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# WETLANDS, COASTLINE, HISTORICAL HERITAGE VS. URBAN SPREAD: A COMPLEX INTEGRATE PLANNING EXPERIENCE IN TARANTO, ITALY<sup>1</sup>

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## ABSTRACT

In 1996, the municipality of Taranto started a participation in a EU-funded project together with other four European coastal cities, called "Posidonia", from the name of an aquatic plant living in the sea near those cities. The project aimed at revitalizing the social, economic and natural environment of the four urban areasthrough conservation and sustainable use of local resources.

In particular, the Taranto *Atelier* tried to prepare an integrated-resource planning effort, using a participatory and multi-disciplinary approach based on the involvement of an expert and non-expert knowledge base.

The target area was the Mar Piccolo, a lagoon surrounded by an extensive presence of wetlands, ancient buildings and historical ruins, but also by a consolidated urban zone, hanging on the whole area as an input for speculative developers. The area is also heavily polluted by different kinds of effluents, such as urban and industrial dumping and dirty drainage from a huge military dockyard.

An effort was made, under the aegis of the EU *Posidonia* project, to identify a general framework of experts and researchers, institutional representatives, NGO representatives, citizens, entrepreneurs and to involve them in the building of planning scenarios for the future of the area, by making use of hybrid scenario-building methods and techniques.

The effort brought about mixed results, as regards to the real consistency of resulting scenarios. Nevertheless, it revealed useful insights and suggestions both about the development potentials of the site and the crucial role of local people in order to address those potentials with effective planning policies.

## 1. INTRODUCTION

There are some places on our planet where anyone would have said that a town would be built if they had been seen at the dawn of times. Taranto is one of those places, because it goes into the sea, once defended from it on three sides, now on four, thanks to an artificial cut, and because the town has always had a fishing economy and a strong seaport connotation (Fig. 1). This, however, has never appeared as a resource fully acknowledged by the community, historically more devoted to prevalently primary activities. However, the port has had its success, but in an exogenous way: the great port of Magna Graecia (8<sup>th</sup> century BC) with its complex historical tribulations, the merchant port of the Angevins (15<sup>th</sup> century AC), the military arsenal (since 19<sup>th</sup> century), the port of the Navy (since the beginning of 20<sup>th</sup> century), the industrial port (1960 onwards).

The area influenced by the town of Taranto undoubtedly goes beyond the municipal and even provincial boundaries, due to its prominent role both directional and economic. Its influence spreads also outside the region, owing to the activities of the Navy and mainly to the production of the iron industry. Up to today, however, the reduction of industrial development has remarkably reduced its field of influence, and attempts to relaunch economy are substantially limited to the provincial area, even if that simplification implies many risks.



Figure 1. Taranto urban core

The province of Taranto spreads for about 2.500 square kilometers, comprises 29 municipalities and has a population of about 600.000 inhabitants. Taranto conurbation consists of the capital town (about 220.000 inhabitants), of a first crown of about 15 municipalities and of a group of big sub-poles. The Taranto reality shows a territory strongly characterized by the industrial area, which extends four times more than the whole built-up area of the municipality.

In that area the countryside is greatly degraded, due to many caves and areas used to dump waste from the iron industry, to the big visual impact caused by the huge plants and to many areas used in the past by small and medium industries closed today, which are in a state of neglect and full of scrap and rubbish. The interference with the environment of the productive activities are notoriously considerable and affect all environmental sectors, owing to the use of resources (water, energy), to the pollution of atmosphere and watersheds, to the production of waste.

In 1996 the municipality of Taranto with other European partners presented the European Community a plan within the pilot program "Terra" called "Posidonia Plan". This project (which takes its name from a protected water plant widespread in the Mediterranean sea and on whose protection and permanence the safety of the basin waters greatly depends) has particular importance for the Taranto area and particularly for the Mar Piccolo area, a salt lagoon rich in natural and historical emergencies. It aims to point out a methodology based on comparative analysis of the local contexts for all the partner towns involved and which can demonstrate the economic advantage of preserving the natural assets that are unique and non-reproducible.

In the case of Taranto Mar Piccolo, in particular, this plan aims to discover new strategies and new solutions to the vulnerability of the site, and, , to find new experimental methods susceptible to further development within territorial planning methodology. Fundamentally, the program proposes a global multi-discipline approach marking the interdependence of the different sectoral policies and their territorial impact within an integrated strategy. The approach, which EU considers a possible formal model of territorial planning and management, finds in the Mar Piccolo area a very strong substantial justification in terms of environmental complexity.

## 2. THE MAR PICCOLO IN TARANTO

The Mar Piccolo basin is divided into two bays having an area of respectively 8.056 sqkm and 12.432 sqkm, making a total of 20.488 sqkm, and a coast perimeter stretching for about 28 km (Fig. 2). The comparison between the whole examined area and the length of the coast is a datum that alone permits individuating the importance of the coast belt of the site.

The territory, as regards coast areas and urbanized zones, shows two types of development, distinct and almost wholly antithetic. One part of the coast of the Mar Piccolo basin is characterized by total absence of urbanization; in the second there are structures, military and civil, which completely surround the coast. In particular, the area of the first bay of Mar Piccolo (on the West side) is densely surrounded by urban settlements, where about 50% of the population of Taranto town resides.

Both the ancient center - the ancient town situated on the island, on the east and the west of which Mar Piccolo comes into contact with Mar Grande - and the nineteenth century centre (Borgo quarter) develop entirely at a very short distance from Mar Piccolo; the farthest buildings are only some hundred meters from Mar Piccolo. Half the perimeter of the ancient centre and its whole length are in contact with Mar Piccolo; the Borgo, instead, is separated from the inner basin by important Navy installations .

The limitations imposed by the existence of military structures are generally extended to the whole area of Mar Piccolo. Over extensive areas South of the two bays and North-West of the second bay there are important settlements of the Navy and Air Force: in particular, the military areas along the South side of Mar Piccolo strongly limit the town in the use of the coastline.

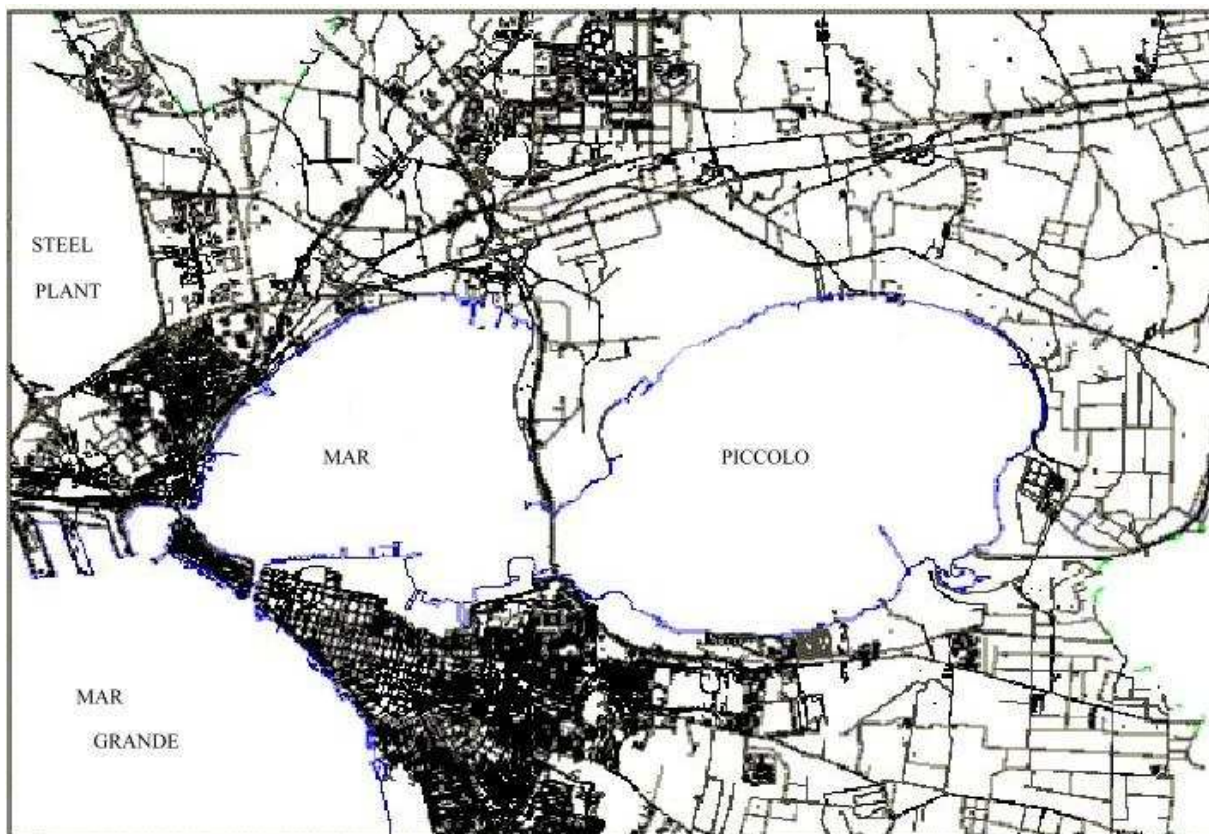


Figure 2. Mar Piccolo and its surrounding area

The relevant difference between the highly urbanized zone and the freer one permits an analysis of the countryside prevalently on the coast zones close to the second bay of Mar Piccolo. In the part facing the first bay, the coast appears rather altered, from a naturalistic point of view, due to the presence of settlements both of the military arsenal and of the Navy and the Air Force. A good state of preservation, instead, can be found on the North coast of the second bay, in a military but almost intact area - even if subjected to natural coast erosion.

More southward, the coast is characterized by good state of preservation and the value of the countryside. An interesting Mar Piccolo coast pinewood starts here, recently become the object of regeneration and fruition plans financed by the European Union, aiming at the creation of an equipped town park. The pinewood is surrounded by very important wetlands, such as "la Vela" marsh, an EU "Community interest site" (EU directive n.92/43 on the preservation of natural habitats), a resting zone for migratory birds. In the Northern part of both bays, on rather limited areas, there are on the bottom some undersea freshwater springs, the so called "*citri*": there are about 30, and they help to keep the degree of saltiness of the lagoon low.

We must say that some extremely polluting tributaries flow into Mar Piccolo, eutrophying the waters, helped in that by the particular morphology of the basin itself. The polluting substances mainly come from the 14 ill-working purifiers in the province hinterland, but also from the activities on the shores: an important naval base of the Navy with its fuel wharf, a hydroport of the Air Force, the medium/small industries dumping there and the enormous cooling water-scooping machine of the steelplant. As we have said, a remarkable percentage of the coast areas, particularly those with military settlements, is State property: as a consequence, at least as regards the strip of territory very close to Mar Piccolo, any hypothesis of socio-economic initiative has had to take that heavy limitation into account. The prospect of dismissal on the part of Navy and Air Force of the areas occupied by them, today shows a completely new situation, in which the community could find new important prospects of socio-economic development, linked to the great environment patrimony available for Taranto. The program of the Posidonia plan starts from this opening prospect, with the aim to delineate possible plans of territory development, realistic and perhaps for the first time- sustainable.

### 3. PARTICIPATION AND KNOWLEDGE

Coherently with the consolidated notion of the environment, as environmental, social, productive complexity, the Plan of the integrated development of Mar Piccolo has been especially intended as a result of processes aimed at knowing the territory from all necessary standpoints. Such knowledge processes, as known, can be reconnected to two main levels of expert and non-expert knowledge. Expert knowledge is intended as the bunch of news, data, research, studies, criticisms and comments relevant to the Mar Piccolo area, thanks to the trans-discipline contribution of a group of scientists, scholars, researchers and professors, who are experts in their own study sector (Maciocco 1996).

Non-expert knowledge, on the other hand, represents the contribution of people acting in the daily life of the area, living, using and/or abusing, contributing to the development or the decay of the area, due to social, economic, psychological, conscious or unconscious reasons. This group of actors, ranging from sectoral representatives of local activities (entrepreneurs, managing boards, employees, workers etc.) to simple citizens or grassroots organizations, owns its own peculiar knowledge heritage. Such knowledge is neither standard, nor scientific, but essential to interpreting needs and vocations, and to achieving the real implementability, effectiveness and probable success of any planning hypothesis (Krumholz and Forester, 1990).

In order to realize an effective planning hypothesis, able to envisage development scenarios that are credible and manageable, it is inconceivable to disregard concurrent comprehension and use of both forms of knowledge. Unfortunately, as is known, non-expert knowledge is often implicit, cryptic, difficult and complex like the environment itself. Therefore, there is the need to look for tools, methods able to give not a panacea for a useless and detrimental simplification of the reality, but hints, suggestions and interpretations of non-expert knowledge.

In the case of the Mar Piccolo plan, a first method used at the beginning was the reiterated submission of questionnaires to the stakeholders of the area, with questions relevant to the plan area, in order to obtain criticisms, comments, new questions, new answers and eventually a certain convergence on issues (*Delphi* methodology). This would permit recognition of key problems and issues, that would be the starting point to build planning scenarios, to be then verified once again, in a last step, before the final report.

The general objective was to let people realize that planning is today a process that needs to be built up step by step, taking collaboration, solidarity and synergy of all stakeholders. Doing this, the acquisition of real multi-discipline and multiform knowledge is more likely to be achieved.

In this framework the hypothesis of building up knowledge base had been placed, within a process

that was based upon three main moments, further detailed and subdivided into three phases: Presentation-awareness of the project, Collection of the expert/non-expert knowledge, Building up and verifying plan hypotheses. However, the scarce response of stakeholders to preliminary questionnaires, suggested the need to change quickly the scheduled program of knowledge base collection. The only solution quickly at hand was to give priority to the building up of expert knowledge, aiming at the individuation of key issues and possible development scenarios to be submitted subsequently to the validation/criticism of non-experts and institutional stakeholders.

## **4. SOME METHODOLOGICAL NOTES**

### **4.1 The collection of the knowledge base**

The need of involving multi-discipline knowledge to plan such a complex area as the Mar Piccolo in Taranto has led to the involvement of many experts of different sectors, holders of specific knowledge, but also witnesses of the development of the Ionic town.

A sociological survey is paralleled to the collection of expert knowledge, aimed at finding issues coming from the community of residents, who often (this is the case of Taranto, too) express issues that are not possible to completely decode and make socially and institutionally representative.

This emerges from the will to build up a network of knowledge able to set up a strong link among different social and institutional subjects, who have long been operating in the local community.

The problem that encourages the building up of networks certainly holds a political valence, but it is mainly communicative.

Oftentimes, in a negative way, multi-discipline is intended as juxtaposition of different forms of knowledge, without an evident need for further re-elaboration. The work of experts is often carried out in technical languages, peculiar of the cognitive domain that produced them, whose semantics are hardly transferable to other domains.

At the same time, the fluid issues expressed by the community, or by social unrepresented groups are the expression of everyday living in a problematic context. This context rarely emerges within the themes that the institutional representatives of the community itself express and pursue, because they are expected to move within more general problematic boundaries, given the nature itself of their institutionally appointed functions.

A useful support can therefore be represented by an "evaluative and interpretative common ground", aimed at being a support in order to single out strategies that are the necessary prelude to the plan itself. These strategies come to the fore by getting different expertises to interact with each other and with common sense.

The workshop represents a moment in which different discipline domains can be compared in order to create a common ground useful to the design of plan strategies. The first meeting aimed mainly at that objective, and it was useful to overcome first communication difficulties. Generally, experts who give their contribution in common workgroups behave according to a pattern that Schön and Argyris (1977) define "single ring". Because of those semantic-communicative difficulties mentioned above, they firmly stay on initial stakes, and have difficulty in modifying their cognitive framework in dependence of the knowledge brought about by other experts to the discussion table. Proposals therefore emerge without any chance of solving possible conflicts, and where there is an initial contrast, the convergence toward common positions is not usually achievable. Therefore problems appear to be "wicked", according to the definition of Rittel and Weber (1973). As Alexander (1989) points out, based on this initial situation, even attempted rational approaches fatally fail and become open conflicts.

It is then essential to step toward a "double ring" pattern, in which by using an exchange of knowledge it is possible to modify initial positions and create a convergence toward a single strategic line. The support given by evaluation and interpretation is explained by Keeney (1992), when he points out how the building up of convergence goes through the individuation of common values among the different subjects involved, and consequently through the possibility of building up a shared list of priorities.

Finally, sectoral reports generally produced by experts are useful to build the complex knowledge

base needed, but they are not the best way to build common values and convergence. They are generally consistent and their knowledge is structured and communicable with difficulties. It is easier to have unstructured knowledge exchanges, with clear milestones and easy language. All views, according to Habermas (1981) should have equal possibility of expression, and planners are in this case facilitators (Forester 1989).

The uneasy attempt of converging should therefore lead to a clarification of all the emerged positions, and to a further consulting step, aiming increasingly at defining the final strategic framework.

The approach is therefore articulated in the following fundamental steps:

- a) a procedure of scenario building, in which the different forms of expert knowledge make proposals, verify compatibility, sum up strategic proposals;
- b) a procedure of "institutional analysis" (Funtowicz, 1997) in which it is possible to analyze the roles of different social stakeholders who modified past development patterns and could modify future ones.
- c) a procedure of scenario assessment, originating after crossing all community issues, as emerging from the sociological analysis.

#### **4.2 The phase of expert involvement**

Expert actors who took part in the first workshop were: one landscape architect, two marine biologists, two law advisers, one urban planner, one archaeologist, one sociologists, one economist, one naturalist, one geologist, one environmental activist. Two representatives of the Italian National Planning Institute (INU) acted as facilitators.

Steps of the meeting can be synthesized as follows.

1. Each participant briefly synthesized the problems of his disciplinary sector concerning the Mar Piccolo system;
2. For each intervention some significant short-term and medium-long-term perspectives were drawn up;
2. Where possible, participants gave some operational indications.

Some general as well as specific issues emerged, whose importance can vary depending on what the real future scenario of the Taranto area will be. General issues have proved to be: the need of the systematization of knowledge, the search for an identity of the area, the resolution of some important institutional conflicts. Among the many specific issues emerging from the minutes of the workshop, participants drew up some action paths that can be important in short and medium-long term. Some short-term paths were: Environmental monitoring, Planning agency, Urban quality increasing, Dumping reclamation, Regeneration of landscape-archaeological valences, Training for new forms of entrepreneurship. Among the medium-long term paths were: Revitalization of archaeological areas, Continuing training, New land use system, Re-balancing the two bays.

In order to draw up scenarios, compatibility and relation matrices were used to cross the different action paths. At this stage of the process, the most probable scenario appears to be the one which envisions the re-balancing of the two bays, through the relocation of activities. It is therefore evident that the importance of actions probably involves a planning-managing process that is closer to a master plan than to a detailed plan.

This process can be led through a planning agency, that can be built up starting from municipal departments rightly retrained-, and that can be able to manage the process by setting out mediating, information and participation actions.

For each action in the plan it is possible to define a degree of implementability or, on the contrary, a level of uncertainty in the implementation. Such level of uncertainty depends on certain factors, among which the general compatibility of the scenario, implementation time, the number of subjects involved in the decisional process, the consistence of the scenario with the current territorial situation, the entity of financial burdens and the width of the impacted area.

### 4.3 The construction of a compatibility matrix.

The compatibility matrix evidences possible conflicts between different measures deriving from the expert's indication.

The compatibility matrix is a multidimensional table where conflicts are evidenced by taking in account their own nature.

This means that the degree of compatibility is evaluated according to the character of each considered measure. The utility given by the output of a specific action is measured by a function, and it is assumed possible to construct utility functions of different nature.

The compatibility is represented by quantitative and qualitative concordance between policies:

- Quantitative concordance: the utility given by action A increases linearly with the utility given by action B according to a linear rule
- Qualitative concordance: the utility given by action A increases linearly with the utility given by action B according to if - then rule, represented by two sigma membership functions increasing in the same direction of axis.

On the contrary, the degree of conflict between two different measures becomes the evaluation of the trade-off: bigger the trade-off is, so bigger the degree of conflict. Cases that we can match are the following.

1. Quantitative trade-offs. In this case experts show that increase of utility derives from the construction of a quantitative indicator. For instance, the measure of decrease of water pollution can be represented by one utility function that is the reduction of hypertrophy measured in organic residuals in the water; this measure conflicts with fishing activity, and creates a quantitative trade-off with the decrease of income derived from the reduction of this activity.
2. Qualitative trade-offs. The expert evidences a fuzzy rule (type if-then). For instance, the fuzzy rule can be: "if touristic activities increase in proximity of archaeological areas, then the attraction of the area increases and the integrity of the cultural heritage decreases". The construction of two opposite sigma membership functions (a) and (b), the first referring to the increase of attractiveness and the second referring to the decrease of cultural integrity, evidences a trade-off. On the horizontal axis the parameter is the increase of tourism.

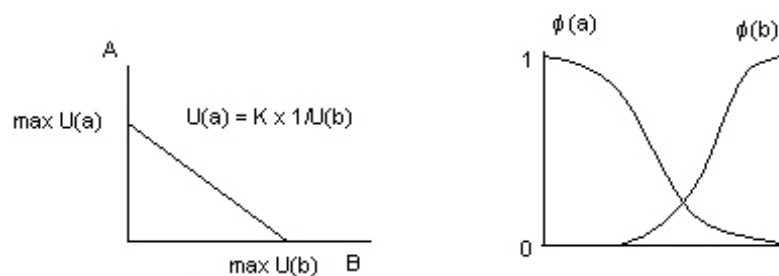


Figure 3. Quantitative trade-off (on the left) and qualitative trade-off (on the right)

The *compatibility matrix* represents the synthesis of all pairwise comparisons, where each *trade-off* can be represented in its own nature.



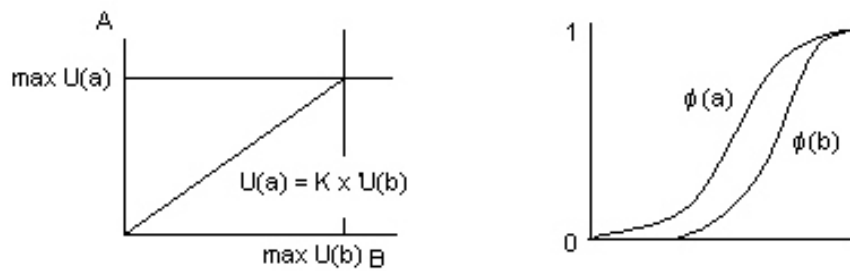


Figure 4. Quantitative concordance (on the left) and qualitative concordance (on the right)

Among the others, some most relevant trade-offs are:

*Qualitative trade-offs:*

- Legal regulation of land and water uses *versus* mussel breeding (fuzzy rule: IF the increase of area forbidden to boats increases THEN it favours the regulation of water uses AND damages the mussel breeding);
- Dumping *versus* Conservation of archaeological sites (fuzzy rule: IF the regulation of excavation of coastal line increases THEN dumping activities decrease AND risk for archeological sites decrease);
- Environmental monitoring *versus* Enforcing seasonal activities (fuzzy rule: IF the increase of area forbidden to boats increases THEN seasonal activities reduce AND space for water monitoring increases)

*Quantitative trade-offs*

- Mussel breeding *versus* reduction of water Hypertrophism (expressed by reduction of income procapita *versus* inverse of reduction of biomass)
- Revision of marine transport connections *versus* fish breeding (expressed by length of marine lines of transport *versus* income for fishery and fish breeds)
- Enforcing seasonal activities *versus* fishing and fish breeding (expressed by income from seasonal activity *versus* income for fishery and fish breeds)
- Conservation of environmental resources *versus* fishing (expressed by size of water surface forbidden to boating *versus* income for fishery)

The final test was to show to experts a qualitative matrix, derived from individuation of single trade-offs, in order to legitimate the identified trade-offs. Experts were questioned about which trade-offs can be considered acceptable or not negotiable (Table 1).

This evaluation is typical of the phase of the process which literature on evaluation defines strategical (Fusco Girard and Nijkamp, 1997).

In fact, it is instrumental for the identification of a *background scheme* which represents support for a strategic plan approach for the Mar Piccolo.

The *Background scheme* is spatial representation of priority deriving from the appraisal of evaluated trade-offs by experts, and it is the résumé of those actions which create a low level trade-off (or conflict), and which, consequently, can be considered as component of a unique coherent scenario.

Table 1. The compatibility matrix submitted to experts and derived from trade-off analysis.

Eliminating discharge of waste water																				
Suspending submarine excavation	P																			
Forbidding fish-breeding	P	P																		
Monitoring environment	C																			
Creating a planning agency				C																
Improving tourist complementary activities	P		P																	
Regulating all activities in the Mar Piccolo	P		P		C	C														
Regulating mussel-breeding	P	P	I			P	P													
Increasing urban quality			C		C	C	C	C												
Creating maritime connections		P			C	C	C	C	C											
Classifying environmental resources				C	C															
Depurating waste disposal sites	P			C			C		C											
Creating cultural paths					C				C		C	C								
Preservation of natural green areas				C	C				C		C	C	C							
Regulating coastal dynamics				C					C					C						
Creating new uses of the area		P	C	P	C	C	C	P	C	C	C	C	C	C						
Emphasising cultural values in the historic urban centre				C					C											
Recover of cultural archaeological values in the Mar Piccolo				C	C		C	C	C	C	C		C	P	P	P	C			
Education for new entrepreneurship				C				C	C	C	C		C	C		C	C	C		
Rebalancing function between the Mar Grande and the Mar Piccolo	P	P	C	C	C		C	C	C						C	C	C	C		
Eliminating discharge of waste water																				
Suspending submarine excavation																				
Forbidding fish-breeding																				
Monitoring environment																				
Creating a planning agency																				
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Emphasising cultural values in the historic urban centre																				
Recover of cultural archaeological values in Mar Piccolo																				
Education for new entrepreneurship																				
Rebalancing function between the Mar Grande and Mar Piccolo																				

C = no trade-offs,  
P = Quantitative trade-off or qualitative trade-off; I incompatibility

## 5. THE SYNTHETIZED SCHEME

After the realization of a reiterated procedure of interactive workshops, aiming at attaining an overall convergence on future scenarios for the Mar Piccolo area, a synthesizing scheme was drawn up.

*Priority actions and policies* recognized in the workshops with expert participants proved to be as follows, in order of decreasing importance:

- Legal regulation of land and water uses;
- Regulation of mussel cultivation;
- Revision and adaptation of the system of marine transport connections;
- Regulation of dumping;
- Prohibition of fish breeding;
- Enforcing seasonal activities (tourism, agriculture);
- Conservation of environmental resources;
- Environmental monitoring;

*Priority strategic areas*, recognized in the workshops with expert participants proved to be as follows:

- Educating and retraining tourist operators, municipal/provincial planning department staff, citizens and entrepreneurs on new forms of entrepreneurship, as well as on the environmental values and the history of Mar Piccolo and Taranto; recognition of the common good.
- Active safeguard of environmentally valuable areas, creation of ecological corridors, improvement of transportation systems and involvement of the private sector, promoting the area by means of an ad-hoc agency, exploring the possibility of setting up a Unitary Program for Environment and Archaeology, upon the recognition of public policies and available funding.

All these issues were synthesized on a physical map of Mar Piccolo, with some warnings. First of all, the area considered by experts is not coincident with the total area of the whole Posidonia project. It does not mean that the rest of the previously identified territory is not important, but simply that experts considered actions to be carried out in and close to water sheets as top priority.

Second, the indication of possible land uses is referred to insignificant or fuzzy boundaries. This was purposely pursued in order both to reinforce the value of the scheme as a strategic not simply implementing predetermined decisions- tool, and to avoid a-priori conflicts in subsequent dealing with economic and institutional stakeholders.

With such premises, the diachronic framework of interventions can be represented as follows (Fig. 5):

- A-** Regulation of activities linked to mussel cultivation (short term); dismissal and change to *Natural-archaeological park* (medium term)
- B-** Agricultural redevelopment wheat, olives- (short term); development of agricultural landscape (long term)
- C-** Change to eco-sustainable aquaculture (s.t.); dismissal and change to activities supporting parks in areas F and D (l.t.)
- D-** Regulation of activities connected to mussel breeds (s.t.); dismissal and change to leisure area (m.t.)
- E-** Agricultural redevelopment vineyards- (s.t.); development of agricultural landscape (l.t.)
- F-** Regeneration of the natural oasis (s.t.), change to natural park (m.t.)
- G-** Reclamation of the natural park of *rimembranza*, re-use of dismissed shipyard area as seat of the Mar Piccolo planning agency and as training and education area (s.t.); change to natural park with the Galeso river area (m.t.)
- H-** Regeneration of the Galeso river area (s.t.); change to natural park with the park of *rimembranza* (m.t.)
- I, L, M, N-** Regeneration of the urban-lagoon shore area
- O-** Relocation of mussel breeds (l.t.)
- P-** Possible landings of an internal maritime transportation system.

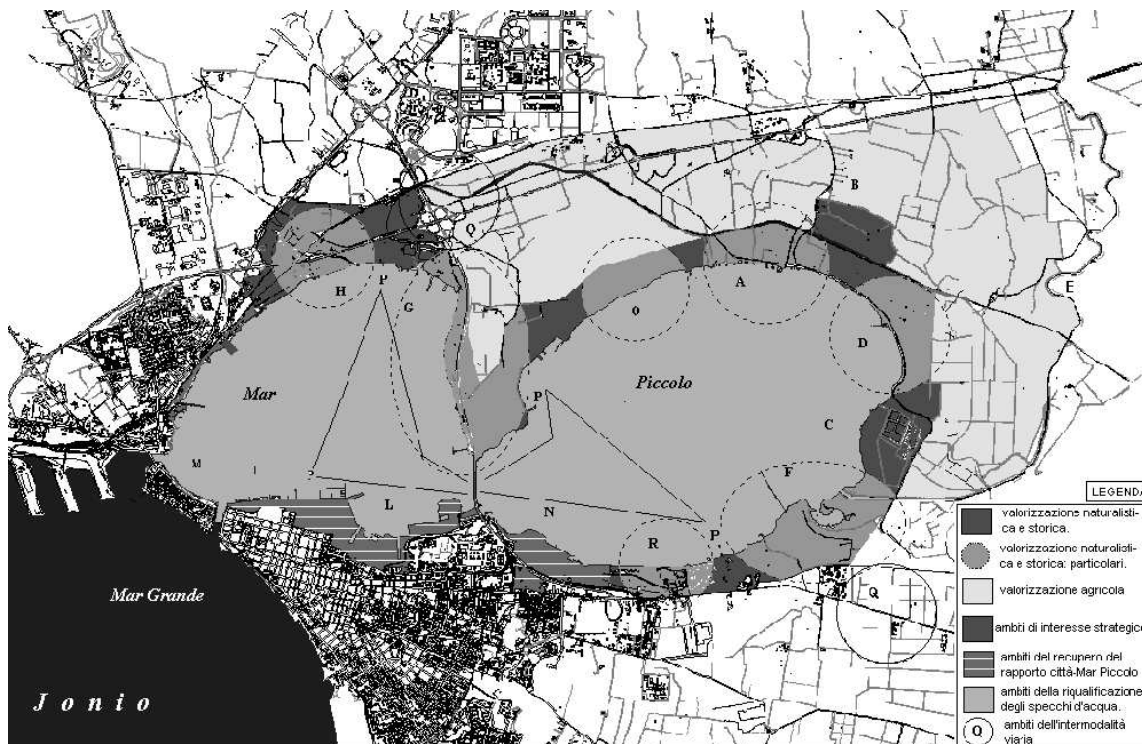


Figure 5. The synthesized scheme

## 6. FINAL CONSIDERATIONS

The phase of definition of the framework of compatibility among possible actions in the Mar Piccolo was the main phase of multi-discipline exchange among the experts of the Posidonia project. That phase had some verification moments in some forums useful to investigate the degree of consensus and interest arising from the possible initiatives in the area of Mar Piccolo.

After such steps, there is the phase of interaction with public decision-makers, aimed at defining a *Background scheme* that public decision-makers will always have as a reference for Mar Piccolo, independent from the ways of implementing public policies in the area.

Possible ways of implementation may be the following:

- a) setting up of a new master plan for Taranto, in which the *Background scheme* represents the basic reference for the realization of detailed plans for the Mar Piccolo area;
- b) setting up of procedures for the protection and conservation of the important habitats of the Mar Piccolo area, through the Apulia regional legislation on protected areas: in this case, the *Background scheme* can represent the preliminary hearing phase;
- c) realization of the so-called “complex urban programs” (planning schemes for the reorganization and redevelopment of mainly urban or suburban areas), aimed at implementing the *Background scheme* itself zone by zone at different times.

It is important to underline that the ways of implementation mentioned above represent actions that are not necessarily alternative and opposed, but hopefully contextual and interacting. In the meantime it is true that there are different difficulties and conflicts emerging from the initial hypothesis of the three above-mentioned processes.

In fact, the realization of the new Master plan involves the political resolution of considerable conflicts, especially in the political arena itself, without which the implementation period becomes too long for a *Background scheme* which stems from medium-term considerations.

On the other hand, also the setting up of a hearing aimed at the creation of a large protected area shows a high degree of conflict among social stakeholders, often founded on a concept of profound

ecological conservation, imposed by the institution of a regional park. This concept of conservation does not correspond to the real degree of limitation of the territorial transformation, but it is nonetheless able to block the processes of setting up of the park itself.

The implementation of the *Background scheme* through complex urban programs seems to be the most interesting among the hypotheses, especially in terms of short and medium term. We should also say that many similar initiatives have been set up in Taranto, especially due to local entrepreneurship the real unexpected author of a course change that had been oftentimes slowed down and discouraged by short-sighted and/or nepotist public managing. However, on the other hand, this lack of public managing and planning skills risks hampering new development perspectives today. A juxtaposition of initiatives that are not integrated appears to be noxious if it is not framed in an overall social, environmental, economic vision which cannot be produced or managed by entrepreneurship, since it is a prerogative of public management, by definition.

It is the crucial role of public management seems that today to be dangerously missing in the socioeconomic context of Taranto, clearly also seen in the missed participation in the Posidonia forums-a substantial indifference that also determines indifference to participation procedures by local economic stakeholders, since they cannot have their first perceived traditional counterpart for development initiatives a leit motif especially in the Mezzogiorno (Bodo and Viesti 1997).

All the procedure devised for the plan of integrated development of the Mar Piccolo area has been compelled to climb a tortuous path, adapting patterns and methods towards the aim of involving public authorities and stakeholders. Consequently, a hybrid methodological process stemmed from that, where democratic participation was forcedly carried out in subsequent involvements: people first, then experts, then entrepreneurs, lastly institutions.

At the end of this experience, still waiting for public authorities, we can, nevertheless outline at least two let's say- by-product achievements, especially interesting for the real situation of Taranto. The first, the most evident outcome has been the discovery of the importance of a holistic, systemic, integrated approach in analyzing and planning the Taranto area. After the numerous sectoral studies and plans, not investigated in deep, nor integrated, lacking complex visions of the social and natural environment, the Scheme gave the opportunity to make a multi-discipline group of experts interact, so progressively refining their semantics together, reflecting on the action just as Schon (1989) pointed out. This interaction determined the creation of an important research network in the town, and gave local the community the possibility to be informed in a consistent, structured and not occasional way on many important potentials of the area.

The second outcome, perhaps less encouraging but finally evident, was the confirmation that the recognition of environmental resources, as common good and potential for local development, largely depends on the social, economic, cultural history of a community (Giusti and Magnaghi, 1994). In all Mezzogiorno areas the *I-want-it-all-and-now* motto is always present, the eternal *Damocles' sword* of the very low discount rate of future, where a plan that does not produce immediate profits is still today considered as a dangerous constraint to development. Furthermore, in the area of Taranto, where the fragmentation of consensus on environmental values and on the common good, is worsened by decades of working struggles to survive, often against the State, the environment-resource correlation is almost incomprehensible.

In such context, then, *education* and *culture* could be crucial points in improving the perception of common values and in promoting the effectiveness of plans and public policies. As can be found also on literature, if a community does not recognize the importance of values, it may simply mean that the values are not well known, and information needs to be increased (Scandurra 1994, Abramowitz 1993).

The great result of the present experience seems to be, therefore, in terms of approach more than in terms of planning process. Certainly a planning process taking care of all stakeholders and their issues gives voice to hidden, non-evident issues, anticipating conflicts and giving new value to the peculiarities of the area. However, in order to increase public participation and build a real consensus there is the need to go beyond the traditional approach of the urban planner, in order to give the community the visionary ability that at times its particular history may have denied it.

This is more likely to be close to the ideal concept of effective planning, especially in contexts such as Taranto a town of the Mezzogiorno a town of the Mediterranean.

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<sup>1</sup> Although conceived as work of the whole group, chapters 1, 3, 5 were written by D. Camarda, chapter 2 was written by M. Romandini, chapter 4 by C. Torre, chapter 6 by D. Camarda and C. Torre.