



## Possible Frameworks for Assessing Need in Relation to Rural Funding Streams: A Note

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### Perspective

- 1 This note considers in outline the feasibility of developing a framework which might be used to deploy evidence to guide various programmes of rural support in accordance with 'needs' and outcomes. It should be stressed at the outset that the following remarks are based on general considerations rather than a detailed assessment of existing schemes or data. Fundamentally the framework must deploy available data to illustrate those 'issues' and 'places' that form the policy-talk of stakeholders in Defra and beyond.
- 2 Of necessity, the framework must be very general and extendible. It is taken as axiomatic that the identification of 'needs' must necessarily rest on the prior recognition of goals (c.f. Barry *Political Argument*, 1963), which may be articulated with greatly varying degrees of specificity. It is assumed, moreover, that goals will be clarified over time, allowing 'needs' to be identified and potentially measured. This is considered below as a process of 'deliberative reference' where the meaning of terms crystallize as debate and implementation proceed and goals are 'unpacked'. *It is therefore assumed that a framework will develop incrementally.*
- 3 From such a perspective, the application of evidence demands a the construction of a framework capable of identifying the various themes (e.g. 'limited employment opportunity', 'low skill endowment', 'loss of ancient woodland' 'poor public transport access') and corresponding geographic objects (e.g. 'the Marches', 'the Mersey Belt', 'the Lincolnshire Wolds') referred to in debate. The aim would be to visualise and measure (that is to say, to find the geographic *extension*) of those things of policy concern. This implies identifying a geographically varying pattern of need corresponding to particular goals.

- 4 It is important to appreciate that this must involve bringing together attributes of communities, business and landscapes from very different sources and of fundamentally different sorts (e.g. social composition, liquidity, accessibility and land cover). It must also involve flexibility in definition of areas (rather than being tied to a set of units such as wards, parishes, or Countryside Character Areas- albeit that information may be collected from such geographic units or aggregated to them. *It is therefore assumed that data will be brought together from a wide variety of sources with a GIS at the core based on hectare cells.*
- 5 Significantly, while it is assumed that Defra's high level goals with respect to Rural Affairs will be unpacked over time, it is not necessarily assumed that policy making will be entirely top-down. Instead it is assumed that it may be desirable that perceptions of needs and ideas of goals may be negotiated with other agencies. An aim might be to seek convergences between the goals of different levels of government. This implies a need not only for a framework which be used to identify and measure the terms used in policy discussion within Defra but that can also express the goals and deploy the geographic terms used by other agencies. These might include terms drawn from the range of regional policy statements to be produced including regional biodiversity statements; regional economic strategies, and regional spatial strategies. *It is therefore assumed that there must be scope for the framework to accommodate such issues and geographies.*

### **From Defra's Broad Rural Policy Concerns to Data Requirements**

- 6 The remainder of this document focuses on conceptions of need arising from Defra policy. *It is assumed that the goals of Defra itself (in so far as they relate to this work) might be considered as arising from concerns to*
- *secure sustainable food and farming,*
  - *secure sustainable rural communities, and*
  - *to protect rural environments.*
- 7 To become operational, these goals have to be unpacked- i.e. be re-written as a series of sub-goals of increasing specificity. This involves a process of 'deliberative reference' in which the meaning of particular terms is clarified as moves are made toward implementation. The time over which this re-writing may take place is not clear. Sometimes it may be appropriate to defer resolving the meaning of particular terms. Some goals might not usefully unpack at all.
- 8 Consider some aspects of unpacking these three top-level goals, starting with the concern for sustainable communities. To secure sustainable rural communities might in principle command universal approbation. 'Sustainability', however, might be thought of as a fundamentally contested concept - one where the meaning only emerges in the detail of how it is unpacked. It may frequently be appropriate to develop partial definitions capturing particular aspects of sustainability. These might include some notion of economic sustainability allied to the notion of productivity (where considerable work has been undertaken by and for Defra). It might include some notion of irreducible variations in the cost of providing services such as primary medical care and education- grounded in the geographic structure of settlement (but whose effects are differentially mediated by the

differing resources of residents). A further aspect might refer to greenhouse gas emissions- again a (complex) function of the pattern of settlement (albeit that this can only be understood in the context of behavioural choices).

- 9 These aspects are all partial, basically tractable and concern areas where the RERC study team has experience. The practical issues to be resolved therefore focus on two matters. The first is the nature of the generic framework for bringing data together, and the other is how goals and hence needs are to be clarified.
- 10 This type of generic framework would demand highly detailed measures of geographic structure. This might be approached by developing the sort of work underlying the urban and rural definitions- the highly detailed measurement of morphology and function. These measures must be supplemented by coarser geographic data providing information about the socio-economic attributes of the people. (This is considered further in para 14 below).
- 11 The goal of **protecting the rural environment** is perhaps more problematic. Having identified partial measures of sustainability such as productivity or of access to services, it is possible to define ways of measuring them. It is more difficult to identify what aspects of the countryside merit protection. It is probably significant that the Countryside Quality Counts Project (CQC) now nearing completion began by making a distinction between countryside *character* and countryside *quality*, but ultimately drew back. There appears here to be a recognition that particular tracts of country represented by Character Areas, for example, have different archetypal characteristics and that quality might pragmatically be protected by maintaining these key characteristics (rather than having a set of criteria, that might apply nationally in respect of say biodiversity, woodland cover or environmental quality).
- 12 This implies a generally conservative approach focussing on limiting change (at least to that set of selected characteristics associated with a particular place). It is likely that this represents a pragmatic solution to an intractable problem where unpacking goals might prove impossible. While this suggests an inevitable tendency to attempt to make places idealizations of themselves, this approach would allow for adaptive modification and could actually be applied creatively (in collaboration with RDAs/Regional Assemblies for example).
- 13 Following this logic, the evidence base would have to indicators of land cover and landscape characteristics. At a minimum, this might involve drawing together the types of data already assembled for CQC and organizing them as 1ha grids compatible with those used in work infrastructure underlying the Urban and Rural Definitions Project. More ambitiously, it might involve the production of land-cover budgets for particular tracts. Clearly some data are ideally suited to this such as the CEH Land Cover Map.
- 14 With regard to securing **sustainable food and farming**, unpacking might define sub-goals concerned firstly with farms as businesses (protecting, encouraging, and restructuring the industry), secondly with the relation between farmers and others living in or visiting rural communities and thirdly with the tension between agricultural activity and protection of the rural environment. With respect to the first of these matters, the focus is likely to be on farms as businesses irrespective of their local context. Much of the evidence will relate to individual accounts within the context of the Farm Business Survey. (Database of farms? Use of IACS information (RPA) at field level).

- 15 To the extent that relation to local communities and environmental matters become problematized in the process of unpacking the goal of securing sustainable food and farming, there will be a dependence upon the June Agricultural Census to indicate the geographic distribution of particular agricultural activities. This would provide the key to locking basically placeless objectives reflected for example in the Pig Industry Restructuring Scheme into a geographic frame. (Particular difficulties arise with the June Census in respect of the allocation of returns for farms to localities, and with interpreting change over time from sample data). In order to facilitate bringing agricultural activity data alongside the demographic-economic-social data required to consider sustainable communities issues and the data required in connection with the goal of rural environmental protection, it is suggested that material from the Agricultural Censuses is assembled on hectare grids. In the longer term it might be desirable to develop a much larger body of work examining the impact of support.

### **An Analytic Infrastructure**

- 16 The emphasis of the discussion above has been on devising methods that might be used to demonstrate the geographic extension of notions of need discussed within the policy process, having regard to the fact that the areas which they talk about (e.g. the Mersey Belt) need not be predefined, or at a fixed geographic scale. (It should be clear from the foregoing that concern to engage with RDAs and Regional Assemblies does not imply treating regions as homogenous spaces but rather identifying variation and issues within regions). As stated above, it is assumed that potentially a geographic pattern of need corresponds to each (sub)goal. Some goals apply primarily or only to the national or supra national level (e.g. woodland cover).
- 17 The approach suggested would involve constructing a series of hectare grids, each depicting a particular attribute (e.g. land cover category, number of commercial postal delivery points, number of farm business offices). This would extend the approach that underlies the work sponsored by Defra on rural and urban definitions. It would also lock into and would be able to draw upon other work undertaken for other government agencies for example on private sector rent determination, rural to urban land conversion and the definition of local housing markets. Combining the attributes of individual cells would define areas meeting particular criteria (e.g. remote, economically underperforming with reliance on dairying). Sets of cells might be expected to indicate areas of apparent need.
- 18 Grids of this type might be used to bring together variables from coarser scales (e.g. the context measures in urban and rural definition, characterization of field patterns, land cover) and from much smaller (e.g. data tied to individual addresses allowing them to be used for a common purpose. This for example allows census data to be used probabilistically in relation to household and dwellings. Rather than treating Census data as attributes of area, it is possible to apply derived proportions (e.g. of households without a car) to the underlying distribution of households at hectare cell level. This provides a basis for estimating a range of need indicators.

- 19 To demonstrate the significance of this distinction compare Figures 1a and 1b, and Figures 1b and 1c. Figure 1a shows the proportion of employees employed in agriculture, forestry and fishing using a conventional choropleth map of Census Output Areas. Figure 1b on the other hand uses the proportions from the Output Area data but only applies them to hectare cells with one or more residential postal delivery point. Figure 1a suggests high dependency on agriculture (etc) across large parts of the country, but Figure 1b shows that when only populated cells are displayed agricultural employment becomes almost invisible.
- 20 Although the emphasis above has been simply on highly flexible description (creating new grids and combinations of grids and on ways of visualizing need) analysis is never far away. The present proposals do not constitute an analytic system but define an infrastructure which would allow a range of analyses on a project by project basis. These might include detailed analyses of possible travel distances.
- 21 Moreover, the dynamic of rural change is largely driven from the outside. This includes not only the EU policy framework, but change within the UK urban system. Issues related to 'sustainable communities' etc cannot be grasped without assessing their relation to the non-rural economy and more generally to activity in urban areas. In the medium term, the transport implications of particular development paths for rural communities must be assessed. Similarly, access to the countryside from urban areas is important when considering the support given to national parks for example. Critically these linkages will become more important should Defra wish to use a framework of the type suggested here to assess spending by other parts of government.

### **Assessment**

- 22 In order to assess the feasibility of deploying this sort of framework to Defra's own rural affairs programmes, we have explored the possibility of identifying key 'need' measures corresponding to the goals reflected in current Defra schemes. It has been assumed that although priorities will shift, the concerns reflected in the present set of schemes should be accommodated by the framework. The attached Table indicates the broad nature of the data requirement for particular groups of schemes.
- 23 Generally it appears that measuring need with respect to the goals of these programmes information is likely to be required about
- the distribution of the rural population (differentiated by a wide range of socio-economic data) guiding resources geared to securing sustainable rural communities (reflected at present in initiatives such as the Learning Skills and Knowledge Programme, Community Services Grant, Parish and Town Plans Grant, Rural Community Council grants, Local Heritage Initiatives, Doorstep Greens, Community Development support, Environmental Action Fund, rural workspaces provision and Leader)
  - the distribution of the urban population (where access is an issue e.g. Community Forest, Community Woodlands support).
  - the distribution of specific policy areas (such as SSSIs, National Parks, ESAS, AONBs, NNRs, nitrate sensitive areas).

- the distribution of specific land-cover types to guide support for rural environmental protection (currently reflected most particularly in relation to support for forestry and woodland, but also in concerns for moorland wildlife enhancement, and maintenance of limestone grasslands for example)
- the distribution of landscape character types to guide support for rural environmental protection having regard to typical land-cover mixes and distinctive features (concerns reflected currently in support for new woodland planting, drystone wall construction, Hill Farm support and more generally countryside and environmental stewardship)
- the character of farm businesses- especially small farm businesses (where their geographic distribution and relation to other departmental goals may be relatively unimportant) concerns evident in support offered under the Agricultural Development Scheme, Pig Industry Restructuring Scheme, Organic Farming Scheme, Better Returns Programme, Processing and Marketing Grant, and Planning and Consultancy support for example
- the nature of cropping and livestock in particular areas (largely as an adjunct to schemes where need is fundamentally farm-business driven(e.g. Pig Industry Restructuring Scheme)stock

24 Overall, scanning the range of current schemes allows a degree of cautious optimism about the possibility of developing a framework which could in some gross way capture key facets of the 'needs' associated with particular goals by using existing data creatively. Given the work that has been undertaken on small area socio-economic and settlement characteristics (in relation to Urban and Rural Definitions for example), it is clear that much of the work in relation to sustainable rural communities could be done fairly readily. With respect to sustainable food and farming, it seems likely that the issues determining 'need' will be to a considerable extent matters relating to the farm as business wherever it occurs. Where this is not the case, it would seem appropriate to extend the grid-based approach to take data about farming activity (primarily from the Agricultural Census) and to land-cover and landscape types (drawing on the data assembled for Countryside Quality Counts for example). These latter topics are of course central to the assessment of need where goals relate to the protection of the rural environment.

### **Weaknesses and Limitations**

25 It is necessary to reiterate that the above remarks rest only on a rapid scan of current schemes and a rapid scan of available data. It is not possible, for example, to make any assessment of the reliability of the data. More significantly, relatively limited attention has been devoted at this stage to the possibility of geographically varying need with respect to support for sustainable food and farming. In particular no proposals have been put forward to consider how previous expenditure might influence the need for further support. Obviously very substantial fine-grained data might be made available through the Rural Payments Agency to underpin any such analysis, but its effective use would be a vast exercise. This might be considered a development for the longer term should officers of Defra wish to pursue this. It should also be pointed out that no specific attention has been devoted at this stage to explicit assessment of biodiversity.

## **Next Steps**

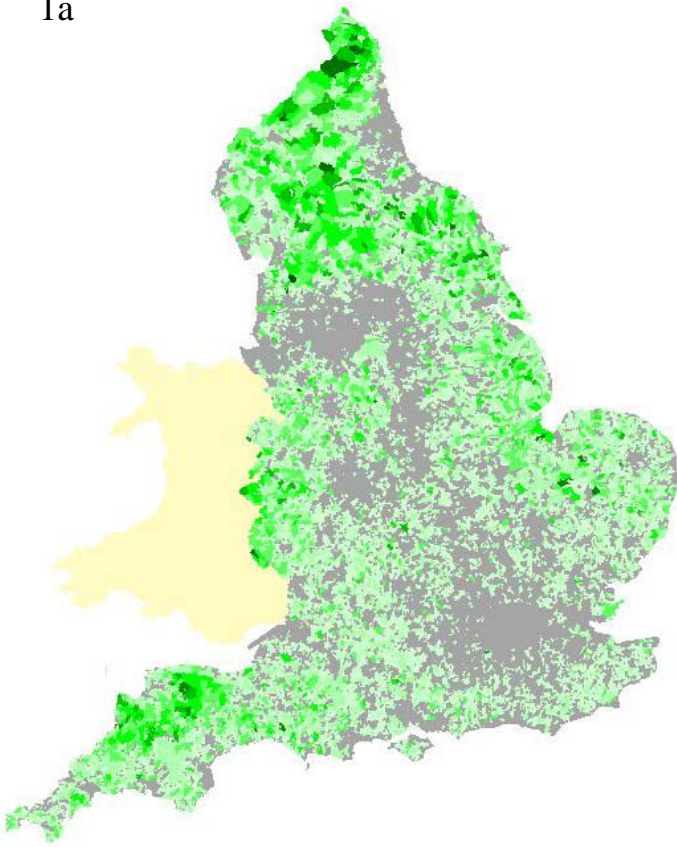
- 26 While it is encouraging that pertinent data are largely available, it is important not to underestimate the amount of work that would be required to operationalize the framework (though it is assumed that unpacking of goals would proceed alongside its development). However the process of unpacking goals and constructing indicators proceeds, it is clear that a body of supporting background work would have to be undertaken including:
- preparation of grids representing the CQC and related datasets
  - developing procedures for representing June Census data in the form of grids and for interpreting differences between Censuses given sampled nature of the data
  - addition of further core socio-economic data from the 2001 Census and Related sources
  - clarification of other inputs e.g. regional strategies

## **Resources and Timescales**

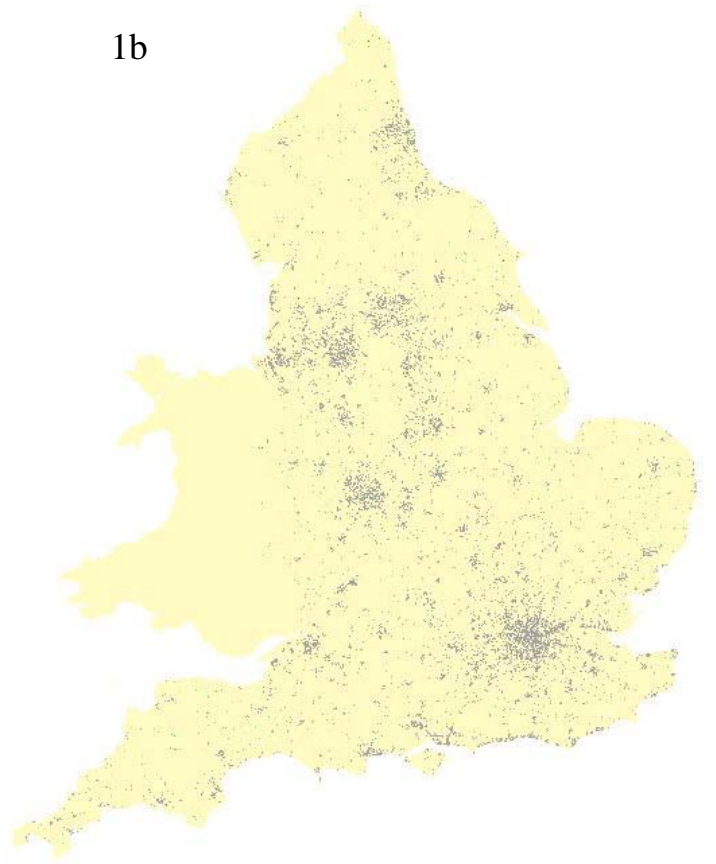
- 27 It is assumed here that the effort required might usefully be considered as involving two major elements. The first comprises the work involved in preparing available data of known relevance for use with a one-hectare grid. The second is the ongoing work of developing indicators as policy takes shape- drawing in new material as required. It is possible to suggest broad indicators of resource required under the first head:
- preparing landscape and land-cover datasets for use in a grid framework(4 person months)
  - preparing farming activity data for use in a grid framework (including development of procedures for treating differences between June Censuses given sampled nature of the data) (1 person month)
  - preparation of core socio-economic data(1 person months)
- 28 This suggests a requirement of 6 person months for the first element. No timescale is suggested at this stage because it would depend upon the priority to be accorded to the project. No assessment is made at this time for the ongoing second element.

# Figure 1: Using Census Data

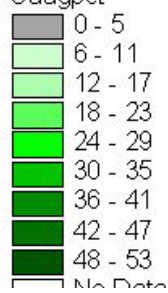
1a



1b



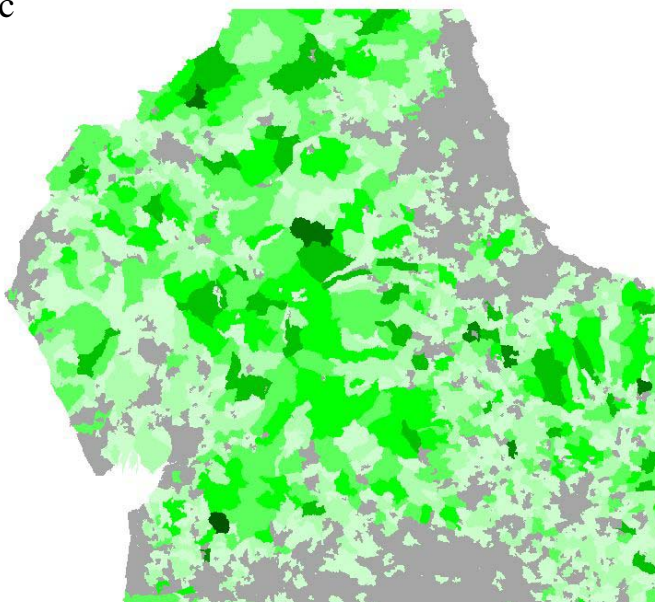
### Percentage of Employees in Agriculture, Forestry etc



OA values:  
all cells shaded

OA values:  
populated cells  
shaded

1c



1d

