

Information Communication Technology (ICT) and Rural Inclusion

There is a need for the public sector to intervene to ensure more equal access to broadband for rural areas.

Summary

The report - based on the findings of two year's study - focuses on the potential of information and communications technologies (ICTs) to contribute towards the reduction of social exclusion in rural areas. It suggests that rural areas currently suffer from a deficit in advanced telecommunications infrastructure as a result of a lack of investment by telecommunications companies, based on a perceived lack of demand in rural areas. There is a need, therefore, to tackle both sides of the supply and demand equation.

The report suggests that the public sector will need to intervene to ensure supply. Either through working in partnership with the telecommunications companies or local/regional authorities establishing their own networks. In either case public investment will be required. The report suggests that there is currently an asymmetry in knowledge of ICTs between the private and public sectors and that mechanisms need to be put in place to narrow that gap. It also suggests that intervention will be required to stimulate demand. It considers a number of demand stimulation measures in the areas of economic development, public service delivery and community development, drawing on 'good practice' examples from the study.

Main findings

The report is based on the findings of two year long European study known as ASPECT, which explored how ICTs can contribute to spatial planning and development. It focuses on how ICTs can help ameliorate social exclusion particularly in rural areas.

The rural broadband deficit

Is there a 'rural broadband deficit'? The report concludes that there is strong evidence to suggest that broadband infrastructure is not being rolled-out to rural areas by the private sector. This applies not only to deep rural areas but also to at least some reasonably sized rural settlements close to cities. The evidence suggests that this imbalance is unlikely to be resolved if left purely to the market.

A consensus appears to be emerging that public sector intervention is required but less consensus, however, as to the steps which should be taken. Intervention at the regional and local levels has occurred but only in a limited

Mechanisms are required to ensure greater co-ordination and exchange if rural areas are to optimise the potential of ICTs.

Properly researched and rural-proofed Regional Telecommunication Plans could provide a focus for co-ordinated investment and enhanced understanding of information society issues.

number of cases. In most cases this has involved public-private partnerships. In an interesting departure from this approach, one council in North East England has effectively established its own telecommunications network. In each of these cases a significant public subsidy has been provided.

Rural access to the 'networked' economy

How can rural areas be more fully included in the information economy and how can they improve their competitive position through the use of ICTs? The report examines two approaches. First, the promotion of ICT use by rural small and medium sized enterprises. Second, through attracting information intensive inward investment.

The report points out the particular importance of Small/Medium Enterprises (SMEs) to most rural economies but also suggests that SMEs tend to be relatively slow to adopt ICTs. It explores a number of examples of public sector intervention to stimulate SMEs through the use of ICTs. A number of general lessons emerge:

- ICTs can be used productively by rural SMEs in a number of ways: to extend geographical and product markets, to find new customers, to deepen existing customer relationships and to implement new customer service strategies;
- ICTs can perform these roles not only for 'e-businesses', but also for firms operating in traditional sectors, including those sectors which are vital for rural areas such as tourism, craft production and food and drink;
- not all SMEs currently need direct access to broadband in order to use ICTs effectively. However, firms currently using ICTs strategically anticipate that more sophisticated technologies will be used in the future and that these will require broadband;
- firms must keep up to date with the changes in technology that will continue to occur. Effective on-going ICT support is required, particularly for micro-businesses, if the interest of firms is to be maintained and if they are to continue to develop new products and services around ICTs. In addition to ICT-support, training and business support will also be required;
- although much is made of the 'weightless economy' and of the 'dematerialisation' of production, physical infrastructure remains crucially important. The report suggests that many rural areas, including market towns, will need to look carefully at the suitability of their current property portfolios and assess how these can be broadened or renewed to stimulate e-businesses.

The report suggests that although the success of indigenous SMEs will be vital to the long-term competitiveness of rural areas it is unlikely that all rural places will be able to rely on indigenous enterprise alone for regeneration. They will not be able to generate the scale of jobs necessary. Nor will they necessarily create work for those from deprived communities. It is likely that many rural areas will also have to attract inward investment in order to provide information economy jobs.

There are opportunities for rural areas to attract information services employment: for example, in call centres, back offices and shared service centres but they have tended to locate in urban areas, though some examples were found in towns with populations of under 5,000.

The report suggests that some new forms of inward investment present opportunities for people living in areas of multi-deprivation. Call centres in particular were providing a route (back) into work for the long-term unemployed and young people. Evidence also suggests that they can provide work opportunities for people living in rural poor and peri-urban poor wards.

These new employment sites also provide a focus for training providers trying to inculcate new skills into the local workforce. The report also, however, notes a number of barriers to participation in these new jobs for those living in areas of multiple deprivation, including low confidence, lack of basic numeracy and literacy skills, transport problems, cultural norms which dismiss office work and child-care issues.

The research sounds a note of warning about the sustainability of some of these mobile jobs and the threats from off-shore locations and from further rounds of technological development are identified.

ICTs and access to services in rural areas

The report considers how ICTs can be used to improve access to services for rural populations, a key area of concern in the context of current modernising government and e-government agendas, as well as for social inclusion agendas. The report explores three ways in which ICTs are being used to improve service provision in rural areas. These are:

- Internet public access points;
- physical decentralisation of public services facilitated by ICTs;
- the creation of 'e-gateways'.

Internet public access points (IPAP) are now becoming a key tool for the delivery of public services. The research suggests, however, that there is often little co-ordination in terms of investment in these facilities at either the local, regional or national levels, that funding streams are often short-term and fragmented, and that exchange of information and good practice is poor. The report concludes that if limited resources cannot be properly co-ordinated and shared and ideas and information on best practice communicated across physical, organisational and personal networks then the role of IPAPs in ameliorating social exclusion will be circumscribed.

The study reports on a number of cases of ICT-supported physical decentralisation of services. Here public authorities have taken the political decision to take services 'closer to the citizen' though creating new offices, or through extending the services offered in existing offices, in small rural towns. ICTs are used to allow public service workers to provide a mediated service for the customer. Local workers can access distant expertise through ICTs thus enhancing the local service offering. There are obviously cost implications with this approach.

The research suggests that community 'e-gateways' such as electronic village halls can make a useful contribution to creating a more inclusive information society in rural areas. In particular they have a role in familiarisation and training, especially informal training. Care needs to be taken to tailor the approach to take into account both the needs and abilities of particular user groups. The research supports other studies which suggest that formal learning courses with clearly defined learning outcomes (to which funding is attached) may well put off the very target groups which community gateways wish to support. E-community gateways can also play a social role providing a community focus. For example, using a DVD player and a large screen to create a local cinema.

ICTs can only make a difference if they are deployed in concert with a range of other measures.

Key Recommendations

The key thrust of the report's recommendations is the need for institutional changes required to capitalise on the economic and social potential of ICTs.

It is clear from the ASPECT study that telecommunications companies will not invest in advanced services in rural areas where they feel there is insufficient demand. This is not a temporary state of affairs but an in-built feature of the telecommunications' environment that is characterised by rapid technological change, liberalised markets and globalisation. If, as key policy documents such as the recent Rural White Paper imply, ICTs are seen as a key element in rural renaissance, then there is a clear need for public sector intervention to ensure roll-out of advanced technologies ahead of articulated demand.

The report recommends that each region should prepare a Regional Telecommunications Plan founded on research based evidence of the current situation in the region and the plans of telecommunications companies. A key purpose of the Plan would be to ensure more equal access to ICTs for rural and deprived urban areas.

The Plan would demand a greater symmetry between the knowledge base of the public sector and private sector telecommunications providers. This implies that some policy makers at the regional and national levels should have detailed technical, regulatory and commercial knowledge of the sector. Data on spatial pattern existing and proposed infrastructure developments should be collated, retained and disseminated by OFTEL and/or the Office of the e-Envoy and should be accessible by regional and local planners.

Each region should put in place a mechanism for capturing and exchanging good practice, avoiding replication and co-ordinating funding.

Further reading

ASPECT Final Synthesis Report.

Available at

www.region-numerique.org/aspect

ASPECT 'Good Practice Guide'.

Available at

www.region-numerique.org/aspect

Office of the e-Envoy (2001)

'UKOnline: the broadband future'.

London: Office of the e-Envoy.

Based on research carried out by R. Richardson CURDS University of Newcastle 2002

Countryside Agency Research Notes can also be viewed on our website:
www.countryside.gov.uk