

Health and Social Services in Rural Umbria



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Objectives and Methodology

To measure the supply, delivery and accessibility of a number of services for different types of rural areas: “**General Policy Proofing**”

To provide a “**spatial analysis methodology**”, applied to the Umbria region but easily **adaptable** to other regions (*Useful Tool for Policy Makers, Evaluators and Analysts!*)

Territorial Approach, creation of different types of rural areas (based on OECD definition of rural)

Desk Analysis + first level statistics through **Field Surveys** (health & child-care services)



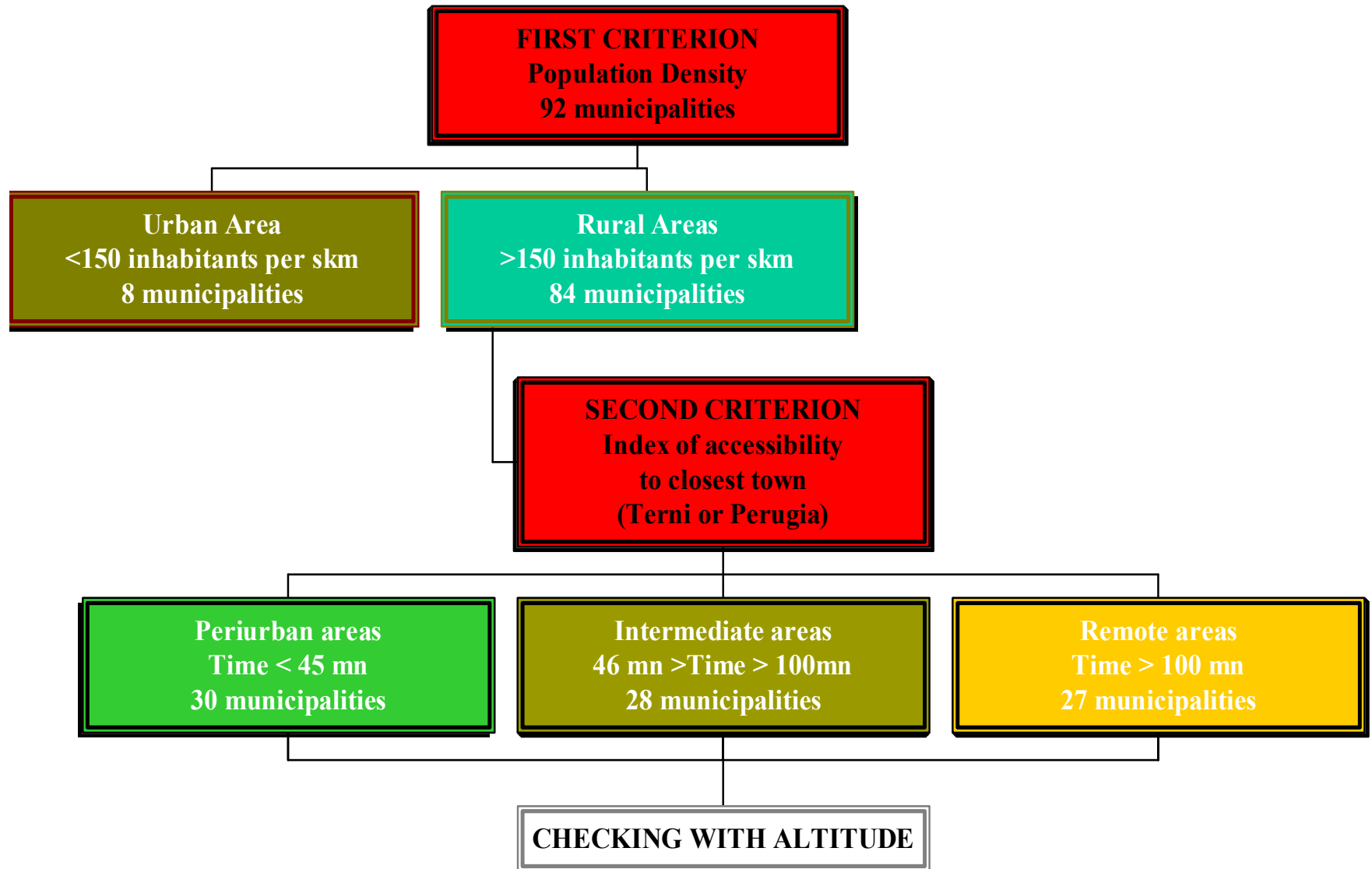
Classification of Rural Areas

Peri-Urban; Intermediate; Remote

Two Main Rules:

- Population Density (Applied at Municipality Level)
- ❖ Index of Accessibility:
 - ❖ The average time to reach the closest major town (Terni or Perugia)
 - ❖ Average time distance between two modes of transport (car and train)

Mapping Rural Umbria



Rural Areas in Umbria

Tuscany

Marche

Lazio

Urban Areas

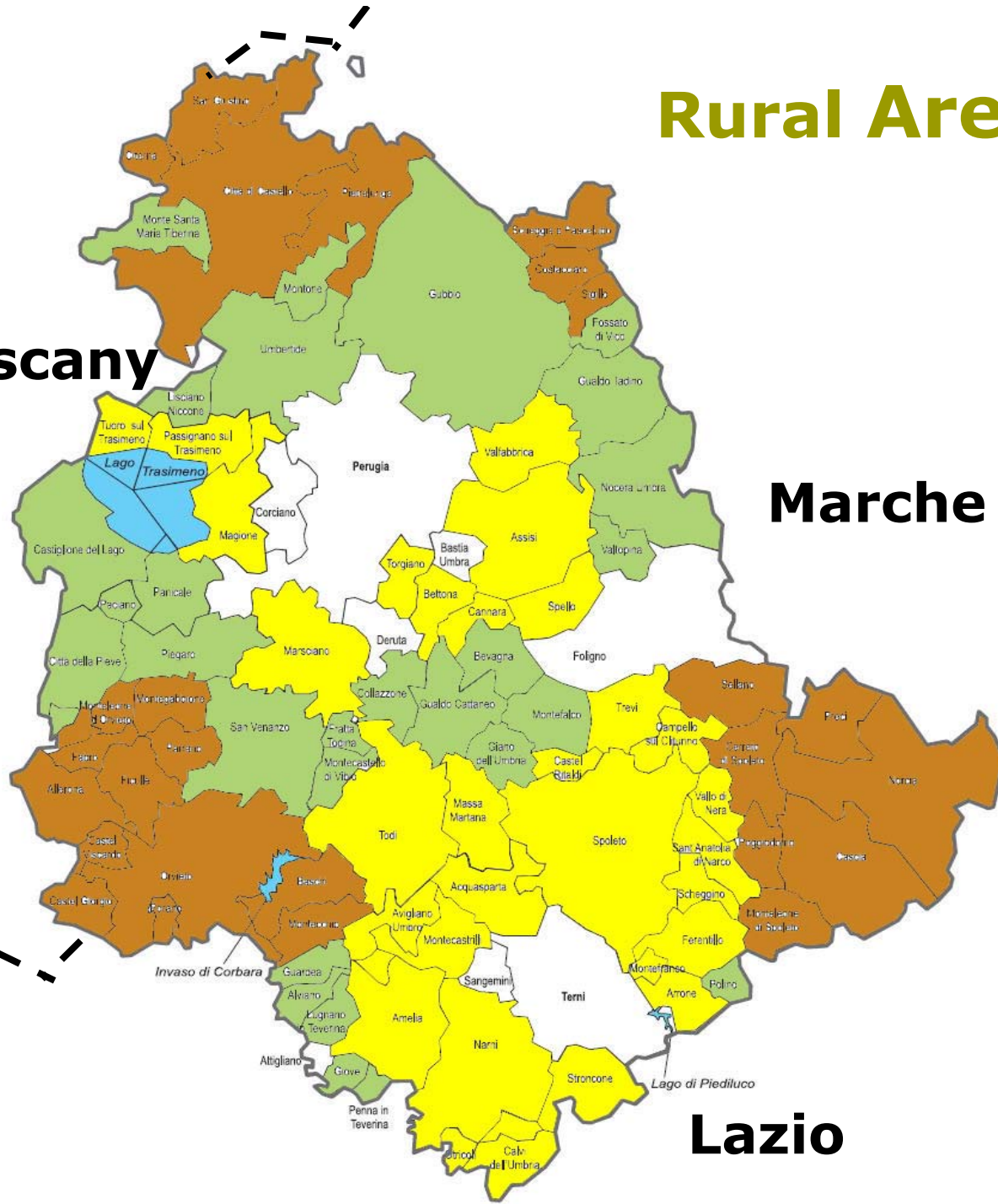
□ Urban

Rural Areas

■ Peri-Urban

■ Intermediate

■ Remote



Socio Demographic Characteristics of Different Rural Areas

- ❑ In the long term, remote and intermediate areas are losing population: *dynamism of peri-urban rural areas!*
- ❑ High share of population over 65 in peri-urban and remote rural areas (27% compared with 18% for Italy)
- ❑ The share of young people declines the more remote an area is
- ❑ There are 7 elderly people for each child in remote rural areas compared with 4 in urban areas
- ❑ high aging and particularly high dependency rates (*the more remote an area is*)

Demographic Behaviour

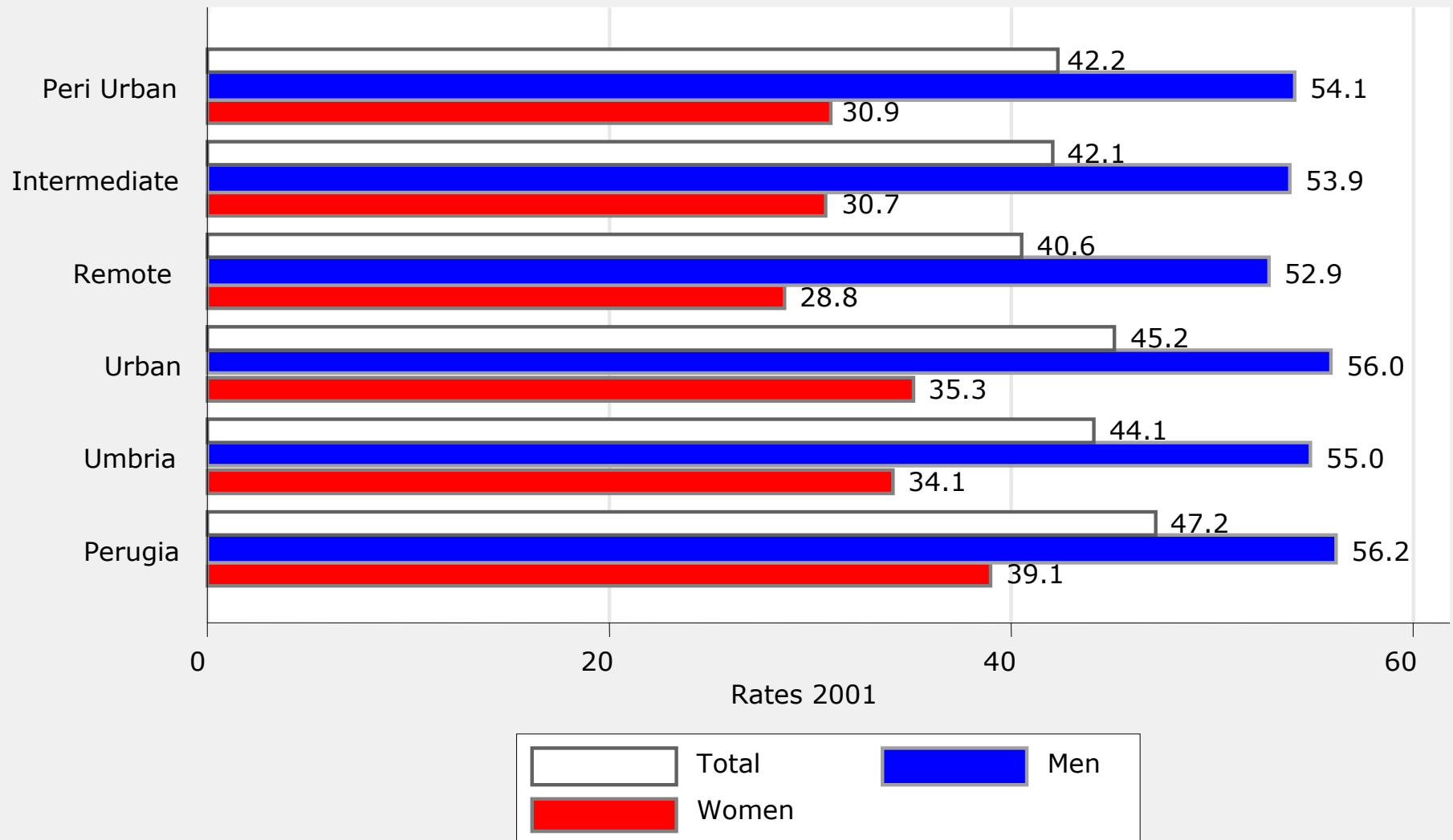
Socio-demographic characteristics of areas		Peri-Urban	Intermediate	Remote	Urban	Perugia	Umbria	Italy
Territory	Density	76.21	59.97	49.65	304.38	331.45	98	189
	Residential Nuclei	290	278	202	166	38	936	36,580
Population dynamics	Population Growth Rate (annual average 1971-01)	4.1	-0.7	-8.2	26.9	14.8	6.5	5.3
	Migration Rate 1991-2001	3.0	1.9	1.0	5.1	2.7	2.5	<i>n.a.</i>
	Natural population balance birth/death 1991-2001	-4.0	-3.9	-6.5	-1.7	-1.1	-3.0	-0.3
	Birth Rate	6.9	6.0	5.8	7.0	8.1	6.7	7.7
Population composition	% population > 65	28.3	24.3	26.8	24.4	20.8	22.7	18.7
	% population < 14	15.2	11.8	11.2	14.6	12.5	12.2	14.2
	N. of elderly per child	5.09	5.64	7.04	4.29	4.21	4.81	3.39
Ageing and Dependency	Dependency Ratio	56.8	59.2	64.8	50.3	49.9	53.9	49.0

The Economic Characteristics of Different Rural Areas

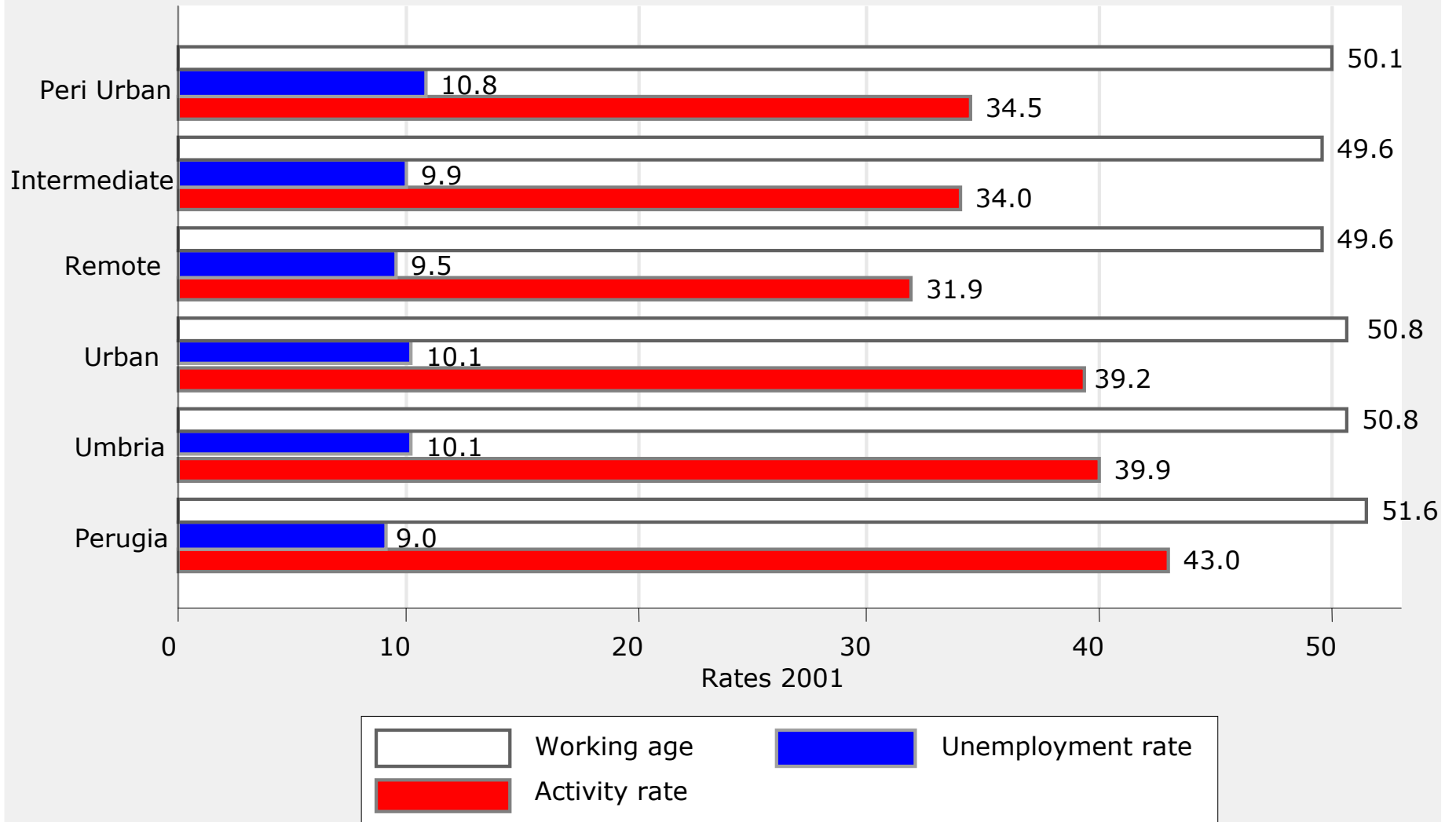
- Low employment rates for woman, which becomes lower in remote areas ...
- “Gender issues” are particularly serious in remote rural areas (gap between male and female employment performance)
- Particularly low activity rates for woman in rural areas: *a significant number of women stay out of the labour market!*
- Very high unemployment rates for young women in peri-urban rural areas

Economic Behaviour

Employment rates for women and men in rural areas, 2001



Working-Age Women - Activity and Unemployment Rates



The Governance of Health and Child-Care Services in Umbria

- The governance of the health system involves 3 levels (Central, Regional, Local Health Authorities – ASL & Hospitals)
- The main objective of Umbria's health policy is to ensure uniform levels of health protection
- A network of local health centres and home health care services + hospitals
- For child-care services, responsibility for general planning belongs to Regions but...
- Municipalities effectively plan and manage the nursery system at local level

Measuring Service Supply in Rural Areas

- Supply Indicators
- Accessibility/Coverage (Population and Surface Area)
- Quality Indicators (few outcome indicators)

Health Indicators

Supply

1. Health centres per area
2. No. of service delivery points
3. No. of hospitals per area
4. Pharmacies per area

Coverage

1. Total surf. area/ No. of hospitals per area
2. Municipalities with hospitals per area (%)
3. No. residential centres / N. of pharmacies
4. No. of general practitioners/ 1,500 area residents

Quality

1. No. of service delivery points with basic services (%)
2. N. of service delivery points with a minimum of 10 services (%)
3. Pharmacies with booking services/ Total pharmacies

Health Service Indicators

Health Service Indicators		Peri-urban	Intermediate	Remote	Urban	Umbria	Perugia
Supply	Total Regional Surface Area (%)	30.6	28.7	27.7	13.0	100	5.3
	No. of Municipalities (%)	32.6	30.4	28.3	8.7	100	-
	Total Population (%)	26.3	17.3	13.7	42.8	100	18.1
	No. of Hospitals	6	4	4	4	18	2
	Health Centres (%)	38.2	20.5	17.9	33.3	100	115.4
	No. of Service Delivery Points (%)	30.5	78%		22.0	100	8.1
	Pharmacies (%)	24.8	20	18.8	36.4	100	14.4
Spatial Coverage	Total Surface Area/No. of Hospitals	430.9	607.6	585.1	274.8	8456	449.9
	% of Municipalities with Hospital	20	14	15	50	-	-
	Total Surface Area/No. of Pharmacies	41.7	48.6	49.8	12.1	33.8	12.5
	No. of Municipalities with ICT : SAT + ADSL (%)	46.7	25.0	11.5	75.0	32.6	100
Quality	No. of Services Delivery Points with Basic Services/ N. of SDP (%)	42.1	29.0	25.9	-	-	-
	No. of Services Delivery Points with a minimum of 10 services/ N. of SDP (%)	31.6	22.6	18.5	-	-	-
	No. of Pharmacies with Booking Services /N. of Pharmacies (%)	69.4	54.0	76.6	64.5	76	100

Health Services: Survey Results

- ❑ 78% of service delivery points are based in rural areas! (accounting for 80% of total regional surface area; 91% of municipalities and 57% of total population)
- ❑ Virtually all municipalities have a pharmacy and 76% of those located in remote rural areas have booking services
- ❑ But 50% of municipalities located in urban areas have a hospital, compared with 20% in peri-urban rural areas and 15% in less easily accessible rural areas
- ❑ There is one hospital for each 275 square km in urban areas compared with 541 square km in rural areas ...
- ❑ Quality issues: there is 1 doctor for each 1500 people in rural areas, compared with 1.4 in urban areas
- ❑ 46% of service delivery points provide basic services in peri-urban rural areas, but only 26% in remote rural areas

Focus on Service Supply and Accessibility for the Elderly

- 26.5% of people living in rural areas are over 65 (compared with 22% in Umbria as a whole)
- There are about 30 general practitioners for each 10,000 people over 65 in rural areas, and 42 in urban areas
- 7% of total elderly people are home health assisted in urban areas, but less than 6% in rural areas (4.1% in remote areas)
- Very small presence of nursing homes in the region (0 in remote areas)
- With a share of 58.8 of total elderly population, rural areas have, in average, 55% of pharmacies with booking services (the more remote ones are particularly well served)

Child-Care Indicators

Supply

- 1. No. of public/private nurseries per area**
- 2. No. of supplementary nursery services per area**
- 3. No. of available posts per area**
- 4. Total child-care services per area**

Accessibility

- 1.No. of public/private nurseries/children 0-3 years**
- 2.No. of supplementary nursery services/children 0-3 years**
- 3.No. of available posts/children 0-3 years**

Quality

- 1.No. of nursery with full-day services/total nursery**
- 2.Supplementary services/child care services**
- 3.No. meals supplied/no.enrolled children**
- 4.Nursery serving organic meals/total nurseries**

Child-Care Services: Survey Results

- ❑ Only 35% of available posts in nurseries are in rural areas, where 54% of the Region's children aged 0-3 live;
- ❑ 41% of total public nurseries are based in rural areas and only 28% of private ones (they are almost absent in remote rural areas)
- ❑ One nursery for each 195 children in urban areas: this ratio doubles in rural areas!
- ❑ Umbria provides child-care services to only 11% of total children aged 0-3 (15% in urban areas and 7% in rural areas)!
- ❑ Accessibility is a major issue: 1 nursery for every 245 square km in rural areas compared with 1 every 18 square km
- ❑ 60% of peri-urban rural municipalities do not have a nursery (80% in remote areas)

Quality Indicators

- Almost all nurseries supply services until 4:30 pm
...
- But there are about 20 trainers for each 100 available posts in urban and peri-urban areas compared with 15 and 13 in intermediate and remote rural areas
- If 1 trainer for each 5 children is the minimum standard, then deficit of about 30% of trainers in less accessible rural areas
- About 70% of total nurseries have an internal cafeteria (cooked meals)
- No supplementary child-care services in rural areas

Considerations

- ❑ *Properly distributed governance of health services across Umbria ...(with a per capita expenditure in line with Italy)*
- ❑ *But two open questions: accessibility to hospitals for elderly people and "quality" issues ...*
- ❑ *For child-care services the Region does not provide adequate services (even if it is performing better than the Italian average!). This issue becomes chronic in rural areas*
- ❑ *Low per capita child-care expenditure (both in Umbria and Italy): Problem of "voice"*

Sound territorial analysis is KEY to improving development policies for rural areas, and to designing development policies that can effectively complement general policies



***Thank You for Your
Attention***

In depth analysis of the accessibility indicator

Accessibility indicator  $IA_i = IAC_i + IAT_i$

$$IAC = \sum_{i=1}^n a_i [(X_i * 90km/h) + (Y_i * 70km/h)]$$

$$IAT = \sum_{i=1}^n a_i [TR + TT]$$

$$TR = \sum_{i=1}^n a_i [(X_i * 90km/h) + (Y_i * 70km/h)]$$

$$TT = \frac{\sum_{i=1}^n t}{f}$$