

Chapter 5 - TESTING METHODS IN NEW AREAS

Introduction

Most HLC projects were designed after consideration of their predecessors' methods. The Programme's evolution itself therefore provides evidence about the transferability and general applicability of specific methods (see chapter 2). In addition, several HLC methods have been applied in more than one county (eg Peak in Derbyshire, Lancashire in Cumbria, Suffolk in Hertfordshire), and this provides some measure of how successfully methods have been transferred to 'new' areas, and how much modification was necessary or otherwise thought desirable.

A further level of comparison was however needed for the Review. This took four of the most influential, innovative and well-developed methods, chosen for their spread across the whole evolutionary spectrum of HLC, and used them to do HLC in identical areas in a controlled manner.

This Inter-Project Comparison (IPC) applied the methods used in Cornwall, Essex, Herefordshire and Lancashire to an area that had already been subjected to HLC in the Surrey project. This allowed each of these distinctive methods, including the very earliest in Cornwall, to be compared directly with the Surrey HLC. Surrey in turn represents a fifth method, derived mainly from the Hampshire/Kent approach, which

was one of the most straightforward and elegant of the early methods. The same sources and same time-scale were used, thus helping to isolate method and interpretation as the main factors. Additionally, the Herefordshire method was used on the same basis in three other counties (Cornwall, Essex and Lancashire), and the Essex and Lancashire method was used in Herefordshire

It was realised that the selection of projects from such widely different stages of HLC evolution would exaggerate the appearance of diversity. Had all four tests been wave 4 projects, for example, it is

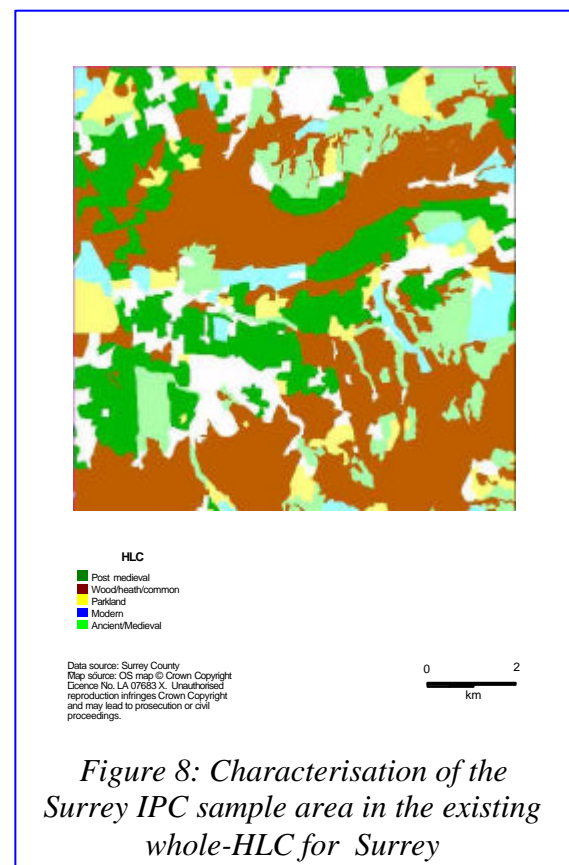


Figure 8: Characterisation of the Surrey IPC sample area in the existing whole-HLC for Surrey

likely that very closely similar results would have been obtained. This would have been a very poor test of the whole HLC method, however - the purpose of the IPC was to explore difference, even though a lot of this diversity is no longer extant in current best practice.

IPC aimed to test the extent to which a method devised and used in one or a limited number of contexts can be replicated elsewhere, and broadly to establish how comparable their results are. Each IPC test characterised the same 10x10 km map square, the time period was limited to 5 days + 1 day to write a report, and using the OS 1:1250/2500 map as baseline and the same sources of other data.

Interim results of the IPC tests were presented by Paul White, Herefordshire County Council, at the Review Workshop in April 2002, with the main focus being put on the Surrey IPC as that area had at that date been completed by all the participating projects. After the workshop discussion, Dr Nicola Bannister, who had carried out the Surrey HLC, was asked to compare the test results in some detail with her own HLC results for the same 10km sq., using her wider whole county perspective. Her report is summarised in the following section.

Surrey IPC

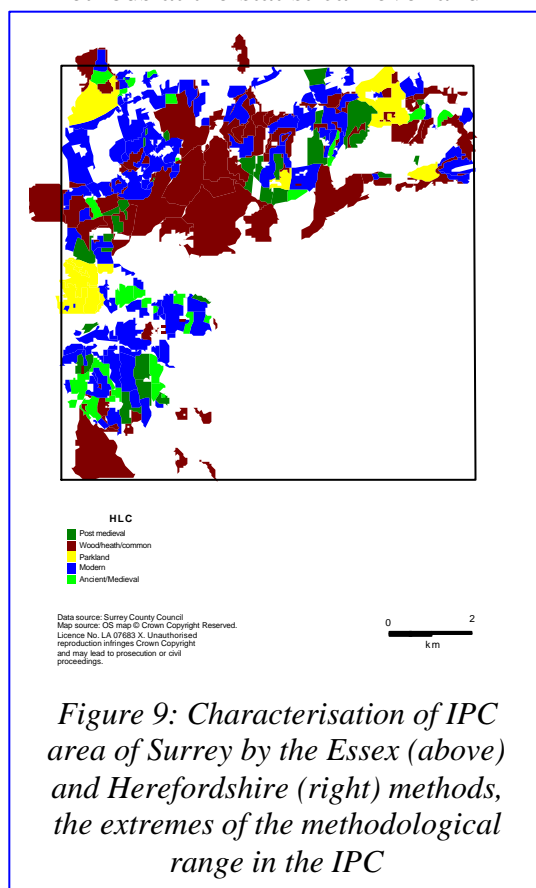
The aims of the Surrey IPC were in particular to assess both broadly and in more detail the similarities and differences of the four chosen methods, and to explain some of the reasons behind the results, particularly whether differences

arose from method or interpretation. Comparison of the four tests with Surrey aimed:

- To look at the similarities and differences between the methods, based on the HLC maps they produced;
- To explain the reasons behind differences, taking into account the background to the different methods, their place in HLC evolution, the sources used and the interpretation of both the character types and the landscape;
- To identify ways of mitigating the effects of the differences and developing the similarities into guidelines for future methodologies.

Statistical assessment

Table 6 shows the diversity in methods at the statistical level and



highlights several key facts. All the methods except Essex completed the area in the time available. Although Essex completed only 60% of the area, it still used the greatest number of polygons, 598. Herefordshire used the fewest, 45. Cornwall most closely matched Surrey in the number of polygons.

The relationship between mean polygon size and number of polygons illustrates that the difficulties of completing the Essex method in the time provided was also connected with the detail of the characterisation method.

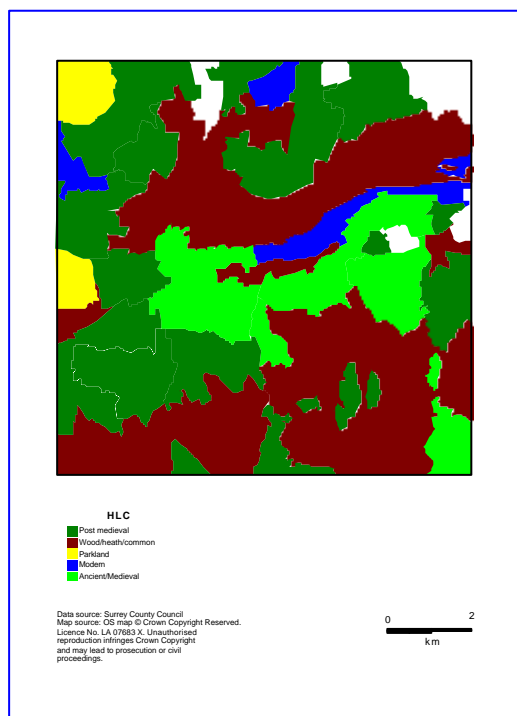
The number of Types used was

fairly consistent between the IPC projects, with a range of between 25 and 34. The Surrey HLC itself had greater diversity in the range of types, using 62 types, probably an indication of the greater level of understanding and refinement that arises from characterising a whole county rather than a 10 km sq fragment as an isolated experiment.

The statistical assessment of the methods therefore suggests that the Essex method is the most time-consuming and costly, partly because of the considerable detail involved in defining individual polygons (although time was also lost through exceptional

Method	Actual area tested (ha)	No of Polygons	size of polygons (ha)			No of HL Types used	% of Area
			Mean	Min	Max		
Surrey	12,633.4	470	26.9	1.0	367.9	62	126.3
Essex	6,129.9	598	10.3	1.0	172.2	30	62.1
Cornwall	9,977.2	521	19.2	1.0	313.7	34	101.1
Lancashire	9,868.5	177	55.8	3.4	372.5	25	100.0
Herefordshire	9,775.6	45	217.2	15.3	1,552.7	28	99.0

Table 6: Statistics for the Surrey IPC, Surrey HLC as a baseline for comparison



data-transfer problems so the picture may be exaggerated). It also suggests that the methods employ rather different perceptions of historic landscape character, as shown by the variations in

the number of polygons and the mean size of polygon. Each method used a number of factors to determine HL character, and the variation illustrates both differences in HL character interpretation and in the method itself.

On the other hand, although the detail in the characterisation may be different, higher level views are similar. There is a greater

correlation between the results of each method when HLC is pitched at a higher level of interpretation, such as would be used for a regional overview of county HLCs - for example HLC groups such as Ancient or Medieval, Post Medieval, Modern, Woodland, Heath, Downland, Ornamental. In other words, much of the difference in the tests reflects the levels of output chosen. The underlying methods and GIS show greater comparability, but each method's use of rather different scales of output emphasised the differences.

The number of HLC types used by each method reflects the decision taken by an individual project on the level at which to characterise. What is missing from a consideration of the range of types, however, is the sense of the decision-making that lay behind the attribution of areas to types. The Surrey HLC, for example, like Cornwall's, has a more or less 'flat' classification, and all of this detail is visible in the main level map. The Lancashire results, in contrast, present a simplified version with only c25 types of a much more complex database of attributes that if wished could produce more detailed mapping at similar level to Surrey.

Similar results to the Surrey IPC characterisation were seen in the Essex and Lancashire characterisation of an area of Herefordshire.

Qualitative assessment of the Surrey IPC results took place in 4 stages:

- Coincidence of HLC types between the five methods
- Comparing interpretations
- Comparing methods

- The Broader Landscape Texture

Stage 1.
Coincidence of HLC types between the five methods

The results of the four tests in Surrey were compared at the level of Historic Landscape Character types with an extract from the whole-county Surrey HLC.

The Cornwall and Lancashire methods provided sufficiently detailed IPC reports to clarify understanding of what the types mean and how they are defined. They highlight apparent difficulties in assigning field and enclosures types, probably due to different levels of familiarity with particular areas. As an example of differentiation introduced by differing degrees of local knowledge, both Cornwall and Lancashire results understated the complex woodland aspects of Surrey's landscape, for instance. Their accompanying descriptions helped in understanding the HLC types and a greater degree of correlation between the historic landscape character types for each method was obtained.

Stage 1 (Outcome 1)
HLC types need to be clearly defined and described, with supporting text and attributes that summarise the principal decision-making factors and types of processes involved in creating the type.

Stage 2.
Comparing interpretations of HLC

The second stage of analysis, using randomly selected polygons, compared the Surrey HLC interpretation with that of the four IPC tests to assess the level and degree of interpretation.

There is considerable variation in interpretation between the four IPC test results and the Surrey HLC, and relatively little close correlation at detailed level. Greatest variation was in defining and understanding field types and field patterns - correlation was not good with respect to field patterns, but better for woods, common, heath and downland, and good for ornamental areas. This confirms that it is the complexity of enclosed land that is least well understood.

Broadly speaking, the Cornwall and Lancashire results came closer to replicating the Surrey HLC than Essex and Herefordshire, and on this basis those three methods have

the greatest interpretative kinship. They are also much closer in other aspects of method, theory and principle as well.

The differences that were identified between the methods in the interpretation of field patterns highlight several key points. Both spatial interpretation and the interpretation of HL character varied. This suggests that the great variation in the types assigned to a particular polygon reflects not only the individual assessor's understanding of the landscape but also the definition of each method's HLC Types.

Sensible comparison of the tests worked best at broad levels of HL character. The Surrey statistics show diversity in the factors used to produce the polygons so that comparison between the extremes, i.e. Essex and Herefordshire, cannot be made viably. The results of the stage 2 IPC analysis, however, suggest that the Cornwall and Lancashire results are valid comparisons, especially given that HLC aims to define broad patterns in the landscape, not the detail. All the projects agree more or less on what they are characterising at this broad level, eg. field patterns, woodland, or ornamental.

They differ most in the use of criteria for defining the more detailed character types and how data sources are used. It is this, along with different personal approaches to interpretation, which creates the variation in the results. Synthesis at regional, and trans-county, level will therefore be relatively straightforward, as demonstrated by the recent SW England test-run using partial HLC data. Trans-county comparisons are also possible, but care will clearly be needed if directly comparing separate parts of two counties directly. Where planning or managing authorities cross county boundaries, however (eg AONBs) HLC has usually been carried out in both parts at the same time to the same method, or its results have been rationalised (as in the Gloucestershire / Avon parts of the Cotswolds).

The IPC tests were unrealistic tests in their lack of local knowledge, because this is a critical and always-present component of 'real-life' HLC. The IPC participants used

their own methods in unfamiliar areas, over very small areas and very quickly, and much of the detailed difference of interpretation can be ascribed to this. The lessons to be drawn from the IPC are higher level ones.

Stage 2 (Outcome 3)

The method should continue to develop with local objectives and priorities to take advantage of local knowledge and experience, though with greater attention to inter-county correlation at the appropriate scale (regional).

Stage 2 (Outcome 2)

To facilitate comparison between standard terms and types, similar data structures should be used wherever possible, though with some scope to continue to be flexible to include locally distinctive types

Stage 3.
Comparing methods with Surrey

In order to look further at how each method interpreted the Surrey landscape, an example of each method's HLC Types was compared to the Surrey HLC, a reversal of the stage 2 test. There was very great variation in which aspects of the historic landscape (particularly fields and enclosed land) were attributed to which types.

This probably reflected variation in interpreting HLC types and in how the landscape was read, especially the approach to matters of

judgement such as the degree of straightness or waviness of boundaries, or how much boundary loss (and what date?) is needed before fields are interpreted as 'prairies'? What is large and what is small in terms of field size? - is it absolute or contingent on surrounding context? Medium in Surrey may be large in Lancashire.

There is no agreed national standard for such measurement, and perhaps the importance of context makes it impossible (at least at present levels of understanding). This indicates, however, the need for further debate about the standard terms used in HLC. It has been assumed that national standardisation will emerge when all representative parts of the country have been HLC'd but this point is fast approaching. The latest HLCs are already benefiting from much greater informed standardisation, and the first wave of updates must also do this.

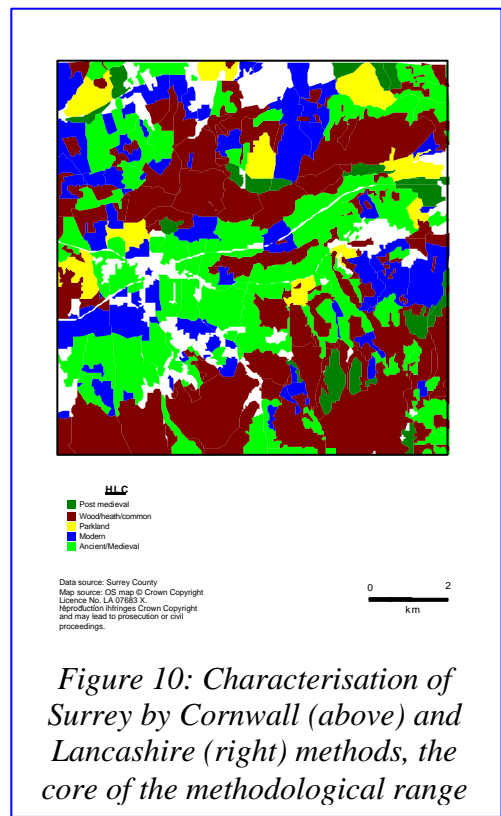
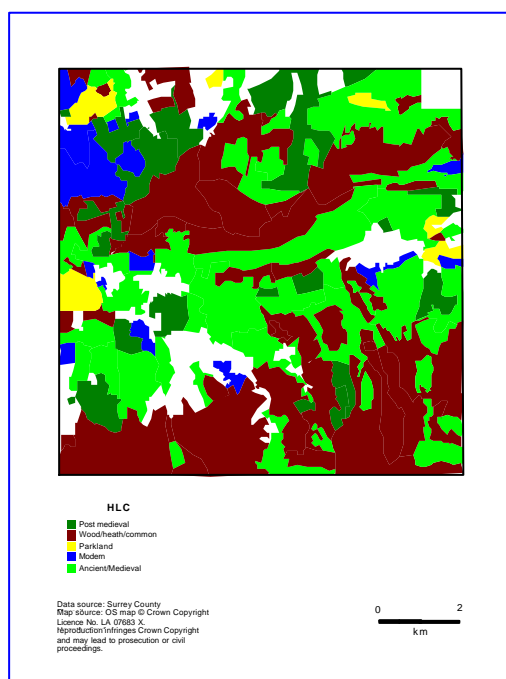


Figure 10: Characterisation of Surrey by Cornwall (above) and Lancashire (right) methods, the core of the methodological range

The IPC exercise highlighted the variation at specific levels between the five methods and also the degree to which any given method was either process-led or visually led in assigning HLC types. For example, Herefordshire characterised a farmland golf course as a degraded historic landscape with straight boundaries, which it is, but the same area of land could equally be characterised as a golf course, with its farmland origins flagged up as previous HLC. There is little consensus about when ‘loss’ or ‘degradation’ is out-weighted by the creation of new landscape types; the HLC philosophy of characterising the historic dimension of the present landscape ought to give precedence to interpretations that include current character first, but not all methods are yet consistent in this. On the other hand, the problem is fading away as projects start using the ‘previous HLC’ attributes of the latest wave 4 and later projects.

A brief assessment against the Surrey HLC was made of the types used by each method. Cornwall



used 75% of the same types as Surrey, Essex 60%, and Lancashire and Herefordshire 55% each (based on the cross-tabulation of the Stage 3 tables provided by Nicola Bannister). Such a level of core-agreement, given the unreality of aspects of the tests, seems reasonably high, especially as the core correlation covers the most significant, broad, inclusive types. Admittedly, correlation is lowest in the case of enclosed land, the most difficult aspect of HLC because the least understood, and this is a prime area for further research and development with HLC.

Stage 3 (Outcome 4)
 The factors behind the decision-making need to be clearly stated for each type, and if possible for each polygon.

Stage 4
The Broader Landscape Texture

In an attempt further to draw out and highlight some of the similarities between the methods, this fourth stage of analysis took a step back to look at the broader picture without the risk that differences in method (eg Essex’s small polygons) would distort overall patterns and trends. The historic landscape character types for each of the five methods were put into two main groupings: Enclosures (medieval and post-medieval), and Woodlands, Heath & commons and Other).

All five maps revealed the essential grain of the historic landscape character of this small area: a

similar very broad pattern of woods, heaths and commons on the Downs and Greensand Hills, and fields on the lower slopes of the Greensand and the dip slope of the downs. All show settlement concentrated in the Tillingbourne Valley and along the northern edge of the dip slope. The greatest degree of similarity with the Surrey map is shown by Cornwall and Lancashire both of which have identified the wooded

uplands of the Downs and Greensand Hills, with the older settlement in the vales and dip slope of the chalk hills.

A comparison was made for Lancashire and Cornwall (the two closest to Surrey) of the percentage area covered by each of the broad types. Table 7 shows a good correlation between these.

HLC Zone	Percentage area covered		
	Cornwall	Lancashire	Surrey
Fields	47.5	48.2	40
Woodland	37.3	38.8	29.5
Settlement	6.7	9.6	10.9
Ornamental	5.4	2.6	7.2
Recreation	1.2	0.2	1.5
Rough Ground	0.8	0.5	3.2
Communications	0.6	/	/
Water	0.4	0.1	1.4
Industrial	0.2	0.1	0.2

Table 7: Comparison of landscape texture of the Lancashire and Cornwall IPC tests with Surreys' HLC

Some of the differences that exist are explained by the unreality of the test, notably lack of local knowledge and the falsity of comparing a rapid test with a real properly-resourced, year-long full-county project. But variation in the interpretation by individuals is undoubtedly a factor as well. At the broad level (i.e. the HLCs ability to reflect the general texture of the historic and present-day landscape) each method identifies more or less the same areas, both statistically and spatially, but this concordance does not always survive at greater levels of detail.

More direct comparisons between the Surrey HLC and the Cornwall IPC test of the Cornwall method (chosen for this purpose because of

CAU's detailed report) shows that the proportion of woodland to fields to settlement is approximately the same, although the Cornwall test placed many commons in the woodland group. Many smaller landscape gardens which are defined as Ornamental in the Surrey HLC were subsumed by the Cornwall method into other adjacent field types because of the Cornwall method's greater level of generalisation; similarly, Cornwall uses a higher size threshold for water features, thus reducing their number. Some adjusting and manipulation of the figures would bring them more into line, although there are real differences at detailed level for field types.

The greatest variation is in the

categorising of the field types. Cornwall, Herefordshire and Lancashire, for example, all show a core of medieval fields in the Tillingbourne Valley (Essex was incomplete) whilst Surrey defined much of this as post-medieval. Areas identified as Ancient by the Surrey HLC were on the contrary labelled post-medieval by the Herefordshire method. The Essex map identified many more modern (modified) field enclosures.

Conclusions

At a very broad level there are similarities in the mapping process between all five methods. Nearly all the methods (except for Essex, only 60% completed) identified the main broad 'texture' of the historic landscape character, with the Lancashire and Cornwall methods showing the greatest degree of correlation with Surrey. They corresponded with the Surrey HLC in highlighting wooded hills, settlement in the valleys, ancient enclosures, with post-medieval enclosures on the dip slope and on the margins of the ancient enclosures. All the methods identified parkland, although the polygon boundary depended on attributes such as whether woodland was included, or whether parkland that is now farmed is counted as enclosed land (as it should be given the philosophy of 'present day' HLC) (an issue resolved in wave 4 HLC by 'previous HLC data'). At more detailed levels, the correlation became weaker, especially with regard to enclosed land. With Lancashire and Cornwall, however there was closer correlation at lower level as well. Correlation is weakest with the definition of ancient and modern

fields, and with the degree of boundary sinuosity and field size; both of these are inherently subjective, heavily influenced by practitioner and context.

These differences at detailed levels appear to be due to several factors, most importantly the different aims of the methods. Cornwall for example aims to be generalised at county scale and deliberately avoids detail, and Lancashire takes a similar approach. These are the most similar results, and the most compatible with Surrey. They are closest to Wave 4 and to current best practice. Herefordshire, however, takes a higher level of generalisation based on quite different stratigraphic techniques almost exclusively targeted at field types (leaving other aspects to be added from other data sets), while Essex, in contrast, leans on documentary sources to produce a much more fine-grained approach. Not surprisingly, Essex and Herefordshire differ most from the others.

The use of different terminology and definitions by projects sometimes reflects real differences in interpretation but sometimes disguises similarities. Different factors are used to derive HL character, for example either process-led (ascribing HL character to its causes), or visually-led (ie simply describing the appearance of fields, eschewing interpretative assumptions). The variation in the weight given to the range of available types exacerbates these differences.

Different ways of reading the landscape, or interpreting it, are perhaps the most fundamental

factor. This, of course, sits at the heart of the issue - is HLC simply a process of collecting “facts” from documents and maps, or is it about creating interpretation from material remains, ie is it the task of historians or of archaeologists?

Many of these factors are already largely resolved in the wave 4 projects and will be addressed. It may be that they are so marked in the IPC tests because the test methods were chosen to represent the full range of HLC evolution, so as to highlight differences for comparison. Certainly had 4 Wave 4 projects been chosen for the IPC the result would have been different again. The last factor, however, is more fundamental, indeed an accepted part of the HLC programme with its emphasis on HLC being interpretation more than data, based on the premise that landscape is a construct created by perception and therefore to some extent subjective. The real issue raised by the IPC tests, and the whole review, is not that of how to standardise and make HLC objective, but rather how to make ever more transparent the varying decisions that make up each county’s characterisation.

The IPC, and its assessment by Nicola Bannister, indicates several areas of enhancement in the method, which will be resolved as far as is possible in the Recommended Approach in Part 3. They are:

- The importance in HLC of local knowledge (which in ‘real’ HLC is built into the process unlike in the IPC tests); taking into account local objectives and priorities establishes the

best method with which to characterise the local area.

- Acceptance that characterisation is an interpretative process and that its results will consequently inevitably differ between projects. The recommendations will seek to limit the differences by suggesting the sources, data structure and standard terms used in HLC. At the end of the day, however, there will always be differences caused by varying perceptions and stages of understanding.
- A strong requirement for more standardisation in terminology (eg of classification terms or criteria for attribution) and further increase in the transparency of the method. This is identified as one of the main problem areas in the IPC tests. In best practice, however, it needs to be balanced with the desirability of retaining some individuality of method to reflect local contexts.
- HLC is a learning process; later projects (those not yet started) will benefit from the work of the pioneer projects, which in their turn will benefit when they reach the stage of updating, second-round HLC or more detailed local work. Standardisation, insofar as it is possible, will thus be achieved in more than one way, and over time, and the Review has allowed a major step forward, in the Conclusions presented in the next, final, chapter and in the accompanying volume, the Template HLC Project Design.