



HOW BIG IS OUR ECOLOGICAL FOOTPRINT?

USING THE CONCEPT OF APPROPRIATED CARRYING CAPACITY FOR
MEASURING SUSTAINABILITY

by

MATHIS WACKERNAGEL

*with The Task Force on Planning Healthy & Sustainable Communities,
The University of British Columbia*

People depend on nature, which provides a steady supply of the basic requirements for life. Energy is needed for heat and mobility, wood for housing and paper products, and we need quality food and clean water for healthy living. Through a process called "photosynthesis" green plants convert sunlight, carbon dioxide, nutrients and water into plant matter, and all the food chains which support animal life – including our own – are based on this plant matter. Nature also absorbs our waste products, and

provides life-support services such as climate stability and protection from ultra-violet radiation. Further, nature is a source of joy and inspiration. Figure 1 shows how very tightly human life is interwoven with nature, a connection we often forget or ignore. Since most of us spend our lives in cities and consume goods from all over the world, we tend to view nature as a collection of commodities or a place for recreation, rather than the very source of our existence.

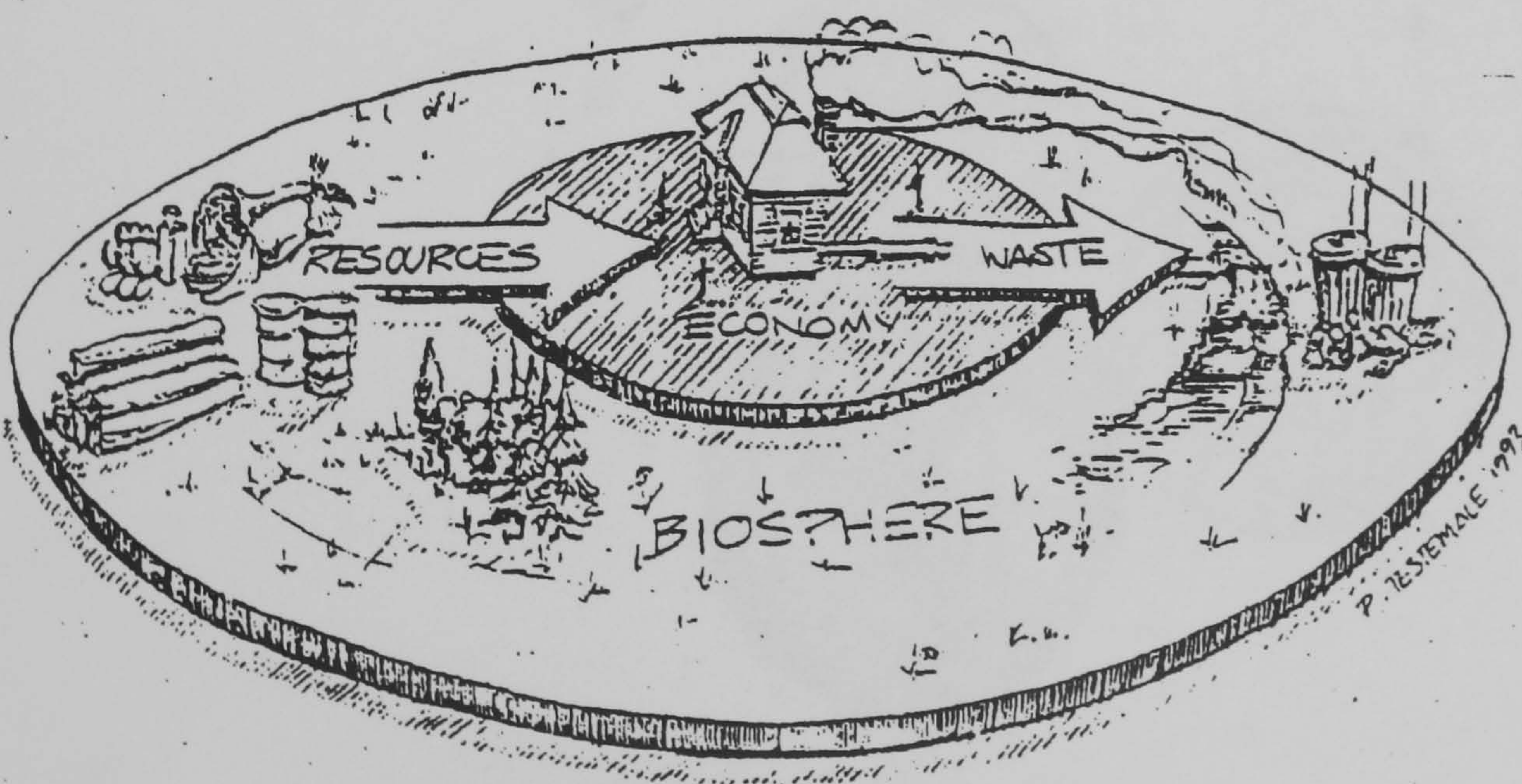


Figure 1: Human life is interwoven with nature

HOW BIG IS OUR ECOLOGICAL FOOTPRINT?

The ecologically productive land available to each person on Earth has decreased over the last century (figure 4). At the moment there is, on average, 1.6 hectares (about one

city block), or one-third of the area which each Canadian is currently using according to table 1. In contrast, the land appropriated by richer countries has increased.

"...we'd
need at least
three
Earths..."

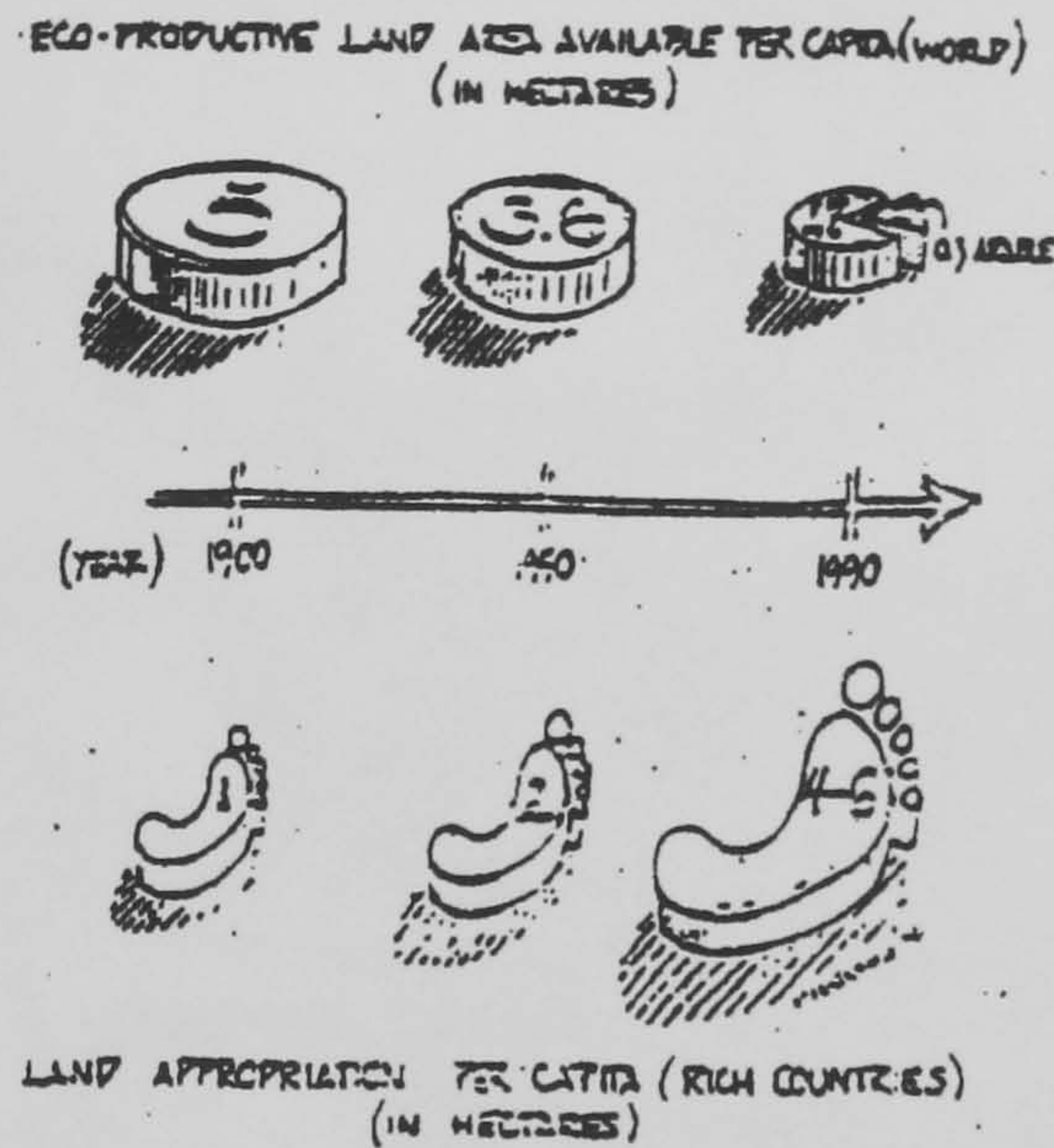


Figure 4: A historical look at the ecologically productive land available to each person and our ecological footprints

This means that if everyone on Earth lived like the average Canadian, we'd need at least three

Earths to provide all the material and energy essentials we currently use (figure 5).



SP. 1230416 1993

Figure 5: Wanted - two phantom planets!

HOW BIG IS OUR ECOLOGICAL FOOTPRINT?

If the world's population continues to grow as anticipated, by the year 2030 there will be 10 billion people, each of whom will have an average of only 0.9 hectares of productive land available, assuming there's no further soil degradation. This shows the pressure of population size on nature's productivity.

The numbers become really interesting when you look at the land area that people in North America actually use. Figure 6 shows the ecological footprint for the Lower Fraser Valley, the area east of Vancouver, which contains 1.7 million people or 4.25 people per hectare. The area is far smaller than that needed to supply the resources for its population. If the average Canadian needs 4.8 hectares as shown in table 1, then the Lower Fraser Valley needs an area 20 times larger than what's actually available for food, forestry products and energy.

Holland has a population of 15 million people, or 4.40 people per hectare, and although Dutch people consume less than Canadians on average, they still require more than 10 times the available land for food, forest products and energy. In other words, human settlements don't affect only the area where they're built.

Increasing density in cities can lead to lower land use requirements, not only because of a reduction in the built environment, but also because of lifestyles which are less energy-intensive. For example, a recent study of the San Francisco area found that when residential

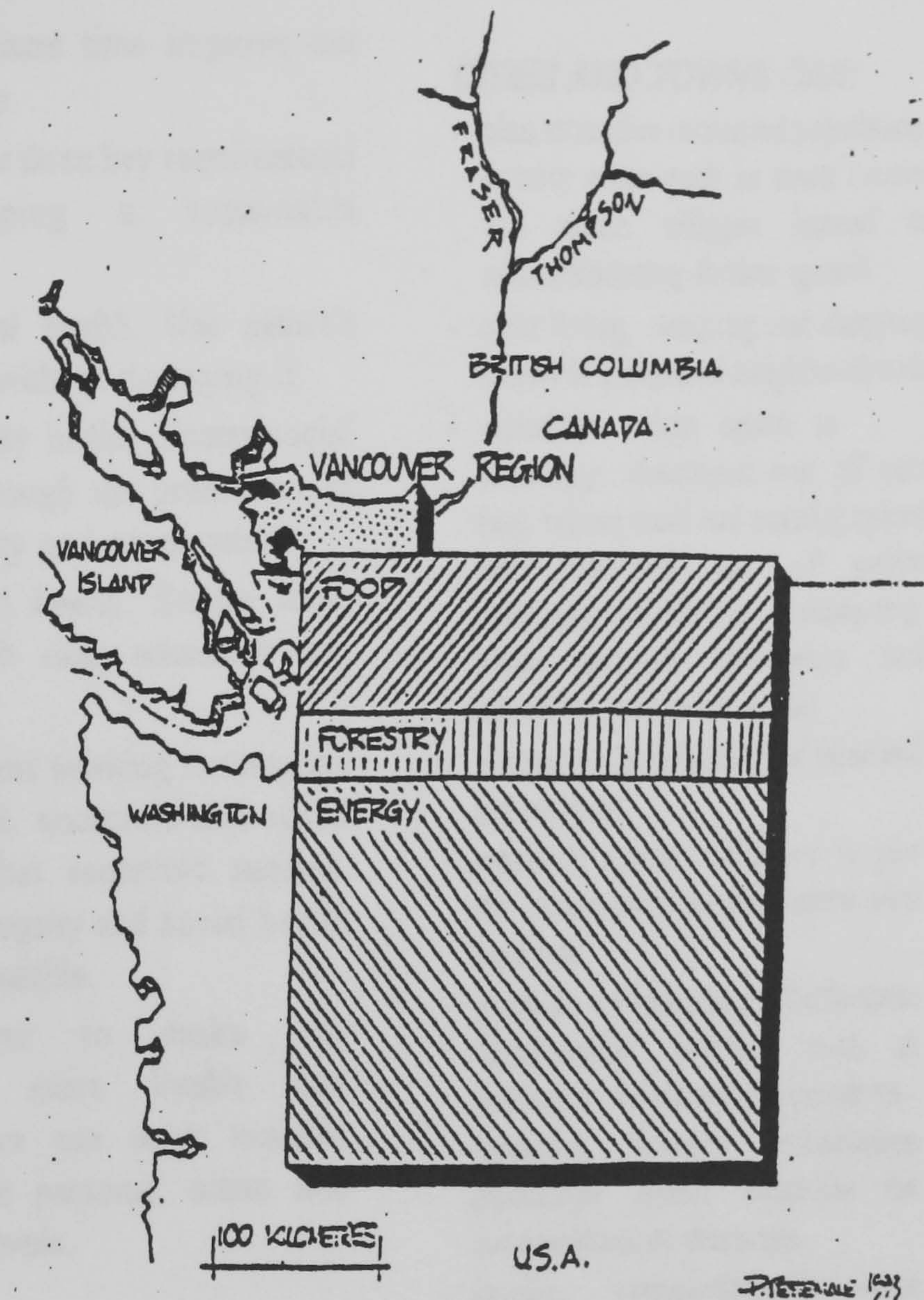


Figure 6: The ecological footprint for the Lower Fraser Valley

density was doubled, private transportation was reduced by 20 to 30 percent. It's also been shown that residential heating requirements can be reduced significantly if housing is grouped rather than free-standing.

Our challenge is to find a way to balance human consumption and nature's limited productivity in order to ensure that our communities are sustainable locally, regionally and globally. We don't have a choice about *whether* to do this, but we can choose *how* we do it. In fact, many people concerned with these issues believe that if we choose wisely now, there's still time for us to make our communities more sustainable,

"...if we choose wisely now, there's still time..."

HOW BIG IS OUR ECOLOGICAL FOOTPRINT?

*"Buy items
made or
grown
locally
rather than
far away."*

and at the same time improve our quality of life.

There are three key requirements for developing a sustainable community:

- (a) Ecological health. Use nature's productivity without damaging it.
- (b) Community health. Foster social wellbeing through the promotion of fairness, equity and cooperation.
- (c) Individual health. Secure food, shelter, health care, education etc. for everyone.

This means working to integrate environmental, economic and social policies so that economic success, ecological integrity and social health become compatible.

In order to make our communities more livable and sustainable we can work towards change at the personal, urban and commercial levels.

AT HOME WE CAN:

- start composting
- use more energy-efficient light bulbs, shower heads etc
- switch to forms of recreation and tourism which have a low impact on the environment
- grow some of our own food
- live closer to work (or the other way around)
- use bicycles and public transport rather than cars
- buy items made or grown locally rather than far away

Households can start by reducing their resource consumption. At the urban level we must develop an infrastructure that leaves options open, rather than one which dictates resource-intensive lifestyles for our own and future generations. Along with these lifestyle changes, there must be changes in our economies.

CITIES AND TOWNS CAN:

- plan attractive increased population-density areas such as town centres and urban villages instead of accommodating further sprawl
- offer living, working and shopping spaces in integrated neighbourhoods
- reallocate urban space to encourage decreased use of cars (e.g. reduce road and parking space) and increased use of public transport, bicycles and walking (e.g. build bicycle speedways and attractive pedestrian areas)
- encourage the planting of trees and greenspaces
- establish urban land-trusts to give the community more control over land use
- promote various kinds of affordable high-density housing such as secondary suites and cooperatives
- introduce housing construction guidelines which minimize the consumption of resources
- develop comprehensive waste reduction systems which include municipal resource reuse and reduction schemes

This approach differs from today's global economy which favours urban industrial centres, and requires the support and involvement of people in each sector of society.

We can all make a difference. Influential groups are:

- Politicians (MPs, MLAs, City Councillors, etc), who can initiate or support sustainability programs and projects, particularly at the infrastructure level. They can set up screening processes which will take ecological impact into account when assessing a budget

HOW BIG IS OUR ECOLOGICAL FOOTPRINT?

IN DOING BUSINESS WE CAN:

- rely on using locally available resources rather than imported ones
- regain local control over production and distribution of those resources
- secure local needs so that the long term livelihood of a region can be protected without compromising the livelihoods of other people in other regions
- charge the true costs for private transportation, pollution and resource use
- support community-based non-cash, volunteer and mutual aid networks
- encourage ecologically sound businesses
- offer tax breaks and other incentives for encouraging sustainable lifestyles, and tax and regulate unsustainable behaviour.

or project, and they can encourage the use of the concept of sustainability by the government. They can persuade their parties to develop sustainability strategies, involve the public, and discuss the dilemmas being faced. They can support community groups working towards sustainable societies.

- Administrators and planners, who can help politicians write appropriate legislation and ensure that existing policies are followed. They too can involve the public, present them with the dilemmas and invite input. They can encourage people to participate in shaping the future of their community, and support and assist community groups making positive contributions to society.

- The general public, which is all of us – possibly the most important group! We can look at our life styles, think about what's important to us, and start family and friends thinking too. Let's get involved and participate in community and municipal groups. Write and talk to politicians at a local, regional or national level, and let them know we want to work with them to develop our communities sustainably.

All of us – including politicians and planners – are consumers of nature's productivity. We must work together to achieve a more sustainable way of living now in order to ensure that resources continue to be available not only for ourselves, but also for future generations.

*"We must
work
together...to
ensure that
resources
continue to
be available
...for future
generations."*

HOW BIG IS OUR ECOLOGICAL FOOTPRINT?

6

If you're interested in finding out more about the issues raised in this pamphlet, we suggest the following reading material:

General:

"For the Common Good: Redirecting the Economy towards Community, the Environment and a Sustainable Future" by Herman E Daly and John B Cobb, 1989. Beacon Press, Boston.

"Toward Sustainable Communities: A Resource Book for Municipal and Local Governments" by Mark Roseland, 1992. Available free of charge from the National Round Table on the Environment and the Economy, Ottawa - phone (613) 992-7189.

Ecological Footprint:

"Ecological Footprints and Appropriated Carrying Capacity: What Urban Economics Leaves Out" by Bill Rees, 1992. Environment and Urbanization Vol 4, No 2, pages 121-130.

"Ecological Footprints and Appropriated Carrying Capacity: Measuring the Natural Capital Requirements of the Human Economy" by Bill Rees and Mathis Wackernagel, 1993. Forthcoming in Investing in Natural Capital, edited by C Folke, M Hammer, A-M Jansson and R Constanza.

"How Big is our Ecological Footprint? A Handbook for Estimating a Community's Appropriated Carrying Capacity" by Mathis Wackernagel et al, 1993. A discussion draft prepared for the Task Force on Planning Healthy and Sustainable Communities, Vancouver.

For further information, please contact:

Janette McIntosh, Coordinator
The Task Force on Planning Healthy and Sustainable Communities
The University of British Columbia
Department of Family Practice
5804 Fairview Avenue
Vancouver, BC Canada V6T 1Z3
phone: (604) 822-4366, fax: (604) 822-5950

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FIFE REGIONAL COUNCIL

INDICATORS FOR SUSTAINABLE DEVELOPMENT - MONITORING REPORT

Contact: Rob Terwey, Depute Director
Department of Economic Development and Planning
0592 414141

Pilot:

Population: 350,000

Relevant Initiatives: Charter for the Environment
State of the Environment Manual
EMAS Pilot Authority
Green Business Fife
Fife National Biological Record Project
Recently adopted Sustainable Development Policy
Officer Working on Local Agenda 21

Initial Views on Resourcing

It was envisaged that the project could be completed within the workload of existing staff in the Economic Development and Planning Department in co-operation with staff from other Fife Regional Council Departments and other Fife based organisations.

Managing the Process:

(i) In-house Team

Internal Working Group comprising staff from the Fife Regional Council Departments of Economic Development and Planning, Education, Community Education, Engineering (Roads) and Social Work.

The Fife project has been carried out at two geographical levels - Fife wide and in 3 pilot communities (Glenrothes, East Neuk and Benarty). For each pilot area there is a lead officer co-ordinating the work. In Benarty a local Working group was established.

(ii) Community Involvement

Fife-wide

A questionnaire developed from the 13 themes was circulated to 171 Charter for the Environment consultees and all the Fife Community Councils. Those who replied had the option of seeking further information about the project. The responses to the questionnaire were used to prioritise the issues on which the indicators have been selected/developed. An article about the project was published in the Region's Newsheet which is distributed to all households. The article included a reply slip and 40 requests for information have been received to date. All those who have sought further information about the project have been sent the consultation draft of the Fife-wide indicators report and asked for their views prior to the preparation of a finalised first Fife-wide sustainability indicators report.

East Neuk (13 coastal communities)

There is a well developed local network of Community Councils chairs and Regional and District Councillors. A presentation was made to them about the indicators project, the opportunities for participation and the scope for development of local indicators. The feedback at the meeting was enthusiastic, but the subsequent response has been low and a follow-up meeting has been arranged.

Glenrothes New Town

Contact has been via local press articles, the local network of Tenants and Residents Federations and the local College. Contact with local Community Education workers and the local network of youth clubs is also being developed. The short timescale of the project has meant that the interest in sustainable development expressed by some of these groups is likely to be directed into the wider work on Local Agenda 21 rather than specifically into the development of local sustainability indicators.

Benarty (3 ex-coalmining communities)

The local group formed to co-ordinate work on this project comprised Community Education Staff, the Manager of the Local Community Centre, the Manager of the Social Needs Strategy Outreach Office, and an Adult Education Worker.

The Group revised the Fife-wide questionnaire to make it more locally relevant and then arranged for it to be distributed via the community use school, the community centre, community groups (credit union, community store, tenants association), professionals working locally (teachers/social workers). In addition on-street interviews based on the questionnaire were conducted by youth trainees outside the local shops.

The next stage is to develop the interest generated into local action. Work is being planned with Benarty local group in conjunction with the local Crime Prevention Panel and the Benarty Environment Group on priority issues identified in the questionnaire responses. The Benarty Group are also interested in piloting the basic needs indicators currently being developed with the Fife Money Advice Project for use Fife-wide.

Relevance of the "Thirteen Themes"

At least one indicator was selected from each of the thirteen themes and data collected at a Fife-wide level. The thirteen themes were also used as the basis for drawing up the Fife-wide questionnaire, although the wording was simplified, some headings were split into more than one category and a further theme about friends and family was added.

Following the receipt of questionnaire responses and data collection and review of the resulting indicators, discussion has developed around the need to focus on outcomes rather than inputs or outputs. There is also felt to be a need to be able to identify impacts at different geographical levels, including outwith Fife - possibly based on the "ecological footprint" model. This may result in a simplified format for the presentation of indicators which does not accord directly with the thirteen themes.

Indicators Initially Chosen**Amendments/Locally Chosen Indicators**

1.2 Household waste production.	Used.
1.6 Water consumption.	No trend - omitted after review.
1.10 Land lost to development.	Increase in urban area 1940-1990.
2.5 Sewage sludge.	% of population served by primary, secondary and tertiary treatment.
2.8 Contaminated land.	For future development: land quality index.
2.10 River quality.	Used.
3.5 Protected Habitats	Used.
4.3 Water from local resources.	Almost all supply local. Developing food indicator: Local production vs local supply.
5.3 Local authority dwellings vacant.	Investigating measure of homelessness as key indicator. Developing indicators on access to food, water, shelter, fuel - in terms of affordability, physical access and security of access.
6.2 Long term unemployment.	Used.
7.3 Infant mortality.	Used.
7.9 Road traffic accidents.	Used. Addition: Cervical cancer screening.
8.5 Dedicated cycle routes.	Inputs not outcomes measured: omitted after review.
8.6 Investment in public transport.	Inputs not outcomes measured: omitted after review. Developing indicator of access to public transport.
9.(1.2.3.6) Crime.	Used. Developing indicator on domestic violence.
10.1 Nursery Provision.	Used.
10.2 Pupil/teacher ratio.	No trend - omitted after review. Additions: Age and destination of school leavers. Participation in adult education.

11.3	Voluntary Groups.	Used.
11.6	Voting in local elections.	Used
11.7	Responses to Charter.	Used.
12.3	Disabled access to public buildings.	Used.
12.4	Library Use.	Used. Proportion of population that are library members by District.
13.8	Tree Preservation Orders.	Omitted after review. Addition: Take up of community grants for environmental improvements.

(v) Special Projects Undertaken

Work is being developed with Fife Health Board with a view to the production of a a separate detailed Health in Fife report.

Work is being developed with Fife Money Advice Project on access to food, water shelter and fuel. This will include affordability, physical access and security of access.

(vi) Data Collection Methods

Census data, published sources, information collected by Fife Regional Council Departments and other Fife organisations.

(vii) Presentation of the Indicators

Seattle type - one page of text plus graphics.

(viii) Resource Implication (Actual)

More staff time than originally envisaged, plus the appointment of a project consultant working three days per week financed through a Scottish office grant of £5,000 to cover additional staffing and the printing of Fife-wide and pilot area reports.

Lessons Learned

- ◆ The jargon of sustainable development is a huge barrier to widespread understanding and involvement. A much better initial response has been achieved by asking simple questions e.g. what are the good bits about living in Glenrothes, what are the bad bits, and through focussing on "quality of life of the local environment" than either "environment" or "sustainable development".
- ◆ There is considerable scope for developing partnerships with groups who have historically had a "social" focus and have been put off by "environmentalism".

And Lessons Reinforced

- ◆ Everything always takes longer than you think it will.
- ◆ Consultation and participation cannot be rushed.
- ◆ If you want real involvement by community groups there have to be clear mutual benefits.

Next Steps

- ◆ Continuing to develop locally relevant indicators at a Fife-wide level.
- ◆ Continuing to develop partnerships with other organisations and Regional Council departments on the priority themes - e.g. access to basic needs, health, crime.
- ◆ Working with the communities in Benarty, the East Neuk and Glenrothes to develop locally chosen indicators and initiatives for action on local priorities.
- ◆ Integration of the continuing development of indicators and the lessons learned in the course of the indicators project into work on Local Agenda 21 and the implementation of the corporate Sustainable Development policy.

- ◆ Developing the linkages between the indicators and other programmes using data sets that are available at a local level. These will include deprivation (1991 census), DSS claims, health indicators, road traffic accidents, crime statistics, contaminated land, and protected habitats. Associations and correlations between the variables will be explored and GIS will be used for mapping the findings.

The aims of this work are:

- (i) To test a number of the indicators - to measure their validity against other measures that have already been evaluated.
- (ii) To measure spatial distribution - examining the location and spread of the indicators defined and evaluated at a Fife level.
- (iii) To evaluate relationships between socio-economic and environmental factors.
- (iv) To carry out project work focussed on rural deprivation.

LM6

measuring SUSTAINABILITY

Most people agree that sustainable development is a good thing — but what exactly is it and how do we measure it?

The UK Sustainability Indicators Project is an exciting attempt to find ways of measuring a community's progress towards sustainability. Here, Lesley Rowan explains what the Project is all about and outlines the involvement of Fife Regional Council.

What are indicators?

Indicators help us to see a "big picture" of what is happening around us by looking in detail at a specific issue. For example, the number of salmon in a river is an indicator of the quality of the water and the condition of the surrounding catchment area.

What makes a good indicator?

Good indicators:

- reflect something fundamental to the long-term social, economic and environmental health of a community;
- can be easily understood and are accepted by the community as appropriate and useful;
- can be used to monitor, analyse and publicise general trends towards or away from sustainable practice.

The Fife Sustainability Indicators Project

Fife Regional Council is one of six pilot authorities participating in the UK Sustainability Indicators Project. The project in Fife is being used to identify which issues are most important to people, appropriate measures to monitor these issues and the data which needs collecting. The pilot period is also being used as an opportunity to learn more about effective means of public consultation and to develop links with other organisations working on aspects of quality of life in Fife.

The Fife project, assisted by funding from the Scottish Office Environment Department, is being carried out Fife-wide

and in three pilot communities: Glenrothes, the East Neuk and Benarty.

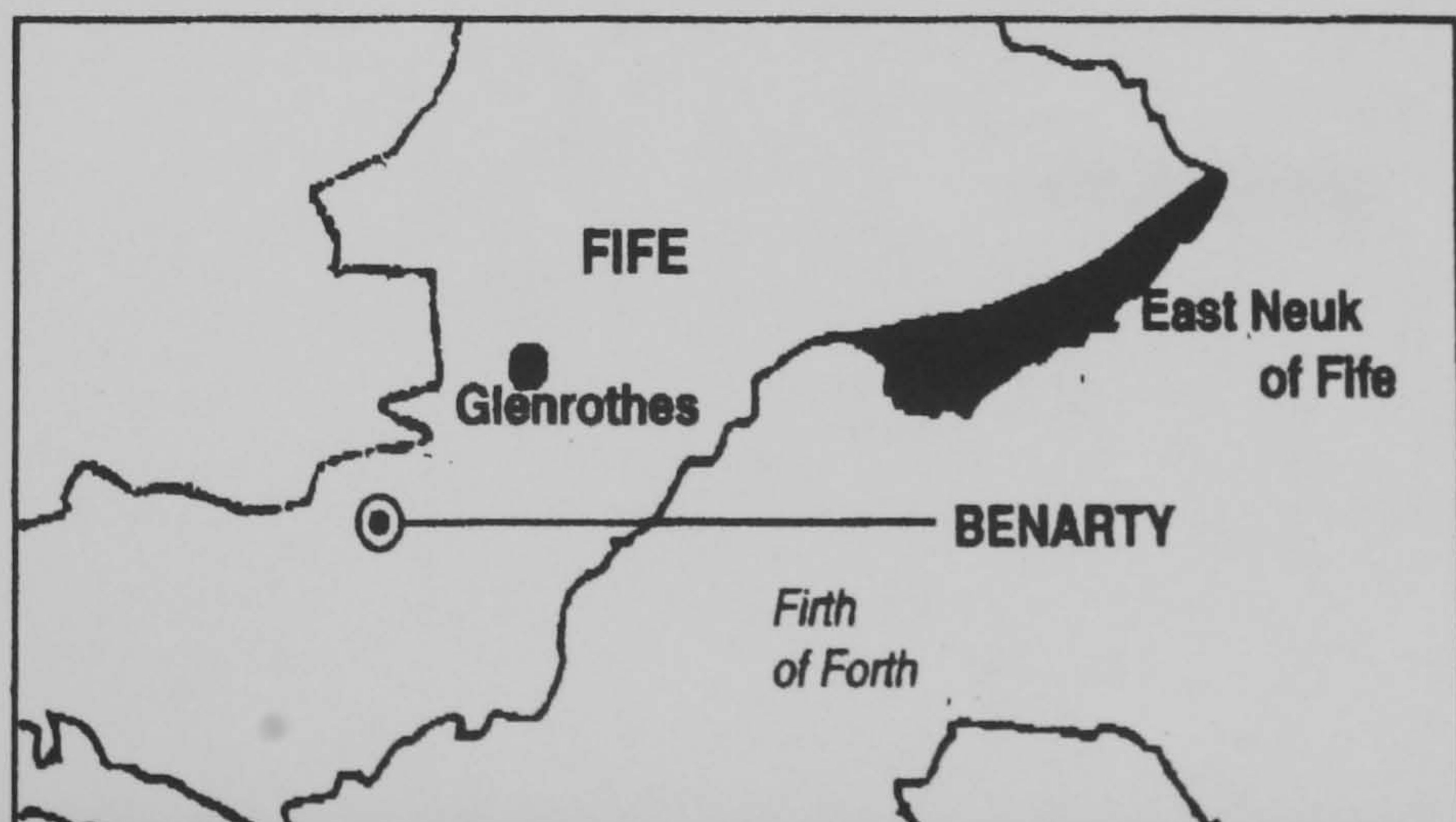
Developing community involvement Fife-wide

A questionnaire was circulated to 170 Charter for the Environment consultees and all the Fife Community Councils. The responses were used to prioritise issues around which to develop indicators. An article about the project was published in the Region of Council's newsletter which is distributed to all households. All those seeking further information about the project have been asked for their views on the consultation draft of the Fife-wide indicators report.

Benarty

At the community level the project has made most progress in Benarty, an area of three former coal mining villages. A local group formed to co-ordinate work on the project includes community education staff, the Manager of the local Community Centre, the Manager of the Social Needs Strategy Outreach Office, and an adult education worker.

The Group revised the Fife-wide questionnaire to make it more locally relevant and then arranged for it to be distributed via the "Community Use School", the Community Centre, community groups (credit unions, community store, tenants' associations) and professionals working locally. In addition on-street interviews based on the questionnaire were conducted by youth trainees outside the local shops.



the UK indicators PROJECT

The next stage is to develop the interest generated into local action. Work is being planned with the Benarty Local Group, in conjunction with the local Crime Prevention Panel and the Benarty Environment Group, on priority issues identified from the questionnaire responses. The Benarty group are also interested in piloting the basic needs indicators currently being developed with the Fife Money Advice Project for use Fife-wide.

Special projects undertaken

A separate, more detailed report on health in Fife is being discussed with Fife Health Board. Work is also being undertaken with Fife Money Advice Project on access to food, water, shelter and fuel. This will look at affordability, physical access and security of access.

Lessons learned...

- The jargon of sustainable development is a huge barrier to widespread understanding and involvement. A much better initial response can be achieved by focusing on quality of life rather than sustainable development, for example, by asking simple questions, such as "what are the good and bad bits of living in Glenrothes?"
- There is considerable scope for developing partnerships with groups who have historically had a social focus and have been put off by "environmentalism".

... and lessons reinforced

- Everything always takes longer than you expect.
- Consultation and participation cannot be rushed.
- Real involvement by community groups is most likely to happen if there are clear mutual benefits.

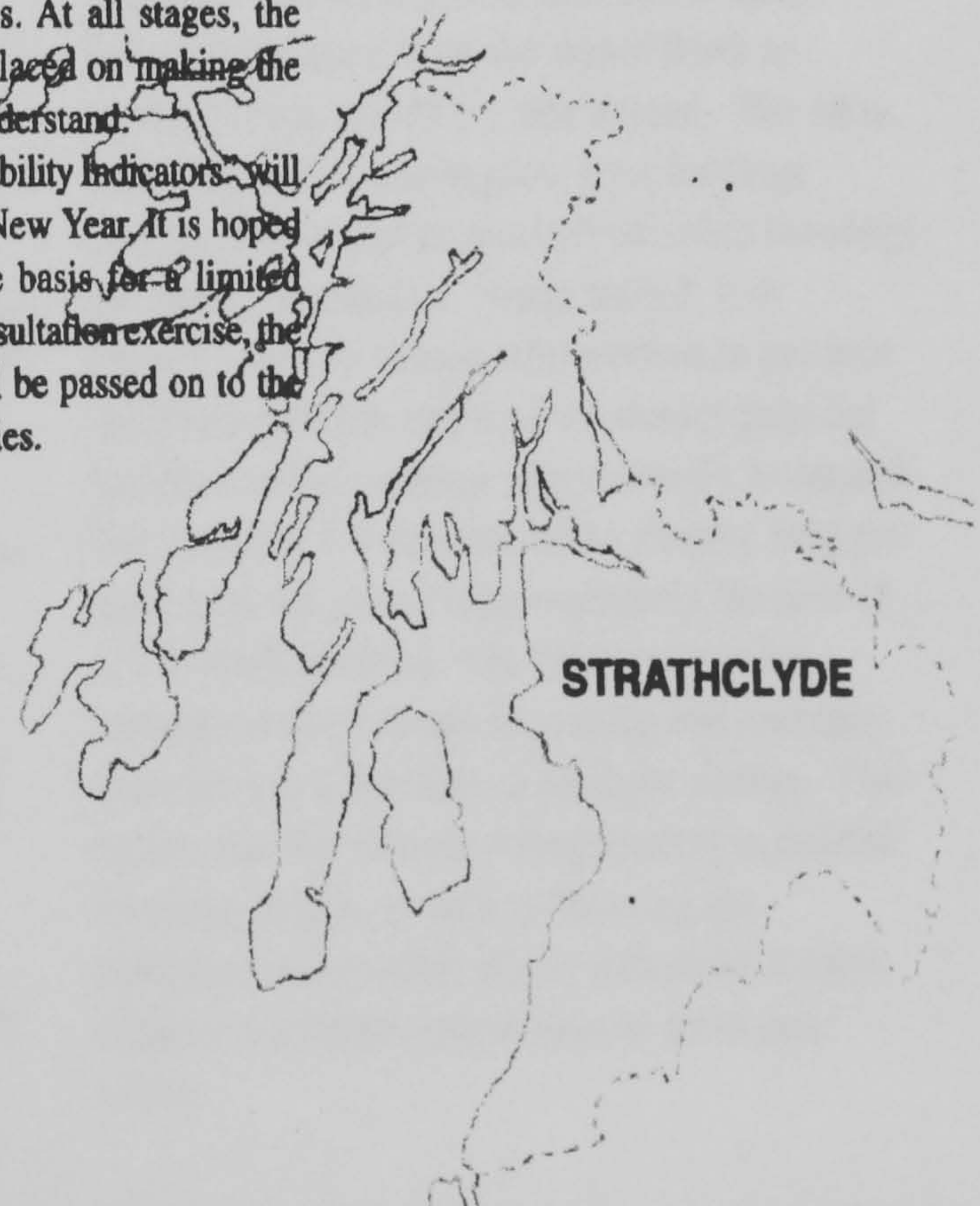
STRATHCLYDE

Through the Indicators Project, Strathclyde Regional Council aims to represent key aspects of development across the West of Scotland. In order to widen participation in the Project the council formed a working group, on which Glasgow City Council, Renfrew District Council, The Scottish Office Central Statistical Unit, Friends of the Earth Scotland and CSV Environment were represented. This proved very successful; having a wide range of people involved from the start meant that access was available to a large pool of expertise and indirect contacts who suggested possible indicators and helped with their interpretation.

The indicators chosen fall broadly into three categories, covering the physical environment (air, water, land use and biodiversity), the human environment (energy, waste, and transportation), and the social environment (economy and population, and health). There are at least two indicators for each subsection. For example, the transportation section contains indicators on car ownership and usage, public transport usage and the number of traffic calming schemes and cyclepaths. For each indicator, data is given for as long a period as possible in order to show trends. At all stages, the emphasis has been placed on making the indicators easy to understand.

"Strathclyde Sustainability Indicators" will be published in the New Year. It is hoped that it will form the basis for a limited Local Agenda 21 consultation exercise, the results of which will be passed on to the new unitary authorities.

Strathclyde are taking a slightly different approach, as described here by
Andrew Faulk



*Introduction***INTRODUCTION**

The first 'Earth Summit' was held in 1992. At this meeting, Government leaders from almost all the countries in the world discussed environment and development issues. An agreement was reached on an "agenda for action in the 21st Century", commonly known as "Agenda 21". This is the first time there has been global agreement to tackle issues of environment and development together. At the summit there was also agreement that disparities existed, both between and within nations, and a worsening of poverty, hunger, ill health and illiteracy, as well as the continuing deterioration of the ecosystems on which all societies depend for their well-being.

At present one in five of the people in the world live in absolute poverty and struggle to meet their basic needs for food, shelter, water and fuel. Yet, at the same time, the richest fifth of the world's population consume 70% of the world's energy, 75% of its metals and 85% of its wood and paper.

The world does not have enough natural resources to allow everyone to consume as much as is used by the richest fifth of the population. We are already using up resources much more rapidly than they can be replaced and are producing wastes at a much faster rate than can be absorbed by the environment. Every year the world's population grows by another 100 million people.

What is Sustainability?

"Sustainability" has been defined as: "meeting the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland Commission, 1987). "Sustainable development" is defined as being concerned with "improving the quality of human life while living within the carrying capacity of supporting eco-systems". (Caring for the Earth, 1991).

The necessity to meet the needs of the present while, at the same time, seeking to achieve sustainability requires us to take account of four

Key Principles:

The Future - in any activity we carry out we must consider the effects of that activity on the ability of future generations to meet their needs and aspirations;

The Environment - in any activity we carry out we must also take into account the full environmental costs of these actions:

Equity - We must aim for a fair distribution of, and access to, resources, services and opportunities;

Participation - We must aim to ensure that all people are able to share in decision-making about decisions which affect the quality of human life and of the environment.

Global Footprint

Many problems and solutions which are being addressed by Agenda 21 have their roots in local activities. What we can buy, how we travel, what we eat and how we heat our homes, all have effects, both locally and globally. The impact we have on the environment has been called our 'global footprint'.

An increasing amount of the food and other goods consumed in Scotland comes from other countries. 'Third world' countries are under financial pressure from the World Bank to produce cheap goods for sale abroad. The same land used to be used to grow food for local people. But unless products from other countries are clearly marked as "fairly traded" it is unlikely that the person who worked to produce the goods will see much of the money paid out for them in this country. It is currently estimated that there are 1.6 hectares of productive land per person on the planet (approximately the area of 2.5 football pitches). Yet the consumption patterns of the rich are increasing and currently demand 4 to 6 hectares of land per person. This means that the rich are taking resources needed by other people, as well as harming the environment in a way which will make it more difficult for future generations to meet their needs.

Introduction

Community Involvement

Agenda 21 stands out because it emphasises a community approach to achieving sustainability. In each community it is important to answer the following questions:

- Are the basic needs of local people being met?
- Does the lifestyle of local people compromise the ability of people in other places to meet their needs?
- Are local people being encouraged to improve their quality of life?
- Is the environment being cared for to ensure that future generations are able to meet their own needs?

This information should be used to shape local action towards sustainability.

Local Authorities and Sustainability

Agenda 21 calls for the participation and co-operation of local authorities to achieve sustainability. It is expected that, by 1996, most local authorities in each country will have developed a consultative process with their population and achieved a consensus on a "Local Agenda 21" for their community.

What are Indicators?

Indicators can be used to provide information which helps us to understand the "big picture" of what is happening around us by looking in detail at a specific part of it. For example, the amount and size of fish caught in an area may be a good indicator of water quality, and of the effects of previous fishing in the area on fish stocks. It is important to note that all the issues covered by the indicators in this report are part of the overall concept of sustainability and are not intended for use in isolation from the others.

Indicators can also improve the planning and management of services, as they can be used to provide feedback on the effects of these policies and actions.

What makes a Good Indicator?

Good indicators:

- reflect something basic and fundamental about the long term social, economic or environmental health of a community over a long period.
- can be easily understood and are accepted by the community as appropriate and useful.
- have interest and appeal for use in monitoring, publicising and analysing general trends towards or away from sustainable practices.
- can be reliably measured.

The Sustainability Indicators Project

Fife Regional Council is one of six pilot authorities in a UK-wide 'Sustainability Indicators Project' being organised by the Local Government Management Board (LGMB).

The pilot project in Fife has been an opportunity:

- to assess those issues which are considered to be important by local communities and how these relate to sustainability;
- to identify ways of measuring whether we are moving towards or away from sustainability on a range of issues;
- to find out whether there are data available to assess trends on these issues;
- to identify what actions are appropriate to ensure a move towards sustainability.

The UK Sustainability Indicators Project has had to be completed in a very short period, and this has made it difficult to carry out the extensive consultation required by Agenda 21, to determine local issues and the indicators which are considered to be of importance. The UK project also obliged Fife, as a pilot authority, to select the

Introduction

indicators to be tested from pre-selected menus, many of which have not proved to be particularly useful for Fife.

The Project has been a very useful learning process, but future work on Sustainability Indicators in Fife will not necessarily follow the format used in the UK Project.

Whilst every effort has been made to develop and quantify these indicators it has become clear, in the preparation of this report that, in many cases, the data and information which would be necessary to develop accurate indicators which show trends over an adequate timescale, are not available. This is an aspect which will be considered carefully in undertaking further steps in developing the project.

A study report prepared for submission to the LGMB contains full details of the process involved and lessons learnt in Fife in undertaking the Indicators Project. Copies of that report can be purchased from the Director of the Economic Development and Planning Department (cost £15).

Public Consultation on this Project

The guidance document for the UK-wide Sustainability Indicators Project identified 13 "menus" of indicators which related to key issues on sustainability. As a pilot authority within the project Fife Regional Council was required to select at least one indicator from each menu.

Rather than start the public consultation process with the presentation of the detailed indicators, which, in some cases, might have been difficult to understand, it was felt to be valuable to get feedback on the relative importance of the issues behind the 13 menus. To do this a range of organisations and individuals were asked to rank sixteen statements (based on the 13 menus) in order of importance. A questionnaire, which is contained in Appendix 1, was sent to 161 individuals and organisations, including Community Councils, environment interest groups, and national and local voluntary groups. By 10th January 1995, 106

questionnaires had been returned, although in a number of cases interested groups had returned additional copies of the questionnaire.

The results of the questionnaire returns are shown in Figure 2. These results have been used to make sure that issues felt to be of particular importance in Fife are incorporated in the report. For example, additional work has gone into the development of Basic Needs indicators, as the responses to the statements in the questionnaire relating to this issue showed that these were ranked highest in importance by Fife residents.

Sustainability Indicators in Local Communities

Promoting community involvement is fundamental to the indicators project. It was, however, considered that, as community involvement might be problematic on a Fife-wide basis, indicators should also be developed at a second level, within three particular communities in Fife. Different approaches to community involvement are currently being developed in the East Neuk, in Benarty and in Glenrothes. The results of this work will be published in separate reports.

Links with other Fife work on Sustainability

The Sustainability Indicators Project has provided an opportunity to develop skills and knowledge which will be useful in developing and implementing a Local Agenda 21 in Fife. This has included learning about more effective means of enabling and encouraging community participation, and of developing partnerships with other organisations to work on particular aspects of sustainability.

Fife Regional Council has recently adopted a Policy on Sustainable Development. The Policy focuses on the authority's own activities as a resource user, and on its functions as a service provider. By taking action in this way the Regional Council wishes to set an example to local businesses and households, and to create appropriate conditions for others to take action towards sustainability.

Introduction

The Fife Charter for the Environment and its Action Programme will play a key role in implementing the Regional Council's Policy on Sustainable Development.

Fife has recently been awarded a grant by the European Union to develop an Environmental Management and Auditing System (EMAS) to monitor and improve the use of resources within its own organisation.

Giving Your Views on this Report

This report is considered to be a first stage in developing sustainability indicators for Fife. Your views on the report are fundamental to the development of future work on the indicators, in terms of identifying issues, proposing actions, setting targets and monitoring progress.

Examples of possible action points are given, where possible, in the "Way Forward" section of each indicator. These are actions which could be undertaken to move each issue towards sustainability. Your views on these proposed actions and your suggestions for additional or alternative actions would be particularly welcome.

Where appropriate the Report also identifies any national targets which are aimed at increasing sustainability, such as the reduction of Carbon Dioxide emissions. A future stage of the project may involve the identification of other targets by FRC for each indicator. Once again, your views on potential targets would be welcomed.

All comments should be sent to:

Director of Economic Development & Planning,
Fife Regional Council,
Fife House,
North Street,
GLENROTHES.
Fife.
KY7 5LT

Introduction

Using this Report

This report presents a selection of indicators which are intended to measure the quality of life and quality of the environment in Fife. Figure 1 summarises the current position. Consideration is also given within the indicators of the impacts of actions within Fife on other countries, and on future generations.

Groups: For ease of use four broad groups have been used to arrange the indicators within this report. These groups are indicated at the head of each page and are intended to make the report easier to read:

Basic Needs

Community

Quality of the Environment

Use of Resources

Aspects: These are broad topics which have been selected because of their fundamental importance in terms of sustainability.

For example:

Homelessness

The indicator is the particular way of measuring what is happening within a particular aspect. For Example: The change in the number of households registered as homeless.

The Presentation of the Indicators For each indicator the following information is given:

Graphic - This shows the trend over time where the information is available, or a snapshot of the current position if no information is available for previous years;

Background - Where appropriate, this outlines the importance of the issue in Fife or in Scotland.

Sustainability Issues - This section explains the relationship between the aspects and the principles of sustainability, and draws together linkages with other aspects and indicators covered in the report.

Analysis of Indicator - This section explains why the particular indicator shown in the graphic section is being used to measure the issue, what the data means, and how this aspect could be measured more effectively in the future.

Evaluation - This section uses the four principles of sustainability, identified above, to make an assessment as to whether the trend on this indicator is towards sustainability, away from sustainability, or is inconclusive;

Data and Information Sources - These notes provide a guide to where more statistical details can be found;

The Way Forward - This boxed section identifies actions which could be taken to move this indicator towards sustainability, although, in some cases, no specific actions have been identified. In these cases, in particular, your views on how sustainability might be achieved will be particularly welcomed.

Other Aspects of Sustainability without Indicators

In a number of cases it has not been possible to identify a suitable indicator or to gather sufficient data to quantify an indicator. However these aspects of sustainability were identified as being of importance to Fife residents from the responses to the questionnaire. "Holding" sheets summarising the sustainability issues and the way forward on the following aspects are therefore included in the Annex to this report:

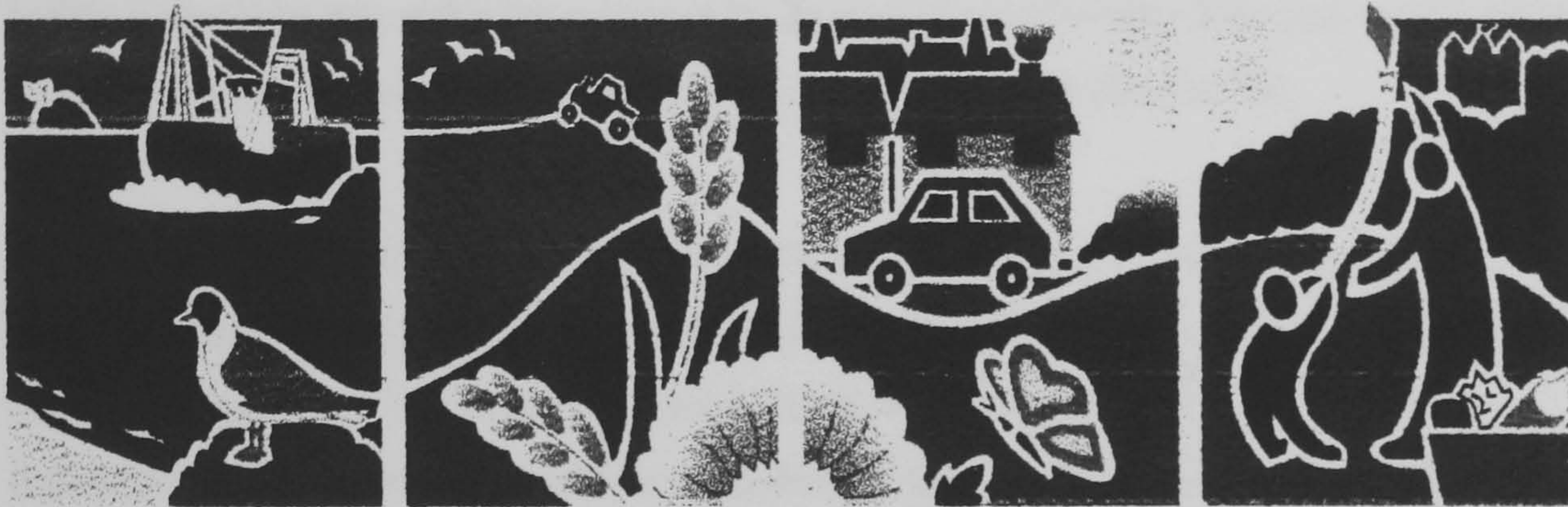
Access to Basic Services

Skills and Training

Decision-Making

Community Economic Development

SUSTAINABILITY INDICATORS FOR FIFE



*Measuring the quality of life
and the quality of the environment in Fife*

Fife Regional Council
Department of Economic Development & Planning
1995



SUSTAINABILITY INDICATORS FOR FIFE

Fife Regional Council was one of 6 pilot authorities who recently took part in a Local Government Management Board Project on Sustainability Indicators. The project, which is part of a UK Local Agenda 21 Programme, ran from August 1994 and ended formally in March 1995.

The Sustainability Indicators for Fife Report, published by Fife Regional Council in June 1995, is the first stage in developing indicators to measure the quality of life and the quality of the environment in Fife. It should be seen within the context of the Regional Council's Policy Statement on Sustainable Development (November 1994) and the proposed Local Agenda 21 Plan for Fife.

Promoting community involvement is fundamental to the concept of sustainability and therefore to the indicators project itself. To be meaningful at a local level, indicators must reflect community values and objectives. Since community involvement on a Fife-wide basis would have been impracticable in the timescale available, it was decided that Fife Regional Council should develop indicators at two levels. Level one was Fife-wide, where a public consultation exercise on the choice of indicators took place. Regarding level two, three different communities were selected in which different approaches to community involvement were piloted. The communities were Benarty, Glenrothes and the East Neuk.

Comments received during the Fife-wide consultation stage of the project have shaped the current format and content of the Sustainability Indicators for Fife Report, including the final choice of 20 indicators. The indicators cover subjects as diverse as Homelessness and Unemployment, Land, Air and Water Quality and Energy. The Report is now being circulated widely and comments sought, particularly on the action points included in the "Way Forward" section of each indicator.

The development of indicators is still being progressed in the level two pilot areas but due to the much more participative nature of this, where members of the local community are setting their own agenda, highlighting issues most relevant to the local community and finding possible courses of action, this process will take longer.

If you would like further information on the Indicators Project or a copy of the Report (£10.00) please contact: *Denise McGregor, Planning Officer, Economic Development & Planning Department, Fife Regional Council, Fife House, North Street, GLENROTHES, Fife KY7 5LT.*
Tel (01592) 414141 Ext 6328.



Printed on Recycled Paper

Figure 1

ASPECTS OF SUSTAINABILITY IN FIFE

←

Measuring Sustainability

→

Measuring Sustainability

—

Measuring Sustainability

Basic Needs

- ←

Homelessness
- Affordable Warmth
- ←

Long-term Unemployment
- ←

Poverty
- Alternative Means of Transport

Community

- Life Expectancy
- Infant Mortality
- Crime
- Nursery Education
- Safety for Pedestrians and Pedal Cyclists

Quality of the Environment

- ←

Land Quality
- ←

Biodiversity
- ←

Quality of Surface & Underground Water
- ←

Pleasant Urban Environment
- Air Quality

Use of Resources

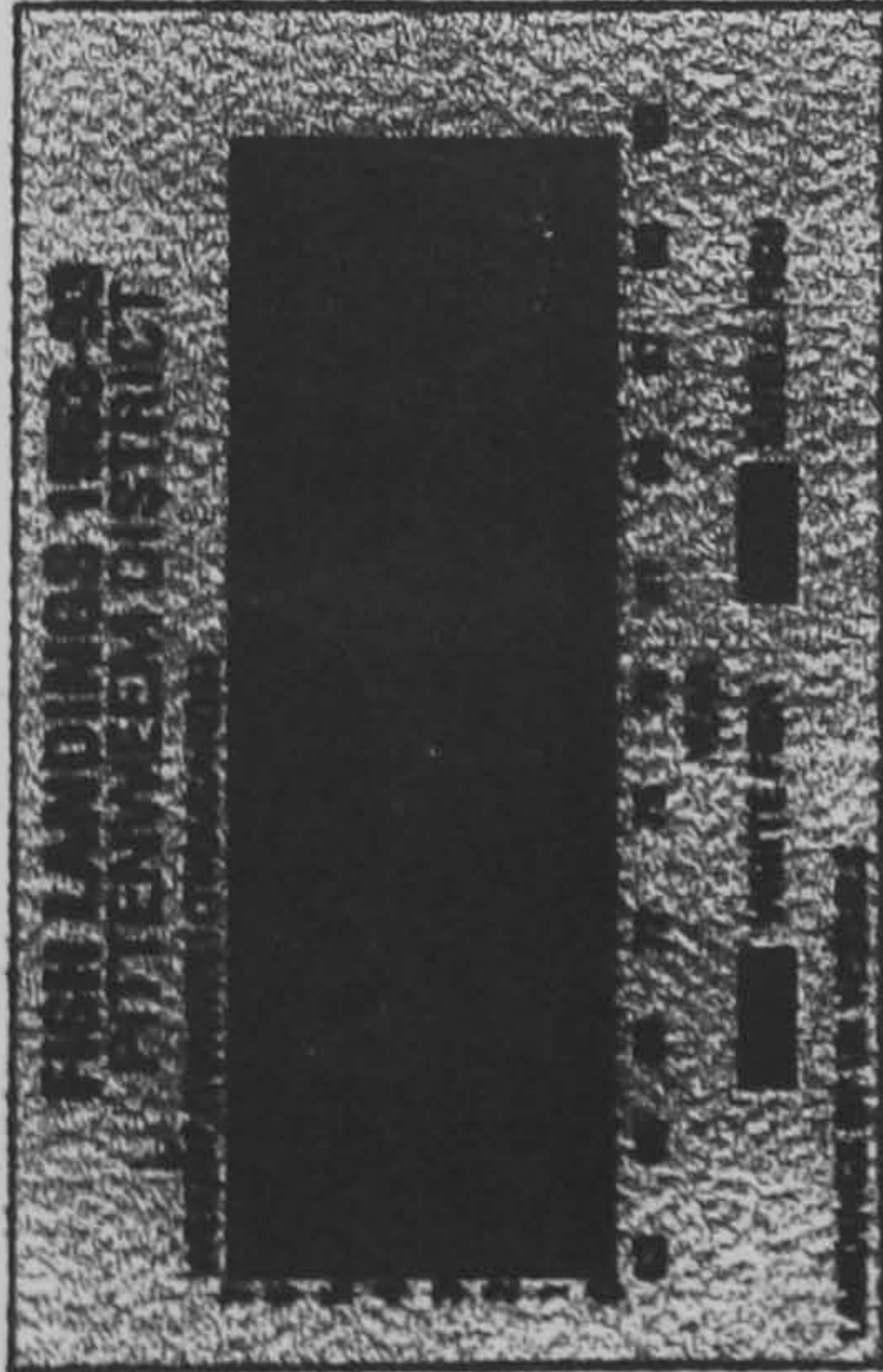
- ←

Food Supply: Agriculture
- ←

Fisheries
- Household Waste
- Sewage Treatment and Disposal
- ←

Energy

Use of Resources



BACKGROUND

There are currently around 120 fishing vessels operating from ports in the East Neuk of Fife, and approximately 270 people are employed in the catching sector of the fishing industry in the East Neuk, with another 250 in Fife involved in processing and support services.

SUSTAINABILITY ISSUES

In recent decades fish stocks have been declining in the Firth of Forth and the North Sea. The viability of the local fishing industry in Fife is closely related to water quality and fish stocks in inshore areas.

When fishing is poor locally Fife boats do fish further afield. Fishing further afield and competition from many other boats for increasingly scarce fish puts pressure on boat owners to use larger more powerful vessels. Larger vessels take less time to get to distant fishing grounds and can catch vastly larger quantities of fish. However, the move towards larger fishing vessels is restricting traditional patterns of participation, and reduces the amount of income to the smaller "fishing villages" such as Pittenweem. Approximately half the landings by Pittenweem-registered boats are directly into Pittenweem (mainly by smaller boats) and half are into Aberdeen (generally the larger boats).

Increased intensity of fishing effort also adds to global environmental impacts. It is estimated that at least 20 times more energy goes into catching fish than is obtained by eating the fish. Almost all

FOOD: FISHERIES

Fish Landings in Fife Ports

this energy is from non-renewable resources. The current pattern of processing and distributing fish by road also has local and global environmental impacts and local social impacts. When Fife boats are unable to supply enough white fish to meet local needs, fish is delivered to Fife from other Scottish ports. At the same time almost all of the shellfish catch is exported rather than being sold locally: tailed prawn is processed in central and southern Scotland, a proportion then being driven back to Fife for sale in supermarkets; whole prawn is exported to Europe by road.

ANALYSIS OF THE INDICATOR

The weight of fish landed at Fife ports between 1963 and 1993 is a measure of the health of the local fishing industry. The graph shows that the shell fish catch has remained relatively stable over time, but that there has been considerable variability in the white fish landings from UK vessels coming into Fife harbours over the past 30 years.

In addition to natural variability, these figures increasingly reflect patterns of trading of fish rather than catches in local waters. For example, the marked increase in white fish landings in 1993 resulted from Peterhead and Fraserburgh boats selling fish caught off Northumberland to Eastern European factory ships anchored off Fife.

Measuring the weight of fish landed does not identify the quality, size or age distribution of the

Extract From 'Sustainability Indicators for Fife'

FOOD: FISHERIES



Away From Sustainability

EVALUATION OF THE INDICATOR

The negative environmental impacts of fishing and fish distribution from the ports in Fife are increasing. The pressure on the fish stocks also raises questions about the future viability of the Firth of Forth and North Sea fisheries unless a more effective management regime is established. The pressure towards larger vessels could affect participation in the fishing industry. All these factors mean that this indicator is moving away from sustainability.

DATA AND INFORMATION SOURCES

Scottish Sea Fish Statistical Tables
Fisherman's Mutual Association, Pittenweem

THE WAY FORWARD

Maintain and improve the marine environment in the Firth of Forth and the North Sea for fisheries.
Promote a sustainable fishing regime which provides incentives to match catching effort to fish stocks.
Involve local fishing organisations in discussions about the future of the fishing industry in Fife.



Sustainability Indicators Project

Summary and Recommendations



**Fife Regional Council
March 1995**

SUSTAINABILITY INDICATORS PROJECT

1.0 SUMMARY

- 1.1 The "Sustainability Indicators for Fife" Report provides a mechanisms for measuring the quality of life and quality of the environment in Fife. It should be seen within the context of the Regional Council's Policy Statement on Sustainable Development and the proposed Local agenda 21 Plan for Fife. Community consultation and participation has been fundamental to the indicators project, both at a Fife-wide level and within the pilot areas of the East Neuk, Glenrothes and Benarty. It is intended that the Fife-wide Report be made available as the basis for continued public consultation.
- 1.2 The public consultation exercise undertaken identified those issues which the respondents felt of most importance to the quality of life and the quality of the environment in Fife. These were:-
1. Food, water, housing and fuel are available to everyone at an affordable price.
 2. Everyone has access to health care that promotes health and cares for the sick.
 3. People are free from fear of crime and persecution.
 4. Damage to the environment by pollution is kept to a minimum.
- 1.3 The report includes 20 indicators for sustainability which cover a wide range of issues all considered to be important to measuring the quality of life and the quality of the environment. Indicators are included on the key issues identified by the public consultation exercise. Currently in Fife 10 of the indicators selected show a trend away from sustainability, 6 are inconclusive and 4 show a trend towards sustainability, as shown below.

Away From Sustainability	No Clear Trend	Towards Sustainability
Homelessness	Affordable warmth	Life expectancy
Long term unemployment	Alternative means of	Infant mortality
Poverty	transport	Nursery education
Land Quality	Crime	Pedestrian and pedal
Biodiversity	Air quality	cyclist safety
Quality of surface and	Household waste	
undergroundwater	Sewage treatment &	
Pleasant urban environment	disposal	
Food supply: agriculture		
Food supply: fisheries		
Energy		

- 1.4 The Director of Economic Development and Planning has been remitted to:-
- (1) publish the "Sustainability Indicators for Fife" Report for general distribution; and
 - (2) investigate, through the Charter for the Environment Sub-Group, and report on the resource implications of implementing the specific recommendations contained in this report aimed at investigating the development of the Fife-wide project, particularly in the context of Local Agenda 21, and the continued development of the project in the pilot areas.

2.0 **BACKGROUND**

- 2.1 Members of the Environment Sub Committee agreed, on 30th March 1994, that Fife Regional Council should request to be one of six pilot authorities who would take part in the above study. The project was undertaken by the Local Government Management Board (LGMB) as part of the UK Local Agenda 21 Programme.
- 2.2 Local Agenda 21 Programmes require some baseline measurements to highlight the difficulty of defining and assessing "sustainability" in certain aspects of our lifestyle. Developing an indicators programme at the local level can help to establish this benchmark. Indicators can also be useful in assisting communities to define and prioritise ways of working towards an understanding of some identified needs and the ways in which a transition can be made towards a more sustainable future.
- 2.3 It was considered that the indicators project would assist in developing work on the proposed Local Agenda 21 Plan for Fife. The project would also contribute directly to the monitor and review role outlined in the Regional Council's recently approved Policy Statement on Sustainable Development. Copies of the Policy Statement (£5.00) can be obtained from the Director of Economic Development and Planning.
- 2.4 On the 31st August 1994 Members of the Environment Sub Committee were informed of progress on the project. Agreement was reached on the broad range of indicators which would be investigated and the geographical areas to be covered.
- 2.5 Promoting community involvement is fundamental to the concept of sustainability and therefore to the indicators project itself. To be meaningful at a local level, indicators must reflect community values and objectives. As community involvement on a Fife-wide basis could raise problems it was decided that Fife Regional Council should develop indicators at two levels. Level one being Fife-wide. Three differing communities were selected regarding the latter, where different approaches to community involvement would be piloted. These being:
 - Benarty - through the existing local service network, with community education taking the lead.
 - Glenrothes - through the Tenants and Residents Associations and the media.
 - East Neuk - via the Community Councils and their liaison group.

The local Members for each area being actively involved.
- 2.6 A Sustainability Indicators Working Group was set up as a sub group of the Charter Steering Group to take the project forward. It includes representatives from the Economic Development and Planning Department, Corporate Services, Engineering, Education and Social Work Departments.
- 2.7 It was stressed at the Environment Sub Committee that the LGMB 6 month project was a starting point for the development of local sustainability indicators. It was agreed by the Sub Committee that it was not possible nor perhaps desirable to complete the above proposals within the timeframe set for the pilot and it was considered that the project should continue in the context of the Charter for the Environment's Action Programme.

3.0 LEVEL ONE

"SUSTAINABILITY INDICATORS FOR FIFE - MEASURING THE QUALITY OF LIFE AND THE QUALITY OF THE ENVIRONMENT IN FIFE"

- 3.1 The Fife-wide Report has been produced after extensive consultation with interest groups and individuals in Fife. The first edition is however seen as the starting point for developing the indicators further.
- 3.2 The guidance document provided by the consultants for the project identified 13 "menus" or "categories" of indicators all of which represented an aspect of sustainability. As a pilot authority within the project Fife was required to select at least one indicator from each menu. Rather than start the public consultation process with the presentation of detailed indicators, it was felt to be valuable to first get feedback on the relative importance of the issues behind the 13 themes. To do this a range of organisations and individuals were asked to rank 16 statements (based on the 13 themes) in order of importance. The questionnaire was sent to 161 individuals and organisations, including Community Councils, environmental interest groups, and national and local voluntary groups.
- 3.3 The results of the questionnaire (see Appendix 1) were used to focus the Report on issues felt to be of particular importance in Fife. For example, additional work has gone into the development of Basic Needs indicators, on issues such as homelessness, poverty and unemployment, since this theme was given the highest priority in the responses to the questionnaire.
- 3.4 Subsequently a Report was circulated for consultation purposes and an article placed in the Fife Insider publicising this process. Detailed responses on the Report and the usefulness of each indicator were received and these have been fundamental to shaping the final Report. Full details of the consultation process are given in the Study Report, prepared for submission to LGMB. Interest in the project from individuals, groups and other local authorities has also led to the project being publicised nationally in newspapers, journals and through radio broadcasts.
- 3.5 The "Sustainability Indicators for Fife" Final Report incorporates a selection of well defined and researched indicators aimed at measuring the quality of life and the quality of the environment in Fife. Each indicator clearly identifies in which direction it is moving; i.e. away from or towards sustainability or neither. An example of this format is contained in Appendix 2. The Report also starts to look at the impact of actions in Fife on other countries and other generations, what has been called our "global footprint". Each indicator concludes with a "Way Forward" box which identifies some ways in which action could be taken to move the indicators towards, or further towards sustainability.
- 3.6 Some of the more significant issues to emerge from the Fife-wide Report include the fact that 10 of the indicators are currently moving away from sustainability. Four are moving towards sustainability and 6 are inconclusive. As may be expected strong linkages are evident between many of the indicators. The inter-relationship between social, economic and environmental issues is evident.
- 3.7 There are some issues for which adequate indicators have not yet been developed and these are currently covered by holding sheets, for example on issues such as local democracy and further education. Part of the problem in developing these and some of the other indicators has been a lack of access to adequate data at a local level. This has in most instances been due to its politically sensitive nature.

- 3.8 The Report, which has been written for use by anyone in the community, is intended to be a starting point. It is considered that there may be scope for further community participation in identifying issues, proposing action, setting targets and monitoring progress Fife-wide.

4.0 LEVEL TWO

- 4.1 A summary of the various approaches to community consultation and participation in developing and selecting local sustainability indicators for each pilot area, is outlined below. Full details are contained in the Study Report. It should be noted that, due to the more extensive nature of the community participation at level two, and the lead-in times this involves particularly where other organisations are involved, the selection and development of local indicators for each pilot area has not yet been progressed as far as it has been Fife-wide.

East Neuk

- 4.2 Presentations about the project have been made to the well developed network of Community Councils as well as to Regional and District Councillors in the East Neuk. Initial interest in the project, particularly the opportunities for community participation and the scope for developing local indicators, has been good.
- 4.3 Community Councils were given the opportunity to complete the Fife-wide questionnaire which asked people to rank 16 statements. Several Community Councils distributed these to their members and returned the completed forms for analysis by Fife Regional Council. The main issues raised consequently formed the focus of a workshop for the Community Councils and local Councillors. Participants were asked to give examples of what was good and bad about the East Neuk in terms of the five main issues raised in the questionnaires returned. They were also asked to give examples of specific actions that should be taken in the East Neuk to address any problems and improve on its good characteristics.
- 4.4 The analysis of the responses from the workshop is ongoing. Feedback will be given at a future meeting. However it is considered that the development of local indicators should now be pursued with individual communities via the appropriate Community Council.

Glenrothes

- 4.5 Contact has been via the network of Tenants and Residents Associations, through local press articles in the Glenrothes Gazette and in GDC's Newspaper and through Glenrothes and Buckhaven Technical Collège. Contact with local Community Education workers and the local network of youth clubs has also been developed.
- 4.6 Interest in the project has been varied. Response to local press articles has been good. The youth contacts are developing well. Developing local indicators via the Tenants and Residents Associations has however been more difficult. Due to the imminent wind-up of the Development Corporation the Tenants and Residents Associations are currently concentrating their efforts on other issues, such as the transfer of the existing housing stock.

- 4.7 Collydean Tenants Association have become actively involved in the project. A cross-section of the population in the Collydean area have been given forms to fill in asking them what they like and dislike about Glenrothes and what could be done to improve it. The responses are awaited. This may be followed up with local meetings or initiatives with the community to move towards developing local indicators of sustainability.

Benarty

- 4.8 A local group has been formed to co-ordinate the work on this project comprising Community Education Staff, the Manager of the local Community Centre, the manager of the Local Services Office and an Adult Education Worker.
- 4.9 The Group revised the Fife-wide questionnaire, using variations on the 16 statements to make it more locally relevant, and then arranged for it to be distributed via the community use school, Community Centre, Community Groups and professionals working locally. In addition, on-street interviews based on the questionnaire were conducted by Community Education staff outside the local shops.
- 4.10 The next stage is to utilise the responses received to the questionnaire and to develop the interest generated into local actions. Work has been planned with Benarty Action Plan Working Group, in conjunction with the local Crime Prevention Panel and the Benarty Action Plan Working Environment Group, on priority issues identified in the questionnaire responses. The Benarty Group are also interested in piloting the basic needs indicators included in the Fife-wide report.

5.0 THE WAY FORWARD

- 5.1 The involvement of Fife Regional Council in the Indicators project has helped in developing practical ideas about the concepts of sustainability and sustainable development which will be of considerable assistance in developing a Local Agenda 21 in Fife. For example information has been collated on the concept of "global footprints". There is also no doubt that without the funding of the Scottish Office which enabled the part time and temporary appointment of Lesley Rowan to prepare the Study Report and assist in developing ideas on the indicators the project would not have achieved the success it has. It should be noted that the involvement of staff from several Departments on the Internal Working Group was a valuable way of sharing different points of view and experiences, particularly when discussions were focussed on issues and solutions rather than the technical aspects of measurement.
- 5.2 The approach taken has been unique in that the study was based on the views of Fifiers as to the relative importance of the 16 statements/themes that make up the concept of Sustainability as defined by the consultants to the LGMB. The work undertaken in respect of some of the issues and how they link together and the relevance to sustainability has not been undertaken anywhere else and will stand the new Fife Council in good stead. It is considered important however for the work to be continued and the rest of this section identifies the suggested development of the project.

Level 1: Fife

- 5.3 It is the view of the Charter for the Environment sub group that many of the indicators require development that was not possible within the short period available for the project and indeed the Council in committing itself to the project recognised that there would be a need to extend the work beyond March 1995. This development should be in accord with the principles of sustainability

itself. Namely that the first report should now be used as the basis for considered consultation with a wide range of organisations and interest groups. Such can be seen as part of the work for Local Agenda 21 in Fife and as an important part of the Charter's 4th Action Programme. The main thrust of such consultation should be two fold:-

- (i) The first aspect should be to determine whether the issues addressed reflect the perceptions of interest groups and individuals. A limited attempt at this was undertaken with the second draft of the report through a questionnaire but it is thought a more comprehensive approach is now required. In this respect it is also considered that specific groups, who are targeted within Local Agenda 21, should be asked to respond to the report. Examples of such groups include women, those with disabilities, the business sector and youth. It is considered that this could be undertaken through the existing Chief Executive's fora for the elderly, women, ethnic minorities and people with disabilities. An assessment of the existing role and remit of each forum, the representativity of each and the mechanisms in place for reporting will have to be made. As will an assessment of the value of providing training and briefing materials in order to assist the forum members in integrating sustainability issues into their existing programmes of work. The formation of fora to represent other groups not covered by the Chief Executive's fora should be investigated e.g. youth. The recently formed Youth Consultative Committee established by the Regional Council's Education Department may be useful in this regard.
- (ii) The second aspect would be to encourage involvement in identifying actions that should be taken by all parties to make Fife more sustainable. This requires taking an overall approach to all aspects to ensure that the concept of sustainability is not reduced to that of environmental protection. The fora would be ideal to develop such programmes that could be implemented by all parties. The fora could identify targets for improvement over the next 5 years, and the most appropriate ways of measuring whether progress is being made towards achieving these targets. Green Business Fife could, for example, provide a good mechanism to develop some business related initiatives particularly through the LIFE project Partnerships in EMAS (PIE).

- 5.4 It is considered that the work of these fora could feed into an umbrella "Sustainable Fife Roundtable". The Roundtable would comprise representatives from each forum, representatives from the local pilot areas and members of the Internal Working Group.
- 5.5 It would be impossible to maintain the level of input that has been achieved over the past 4 months, particularly in developing the Fife-wide report. Consequently work will be focused on the development of indicators for those issues currently covered by holding sheets (ie. Access to Basic Services, Skills and Training, Decision Making and Community Economic Development). In addition a system needs to be set up so that the statistically sound indicators can be monitored on a regular basis and in addition work can be focussed on the development of priority indicators. (i.e. those marked highest in the responses to the 16 themes). These are currently considered to be:-

1. Food, water, housing and fuel are available to everyone at an affordable price.
 2. Everyone has access to health care that promotes health and cares for the sick.
 3. People are free from fear of crime and persecution.
 4. Damage to the environment by pollution is kept to a minimum.
- 5.6 Nevertheless it is important for the report to be maintained and it is therefore considered that an annual report should be prepared on the document in a way not dissimilar to the process of updating the Transport Policies and Programmes document (TPP). The Sustainable Fife Roundtable could encourage and assist involvement in this annual process.
- 5.7 The work on sustainable indicators can be assisted by other initiatives being undertaken by the Regional Council. In this regard it is considered that work on a Local Agenda 21 Plan for Fife, the State of the Environment Manual and Deprivation Analysis in Fife, aimed at confirming existing or identifying new Priority Areas, is particularly relevant, as will the development of the Regional Council's Geographic Information System (GIS). Similarly it is important that the Regional Council continues to build partnerships with other organisations such as Fife Health Board. The Health Board have already made a valuable contribution to the Indicators Project by providing data for and assisting in the development of the health indicators.

Level 2

East Neuk

- 5.8 Through the East Neuk Communities Group considerable progress has been made. Not only have the communities identified what they consider to be important in terms of the sustainability concept but they have identified aspects of the East Neuk that they consider should be maintained and those which can be improved. In addition as a result of the workshop specific actions have been identified which could assist in making the area more sustainable.
- 5.9 The stage has now been reached where progress can be made more effectively through the individual villages and specific programmes prepared. Elie and Earlsferry and Pittenweem have intimated that they wish to continue the project further and it is considered that perhaps one or two more villages could be involved. Finally it is thought appropriate that a report be prepared by the East Neuk Communities Group, assisted by the Regional Council, setting out the work they have successfully undertaken
- 5.10 The lessons learnt in the East Neuk concerning the involvement of Community Councils can be applied to other Community Councils in the Region and also elsewhere in Scotland. It is considered therefore that as part of the consultation other Community Councils are given the opportunity to undertake the steps that have been carried out in the East Neuk. This will require the commitment of those Community Councils and also support from the Association of Scottish Community Councils. Contact has been made with this organisation and it is suggested that further development await the response from the organisation. It is also understood that there may be central government funding available to encourage Community Councils to become involved in Agenda 21 processes of which the identification of local indicators is an important aspect. It is suggested therefore that approaches be made to the

Scottish Office. Any support from the Association should be used to develop the techniques used in the East Neuk with a limited number of other Community Councils and to prepare worksheets so that other Community Councils can undertake the work themselves.

Glenrothes

- 5.11 Links developed with Collydean Tenants Association have to date been encouraging. The responses to forms distributed by the Association are awaited. However initial discussions regarding these have identified the various issues of most concern to the local community. It is intended that this should be followed up with local initiatives aimed at raising awareness regarding sustainability issues and by the development of local indicators. In this respect it is considered that a 100 Household Project could be piloted in the Collydean area via the local Tenants Association.
- 5.12 A 100 Household Project, piloted in Leicester, involved a group of households in identifying actions they can take individually to influence the sustainability of their community. The lessons learnt by the householders can then be passed onto others. It is anticipated that Fife Regional Council would provide the required training and support to the householders.
- 5.13 In addition it is considered that work should continue with the youth in Glenrothes via the Community Education Workers and their links into the local youth club network, in particular, and via the students at Glenrothes Technical College. A Youth Forum in the area is proposed.

Benarty

- 5.14 A consultant has recently provided the Community Education Officers with information and some training in the use of Participatory Rural Appraisal. The process involves the use of various techniques, including time lines and community mapping, which allows a picture of the community to be built up over a period of time. It concentrates on various issues, such as patterns of employment, and thus helps prioritise action to addressing local issues. This process should link with the existing local Community Action Plan process, which is now in its third year of operation, and will be of value in helping to develop local sustainability indicators.
- 5.15 Due to the current workload on staff available it is unlikely that the technique of Participatory Rural Appraisal will currently be implemented. Instead a variant, used by Community Education, will be applied. It is considered that this will be quicker and be a more efficient use of resources.
- 5.16 In addition it is proposed that the following steps are taken:
 - 1. Newspaper coverage, locally, giving information on the Fife-wide survey and a comparison with the results in Benarty . (It should be noted that the responses to the 16 statements from people in Benarty were significantly different from the Fife-wide responses).
 - 2. Invitation to a meeting/seminar for selected groups e.g. Community Action Plan Working Group, Benarty Environment Group, Community Centre Management Committee, Community Council and others.

- 5.17 It is considered that initiatives or ideas from groups or individuals throughout Fife wishing to become more active in sustainability issues should be encouraged. Their involvement should be directed towards local action within the framework identified.

6.0 RECOMMENDATIONS

- 6.1 It is recommended that Members remit to the Director of Economic Development and Planning, through the Charter for the Environment Steering Group, to:-

1. Publish the "Sustainability Indicators for Fife" report for general distribution.
2. Investigate and report back on the resource implications of developing the following:
 - (i) Development of fora for the elderly, youth, women, ethnic minorities, people with disabilities and business in Fife by building upon the existing Chief Executive's fora, Green Business Fife and the newly established Youth Consultative Committee.
 - (ii) Investigation of the establishment of a "Sustainable Fife Roundtable".
 - (iii) Production of an annual update to the Sustainability Indicators for Fife Report.
 - (iv) Preparation of a report on Local Agenda 21 in Fife and its linkages with this project.
 - (v) Development of priority indicators for those issues identified by the public consultation process as being of most importance.
 - (vi) Development of linkages with other Regional Council initiatives, such as Local Agenda 21, and the State of the Environment Manual.
 - (vii) Development of partnerships with other organisations, such as the Fife Health Board.
 - (viii) Development of initiatives with 3 or 4 Community Councils in the East Neuk.
 - (ix) Investigation of joint initiatives with the Association of Scottish Community Councils.
 - (x) Development of a 100 Household Project in Glenrothes.
 - (xi) Development of a variant of the Participatory Rural Appraisal, linked to the existing Action Plan Process, for use in Benarty.
 - (xii) Investigation of opportunities for funding.
 - (xiii) Incorporation of action arising from the above recommendations into the 4th Charter for the Environment Action Programme.



Fife Sustainability Indicators Report - 1st Edition (June 1995)

Summary of Written Comments Received (December 1995)

Respondents Name	Issue	Respondents Comments	Response
Environmentally Sustainable Systems	1. General	<p>The report is extremely interesting, and very well produced in what must have been a very tight time schedule.</p> <p>Very impressed by the emphasis placed upon equity issues. And the clear benefits of clustering individual indicators in meaningful groups, thus avoiding some of the perils of aggregation.</p>	Noted.
Fife Constabulary	1. Road Accidents	<p>Whilst Fife has been successful in achieving central government's target of a 33% reduction in road casualties, it is important to highlight the fact that pedal cycle casualties have only reduced by 11%. This may be due to the massive increase in popularity of cycling or because Fife had a low pedal cycle accident rate at the time the mean was set. Would be merit in investigating issue.</p>	<p>Investigations in urban areas, as to where core cycle routes could be provided in Dunfermline, Glenrothes, Kirkcaldy, Levenmouth and St Andrews, as part of the Kingdom of Fife Cycling Initiative, have revealed definite "blackspot" locations for pedal cycle accidents and casualties. Provision of these urban cycle routes, should address many of these problem locations and raise awareness, and the profile of cycling to other road users. Feedback from cyclists obtained as part of these investigations identifies junctions, especially roundabouts, as problem locations. This suggests that a region-wide investigation would be beneficial for cyclist safety.</p>
	2. Crime	<p>(i) Fife Constabulary is committed to the development of community orientated policing and therefore supports the way forward outlined in the crime indicator.</p> <p>(ii) Whilst number of crimes reported rose in 1994 there was a significant decrease in crimes of dishonesty, amounting to 10.51%. In addition detection rates increased to 42.36%.</p>	<p>Noted and welcomed.</p> <p>Noted</p>
Mr Hansen	1. General	<p>(i) Welcome tone and content of the Report . The Report is an excellent first step.</p> <p>(ii) For it to be of any use the Report must be put into action by the inhabitants of Fife, including the new Fife Authority.</p>	<p>Noted</p> <p>Agreed, this is fundamental to achieving progress towards sustainability in Fife.</p>



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Summary of Written Comments Received (December 1995)

Respondents Name	Issue	Respondents Comments	Response
Mr Hansen (Continued)	2 Decision Making (p3)	(i) The Report states that all people should be able to share in decision-making. This important area has been neglected, possibly because of lack of time.	Noted. It is accepted that partially due to a lack of time (i.e. 6 months in which to develop a full set of indicators for Fife) but also because of limited resources that consultation and participation on a Fife-wide basis did not involve every household. Efforts were therefore concentrated on consulting a range of organisations and individuals, including Community Councils. More extensive consultation and participation was however possible within the pilot areas.
		(ii) Funds should have been made available to inform every household of this project by placing a small leaflet through every letter box. Most people would have ignored this project, but at least they would have had the opportunity to get involved if they wanted to.	Noted. See response to 2(i) above.
	3 Food Miles	The report refers to an increasing amount of goods consumed in Scotland from other countries. It should also be remembered that an increasing amount of food being consumed in Fife is coming from outside Fife. This is covered on page 48 fairly well. The policies of central and local government have encouraged this increase in food miles to the detriment of the local economy as well as the environment.	Noted.
	4. Rail and Cycle Facilities (p21).	Proper cycle facilities should be encouraged at stations to avoid having to take the cycle on the train. Facilities should be provided for parking, hiring and having cycles repaired at the main stations in Fife	Noted. Secure cycle parking at rail stations and halts must however involve the rail operating company. Similarly hire and repair of cycles at these locations will involve the private sector. It is anticipated that the region-wide Kingdom of Fife Cycling Initiative shall provide a stimulus, not only to encourage cycling but for this type of support activity.



Fife Sustainability Indicators Report - 1st Edition (June 1995)

Summary of Written Comments Received (December 1995)

Respondents Name	Issue	Respondents Comments	Response
Mr Hansen (Continued)	5. Car Use (p23).	The report makes relevant points about reasons for increased car use including facilities designed for cars; with pedestrians and cyclists as an afterthought. Such schemes were designed and executed by Fife Regional Council! I hope that in future the designers of such schemes design roads for pedestrians, cyclists and vehicles in that order.	Noted. Policies contained in the Regional Councils, more recent Transport Policies and Programmes document 8 and 8C address the needs of all road user groups on an equal basis.
	6. Crime (p28-29)	The report makes relevant points about crime. The policy of national and local government to encourage people into shells are a big contribution to a lack of people on the streets and so an increase in crime.	Noted.
	7. Safety for Pedestrians and Cyclists (p32-33)	Disagree fundamentally with this approach and with this indicator moving towards sustainability. The indicator being used is an excellent measure of the number of casualties but, unless the number of journeys made by each mode remains the same, is not an indicator of safety at all. Safety is actually a measure of how many journeys are successfully made without an incident.	Noted. As part of the development of transportation strategies which seek to achieve the safe integration of all road users and a high level of resident and interest group participation, this suggestion is being actively explored in the ongoing development of the variables used in the objective appraisal of elements of these strategies.
		Dividing the number of casualties by the number of journeys made by each mode would be a more realistic indicator of safety. A fully realistic indicator would include compensation for the environmental impact of each mode of transport as well. I think such a fully realistic indicator would show an inconclusive result or a move away from sustainability.	Noted.
	8. Land Quality (p36-37) and Food Agriculture (p48-49)	(i) Makes interesting reading when combined. The amount of land that is urbanised is rising. However, the amount of farm land has increased marginally. The only conclusion is that wildlife habitat is being converted into suburbs and tin shed farms, which is not sustainable.	Agree in principle, however Structure and Local Plan policies exist to prevent the unsuitable development of land especially protected wildlife habitats.



Fife Sustainability Indicators Report - 1st Edition (June 1995)

Summary of Written Comments Received (December 1995)

Respondents Name	Issue	Respondents Comments	Response
Mr Hansen (Continued)		(ii) The report talks about developing an indicator for the distance food travels to reach Fife. Such indicators have been developed already and I think Transport 2000 could supply all the details of a suitable indicator.	Noted. The information required to develop a food mileage indicator will be pursued.
Mr W J McGregor	1. Community Involvement (p5).	Do not agree that community involvement might be a problem on a Fife-wide basis. Each village should have a sub-committee set up to concentrate on their own village problems.	Community involvement on a Fife-wide basis is certainly a worthy objective and is in keeping with the Regional Council's commitment to Local Agenda 21. However for the purposes of the first edition of this Fife-wide indicators report the restrictive timescale and limited resources meant that Fife-wide consultation was impractical. It is the intention that the lessons learnt from the fuller consultation and participation in the three pilot areas may be developed elsewhere in Fife.
	2. Cycling (p20-21)	(i) Agree with most points raised in regard to providing cycle paths. (ii) A main roadway should be considered for a trial lane cycle path e.g. on the back road from Aberdour to Kirkcaldy. (iii) In addition provision will have to be made for large monitored cycle parking spaces.	Noted A viable route for cyclists between Aberdour and Kirkcaldy is currently being investigated. Secure cycle parking features as an integral element of programmed cycle routes and networks in urban areas.
	3. Community Participation (p23).	Agree that the ability of people to participate in decision-making is important.	Noted.
	4. Land Quality (p37).	There is a waste of building land in town areas e.g. in Kirkcaldy. There is no point in building out in the countryside when there is plenty of room in the town itself.	Agree that efforts should be made to develop appropriate sites within urban areas before releasing greenfield sites. The Regional Council supports the development of brownfield sites.
	5. Biodiversity (p38)	(i) Why state that we must reduce sewage and effluent discharges into water/ courses. It should be an offence and punishable with heavy penalties imposed.	Noted.



Fife Sustainability Indicators Report - 1st Edition (June 1995)

Summary of Written Comments Received (December 1995)

Respondents Name	Issue	Respondents Comments	Response
Mr McGregor (Continued)		(ii) Did the Fife Freshwater Macrophyte Survey of 1991 (NCC) cover the outlet of the freshwater rivers to the sea or was it confined to the inland rivers or ponds/lochs? The Macrophyte Survey covered lochs only.	The Macrophyte Survey covered lochs only.
		(iii) Has a survey been undertaken of the marine life in the coastal parts of the Forth and Tay to determine if the standards of marine life and the cleanliness of the two areas is on the decline.	The Forth and Tay River Purification Boards do undertake extensive surveys of marine life in their respective estuaries. The Regional Council is currently negotiating access to this information.
	6. Air Quality (p44-45)	Longannet Power Station and the BP and other large international companies at Grangemouth and Mossmorran should contribute to the costs of air quality monitoring in Fife.	BP carry out a programme of air quality monitoring the results of which are made public. In the case of Mossmorran Shell and Exxon fund an independent group established by the Regional Council. The Mossmorran and Braefoot Bay Independent Air Quality Monitoring Review Group monitor air quality and publish the results.
	7. Household Waste (p53)	Although Fife has a system of collecting waste glass, paper and tin cans it still does not have a recycling plant for plastic refuse.	Part 4 of the Environment Act 1995 introduces various powers and controls regarding air quality monitoring to be carried out by the new unitary authorities in Scotland. However there is no specific requirement for companies to contribute to the cost of monitoring.
	8. Energy (p57)	(i) To save energy should progress with the redevelopment of the railway network and open up stations such as Sinclairtown and Dysart.	Noted. The recycling of household plastics is not currently considered commercially viable. However there are a number of commercial operators who do recycle their own plastic. Kirkcaldy District Council considered the feasibility of plastic recycling facilities and this work is being continued.
			Noted. Provision of new rail halt at Dalgety Bay is programmed for early 1997. The current Roads and Transportation Capital Programme, contained in the Regional Council's Transport Policies and Programmes document, contains an allocation for construction of a new station in the Dysart/Sinclairtown area of Kirkcaldy.



Fife Sustainability Indicators Report - 1st Edition (June 1995)

Summary of Written Comments Received (December 1995)

Respondents Name	Issue	Respondents Comments	Response
Mr McGregor (Continued)	9. Skills and Training (p61)	(ii) Rail fares should be cheaper with improved timetables. Agree that training is essential but consider that YTS schemes etc are rather a waste of time. It would be better if companies were subsidised with government or local funds to attract additional staff or apprentices.	The Government's Skill Seekers Initiative, which has replaced the YTS Scheme, offers government funding direct to companies. The Regional Council also offers Employment and Training Grants direct to companies.
Oxford Brookes University	1. General	The report makes interesting reading and provides a useful if sometimes provocative basis from which to consider further the current sustainability debate.	Noted.
	2. Observations	(i) What in the recent past were close knit communities of people with mostly local employment, local ties, and a shared investment in the future of their own community, are now, more often, just loose-knit associations for essentially unrelated people with their only common feature being that of a residence, however temporary, somewhere in the same locality. (ii) Generalisations are rarely found to provide the viable answers to the diverse problems of what often are locality specific issues of real people and their own communities. Therefore, whilst accepting the lessons of experience but not taking the validity of comparatives for granted, each individual community (locality) requires anew its own full and interrelated appraisal to be undertaken.	Noted. Agree this is a fundamental part of the approach being undertaken by the Regional Council in the level 2 pilot areas where various exercises have been undertaken and events held to gather information on local issues, threats and opportunities. The lessons learnt may then be used to help develop local indicators in other parts of Fife.



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Respondents Name	Issue	Respondents Comments	Response
Oxford Brookes University		(iii) With more precise information and also a restructured focus, the problematical area of devising multiple, appropriate and meaningful indices could perhaps be divided, and, as an alternative, the more exciting potential of developing a GIS based, multifactoral matrix with perhaps a single index for each locality, community and their sub-groupings could even be explored?	The possibilities of such an approach sound very interesting. Further information on a GIS based multifactoral matrix will be sought.
Director of Personnel and Management Services (Fife Regional Council)	1. Presentation	The presentation of the final version is excellent and helps to make what is a fairly complex subject fairly easy to understand.	Noted.
	2. General	Nothing to add to comments made on earlier drafts.	Noted.
Director of Social Work (Fife Regional Council)	1. Presentation	The report is well presented.	Noted.
	2. Distribution	It should be widely disseminated to stimulate discussion among political representatives, opinion farmers, voluntary organisations, and the general public as a whole.	Agreed. 1000 copies of the first edition of the report have already been distributed amongst the general public, Community Councils and interest groups, education establishments, the private sector and government bodies and organisations. In addition the report, and other information about the Indicators Project, has been distributed to many organisations outwith Fife.
	3. Future Stages	Perhaps sustainability "seminars" might be held in local communities beyond those of Benarty, St Monans and Glenrothes to explore the issues raised by the report and to define indicators of particular relevance to each community.	Noted. The three communities identified are pilot areas; it is intended that the lessons learnt in each could be applied elsewhere in Fife.



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Respondents Name	Issue	Respondents Comments	Response
Director of Social Work (Fife Regional Council) (Continued)		(ii) The indicators strongly, and crucially, demonstrate the interconnectedness of economic, planning, community development, environmental protection and service delivery at the strategic level.	Noted. It was considered essential that the linkages between social, economic and environmental issues and specific indicators be made clear.
		(iii) Further development of macro-level indicators and their linkage with specific local concerns is awaited with interest.	Noted. It is intended that these will be developed as part of an ongoing process.
Royal Society for the Protection of Birds	1. General	Very much welcome the Council's efforts in developing indicators and its early commitment to Local Agenda 21.	Noted.
	2. Biodiversity (p.38)	Encouraged by efforts to seek views of the local community and national bodies. Indicators reflect community values and objectives.	Noted. It is intended that this will be developed further.
		Submerged aquatic plants seems a very good indicator because the trends away from biodiversity can probably be united to causal environmental factors affecting a range of species e.g. habitats, in spite of its wider relationships it is doubtful that use of this indicator alone is adequate to draw conclusion that "local species diversity is declining".	Agree that an additional indicator on biodiversity should be developed.
		Other indicators do link to biodiversity e.g. boreholes, air quality and fisheries. Fisheries have a direct link to birds and the issues and actions identified under this indicator mirror the concerns of the RSPB, particularly in relation to the need for local management of fisheries. But these indicators do not provide a clear linkage which enables additional conclusions to be drawn about the state of biodiversity. For example the fisheries indicator could be complemented by an indicator on the nationally important breeding seabird populations in Fife.	Agreed. Better linkages between indicators will be developed in the 2nd edition of the Report. Nationally important seabirds is a potentially useful indicator which may be developed further.



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Summary of Written Comments Received (December 1995)

Respondents Name	Issue	Respondents Comments	Response
Royal Society for the Protection of Birds (Continued)	3 Suggested	<p>The conservation of biodiversity is a key test of sustainable development and we feel that additional biodiversity indicators are necessary subject to resources, adequate data and practical monitoring. The Council does have a very important resource in Fife Nature. An effective biological records centre linked to naturalist groups in the community is fundamental to the selection and development of a representative range of biodiversity indicators.</p> <p>1 Protected Areas in Fife - change in the extent of protected areas, and the reasons why, is an important measure of the health of the environment. These suggestions are noted and will be given further consideration in developing additional biodiversity indicators.</p> <p>2 Threatened species in Fife - decline or loss within Fife of any nationally or internationally threatened species from the red data lists would represent a significant loss of global and UK biodiversity and a trend away from sustainability. Fife is nationally important for 5 breeding red data bird species. Information on these should be readily available. Monitoring and action for these species should be a fundamental part of any Local Agenda 21 Plan.</p> <p>3 Internationally Important Sites in Fife - these sites of international importance for migratory waterfowl e.g. estuaries of the Forth and Tay and Cameron Reservoir. Recognition of this international responsibility to biodiversity conservation should be a fundamental part of the Council's Local Agenda 21 Plan.</p>	<p>Agree Fife Nature will be used to develop additional biodiversity indicators for the second edition of the Report.</p> <p>These suggestions are noted and will be given further consideration in developing additional biodiversity indicators.</p>



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Royal Society for the Protection of Birds (Continued)	4. Targets	<p>It would be desirable in the longer term to develop indicators based on species which are characteristic of species assemblages or natural or semi natural habitats. More complex but may be possible to develop wetland indicators from the work being done by the Fife Wetlands Initiative and RSPB may be able to contribute to monitoring.</p> <p>Indicators are of little value without targets for their maintenance, enhancement or recovery. The government through the UK Biodiversity Action Plan is currently developing targets for priority species and habitats. LA21 needs to take the national targets and adopt them to local circumstances. This process together with the co-ordination and implementation of policies and actions to achieve targets is best pursued through a biodiversity action plan or nature conservation strategy. We would strongly urge the preparation of such a plan.</p>	Agreed. Fife Council in partnership with other agencies is involved in developing a biodiversity plan for Fife.
	1. Quality of the Environment Indicator (p39)	Reducing sewage and effluent discharges to water courses from all services is obviously a prime method of reducing nutrient imports to fresh waters. Reduction of discharges of sewage however is difficult to achieve in the face of progressive development. However, improvement of effluent treatment and hence quality of effluent can be achieved. Perhaps this should be added as a fourth possibility for the way forward.	Noted. Consideration will be given to adding this to the Way Forward Section.
Tay River Purification Board	2. Quality of Surface and Underground Water (p40).	According to the 1990 Water Quality Survey of Scotland 99% of fresh surface waters in the Board's area were class 1 quality. I am therefore surprised at your observations in Analysis of the indicator. This requires some clarification.	This has been the subject of discussion and correspondence with the Forth River Purification Board as well. The levels of nitrates in boreholes are a matter of record, but a more sensitive indicator which relates physical conditions of water quality, to human activity and the condition of other species is being sought.



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Mr D Whyms (Continued)	5. Crime	Occurrence of crime can be viewed in itself as an indicator of a society's health. As well as tackling "symptoms" community identify, socio-economic usefulness and equity have a fundamental role to play in ensuring individuals are not constrained into criminal activities.	Noted.
	6. Safety for Pedestrians and Pedal Cyclists	Over simplistic conclusion to draw from data . More useful may not be the gross number of accidents but the number of accidents per km travelled. Additional information provided.	This particular indicator has been criticised for its over simplistic approach and will be developed further or replaced in the 2nd edition.
	7. Water	It is important that access to a safe, reliable, healthy water supply is preserved. Considering Fife water's current deficit in certain health enhancing natural minerals, it would also be appropriate to implement the treatment of the supply with fluoride.	Noted. Adding any supplements to Fife's water supply is obviously a controversial subject.
	8. Food: Agriculture	Many pertinent issues addressed, but more emphasis could be placed on increasing the ability of individuals and communities to produce their own food. Access to land for this purpose seems nominal. Many Councils encourage allotment cultivation which could represent a real improvement in diet and exercise levels for many - especially if systematically supported by other Council initiatives such as basic education, access to resources and tools, and linked in with LETS schemes targeting communities of high need. The "Way Forward" does not mention organic methods as the only long term sustainable option.	Agree.
	9. Fisheries	Difficult to know what could be done locally in the face of the global threat to fisheries and marine ecosystems. Ideally a shift to smaller and less intrusive methods would result in less fish being caught and more employment - but this would not work in isolation, and to make the products affordable considerable subsidies would be needed.	Agree.