

# Diapositivo de sumário

SUSTAINABLE RURAL  
DEVELOPMENT AND THE  
INFORMATION SOCIETY IN EUROPE

# **SUSTAINABLE RURAL DEVELOPMENT AND THE INFORMATION SOCIETY IN EUROPE**

**Dynamics and Links between Rural Territories in  
the Context of the Information Society**

**Rede Portuguesa LEADER +**

**Instituto de Desenvolvimento Rural e Hidráulica,  
Ministerio da Agricultura, Desenvolvimento Rural e  
Pescas, Lisboa, 18 de Novembro de 2003.**

**Philip Wade, OECD, Directorate for Public Governance  
and Territorial Development**

# HISTORICAL CONTEXT: NEW ERA

Historically, the economy and hence society were characterised by successive cycles:

- Agriculture, Industry, Services
- And now, Information:

**Convergence** of print media, broadcasting, telecommunications and computing = data+voice+pictures (still and movies) = Information and Communication Technologies (ICTs) = towards the Information Society (IS).

Today around **400 000 000 Internet users** world-wide.

# CONVERGENCE = A REVOLUTION

- ICTs are a sector (hardware, software) to which the « New Economy » (start-ups, multimedia application firms, e-commerce) belongs.
- But mostly ICTs have an impact on all economic sectors and delivery of public services.
- They help to streamline production methods, delocalise activities based on knowledge and information processing (call centres...).
- **Interactivity** is two-way active communication for individuals and businesses. All are senders and receivers in a **value-added global network**.

# THE VALUE OF INFORMATION AND ORGANISATION

ICTs are not neutral, they can change ways of work and lead to restructuring of organisations, whether public or private.

A project using ICTs must start with an audit:

- Who holds the strategic information?
- What are the information flows, their volume?
- Are structures adapted to information exchange?
- Are existing management techniques relevant?
- Which channels used for information up-dating?

# THE GLOBAL VILLAGE: RISKS AND CHALLENGES

- Forget geography, we are digital nomads.
- The more global we become the more we feel the need to be local.
- English is a *lingua franca* but many people and cultures are now accessible through the Internet.
- A social, educational and economical digital divide : Tokyo has more telephone lines than Africa, ICT penetration is low in distressed urban areas, rural areas lag behind urban ones.

# **U.S. AND RURAL DEVELOPMENT**

## ***INTRODUCTION***

### **ISSUES & PERSPECTIVES**

- **Networked economy and society**

ICT = often 5% of GDP in Europe and North America,

high growth rates, new job creation but...

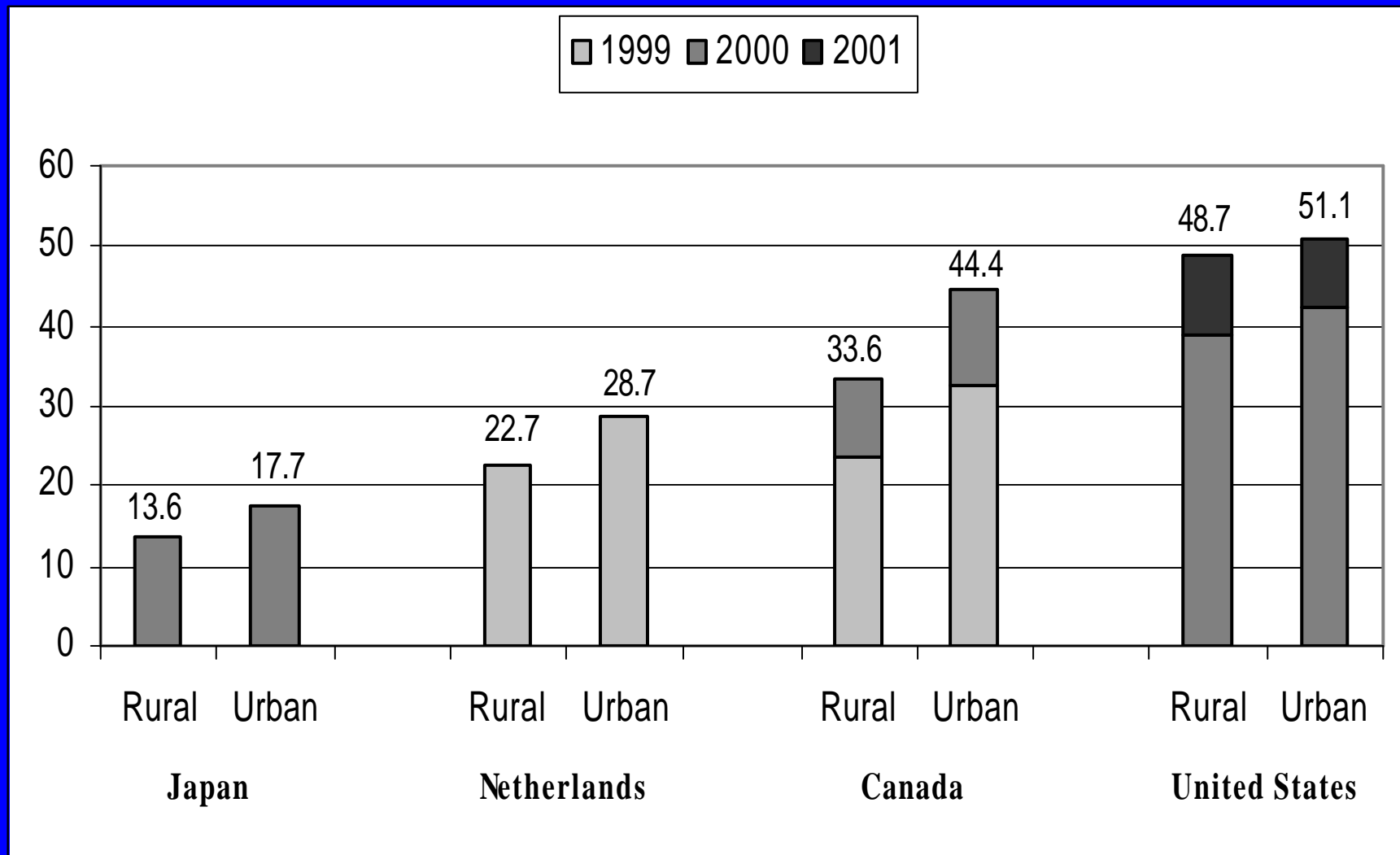
- **Unequal spread, rural areas lag behind urban**

because of cost of infrastructure...

and lack of awareness...

- **The digital divide is also territorial.**

# Internet Access among rural and urban households, OECD/DSTI



# **I.S. AND RURAL DEVELOPMENT**

## ***INTRODUCTION***

### **RISKS IN RURAL AREAS**

Slow rhythm of dissemination + low level of appropriation = continued decline of traditional activities, little innovation, outward migration.

### **OPPORTUNITIES FOR RURAL AREAS:**

More performing SMEs, access to new markets

Job creation, inward investment in service sector

Better access to public services

**I.S + ICTs CAN BE TOOLS FOR RENEWAL  
OF RURAL AREAS**

# **I.S. AND RURAL DEVELOPMENT**

## **I/ SOCIETAL ISSUES:**

- Digital divide
- Public access points
- Public services and local governance

## **II/ ECONOMIC ISSUES:**

- Small businesses
- New activities

## **III/ ICT: A RURAL DEVELOPMENT TOOL**

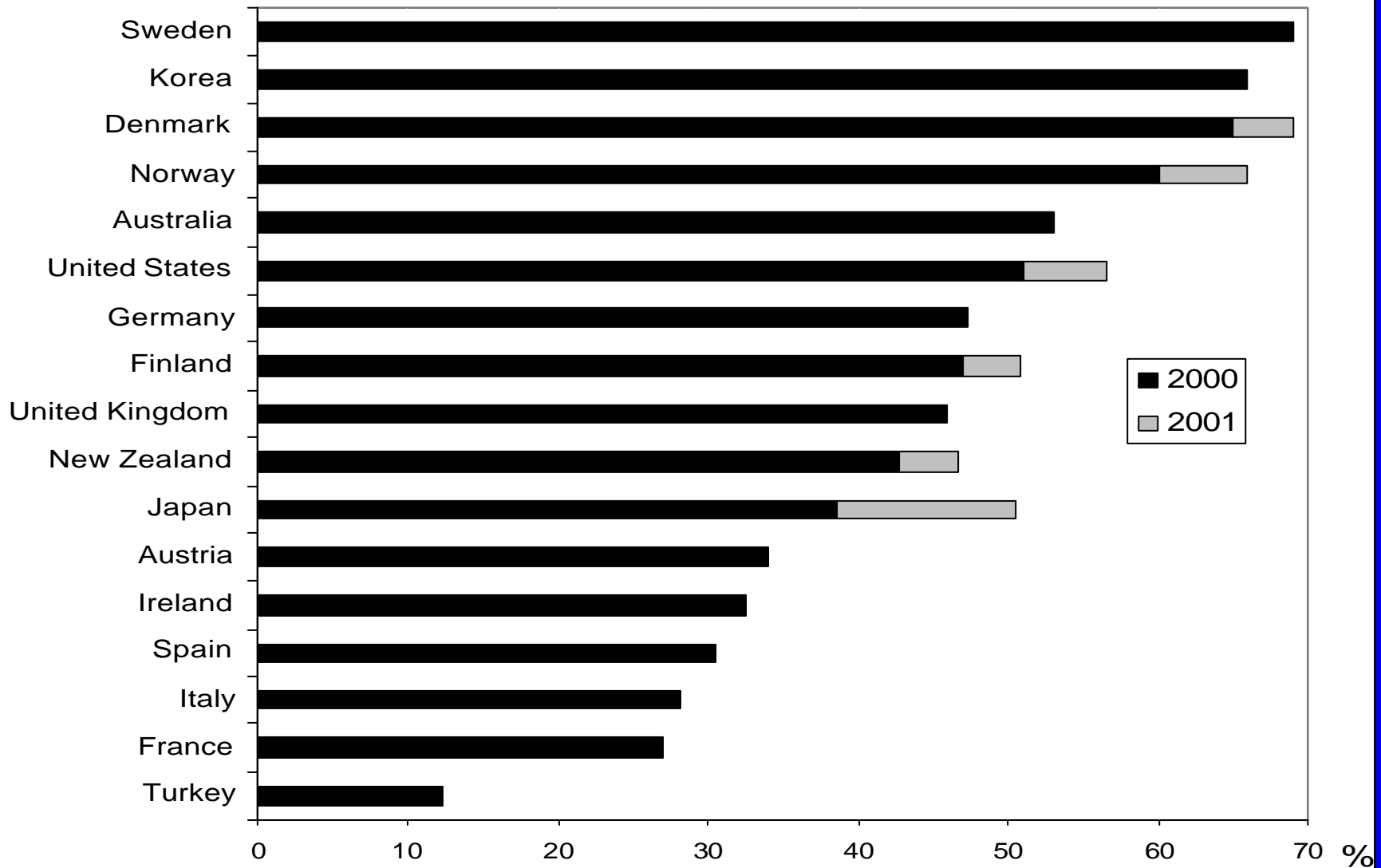
- Support for LEADER +
- Rural area strategies.
- Development models

# I.S. AND RURAL DEVELOPMENT

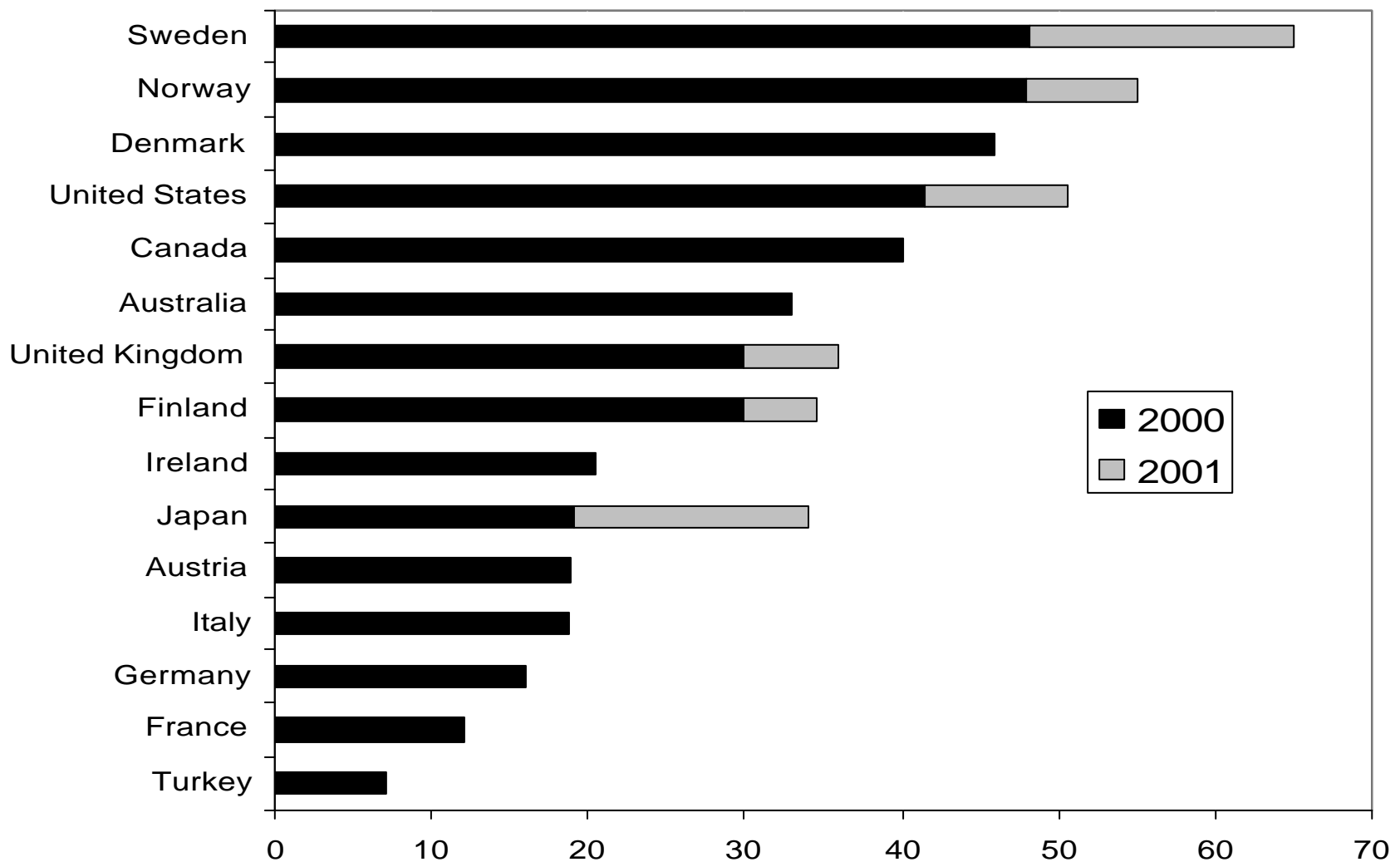
## I/ SOCIETAL ISSUES

- The digital divide
- Public access points
- Public services
- Local governance

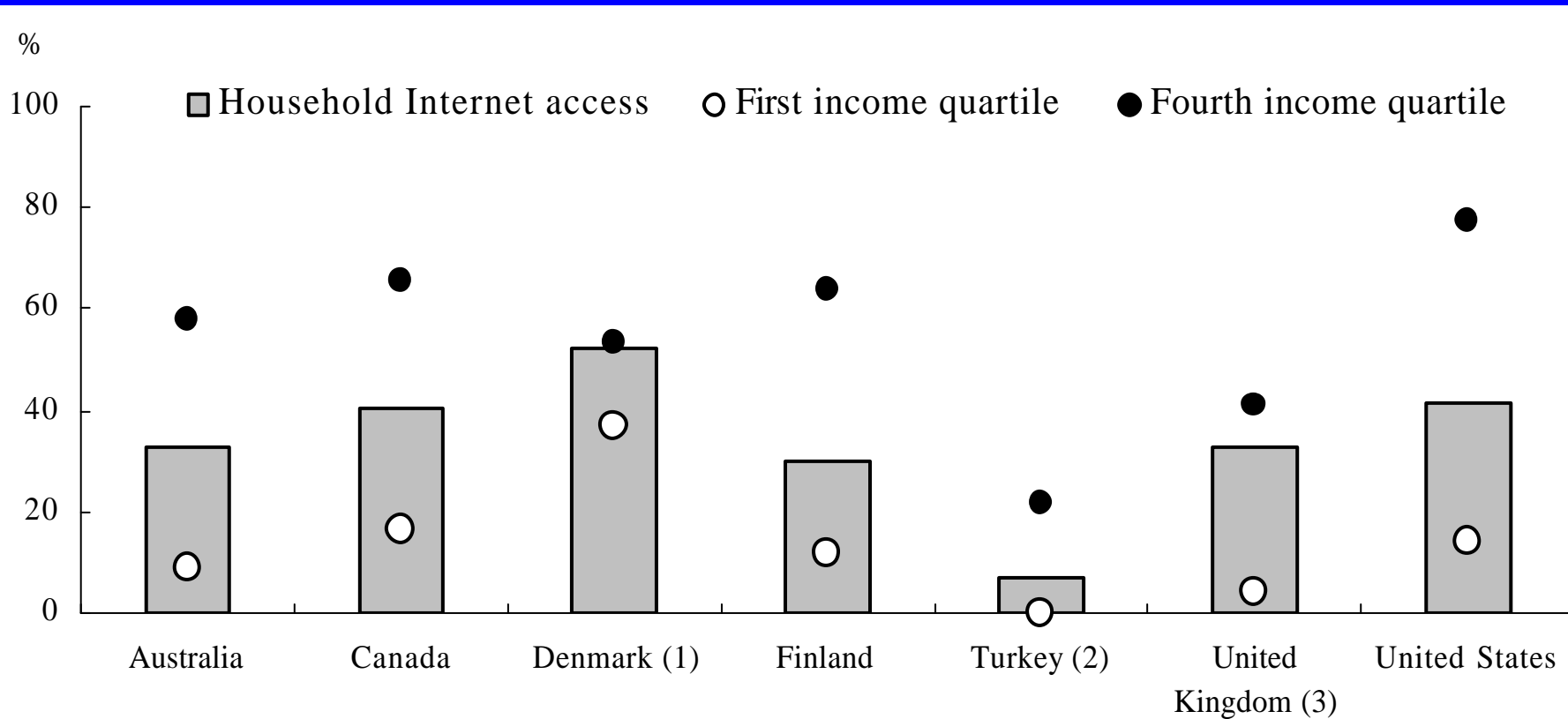
# Households with home computer, 2000-2001, OECD/DSTI



# Households with Internet Access, 2000-2001, OECD/DSTI



# Internet Home Access by household income level, 2000, Source: OECD (DSTI)



# **SOCIETAL ISSUES**

## **DIGITAL DIVIDE**

### **INFRASTRUCTURE COST IN RURAL AREAS**

- High infrastructure cost with capacity/speed for data transmission (ISDN, broadband more costly).
- Too limited customer base for telecom operators
- Universal service principles and mechanisms not easily applicable (cost, complexity) but some forms of subsidies exist for public services
- Evolving regulations authorise towns/communities to invest in infrastructure if private initiative absent
- Rural area servicing requires specific policies.

# **SOCIETAL ISSUES**

## **PUBLIC ACCESS POINTS**

- Sometimes called telecottages in rural areas, are an essential component in ICT awareness, dissemination and training.
- Address needs of general public and SMEs.
- Are often part of national Information Society initiatives but set-up supposes close coordination with regional and local authorities.
- Standard processes on implementation and information sharing are most useful.

# **SOCIETAL ISSUES**

## **PUBLIC ACCESS POINTS**

**Long term sustainability not always ensured:**

many programs rest on volunteers

lack of proper technical resources

communities not always sufficiently supportive

**Remedies:**

professional approach with salaried personnel

networking in territory to share resources

continued role for SMEs (e-commerce)

Local website support/access to public services

# **SOCIETAL ISSUES**

## **PUBLIC SERVICES ON-LINE**

Countries implementing ambitious e-government programs to facilitate access to public services for all citizens (information, formalities, transactions, payments): portals.

In rural areas, if significant proportion of population is connected and public access points provide adequate alternative entry, e-government can be a cost effective solution.

Can be an answer to insufficient presence of these services in sparsely populated areas.

# **SOCIETAL ISSUES**

## **PUBLIC SERVICES ON-LINE**

- Two areas where specific projects are required for rural and remote territories:
  - distant education
  - telemedicine
- both rest on sharing of human resources (teachers, specialist doctors) through video conferencing in particular, provided adequate telecom infrastructure.
- successful regional and local programs, national support.

# **SOCIETAL ISSUES**

## **LOCAL GOVERNANCE**

e-democracy is not only on-line voting.

new way of relating citizens with elected/public officials, better associating to democratic process.

transparency in decisions

voicing of opinions (e-forums)

increased role of general interest groups

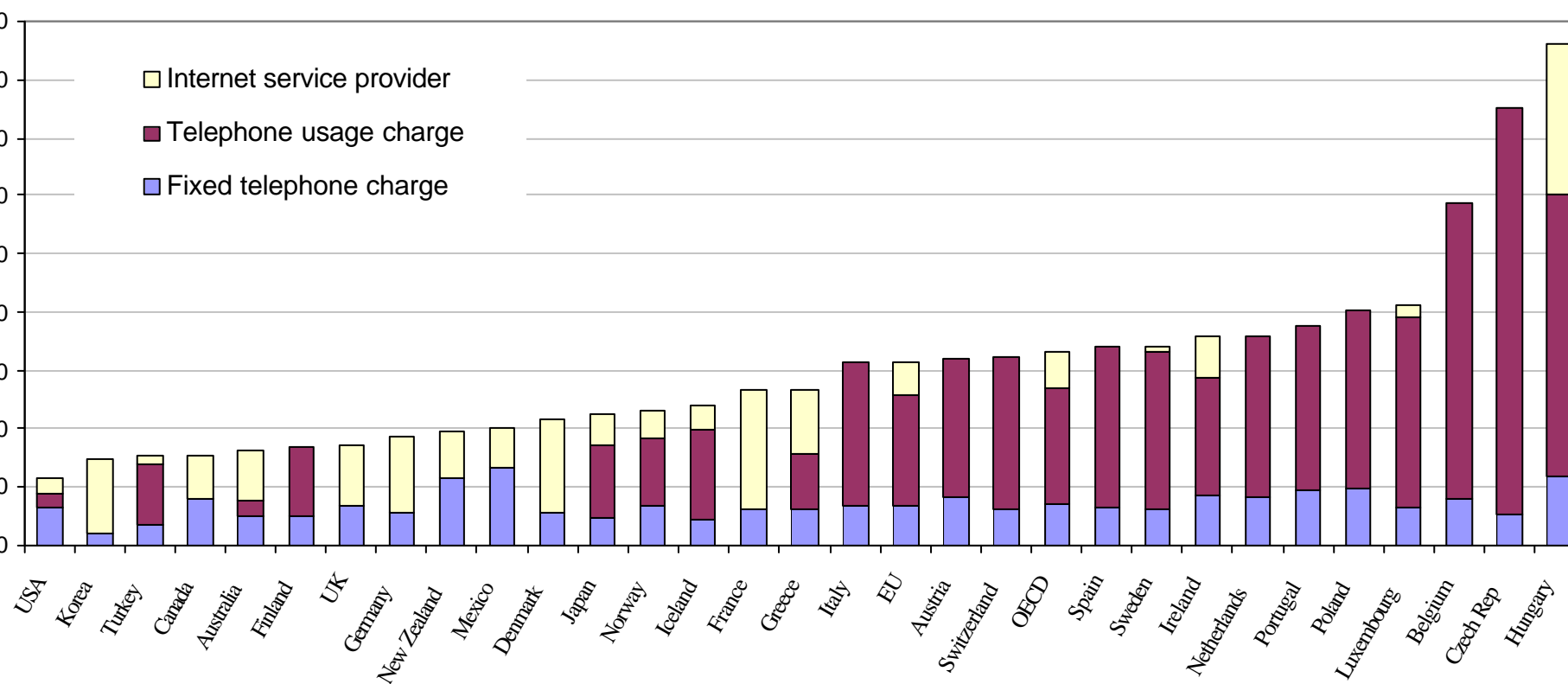
risks of territorial imbalances if smaller towns do not develop their own initiative but they need to join forces in a wider area (micro-region).

# **I.S. AND RURAL DEVELOPMENT**

## **II/ ECONOMIC ISSUES**

- **I.S., ICTs and small businesses**
- **New activities in rural areas**
- **Attractiveness of territories**

# Internet Access Basket, Peak Times, PSTN discount, end 2001, PPP, USD including VAT, source OECD (DSTI)



# ECONOMIC ISSUES

## SMALL BUSINESSES

- **Obstacles to ICT dissemination**
  - the smaller the firm, the lesser the awareness of ICT potential for business development.
  - lack of sufficient expertise to elaborate an ICT strategy and choose best adapted hardware and software.
  - lack of sufficient financial resources
  - more difficult access to training

# ECONOMIC ISSUES

## SMALL BUSINESSES

### Advantages of ICT:

increased marketing capacities

development of new services for customer

extension of commercial territory

openings on new national and foreign markets

SMEs present on the Internet tend to be more performing than others.

# ECONOMIC ISSUES

## SMALL BUSINESSES

### ICT policies/projects

European, national Information Society programs help create awareness, deliver training but seldom distinguish rural SMEs or address smallest firms.

incentives for projects regrouping several SMEs at the regional level deliver expertise to help define strategies (development agencies).

identify “business champions” and disseminate best practices.

# ECONOMIC ISSUES

## NEW ACTIVITIES

- **At different geographical scales economic development based on ICT can be pursued in rural areas:**
  - call centers and outsourcing of business processes (telebusiness) at sub (regional) level
  - telework organised at the level of a community
  - multimedia and website design and maintenance
  - technology centers and business incubators in rural towns.

# ECONOMIC ISSUES

## NEW ACTIVITIES

### **Requirements:**

well defined strategy seeking sustainable results  
mostly on the medium to long term

convergence with other policies at the (sub) regional  
level (education and training)

securing adequate telecommunications infrastructure  
or proper linkage with trunk lines.

whenever possible, capitalise on existing skills  
(telework, rural start-ups based on IT for farming).

# ECONOMIC ISSUES

## ATTRACTIVENESS OF TERRITORIES

- **A triple socio-economic goal:**
  - stem emigration, reverse demographic decline.
  - attract inward investment and ideas/ innovation.
  - Attract tourists (adequate Internet site + policy).
- **Essential conditions:**
  - adapted telecommunications infrastructure
  - public access points for good level of awareness and training
  - easy access to public services.

# I.S. AND RURAL DEVELOPMENT

## III/ ICT: A RURAL DEVELOPMENT TOOL

- Support for LEADER +
- Rural area strategies
- Development models

# ICT: A RURAL DEVELOPMENT TOOL

## SUPPORT FOR LEADER +

A few simple rules for proper use of the Web

- Simple but attractive website design
- Not too many or too big pictures (bandwidth, slow access), but a simple map
- Clearly state what the site represents, who is involved (LAG membership) and project purpose
- Ensure regular up-dating and answer E-mail rapidly: essential role of Webmaster, time needed
- Links to related sites
- Languages: depends on potential audience.

# ICT: A RURAL DEVELOPMENT TOOL

## SUPPORT FOR LEADER +

A website must not be static, but lively

Like in the village square: always something going on, always information exchanged

What is the latest news, what is happening in the local area, how are projects advancing?

Facilitate networking with practical information

Make reports, evaluation, immediately available

If there is a forum, moderate and animate it.

# ICT: A RURAL DEVELOPMENT TOOL

## RURAL AREA STRATEGIES AND THE WEB

- LEADER + projects are obviously inserted within wider local area strategies that have two-way links with regional, national and European policies
- These local area strategies seek to encourage local participation and capture the attention of a larger audience: potential investors or tourists
- To have impact, Internet policy co-ordination between local areas is essential.

# **ICT: A RURAL DEVELOPMENT TOOL**

## **RURAL AREA STRATEGIES AND THE WEB**

### **The inner vision: a local audience checklist**

- Who is active locally, who contributes information and consults the site often?
- Who else could be drawn into this circle?
- How many and what kind of local accesses are available (in homes, schools, public access points) so that local people can be involved?
- Be sure there is added value: pooling of ideas, knowledge and resources.

# ICT: A RURAL DEVELOPMENT TOOL

## RURAL AREA STRATEGIES AND THE WEB

### **The inner vision: proper targeting**

Local area identity is the common factor

Daily concerns of the population are not necessarily relevant for people out of the area but interested in its amenities or its economic development

Clearly distinguish this part of the website from the rest addressing other audiences or even create two different websites with links.

Municipal sites can remain local, not those presenting wider area perspectives.

# **ICT: A RURAL DEVELOPMENT TOOL**

## **RURAL AREA STRATEGIES AND THE WEB**

### **The outer vision: how to receive attention**

Is the site mainly conceived for tourists, potential investors and policy-makers?

Be practical: precise access, lodging and visitors information (example: opening days and hours of museums, attractions...)

Be honest: present local heritage and amenities as they are, in a simple way, beware of superlatives.

# **ICT: A RURAL DEVELOPMENT TOOL**

## **RURAL AREA STRATEGIES AND THE WEB**

### **The outer vision: how to reach your audience**

- Languages
- Upper networked links: national and regional portals, thematic sites
- Access through specific European and national networks: rural tourism
- Ensure identity through proper logos and/or graphic homogeneity between certain sites (region).

# ICT: A RURAL DEVELOPMENT TOOL

## DEVELOPMENT MODELS

- Technological push versus social pull
- Top down versus bottom up
- Infrastructure led versus content led
- Technology and infrastructure led projects are top down; must evolve towards social pull to succeed
- Initiative, motivation, support and involvement of population are indispensable (LEADER...)

# ICT: A RURAL DEVELOPMENT TOOL

## DEVELOPMENT MODELS

Endogenous/exogenous:

a region with sound ICT strategies and policies will favor inward investment and value added activities, evolving from an exogenous to an endogenous development mode.

Spatial policies:

a territory in the knowledge based networked economy should have a mix of access points for the public and SMEs, and possibly technological parks, linked to academia and research, for new businesses

# **ICT: A RURAL DEVELOPMENT TOOL**

## **The example of the Highlands and Islands of Scotland**

- A strategic regional plan launched in 1989 to revitalise rural areas afflicted by decline of traditional sectors and out-migration by creating new activities.
- Pro-active role of the regional development agency in project co-funded by national/EU sources and operator.
- Education and training in certain skills to perform distant services directly linked to ISDN infrastructure project .
- Today 2300 employees in 17 telebusiness locations (call centres, data processing, multimedia).
- Telework project in Western Isles, +120 jobs since 1995.

# ICT: A RURAL DEVELOPMENT TOOL

## The example of Lanark County, Ontario, Canada

- Too close to Ottawa, risk of being only a distant residential suburb, loss of local jobs.
- Local public and private sector create Non profit Corporation (1996) to implement a high speed network.
- Aggregation of public needs (hospital), private sector demand, start-up projects and support of population
- Bell Canada retained in 1999 for project (also federal, regional and local funds, local businesses)
- “Smart community”, typical bottom-up initiative.

# ICT: A RURAL DEVELOPMENT TOOL

## Knowledge of best practices and success stories

- Ennis (Ireland): local business championships permit selecting small firms with best chances of integrating major technological and organisational changes. Are supported in their efforts (training) and best practices publicised on local Internet site.
- Maddock (North Dakota, USA): ICT firms in local business centre of small town (less than 600) are example for others, sharing experience and know-how.
- Parthenay (France), SMEs export (e-commerce). Hub town experience benefits area (“Pays de Gâtine”).

# CONCLUSIONS

Technicalities and the human dimension

**All successful rural ICT projects require horizontal approach combining the following:**

- Rising overall ICT awareness of inhabitants and business community.
- Launching visible and highly useful projects, particularly for remote communities.
- Publicising success stories and best practices.

**Creation of synergies is essential to overcome possible apathy or skepticism.**

# **ACT LOCAL AND THINK GLOBAL**

**RENEWED ATTRACTIVENESS IS ACHIEVED  
WHEN**

**EUROPEAN/NATIONAL/REGIONAL I.S. POLICIES**

Give specific attention to rural areas, to contribute to their sustainable development, prevent a territorial digital divide.

Help rural communities seize the opportunities of the new economy on the long term, by mastering ICT tools and the I.S. to face the challenges of the “global village”.

Bring framework and support only: local initiative is primary driver, (LEADER), it can influence other levels.