

Measuring socially and economically sustainable rural communities – a policy based approach

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Abstract: Defra has taken a place-based – rather than land-use based – approach to rural policy since it published its Rural Strategy in 2004. This approach is captured in its indicator set measuring Defra’s objective to support *Socially and Economically Sustainable Rural Communities*. The objective has two components: one on mainstream policy areas and one on economic performance. The first reflects a wide range of policy areas from other government departments, ranging from education and health to poverty and housing affordability. The second focuses on productivity, supported by a range of indicators from earnings and employment to investment and enterprise. The indicators are updated twice yearly, and measure the relative position of rural areas to the national (English) average.

Keywords: rural definition, rural policy, indicators

1. Introduction

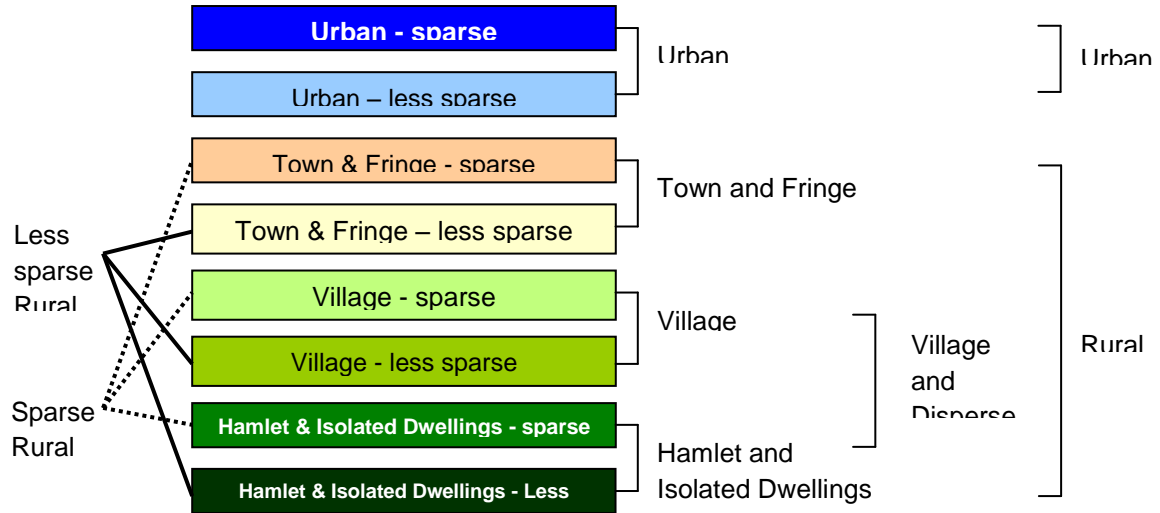
England’s Department for Environment, Food and Rural Affairs (Defra) aims, as one of its key strategic objectives, to support *Socially and Economically Sustainable Rural Communities*. Measuring such an objective not only demands a robust and fit-for-purpose system of classifying rural and urban areas, but also a set of indicators which are successful in encapsulating ‘sustainable rural communities’. This paper will first outline Defra’s approach to defining rural areas, and then summarise the indicator set chosen to evaluate the objective alongside the reasons for their selection. Finally, I will discuss how Defra measures the success of this rural objective.

2. Defining rural and urban areas

Defra takes a place-based – rather than land-use based – approach to rural policy. Rural areas are identified using the Rural-Urban definition, based on hectare grid squares and postcode information from data from Census 2001. Both the morphology of a settlement and its context are taken into account in this definition. On morphology, settlements are defined as being urban if their populations are over 10,000 at Census 2001. If the population is less than 10,000, the settlement is defined as rural. These rural settlements are then separated into three settlement types: town and fringe; villages; and hamlets and isolated dwellings. The context of settlements is dependent on whether the wider area is defined as being ‘sparsely’ populated or not. The advantage of this eight-way definition is that it can be aggregated differently according to policy need – for example, by grouping all sparse rural areas and all less sparse rural areas – and according to analytical need, such as if there are not enough data points on which to

base estimates at the very lowest level. Figure 1 illustrates the structure of the Definition.

Figure 1: *Structure of the Rural-Urban Definition*

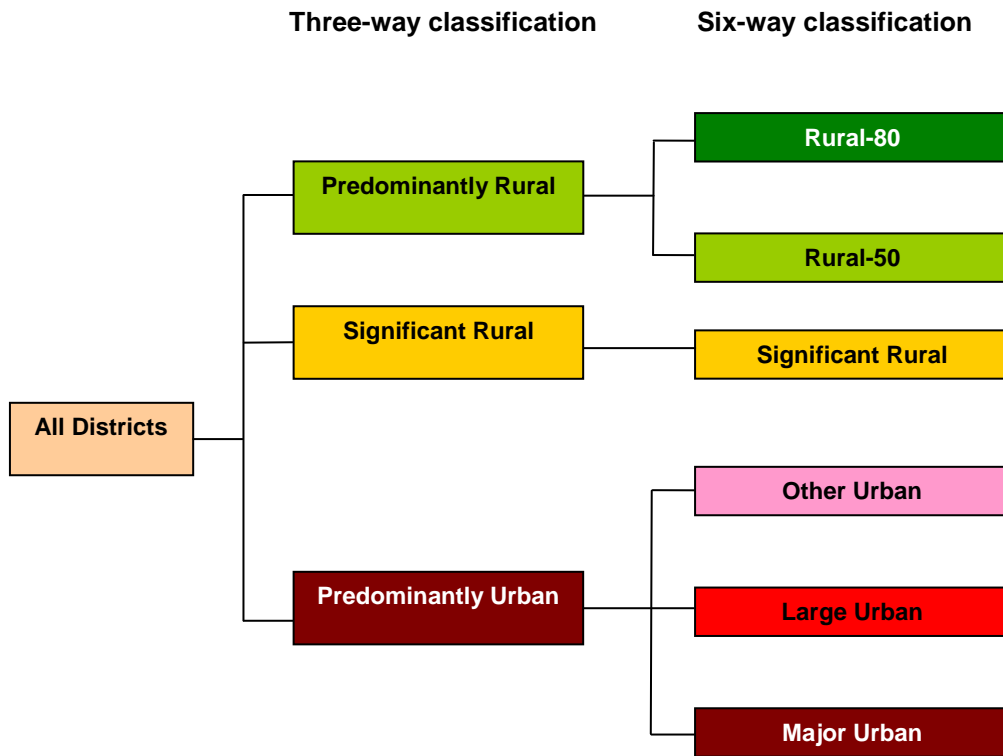


When data is not available at this very low level, Defra has developed a rural-urban classification based on the Rural-Urban Definition that can be applied to local authorities, which are equivalent in geography to NUTS4 statistical regions. This methodology is based on the rural-urban definition, and categorises areas on a six-point scale urban to rural based on the number of people living in large urban conurbations and the proportion of people living in rural areas:

- Major urban (MU) – districts with either 100,000 people or 50 per cent of their population living in urban areas with a population of more than 750,000.
- Large urban (LU) – districts with either 50,000 people or 50 per cent of their population living in one of 17 urban areas with a population between 250,000 and 750,000.
- Other urban (OU) – districts with less than 26 per cent of their population living in rural settlements and larger market towns.
- Significant rural (SR) – districts with more than 26 per cent of their population living in rural settlements and larger market towns.
- Rural-50 (R50) – districts with at least 50 per cent but less than 80 per cent of their population living in rural settlements and larger market towns, and
- Rural-80 (R80) – districts with at least 80 per cent of their population living in rural settlements and larger market towns.

Figure 2 shows how the Rural-Urban Classification can be aggregated. More information on England’s approach for defining rural areas can be found at <http://www.defra.gov.uk/rural/ruralstats/rural-definition.htm>.

Figure 2: Structure of the local authority classification



These classifications mean that local-level data published by other government departments can almost always be subject to a rural-urban breakdown. Furthermore, the methodology underpinning this classification can also be applied to other geographies for which population data exists. This is useful when data are only available for certain geographies – for example, administrative areas for National Health Services, or NUTS3 statistical areas.

3. Measuring ‘socially and economically sustainable rural communities’

In assessing the strategic objective for *Socially and Economically Sustainable Rural Communities*, Defra is required to report on both ‘mainstream’ and economic policy outcomes. The former, ‘The evidenced needs of rural people and communities are addressed through mainstream public policy and delivery’, relates to whether policy from across Government is reaching people in both rural and urban areas. The social and economic outcomes sought by Government apply equally to all areas, whether they are urban or rural. ‘Mainstreaming’ rural policy means ensuring that the policies and processes developed to deliver Government’s desired outcomes are designed effectively to meet the needs of people living throughout the country. We can assess the performance of Government policies in rural areas by comparing outcomes and trends in rural areas to the national picture. This objective underlines that the responsibility for meeting the needs of rural people and places falls not to Defra but to all Government

departments; for example, rural transport is fundamentally the responsibility of the Department for Transport. The latter, ‘Economic growth is supported in rural areas with the lowest levels of performance’, relates to the relative economic performance of rural areas. This objective also reflects the ‘mainstreaming’ agenda as the responsibility for economic growth falls to the Department for Business, Enterprise and Regulatory Reform (BERR).

Both sets of indicators have been selected to broadly reflect Government policy. However, as discussed above, in order to measure any indicator on a rural-urban basis, data must be available at a reasonably low spatial level, ideally allowing the application of the very fine-grained Rural-Urban Definition. Usually this means that data must come with detailed geographical information (for example postcode information or similar for surveys) and have a sufficient sample size for the smaller rural categories. Alternatively categories of the Definition can be merged as per Figure 1 above; for example, data can be aggregated to urban, sparse rural and less sparse rural, avoiding some of the problems associated with small sample sizes from survey data such as lack of robustness or confidentiality issues. If this is not a possibility, the higher level geographic information for districts (NUTS4) can be used to apply the classification. Defra does not collect its own rural (non-agricultural) statistics, instead re-analysing and applying rural definitions to data from other Government departments.

In previous years the indicators selected to measure Defra’s targets were established from the top down, meaning that the policy areas to monitor were selected before consideration was made of the sources of data to populate them. As a result many of the previous set of indicators for the period 2004-2008 remained unpopulated with data throughout the reporting period. For the current set of indicators, therefore, a combined top-down and bottom-up approach was taken. First, we identified broad policy areas to monitor, based on priority areas relating to social exclusion challenges and a national long-list of indicators for all local authorities in England. Within these policy areas the individual indicators were established based on what it was possible to measure at a rural-urban level.

3.1. Mainstreaming objective

The broad policy areas included in the ‘mainstreaming’ objective are education, health, housing affordability, poverty and unemployment, crime and social capital/quality of life. Using these as a starting point data sources reflecting the broad themes of these areas were identified, and incorporated into an indicator set. For example, the education indicators are based on targets for the Department for Children, Schools and Families (DCSF). The objective for “all young people to reach age 19 ready for skilled employment or higher education” relates to building a skilled workforce to improve national wealth and reducing poverty and deprivation. There are a wide range of indicators that could be used to measure this objective – for example, educational attainment, the proportion of children from low-income families staying in education to aged 18, or the number of over-16s not in education, employment or training. However of these, data are available at a rural-urban level to support two broad areas: educational attainment at school-leaving age (16) and the number of 18-20 year olds entering full-time higher education. These two indicators do not give a complete picture of

everything the DCSF target aims to measure – and indeed, an indicator set that did reflect all of the Department’s policy objectives would be unwieldy – but rather provide an indication of how rural outcomes differ (or otherwise) to the national (English) average.

3.2. Economic growth objective

For the economic objective, a headline indicator of Gross Value added (GVA) per job is supported by a range of economic indicators. In addition to employment rates and earnings data, these attempt to broadly reflect HM Treasury’s five drivers of productivity: skills, investment, innovation, competition and enterprise. Unlike with the majority of the mainstreaming indicators, Defra has specifically developed the headline indicator alongside the Office for National Statistics. The data to support this is not publicly available at the district level but it was important to Defra that the indicator accurately reflected the official methodology of measuring sub-national productivity. It is less easy to measure this objective because of the fluid nature of local economies, and for the supporting indicators, the innovation and competition indicators are yet to be populated.

3.3. Measuring success

Success on the indicators supporting the *Socially and Economically Sustainable Rural Communities* objective is measured by comparing rural areas to the national average. However, the aim is not for rural areas to achieve better outcomes than urban areas or the national average – just for rural areas not to perform below the national average. Therefore, if the predominantly rural categories are performing equally to or above the national average, this is measured as a success. When assessing each indicator’s success we look at the rural average against the norm both for the current year (or latest year available) and against the trajectory for England and for rural areas over the previous years. Each indicator is measured using a traffic light system of green, amber-green, amber-red and red. The underlying principles are summarised in Annex 1.

Defra has no direct levers over the mainstream policy areas that the DSO monitors. Government aims to achieve positive outcomes for these indicators regardless of location, be it rural or urban. As a result of this, as well as lessons learnt from previous experience measuring indicators which set targets that were unrealistic for Defra as a department to achieve, the current suite of indicators set no specific targets for Defra to achieve in rural areas.

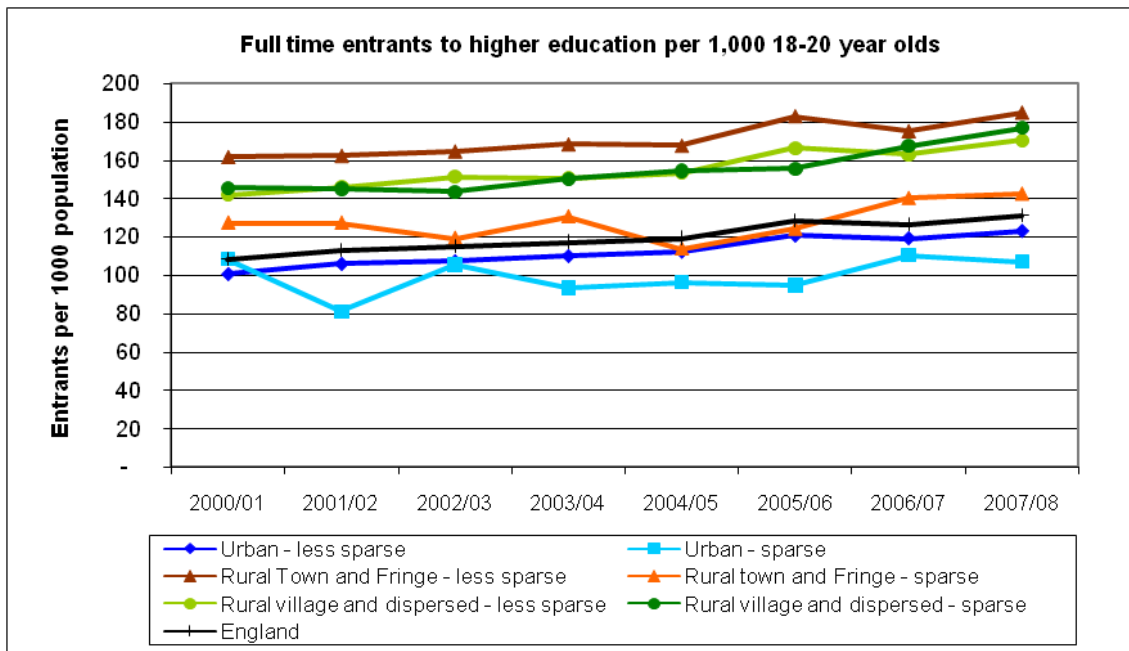
4. Results

This section summarises results from three of the indicators: for the mainstreaming objective, an indicator supporting the education sub-theme and one supporting the affordable housing sub-theme, and for the economic growth objective the headline indicator for productivity.

4.1. Education

For education, data are available at a low enough spatial level to use the Rural-Urban definition. Statistics on the number of full-time entrants to higher education are obtained by ward (roughly equivalent to NUTS5) and aggregates to the Definition, merging the two smallest settlement types (village and hamlet/isolated dwellings). The data show that generally, a higher proportion of 18-20 year olds in rural areas go into higher education than the England average and urban areas (Figure 3).

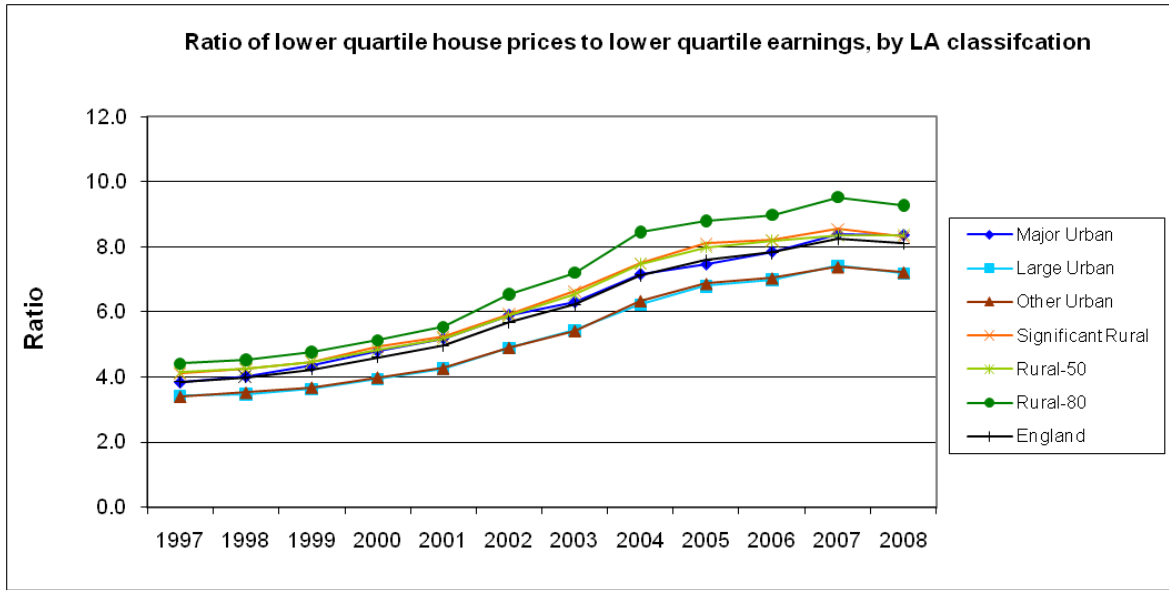
Figure 3: Full-time entrants to higher education, by Rural-Urban Definition



4.2. Housing affordability

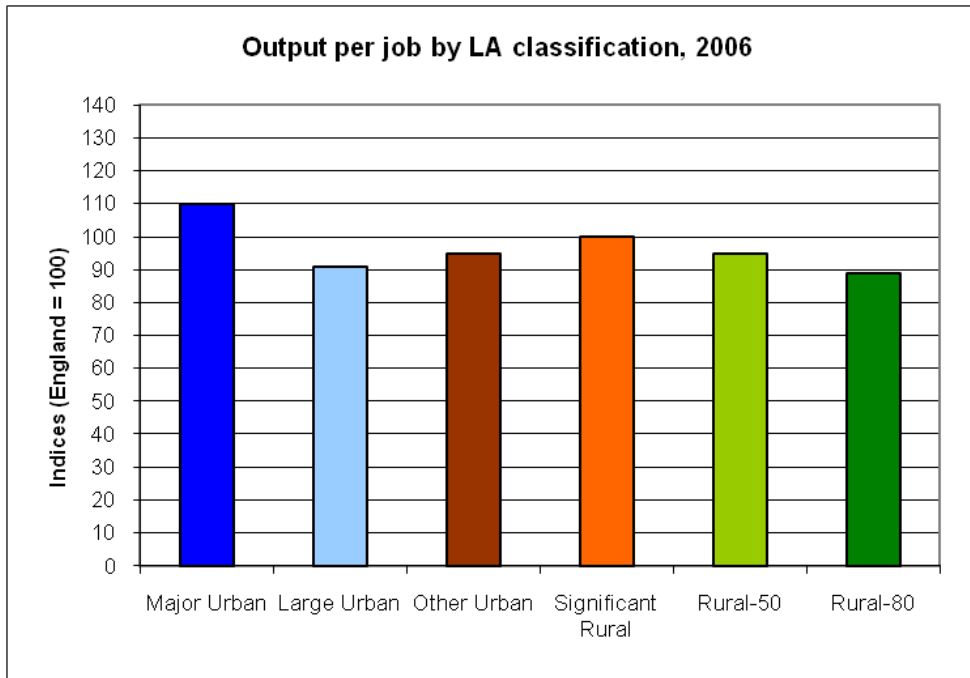
The data to support the indicator on housing affordability obtained from the Department for Communities and Local Government and aggregated to the local authority classification. This data shows the ratio of lower quartile earnings to lower quartile house prices, by local authority, and is an established methodology of assessing the affordability of houses by area. The data are then aggregated to the local authority classification. We then present the six categories of the classification and the England average on a graph (Figure 4). This shows that housing is less affordable in rural areas than in England overall. The average lower quartile house price in Rural-80 areas is over nine times the average lower-quartile earnings, whereas in England overall the ratio is around eight.

Figure 4: *Housing affordability by rural-urban classification*



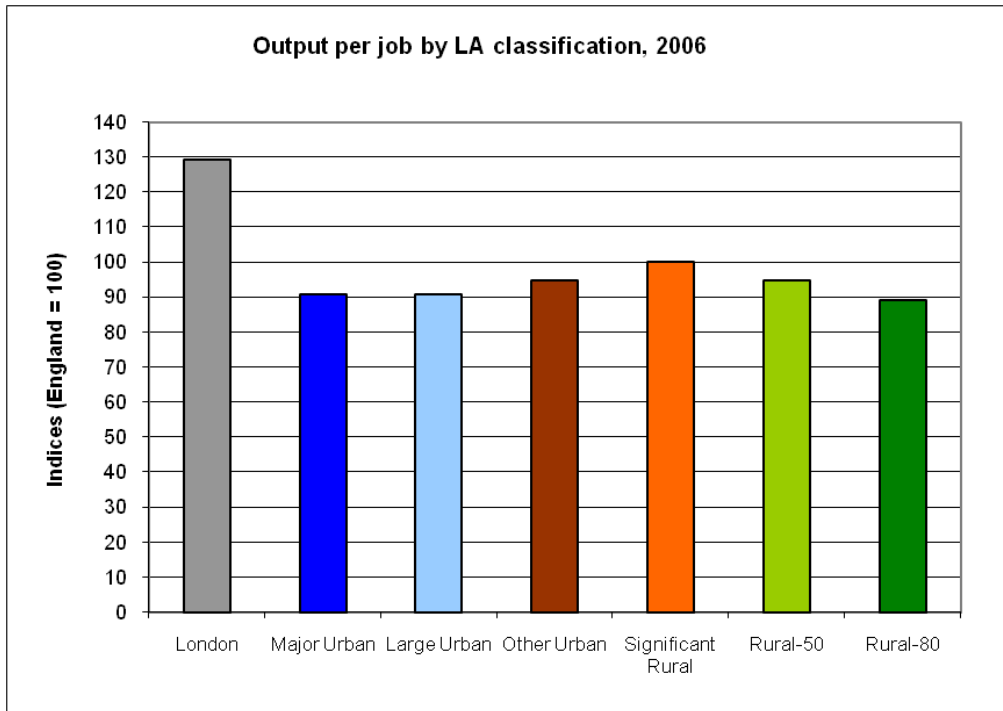
To measure productivity, data for Gross Value Added (the output measure) and the total number of workforce jobs (the input measure) are obtained by local authority district, and aggregated to the rural-urban classification for England. Output per job is then calculated for each category of the classification and indexed so that England=100. Results show that Major Urban areas have higher productivity than the other categories, with Rural-80 areas the least productive (Figure 5).

Figure 5: *Productivity by rural-urban classification*



However a more sophisticated analysis, separating London from the other Major Urban districts, shows that it is more of a ‘London effect’ that influences the disparity in productivity than a rural-urban divide (Figure 6).

Figure 6: *Productivity by rural-urban classification, London extracted from Major Urban category*



More information on the full range of indicators can be obtained via <http://www.defra.gov.uk/rural/dso/index.htm>.

5. Measuring success

Although Defra does not have any policy levers over the outcomes of these areas directly, the evidence helps us to prioritise our activity to ensure that we are focused on those issues where there is greatest evidence of need. It will also provide the basis for a further programme of analysis and investigation; looking beneath the high-level information captured by the DSO exploring evidence gaps and outstanding questions and testing our assumptions.

Where there are clearly differences between rural areas and the national average which put rural areas at a disadvantage (such as for affordable housing), Defra’s role is in influencing the relevant Department to engage with the issue at hand and to ensure that the impacts of their policy are distributed equitably in all areas, be they rural or urban. Where the aggregated averages for rural areas are suspected to mask localised disadvantage (for example if they contradict other evidence), proactive research can be carried out. In the case of housing affordability, for example, a current research project is investigating what the economic drivers behind higher rural house prices are, and

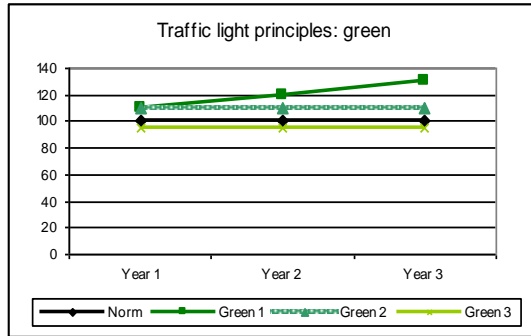
what impact this has on the people living (or hoping to live) there. Again, the outcomes of these research projects are shared with the lead department for the policy area in question.

Conclusion

There is no single indicator to evaluate *Socially and Economically Sustainable Rural Communities* and nor is there a set of measures that accounts for every aspect of rural life. However it is possible to monitor a set of national policies to ensure that the outcomes are distributed equitably in all areas, be they urban or rural. The advantage of using a place-based definition of rurality, rather than one based on land use, is that the impacts of a wide range of Government policies in rural and urban places can be assessed with no underlying assumptions about the economic or social structure of the area. The result of this is a sound evidence base that allows Defra to focus its activity on those issues where there is greatest indication of need.

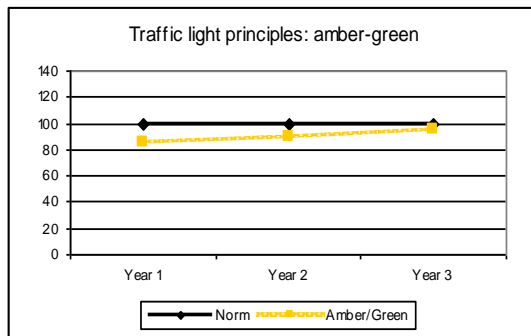
Annex 1: measuring success using traffic light principles

The graphs below demonstrate the methodology behind each type of traffic light. The norm represents the England average and is, for the purpose of illustrating the principles, set at 100.

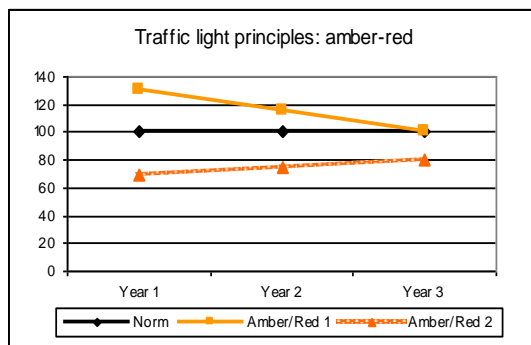


Green 1 and 2: An indicator where rural areas perform above or equal to the norm, with a trajectory suggesting that it will remain so.

Green 3: An indicator that is below, but within an acceptable range of the norm with a trajectory that remains within an acceptable range.

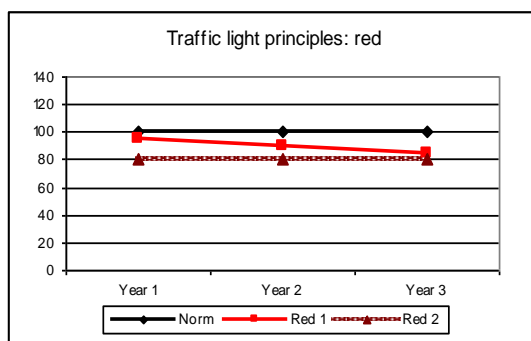


Amber/Green: An indicator where rural areas perform below an acceptable range of the norm, but with a converging trajectory that will converge within an acceptable time frame.



Amber/Red 1: Rural areas performing equally to the norm, but trajectory will clearly take rural below the norm.

Amber/Red 2: Indicator where rural performs below the norm with a converging trajectory that will converge outside an acceptable time-frame.



Red 1 and 2: An indicator where rural areas perform below an acceptable range of the norm with either a parallel or diverging trajectory.