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# **INDICATORS OF SUSTAINABLE DEVELOPMENT IN THE UK**

## **Abstract**

The UK has recently established a third generation of indicators of sustainable development, building on the experience of a preliminary set produced in 1996, and a set of headline and core indicators established in 1999. Indicators played an integral role in the preparation of a sustainable development strategy in 1999, and a set of 15 headline indicators became the predominant means of communicating progress and promoting sustainable development.

However, over the last five years the requirement for and expectations of indicators have changed, and there is now perhaps a better understanding of their strengths and their limitations. The greatest strength has been in providing a means by which stakeholders and the media can review progress and hold the Government to account. Where, in the main, they have been less successful has been in directly driving policy development.

However, this raises the question of whether indicators in themselves can be integrated into policymaking, and whether too much is expected of them beyond their basic communication role. Other challenges remain in aiming to have indicator sets that are as comprehensive as possible in the issues they cover, whilst being specific enough to be directly related back to policy, whilst being small enough in number to maintain for regular monitoring.

The UK does not have all the answers, but the experiences of producing three generations of indicators, and some success in the use of headline indicators, may be of interest and use to other countries following their own paths towards successful indicator programmes.

## **1. Introduction**

- 1.1. After more than ten years of experience in developing and using sustainable development indicators, the United Kingdom has recently established its third generation of indicators in a new set to support a new sustainable development strategy.
- 1.2. The need for and the perception of indicators have evolved since the first set and some re-evaluation is needed of what is expected of indicators, how they should be used and how they should be communicated.
- 1.3. When sustainable development indicators were first established, the proactive use of indicators and targets in government was in its infancy. The first set of indicators was therefore breaking new ground in the process of reviewing progress.
- 1.4. By the time of the second generation of indicators, the Government was willing to embrace the concept of being held to account having already proliferated the

machinery of government with performance targets. So sustainable development indicators were strengthened with a commitment to make progress, and a set of headline indicators was established to be drivers for action and to highlight where policies needed to be adjusted.

- 1.5. However, with performance measures now across every aspect of Government, and every new policy initiative generating more targets the approach to developing a set of sustainable development indicators is more challenging and their perceived role perhaps needs to change.
- 1.6. In one respect, with a multitude of indicators and targets already in place across Government, establishing a set of sustainable development indicators ought to be easier, as it should be possible to ‘cherry pick’ the best indicators from a wider variety of existing sets. However the challenge now is to identify and develop indicators that are adding value and bringing a sustainable development perspective, rather than simply repackaging existing performance measures and giving them a ‘sustainable development badge’.
- 1.7. There is now greater sensitivity about what messages a set of sustainable development indicators might convey, and in many cases a desire by policy makers and politicians that these should be consistent with the indicators and targets already adopted within specific policy areas. There is a danger therefore that a set of sustainable development indicators may only be a repackaging exercise (though this may in part be welcomed since obtaining information on disparate trends from even the most centralised of statistical systems can be very difficult).
- 1.8. Where a set of sustainable development indicators is closely allied with a sustainable development strategy, as is the case for the UK, greater influence can be applied through the existence of policy statements to extract agreement for more challenging sustainable development indicators, and perhaps reduce some of the ‘repackaging’.
- 1.9. There has long been the desire that sustainable development indicators should be fully integrated into policy making and directly influencing policy decisions – making them more sustainable. However, there are very few examples of where this has happened. The problem is that the principal role of indicators is as communicators, and in particular communicators to the public and Ministers who do not necessarily need or want to know lots and lots of detail. Most indicators therefore provide only a broad overview of an issue and are of little use for detailed policy considerations. They are in particular often too broad for a policy maker to identify where their policy area may impact on another aspect of sustainable development. Some stakeholders call for a set of indicators that are better integrated internally, i.e. with all the inter-linkages identified and quantified, but we are a long way from being able to construct comprehensive models that allow us to know what impact a change in one indicator will have on another.

- 1.10. Some stakeholders believe that holistic sustainable development measures are needed, and there are a growing number of aggregate indices promoted internationally that profess to be measures of sustainability. However, there is also a wide degree of scepticism internationally about their methodologies and meaningfulness. Although aggregate indices may have their place in a package of communication tools there is a concern that they are more likely to mislead than to lead to discernable progress. However the idea of condensing down the messages is valid, and the sizes of our indicators sets perhaps need to be reduced to be more manageable for those trying to maintain them and those trying to understand the messages.
- 1.11. The immediate future and need for indicators is a focus on raising their profile and making them more effective as communication tools in order to raise awareness and understanding of sustainable development. There is a need for more accessible indicator ‘products’ such as the UK’s very successful ‘headline indicator’ leaflets, which can be used by Government Ministers, stakeholders and the public, and user-friendlier indicator websites. It needs to be recognised that few if any indicators can serve the needs of both those who need broad messages and those who need detailed input into policy making. Those responsible for sustainable development indicators should first and foremost focus efforts on effective communication. Policy makers will tend to use detailed statistical and other evidence rather than rely wholly on indicators.

## **2. The 1<sup>st</sup> generation indicators**

- 2.1. In 1994 the UK became one of the first countries to produce a sustainable development strategy (HM Government 1994) in response to the 1992 Earth Summit in Rio de Janeiro. The strategy led the Government to pursue, via an inter-departmental working group, a set of indicators with which to monitor progress.
- 2.2. In 1996 a preliminary set of indicators were published, “Indicators of Sustainable Development for the United Kingdom” (Dept. of the Environment 1996), making the UK one of the first countries to do so. This included some 120 indicators produced for discussion and consultation.
- 2.3. The UK took account of ideas and work in other countries and organisations, in particular the UN Commission on Sustainable Development (UNCSD), the Organisation for Economic Cooperation and Development (OECD), and European institutions.
- 2.4. The indicators were based on a unique framework based on the key issues and objectives set out in the sustainable development strategy. The work also attempted to go beyond environmental indicators, to include indicators explicitly linking environment impacts with socio-economic activity. Despite this, the main criticism of both the strategy and the indicator set was that there was too little coverage of social issues, and indeed most of the indicators focused on environmental ones.

There was also criticism that the UK indicators had been published shortly before the UNCSO published a draft menu of indicators for all countries to use in reporting internationally on sustainable development. However, the UK was subsequently one of 22 countries to volunteer to pilot test the applicability of the UNCSO indicators.

### **3. The 2<sup>nd</sup> generation indicators**

- 3.1. Following a change of Government in 1997, a new strategy, “A better quality of life” (DETR 1999a), was published in 1999. The establishment of indicators was an integral part of the development of the new strategy, with work on indicators going alongside and sometimes ahead of discussions on the content of the strategy.
- 3.2. This approach of indicator development in tandem with policy formation was a pragmatic one in that there were concerns that the delivery time for the indicators would be considerably longer if they were entirely predicated on the content of the strategy being finalised.
- 3.3. However, the approach had both strengths and weaknesses. One of the strengths was that the indicators helped to focus people’s minds on the issues that should be covered by the strategy and in some cases indicators led to the inclusion of issues in the strategy that might not otherwise have been included, or at least not in the same way, for example indicators on wild bird populations and on air quality. However, some of the indicator work (for example on social indicators) was either not used in the final set or the experts engaged in the exercise felt unable to contribute constructively without knowing the direction of the strategy.
- 3.4. Working to some extent blind - without a strong policy lead - perhaps also resulted in a much larger volume of candidate indicators than might have been the case if indicator development had awaited finalisation of the policy framework.
- 3.5. Furthermore and perhaps inevitably, when then opening the debate on indicators to stakeholders, there was a tendency for them to be strongly motivated towards their own area of concern being covered by an indicator. This was often on the erroneous assumption that if it was not an ‘indicator of sustainable development’ then it was not monitored at all.
- 3.6. Another motivation was perhaps that in their view a particular issue had to be seen as contributing to sustainable development through the indicators, possibly in anticipation of potential funding or for political or presentational reasons.
- 3.7. Whilst undoubtedly eliciting wider support and ensuring a more robust set of indicators, stakeholder involvement, with a still-evolving policy framework, had the potential to hamper the establishment of a coherent set. For example, in one particular workshop event, the aim had been to reduce an already large list of indicators, some 200 or so, down to perhaps as few as 50. By the end of the day’s

deliberations, rather than reducing the list, stakeholders had argued the need for more candidate indicators and the list had grown to over 400.

#### **4. The 2<sup>nd</sup> generation indicators: headline indicators and “Quality of life counts”**

- 4.1. Within a climate of ever increasing numbers of indicators and targets, covering a wide range of policy areas in Government, Ministers were comfortable with the concept of being held to account, and indeed holding the country to account through sustainable development indicators.
- 4.2. However, even if a set of less than 200 indicators could be whittled down from all the candidate indicators, it was clear that it would be very difficult to answer the question ‘Are we becoming more or less sustainable?’ – each indicator would in effect give a different answer for a specific area.
- 4.3. In recognising that this could not be effectively done with a large number of indicators, Ministers asked that some ‘headline’ indicators be established which might provide a broad overview of progress.
- 4.4. A public consultation paper, “Sustainability counts” (DETR 1998) proposed a set of 13 headline indicators covering economic growth, social investment, employment, health, education and training, housing quality, climate change, air pollution, transport, water quality, wildlife, land use and waste. The concept of a ‘headline’ set received wide support. Responses to the consultation resulted in a fourteenth indicator on crime being included in the strategy document, and a fifteenth indicator on poverty and social exclusion was introduced in the final publication of the indicators.
- 4.5. Some six months after the publication of the strategy document, “Quality of life counts” (DETR 1999b) was published. This provided a baseline assessment of the fifteen headline indicators and 132 core sustainable development indicators, established to focus on specific issues and identify areas for action.
- 4.6. The headline indicators were described as a ‘quality of life barometer’ – ‘to provide a high level overview of progress, and be a powerful tool for simplifying and communicating the main messages for the public’.
- 4.7. The headline indicators were to play a key role in the promotion of sustainable development, and the indicators were at the centre of four successive UK Government annual reports on progress “Achieving a better quality of life” (DEFRA 2004a).
- 4.8. The wider “Quality of life counts” proved to be very influential in other indicator initiatives throughout the UK and internationally. However with hindsight it is questionable whether such a large set of indicators, 147 including the headline

indicators, was practical to maintain and effective in communication or in influencing policy.

## 5. The 3<sup>rd</sup> generation indicators: public consultation

- 5.1. The 1999 strategy document included a commitment to review the strategy and its supporting indicators after five years. In April 2004, the UK Government, in partnership with the Scottish Executive, the Welsh Assembly Government and the Northern Ireland Administration, launched a public consultation document “Taking it on” which sought views on the direction of sustainable development strategy and future monitoring of progress through indicators.
- 5.2. In 1999, the UK devolved many powers to new democratic bodies in Scotland, Wales and Northern Ireland. As new bodies, these devolved administrations created their own solutions to the shared challenge of sustainable development. This led to separate indicator sets being established by the Scottish Executive and the Welsh Assembly Government, and initial work on indicators in Northern Ireland, which reflected their own circumstances and priorities.
- 5.3. However, some stakeholders had expressed concern about the confusing messages conveyed by disparate policy and disparate indicator sets. The consultation document proposed a common strategic framework for sustainable development, beneath which each administration could develop its own strategy. Views were then sought, through the following questions, on how progress should be reviewed and communicated:

What are the strengths and weaknesses of the current sustainable development indicators, and how they are used?

In general

More specifically indicators used:

- in the UK Government’s headline set;
- in the wider UK core set in ‘Quality of life counts’;
- in Scotland, Wales and Northern Ireland;
- in the English regions;
- in local authorities; and
- elsewhere (for example sectoral indicators).

What needs to be monitored and measured UK-wide?

Who are the audiences for indicators and how could we better meet their needs?

Should any set of indicators supporting the new strategy concentrate on just the main priorities in the strategic framework; or be wider and more comprehensive?

Should important high-level sustainable development indicators focus on monitoring general progress towards final outcomes; specific delivery actions and targets; or both?

- 5.4. In total there were 42 questions in the consultation document, and more than 700 individuals or organisations provided responses. In developing the consultation document, attempts were made to ensure that questions on indicators were integrated alongside the relevant policy related questions. Unfortunately there were considerable pressures to structure the consultation document in a manageable way and policy interests prevailed. This resulted in the indicator questions above featuring as questions 38 to 42 of the consultation document. Many of the preceding questions required respondents to produce detailed answers, so there was an inevitable decline in the extent of answers for later questions.
- 5.5. However, monitoring and indicators were important threads running through responses to many of the questions in the consultation document – not just those specifically on indicators. In all there were more than 1,500 indicator-related responses.
- 5.6. There was strong support for the retention of a set of UK-wide indicators, with the desire that indicators could be linked from local to national level. Ninety-five per cent of respondents supported the need for a set of headline indicators, but only 11 per cent specifically favoured the existing headline set with no change and a further 25 per cent supported the existing set but with some modification.
- 5.7. Eleven per cent of all indicator responses were specifically concerning Gross Domestic Product (GDP) as a measure of sustainable development, with the majority of these advocating its exclusion from the set or changing it radically.
- 5.8. A wide variety of candidate indicators were proposed for a headline set, including a number of aggregate indices, with some people suggesting that there should be no more than 3 to 5 ‘headline’ indicators, and that these should be aggregate measures. Eight per cent of all indicator responses strongly supported the inclusion of an ecological footprint. There was also strong support for other measures that for example encapsulate wellbeing so as to counter the perceived assumption that economic growth is necessarily a desirable outcome of sustainable development.

## **6. The 3<sup>rd</sup> generation indicators: the final set**

- 6.1. In addition to the consultation, an indicator review was undertaken to identify indicators to support future monitoring. The review initially focused on indicators used directly to monitor sustainable development, and indicators in closely related national strategies. The exercise was then extended to a wider array of indicator sets used nationally and internationally. In total over 5,000 indicators were identified. These were then characterised into broad themes, and into economic, social and environmental impacts and drivers.
- 6.2. To a great extent the development of the 3<sup>rd</sup> generation of indicators reflected some of the same challenges faced in producing the 2<sup>nd</sup> generation. The greatest challenge being trying to establish a policy-relevant set of indicators in time for



inclusion in the new strategy, whilst the policy thinking for the new strategy was still being developed. A degree of pragmatism was required, along with constructive dialogue with policy colleagues and those within the devolved administrations to negotiate an acceptable set of indicators.

- 6.3. The new UK Government sustainable development strategy “Securing the future” and the UK’s shared framework for sustainable development “One future different paths” were published in March 2005.
- 6.4. Twenty ‘UK Framework Indicators’ were outlined which reflected the broad priorities set out in the shared framework for sustainable development. These broadly take on the role of ‘headline indicators’, for which the devolved administrations and the UK Government have shared responsibility.
- 6.5. The UK Government sustainable development strategy outlined, in addition to the ‘UK Framework Indicators’, a further 48 indicators related to the priority policy areas covered by the strategy.
- 6.6. The new indicator set included eight that required development – in some cases from scratch. Perhaps the most challenging of these were indicators covering:
  - social justice
  - environmental equity
  - wellbeing

all of which need to be defined in concept and policy terms as well as for monitoring.

- 6.7. Thinking on how these indicators might be implemented is still at a very early stage. The first two may be based on combinations of localised data through the development of ‘neighbourhood statistics’. The most difficult monitoring to envisage is of ‘wellbeing’. There have been a number of surveys that ask people to rate their life satisfaction, but the degree of satisfaction is surprisingly high and has changed little for many years. So it is difficult at this stage to envisage what an indicator of wellbeing might be that is informative and has credibility. It is likely to be several measures rather than a single indicator. Research to contribute to the scoping of wellbeing and to help identify the evidence is to be commissioned shortly.
- 6.8. The 68 indicators include all the previous 15 ‘headline’ indicators, though not all of them are within the 20 ‘UK Framework Indicators’. This means that GDP has been retained. Arguments for its retention included recognition that GDP provides essential context for considering a number of the other indicators, it is a driver for many of the environmental pressures, and economic growth is an essential aspect of sustainable development in terms of supporting environmental and social development.
- 6.9. A number of the indicators in the new set were ‘decoupling’ indicators, which attempt to show whether impacts (predominantly environmental) are being

'decoupled' from their potential drivers (predominantly economic growth or demographic changes).

## **7. The international dimension, including Millennium Development Goals**

- 7.1. There was much debate about and initial expectations of the new indicator set featuring a number of international indicators. Indeed policy colleagues and some of the 'Taking it on' consultation responses suggested the inclusion of indicators that capture the UK's global 'footprint' or other 'international' indicators.
- 7.2. This was fine in theory but it was not clear what people meant by international indicators, as this could include indicators of the UK's performance compared with other countries, indicators highlighting global trends, and indicators trying to capture the UK's international impacts.
- 7.3. As a starting point for considering the international perspective a selection of two indicators for each Millennium Development Goal (MDG) were included in the draft set. However, the case could be made for including all 48 MDG indicators and a wide array of other potential international measures.
- 7.4. Having had the goal of reducing the size of the national indicator set to improve its manageability and communication, there was a danger that the indicator set could be swamped with international indicators, which would be difficult to maintain and would be directly duplicating reporting being done by many reputable international organisations.
- 7.5. A more practical approach was therefore needed and it was agreed that the new set of indicators would not formally include international indicators. Instead commitments were made to make international comparative information available via links to international websites, and in due course to explore how the UK's international impacts might be measured for particular sectors.

## **8. Indicator frameworks and selection of indicators**

- 8.1. Much work has been undertaken nationally and internationally to determine the most appropriate structures for sustainable development indicators. Sometimes perhaps too much effort is expended in theorising about frameworks. They may help to ensure that cause and effect can be monitored and they may help to ensure that significant gaps in monitoring are filled. So it is clear that some structure is needed.
- 8.2. However from the experience of the 2nd generation of UK indicators, the strength of the indicator structure had been that it was precisely the same as the policy framework, with direct links to the both the broad and specific structure of the policy objectives in the strategy. It meant that the indicators were not seen as an academic or distinct statistical exercise, but as core components of the overall policy approach.

- 8.3. Ensuring their policy relevance in structure and coverage also meant that strong Government commitments were associated with the indicators in terms of aiming to make progress.
- 8.4. In the 2nd generation indicators ‘Quality of life counts’, there was literally an indicator for every single substantive objective in the 1999 strategy. This resulted in the set consisting of 147 indicators.
- 8.5. In the 3rd generation of indicators, the approach was not quite so precise and indicators were selected that related to the four broad priority areas identified in the strategy. The specific links to policy were then not necessarily related to precise wording in the strategy document, but through the pre-existence of policy targets that if achieved would directly or indirectly contribute to progress in the indicator and hence to the broad policy area. This approach reflected in part a stronger focus in the new strategy on tangible delivery of sustainable development through outcomes, rather than laudable but vaguely defined objectives.

## **9. Indicator selection criteria**

9.1. In establishing indicator sets, attempts have often been made to adhere to a number of selection criteria. For ‘Quality of life counts’ the criteria were:

- to describe whether we are achieving sustainable development
- to highlight and monitor key policy initiatives, commitments and targets
- to educate the public and businesses both about sustainable development and the actions required
- to report progress to international fora, particularly with indicators recommended internationally
- to help make transparent trade-offs and links between sustainable development objectives.

9.2. Certain scientific and technical criteria were applied to the indicators before their adoption. The indicators had to:

- be representative
- be scientifically valid
- be simple and easy to interpret
- show trends over time
- give early warning about irreversible trends where possible
- be sensitive to the changes they are meant to indicate
- be based on readily available data or be available at reasonable cost
- be based on data adequately documents and of known quality
- be capable of being updated at regular intervals
- have a guideline or target against which to compare them.

9.3. These criteria were theoretically laudable and to be encouraged, but in practice there was not necessarily a rigorous checklist applied to each indicator. Compromises inevitably had to be made and pragmatism prevailed to ensure that appropriate measures could be established.

9.4. For the new set of indicators, selection criteria were somewhat less detailed, and wherever possible indicators:

- were linked to the purpose and priorities with the UK Framework and Strategy
- were agreed as high priorities by the UK Government
- had UK coverage
- had trends available
- highlighted challenges
- were statistically robust and meaningful.

9.5. One of the specific goals not mentioned in the criteria was to reduce the number of indicators in the new set. The goal was to have around 50 indicators in the final set. Although not quite achieving this goal, the 68 indicators in the new set are less than half the number in the previous 'Quality of life counts' set.

## **10. Headline indicators**

10.1. There was much debate about a new set of 'headline' indicators in the 3rd generation set. Some stakeholders felt that the previous 15 'headline' indicators were too many. However other stakeholders also felt that additional issues should also be covered by a new 'headline set', and expressed support for a slightly larger set.

10.2. In the new set, the 'UK Framework Indicators' were not explicitly described as 'headline' indicators, and within the new strategy document little distinction was made between the 'Framework' indicators and other supporting indicators. However it is very likely that as communication and reporting for the new strategy is developed, the 20 'Framework Indicators' will take on the 'headline' role.

10.3. The 15 headline indicators in the 2nd generation set were developed in the hope that they might sit alongside traditional measures such as Gross Domestic Product and employment as a means of holding the government and the country to account in making progress towards sustainable development.

10.4. As an integral part of the strategy, a statement was made that: 'the Government's aim is for all the headline indicators to move in the right direction over time, or, where a satisfactory level has been reached, to prevent a reversal. Where a trend is unacceptable, the Government will adjust policies accordingly, and will look to others to join it in taking action.'

10.5. Following Government reorganisation in 2001, a new Government department, the Department for Environment, Food and Rural Affairs (Defra) was formed, which brought together environmental functions with agriculture and fisheries. With the environmental functions came responsibility for coordinating sustainable development across Government. From the start, Defra identified sustainable development as one of its overarching objectives.

- 10.6. This led to a performance target for Defra agreed by Her Majesty's Treasury to 'promote sustainable development across Government and the country as a whole as measured by achieving positive trends in the Government's headline sustainable development indicators.' This was a particularly challenging target as in terms of its policy responsibilities; Defra only had lead responsibilities for policies that might directly affect five of the fifteen headline indicators. This led to considerable difficulties in formulating an approach that appropriately measured Defra's performance, and this remains unresolved to a great extent.
- 10.7. The headline indicators were collectively referred to as a 'quality of life barometer' as they were intended to focus attention on what sustainable development means, and to give a broad overview of whether we are achieving 'a better quality of life, now and for generations to come' – the overarching aim of the 1999 strategy.
- 10.8. Using the term 'quality of life barometer' had its benefits in terms of getting people's attention, but may have also raised people's expectations of what was being measured - some assuming that a single index was being developed.
- 10.9. With the commitments behind the headline indicators they became established as key communication tools. In most cases the statistics behind the indicators were National Statistics in their own right, and with the National Statistics system in the UK predominantly non-centralised, were published in their appropriate context by the responsible department. For example, the crime figures used for the headline indicator on crime were a long established statistics series published by the Home Office. However this did at times mean that there was reluctance on the part of the Departments to present their statistics as sustainable development indicators. In the case of crime statistics they were clearly not first and foremost a measure of sustainable development but of crime. Thus, in press releases and briefings little or no reference was made to sustainable development. It was only when 'repackaged' that the indicators could be highlighted in sustainable development communications.
- 10.10. Furthermore, Defra had little or no influence over whether definitions were changed. Whilst in the strategy the commitment was to retain a consistent set of indicators for a number of years, in practice it was necessary to revise the measures used if there was a change in policy focus or statistical measure. This could lead to presentational difficulties in trying to avoid accusations of choosing indicators that were more likely to show good progress.

## **11. Assessing progress**

- 11.1. Only a handful of countries and institutions have actively made summary assessments of progress using indicators - in most cases the indicators are only presented as charts and commentary. Examples where 'smileys' or other symbol-based assessments are made include the European Environment Agency, Canada, and Slovenia.

- 11.2. For the UK's 2nd generation set early attempts were made to have targets associated with the indicators, but it was concluded that in most cases there was no easily identified point at which a trend was sustainable. So the approach of assessing progress since baselines was established and summarised using 'traffic light' assessments.
- 11.3. With hindsight there are some arguments for why perhaps it would have been better to have avoided making summary assessments – there are undoubtedly sensitivities for policy makers and Ministers in terms of what colour traffic light is highlighted for their particular policy areas, and the media can become very focused on the assessments and not on the wider issues behind the indicators. However on balance, symbol assessments probably are useful to help people understand what the charts are saying, and to get an idea at a glance as to whether things are improving or getting worse. Now that traffic light assessments have been in use for five years, it is doubtful that stakeholders and the media would accept UK indicators without assessments.
- 11.4. Problems surrounding this means of assessment have included the baselines being relatively arbitrary – and with the danger that a different baseline could result in a very different assessment of progress – and the determination of whether change in an indicator should be regarded as significant. Pressure has been applied by the National Audit Office and others for the basis of the assessments to be made much more transparent, with clear justifications regarding the significance of any change.
- 11.5. This has remained difficult, not least because for many of the data sets there was no statistical information available on significance. Assessments had hitherto been made based on the experience and knowledge (and sometimes 'gut-feeling') of the statisticians involved, but it was very difficult to robustly justify the assessments beyond saying what the latest data were, and what the baseline figures were.
- 11.6. To try to make the assessments a little more rigorous, a threshold percentage change in the indicators was declared, above which a change was considered significant. This work was undertaken as part of an update of the 2nd generation indicators published in 2004. The determination of the threshold was to some extent still arbitrary but was based on what percentage change would for most if not all indicators support the assessments previously made. So it was an a priori judgement, rather than one based on statistical rigour. The main benefit was that although debates could be had about the threshold, there was at least greater transparency in, and defence of, the traffic light assessments. For most indicators a three per cent change was regarded as significant. Where the value of an indicator was already very high, and could not be expected to change greatly, then a smaller amount of change was regarded as significant. So there remained some latitude for common sense to prevail.
- 11.7. In the new set of indicators, attempts have been made to reduce the effect of the baseline year, by making the baseline figure, against which the latest data are

assessed, a three-year average around the baseline year. It remains to be seen whether this will be supported by stakeholders and those wishing to ‘audit’ progress through the indicators.

11.8. Some presentational difficulties still remain with ‘baseline’ traffic light assessments, as they have caused confusion for some users of the indicators. For example the assessment for climate change, based on greenhouse gas emissions would be a green tick, since emissions have been reduced, but having a green tick might suggest that the problem of climate change had been resolved.

11.9. Further consideration is still needed as to how best to assess and communicate progress.

## **12. Communication products: Quality of life barometer leaflet**

12.1. In the initial years of the 2nd generation of indicators, there was frustration amongst Ministers that the ‘headline’ indicators were not making ‘headlines’ in the media, and awareness of sustainable development was low.

12.2. The main approach to highlighting the indicators was through the Government’s sustainable development website, and through annual reports, but these were eliciting little interest from the media.

12.3. It was clear that a more succinct way of getting the indicators across to audiences beyond the cognoscenti was needed.

12.4. A leaflet was developed that attempted to present the indicators in simplified form – stripping out unnecessary detail and providing very short commentary and traffic light assessments. Information on all 15 headline indicators was condensed on to two sides of A4 paper. (A version of the leaflet is provided as an Annex to this paper.)

12.5. At media briefings, it was often the “Quality of Life Barometer” leaflet that the journalists turned to rather than the weighty tome that was the main focus of the event. Many of their questions directed at Ministers were then based on the headline indicators and traffic light assessments shown in the leaflet.

12.6. In 2003 the Prime Minister gave the keynote speech at the launch of the annual report on sustainable development, and using the leaflet referred to the headline indicators saying that:

‘we must do more to embed [sustainable development] at the heart of policy-making. That is why I believe that the report on sustainable development in the UK ... is so important. The UK was the first country in the world to publish a comprehensive set of sustainable development indicators. And the first country to report annually on our progress against those indicators.

Many inside government felt we were taking a big risk - that the indicators wouldn't go in the right direction. Some of them are not. But they show clearly the direction we should be moving in. This is a bold experiment...'

12.7. The leaflet proved to be extremely effective in promoting the headline indicators to wider audiences. It was applauded by the UK's independent Sustainable Development Commission and European Union indicator experts, and was described as "the single most important development in communicating sustainable development" (Professor Anne Power, UK Sustainable Development Commissioner, 2001).

12.8. The leaflet subsequently inspired similar leaflets to be produced by, for example, the European Commission, the Environment Agency (England and Wales) and the Finnish Environment Institute, and has been emulated more widely since.

12.9. The leaflet was particularly successful at one UK media briefing in 2003. It resulted in a healthy debate in newspapers and television news programmes on what quality of life means, how it should be measured and whether the Government's assessments of progress were the right ones. Examples of the newspaper headlines were:

- Evening Standard - Crime up, roads worse but life is better says Labour
- The Times - Life is better despite crime, illness and cars, says Labour
- The Express - Quality of life is better? But what about all the thuggery and the jams
- The Guardian - Quality of life 'getting better'

### **13. Indicators influencing policy**

13.1. It is unlikely that many of the indicators have influenced policy owing to them being part of a sustainable development set. In most cases the indicators selected were already well-established measures of progress for their policy areas. One of the exceptions to this was the headline indicator on populations of wild birds. The media initially made much of the novelty of the government measuring people's quality of life by counting birds, but the messages conveyed by the indicator demanded action. Whilst overall the population of birds had not changed significantly from what it was in 1970, the populations of farmland species had fallen dramatically, almost halving in number compared with a peak in 1977. Woodland birds had fallen by almost 30 per cent since a peak in 1974.

13.2. In the case of farmland birds there was speculation that the loss was caused by the intensification of farming, the increased use of pesticides and the loss of hedgerows. As a direct result of the messages conveyed by the headline indicator Defra was given a performance target to halt the decline and stabilise populations.

### **14. Communication products: pocket-sized booklets**



- 14.1. In the 2nd generation of indicators the ‘Quality of life counts’ set was not intended to be updated as frequently as the 15 headline indicators – to have done so would be impractical and most trends would not be expected to change dramatically annually. An updated compendium of the indicators “Quality of life counts – update 2004” was published on the sustainable development website in March 2004.
- 14.2. Being in effect a repackaging of many existing indicators, there is a question over whether in itself, as a set of sustainable development indicators, ‘Quality of life counts’ had any policy impact. It is possible that as individual policy measures, some of the indicators had influenced policy decisions, but not because they had been labelled as ‘sustainable development’ indicators. There is a prevailing assumption that it is important to have a comprehensive set of indicators that provides a comprehensive picture of ‘sustainable development’. However, a large set is somewhat unwieldy and it is difficult to get a quick impression of whether progress is being made and what are the main issues to focus on.
- 14.3. In considering this, a new publication “Sustainable development indicators in your pocket” (DEFRA 2004b) booklet was published in April 2004 and was a considerable success. This pocket-sized booklet (A6 in size) contained a selection of 50 indicators, to help illustrate the breadth of issues covered by the sustainable development agenda, but without over-loading the reader with too many indicators. Orders for the booklet surpassed expectations and a reprint had to be run to meet demand from, in particular, schools and other educational institutions. This success thus reinforced the assumption that small ‘pocket’ summaries of indicators would be more useful and attract wider audiences than large statistical volumes.
- 14.4. This in part influenced the decision made for the 3<sup>rd</sup> generation of indicators to try to reduce the number of indicators in the set, and there by make them more manageable in communication terms. A new version of “Sustainable development indicators in your pocket” was published in June 2005 based on the new indicator set, and contained the full set of 68 indicators in one small volume.

## **15. Regional and local indicators**

- 15.1. Once the 2<sup>nd</sup> generation of indicators were released, there were demands for indicators that were more local and more relevant to local experiences. “Regional quality of life counts” was therefore produced and updated annually, providing regional versions of the headline indicators, where data were available, for the English Regions. These were intended to help raise awareness of sustainable development still further, to provide a useful input into regional sustainable development frameworks, and also help to direct policies where there are regional disparities.
- 15.2. Inevitably, producing regional indicators led to comparisons being made between regions, and in England there is often the media assumption that things are better in

the south of the country than in the north. The “Regional quality of life counts” (DEFRA 2003) publication generated some interesting newspaper headlines:

- The Daily Telegraph - It’s grim up North, say life quality statistics
- Daily Express - Great divide - Head south if you want a longer life northerners told
- The Guardian - Poverty and crime make it tough up north - but more birds are singing
- The Times - Life sounds sweet in poorer North

15.3. There was strong support in the consultation, leading to the new strategy, for greater comparability and consistency between national, regional and local indicators. So it is anticipated that in due course regional versions of the new set of indicators will be developed. However these will not be imposed upon the regions, but will supplement more region-specific monitoring.

15.4. Work has been and will continue to be done at the local level too. In 2000 a menu of 29 indicators was developed which local authorities were encouraged to consider using for their strategies and other local monitoring. The menu “Local quality of life counts” (DETR 2000) was developed jointly by Central Government, local government bodies, the Audit Commission, Local Agenda 21 groups, and tested in 30 local authorities. The development of local Quality of Life indicators, strongly influenced by “Local quality of life counts”, was taken forward by the Audit Commission, and a project is near to completion to produce a new set that ties in as far as possible with the new national strategy and indicators.

## **16. Aggregate indices**

16.1. Whilst avoiding making comments on specific measures, there is increasing pressure for the development of aggregate indices that somehow give an overall measure of sustainability.

16.2. There is nothing wrong with an aggregate indicator *per se*: GDP is a well-established example of a generally accepted aggregate indicator. However, there are widespread concerns about the objectivity, robustness and transparency of aggregate indicators of environmental impact.

16.3. There are limitations surrounding the use of aggregate measures as analytical tools, but in some cases this may be extended to their use as communication tools. Changes in individual components and their relationship with other indicators may need to be understood if the overall messages are to be understood. In many cases there are also methodological and data concerns which are masked by aggregation, and render the overall messages misleading.

16.4. Although there are a number of aggregate indicators promoted by various organisations, it is not clear that any of the indicators address these concerns.

16.5. The UK’s approach, for the moment at least, remains focused on the communication of individual measures rather than trying to aggregate disparate measures.

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