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## **CHAPTER 1**

# The INTERREG project "Polydev"

#### 1.1 Presentation of the project "Polydev"

The main goal of the project "Polydev" (Common best practices in spatial planning for the promotion of sustainable polycentric development), on a transnational scale, is the promotion of spatial and territorial planning themes in order to outline a common and integrated strategy for polycentric development within the member states of the CADSES areas according to the regulations outlined in the ESDP (European Spatial Development Perspective).

The project involves the study of existing territorial relations between the rural/natural areas and the urban settlements. The project is also linked to the ESDP priority as regards the strengthening of decision makers' abilities to administrate the main territorial issues and it is based on the cooperation among the various local and regional governments and the comparison of the various territorial situations of the countries involved.

The project which lasts 2 years, supported by a transnational partnership of 11 subjects, aims at facing problems linked to the irrational expansion of urban and productive settlements, the reduction of natural areas and the modified landscape, the reduction of biodiversity especially as regards the use of uncontrolled land and the deterioration of the populations' environment and quality of life.

The CADSES area, from the geographical as well as the functional point of view, acts as an interface between the two sides of the European continent characterised by its profound differences in institutional organisations, socio-economic aspects and the territorial and environmental planning and it makes room for the more complex and crucial European cooperation.

The regions involved in the project are characterised by great differences in terms of growth, occupancy, population density and developmental paths.

Furthermore, there is a significant difference in the area as regards the critical state of the environment, the landscape and the natural and cultural heritages.

The main objectives of the project are:

- to guide the territorial development policies towards the European model according to the ESDP (European Spatial Development Perspective), ESPON (European Spatial Planning Observation Network) and CEMAT (European Conference of Ministers responsible for Regional Planning) so as to avoid excessive polarization around a few centres and the marginalization of the suburban areas guaranteeing economical and social environmental sustainability for activities necessary for territorial management;
- to create equal conditions of accessibility according to the infrastructure for the mobility and the diffusion of awareness;
- to manage the natural and cultural heritage in a balanced manner, being a resource for economic and social development.

The activities involved in the project are divided into the following topics:

#### Preliminary analysis

Territorial planning experiences, obtained from the partners' areas, have been collected. A reference framework of the national and regional communitarian laws and guidelines regarding the management and the use of the territory has also been drawn up. The analysis has made the identification of territorial strengths and weaknesses possible.

#### Polycentric territory planning models

The principles necessary for the development of a polycentric development model have been defined on the basis of the collected data. The formulated principles were inspired by the guidelines of the European ESDP and CEMAT planning documents and the outcomes of other transnational cooperation projects carried out in the area and those related to this subject (CON-SPACE, VISION PLANET, ESTIA, etc.). These principles are the basis of the drawn up territorial planning model, on a transnational scale, and its application in the target areas chosen by the partners makes it possible to promote a rational use of the territory and a process of sustainable territorial development in the long term.

#### Pilot actions

This activity involves the partners' choice of a target area according to the criteria and the objectives defined in the previous activity. Consequently, an evaluation of the territorial plan-

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ning will be carried out within the selected target area according to the principles and the objectives identified by the ESDP and the CEMAT.

The Marche Region has chosen the territory of the new Province of Fermo as its target area for the analysis. Specifically, the objective of the analysis is that of providing an interpretation of the spatial organization of the economic process in the area and to identify the existing spatial development routes and the situation in the medium-long term. This work will permit to predict the situation of the spatial organization in 10 years time in the case no intervention is carried out. The scenario will be evaluated under the three aspects of polycentrism, environmental sustainability and the preservation of the landscape.

The potential development centres, the tools and the planning strategies useful for sustainable polycentric development of the analysed local situation were identified on the basis of the predictions.

This phase also involves moments of territorial activities so as to transfer the methodology and the results of the project and to improve the policy makers' knowledge as regards the European objectives of sustainable spatial development.

5 Countries and 11 Partners are involved in the project:

#### Italy

Veneto Region (Lead partner)

- Marche Region
- Province of Gorizia

#### Slovenia

- Regional Environmental Center for Central and Eastern Europe (R.E.C.)
- Development Agency of Idrija and Cerkno (Development Agency of Northern Primorska Region)
- Regional Development Centre Koper

#### Slovak Republic

- Slovak University of Technology in Bratislava
- Faculty of Architecture, Regional Environmental Center for Central and Eastern Europe (R.E.C.)

#### Greece

- Development Company of Magnesia (ANEM)
- Prefecture of Fthiotida

#### Bulgaria

• Municipality of Sofia - Sofproect Master Plan

The internet website of the project is: www.polydev.org

# 1.2 Territorial planning from the "European" point of view

#### ESDP

With the adoption of the development European space scheme (SSSE or ESDP - Europe-

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For the development of the Union the ESDP has the objective of obtaining a balanced and sustainable territory by strengthening economic and social cohesion.

In order to obtain greater coherence in the territorial public policy approach, it is firstly advisable to develop an integrated and multi-sectorial approach with a strong spatial dimension when it is being defined. In other words, public policies must make greater use of the spatial categories within the traditional sectorial policies.

Many European, national and local policies already mark off areas eligible for particular funding and predict certain conditions for others, such as the mountain areas and the sites of the network Natura 2000.

The intermediary objectives to obtain a balan-

ced and sustainable territory might be summarized as follows:

- 1. to develop a polycentric and balanced urban system and strengthen the relations among the urban and the rural areas overcoming dualism;
- to promote equality in accessing infrastructures and knowledge to support polycentric development;
- 3. to promote the preservation of natural and cultural heritage.

A territory development perspective restricted to the polycentric development of each of the metropolitan regions does not pursue the goal of maintaining the existence of a variety of urban and rural areas. For this reason the objective to be achieved is that of obtaining a polycentric organization all over the territory of the entire Union, determining a progressive urban hierarchy.

It is also fundamental to promote cooperation and complementarity among the regions and cities, increasing the synergies and overcoming the disadvantages of competition.

Complementarity must not be focused only on economic cooperation but also on all the other urban functions: culture, education, knowledge and social infrastructures.

Those places, such as in the Marche Region, where it is possible to observe phenomena of territorial coalescence among neighbouring Communes which, in fact, lead to the setting up of "new cities", must give preference to voluntary collaboration forms. These types of colla-

boration might permit the overcoming of the existing administrative borders such as to avoid lack of perception or the underestimation of economic, environmental and social imbalances and to permit the planning which takes the correct territorial situation of the urban phenomenon into consideration.

In the less densely inhabited areas and those that are economically weak, the creation of networks of small villages might represent the only possibility to maintain economic activities and services which would otherwise be sustained by the individual villages.

The EU territories can only be competitive if the cities have sufficient economic and enticing potential.

The main actions to be undertaken in order to increase such potential are:

- Control of the physical expansion of the villages and cities.
- Maintain a balanced variety of social functions and groups.
- Maximize the use of resources, especially energy, waste and water.
- Improve accessibility by providing eco-efficient transport. The accessibility to a city has an enormous impact on the quality of life, the environment and economic performances
- Preserve and develop the natural and cultural heritage.

Moreover, the local Authorities should pursue the objective of a "compact city", which means a city that is spread over short distances, reducing the movements necessary to meets the daily production, exchange and consumption needs. The future of the city also depends on the fight against poverty, social exclusion and the loss of typical urban functions. For this purpose, the actions that must be promoted are the reclaiming of degraded areas, the promotion of high quality urban areas, guaranteeing access to basic services in urban areas (open spaces, education, health services and urban parks) for all citizens. The ESDP also suggests a new approach as regards relations between cities and rural areas. Rural areas used to be considered as homogeneous areas. Today, even though they are simply defined as areas with low population densities and high use of land for agricultural purposes, it is known that the rural areas greatly differ from one another. Therefore, the development of strategies that include rural areas must take into consideration the local features of each area. Moreover, another characteristic that must be taken into consideration is the insignificance of an analysis that is carried out on urban areas and rural areas separately.

Instead, they should be treated in an integrated manner taking into consideration the various relations and the existing interdependency. The relations between urban and rural areas should be based on a series of voluntary cooperation and coordination agreements, in which participants have equal dignity and are aware that every area is reciprocally responsible for the deve-

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lopment of the other.

CEMAT (European Conference of Ministers responsible for Regional Planning)

While the ESDP deals only with the territory of the European Union, the European conference, held in Hannover in 2000, for ministries responsible for territorial planning, has prepared guidelines for the territorial planning of the entire European continent.

The objectives of the "Guidelines for the sustainable spatial development of the European continent" aims at supplying the contribution of CEMAT to the social cohesion as one of the main needs of the entire Europe, promoting a sustainable and balanced regional development. The guidelines also emphasize the importance of reaching acceptable standards of quality of life as a precondition for the strengthening of democratic structures and the international competitiveness of Europe.

#### Guidelines:

- promote territorial cohesion through a balanced social and economical development of the regions and better competitiveness;
- encourage the development produced by the urban functions and improve the relationship between cities and rural areas;
- promote accessibility, improving links between medium-small villages and the main transport articulation;
- develop access to information and knowled-

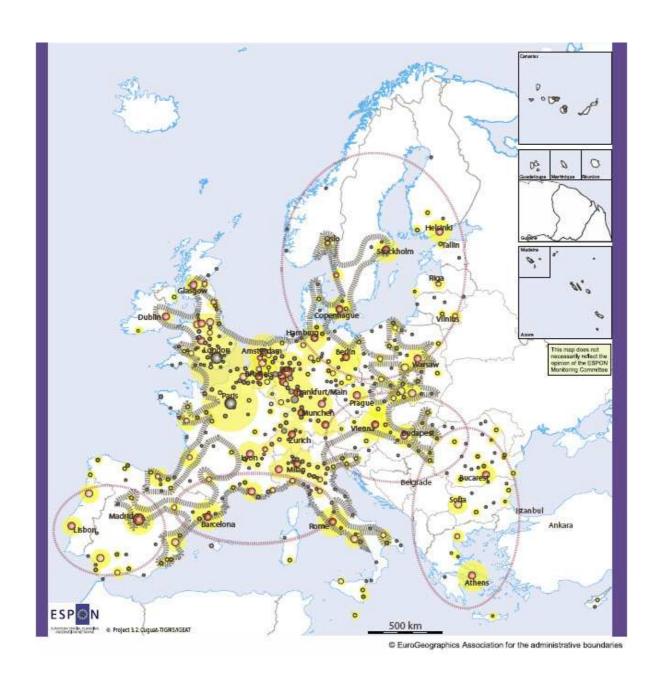
- ge that, with the raising of the information society, the whole territory may be competitive and may improve its links with the global economy;
- promote spatial planning which aims at deleting or lighten environmental imbalances;
- increase the protection of natural heritage;
- appreciate culture heritage as a development factor;
- develop the production of energy, maintaining energetic safety, giving priority to the
  development of renewal energy sources and
  a more efficient use of non renewable ones;
- promote sustainable tourism;
- reduce the risk of natural disasters restricting the extension of damage and building less vulnerable structures.

#### **ESPON**

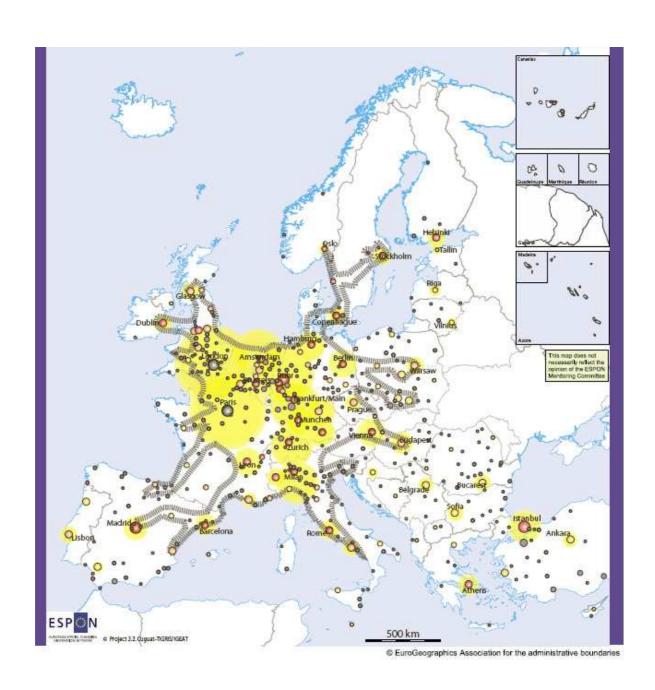
The European Spatial Planning Observation Network has a research programme on territorial development promoted by the European Commission with the objective of establishing a permanent observation system for the European territory, rendering cooperation and complementarity among state members, the Commission and the research institutions systematic. Moreover, it focuses on the technical and scientific functions, the applications and the periodical updating of the ESDP.

Comparising scenarios: spatial structure and urban hierarchy in 2030

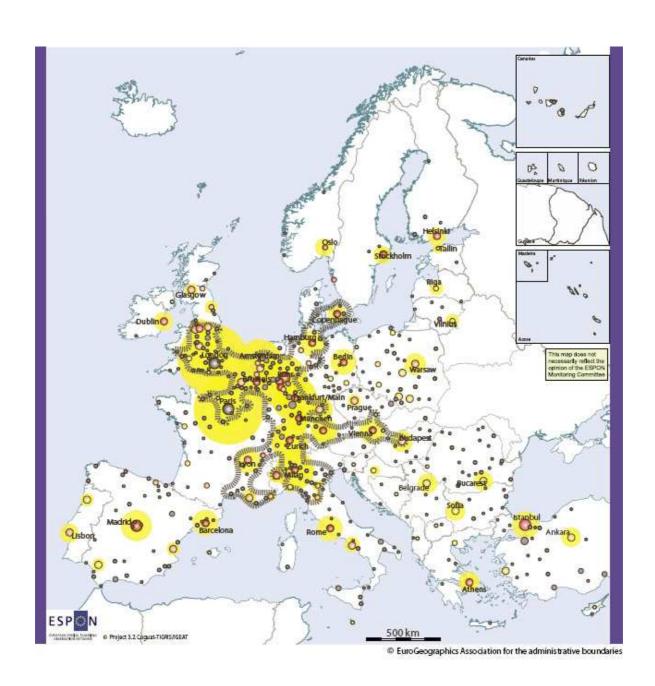




Cohesion-oriented scenario



Trend scenario



Competitiveness-oriented scenario

## **CHAPTER 2**

# Spatial development and polycentrism

#### 2.1 Introduction

In recent years - in particular since the publication of the European Spatial Development Perspective (1999) - the European Union's regional policy has undergone a profound change. The 4th Report on Economic and Social Cohesion (2007) documents this change and can be taken as the starting point towards the implementation of the Strucutral Funds 2007-2013.

Firstly, in EU regional policy environmentally sustainable development - in particular, the sustainability of the European urban systems - has turned itself into an objective of overriding importance. Secondly, the concept of 'spatial development' has been integrated with that of 'territorial development', in order to stress the relevance of 'cohesion' and 'sustainability' in the 'social preference function' of the European Union. Thirdly, maintaining and promoting 'urban polycentrism' have been acknowledged as an 'intermediate objective' functional to territorial cohesion and to learning and innovation - as well as to economic development in Europe.

The new approach to regional policy has set in motion an encompassing reflection on the actual and potential dis-equilibria of the European territory. It is necessary to stress that the interpretation of the European territory is being conducted from a bottom-up and a top-down perspective. Indeed, local governments are promoting and actively participating to formulating more appropriate interpretations of the local territory. Against the background of the enlarge-

ment process, and the increasing complexity of the EU territory, local governments are asked to feel responsible not only for proposing and implementing projects and policies but also for interpreting dis-equilibria and potentialities of their territories relying on the conceptual framework elaborated by the European Union.

# 2.2 The polycentric organisation of the Marche Region

The pattern of spatial and economic development of the Marche Region has attracted much attention in Italy in recent decades. The whyquestions it has raised are indeed theoretically challenging and also relevant from a policy perspective. The so called 'Marche Region model' has been often indicated as a model from which one could draw important policy lessons. It is considered a 'paradigmatic case of spatial development' - for the peculiar kind of 'light polycentrism' which emerged. It is also considered a 'paradigmatic case of regional development' - for the fact that its development trajectory can be classified as 'purely endogenous'.

A more balanced view on the pattern of local development of the Marche Region might let emerge the significant social costs associated to it. It might also lead to a less positive assessment of the development potential of the Region's economy. Yet, the model deserves to be closely observed. Particularly now that 'territories' which have practically no chance to com-

pete for 'exogenous development', by attracting foreign direct investment, may want to try to promote 'endogenous development'.

The Marche model can prove of particular interest for territories belonging to the CADSES area - territories which, for different reasons, are deemed - as it was the Marche Region in the Fifties - to loose the competition for 'exogenous development' and have to find within their own territories - namely, within their communities, economies and geographical spaces - the motivation and resources to improve their welfare. Nowadays, after five decades of industrialisation and development, the Marche Region has a polycentric organisation based on eleven (11) 'functional urban areas' (FUAs). Two questions are to be noted regarding these 11 FUAs. Firstly, these urban poles are not institutionalised. They are 'sets of contiguous towns' conceptualised, within the model of urban polycentrism here suggested, as a single integrated 'local systems. Secondly, in this model the concept of FUA is applied to 'urban poles' with a population within the range 50,000-250,000.

Territorial coalescence, generated by the pattern of relational and spatial development experienced in this Region - but also in practically all the region in Central Italy - is what has turned sets of contiguous towns into a single territorial units.

What we may want to call the 'density of relational flows' among the individuals belonging to contiguous towns may increase over time driven

by various factors. Moreover, in the Marche Region one can also observe that clusters of contiguous towns, as a consequence of the specific pattern of spatial development, have physically melted into each other. By looking at the spatial organisation it would be hardly possible to distinguish between different institutional spatial domains. Social integration and spatial integra-

tion have led to the formation of 'functional urban areas' in the Marche Region.

The scale at which typical 'urban phenomena' manifest themselves is much lower and this is a why-question whose explanation has important implications for the CADSES area.

The 'functional urban areas' of the Marche Region

| Local systems                       | Population abs. values | Population % values | Employment abs. values | Employment % values | Density inhabitants/kmsq | Territory<br>kmsq | Municipalities |
|-------------------------------------|------------------------|---------------------|------------------------|---------------------|--------------------------|-------------------|----------------|
| Ancona                              | 210,729                | 14.3                | 89,449                 | 15.5                | 484                      | 436               | 13             |
| Civitanova Marche                   | 136,538                | 9.3                 | 87,897                 | 15.2                | 416                      | 328               | 10             |
| Pesaro                              | 116,179                | 7.9                 | 55,441                 | 9.6                 | 403                      | 288               | 7              |
| Macerata                            | 89,964                 | 6.1                 | 35,511                 | 6.1                 | 219                      | 411               | 9              |
| S. Benedetto del Tronto             | 86,463                 | 5.9                 | 31,356                 | 5.4                 | 437                      | 198               | 7              |
| Ascoli Piceno                       | 76,293                 | 5.2                 | 26,599                 | 4.6                 | 259                      | 295               | 7              |
| Fano                                | 74,413                 | 5.1                 | 29,391                 | 5.1                 | 369                      | 201               | 6              |
| Fermo                               | 69,712                 | 4.7                 | 24,936                 | 4.3                 | 260                      | 268               | 12             |
| Jesi                                | 62,849                 | 4.3                 | 26,956                 | 4.7                 | 280                      | 224               | 8              |
| Senigallia                          | 60,820                 | 4.1                 | 21,771                 | 3.8                 | 223                      | 273               | 6              |
| Fabriano                            | 54,981                 | 3.7                 | 27,444                 | 4.7                 | 87                       | 628               | 6              |
| Total local systems                 | 1,038,941              |                     | 456,751                |                     | 293                      | 3,551             | 91             |
| Marche Region  Total local systems/ | 1,470,581              | 100.0               | 578,273                | 100.0               | 151                      | 9,750             | 246            |
| Marche Region                       | 70.6                   |                     | 79.0                   |                     |                          | 36.4              | 37.0           |

Source: ISTAT data - Population Census 2001; Industry and Services Census 2001

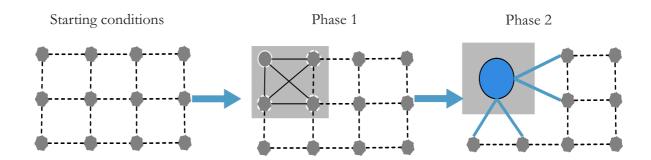
## 2.3 The Marche Region: a model of polycetrism

The relationships between the urban poles are anyway a constitutive element of the concept of polycentrism. Therefore, a close glance to the 'network dimension' seems to be necessary. Firstly, the network among the FUAs of the Marche Region is asymmetric: between pairs of poles there are relationships which are very dif-

ferent in strength and nature. Secondly, the network is incomplete. 'Proximity' is very important in generating stable relationship. But there are FUAs between which there is practically no relationship although they are not very distant in space. The figures on page 23 and 24 are a conceptualisation of the strong and less strong relationships among the FUAs of the Marche Region.

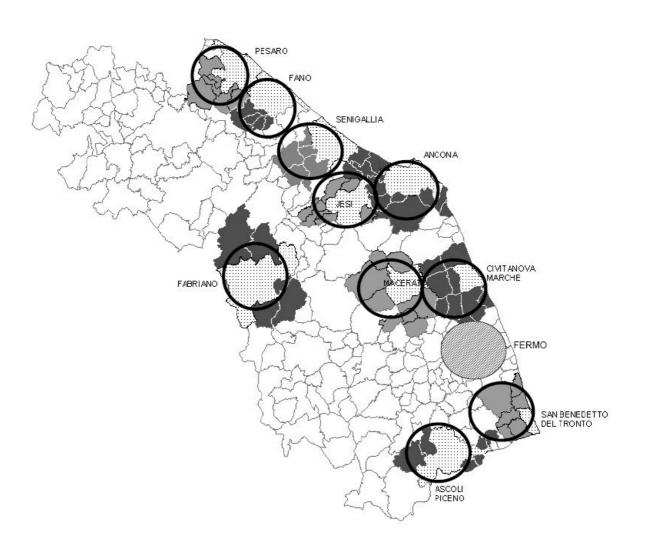
Urban polycentrism is a phenomenon one can

#### Scheme of the coalescence process



FUAs has emerged through a process of territorial coalescence. The first step is an intensification of the relationships among clusters of contiguous towns. The second step is that the density of (spatial and 'exchange') relationships has increased so much to make the different part not distinguishable - both from a spatial and relational perspective. In no case territorial coalescence has given rise in the Marche Region to new political entity - neither one can observe strong forms of political and administrative cooperation.

"Functional urban areas" in Marche Region



observe when in a given territory there is a set of 'urban poles' nicely distributed in space and, also, a matrix of 'relationships' between these 'urban poles'. On discussing polycentrism the focus ought to be, firstly, on the internal social, economic and spatial structure of the urban poles and on the relationships between the urban poles. Correctly understood polycentrism is a relationship between a set of urban poles (FUAs) and a territory. The nature and degree

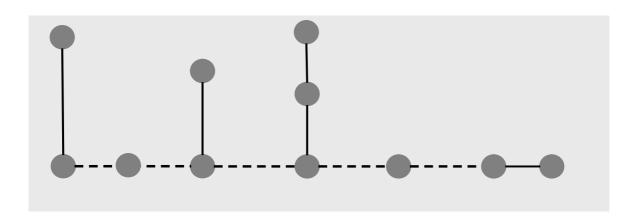
of empirical manifestation of polycentrism has to be defined with respect to a given territory. The Figure on page 24 is a schematic representation of the spatial distribution of the urban poles - here identified with the functional urban areas'. It is quite clear that in this region there is a polycentric urban organisation. The 11 urban polesidentified are nicely distributed in the territory.

Comparing the current situation with the 'initial

Rates of changes (1951-2001) in the FUAs

|                          | Population   | industrial<br>employment | Manufacturing<br>employment | Private services<br>employment |
|--------------------------|--------------|--------------------------|-----------------------------|--------------------------------|
| Ancona                   | 31.6         | 69.7                     | 67.1                        | 175.1                          |
| Asceli Picene            | 21.8         | 221.2                    | 224.7                       | 216.3                          |
| Civitanova Marche        | 80.4         | 416.5                    | 425.1                       | 489.6                          |
| Fabriano                 | 8.8-         | 184.3                    | 348.6                       | 143.0                          |
| Fano                     | 53.5         | 401.6                    | 394.1                       | 372.1                          |
| Fermo                    | 22.8         | 319.9                    | 352.0                       | 24 0.5                         |
| Jesi                     | 18. <b>0</b> | 149.1                    | 143.2                       | 233.0                          |
| Macerata                 | 16.6         | 215.5                    | 233.9                       | 244.0                          |
| Pesaro                   | 59.1         | 475.8                    | 539.4                       | 383.2                          |
| San Benedetto del Tronto | 57.3         | 285.5                    | 269.8                       | 387.9                          |
| Senigallia               | 7.6          | 210.1                    | 206.1                       | 264.9                          |

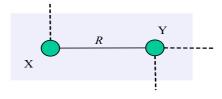
The spatial distribution of FUAs in the Marche Region



conditions' (1950) the development trajectories of the FUAs have confirmed the distribution prevailing at that time. Each functional urban area we observe nowadays in the Marche Region revolves around a pivot communes that was already in the Fifties a key settlements - and among the largest in the Region. Territorial development has been clearly path-dependent in the Marche Region

In principle, one could have observed a rather different pattern, one with most of the increase in population and industrial employment concentrated in a few poles. It is important to stress that one could have observed a strong concentration process of human activity rather that the emerging of a polycentric organisation.

Relationship among FUAs



X,Y = urban poles (functional urban areas) R= relationship among the FUAs

#### 2.4 Rural areas

The Marche Region is a 'small' region and, moreover, its FUAs are nicely distributed over the territory. This feature has not avoided massive emigration from the rural areas and from the small towns and villages of the Apennines.

The phenomenon of 'desertification' of rural areas is not always associated with the development of large urban poles. It may take place – and has actually taken place – in territory like that of the Marche Region, where urban poles are relatively small and not exceedingly distant from rural areas.

A well-behaved urban polycentrism may solve some territorial dis-equilibria. Yet it does not solve the problem of finding an equilibrium between urban and rural areas within the same region.

#### 2.5 Conclusions

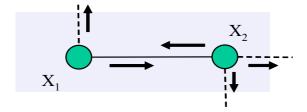
In order to improve the quality of the regional policies in the Marche Region it is necessary to up-grade the interpretation of the territory and of its dynamics. By moving from the paradigm of 'urban polycentrism' the first step is to identify the 'local systems' and, then, select those that qualifye as 'urban systems'. The second step is to compare the evolutionary trajectory of the local system at social, economic, spatial and environmental level. The third step is to assess the development trajectory one observes in

the territory on the basis of the framework guiding principles, objectives, instruments - of the new EU regional policy.

In the following chapter the analysis will focus on a part of the Marche Region's territory, which is in the process of being transformed in the Province of Fermo.

Urban polycentrism, especially when urban poles are not quite distant one from the other, may easily develop a sort of spatial disease - which manifested in Italy quite virulently in Veneto and Lombardia and also in Marche. I refer to a kind of spatial development that generated a diffusion of settlements along the transportation axis connecting the FUAs and in general in places which are barycentric to two or more FUAs. One can observe the paradoxical phenomenon of a dispersed city generating urban sprawl! The alternative model, one in which FUAs grow in a more compact way, is preferable for different reasons: lower use of land and lower social costs.

The sprawling process in the 'connecting areas' in-between FUAs



### **CHAPTER 3**

## Territorial organisation and paths of economic development in Marche Region A case study

#### 3.1 Introduction

The target area examined here comprises the territories of 40 contiguous municipalities located in the southern part of the Marche Region. It has a population of about 166,000 inhabitants (2001) and covers a territory of 863 km<sup>2</sup>. In the next few years this area should assume the political-administrative status of a "Province".

On the background of the objectives of the PolyDev Project this territory is of great interest with regards to both the big changes in its spatial organization which have manifested over the past decades and some phenomena of environmental disruption. Over the past decades this area has followed an accelerated industrial trajectory.

This Report has the following objectives:

- 1. to put forward an interpretation of the spatial organization of the economic process;
- 2. to identify the spatial development trajectory followed in the past decades;
- 3. to identify a medium-long term territorial scenario;
- 4. to assess the scenario without intervention regarding the issues of polycentrism, environmental sustainability and landscape conservation.

#### 3.2 Territorial organisation

#### 3.2.1 Introduction

The territory of the target area shows features similar to those of the rest of the territory of the Marche region - and, in general, of Central Italy. In terms of both initial conditions - territorial organization at the beginning of the 1950s - and economic development trajectory over the past five decades, it does not differ from the rest of the Marche Region. On the background of a big political-administrative partition (40 Municipalities), the marked reduction in human activities in some municipalities has been accompanied by a strong demographic and social

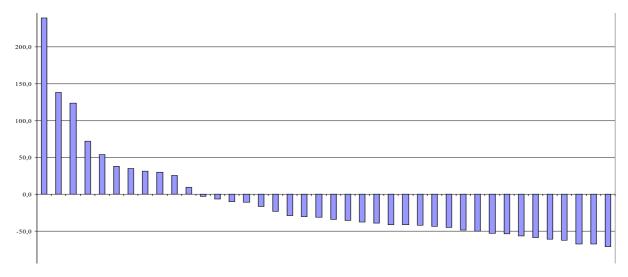
growth in others. Moreover, the phenomena of decline and growth have manifested in terms of clusters of municipalities.

After analysing the territorial dynamics in terms of municipalities, this chapter tackles the issue of the formation of the local systems - a central issue in the analysis of the Italian territory.

#### 3.2.2 Some basic data

The target area comprises 40 municipalities of very small size: 75% of them have a population below 3,000 inhabitants. As to the remaining ten municipalities, the biggest - Fermo - has a population of a little more than 35,000 inhabitants. The ten major municipalities

Population growth rates - 1951-2001



Source: ISTAT data - Population Census 1951-2001

concentrate 76.4% of the total population - and 81% of the total employment - although they cover less than 50% of the total territory. Most of the major municipalities are contiguous and are located in the Eastern part of the target area. It shows the typical polycentric organization of Central Italy, with a settlement system which originates from agricultural and pastoral activities.

As in Central Italy, in the Fifties - with the beginning of the Italian industrial take-off - the territorial organization of this area has undertaken a big change in the classic form of a very strong concentration of human activities in some poles. Among the declining municipalities in terms of population, 16 have recorded negative growth rates higher than 40%. If one considers that in most cases small size municipalities have reduced their populations it follows that in the target area urban polycentrism can not take shape at a municipal level but at the level of "local systems" or "functional urban areas", namely in terms of agglomerations of contiguous municipalities.

The average population density of the area is 192 inhabitants/km<sup>2</sup>. Eight municipalities show

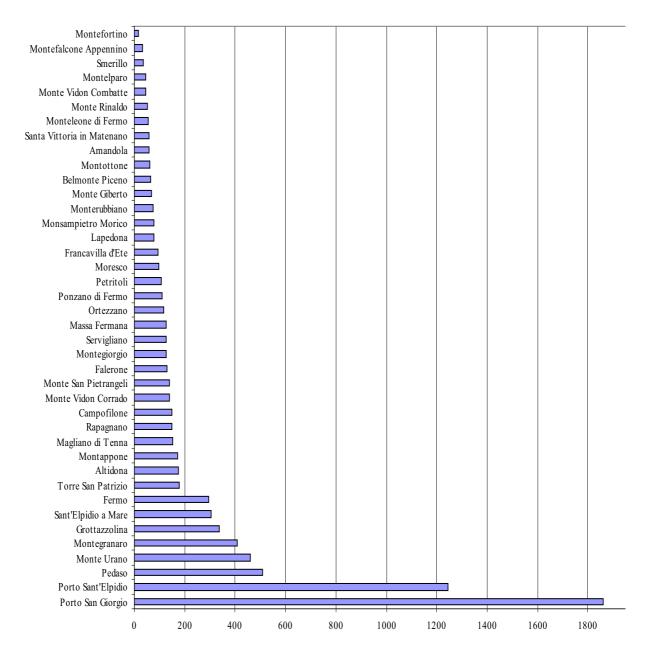
#### Communes with 3,000 inhabitants and over - 2001

| Municipalities      | Population abs. values | Population % values | Employment abs. values | Employment % values | Density inhabitants./kmsq | Territory<br>kmsq |
|---------------------|------------------------|---------------------|------------------------|---------------------|---------------------------|-------------------|
|                     |                        |                     |                        |                     |                           |                   |
| Fermo               | 35,502                 | 21.4                | 13,647                 | 21.3                | 296                       | 120               |
| Porto Sant'Elpidio  | 22,752                 | 13.7                | 9,991                  | 15.6                | 1,244                     | 18                |
| Porto San Giorgio   | 15,869                 | 9.5                 | 5,168                  | 8.1                 | 1,860                     | 9                 |
| Sant'Elpidio a Mare | 15,332                 | 9.2                 | 6,602                  | 10.3                | 304                       | 50                |
| Montegranaro        | 12,860                 | 7.7                 | 6,278                  | 9.8                 | 410                       | 31                |
| Monte Urano         | 7,802                  | 4.7                 | 4,438                  | 6.9                 | 461                       | 17                |
| Montegiorgio        | 6,667                  | 4.0                 | 2,670                  | 4.2                 | 128                       | 52                |
| Amandola            | 3,969                  | 2.4                 | 957                    | 1.5                 | 57                        | 70                |
| Falerone            | 3,176                  | 1.9                 | 1,010                  | 1.6                 | 129                       | 25                |
| Grottazzolina       | 3,129                  | 1.9                 | 1,214                  | 1.9                 | 337                       | 9                 |
| Total               | 127,058                | 76.4                | 51,975                 | 81.0                |                           | 401               |
| Province of Fermo   | 166,218                | 100                 | 64,172                 | 100                 | 193                       | 863               |

Source: ISTAT data - Population Census 2001; Industry and Services Census 2001

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### Population density by municipalities - 2001



Source: ISTAT data - Population Census 2001

values higher than the average. Extremely high values are recorded for the municipalities of Porto Sant'Elpidio and Porto San Giorgio, both localized along the Adriatic coast which is the critical area in terms of sustainability of human processes. The small municipalities, most of them localized in the hilly and mountainous part of the territory of the target area, show lower than average values and, in many cases, extremely low ones.

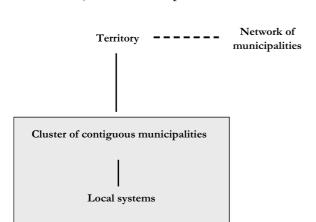
# 3.2.3 Local systems: the new territorial units for analysis

Since the Eighties, in Italy analysis of the territorial dynamics has taken into consideration not the single municipalities but rather functional urban areas labelled "local systems". Already at the end of the Eighties, ISTAT (Italian Institute of Statistics) had drawn the first maps of the Italian territory. In the same period regional analysts and researchers had begun to focus on the trajectories of spatial and economic

development of the new units for analysis.

The procedures followed to identify the local systems have been diverse. But thisis not a significant issue in this context. More interesting is to observe that many analytical categories utilized to analyse the Italian territory are local systems, that is clusters of contiguous municipalities: "industrial districts", "functional urban areas", "metropolitan areas".

In other European countries - Germany, for example - the territorial integration among contiguous municipalities has led - and is still leading-toachange in the political-administrative partition: in general, to the creation of new units of government which comprise the previous territorial units. This has not occurred in Italy, although the phenomenon of territorial coalescence has manifested more intensively than in other European countries. It follows the necessity to abandon the municipalities as units for analysis and assume instead the local systems. However, it is at the level of the entire cluster that the hierarchy of the focal points to



Since the Eighties, in Italy territory has not been conceptualised any longer as a network of municipalities but rather as a cluster of contiguous municipalities labelled "local systems".

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which the circadian cycles of the individuals gravitate is recognizable.

Of course, as ought to be expected, the clusters that have been identified - independently from the procedures adopted - differ significantly in terms of size (population, employment, territory), social and demographic structure (activity rate, ageing rate) and economic structure (sector composition of the economy).

It has to be stressed - and this is an aspect of great importance for the target area under consideration - that the territorial organization is still in transition in many Italian regions. This means that the clusters of municipalities tend to change as a consequence of changes in the territorial interdependences among municipalities.

#### 3.2.4 The local systems in the target area

The following four local systems have been identified - indicated with the name of the corresponding pivot municipality (the municipality where the "central places" of the local system concentrate and which invariably coincides with the municipality that at the beginning of the Fifties - and still today - was the biggest municipality of the cluster):

- 1. 'Civitanova Marche'
- 2. 'Fermo'
- 3. 'Montegiorgio'
- 4. 'Comunanza'.

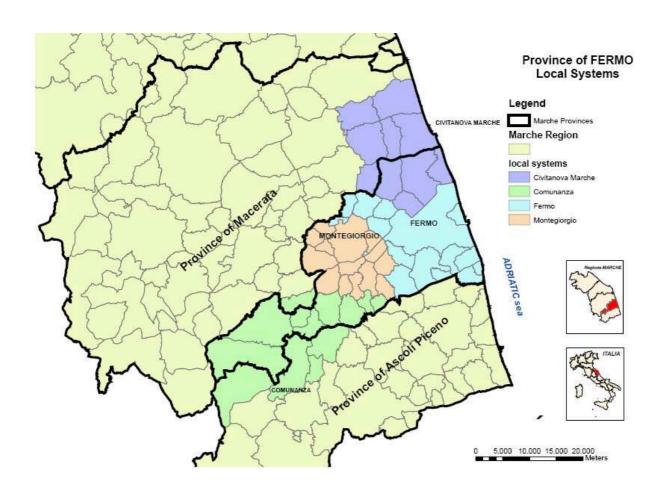
The first aspect to highlight is that in two cases

- the local systems of 'Civitanova Marche' and 'Comunanza' - the corresponding pivot municipalities do not belong to the target area, being located outside its territory. This means that some of the municipalities comprised in the target area belong to local systems whose territories are partly located in the target area. It is useful to remember that the target area corresponds to the territory which should assume the political-administrative status of a "Province" within a few years. Therefore, from the point of view of the territorial interdependences the target area is not selfcontained. (However it is important to stress that the territorial organization of this area is still in transition and within some years changes in the territorial interdependencies among municipalities may occur leading to a different clustering.) Among the local systems examined here, that of 'Montegiorgio' is the weakest in terms of gravitational force - also because of its limited size. Its fusion with the contiguous local system of 'Fermo' can be expected. The other three local systems show a high degree of interdependences, with the exception of some small municipalities whose gravitational fields are uncertain.

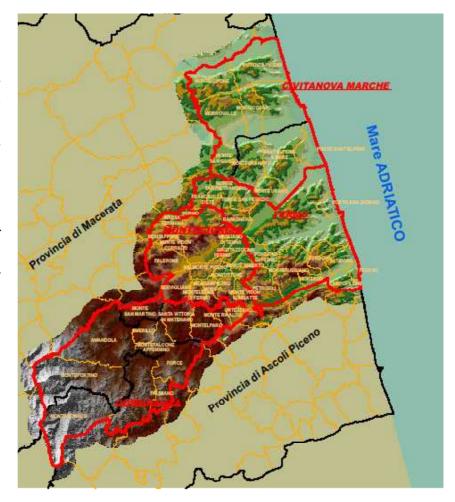
Turning to the issues of the changes in the territorial interdependences among municipalities and their possible re-clustering one should note that the four local systems are different as far as their stability is concerned. The local systems of the target area: some basic data - 2001

|              | Population | Area<br>square Km | Density<br>Inhab./sq. Km | Total employment | Number of municipalities | within the province |
|--------------|------------|-------------------|--------------------------|------------------|--------------------------|---------------------|
| Civitanova   | 136,538    | 328               | 416                      | 60,553           | 10                       | 4                   |
| Fermo        | 73,204     | 302               | 242                      | 26,014           | 14                       | 14                  |
| Montegiorgio | 24,364     | 205               | 119                      | 8,781            | 14                       | 14                  |
| Comunanza    | 16,332     | 426               | 38                       | 5,506            | 13                       | 8                   |

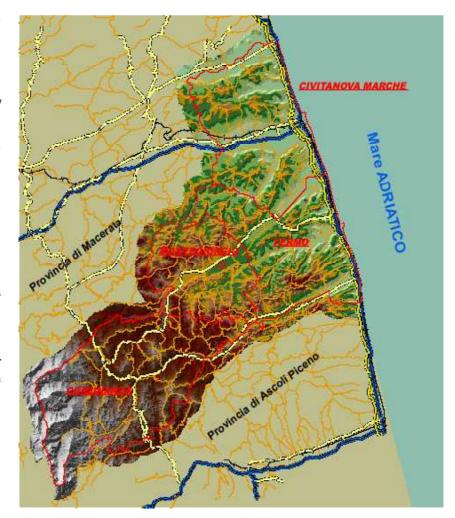
Source: ISTAT data - Population Census 2001; Industry and Services Census 2001

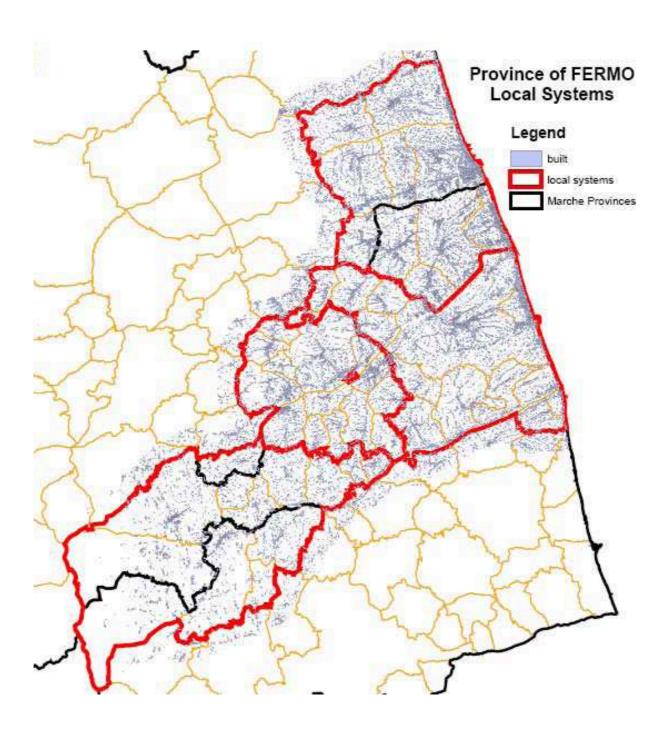


From a geographical point of view the territory of the target area is extremely complex. Most part of the territory has hilly features. It becomes very mountainous in the western part - the Sibillini Mountains Region - and flat in the eastern side along the Adriatic coast. Moreover, this area is characterized by a number of river valleys which stretch perpendicularly from the Adriatic coast.

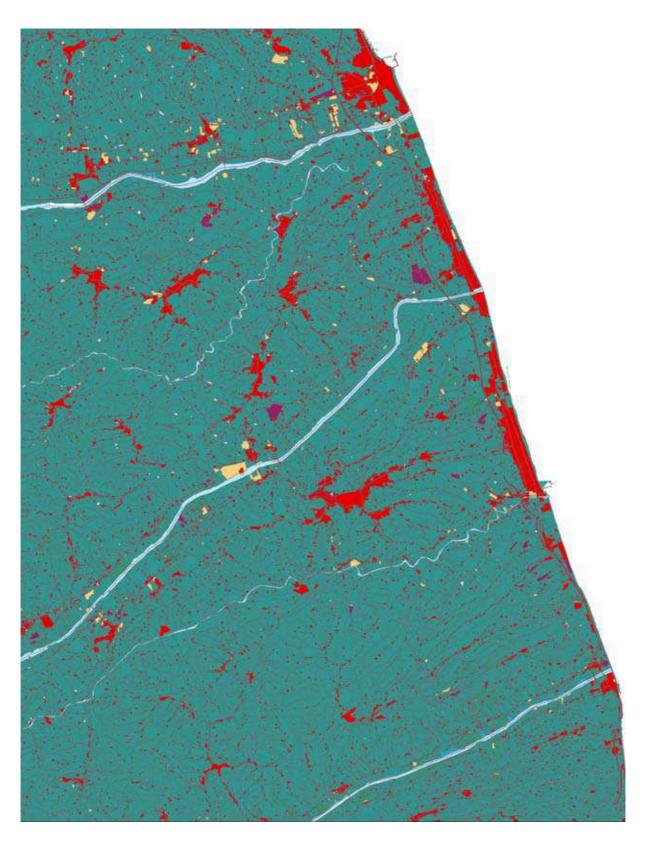


Road infrastructures in the target area is characterized by a very dense network - a feature which is typical of the Marche Region and of Central Italy too. The main road infrastructures are located along the Adriatic coast and run very close and parallel to each other. They are: the railway Bologna-Bari, the motorway A14 Bologna-Bari and the Adriatic road SS 16 (north-south direction). Equally important is the dual carriage way Civitanova Marche-Foligno (eastwest direction), now under construction in its western part close to Umbria.



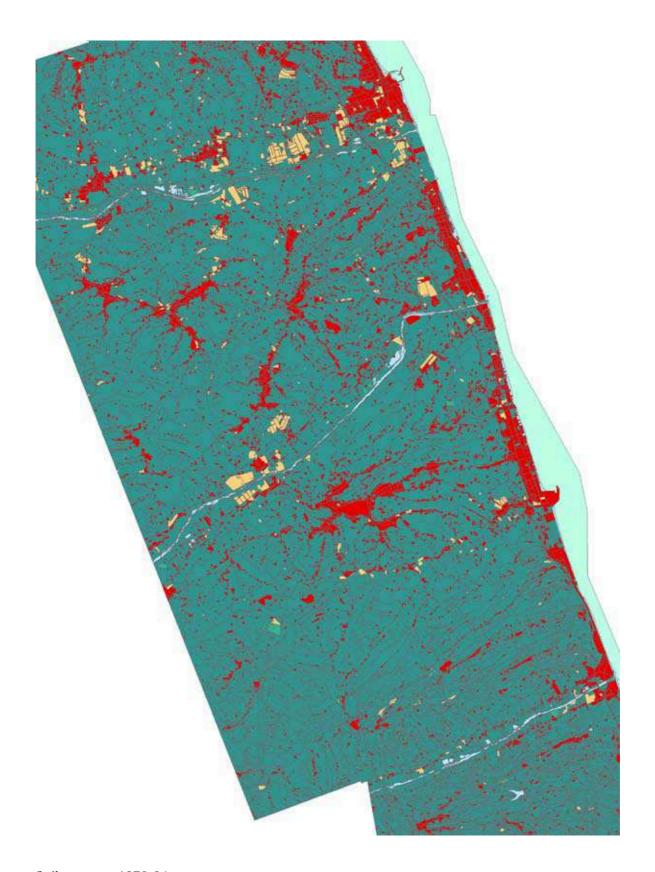


The distinctive feature of the settlement structure of the target area is that of diffusion, a character which has been historically determined by the specific organization of the agricultural activity in this area. Over the past decades population dynamics have caused some changes in the settlement structure of the area. The phenomenon of spatial concentration of human activities has led to the underuse of many sparse settlements, as well as of many buildings located in the historic centres. However, it is a rather recent phenomenon which has not yet caused functional loss of the existing building capital.



36 Soil use map 1978-84

Red = urban Yellow = industrial and commercial areas Purple (1984) = changing areas



Soil use map 1978-84

Red = urban

Yellow = industrial and commercial areas

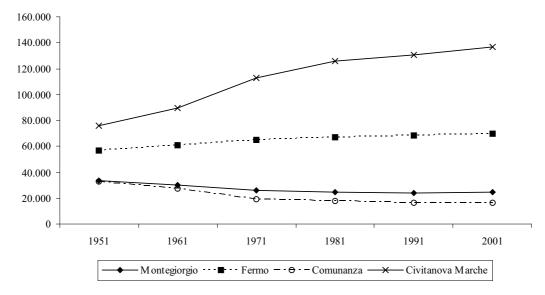
# 3.2.5 Local systems: some basic features

In the period 1951-2001, the demographic performances of the local systems in the target area were different. The local systems of 'Comunanza' and 'Montegiorgio' experienced negative demographic trends, whereas those of 'Fermo' and 'Civitanova Marche' were positive. In particular, the local system of 'Civitanova Marche' - and its municipalities which are located in the territory of the target area - recorded a performance which is among the highest in Italy. In the local system of 'Fermo' demographic growth was not particularly high (22.8%), whereas in that of 'Civitanova Marche' it was extremely high (80.4%). On the background

of the above-mentioned performances it is useful to remember that the local system of 'Civitanova Marche' is the biggest in terms of size (population and employment) but its territory is not fully comprised in the target area and its gravitational centre is located in the commune of Civitanova Marche which is outside the target area.

In the period 1950-1980 the target area experienced the most intensive demographic variations. Subsequently, the demographic dynamic decreased. The internal local systems ('Comunanza' and 'Montegiorgio') continued to lose population, whereas the local systems of 'Civitanova Marche' and 'Fermo' continued to grow.

Dynamics of the resident population of the local systems: 1951-2001 (absolute values)



Source: ISTAT data - Population Census 1951-2001

The four local systems under consideration show rather homogeneous demographic structures in terms of age classes. Yet those of 'Comunanza' and 'Montegiorgio' differentiate with the highest shares of population aged 65 and over.

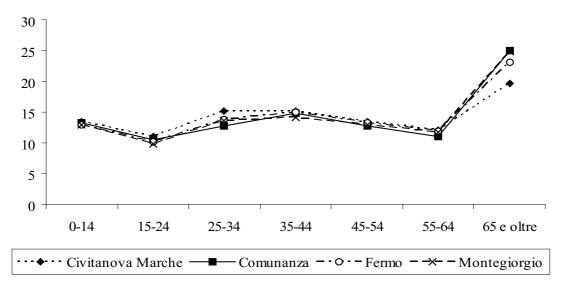
Demographic dynamics were driven by the industrial trajectories of the concerned local systems. The local system of 'Civitanova Marche' recorded a very high growth in employment in the private sector (industry and private services) until the beginning of the Eighties. Much less significant was the occupational growth in the local system of 'Fermo' that, as 'Civitanova Marche', began its industrialization process in the Fifties, grew until the end of the Seventies

and stabilized its employment in the subsequent two decades.

The local systems of 'Comunanza' and 'Montegiorgio' both have very limited scales of employment and also increases in their employment have been modest. They are the "weak" local systems of the target area - they comprise the hilly and mountainous territory of the target area - where industrial growth has not counterbalanced the collapse of the primary activity. Their economies have been growing very slowly and with delay compared to the other two local systems.

The development of the local system of 'Comunanza' constitutes a peculiar case: its trajectory of industrial growth was driven by the

Population structure by age classes - 2001



Source: ISTAT data - Population Census 2001

industrialisation policy implemented through the "Cassa per il Mezzogiorno Programme" an incentives scheme which was abolished in the Nineties. It induced some large enterprises to locate new factories in the commune of Comunanza determining a sharp increase in industrial employment.

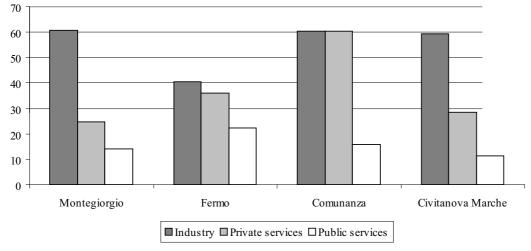
The manufacturing sector is the leading sector of the economic development of the target area's local systems. As a matter of fact, growth trajectories of manufacturing employment are similar to those of the private sector previously analysed.

In the case of the local system of 'Civitanova Marche', 53% of the growth in the private sector employment over the period 1951-2001 is due to growth in manufacturing employment. As far

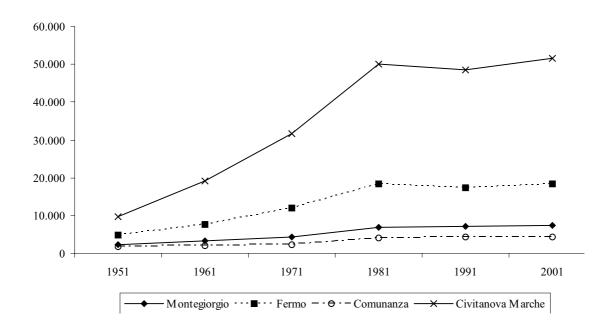
as the local system of 'Fermo' is concerned, the contribution to employment growth given by the manufacturing sector accounts to 38%.

By analysing the macro-sector composition of the four local systems under consideration it appears evident the importance of the industrial sector compared to the other economic sectors. This also confirms the importance of the district economies for the target area. Only in the case of the local system of 'Fermo', the share of employment in the industrial sector is not much higher than that of the public service, which depicts this local system as the "service centre" of the target area - mostly with reference to the local systems of 'Montegiorgio' and 'Comunanza'.

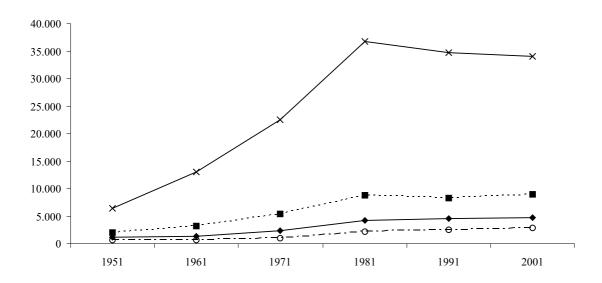
Shares of the employment in the industrial sector, in private and public services - 2001 (% values)



Dynamics of the employment in the industrial sector and in private services (1951-2001) (absolute values)



Dynamics of the employment in manifacture (1951-2001) (absolute values)



Source: ISTAT data - Industry and Services Census 1951-2001

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### 3.3.1 The local system of 'Civitanova Marche'

The local system of 'Civitanova Marche' comprises the territory of 10 municipalities localized along the Adriatic coast in the central-southern part of the Marche Region. Its municipalities belong to the Provinces of Macerata and Fermo - the latter is still a territory which should assume the political-administrative status of a "Province" in the next few years. It covers an area of 328 km² and has a population of 136,53 inhabitants and an employment of 60,553 units. In terms of both population and employment it is the second major local system in the Marche Region - after that of 'Ancona'.

It constitutes a clear-cut example of territorial coalescence starting from a set of contiguous settlements of diverse scales and ranks. In the early Fifties the spatial organization of its territory had a polycentric feature and articulates in terms of gravitational areas each corresponding to the single municipalities.

Contrary to the other local systems of the target area, in this case social and spatial integration has been the outcome not only of a change in the metric of the economic process; but also of the sharp increase in human activity density across the entire territory. The area examined here has experienced very high demographic

growth. In the past five decades its population has more than doubled and employment has significantly increased.

From the point of view of the spatial organization, the local system of 'Civitanova Marche' is a dispersed city - generated by territorial coalescence processes and not by the traditional processes of urban expansion starting from an urban settlement - which has organized itself around two main gravitational axis intersecting in the urban settlement of Portocivitanova, the "centre" of the new urban system. On examining its territorial organization it emerges that the typical organization of a city, disappeared at the scale of the single municipalities, appears today at the territorial scale of the new city.

The economic growth of the local system of 'Civitanova Marche' has been driven by the expansion of the manufacturing sector (footwear production). However, for two decades the manufacturing sector has not increased in employment and total employment has grown modestly. The footwear sector is experiencing a phase of profound change and a reduction in total employment appears to be very likely. Moreover, the tertiary process does not seem able to significantly contribute to the expansion of the city's economy.

The local system of 'Civitanova Marche' has relational densities which depict a city, whose gravitational centre is constituted by the muni-

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Montegranaro (industrial area)

The local system of 'Civitanova Marche': some basic data - 2001

| Municipalities      | Population | Population<br>% | Employment | Employment<br>% | Territory<br>Kmsq | Density<br>inhabitants/kmsq |
|---------------------|------------|-----------------|------------|-----------------|-------------------|-----------------------------|
| Civitanova Marche   | 38,299     | 28.1            | 16,994     | 28.1            | 46                | 839                         |
| Monte San Giusto    | 7,324      | 5.4             | 3,154      | 5.2             | 20                | 366                         |
| Monte Urano         | 7,802      | 5.7             | 4,438      | 7.3             | 17                | 467                         |
| Montecosaro         | 5,198      | 3.8             | 2,538      | 4.2             | 22                | 241                         |
| Montegranaro        | 12,860     | 9.4             | 6,278      | 10.4            | 31                | 411                         |
| Montelupone         | 3,221      | 2.4             | 1,830      | 3.0             | 33                | 98                          |
| Morrovalle          | 9,226      | 6.8             | 3,799      | 6.3             | 43                | 217                         |
| Porto Sant'Elpidio  | 22,752     | 16.7            | 9,991      | 16.5            | 18                | 1,236                       |
| Potenza Picena      | 14,524     | 10.6            | 4,929      | 8.1             | 48                | 303                         |
| Sant'Elpidio a Mare | 15,332     | 11.2            | 6,602      | 10.9            | 50                | 304                         |
| Local System        | 136,538    | 100.0           | 60,553     | 100.0           | 328               | 417                         |

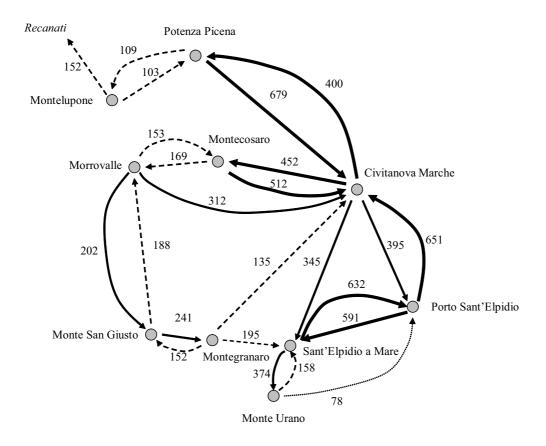
Source: ISTAT data - Population Census 2001; Industry and Services Census 2001

cipality of Civitanova Marche which is located in a central position compared to the entire territory of the local system. As a matter of fact, the major home-work commuting flows are recorded with respect to the pivot municipality of Civitanova Marche. However, this urban system has a polycentric feature, as shown by the intensity of the commuting flows among some parts of the local system - Sant'Elpidio a Mare and Porto Sant'Elpidio, Morrovalle and Monte San

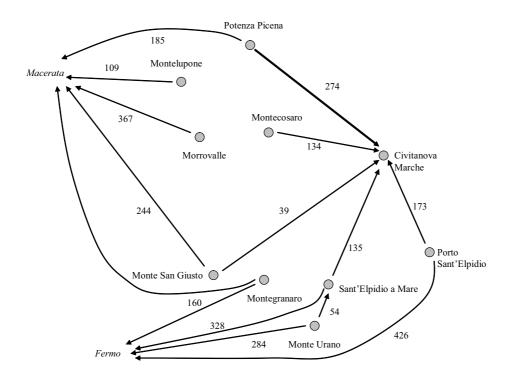
#### Giusto.

Notwithstanding the importance of two educational centres which are located outside the territory of the local system of 'Civitanova Marche' - Fermo (secondary education) and Macerata (secondary and tertiary education) - the centrality of the municipality of Civitanova Marche also emerges as far as home-school commuting flows.

The distinctive feature of the territorial coale-



## Home-school commuting flows - 2001



scence which has led to the formation of the urban system of 'Civitanova Marche' has been the remarkable increase in human density. Since the Sixties, industrial growth has generated a shortage in the labour market which has determined until now an always positive demographic dynamics in terms of migration flows. Only in the Fifties and in the Sixties - when demographic growth achieved the highest performances of 19% and 30% respectively -migration balance accounted for about 20,000 people.

In the past five decades this local system has had a population growth of 80% - far reaching the highest value compared with those of the other local systems in the Marche Region.

All the municipalities of this local system, with

the sole exception of Montelupone, have experienced positive demographic trends which, however, differ greatly in intensity. There are municipalities (Montegranaro, Monte Urano, Porto S. Elpidio) that in the period 1951-2001 more than doubled their populations, whereas others (Montecosaro, Morrovalle, Potenza Picena) increased their populations modestly.

However, differences in the population growth have not led to remarkable changes in the spatial distribution of the population of the local system. On the background of an unchanged situation with regard to the relative share of population in the municipality of Civitanova Marche - with 28% of the total population of the local system it was in 1951, and is still today, the

### Demographic trends 1951-2001

| Municipalities      | 1951   | 1961   | 1971    | 1981    | 1991    | 2001    | 1951-2001 | 1951-2001 |
|---------------------|--------|--------|---------|---------|---------|---------|-----------|-----------|
| 0: "                | 04.070 | 05.740 | 00.044  | 00.407  | 07.000  | 00.000  | 40.000    | 70.7      |
| Civitanova Marche   | 21,673 | 25,743 | 32,844  | 36,187  | 37,260  | 38,299  | 16,626    | 76.7      |
| Monte San Giusto    | 3,976  | 4,842  | 6,475   | 7,117   | 7,049   | 7,324   | 3,348     | 84.2      |
| Monte Urano         | 3,277  | 4,044  | 6,073   | 7,273   | 7,748   | 7,802   | 4,525     | 138.1     |
| Montecosaro         | 3,582  | 3,651  | 4,192   | 4,555   | 4,745   | 5,198   | 1,616     | 45.1      |
| Montegranaro        | 5,757  | 7,545  | 10,609  | 12,484  | 12,688  | 12,860  | 7,103     | 123.4     |
| Montelupone         | 4,179  | 3,699  | 3,123   | 3,147   | 3,046   | 3,221   | -958      | -22.9     |
| Morrovalle          | 6,679  | 6,321  | 6,390   | 7,509   | 8,477   | 9,226   | 2,547     | 38.1      |
| Porto Sant'Elpidio  | 6,712  | 12,233 | 17,496  | 19,646  | 21,112  | 22,752  | 16,040    | 239.0     |
| Potenza Picena      | 9,855  | 10,724 | 11,714  | 12,752  | 13,602  | 14,524  | 4,669     | 47.4      |
| Sant'Elpidio a Mare | 9,982  | 11,013 | 13,936  | 15,041  | 15,040  | 15,332  | 5,350     | 53.6      |
| Local system        | 75,672 | 89,815 | 112,852 | 125,711 | 130,767 | 136,538 | 60,866    | 80.4      |

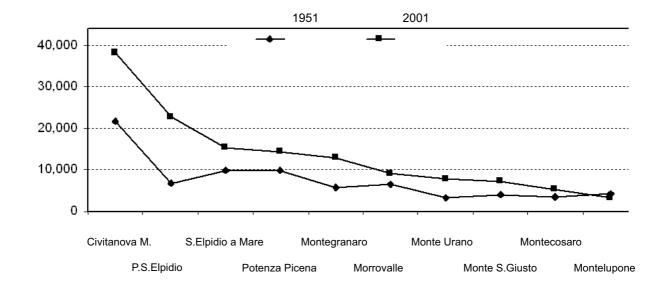
Source: ISTAT data - Population Census

biggest - the most significant change concerns the municipality of Porto Sant'Elpidio - whose current share of population is 16% of the total population of the local system (it was 9% in 1951).

The economy of the local system of 'Civitanova Marche' has always had a strong industrial characterization. In 2001, after two decades of expansion of the service industry, 59% of its total employment was still occupied in the industrial sector, whilst private and public servi-

ces occupied respectively 28% and 11% of total employment. This is a feature that in some municipalities of the local system (S. Elpidio a Mare, Monte Urano, Montegranaro, Monte San Giusto, Morrovalle and Montelupone) becomes distinctive, their ratios between employees in the industrial sector and total employees never being less than 70%. Although in absolute values Civitanova Marche has the highest number of employees in the industrial sector, it is the only one where the weight of the industrial sec-

Population of the local system's municipalities - 1951, 2001



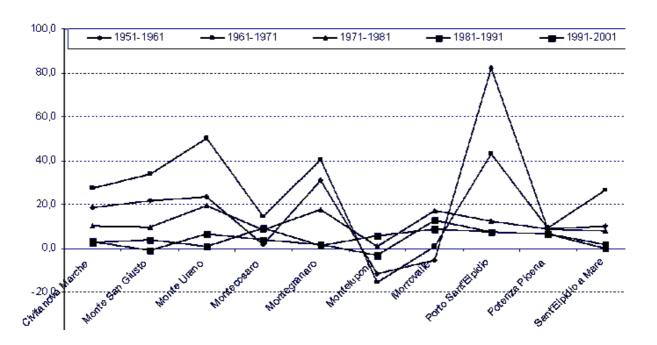
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tor is less today than that of the service industry. The distribution of the industrial production by municipalities - interpreted in the light of the distribution of the service industry by municipalities - assumes a clear meaning when the single communal territories are conceptualized as parts ("neighbourhoods") of the urban system. The economy of the local system of 'Civitanova Marche' - in this case expressed in terms of industry and private services - expanded its productive base of 417% over the period 1951-

2001. Industrial and private services employment recorded particularly high growth rates - although decreasing - until the end of the Seventies. In the subsequent decade, the productive base of the urban system decreased for the first time and the industrial sector experienced a fall in employment, whereas the tertiary process continued.

The development of the manufacturing sector of the local system of 'Civitanova Marche' has been typical of a model that analysts call "di-

#### Population growth rates



Source: ISTAT data - Population Census

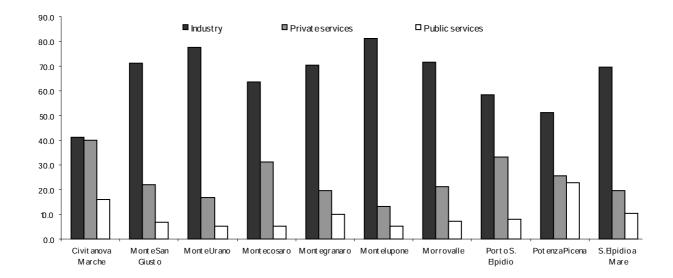
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strict model". With 4,324 firms engaged in manufacturing activities and with 34,061 manufacturing employees, the productive system of this local system has typical features. Networks of business enterprises based on low transaction costs have reached and maintained a level of competitiveness which has made possible manufacturing employment rise from 6,486 units in 1951 to 34,061 units in 2001.

At the beginning of the industrialization process there was an already-existing industrial core,

which was relevant in terms of both employment and firms, that allowed the local system to 'capture' swiftly and strongly the growing demand (for shoes, especially) coming from the expansion of the international markets. As a matter of a fact, manufacturing activities experienced three decades of extremely good performances (1950-1980) - in particular, the Fifties and the Sixties were years of accelerated growth - , followed by two decades (1980-2000) of profound structural changes and a substan-

Shares of the employment in the industrial sector, in private and public services - 2001 (% values)



tial industrial stagnation (without the development of an autonomous service industry). Contrary to the other local systems of the target area, all municipalities have had positive in some cases very positive - performances in terms of manufacturing employment over the whole period examined. Moreover, with the sole exception of Montelupone, all municipalities have begun to grow since the early Fifties. Finally, manufacturing employment has not increased in the pivot municipality more than in

the other municipalities of the local system - in terms of both absolute and percentage values. These stylized facts suggest that the economic development of the local system of 'Civitanova Marche' is not the outcome of a process which has first manifested in the pivot municipality and then extended to the contiguous municipalities. From the beginning the industrialization process has involved the single municipalities and transformed the original units in parts of the new urban system. Consequently, the terri-

Dynamics of employment in the industrial sector and in private services (1951-2001)

|   | 1951  | 1961   | 1971   | 1981   | 1991   | 2001   | 1951-2001 | 1951-2001 |
|---|-------|--------|--------|--------|--------|--------|-----------|-----------|
| Quarrying   | 40    | 26     | 47     | 170    | 28     | 30     | -10       | -25.0     |
| Manufacture                                       | 6,486 | 13,080 | 22,516 | 36,701 | 34,725 | 34,061 | 27,575    | 425.1     |
| Construction                                      | 546   | 1,572  | 2,550  | 2,740  | 2,027  | 2,584  | 2,038     | 373.3     |
| Energy, fuel, water                               | 48    | 87     | 103    | 256    | 179    | 97     | 49        | 102.1     |
| Industry  | 7,120 | 14,765 | 25,216 | 39,867 | 36,959 | 36,772 | 29,652    | 416.5     |
| Wholesale and retail trade                        | 1,474 | 2,642  | 3,871  | 5,676  | 6,456  | 6,942  | 5,468     | 371.0     |
| Hotels and restaurants                            | 268   | 492    | 743    | 1,037  | 1,212  | 1,860  | 1,592     | 594.0     |
| Transport, storage, comunications                 | 401   | 660    | 848    | 1,313  | 1,482  | 1,703  | 1,302     | 324.7     |
| Banking and financial brokerage, insurance        | 64    | 90     | 195    | 423    | 796    | 975    | 911       | 1423.4    |
| Real estate activities, data processing, research |       |        |        |        |        |        |           |           |
| Other professiona activities                      | 318   | 450    | 752    | 1,627  | 1,707  | 3,408  | 3,090     | 971.7     |
| Private services                                  | 2,525 | 4,334  | 6,409  | 10,076 | 11,653 | 14,888 | 12,363    | 489.6     |
| Industry and private services                     | 9 645 | 19 099 | 31 625 | 49 943 | 48 612 | 51 660 | 42 015    | 435.6     |

tory under examination has rapidly lost its polycentric feature.

The manufacturing sector identifies with the footwear sector that, in 2001, still accounted for 76% of total manufacturing employment. This means an extremely high degree of specialization which is closely related to the fact that this local system hosts the major part of the 'footwear district of the Marche Region' - the biggest one, in terms of employment, among the Italian footwear districts. (The remaining part of the footwear district is located in the contiguous local system of 'Fermo'.)

Footwear productive base is today four times

as large as in 1951, in terms of both employment and firms. This development - which has been due to the growth of existing firms and the birth of new ones ('endogenous development') - was very high until the Seventies, with growth rates of 90% in 1961-71 and of 84% in the subsequent decade. In the Eighties, as a consequence of some factors which had modified the national and international scenarios, the footwear sector experienced a restructuring process leading to a reduction in employment of 2,255 units (-8%) and firms of 48 units (-1%). It continued to decline in the Nineties. Briefly, as a consequence of radical changes in the competi-

Dynamics of manufacturing employment (1951-2001)

|                     | 1951  | 1961   | 1971   | 1981   | 1991   | 2001  | 1951-2001 | 1951-2001 |
|---------------------|-------|--------|--------|--------|--------|-------|-----------|-----------|
|                     |       |        |        |        |        |       |           |           |
| Civitanova Marche   | 2.474 | 2.987  | 4.236  | 6.797  | 6352   | 6632  | 4.158     | 168,1     |
| Montecosaro         | 161   | 339    | 722    | 1.306  | 1448   | 1502  | 1.341     | 832,9     |
| Montelupone         | 59    | 46     | 379    | 487    | 1013   | 1389  | 1.330     | 2.254,2   |
| Monte San Giusto    | 355   | 750    | 1.671  | 2.587  | 2331   | 2193  | 1.838     | 517,7     |
| Morrovalle          | 198   | 233    | 798    | 2.088  | 2280   | 2494  | 2.296     | 1.159,6   |
| Potenza Picena      | 735   | 1.110  | 1.742  | 2.673  | 2581   | 2346  | 1.611     | 219,2     |
| Montegranaro        | 662   | 1.878  | 3.318  | 5.056  | 4641   | 4317  | 3.655     | 552,1     |
| Monte Urano         | 318   | 1.115  | 2.168  | 3.065  | 3571   | 3301  | 2.983     | 938,1     |
| Porto Sant'Elpidio  | 0     | 3.334  | 4.923  | 7.825  | 6090   | 5531  | 5.531     | 0,0       |
| Sant'Elpidio a Mare | 1.524 | 1.288  | 2.559  | 4.817  | 4418   | 4356  | 2.832     | 185,8     |
|                     |       |        |        |        |        |       |           |           |
| Sistema locale      | 6.486 | 13.080 | 22.516 | 36.701 | 34.725 | 34061 | 27.575    | 425,1     |

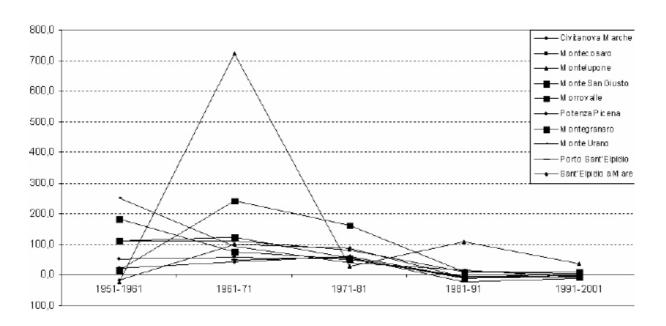
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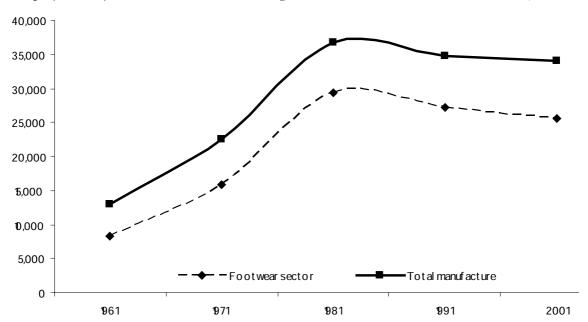
tive space for firms, since the past two decades the competitiveness of the local business firms has greatly diminished and the footwear sector has entered a phase of profound crisis.

By analysing the structure of the manufacturing activities of the local system one observes that the remaining employment - which amounts to about 8,000 employees - relates mostly (47%) to the three following sub-sectors: 'Rubber and plastic products', 'Fabricated metal products, except machinery and equipment' and 'Machi-

nery and equipment'. Each sub-sector occupies less than 1,400 units and all together account for 11% of total manufacturing employment. In the past decade these sub-sectors recorded the highest employment growth (values ranging from about 450 to 600 units). Moreover, one may observe that employment increases in these sub-sectors have almost compensated the loss of employment in the footwear sector.

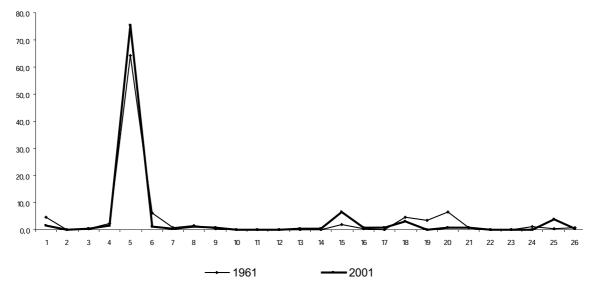
### Manufacturing employment growth rates (1951-2001)





Source: ISTAT data - Industry and Services Census

Manufacturing specializarion in terms of employees - 1961, 2001 (% values)



### 3.3.2 The local system of 'Fermo'

As the local system of 'Civitanova Marche', 'Fermo' shows relational densities which depict an urban system - although this feature essentially manifests along the Adriatic coast and along the Fermo-Porto San Giorgio axis where population densities are very high. The intensity of the home-workplace commuting flows among the municipalities of this local system is so significant as to corroborate the hypothesis that this area is an urban system. Unlike 'Civitanova Marche', however, its territorial organization is polarized rather than polycentric: most home-workplace commuting flows are directed towards the Fermo-Porto San Giorgio axis.

A polarized structure of this local system also emerges by analysing the corresponding homeschool commuting flows. In terms of educational services supply, the pivot municipality of Fermo is the most important for the students who live not only in the municipalities of this local system but also in the municipalities of the contiguous local system of 'Montegiorgio' (see the case study of the local system of 'Montegiorgio' in this Report).

The population trend of the local system of 'Fermo' was globally positive in the period 1951-2001, although half of its municipalities experienced negative performances. The average growth rate was 17.7%, with an absolute increase

by 11,018 units. In three cases - the municipalities of Lapedona, Monterubbiano and Moresco - population decreased by more than 40%. By analysing the municipalities that recorded positive demographic trends in the 1951-2001, one notes strikingly different growth rates: from the highest value of 72% (Porto San Giorgio) to the lowest one of 9.8% (Rapagnano). The municipalities that experienced the highest increases in population in absolute terms are Fermo (8,432 units) and Porto San Giorgio (6,648 units), where almost all the population increase of the whole urban system has concentrated. In the remaining four cases, population increases in absolute terms were much lower - never above 600 units. Most municipalities of the local system of 'Fermo' show a high degree of specialization in industrial activities, with shares of industrial employment ranging from 42.6% (Altidona) to 74.4% (Monte San Pietrangeli). The biggest municipalities of Fermo and Porto San Giorgio have a tertiary characterization: Fermo has a ratio between employees in the private service and total employees of 32.7% and its importance as far as public services are concerned is much greater than in the rest of the local system (public services share of 28.4%), whereas Porto San Giorgio has a very high share of employees in the private service industry (54.6%).

In the local system of 'Fermo' employment in the private sector (industry and private servi-



Fermo

The local system of 'Fermo': some basic data - 2001

|                       | Area      | Populati  | on     | Density            | Employn   | nent   |
|-----------------------|-----------|-----------|--------|--------------------|-----------|--------|
|                       | square Km | abs. val. | % val. | inhab. / square Km | abs. val. | % val. |
| Fermo                 | 119.8     | 35,502    | 48.5   | 296.2              | 13,647    | 52.5   |
| Porto San Giorgio     | 8.5       | 15,869    | 21.7   | 1,860.4            | 5,168     | 19.9   |
| Monte San Pietrangeli | 18.4      | 2,545     | 3.5    | 138.0              | 1,163     | 4.5    |
| Petritoli             | 24.0      | 2,529     | 3.5    | 105.5              | 813       | 3.1    |
| Monterubbiano         | 32.2      | 2,387     | 3.3    | 74.1               | 648       | 2.5    |
| Altidona              | 13.0      | 2,292     | 3.1    | 175.9              | 761       | 2.9    |
| Torre San Patrizio    | 12.0      | 2,132     | 2.9    | 178.4              | 679       | 2.6    |
| Pedaso                | 3.9       | 1,968     | 2.7    | 507.8              | 652       | 2.5    |
| Rapagnano             | 12.6      | 1,877     | 2.6    | 148.6              | 675       | 2.6    |
| Campofilone           | 12.2      | 1,803     | 2.5    | 147.8              | 586       | 2.3    |
| Ponzano di Fermo      | 14.3      | 1,581     | 2.2    | 110.7              | 597       | 2.3    |
| Lapedona              | 14.9      | 1,148     | 1.6    | 76.8               | 223       | 0.9    |
| Francavilla d'Ete     | 10.2      | 963       | 1.3    | 94.6               | 265       | 1.0    |
| Moresco               | 6.3       | 608       | 0.8    | 95.9               | 137       | 0.5    |
| System of Fermo       | 302.4     | 73,204    | 100    | 242.0              | 26,014    | 100.0  |

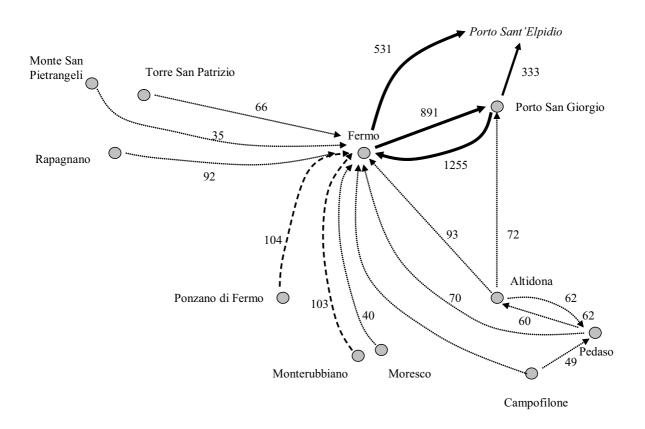
Source: ISTAT data - Population Census 2001; Industry and Services Census 2001

ces) increased by 268% in the period 1951-2001 (from 5,175 units in 1951 to 13,903 units in 2001). Although small municipalities too expe-

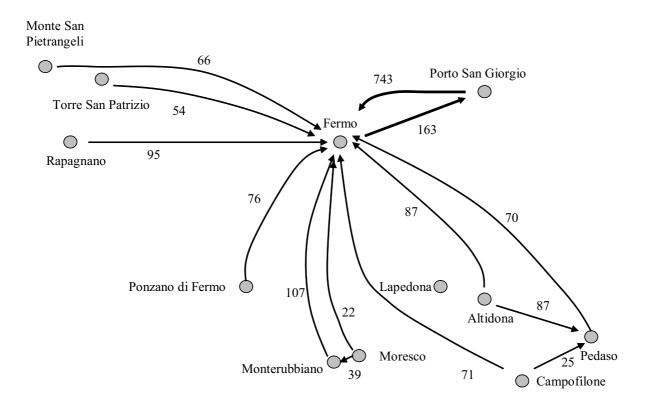
rienced remarkable increases in employment,

the difference in terms of scale between them and the biggest municipalities - Fermo and Porto San Giorgio - has widened further.

As far as the manufacturing sector is concerned,



## Home-school commuting flows - 2001



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the local system of 'Fermo' has followed a noticeable development trajectory. Employment has increased by 320.2% (around 7,000 units in absolute terms) - value which is one of the highest among those displayed by the other urban systems in the Marche Region. Growth intensity of the manufacturing sector was almost constant in the early decades of the period of

analysis (1951-1981), with growth rates ranging from 58% to 66%. In the Eighties, instead, a reduction in manufacturing employment is to be observed (-7%), followed by a recovery in the subsequent decade (+6.9%).

All the municipalities of the local system of 'Fermo' experienced positive employment performances in the manufacturing sector in the

### Demographic trends 1951-2001

|                       | 1951      | 1961      | 1971      | 1981      | 1991      | 2001      | 1951-2001<br>abs. var. | 1951-2001<br>% var. |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------|---------------------|
| Altidona              | 1,760     | 1,624     | 1,507     | 1,589     | 1,741     | 2,292     | 532                    | 30.2                |
| Campofilone           | 2,152     | 1,857     | 1,650     | 1,618     | 1,678     | 1,803     | -349                   | -16.2               |
| Fermo                 | 27,070    | 30,545    | 34,067    | 35,119    | 35,111    | 35,502    | 8,432                  | 31.1                |
| L apedona             | 1,942     | 1,672     | 1,306     | 1,143     | 1,168     | 1,148     | -794                   | -40.9               |
| M onterubbiano        | 4,123     | 3,569     | 2,748     | 2,410     | 2,442     | 2,387     | -1,736                 | -42.1               |
| Monte San Pietrangeli | 2,620     | 2,509     | 2,429     | 2,465     | 2,471     | 2,545     | -75                    | -2.9                |
| Moresco               | 1,100     | 1,025     | 746       | 604       | 606       | 608       | -492                   | -44.7               |
| Pedaso                | 1,428     | 1,612     | 1,774     | 1,859     | 1,934     | 1,968     | 540                    | 37.8                |
| Ponzano di Fermo      | 2,050     | 1,712     | 1,154     | 1,103     | 1,372     | 1,581     | -469                   | -22.9               |
| Porto San Giorgio     | 9,221     | 11,156    | 14,114    | 15,562    | 15,853    | 15,869    | 6,648                  | 72.1                |
| Rapagnano             | 1,709     | 1,739     | 1,635     | 1,569     | 1,706     | 1,877     | 168                    | 9.8                 |
| Torre San Patrizio    | 1,575     | 1,818     | 2,069     | 2,043     | 2,102     | 2,132     | 557                    | 35.4                |
| Francavilla d'Ete     | 1,375     | 1255      | 989       | 1991.0    | 937       | 963       | -412                   | -30.0               |
| Petritoli             | 4,061     | 3,732     | 3,053     | 2,662     | 2,602     | 2529      | -1,532                 | -37.7               |
| System of Fermo       | 62,186    | 65,825    | 69,241    | 71,737    | 71,723    | 73,204    | 11,018                 | 17.7                |
| Province of Fermo     | 141,806   | 147,321   | 155,113   | 160,513   | 162,671   | 166,218   | 24,412                 | 17.2                |
| Marche Region         | 1,364,030 | 1,347,489 | 1,359,907 | 1,412,404 | 1,429,205 | 1,470,581 | 106,551                | 7.8                 |

Source: ISTAT data - Population Census

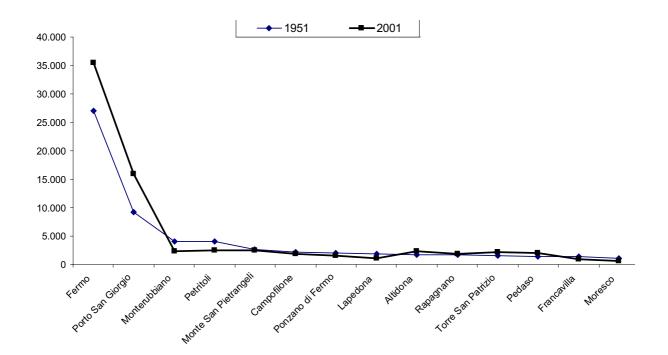


Porto San Giorgio

period 1951-2001. Nevertheless, there appears to be a high variability of their growth rates: from the minimum of Petritoli (27.2%) to the maximum of Monte San Pietrangeli (1.093%). Monte San Pietrangeli is the municipality that underwent the most intense industrialization process and ranked third in 2001 in terms of industry sector employment (although Fermo, with 4,641 employees in the industry sector, still remains the most important municipalities of the urban system).

Analysing the manufacturing employment trends in the various sub-periods one notes, firstly, a wide range of variability as far as growth rates are concerned in the first three decades - besides some negative growth rates. Secondly, ma-

Population of the local system's municipalities - 1951, 2001

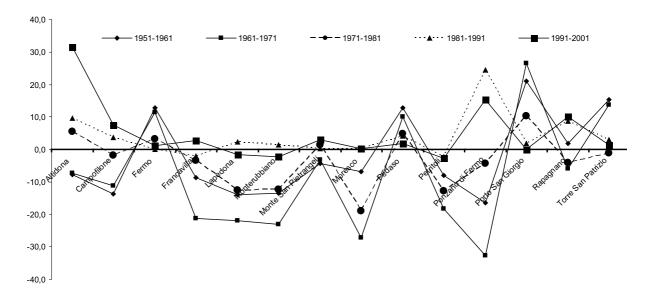


nufacturing employment dynamics at municipal level do not seem to be synchronized. The Figure shows that manufacturing employment growth rates have progressively aligned until 1991.

In 1951, manufacturing specialization in terms of employees showed a high share of employment in the traditional manufacturing activities (clothing, footwear, leather and textiles) (37.8% of total manufacturing employment). Sub-sectors

related to food production, mechanical production and furniture were also important in terms of employment. On examining the manufacturing sector structure in 2001 one notes that the footwear industry has grown significantly, accounting for above 50% of total manufacturing employment. This sector has played a major role in the economic development of this local system, where a part of the footwear district of

### Population growth rates



Source: ISTAT data - Population Census



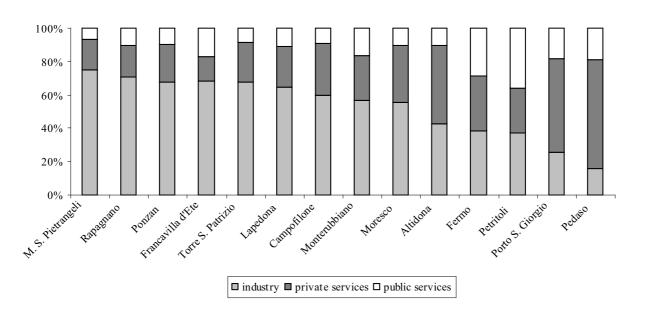
Fermo (west territory)

the Marche Region is located. As mentioned before, the most relevant part of it is located in the contiguous territory of the local system of 'Civitanova Marche' with which the local system of 'Fermo' has developed intense relationships, given the high degree of vertical disintegration of the local footwear firms.

In the last two decades the productive structu-

re of the manufacturing sector has remained almost unchanged, except for the remarkable increase in the share of employment in the subsector 'non-electrical machines and metallic carpentry' - from 3.8% to 11.3%.

Shares of the employment in the industrial sector, in private and public services - 2001 (% values)

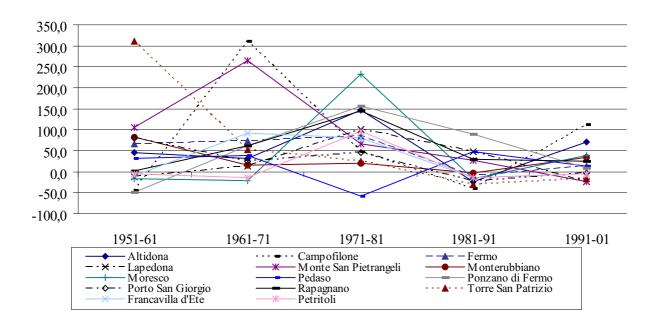


|                       | 1951    | 1961    | 1971    | 1981    | 1991    | 2001    | 1951-20   | 001    |
|-----------------------|---------|---------|---------|---------|---------|---------|-----------|--------|
|                       |         |         |         |         |         |         | abs. var. | % var. |
| Fermo                 | 2,190   | 3,588   | 5,727   | 9,013   | 8,511   | 8,999   | 6,809     | 310.9  |
| Porto San Giorgio     | 1,279   | 2,074   | 3,079   | 4,583   | 3,756   | 3,989   | 2,710     | 211.9  |
| Monte San Pietrangeli | 172     | 243     | 713     | 1,079   | 1,329   | 1,079   | 907       | 527.3  |
| Altidona              | 73      | 117     | 189     | 372     | 428     | 668     | 595       | 815.1  |
| Rapagnano             | 130     | 188     | 233     | 410     | 494     | 602     | 472       | 363.1  |
| Torre San Patrizio    | 126     | 453     | 678     | 912     | 678     | 597     | 471       | 373.8  |
| Monterubbiano         | 212     | 309     | 367     | 518     | 522     | 536     | 324       | 152.8  |
| Ponzano di Fermo      | 125     | 107     | 123     | 311     | 433     | 532     | 407       | 325.6  |
| Campofilone           | 106     | 121     | 274     | 403     | 323     | 524     | 418       | 394.3  |
| Pedaso                | 258     | 404     | 535     | 449     | 476     | 511     | 253       | 98.1   |
| Petritoli             | 282     | 371     | 352     | 545     | 466     | 507     | 225       | 79.8   |
| Francavilla d'Ete     | 91      | 112     | 159     | 285     | 221     | 219     | 128       | 140.7  |
| Lapedona              | 92      | 101     | 112     | 208     | 236     | 197     | 105       | 114.1  |
| Moresco               | 39      | 50      | 45      | 98      | 89      | 118     | 79        | 202.6  |
| System of Fermo       | 5,175   | 8,238   | 12,586  | 19,186  | 17,962  | 19,078  | 13,903    | 268.7  |
| Province of Fermo     | 11,925  | 22,513  | 34,651  | 53,862  | 50,790  | 52,148  | 40,223    | 337.3  |
| Marche Region         | 135,972 | 195,091 | 271,095 | 398,719 | 399,709 | 435,460 | 299,488   | 220.3  |

Dynamics of manufacturing employment (1951-2001)

| Municipality          | 1951  | 1961  | 1971  | 1981  | 1991  | 2001  | 1951-20   | 001    |
|-----------------------|-------|-------|-------|-------|-------|-------|-----------|--------|
|                       |       |       |       |       |       |       | abs. var. | % var. |
| Fermo                 | 847   | 1,406 | 2,437 | 4,509 | 4,109 | 4,641 | 3,794     | 447.9  |
| Porto San Giorgio     | 442   | 791   | 987   | 1,429 | 1,086 | 1,046 | 604       | 136.7  |
| Monte San Pietrangeli | 70    | 143   | 521   | 860   | 1,086 | 835   | 765       | 1092.9 |
| Rapagnano             | 67    | 68    | 110   | 270   | 347   | 435   | 368       | 549.3  |
| Torre San Patrizio    | 93    | 381   | 579   | 724   | 506   | 423   | 330       | 354.8  |
| Ponzano di Fermo      | 78    | 40    | 65    | 166   | 313   | 341   | 263       | 337.2  |
| Campofilone           | 69    | 39    | 160   | 236   | 144   | 307   | 238       | 344.9  |
| Monterubbiano         | 90    | 165   | 191   | 230   | 224   | 301   | 211       | 234.4  |
| Altidona              | 45    | 65    | 85    | 209   | 160   | 274   | 229       | 508.9  |
| Petritoli             | 180   | 169   | 145   | 286   | 241   | 229   | 49        | 27.2   |
| Francavilla d'Ete     | 58    | 52    | 100   | 180   | 155   | 145   | 87        | 150.0  |
| Lapedona              | 58    | 51    | 58    | 116   | 170   | 130   | 72        | 124.1  |
| Pedaso                | 88    | 115   | 158   | 67    | 99    | 113   | 25        | 28.4   |
| Moresco               | 23    | 19    | 15    | 50    | 42    | 58    | 35        | 152.2  |
| System of Fermo       | 2,208 | 3,504 | 5,611 | 9,332 | 8,682 | 9,278 | 7,070     | 320.2  |

Manufacturing employment growth rates (1951-2001)

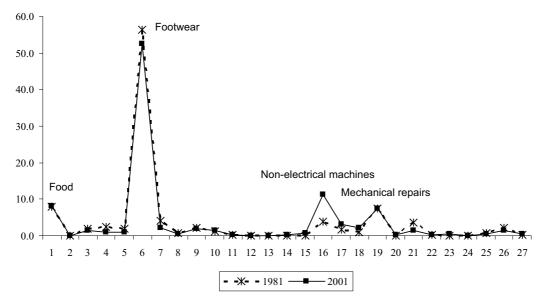


Manufacturing employment growth rates and absolute values - 1981-1991; 1991-2001

|                       | 1981-9    | 1      | 1991-0    | 1      |
|-----------------------|-----------|--------|-----------|--------|
|                       | abs. var. | % var. | abs. var. | % var. |
| T.                    | 400       | 0.0    | 522       | 12.0   |
| Fermo                 | -400      | -8.9   | 532       | 12.9   |
| Porto San Giorgio     | -343      | -24.0  | -40       | -3.7   |
| Monte San Pietrangeli | 226       | 26.3   | -251      | -23.1  |
| Rapagnano             | 77        | 28.5   | 88        | 25.4   |
| Torre San Patrizio    | -218      | -30.1  | -83       | -16.4  |
| Ponzano di Fermo      | 147       | 88.6   | 28        | 8.9    |
| Campofilone           | -92       | -39.0  | 163       | 113.2  |
| Monterubbiano         | -6        | -2.6   | 77        | 34.4   |
| Altidona              | -49       | -23.4  | 114       | 71.3   |
| Petritoli             | -45       | -15.7  | -12       | -5.0   |
| Francavilla d'Ete     | -25       | -13.9  | -10       | -6.5   |
| Lapedona              | 54        | 46.6   | -40       | -23.5  |
| Pedaso                | 32        | 47.8   | 14        | 14.1   |
| Moresco               | -8        | -16.0  | 16        | 38.1   |

|   | abs. val. | % val. |
|---|-----------|--------|
| Clothing and footwear                               | 653       | 29.57  |
| Food and beverages                                  | 465       | 21.06  |
| Mechanics   | 392       | 17.75  |
| Wood and furnishings                                | 310       | 14.04  |
| Textiles  | 127       | 5.75   |
| Non-metalbearing minerals                           | 119       | 5.39   |
| Leather   | 55        | 2.49   |
| Paper industry                                      | 28        | 1.27   |
| Publishing and press                                | 28        | 1.27   |
| Industries related to music, photography and cinema | 14        | 0.63   |
| Petrochemicals                                      | 14        | 0.63   |
| Rubber  | 2         | 0.09   |
| Plastic and other manufacturing industries          | 1         | 0.05   |

Manufacturing specializarion in terms of employees - 1961, 2001 (% values)







Montegiorgio Servigliano

### 3.3.3 The local system of 'Montegiorgio'

This local system covers an area of 205 Km<sup>2</sup> and has 7,418 inhabitants and 4,364 employed (2001 Census). Population density is on average much lower than that of the local systems of 'Fermo' and 'Civitanova Marche'. Six municipalities display values which are much lower than 100 inhabitants/Km<sup>2</sup>. From a geomorphologic point of view one may observe that most part of its territory is hilly or mountainous.

In the past five decades the local system of 'Montegiorgio' has experienced a constant reduction in population - only the municipality of Grottazzolina has increased its population - and

a small increase in employment - mainly in the manufacturing sector. This local system has a strong industrial characterisation and the low share of employment in the service industry - mainly in the public services - suggests a strong dependence from the local system of 'Fermo' - a relationship which emerges on examining the corresponding commuting flows.

The local system of 'Montegiorgio' does not display the typical features of an urban system and does not possess a gravitational centre with a high degree of autonomy and attractive capacity. As a matter of a fact, the municipality of Montegiorgio does not show these features. Indeed, this local system can be better defined

The local system of 'Montegiorgio': some basic data - 2001

| Municipality           | Area      |              | Population |              | Density           | Total employment | Manuf. empl. 01 |
|------------------------|-----------|--------------|------------|--------------|-------------------|------------------|-----------------|
|                        | Square Km | abs. val. 01 | % val. 01  | % var. 51-01 | Inhab./ Square Km | val. ass. 01     |                 |
| Montegiorgio           | 52.2      | 6,667        | 27.4       | -6.5         | 127.7             | 2,670            | 1,478           |
| Falerone               | 24.6      | 3,176        | 13.0       | -31.0        | 129.1             | 1,010            | 476             |
| Grottazzolina          | 9.3       | 3,129        | 12.8       | 25.6         | 337.1             | 1,214            | 688             |
| Servigliano            | 18.5      | 2,323        | 9.5        | -43.6        | 125.7             | 652              | 280             |
| Montappone             | 10.4      | 1,787        | 7.3        | -9.7         | 171.8             | 642              | 345             |
| Magliano di Tenna      | 7.9       | 1,204        | 4.9        | -10.8        | 152.4             | 888              | 541             |
| Montottone             | 16.4      | 1,032        | 4.2        | -53.3        | 63.0              | 230              | 81              |
| Massa Fermana          | 7.7       | 970          | 4.0        | -35.5        | 125.3             | 417              | 282             |
| Monte Giberto          | 12.6      | 863          | 3.5        | -52.7        | 68.7              | 234              | 138             |
| Monte Vidon Corrado    | 5.9       | 829          | 3.4        | -28.8        | 139.6             | 245              | 162             |
| Monsampietro Morico    | 9.8       | 744          | 3.1        | -41.2        | 76.3              | 142              | 70              |
| Belmonte Piceno        | 10.6      | 675          | 2.8        | -50.1        | 64.0              | 207              | 135             |
| Monte Vidon Combatte   | 11.2      | 511          | 2.1        | -67.5        | 45.7              | 80               | 16              |
| Monteleone di Fermo    | 8.2       | 454          | 1.9        | -60.7        | 55.2              | 150              | 115             |
| System of Montegiorgio | 205.2     | 24.364       | 100        | -27.8        | 118.7             | 8.781            | 4.807           |

Source: ISTAT data - Population Census 2001; Industry and Services Census 2001

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as a "weak relational network" where the municipality of Fermo exercises a strong attraction to it. Its territory could also be interpreted as the urbanised countryside of the local system of Fermo.

On examining home-workplace commuting flows it emerges that the local system of 'Montegiorgio' is not much self-contained. 23.3% of the commuters outflow is directed to municipalities that are located outside this local system. In some municipalities values grow over 30% (Grottazolina, Magliano di Tenna and Monte Giberto). Home-work commuting flows show, in most cases, weak relationships among the municipalities of this local system and its pivot. As a matter of fact, given its modest demographic and productive scale, Montegiorgio can not perform properly the function of a pivot municipality.

The degree of self-containment of this local system is still lower with respect to home-school commuting flows. As far as the pivot municipality is concerned, 29% of the commuting students are directed outside the territory of the local system, mainly to Fermo. The highest share (47.5%) is relative to the municipality of Montegiberto.

This local system is made up of small municipalities. The pivot municipality - the biggest one - has less than 7,000 inhabitants (it accounts for 27.9% of the total population of the local system). The remaining municipalities have populations ranging from 500 inhabitants to 3,000

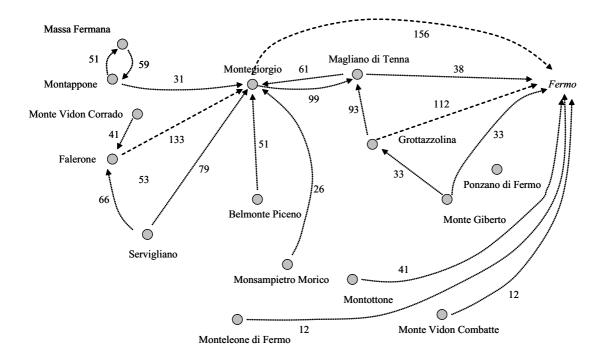
inhabitants.

In the period 1951-2001 the demographic evolution of this local system was negative (-27%). With the sole exception of Grottazolina, which increased its population by 25% (625 units), the municipalities under consideration experienced negative growth rates. As a result, in 2001 half of them had less than 1,000 inhabitants each. The municipalities with the worse population decreases in percentage terms are Montottone, Monte Giberto, Monte Vidon Combatte and Monteleone - in some cases, negative growth rates are above 50%. Whereas the municipalities with the largest population decreases in absolute terms are Falerone, Servigliano, Montottone and Monte Vidon Combatte - with reductions above 1,000 inhabitants.

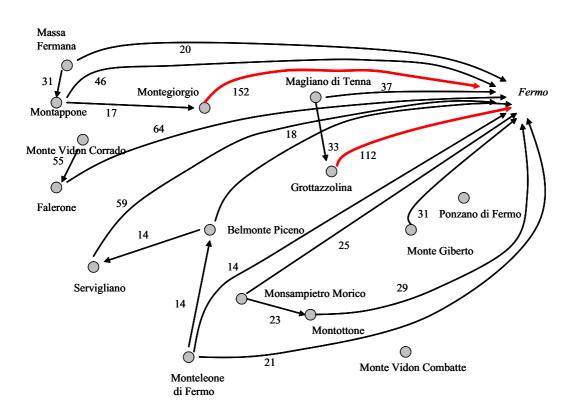
On examining the demographic growth patterns of the various municipalities over the diverse sub-periods one may note that the demographic performances are almost always negative. Only in the past decade nine municipalities (out of fourteen) showed positive - although not remarkable - demographic growth rates. Grottazolina is an exception, with positive growth rates in all the decades examined.

The local system of 'Montegiorgio' is characterised as an industrial system. Employment in the industrial sector is 60.6% of total employment, while the shares of employment in private services and in public services are 24.7% and 14% respectively.

The municipalities' economic structures are



## Home-school commuting flows - 2001



rather differentiated. The most significant differences relate to the industrial sector. Some municipalities have very high shares of employment in the industrial sector (about 80% of the total employment in the cases of Monteleone and Belmonte Piceno). The lowest value is recorded in the municipality of Montottone (39.6% of the total employment).

Economic structures are far less differentiated in terms of employment in public services: the maximum value is 20% for Monte Vidon Combatte and the minimun value is 7.3% for Monte Vidon Corrado. As far as private services are concerned, shares vary from 40% (Montottone)

to 9.3% (Monteleone).

In the period 1951-2001 employment in the private sector (industry and private services) increased by 215% (from 2,354 units in 1951 to 5,064 units in 2001). All municipalities experienced positive performances but growth rates were significantly different. Montegiorgio, Grottazolina and Magliano di Tenna are the municipalities with the highest growth rates in the private sector (respectively 429.2%, 445.1% and 824.1%). Montottone and Monte Vidon Combatte are those with the lowest growth rates.

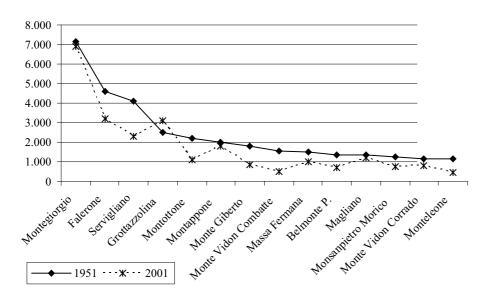
In the local system of 'Montegiorgio' manufacturing employment more than trebled during

Demographic trends 1951-2001

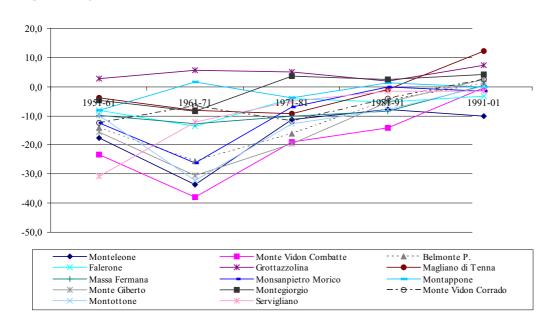
|                        | 1951   | 1961   | 1971   | 1981   | 1991   | 2001   | 1951-2    | 2001   |
|------------------------|--------|--------|--------|--------|--------|--------|-----------|--------|
|                        |        |        |        |        |        |        | abs. var. | var. % |
| Montegiorgio           | 7,130  | 6,803  | 6,236  | 6,461  | 6,621  | 6,904  | -226      | -3.2   |
| Falerone               | 4,606  | 4,228  | 3,655  | 3,502  | 3,317  | 3,213  | -1,393    | -30.2  |
| Grottazzolina          | 2,491  | 2,562  | 2,705  | 2,843  | 2,899  | 3,116  | 625       | 25.1   |
| Servigliano            | 4,119  | 2,854  | 2,506  | 2,382  | 2,348  | 2,312  | -1,807    | -43.9  |
| Montappone             | 1,980  | 1,819  | 1,849  | 1,776  | 1,801  | 1,801  | -179      | -9.0   |
| Magliano di Tenna      | 1,350  | 1,298  | 1,191  | 1,080  | 1,069  | 1,201  | -149      | -11.0  |
| Montottone             | 2,210  | 1,991  | 1,349  | 1,178  | 1,086  | 1,089  | -1,121    | -50.7  |
| Massa Fermana          | 1,503  | 1,357  | 1,184  | 1,065  | 976    | 981    | -522      | -34.7  |
| Monte Giberto          | 1,825  | 1,539  | 1,068  | 858    | 813    | 834    | -991      | -54.3  |
| Monte Vidon Corrado    | 1,165  | 1,019  | 951    | 837    | 802    | 823    | -342      | -29.4  |
| Monsanpietro Morico    | 1,266  | 1,110  | 818    | 762    | 762    | 750    | -516      | -40.8  |
| Belmonte Piceno        | 1,354  | 1,161  | 863    | 723    | 690    | 697    | -657      | -48.5  |
| Monte Vidon Combatte   | 1,571  | 1,205  | 749    | 606    | 520    | 518    | -1,053    | -67.0  |
| Monteleone di Fermo    | 1,156  | 954    | 633    | 561    | 517    | 465    | -691      | -59.8  |
| System of Montegiorgio | 33,726 | 29,900 | 25,757 | 24.634 | 24.221 | 24.704 | -9.022    | -26.8  |

Source: ISTAT data - Population Census

# Population of the local system's municipalities - 1951, 2001



# Population growth rates



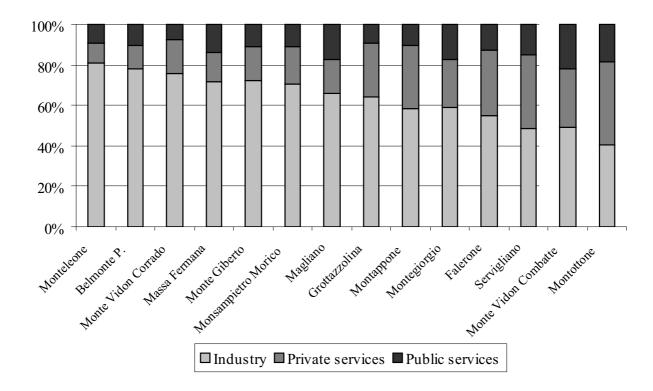
Source: ISTAT data - Population Census

the period 1951-2001. The most dynamic municipalities were the largest ones: Grottazolina, Montegiorgio and, mainly, Magliano di Tenna. By analysing the rank of the municipalities of the local system in terms of manufacturing employment in 1951 and in 2001 the following main changes emerged: Falerone occupied the first position in 1951 and the fourth position in 2001; Magliano reached a higher position, rising

from the ninth to the third position, as well as Servigliano which rose from the fourth to the seventh position.

In the whole period examined the municipalities of this local system have followed different trajectories as far as manufacturing employment is concerned. Some of them (Montegiorgio, Montappone, Grottazolina and Magliano) begun a trajectory of industrialization in the 1950s and

Shares of the employment in the industrial sector, in private and public services - 2001 (% values)



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Dynamics of employment in the industrial sector and in private services (1951-2001)

|                        | 1951  | 1961  | 1971  | 1981  | 1991  | 2001  | 1951-2001 |        |
|------------------------|-------|-------|-------|-------|-------|-------|-----------|--------|
|                        |       |       |       |       |       |       | abs. var. | % var. |
| Montegiorgio           | 407   | 743   | 1,258 | 1,871 | 2,181 | 2,154 | 1,747     | 429.2  |
| Grottazzolina          | 195   | 332   | 653   | 947   | 941   | 1,063 | 868       | 445.1  |
| Falerone               | 420   | 628   | 649   | 1,032 | 884   | 870   | 450       | 107.1  |
| Magliano di Tenna      | 79    | 122   | 125   | 405   | 607   | 730   | 651       | 824.1  |
| Montappone             | 220   | 237   | 472   | 631   | 538   | 561   | 341       | 155.0  |
| Servigliano            | 234   | 262   | 339   | 698   | 603   | 545   | 311       | 132.9  |
| Massa Fermana          | 131   | 251   | 258   | 310   | 296   | 387   | 256       | 195.4  |
| Monte Vidon Corrado    | 90    | 121   | 93    | 217   | 246   | 219   | 129       | 143.3  |
| Monte Giberto          | 106   | 91    | 97    | 146   | 183   | 208   | 102       | 96.2   |
| Belmonte Piceno        | 89    | 63    | 83    | 136   | 172   | 185   | 96        | 107.9  |
| Montottone             | 159   | 194   | 205   | 228   | 221   | 182   | 23        | 14.5   |
| Monteleone di Fermo    | 101   | 86    | 74    | 105   | 128   | 135   | 34        | 33.7   |
| Monsampietro Morico    | 76    | 99    | 101   | 150   | 126   | 124   | 48        | 63.2   |
| Monte Vidon Combatte   | 47    | 54    | 60    | 105   | 64    | 55    | 8         | 17.0   |
| System of Montegiorgio | 2.354 | 3.283 | 4.467 | 6.981 | 7.190 | 7.418 | 5.064     | 215.1  |

Dynamics of manufacturing employment (1951-2001)

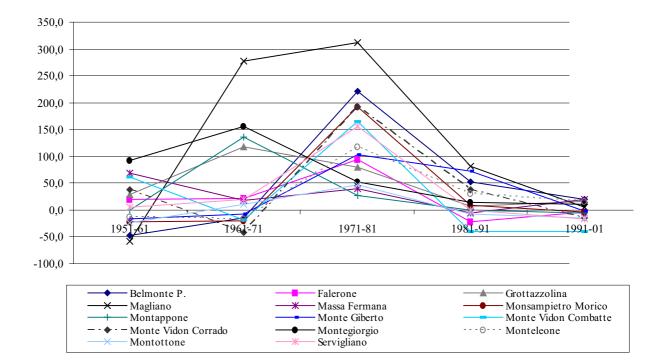
| -                      | 1951  | 1961  | 1971  | 1981  | 1991  | 2001  | 1951-2001 |         |
|------------------------|-------|-------|-------|-------|-------|-------|-----------|---------|
|                        |       |       |       |       |       |       | abs. var. | % var.  |
| Montegiorgio           | 156   | 299   | 764   | 1,170 | 1,341 | 1,478 | 1,322     | 847.4   |
| Grottazzolina          | 111   | 142   | 308   | 556   | 595   | 688   | 577       | 519.8   |
| Magliano di Tenna      | 44    | 18    | 68    | 280   | 510   | 541   | 497       | 1,129.5 |
| Falerone               | 229   | 273   | 330   | 639   | 498   | 476   | 247       | 107.9   |
| Montappone             | 123   | 123   | 291   | 370   | 367   | 345   | 222       | 180.5   |
| Massa Fermana          | 89    | 150   | 176   | 247   | 234   | 282   | 193       | 216.9   |
| Servigliano            | 103   | 109   | 131   | 334   | 332   | 280   | 177       | 171.8   |
| Monte Vidon Corrado    | 58    | 80    | 47    | 137   | 190   | 162   | 104       | 179.3   |
| Monte Giberto          | 51    | 43    | 40    | 81    | 140   | 138   | 87        | 170.6   |
| Belmonte Piceno        | 51    | 27    | 23    | 74    | 113   | 135   | 84        | 164.7   |
| Monteleone di Fermo    | 48    | 42    | 35    | 76    | 99    | 115   | 67        | 139.6   |
| Montottone             | 82    | 62    | 69    | 102   | 94    | 81    | -1        | -1.2    |
| Monsampietro Morico    | 37    | 29    | 23    | 67    | 73    | 70    | 33        | 89.2    |
| Monte Vidon Combatte   | 13    | 21    | 17    | 45    | 27    | 16    | 3         | 23.1    |
| System of Montegiorgio | 1,195 | 1,418 | 2,322 | 4,178 | 4,613 | 4,807 | 3,612     | 302.3   |

experienced higher growth rates in the 1960s. Others (Massa Fermana, Monte Vidon Combatte and Monte Vidon Corrado) began a trajectory of industrialization in the 1950s but experienced lower growth rates in the subsequent decade. Most importantly is that most of the municipalities recorded negative growth rates in the 1950s and since the 1960s have begun their trajectories of industrialization.

Since the early 1970s the manufacturing employment trajectories of the municipalities have been more homogeneous. All municipalities experienced modest increases in their manufacturing growth in the 1970s. In the subsequent decade eleven municipalities experienced a reduction in manufacturing employment.

On the background of the negative dynamics of manufacturing employment experienced by six

### Manufacturing employment growth rates (1951-2001)



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municipalities (out of 14 municipalities) during the Eighties and by eight municipalities during the Nineties, it can be noted that in the past two decades Magliano, Montegiorgio and Grottazolina have been the driving municipalities.

The manufacturing sector of the local system of 'Montegiorgio' has a rather high degree of specialization in footwear production (40% of total manufacturing employment) - and to a lesser extent in the 'clothing' sub-sector (15%) - while 'non-electrical machinery' and 'metallic carpentry' sub-sectors are the next most important. In general, one can state that this local

productive system is not much diversified, with a specialization pattern characterized by the traditional "made in Italy" sub-sectors. Moreover, its degree of specialization in the sub- sectors mentioned above has not changed significantly over time: in 1951 'footwear', 'textiles' and 'clothing' sub-sectors accounted for 45.4% of total manufacturing employment, whereas 'food products and beverages' and 'mechanical' sub-sectors accounted for 18.2% and 11.4% respectively.

Manufacturing employment growth rates and absolute values - 1981-1991; 1991-2001

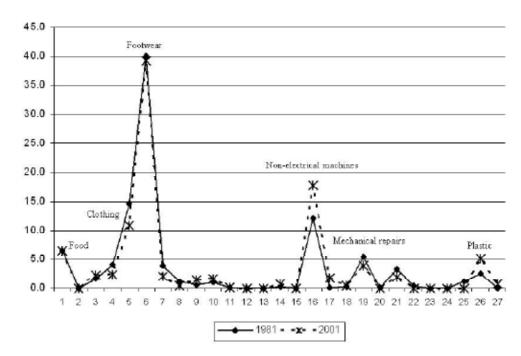
|                      | 1981-91   |        |                      | 1991-01   |        |
|----------------------|-----------|--------|----------------------|-----------|--------|
|                      | abs. var. | % var. |                      | abs. var. | % var. |
| Magliano             | 230       | 82.1   | Montegiorgio         | 137       | 10.2   |
| Montegiorgio         | 171       | 14.6   | Grottazzolina        | 93        | 15.6   |
| Monte Giberto        | 59        | 72.8   | Massa Fermana        | 48        | 20.5   |
| Monte Vidon Corrado  | 53        | 38.7   | Magliano             | 31        | 6.1    |
| Belmonte P.          | 39        | 52.7   | Belmonte P.          | 22        | 19.5   |
| Grottazzolina        | 39        | 7.0    | Monteleone           | 16        | 16.2   |
| Monteleone           | 23        | 30.3   | Monte Giberto        | -2        | -1.4   |
| Monsampietro Morico  | 6         | 9.0    | Monsampietro Morico  | -3        | -4.1   |
| Servigliano          | -2        | -0.6   | Monte Vidon Combatte | -11       | -40.7  |
| Montappone           | -3        | -0.8   | Montottone           | -13       | -13.8  |
| Montottone           | -8        | -7.8   | Falerone             | -22       | -4.4   |
| Massa Fermana        | -13       | -5.3   | Montappone           | -22       | -6.0   |
| Monte Vidon Combatte | -18       | -40.0  | Monte Vidon Corrado  | -28       | -14.7  |
| Falerone             | -141      | -22.1  | Servigliano          | -52       | -15.7  |

Source: ISTAT data - Industry and Services Census, 2001

|   | abs. val. | % val. |
|---|-----------|--------|
| Clothing and footwear                               | 477       | 39.9   |
| Food and beverages                                  | 217       | 18.2   |
| Wood and furnishings                                | 207       | 17.3   |
| Mechanics   | 136       | 11.4   |
| Textiles  | 65        | 5.4    |
| Non-metalbearing minerals                           | 65        | 5.4    |
| Publishing and press                                | 16        | 1.3    |
| Industries related to music, photography and cinema | 6         | 0.5    |
| Tobacco   | 2         | 0.2    |
| Rubber  | 2         | 0.2    |
| Petrochemicals                                      | 1         | 0.1    |
| Plastic and other manufacturing industries          | 1         | 0.1    |

Source: ISTAT data - Industry and Services Census 1961, 2001

Manufacturing specializarion in terms of employees - 1961, 2001 (% values)



Source: ISTAT data - Industry and Services Census 1961, 2001



Monte fortino

### 3.3.4 The local system of 'Comunanza'

The local system of 'Comunanza' is located in the southern-western area of the Marche Region. Among the local systems of the target area, it has the largest territorial extension (426 Kmsq) but the lowest levels of population and employees. Unlike the local systems of 'Fermo' and 'Civitanova Marche' and like 'Montegiorgio', it does not possess urban features, being a sub-ordered system with rarefied relational densities.

It comprises the territories of thirteen commu-

nes, eight of which are located in the territory of the target area whereas the other five are located in the Province of Ascoli Piceno. Its population amounts to about 16.000 inhabitants; total employment is about 4,400 units, 2,900 of which are occupied in the manufacturing sector (Census 2001).

The municipalities of Comunanza and Amandola, which were the biggest ones in terms of population already in the early 1950s, were the urban centers where the economic development which led to the formation of this local system began. This process has generated a functional

The local system of 'Comunanza': some basic data - 2001

| Municipality               | Population (abs. val.) | Population (%) | Employees (abs. val.) | Employees (%) | Area  | Density |
|----------------------------|------------------------|----------------|-----------------------|---------------|-------|---------|
|                            | 020                    | • 0            | 104                   | • •           | 10.44 | 44.5    |
| Monte San Martino          | 820                    | 5.0            | 124                   | 2.8           | 18.44 | 44.5    |
| Amandola                   | 3,969                  | 24.3           | 630                   | 14.4          | 69.53 | 57.1    |
| Comunanza                  | 3,100                  | 19.0           | 2,466                 | 56.3          | 54.37 | 57.0    |
| Force                      | 1,602                  | 9.8            | 322                   | 7.4           | 34.31 | 46.7    |
| Montefalcone Appennino     | 527                    | 3.2            | 58                    | 1.3           | 16.01 | 32.9    |
| Montefortino               | 1,303                  | 8.0            | 151                   | 3.4           | 78.63 | 16.6    |
| Montelparo                 | 964                    | 5.9            | 70                    | 1.6           | 21.59 | 44.7    |
| Montemonaco                | 684                    | 4.2            | 67                    | 1.5           | 67.85 | 10.1    |
| Monte Rinaldo              | 412                    | 2.5            | 53                    | 1.2           | 7.96  | 51.8    |
| Ortezzano                  | 832                    | 5.1            | 153                   | 3.5           | 7.04  | 118.2   |
| Palmiano                   | 222                    | 1.4            | 12                    | 0.3           | 12.69 | 17.5    |
| Santa Vittoria in Matenano | 1,486                  | 9.1            | 250                   | 5.7           | 26.17 | 56.8    |
| Smerillo                   | 411                    | 2.5            | 23                    | 0.5           | 11.29 | 36.4    |
| Total                      | 16,332                 | 100.0          | 4,379                 | 100.0         | 425.9 | 38.3    |

Source: ISTAT data - Population Census 2001; Industry and Services Census 2001

As previously pointed out, the local system of 'Comunanza' does not possess an urban characterization: because of its limited demographic and employment scale and because of its low density of relational interdependencies, it can be defined as a 'weak' network of territorial interdependencies. Unlike the local system of 'Montegiorgio'-the other local system of the target area which does not show the typical features of an urban system -, in this case it is evident the role that the pivot commune of Comunanza plays at the level of the entire local system. Indeed, most of the home-workplace commuting flows are directed toward Comunanza. Among the communes belonging to this local system, those of Amandola, Comunanza and Montefortino constitute the core of this local system and show the most intense relational interdependencies.

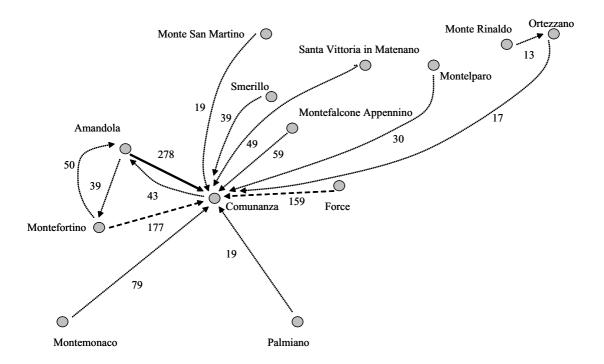
As for home-school commuting flows, one notes a more articulated situation because of the presence of three centers which provide educational services for the population of the local system: Comunanza, Amandola and Fermothe latter located outside its territory. From this point of view, notwithstanding the relative importance of Comunanza as supplier of educational services at the level of the local system, it is evident that the pivot commune plays a major

role as supplier of employment opportunities.

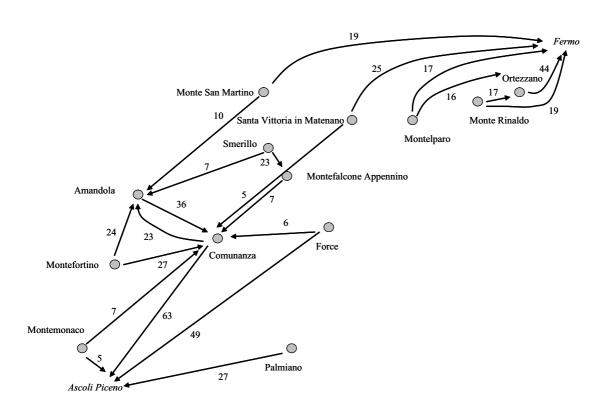
This local system is formed by municipalities of very limited sizes. Eight of them have less then 1,000 inhabitants, three have a population ranging from 1.000 to 2.000 inhabitants, whilst Comunanza and Amandola, which together comprise 43.3% of the total population of the local system -have 3,100 and 4,000 inhabitants respectively. From a spatial point of view, notwithstanding the relative large concentration of total population in its two biggest centers, one may state that this local system has a high degree of dispersion.

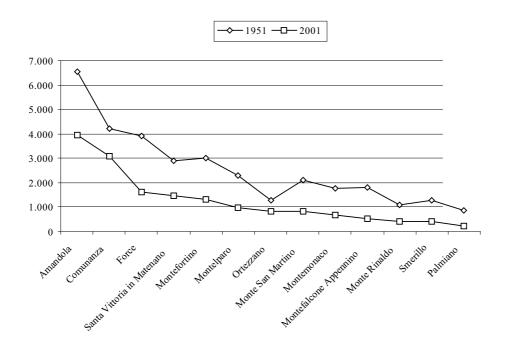
Population trend of the local system of 'Comunanza' in the period 1951-2001 shows a strong reduction in its demographic basis. Indeed, resident population decreased continuously in all the communes. On average, the negative growth rate was about 50% (which means a reduction of about 17,000 people). In eight communes out of thirteen-negative population growth rates peaked at 60% or more.

On examining the shape of the demographic trend one notes that all the communes experienced a fall in population mostly in the 1950s and 1960s -but Smerillo, Montefalcone Appennino, Palmiano e Monte San Martino more intensively than the others. In these decades, indeed, primary industry released a big amount of workers the local economic system was not able to absorb. The outcome was a large-scale migration which decreased only in the 1990s. Amandola and Comunanza, instead, became



Home-school commuting flows - 2001





Population of the local system's municipalities - 1951, 2001

| Municipality               | 1951   | 1961   | 1971   | 1981   | 1991   | 2001   | 1951-2001 1951-200 |           |
|----------------------------|--------|--------|--------|--------|--------|--------|--------------------|-----------|
|                            | 1931   | 1901   | 19/1   |        | 1991   | 2001   | abs. var.          | abs. var. |
| Monte San Martino          | 2,093  | 1,703  | 1,074  | 876    | 820    | 820    | -1,273             | -60.8     |
| Amandola                   | 6,541  | 5,645  | 4,403  | 4,106  | 4,012  | 3,969  | -2,572             | -39.3     |
| Comunanza                  | 4,225  | 3,675  | 2,977  | 2,919  | 3,026  | 3,100  | -1,125             | -26.6     |
| Force                      | 3,925  | 3,139  | 1,991  | 1,778  | 1,722  | 1,602  | -2,323             | -59.2     |
| Montefalcone Appennino     | 1,807  | 1,452  | 853    | 713    | 569    | 527    | -1,280             | -70.8     |
| Montefortino               | 2,993  | 2,458  | 1,683  | 1,493  | 1,411  | 1,303  | -1,690             | -56.5     |
| Montelparo                 | 2,310  | 1,886  | 1,268  | 1,121  | 1,002  | 964    | -1,346             | -58.3     |
| Montemonaco                | 1,771  | 1,489  | 1,007  | 905    | 753    | 684    | -1,087             | -61.4     |
| Monte Rinaldo              | 1,090  | 843    | 606    | 520    | 448    | 412    | -678               | -62.2     |
| Ortezzano                  | 1,262  | 1,095  | 864    | 806    | 819    | 832    | -430               | -34.1     |
| Palmiano                   | 873    | 617    | 388    | 271    | 219    | 222    | -651               | -74.6     |
| Santa Vittoria in Matenano | 2,900  | 2,368  | 1,719  | 1,483  | 1,447  | 1,486  | -1,414             | -48.8     |
| Smerillo                   | 1,263  | 1,014  | 605    | 491    | 431    | 411    | -852               | -67.5     |
| Total                      | 33,053 | 27,384 | 19,438 | 17,482 | 16,679 | 16,332 | -16,721            | -50.6     |

Source: ISTAT data - Population Census 1951, 2001

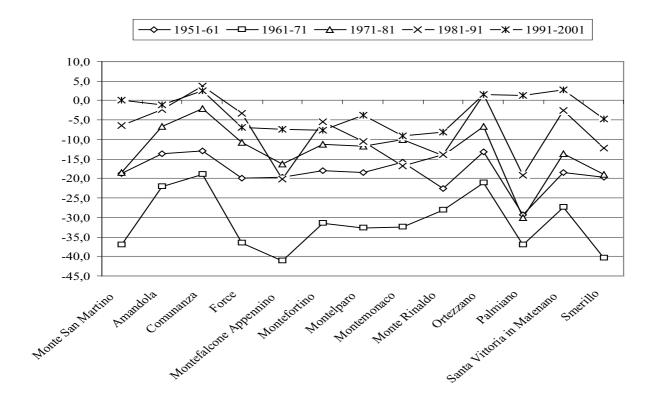
stable from the demographic point of view during the 1980s. In that period, indeed, this local system began to organize itself around these two main centers.

According to the Industry and Services Census 2001 employment amounted to 5,506 employees. 60% of them (3.316 units) were employed in the industrial sector, while 23% (1.264 units) in the private services and 15.9% (877 units) in the

public services.

By analysing the distribution of employment by municipalities one notes that employment is highly concentrated in the municipalities of Comunanza and Amandola, where 67.9% of the total employees of the local system are recorded. This concentration is particularly high in Comunanza -62.9% of the total industrial employees and 41.1% of the total private ser-

### Population growth rates



Source: ISTAT data - Population Census

# Employment by municipalities, 2001

| Municipality               | Agricolture | Industry | Private services | Public services | Total |
|----------------------------|-------------|----------|------------------|-----------------|-------|
| Monte San Martino          | 0           | 01       | 2.4              | 27              | 150   |
|                            | 0           | 91       | 34               | 27              | 152   |
| Amandola                   | 12          | 371      | 290              | 284             | 957   |
| Comunanza                  | 5           | 2,085    | 521              | 172             | 2,783 |
| Force                      | 10          | 264      | 58               | 56              | 388   |
| Montefalcone Appennino     | 1           | 35       | 29               | 31              | 96    |
| Montefortino               | 10          | 104      | 49               | 67              | 230   |
| Montelparo                 | 1           | 27       | 41               | 68              | 137   |
| Montemonaco                | 1           | 26       | 43               | 28              | 98    |
| Monte Rinaldo              | 0           | 29       | 28               | 10              | 67    |
| Ortezzano                  | 0           | 102      | 57               | 36              | 195   |
| Palmiano                   | 3           | 5        | 7                | 2               | 17    |
| Santa Vittoria in Matenano | 5           | 165      | 92               | 86              | 348   |
| Smerillo                   | 1           | 12       | 15               | 10              | 38    |
| Total                      | 49          | 3,316    | 1,264            | 877             | 5,506 |

# Shares of employment by municipalities, 2001

| Municipality               | Agricolture | Industry | Private services | Public services | Total |
|----------------------------|-------------|----------|------------------|-----------------|-------|
|                            |             |          |                  |                 |       |
| Monte San Martino          | 0.0         | 2.7      | 2.7              | 3.1             | 2.8   |
| Amandola                   | 24.5        | 11.2     | 22.9             | 32.4            | 17.4  |
| Comunanza                  | 10.2        | 62.9     | 41.2             | 19.6            | 50.5  |
| Force                      | 20.4        | 8.0      | 4.6              | 6.4             | 7.0   |
| Montefalcone Appennino     | 2.0         | 1.1      | 2.3              | 3.5             | 1.7   |
| Montefortino               | 20.4        | 3.1      | 3.9              | 7.6             | 4.2   |
| Montelparo                 | 2.0         | 0.8      | 3.2              | 7.8             | 2.5   |
| Montemonaco                | 2.0         | 0.8      | 3.4              | 3.2             | 1.8   |
| Monte Rinaldo              | 0.0         | 0.9      | 2.2              | 1.1             | 1.2   |
| Ortezzano                  | 0.0         | 3.1      | 4.5              | 4.1             | 3.5   |
| Palmiano                   | 6.1         | 0.2      | 0.6              | 0.2             | 0.3   |
| Santa Vittoria in Matenano | 10.2        | 5.0      | 7.3              | 9.8             | 6.3   |
| Smerillo                   | 2.0         | 0.4      | 1.2              | 1.1             | 0.7   |
| Total                      | 100.0       | 100.0    | 100.0            | 100.0           | 100.0 |

Source: ISTAT data - Industry and Services Census, 2001

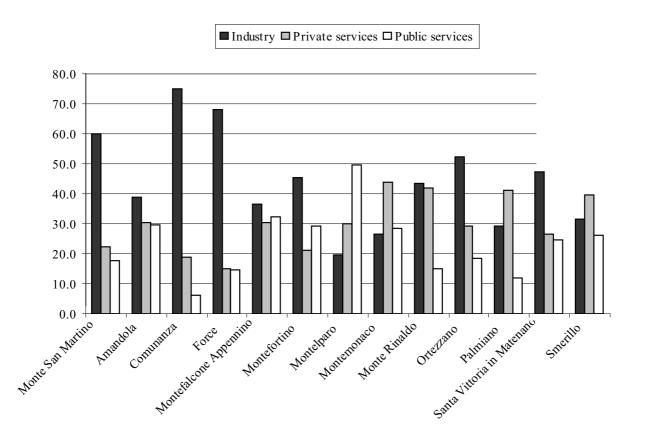
vices employees. Amandola, instead, has a high characterization in the public services (32.4% of the total public services employees).

In conclusion, the territorial re-organization which took place during the past two decades has led to a functional specialization of the two main centers of the local system. Comunanza

has a marked industrial characterization and private services related to industrial growth are also important, while Amandola plays a role as a tertiary centre with regard to public services. The other municipalities play mostly a residential function.

The economic structures of the municipalities

Shares of the employment in the industrial sector, in private and public services - 2001 (% values)



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differ greatly. Comunanza, Ortezzano, Monte San Martino and Force have high shares of employment in the industrial sector, ranging from 52.3% to 75%. Other municipalities - Montemonaco, Palmiano, Smerillo and Monte Rinaldo -are characterized for their relatively high shares of employment in the private services, with values ranging from 39.5% to 43.9%. Amandola, Montefortino and Montefalcone Appennino, instead, show the highest shares of employment in the public services, with values ranging from 29.7% to 49.6%.

During the period 1951-2001 the local system of 'Comunanza' followed a trajectory of re-

markable industrialization. Manufacturing employment increased by 296.2% (from 734 workers in 1951 to 2,908 workers in 2001). The scale of the economic process, however, is still very limited.

Manufacturing growth has been polarized: the municipality of Comunanza concentrated 85% of the total growth of the manufacturing employment. Comunanza began to develop in the 1960s and reached a peak in the 1970s, when its territory became eligible for benefits under the "Cassa per il Mezzogiorno Program". As far as the other municipalities of the local system are concerned, they also experienced remarkable

### Dynamics of manufacturing employment (1951-2001)

| Municipality               | 1951 | 1961 | 1971 | 1981  | 1991  | 2001  |
|----------------------------|------|------|------|-------|-------|-------|
|                            |      |      |      |       |       |       |
| Monte San Martino          | 34   | 29   | 69   | 137   | 73    | 64    |
| Amandola                   | 170  | 133  | 218  | 313   | 262   | 260   |
| Comunanza                  | 168  | 124  | 322  | 975   | 1,458 | 2,014 |
| Force                      | 51   | 56   | 101  | 286   | 277   | 240   |
| Montefalcone Appennino     | 21   | 19   | 18   | 20    | 24    | 30    |
| Montefortino               | 62   | 34   | 42   | 75    | 79    | 62    |
| Montelparo                 | 37   | 45   | 34   | 25    | 31    | 24    |
| Montemonaco                | 30   | 16   | 17   | 27    | 10    | 11    |
| Monte Rinaldo              | 39   | 20   | 18   | 36    | 10    | 13    |
| Ortezzano                  | 38   | 71   | 60   | 97    | 124   | 61    |
| Palmiano                   | 1    | 2    | 2    | 24    | 34    | 2     |
| Santa Vittoria in Matenano | 64   | 55   | 86   | 155   | 154   | 125   |
| Smerillo                   | 19   | 12   | 8    | 18    | 17    | 2     |
| Total                      | 734  | 616  | 995  | 2,188 | 2,553 | 2,908 |

Source: ISTAT data - Industry and Services Census

positive or negative performances in percentage terms but their performances did not exert large effects on the territory because of their very limited sizes. In the past decade, only five municipalities - Comunanza, Monte Rinaldo, Montefalcone Appennino, Montemonaco -continued to increase their manufacturing employment. In 2001 the ratio between employees in the manufacturing employment and total employees was about 13%.

The manufacturing sector of this local system show a fairly high degree of specialization which encompasses two sub-sectors: the 'non electrical machinery' sub-sector accounts for 34.4% of manufacturing employment, whereas the 'footwear' sub-sector accounts for 23.3% of total manufacturing employment. The other manufacturing sub-sectors show much less significant values.

### Manufacturing employment growth rates

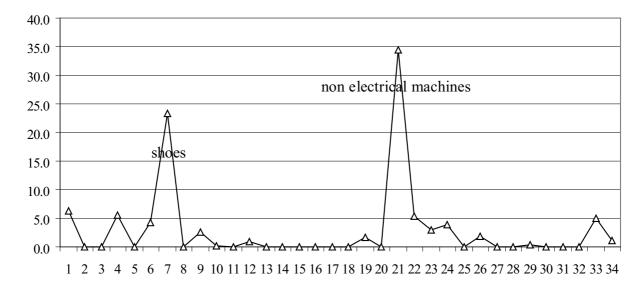
| Municipality               | 1951-61 | 1961-71 | 1971-81 | 1981-91 | 1991-2001 | 1951-2001 |
|----------------------------|---------|---------|---------|---------|-----------|-----------|
|                            |         |         |         |         |           |           |
| Monte San Martino          | -14.7   | 137.9   | 98.6    | -46.7   | -12.3     | 88.2      |
| Amandola                   | -21.8   | 63.9    | 43.6    | -16.3   | -0.8      | 52.9      |
| Comunanza                  | -26.2   | 159.7   | 202.8   | 49.5    | 38.1      | 1098.8    |
| Force                      | 9.8     | 80.4    | 183.2   | -3.1    | -13.4     | 370.6     |
| Montefalcone Appennino     | -9.5    | -5.3    | 11.1    | 20.0    | 25.0      | 42.9      |
| Montefortino               | -45.2   | 23.5    | 78.6    | 5.3     | -21.5     | 0.0       |
| Montelparo                 | 21.6    | -24.4   | -26.5   | 24.0    | -22.6     | -35.1     |
| Montemonaco                | -46.7   | 6.3     | 58.8    | -63.0   | 10.0      | -63.3     |
| Monte Rinaldo              | -48.7   | -10.0   | 100.0   | -72.2   | 30.0      | -66.7     |
| Ortezzano                  | 86.8    | -15.5   | 61.7    | 27.8    | -50.8     | 60.5      |
| Palmiano                   | 100.0   | 0.0     | 1100.0  | 41.7    | -94.1     | 100.0     |
| Santa Vittoria in Matenano | -14.1   | 56.4    | 80.2    | -0.6    | -18.8     | 95.3      |
| Smerillo                   | -36.8   | -33.3   | 125.0   | -5.6    | -88.2     | -89.5     |
| Total                      | -16.1   | 61.5    | 119.9   | 16.7    | 13.9      | 296.2     |

Source: ISTAT data - Industry and Services Census



Monteleone

Manufacturing specialization in terms of employees, 2001 (% values)



Source: ISTAT data - Industry and Services Census 2001

### 3.4 Polycentrism and sustainability: scenarios

### 3.4.1 Introduction

The dynamics outlined in the previous pages have a complex relationship with the objectives in terms of degree of polycentrism and sustainability. By analysing this relationship one may identify some guide lines for public policies aimed to achieve a reasonable degree of polycentrism and sustainability.

### 3.4.2 Effects on the objectives

The following relationships among the socioeconomic dynamics and socio-territorial dynamics which are in motion in the target area and the degree of polycentrism and sustainability can be identified:

# A. Obsolescence and disruption of the historical building capital

A redistribution of human processes has occurred in the target area. As previously examined, population growth (17%) has concentrated only in some municipalities and a strong population decrease has occurred in the rest of the municipalities of the target area. These dynamics have led to a sharp increase in the physical capital in the growing municipalities. Paradoxically, this has made obsolete part of the physical capital located in these municipalities. In the declining municipalities the obsolescence of their physical capital - in most of the cases it is a capital

with a relevant historical and cultural value - has been higher than expected.

The explanation of this paradox lies in the formation of the new local systems - besides the increase in the endowment of per capita building capital and the need for new forms of building capital (factories) demanded by the industrialization process. Indeed, the formation of the new local systems has been driven by the realization of new "focal points" located in a barycentric position which have determined a displacement effect of part of the inherited building capital.

All the historic centres in the local systems of 'Fermo' and 'Civitanova Marche' - all of great value - are largely underused, notwithstanding that they are located in areas which have undergone high demographic performances. Thus one may observe two phenomena. From one side, there are urban centres located inland which have lost their function as a consequence of the new territorial organization and of the reduction in the local community. On the other side, there are enclaves of abandonment and/or under-use of the physical capital (particularly in the historic centres) within the areas in rapid expansion.

### B. Desruption of the agricultural landscape

A large part of the territory of the target area is characterized by agricultural landscapes shaped by a kind of agriculture organized according to the traditional share-cropping system which governed agricultural production in most parts

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of Central Italy until the 1970s. Landscape values have experienced a sharp reduction under the effect of diverse phenomena. Changes in relative prices have determined a reduction in the farmland as well as an increase in the land left aside which has undergone a process of renaturalisation. Moreover, the agricultural price system has provoked a sharp reduction in zootechny, breaking a production local chain which is fundamental for landscape conservation. Finally, the diffusion of extensive agriculture and the progressive ageing of farmers, factors that have introduced changes in the traditional methods of farming, have given rise to landscape simplification.

The formation of the local systems which brought processes of territorial self-organization has caused a marked diffusion of new settlements for industrial, handicrafts, commercial and residential purposes - as a response to the reconstruction of the spatial equilibrium and to the creation of the new focal points. This has determined an evident disruption of the values of the agricultural landscape - also as a consequence of the fact that the new buildings do not retain the typical and significant characteristics of vernacular architecture.

### C. Urban quality in the new local systems

As the local systems of 'Fermo' and 'Civitanova Marche' have been driven by rapid processes of territorial coalescence and arose from self-organizing processes, they possess a very low degree of urban quality, either with respect to

formal parameters or - especially - with respect to functional parameters.

In functional terms, the most critical aspect is the congestion brought about by a major increase in car use associated to the dispersed settlement structure which characterizes these local systems. Decisive for this extremely high car use is the lack of adequate local markets in most of their small urban settlements and scattered dwellers - besides the lack of adequate mobility infrastructures for pedestrians and cyclists.

D. Environmental sustainability of the economic process. The reduction in human activities in the hilly and mountainous areas of the target area has not generated a critical environmental pressure in a large part of its territory. Of course, this has not prevented the emergence of some critical punctual situations of environmental disruption - besides the environmental pressure caused by agricultural practices which exercise high environmental impacts.

Very different is the situation in the local systems located along the Adriatic coast which have undergone much more sustained processes of economic growth. In this case the environmental pressure manifests in critical forms, justifying an assessment of unsustainability of the economic process.

The analysis of the current state of the target area with reference to the objectives of sustainability and polycentrism has been conducted along the following two lines. Firstly, following the procedures of the "STEMA Model" some thematic maps which indicate critical situations have been drawn. Secondly, a recent study of the Marche Region on the geography of the environmental impact has been utilized. This study made possible the drawing of a set of thematic maps which allow to build the sustainability of the socio-economic processes of the target area.

### 3.4.3 Scenarios without intervention

With regards to the objectives of environmental sustainability, human landscape conservation and polycentrism preservation, the development trajectories previously examined seem to be critical. Assuming the coming decade as the temporal horizon one may make the following considerations:

a. demographic trajectories will not change significantly both in direction and in intensity compared to the past decade;

b. the productive structure of the primary sector will become progressively weaker and, consequently, the un-equilibrium previously mentioned will strengthen; moreover, a "demographic collapse" of the agricultural system of the area could occur;

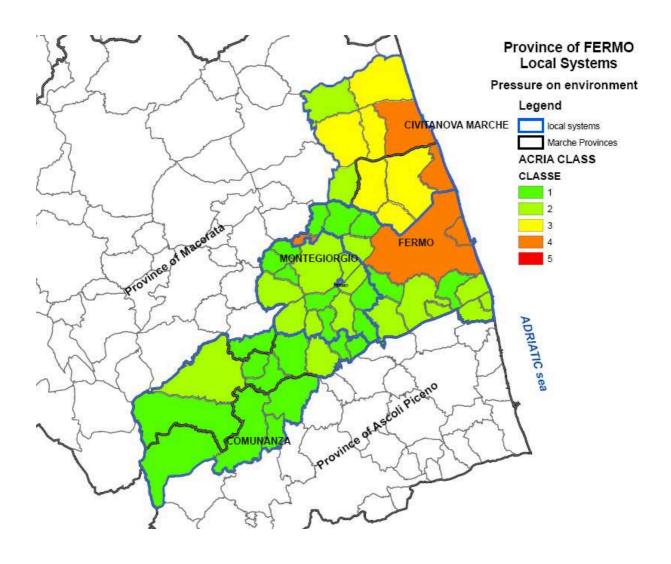
c. building dynamics seem to remain strong although a significant demographic trend is not expected; thus, it will concentrate in the more dynamic local systems of 'Fermo' and 'Civita-

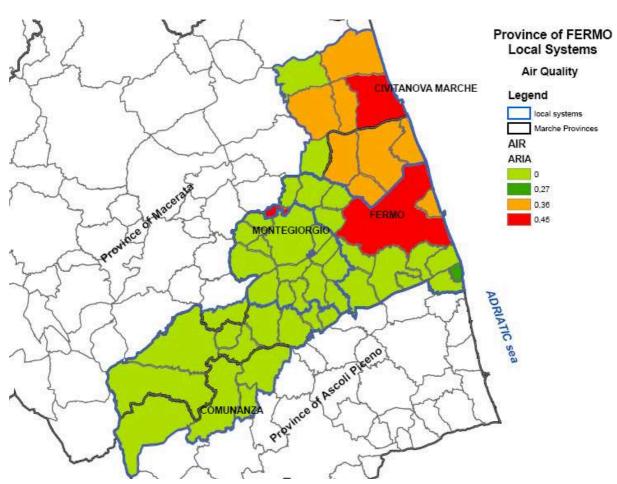
nova Marche' but a reuse of the obsolete building capital of the historic centres is not likely to happen; moreover, building dynamics do not seem to tackle the issue of the urban quality either in formal or functional terms;

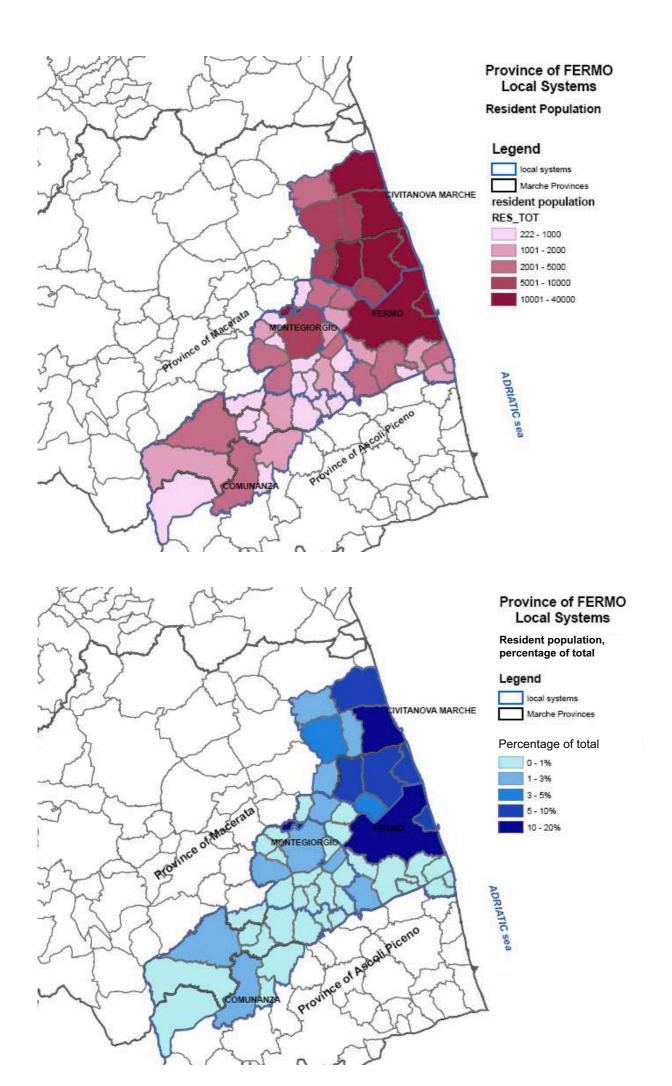
d. settlement dispersion seems doomed to increase; at present, signs of a reversal of trend are not detectable; consequently, negative effects in terms of pollution, congestion and transaction costs related to car mobility are expected to increase too.

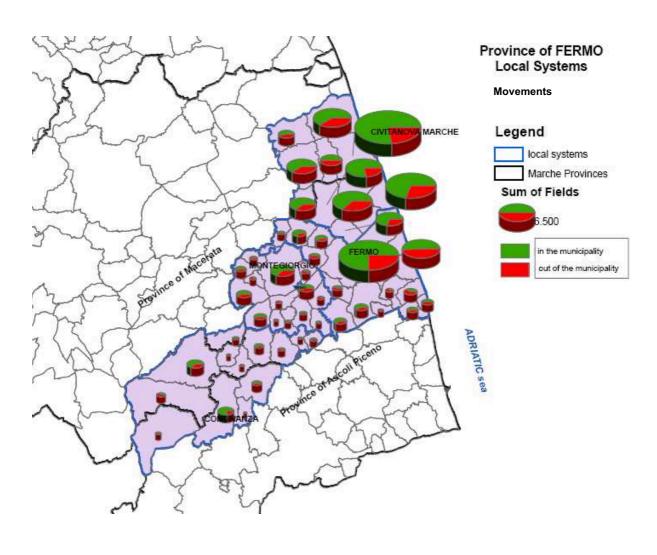
The last consideration concerns productivity and income dynamics for which, considering the prevailing sectors of the target area's economy (substantially, the footwear sector), significant changes are not foreseeable.

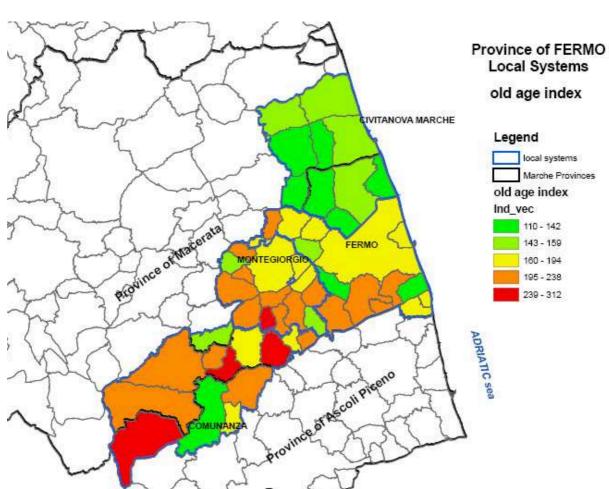
On the background of the analysis conducted in the previous pages one may conclude that if effective policies are not implemented none of the un-equilibrium which have been highlighted will decrease. First of all, the polycentric organization of the territory will become even weaker: the declining municipalities are not expected to change their trajectories. Secondly, congestion and unsustainable environmental pressure which manifest themselves in the most densely populated municipalities are doomed to grow. At present the territorial and environmental unequilibrium of the target area are not subject to public policies which directly or indirectly can improve the situation decreasing the phenome-

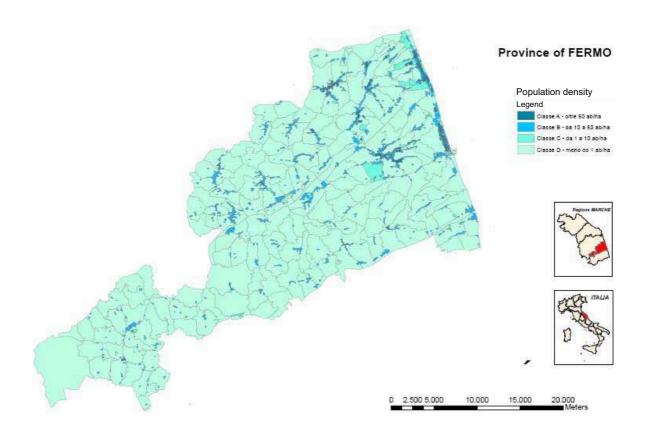


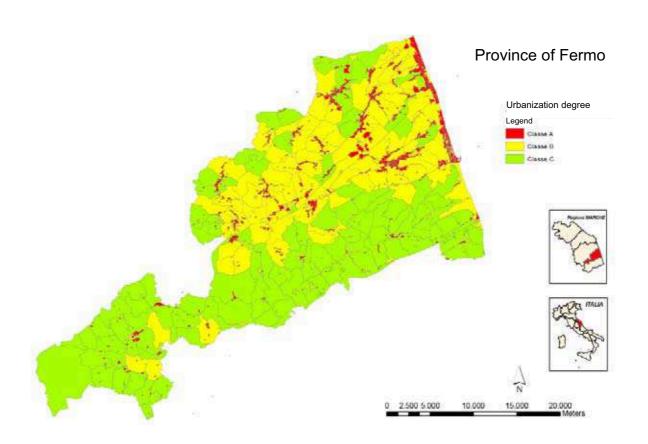












## **CHAPTER 4**

### **Conclusions**

The study conducted on the target area has highlighted a number of issues to which it is now appropriate to draw our attention. These issues relate both the knowledge of the territorial dynamics - social, economic and environmental dynamics - and the devise of effective public policies.

The first issue concerns the alignment of political-administrative partitions to territorial logics. The process which will assign the status of a "Province" to the target area, which in Italy is a political-administrative unit of regulation, has already started. This will allow the improvement of the decision-making processes - and also the processes of interpreting the territorial dis-equilibria. But, giving the target area the status of a Province will not solve the fundamental problem which has emerged from the analysis previously conducted. As a matter of fact, it remains unsolved the problem to give some instruments of governance to the "functional urban areas" and, in general, to the local systems in which this territory articulates. The crucial issue is that in this territory - but also in the territory of the Marche Region - municipalities do not represent any longer a relevant unit of government. Although municipalities have now more instruments of intervention and more resources, they are not relevant units of government as a result of the territorial dynamics occurred in the past decades.

As previously pointed out, this territory has to be governed with reference to "inter-municipal local systems". This does not mean that administrative decisions have to be made at the level of the local systems but that strategies for territorial development have to be devised. This is particularly evident in the internal areas where "networks of small-size municipalities" represent the units of reference. But

it is also evident along the coastal area, where the functional urban area of Fermo - which concentrates most part of the population and of the economic activities of the target area should be acknowledged and institutionalized. The establishment of the Province of Fermo should not put aside this fundamental politicalinstitutional problem.

The second issue concerns the current and future territorial disequilibria. Just a few municipalities have experienced very good demographic and economic performances in the past five decades. The remaining municipalities have followed paths of economic decline - although, due to some factors, per-capita income of the population has grown significantly. The situation has stabilized in the past two decades but there are reasons to believe that the tendency towards the concentration of population and economic activities will strengthen in the next decade if appropriate policies are not implemented.

These highly differentiated territorial dynamics create some problems. Firstly, it has to be acknowledged that some parts of the target area's territory have very high population densities which suggest typical urban features. These are the areas where a high - and critical - environmental pressure is to be found, as the analysis conducted in this Report has highlighted. In these areas spatial development has to be designed on the background of dis-equilibria like congestion, pollution (in diverse forms), urban quality, mobility times, social segmentation (with particular regard to foreign people whose presence in this territory is one of the highest

in Italy).

Secondly, it has to be acknowledged that most of the internal areas are experiencing a phase of "vocational uncertainty". The industrialization project of the internal areas, widely shared in the Seventies, has almost faded away and there are not the conditions to propose it again today (in a period of de-industrialization but, however, of concentration of factories in the best equipped industrial areas with dimensions such as to generate different types of externalities). Undoubtedly, a major increase in the car use and the willingness to use this means of transport intensely - and the substantial vicinity to the "focal points" of the target area from any point in the territory - have slowed down the decline of the internal areas. Home-workplace commuting and mobility associated to consumption and recreational activities have reduced emigration and stimulated residence. However, at this point in the evolution of the territory examined here, the situation is getting critical and likely unsustainable in the medium-long term. Some municipalities located in the internal areas are confronting more critical situations compared with others, but difficulties are general. Tackling the "vocational crisis" can not be delayed.

One of the consequences of the territorial dynamics mentioned above is the loss of the valuable historical and architectural heritage. The local income production is not able to produce investment aimed to preserve it. Public investment has certainly contributed to preserve the historical and architectural heritage but devising a general project would seem to be a stra-

tegic solution now.

The loss of a precise gravitational logic is at the origin of another territorial phenomenon which characterizes the target area: the sprawling of settlements for residential, commercial and industrial purposes over the territory. Although there is no economic reason which justifies it in the long term - with particular regard to the restrictions placed by the objective of environmental sustainability -, urban sprawl continues in the territory of the target area in "aggressive" forms which are unsustainable from an environmental perspective. This phenomenon, which all European countries are seeking to put under control, can generate very negative effects in a fragile and small territory like the one examined here. It significantly reduces the efficiency of the territorial systems by manipulating the use of public resources (it becomes necessary, therefore, to use resources, for example, in transport infrastructures connecting dispersed poles which could be used for other purposes). Moreover, it causes an irreversible loss of landscape values. In this case what is at stake is not only the loss of identity values but also the possibility to use the landscape in the production of tourist and recreational goods.

The clear division of the target area in terms of human density and land use brings about what can be called the "rural issue". In a territory which hosts one of the most dynamic industrial districts in Italy - the footwear district - the rural issue has been put in the background in the past decades. However, territorial dynamics have been such that the rural issue should be given

adequate consideration. Agriculture has shaped the landscape of this territory and how to preserve this agricultural landscape - its identity features and its ecological and economic values - constitutes a relevant objective on the light of the relationship among agricultural landscape and changes in the primary sector. Moreover, agriculture is an important - and in some cases fundamental - source of income in the local systems located in the internal areas. It also provides the basis for significant forms of tourism, both in the hilly and in the mountainous areas (where it continues to play a fundamental social and ecological role).

The target area examined here comprises a small fraction of the Marche Region's territory. Certainly, in the Marche Region there are areas with bigger environmental, social and economic dis-equilibria and this can be a further hindrance for the target area because it could undergo a marginalization process in the regional public policies. As a matter of fact, this Report, written as part of the activities conducted by the Marche Region as partner of the "PolyDev Project", should be interpreted as an attempt to highlight the territorial dis-equilibria which characterize the target area and to call the attention of the diverse levels of government - regional, national, community levels - to them so that they can become object of public policies.

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