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Urban Environment Group of Experts

THE "URBAN ENVIRONMENT" PROGRAMME OF THE ITALIAN GOVERNMENT TEN YEAR-PLAN FOR THE ENVIRONMENT (DECAMB)

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THE "URBAN ENVIRONMENT" PROGRAMME OF THE ITALIAN GOVERNMENT TEN YEAR-PLAN FOR THE ENVIRONMENT (DECAMB)

1. Introduction

The present paper is intended as a summarised illustration of the "Urban Environment" Programme, as worked out and featured in the Ten-Year Plan for the Environment (Decamb) presented by the Italian Minister of the Environment in a preliminary document in March 1992¹.

The illustration of said programme will be preceded by:

A brief recap of the Ten-Year Plan for the Environment (Decamb), going through its general attributes and essential content.

Brief mention of a few of the scientific premises which have guided the development of the "Urban Environment" Programme (and which are not found in the official text of the document).

2. The ten-year Plan for the Environment (Decamb)

The initiative of the Italian Ministry of the Environment to work out a Long-Term Plan for the Environment was developed alongside analogous sets of documents worked out by other European and non-European governments². The intention was to construct a systematic guide-line for governmental actions for at least the following decade, since many of the actions cannot but be considered in such a long-term perspective if one wants to evaluate their effects. In an "added note" to the State of the Environment Message of 1989 the then Minister of the Environment Giorgio Ruffolo confirmed that "an action with which one wants to affect the character of the direction of productive development structurally, to intervene in the organisation of the territory for its use in a way which does not bring about the depletion of environmental resources and to contribute to the modification of consumer orientations, then this cannot but be expressed in a long-term framework"³.

Following this logic Decamb was conceived as an instrument for⁴:

1. "establishing credible and measurable goals";
2. "evaluating the problems of equilibrium and reciprocal congruity of various promoted and selected actions in a global manner";
3. "establishing priority scales for needs to be satisfied";

¹The Italian Ministry of the Environment, the Ten-Year Plan for the Environment (Decamb), Rome, March 1992.

²In particular we refer to the official documents on long-term planning of the Japanese, Dutch, British, French and Canadian governments.

³The Ministry of the Environment, State of the Environment Report 1989, Added Note by the Minister, Giorgio Ruffolo, Rome, 1989, p. 38.

⁴The Ministry of the Environment, the Ten-Year Plan etc., op. cit. p.1

4. "organising the instruments and their mode of intervention, starting from the concrete evaluation of the functions which they must perform, with respect to the initiative and the programme to be realised".

Decamb is thus articulated as a series of "Programmes" of actions, for each of which a "programme structure" is laid down, consisting of three separate operational levels. For each Programme these are defined as: Objectives, Action Programmes, and Actions.

Decamb has fifteen Programmes (in the first preliminary draft of the presented document):

1. The "Urban Environment" Programme
2. The "Conservation of Nature" Programme
3. The "Atmosphere" Programme
4. The "Water" Programme
5. The "Land Conservation" Programme
6. The "Waste Disposal" Programme
7. The "Forests" Programme
8. The "Coastlines" Programme
9. The "Industrial Risks" Programme
10. The "Agricultural" Programme
11. The "Chemical Industries" Programme
12. The "Transport" Programme
13. The "Energy" Programme
14. The "Environmental Education" Programme
15. The "Environmental Information" Programme

The Programmes listed above, which Decamb has expressly declared subject to further extension and integration, have been classified in three general categories:

- "Environmental" Programmes: those which aim at having a direct effect on the environmental conditions, and fall under the responsibility of the environment administration (no.s 1 to 8 in the list);
- "Environmental Compatibility" Programmes: those which aim at constraining programmes which have goals that differ from the environmental ones, ensuring compatibility with environmental requirements (no.s 9 to 13);
- "Support" Programmes: those which aim at supplying optimal operational conditions for all the other programmes (no.s 14 & 15).

As can be seen, the Decamb places first, in its list of Programmes of action, a programme for the Urban Environment⁵. Moreover the Decamb has articulated its

⁵This represents a clear novelty, both with respect to other long-term plans worked out in the other states referred to (Japan, Holland, Canada, France, the UK etc.), and with respect to the usual division of the "subjects" of environmental policy, as resulting from the "grey" literature of existing national and international organisations (the UN-, EC- and Oecd- families etc.). In a way not different from what has been happening in the EC environment - where attention to the problems of the urban environment, which is effectively the natural environment of the vast majority of European citizens, came about with a certain time-lag with respect to the initial development of environmentalist culture (or more precisely the "Green Book on the Urban Environment" and the Council of Ministers' ruling in December 1990, which are the first

Programmes on the basis of indications that emerged with certain welcome recommendations from international bodies to which Italy belongs. In particular, the "*Regional Strategy for Environmental Protection and the Rational Use of Natural Resources in EEC Member Countries Covering the Period up to the Year 2000 and beyond*", (UN, 1988), elaborated by the European Economic Commission of the United Nations, a body that has dedicated, with varying fortune, much attention to the prospect of a medium or long-term Environmental policy.

The articulation of the Decamb programmes admits inevitable overlaps between one programme and another. In certain cases recourse has to be made to the conventional attribution of responsibility between the individual programmes. In particular this has happened in the case of the "Urban Environment" Programme, which cuts across other programmes with regard to conditions and quality factors such as the atmosphere, water, waste, transport, energy etc. in as much as these are dealt with in other programmes as well.

However, the Urban Environment Programme is distinguished as regards one particular factor: that of the urban and territorial order, a factor that is considered more decisive than others for a recovery of quality in the medium and long term. This means that the sectorial treatment of environmental pollution problems such as urban heating, waste disposal, motor traffic and its emissions, noise, the distribution of drinking water, and effluent treatment etc. have been reserved for the single programmes and are not found in the discussed Urban Environment Programme.

The marked orientation of the Decamb towards a policy of long term urban environmental re-equilibrium and development control on a national scale arises from a vision of a territorial policy that has been extant in Italy for several decades, and which has not always found an adequate response as far as government action and the general political consciousness are concerned⁶.

The environmental and territorial policy premises that underpin the elaboration of the Decamb Urban Environment Programme, deserve to be quickly recounted.

documents on the issue) - also in Italy has it taken time to get attention to the problems of the urban environment as such introduced into the environmentalist movement, despite the numerous efforts at the cultural and scientific level on the part of scholars and professionals to draw the attention of the public and politicians to this issue.

⁶This re-emerged toward the end of the 'sixties, when the Ministry of Budget and Economic Planning worked out a document on medium and long term prospects (called in short "*Progetto '80*" - Project '80), which should have inspired the preparation of five-year plans of development in the 'eighties (plans which never saw the light of day during the 'seventies, nor subsequently, due to the general crisis of all medium term planning in Italy). One of the four "social projects" of the *Progetto '80* concerns just the "environment"; and the territorial projections on which the project (worked put by the *Centro di Studi e Piani Economici* - the Planning Studies Centre - under the present author's direction) was based, provided for a national territorial re-equilibrium of "pressure" on the environment, based on the creation of "urban systems" which represented alternatives to the great metropolitan areas which featured on the national scale. The official publication of the Ministry of Budget and Economic Planning was dated 1971 (see references); and the base study of the Planning Studies Centre 1971 a & b. At the time, and subsequently, a wide debate took place on the issue in Italy, of which there is only evidence in the form of a bibliography of works in Italian. In other languages there are but a few works by the present author (see Archibugi 1969, 1970 a & b, 1974, 1978).

3. The cultural and scientific premises of the Decamb urban environment programme

The basic premise is that the best environmental policy always coincides with the most appropriate land use policy. And that important policies for the protection of the environment (air, water, coasts, forests, biotopes, landscape etc.) should converge with production policies (energy, agriculture, industry, transport etc.) in a compatible "territorial framework" that will act as a point of reference for all types of decisions, from general programmes to individual projects.

The urban environment, ie that in which we for the most part act and work and in which we find in our daily life the most important factors of our environmental well-being, is also that in which we can best create an equilibrium between the demands of land use provoked by our activities and the actual protection of the environment.

Nevertheless, this ambit, that represents the most appropriate territorial unit for the realisation of an analysis of the ecological balance between activities and environmental conservation, must be conceived in a different manner from the physical urban continuum that characterises, especially in Europe, the idea of the "city". It must be conceived as a "system" of functions - with none excluded - that take place in daily life, and that produce what may be called the "urban-effect". Therefore a large part of nature and of natural values, which constitute a function of the urban well-being of the citizen, are included in the concept - and in the physical delimitation - of the "urban system".

Since the population realises (multi-functional) integrated environmental socio-economic well-being essentially in "urban living" - including the built environment and nature - the ambit of the eco-systemic equilibrium coincides with the same ambits that constitute an appropriate territorial level for socio-economic planning aimed at the well-being of the population. The "urban systems" - of the "ideal-type" sort - become "Urban Eco-Systems". This is why a real "urban-effect" is only produced in a balanced ecological ambit; and, vice-versa, why a real effect of environmental well-being is only produced in an urban context.

The identification in the territory of such ambits and of such suitable territorial units of potential urban-natural ecological equilibrium between human pressure and environmental protection constitutes the fundamental premise of a correct and lasting environmental policy.

It is with this vision that the Decamb Environment Programme has again taken up the hypotheses and proposals already put forward in the country (from "Progetto 80 onwards) for a reorganisation of urbanisation and of the urban fabric; and thus ultimately - as mentioned - to realise that complete equilibrium of urban-environmental values, by means of the delimitation of territorial entities (the above-mentioned urban systems or eco-systems) to which in the past were given a variety of names (city-region, city-territory, systems of cities,

functional urban regions etc.) that represent real human environmental ecosystems⁷.

4. The "Decamb "urban environment" programme: an analysis of urban decay in Italy

The Decamb "urban environment" Programme has taken its cue from the realisation that economic development, by provoking an uncontrolled and chaotic development of cities, is destroying their environmental quality. It is destroying above all the environmental quality of those cities that are suffering a function overload, whether through the uncontrolled increase in the metropolitan conurbation and in the anonymous outskirts or through an excessive and disfiguring pressure on the "historic centres", which tends to alter and destroy functionality and transform these centres into anonymous areas given up to traffic and pollution (from traffic, rubbish, noise etc.).

Economic development is also destroying - in the view of Decamb - the environmental quality of some "intermediate" centres, medium or small-sized, that were once in Italy the hub of important urban activities and were rich in urban values. These intermediate centres - even though they are still not influenced by the decay of the overloaded metropolitan areas, and even though they are still quite "liveable" (going by various specific physical and social indicators) - are losing nevertheless any real attraction as centres of "superior" tertiary activities (which we will call "superior" urban services), and therefore as the accepted residence for the more culturally and socially advanced strata of the community.

The fact that some medium-sized towns have replaced certain large metropolitan centres as the destination point for immigration from rural and peripheral areas of the country (within the context of an overall decrease in demographic and migratory pressure) does not in any way mean that these towns are improving in relative terms the quality of their overall urban environment. In fact these towns in Italy are in a worse position with respect to the past: this is probably because user thresholds for superior urban services, the presence of which engages the "city-effect", have risen historically. Urban quality (not seen only in terms of pollution and the stress caused by traffic) is becoming more and more concentrated, in Italy, in a few metropolitan areas, despite - as mentioned - their undoubted environmental decay.

All this is occurring without taking into consideration that these "intermediate"-sized towns with their uncontrolled and unexpected growth, are

⁷The Decamb "Urban Environment" Programme, as indeed the entire Decamb was advanced through the Ministry of the Environment by the works of a special "Group for reflection on the guide-lines of medium and long term environmental policy", set up in 1988 by the Minister of the Environment, Giorgio Ruffolo (and of which the present author was the coordinator). In this group's "Report to the Minister" (March 1991, see references) an extensive illustration of the scientific and intellectual premises which were later used in Decamb can be found. The demarcations of the various urban eco-systems proposed for the entire national level (37 in total) were indicated as early as in this document, as was the still provisional identification of the *Utras* (about 260 in total) - see **Maps 1** and **2** below.

about to be hit by environmental degradation (from pollution and traffic) without thereby gaining the urban effect and quality that they deserve.

In short, environmental decay is advancing nationally - for one reason or another - on all fronts, whilst at the same time urban life is involving the vast majority of the population.

It may be said therefore that development is eating away dangerously and beyond measure at the peculiar resource that are cities; a resource that - above all in Europe and in particular in Italy - has achieved an irreplaceable historical and heritage value. Its destruction renders - above all from the point of view of the city - development unsustainable.

The Decamb Plan aims to block this tendency towards decay in the Italian urban environment and bring it back in the long term to a sustainable development level.

This is the reason why the Decamb Plan includes this specific programme for the improvement of the quality of the urban environment, in response to an urgent historic need that has been present for a long time, and in response also to the commitment assumed by the European Community (in relation to the above-mentioned Council of Environment Ministers Resolution, Dec 1990).

This programme (like, and perhaps more so than various other of the Decamb) intersects with goals and programmes of action expressed in other Programmes.

In particular, the quality of air and drinking water in the cities, the decrease of pollution caused by motor traffic, noise reduction, climate improvement, waste management, etc. are important objectives, and therefore the object of action programmes, in the other Decamb Programmes mentioned above such as: the "Air Quality", "Transport", "Land Conservation", "Forestry and "Waste Management" Programmes.

Therefore with regard to the aspects that relate to the safeguarding and improvement of the quality of the urban environment in the above-mentioned sense, the specific Decamb "Urban Environment" Programme is linked to actions planned by the other respective Programmes.

However, the "Urban Environment" Programme will develop in the direction of the qualification and requalification of the urban environment, not in its single physical/environmental aspects (air, waste, noise, etc.), but rather in its overall urban values, which are fundamental to the so-called "urban effect".

These values (which are certainly changeable in the course of time) guarantee - within certain time periods and community feelings - an overall level of socio-environmental well-being; a well-being that is not only measurable with physical indicators, and is - amongst other things - decisive in the residential choices both of families and of the more important productive activities of the "superior" tertiary sector and of the "quaternary sector" (as some call it).

It is to this type of "eco-systemic" well-being, of the socio-ambiental sort, that this Programme makes specific reference. Obviously this type of well-being is also influenced by physical-environmental conditions (above all to the extent that transport technology development on the one hand, and telematics on the other, "reduce distances" and access costs); but not in a prevailing and certainly not in a decisive manner. It is above all influenced by an "urban" life condition, that is made up by the presence of "superior" urban values (in essence certain "superior"

urban services), that are in this case decisive for the perception and evaluation of urban quality.

Vice-versa the actual success of environmental programmes (air, waste, noise etc.) is largely influenced - in the long term and with the "preventive-type" - by the success of the "Urban Environment" Programme.

In fact, the greater part of the pressure that urban development has exercised and continues to exercise on the physical city environment depends on the "overloading" of activities and residential settlements, and in the long run on the overloading of the land use of the actual cities.

These settlements are due to the search on the part of those settled - who are the consumers (families) and the producers (providers of services, entrepreneurs) - for "urban quality". A better distribution of urban quality in the territory (the specific aim of this Programme) determines a better distribution of the "load" and of the pressure on the territory and the environment itself: that is if this better distribution aims at progressive elimination of the overload.

This therefore represents an indispensable factor in the recuperation of the balance between such pressures and the environment, and in the reduction of urban pollution (from motor traffic, waste, heating etc.) by attacking the source and not the end manifestation.

The territorial units (or basins) that have an optimal balance between human settlement and urban quality (in the above sense), are also those in which the search for and the evaluation of a balance between the various pressures and the environment, between pollution and its absorption, is made easier, less costly and more efficient.

This is why an urban quality policy represents an important preliminary for the lasting success of a policy aimed at safeguarding the environment.

5. The "Decamb" urban environment programme: general objectives

Bearing in mind the general limits of the "Urban Environment" Programme, as expressed above, the general objectives of the Programme are the following:

- A. the urban environmental requalification of highly urbanised areas (metropolitan areas);
- B. the urban environmental requalification of areas and cities "losing urban values" (medium-sized cities);
- C. the urban environmental qualification of "non-urban areas".

These three objectives correspond to three different territorial directions of the same general objective: the improvement of the urban environment (above all from the point of view of the citizen, or rather of the user of the city, wherever he or she is residentially located).

Indeed, the general objective presupposes the maximum utilisation of the residences already existent in the country, and the minimum development of additional residences, unless they are essential and indispensable for the improvement of the living and residential conditions of the above-mentioned citizens.

The three objectives may be further described as follows.

With regard to Objective A, that which is relative to the "urban environmental requalification of highly urbanised areas (metropolitan areas)", it presupposes that the decay of the urban environment in metropolitan areas is due mainly to an "overloading" of functions on the part of a generally limited territory (the "historic centres" of the principal cities), in respect to the huge increase in the demand for superior urban services which is linked to the increase in population and to the relative increase in productive activities.

This produces hyper-congestion (of the traffic as of excessive settlements with respect to functions) of the (more or less historic) traditional "centres".

At the same time, the above causes the creation and expansion of vast peripheral areas that gravitate around the centre. These peripheries alienate urban functions in favour of the centre ("centralities" and public spaces), and thus end up bleak and anonymous. This goes both for the peripheries near to historic centres (adjacent in a built up urban continuum) and for those further away made up of small and medium-sized centres (once relatively autonomous) that today gravitate for the superior urban services around the historic centre that acts as a "metropolitan" centre.

Regarding Objective B, ie that concerning "the urban environmental requalification of the areas and cities "losing urban values", the Decamb "Urban Environment" Programme points out that Italy (and perhaps the whole of Europe) is full of "intermediate" cities, once rich in urban values, and that today - notwithstanding an environmental physical quality that is not degraded to the extent of those of the metropolitan areas - are "losing" their urban values.

These cities and towns are an important environmental and urban inheritance. They represent a precious, rare and irreplaceable resource (on the world scale as on the national one). This resource risks being degraded with time because of the abandonment of centralities and superior urban services, and because of the absence of a national policy with regard to the cities on a national scale (today desirable also on a European scale).

Although the clogging up of the metropolitan areas has been relatively halted (not however the territorial extension of the same which spreads, like the proverbial oil spill, swallowing up small new centres in the relative conurbations), and although some are showing a certain increase in population with respect to non-urban areas (with an ever declining population), the intermediate cities are nevertheless showing a marked loss in urban values with respect to the metropolitan areas, a loss that is not compensated by any indications of greater "liveability". For example, Macerata (a medium-sized city of Central Italy) may well be at the top (according to a survey carried out) of the "liveable" cities table for physical conditions and income, but no-one decides to go and live there thus abandoning the larger cities, and many of its more qualified residents are continuing to migrate, out of a desire for urban quality, towards the less "liveable" metropolitan centres; the same goes for the vast majority of intermediate (Italian) cities.

What is lacking in the "intermediate" cities (albeit with many differences from city to city with regard to individual services) are the superior urban services: high-culture activities, economic business centres, specialisation in health services etc. This provokes an exodus on the part of the more qualified families, of the

young in search of better opportunities and of the highly intelligent, thus an erosion of the once relatively rich cultural and social humus takes place.

Not much is necessary in order to fully recover this type of urban quality: it is sufficient that these intermediate organise themselves within reciprocally accessible radii that are acceptable to the day by day functioning in new "systems of cities", that they attempt to avoid (for those near to the attractive influence of large metropolitan centres) further dependency on these centres, and that they try to reach with their organisation the "critical" thresholds of use that are capable of developing and nurturing within the new territory to which they belong the urban conditions and the superior urban services, that are producers of the "city-effect".

Finally, as far as Objective C is concerned, that regarding the "urban qualification of "non-urban areas"", it deserves a precise and careful definition, in terms of what is understood here by "urban qualification".

In fact, even in many areas of the country that have never historically achieved up until now urban quality, in that they have not developed urban centres worthy of being defined as "cities", there still subsists a population (in small centres) that cannot be excluded from acquiring in the future an "urban" condition of life.

If there is a spontaneous migration towards the large centres and, which is desirable, towards the centres of new "systems of cities" - that are organised between the intermediate cities like some new polycentric cities - we will be able to accept the consequences. But if this spontaneous migration does not occur it will be necessary to retrieve in some way for urban life these small centres as well, ensuring thus the protection of an important part of the environmental assets, for which these centres represent a kind of depositary, and an important part of the historical-cultural heritage that these centres again represent.

We will be able to ensure urban quality for this type of area, which has never known it before, if these areas are "functionally" integrated in the urban systems or systems of cities that are the object of the preceding general objectives.

By functional integration is meant "role" not "dependency". These areas, in other words, should perform within the new urban eco-systems or city systems, the role that is not performed by any of the territories of the same system: that of "free" areas of environmental and historical-cultural recovery. If one has used the concept of "recovery" it is because such areas (that however have never known urban quality) have suffered or are suffering, or risk suffering serious environmental degradation or the degradation of their historical-cultural heritage because of their marginalisation from centralised urban development. This degradation on the one hand has caused certain environmental safeguards to be lost and on the other has degraded a not insignificant monumental and architectural heritage. Today many of these areas risk a secondary environmental degradation - particularly those that are near to metropolitan centres or those with intense tourist activity - if they are subject to a confused invasion of non-specialised activity (to the role that should be assigned to them in the general economy of the urban system to which they belong).

Their recovery would ensure them a functional integration of urban values, and not generic compensatory help, in the quality of "internal areas" without a specific urban function; moreover it would give the local, regional and national urban

collective the chance to safeguard an environmental and historical-cultural heritage of the utmost importance.

The Urban Environment Programme therefore, which is aimed at the qualification and requalification of urban life, in the way indicated above, and which is developed in the three indicated general objectives, is articulated in a series of "Programmes of Action" (that are grouped in the same three lines of direction).

The Programmes of Action that will develop along the lines of the three general objectives will be articulated in the following way.

The Programmes relative to **Objective A - "Requalification of the metropolitan areas"** are:

A.1 "A programme of actions aimed at the design of alternative centres to the single historic centre of the area";

A.2 "A programme of actions aimed at the requalification of the urban peripheral zones of the metropolitan areas";

A.3 "A programme of actions aimed at traffic planning with regard to the depolarisation strategy of the metropolitan areas";

A.4 "A programme of actions aimed at the urban restoration of the historic centres of the metropolitan areas".

The Programmes relative to **Objective B - "Urban requalification of areas losing urban values (intermediate cities)"** - are:

B.1 "A programme of actions aimed at the creation of new "systems of cities" as "Urban Eco-Systems";

B.2 "A programme of actions aimed at the restoration of the historic centres of the intermediate cities and in the new systems of cities".

The Programme relative to **Objective C - "Urban qualification of non-urban areas"**, is:

C.1 "A programme of actions aimed at the setting up and design of "Territorial Units of Environmental and Historical-Cultural Recovery" (Utras, in Italian) within the Urban Eco-Systems".

The Programme articulation would assume the "Programme- structure" of the attached **Chart 1**.

6. The "Decamb "urban environment programme: the action programmes

A characteristic of the Programmes of actions is that the majority of the "actions" referring to each programme are made up of "territorial projects" and are, therefore, as many as will be needed according to the objective's line of direction, from which the Programme of actions receives its inspiration.

This does not rule out that for some Programmes, actions may arise on an administrative and managerial level that are independent of the territories and the relative projects.

As far as the "territorial project actions" are concerned their nature will obviously differ according to the respective plans.

For example if a Programme of actions aimed at the urban requalification of highly urbanised and conurbated areas consists of "Equilibrating the superior urban services' burden by means of the creation of alternative centres", then (in Italy's case) an obvious action would be "to design alternative centres in Rome's metropolitan system"; the actions will be as numerous as the metropolitan areas in need of such an intervention or action.

Again, by way of example, if a Programme aimed at the urban requalification of cities losing urban values (intermediate cities) consists of "Equilibrating the superior urban services' burden by means of the organisation of systems of cities that reach the threshold of the "catchment areas for such services", then an "action" of the said Programme would be "To design a system of cities, ie an Urban Eco-System for the cities of west Tuscany (Pisa, Lucca, Livorno, Massa)". The actions will be as many as there are intermediate cities that have to be included in the Programme of urban requalification.

In the appendix then, for each programme of actions, instead of a general "action" category relating to that programme, a list of concrete projects for the Italian territory will be provided that should be carried out in order to ensure the accomplishment of each of the Programmes of action.

6.1. *The design of alternative centres to the single historic centre of the area*

The only strategy possible in order to oppose hyper-congestion, to depolarise the function of the historic centre, and to reduce the overload is that of designing alternative centres that absorb a part of the centrality functions and public space functions reserved for the traditional centre.

However, these alternative centres must have certain dimensional requisites and they must represent an integrated functional whole with the same force of attraction as that of the historic centre, and, at least, have requisites that respect the "physiological" thresholds of use necessary for the economic development of the superior urban services in question. Decentralisation that does not have the polarising capacity of the historic centre is destined to fail and to thus constitute a waste. Alternative centrality in other words should respect the dimensional constraints of use that are considered sufficient for the functional economic development (not forced or protected) of the superior urban services on which it is based and centred.

To obtain this it is necessary to design and promote the guided positioning (on the part of urban and territorial Plans on a suitable scale) of superior tertiary activities (starting from public activities) in central locations chosen somewhere in

the peripheral areas to be recovered and requalified. The amount of the alternative centralities of this type depends on the size of the (user) population that presently gravitates to the hyper-congested centre, and on the size standard of the catchment area considered the minimum for the functioning of alternative centralities. Excessive diffusion produces the opposite result to the one sought for: further reinforcement of the traditional centre with an increase in the confused and chaotic peripheral settlements, a great waste of new resources and the continuation of the decay of urban quality.

In brief, the fundamental constraint that inspires the design of new "central locations" is that of the redistribution of the functional "burdens" in a catchment area that constitutes, however, a sufficient "critical mass" for the superior urban services provided previously (and perhaps redundantly) by the historic centres that are to be decongested.

The design of these new central places constitutes the "actions" of the Programme.

The Italian metropolitan areas in which we have to put into effect these "actions" with this strategy, and which therefore need as many alternative centre projects are:

- Rome, where there are catchment areas in the metropolitan area that suggest at least four or five alternative centres;
- Milan, the catchment area of which is such that at least three alternative centres are justified, plus an alternative centre dependent on the strengthening of Pavia's historic centre, in a single urban system.
- Naples, the catchment area of which justifies at least two alternative centres, besides the strengthening of Caserta's centre in a single urban system;
- Genoa, the catchment area of which justifies the strengthening of Savona in a single urban system;
- Turin, the catchment area of which justifies the design of an alternative centre within the metropolitan area;
- Bologna, the catchment area of which justifies the design of an alternative centre within the metropolitan area;
- Florence, the catchment area of which justifies the alternative strengthening of Pistoia in a single urban system;
- Palermo, the catchment area of which justifies another alternative centre within the metropolitan area, and the alternative strengthening of Trapani and its territory, within the confines of the same urban system;

- Catania, the catchment area of which justifies the alternative strengthening of Siracusa in a single urban system;
- Bari, the catchment area of which justifies another alternative centre within the same metropolitan area.

For each of the "alternative centre projects" to be promoted in the above metropolitan areas, there will have to be drawn up - in agreement with the Regional, Provincial, and Local governments concerned - various "Eco-plans", ie environmental "Master plans", that will be in part indicative and in part normative.

These ten metropolitan cities to be reorganised for the improvement of environmental quality are exhibited in **Map 2**.

6.2. Design aimed at the requalification of the metropolitan peripheral areas

Action for the design of alternative centres in the metropolitan areas coincides largely with another action linked to this Programme of actions for the requalification of the metropolitan areas: that aimed at the requalification of the metropolitan peripheral areas.

In fact, the eventual alternative centres would be securely placed within these peripheral areas, in a strategic position, and in locations that would maximise the recovery of urban quality in the peripheral areas. It would mean the concentration of public spaces, (modern) monumental buildings, meeting places on the scale required by the prescribed catchment areas in the prechosen locations, which would be more efficient and direct with respect to the previous overburdening of the historic centres. The restoration of equilibrium between the supply and demand for central areas, squares, and public spaces, surely means initiating a process of recovery and requalification of today's "peripheral" areas and zones (besides better management of the balance between the pressures and the available territorial and environmental resources).

The design of the new centres in the peripheral metropolitan areas should give rise to a vast movement of ideas and proposals from the wealth of opportune ideas arising from the Competitions that will be in keeping with the strict initial terms of reference.

The design of the new centres in the metropolitan peripheral areas would constitute the "actions" of this programme (as already mentioned).

6.3. The planning and management of urban transport with respect to the depolarisation strategy of the "historic" centres in the metropolitan areas

An action simultaneous with the two preceding ones, and aimed at the same objectives of the Programme of actions, consists of the tight linking together of the planning and management of the urban transport systems in the metropolitan areas in question with the prechosen strategies of the two preceding designs, in the same integrated design.

The management of automobile traffic should be such as to promote the development of the new alternative centralities and to "free" as well the traditional centre from the overburdening of traffic, as another factor of further depolarization.

Planned transport development (supply of transport) should not continue to respond acritically to the development of the demand for transport, as this appears nowadays, but rather should respond to transport demand as it is "programmatically" simulated and determined by the territorial plan, within an overall conception of "land use /transport".

With this approach, the historic centres should be destined and geared more and more for cultural and tourist activities, for which they perform an irreplaceable function, which is moreover always expanding in terms of the relative dimensions of the activities. Transport demand for which investments in infrastructures and services are made, should be calculated with respect to this "different" land use and this different territory destination. We will see what implications this can have for real traffic needs (for example, the fact that tourists and those benefitting from their "spare time" are more favourable towards pedestrian accessibility than to other types of accessibility).

At the same time accessibility to new alternative centralities, and the connected investments in infrastructures and services, should be calculated and designed not with respect to the "actual" traffic demand, which could be modest and limited, but rather with respect to the (simulated) demand generated by the new land use destination. In order to help the new centralities to grow, the strategic weapon could be above all the creation of metropolitan railway systems that conform to territorial strategies, and are not merely in line with a present demand for transport in the absence of any strategy.

The various projects referring to this Programme of actions would constitute the "actions" of this same Programme.

6.4. *The urban recovery and restoration of the "historic" centres in the metropolitan areas*

In connection with the other actions aimed at the requalification of the metropolitan areas contained in the programmes already indicated (design of new centralities, recovery of peripheral areas, urban transport planning) the picture can be completed with a Programme relating specifically to the restoration of the historical centres that make up the metropolitan areas.

The relief granted by the other actions will allow the historic centres to be restructured with the aim of a recovery of their age-old function, and of a specific adaptation to their new functions (touristic, cultural etc.), to which they can be orientated without over burdening their building or urban structure.

A good urban "restoration", is, in short, essential for their renewal within the modified context of environmental pressure.

The historical centres of the metropolitan areas that deserve the most attention within the framework of an integrated policy of environmental renewal and thus suggest as many "actions" for recovery and restoration, and special project

elaboration are those of Rome, Naples, Venice, Milan, Florence, Genoa, Palermo and Bologna.

Each of the Projects in question would constitute an action for this Programme.

6.5. *The design of new "systems of cities", as "Urban Eco-Systems"*

The accomplished actions of this Programme coincide with the territorial Projects to which they should make way, ie the "functional integration" territorial projects between various intermediate and medium-sized cities that are able to provide for the new "urban eco-systems" the critical catchment mass in order to achieve the city effect (the superior urban services). These territorial projects will be distributed strategically throughout the eco-system's whole intensive and polycentric territory and will be able to create an alternative polarisation for these cities that gravitate towards the present metropolitan areas.

The Projects that the study group of the "Quadroter" elaborated - based on numerous past proposals⁸, concern the projects that we will list below:

1 - a "*Prealpine Piedmontese City*", based on the functional integration of Novara-Vercelli-Biella-Ivrea and adjacent territory (including Valle d'Aosta). The potential catchment area for the "superior urban services" (SUS) would consist of 1,100,000 inhabitants, that today gravitate towards Milan and Turin with serious social and environmental costs;

2 - a "*City of the Tanaro*", based on the functional integration of Alessandria, Asti and Cuneo and their territories; the catchment area for the SUS would be of 1,200,000 inhabitants, that today gravitate towards Milan and Turin with serious social and environmental costs;

3 - a "*City of the Lakes*", based on the functional integration of Varese-Como-Lecco-Bergamo and their territories; the catchment area for the Sus would be of 2,500,000 inhabitants, that today gravitate almost totally on Milan, with very serious social and environmental costs;

4 - a "*City of the Po*", based on the functional integration of two very near cities (but which ignore each other) Piacenza and Cremona (plus the territory of Codogno); with a catchment area for the Sus of about 700,000 inhabitants that today mainly gravitate towards Milan with serious social and environmental costs;

5 - a "*City of the Adige*", based on the functional integration of Trento and Bolzano and their territories, with a catchment area for the Sus of about 800,000 inhabitants, who are today marginalised from the Sus;

⁸From those of Project '80 (1969), to those of the "Venetian City" (1970), of the Commission for Studies on Urban Systems in the Mezzogiorno of the Ministry for the Mezzogiorno (1983), and those of the General Transport Plan (1986), all cases of territorial planning which have seen further progress in Italy in the urban systems inaugurated by the Project '80.

6 - a "*City of the Garda*", based on the functional integration of Brescia-Mantua-Verona, and their territories with a catchment area of about 2,200,000 inhabitants, that today continue to gravitate for the Sus towards Milan and the Venetian area;

7 - a "*City of the Veneto*", which represents a good example of functional polycentrism between Venice-Padua-Mestre-Vicenza-Treviso (and also Belluno), that has to be better infrastructured and equipped. The catchment area is of 3,300,000 inhabitants, and perhaps their are the bases for a division into two complete systemic units: Venice-Treviso-Mestre-Belluno on the one hand, and Padua-Vicenza on the other;

8 - a "*City of the Delta*", based on the functional integration of Ferrara and Rovigo and linked territories, with 600,000 inhabitants as a catchment area for the System;

9 - a "*Julian City*", based on the functional integration of Trieste-Udine-Gorizia, which is moreover sanctioned by a special Region status, with a catchment area of 1,200,000 inhabitants, and many urban values inherited from the past, but with a campanilistic mentality that creates marginalisation;

10 - an "*Emilian City*", based on the functional integration, already partly existent, and in part to be reinforced, of Parma-Reggio Emilia-Modena, with an overall catchment area for the Sus of 1,400,000 inhabitants that still gravitate towards Milan and Bologna;

11 - a "*City of Romagna*", based on the functional integration of Ravenna-Forli'-Cesena-Rimini, and their territories, with a catchment area of about 1,000,000 inhabitants that are included only in part in a urban system of life and gravitate anyway towards Bologna;

12 - a "*Tuscan-Tyrrhenian City*", already largely in existence with Pisa-Lucca-Viareggio and Massa, that need to be better integrated functionally, with a catchment area today of about 1,600,000 inhabitants with poor urban quality, even with the rich values inherited from the past;

13 - a "*Sienese-Maremmian City*", based on the functional integration between Siena and Grosseto, and their vast territories, with about 500,000 catchment area inhabitants with a strong vocation for development, and who gravitate for the Sus towards Florence and Rome;

14 - an "*Umbro-Aretine City*", based on the functional integration of Arezzo-Perugia, with a potential urban catchment area of about 1,000,000 inhabitants, today varying in quality and gravitating towards Florence and Rome;

15 - a "*City of the Marches*" or "*Picene City*", based on the functional integration of Ancona-Pesaro-Ascoli and Macerata (ie the Marche Region), with a catchment area of about 1,500,000 inhabitants with a very low urban quality and ready to

split into two urban systems, as soon as conditions allow (Pesaro-Ancona on the one hand, Macerata-Ascoli on the other).

16 - a "*City of the Tuscia*", based on the functional integration of Terni, Viterbo, Rieti and Civitavecchia, with a potential 700,000 inhabitant users, that today gravitate towards Rome with serious social and environmental damage;

17 - a "*Latin City*", or City of Lower Latium, based on the functional integration of Latina and Frosinone and their territories (with the addition of Isernia), that reaches 1,100,000 potential users, who enjoy a limited level of urban quality, and gravitate when they can towards Rome;

18 - a "*City of the Abruzzi*", that is finding it difficult to maintain urban values with a potential catchment area of 1,200,000 inhabitants (the entire Region), who gravitate almost exclusively towards Rome;

19 - a "*City of central Campania*", based on the territorial integration of Salerno, Avellino and Campobasso, that have very low urban values, despite the noteworthy development of the Salerno area, with a catchment area of 1,500,000 inhabitants that continue to gravitate towards Naples, with very serious consequences for the Neapolitan urban environment;

20 - "*City of the Salento*", based on the functional integration of Brindisi-Taranto-Lecce, with a potential catchment area of 1,700,000 inhabitants including their territories, who today make do with low urban quality that is mitigated by constant gravitation towards Bari;

21 - a "*Lucan City*", based on the functional integration of Potenza and Matera, two inexistent urban entities, that together with the whole of Basilicata constitute a catchment area of just about 600,000 inhabitants who today gravitate for the little they ask towards Bari and Napoli;

22 - a "*City of the Sila*", including the territories of the provinces of Catanzaro and Cosenza, with extremely low urban quality, and very difficult functional integration, but with a catchment area of 1,500,000 inhabitants;

23 - a "*City of the Straits*", based on the functional integration of Messina and Reggio Calabria, and on the prospect of a more stable crossing of the Straits, with modest urban quality but that amounts to an urban catchment area of 1,200,000 inhabitants;

24 - a system of small towns in *central or southern Sicily*, made up of the agglomeration of various small centres of the provinces of Agrigento, Enna, Caltanissetta and Ragusa that are hard to polarize and are with difficulty functionally integrated and polycentric, but which represent a potential catchment area of 1,200,000 inhabitants;

25 - and finally the "system of cities" of *southern Sardinia*, polarized on Cagliari, with about 1,000,000 inhabitants, with low urban quality and which are to be reinforced in a concentrated and polarizing way;

26 - and that of *northern Sardinia*, polarized on Sassari, with a potential catchment area of about 600,000 inhabitants and urban quality still a long way off in the future.

The 26 "systems of cities" proposed above are to be realised in different ways and with different lengths of time. But they have potential requisites in common: within the territorial space in question and within the minimum catchment area (the 26 systems of cities are exhibited in Map 1).

They involve about 80 "intermediate cities" that represent a very important part of the urban population, which have not achieved modern levels of urban quality and which in relative terms are losing urban quality in comparison to the "metropolitan areas".

Without a policy of creation and design of the aforementioned "systems of cities", the urban environment of these intermediate cities, although it will improve in physical terms, will tend to worsen in social and cultural terms. Moreover many of these cities will become "peripheries" of the metropolitan areas (for many rare services they are already thus, and for others for which they are not, it is at the cost of having given these up).

The absence of such a policy moreover will compromise any policy in support of the metropolitan areas aimed at their decongestion. In fact without the "polarization" of the intermediate cities formed autonomously, no "depolarization" will be able to take place in the metropolitan areas and any environmental policy in the one or the other Italian urban context will be destined to failure.

Therefore the success of the Programmes of actions A.1 and B.1 are closely inter-related.

The 26 new "systems of cities" of the more than 80 "intermediate cities" may be classified and distinguished internally according to their degree of income development, the level of which may to a greater or lesser extent facilitate the take-off of urban quality and the city-effect sought for, and according to their level of urban values that, although in decline, to a greater or lesser extent facilitates recovery.

For each of the "new system of cities" (like for the new "alternative centres" of the metropolitan areas, see Programme A.1), "Eco-Plans" will have to be elaborated - in agreement with the Regions, Provinces and other interested local bodies - ie environmental "Master Plans" that are in part indicative and in part normative.

6.6. Qualification of the non-urban areas: the UTRAS (Territorial Units of Historical-cultural and Environmental Recovery).

Italy is rich in territorial areas (often defined as "internal" areas) that because of their geo-morphological nature (mountainous or hilly, reduced or conditioned

accessibility, peripheral or isolated etc.) have not been involved in the industrial economic development, and therefore residential expansion characteristic of the stronger areas.

This has resulted in their environmental decay. A decay that is marked by the abandonment of these areas by the adult population, the lack of activity opportunities, and above all by the decline in agricultural activities. Numerous programmes of economic and financial assistance have not halted the above-mentioned abandonment.

The environmental decay of these areas is today at risk of finding itself re-proposed in new ways: through a disordered "return" of second homes, the locating of rubbish dumps, the construction of warehouses in need of space, ie by the regurgitation of the areas that have reached their maximum capacity and are overburdened.

Today these areas are in danger of being doubly penalised - from the environmental point of view - by an uncontrolled and unregulated territorial development. A first analysis has pointed out 257 of these areas throughout the whole country (see **Map 2**).

The environmental recovery of these areas merits being the object of a Programme of actions.

This Programme of actions consists of the following actions.

a. The precise legislative definition of the requisites of such areas to be defined as "Territorial Units of Historical-Cultural and Environmental Recovery" (Utras, in Italian).

In fact such areas must be officially defined for their characteristics and functions if they are to benefit from certain assistance conditions. We must never ignore their integration function in the urban systems to which they belong which in turn allows for their qualification.

b. The promotion of Consortiums between local Bodies, with special Programme Agreements (with the presence of the Minister of the Environment)

The "Quadroter" ("Quadro territoriale di riferimento per la politica ambientale" - the Territorial Framework of Reference for Environmental Policy), a research project that is being carried out by the National Research Council⁹, has already identified over the whole national territory the areas that deserve attention as "Territorial Units of Historical-Cultural and Environmental Recovery". It is a matter of ascertaining and negotiating with the respective regional and local authorities the Quadroter proposals, the confines of such areas etc. It will be possible to do this with special Programme Agreements and with the promotion of the Minister of the Environment for a unified design of the Utras.

c. Elaboration of "Eco-Plans" for each Utras that is in concordance with the preceding actions

⁹See for synthetic information a paper by the Author (Archibugi, 1992).

As with Programmes A.1 and B.1 the Eco-Plans are environmental "Master Plans" that are in part normative and in part indicative.

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