

First report on the impacts of Project SIRENA

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Introduction

This paper is the first report of a research project started up by SIRENA in collaboration with the Department of Preservation of Environmental and Architectural Heritage of the “Federico II” University of Naples and with the Department of Social Sciences of the “Orientale” University of Naples. The purpose of this report is to evaluate the impact of Project Sirena on the territory (at a town planning, environmental and architectural level), from an economic, environmental and social point of view over the long/medium/short term, with reference to the relationships between public and private institutions and society.

Four years after the project began, we configured a working method, which our researchers will continue to monitor during its progressive application. This will hopefully lead to its redefinition and a more systematic way of estimating its results.

Since this report is based on statistics and field verifications conducted through questionnaires and interviews with various people involved in this program, it is to be considered an important contribution to the whole project.

Finally, it must be stressed that this report is also a useful reflection in terms of future criteria for the definition and allocation of quotas for public funding. Furthermore, it will be helpful in the reiteration of Project Sirena in the city of Naples and the other towns of the Campania Region¹.

Its impact on the social fabric

Over a period of 4 years, a total of 1,761 buildings in Naples have been involved in Project Sirena, with 62.5 million euros of funding by the regional and local governments, activating a total expense of 192.3 million euros of work.

From an examination of the distribution of requests for financing in various zones, it is clear that the largest concentration of requests for funding come from the oldest areas of the town. These include those areas (such as Mercato, Pendino, San Giuseppe and Porto) that have a historically more fragile social fabric. However, after the 2nd Public Announcement, when the number of areas involved in Project Sirena was extended to include the outer suburbs of Naples, a detailed examination of the distribution trend by zones of the requests submitted, confirmed that not only did the historical central zones confirm their participation, but many suburban zones such as Fuorigrotta, Bagnoli and Miano, etc., also participated in the program.

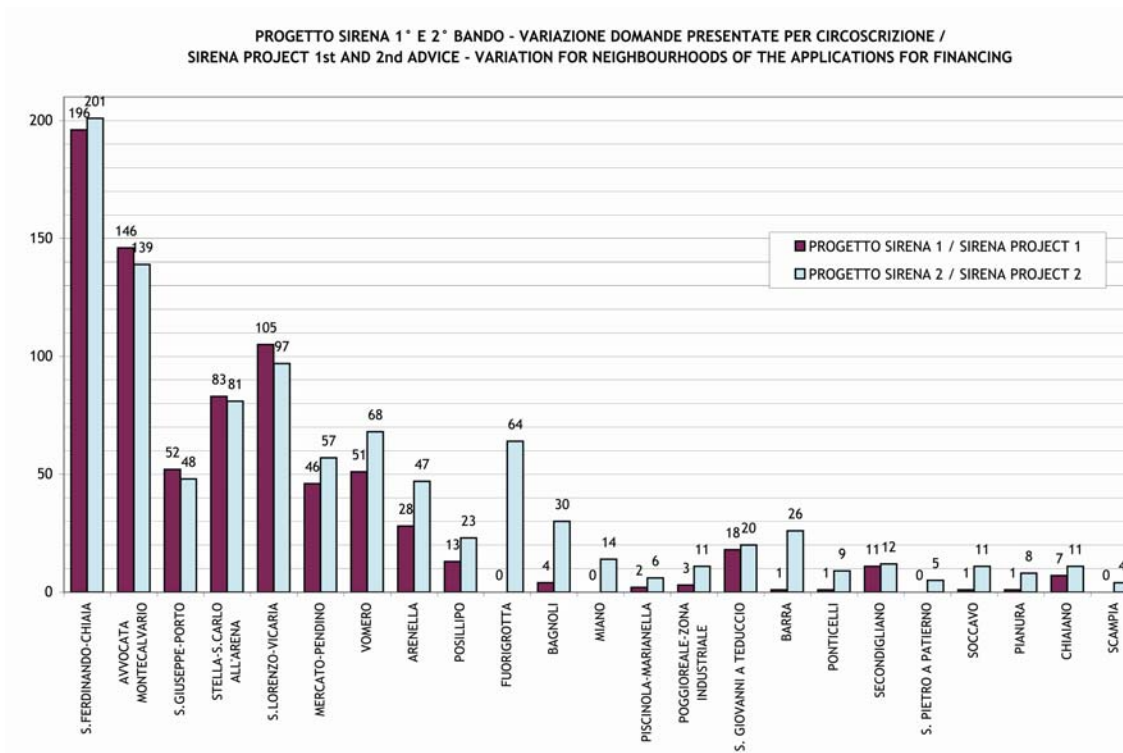
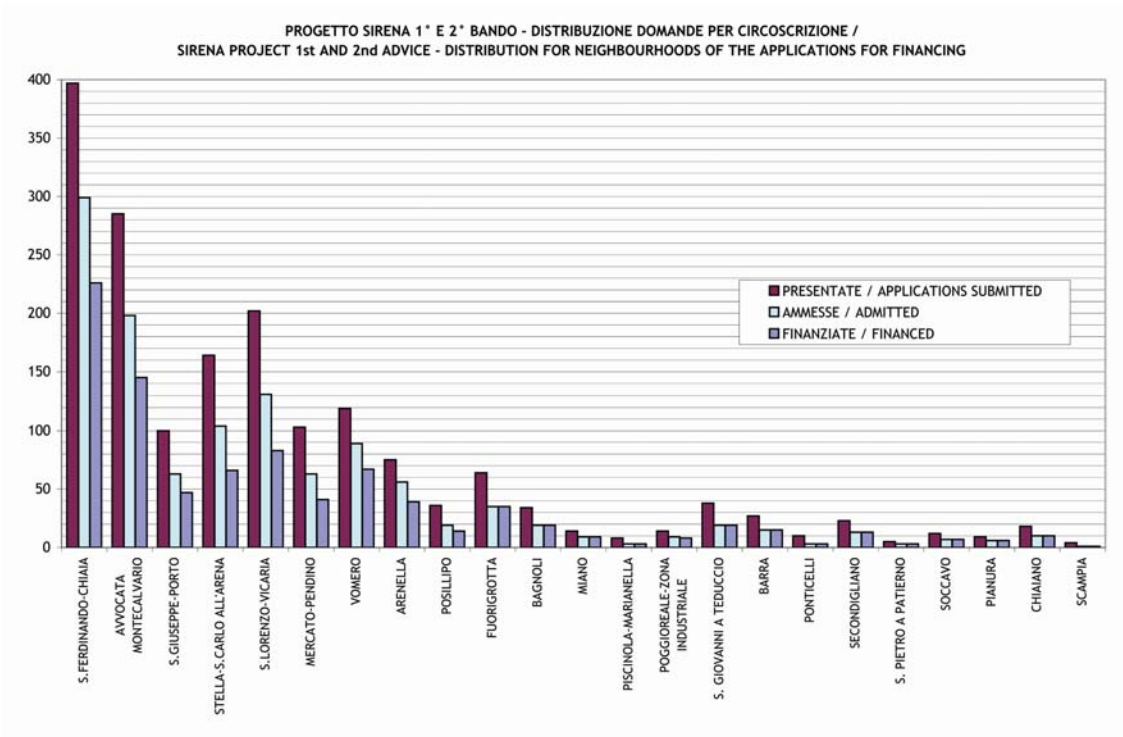
Another interesting factor emerged from an initial analysis of the data relating to the investments that were activated. Approximately 1,000 projects out of all the requests submitted have been financed over three years, and just as many technicians – planners, work directors and safety coordinators– have been involved. Out of a total of 192.3 million euros spent on work, we estimate that approximately 20 million euros have been spent for technical consultancy, and over 600 construction companies have participated in the project throughout its various phases.

One more piece of data is worth highlighting. Based on an analysis of a representative sample of financed works, it has been evaluated that approximately 20,000 dwellings – apartment units mostly used for residential purposes – have benefited from Project Sirena’s contributions for the rehabilitation of the common parts of the buildings in which they are situated. Therefore we can assume that over 70,000 people have been involved in the process.

A more detailed analysis of the Quartieri Spagnoli area was carried out through an examination of both the ISTAT data from the last census of 2001 on the population and buildings, and the Project’s data connected to SIRENA’s territorial information system (GIS).

The Quartieri Spagnoli area is not currently defined from an administrative point of view, yet it is a homogeneous area from a morphological point of view. In fact, it has already been the object of specific urban renewal work (Law 219, Urban Project). In particular, a calculation was made that between the first and second “SIRENA Announcements”, 130 requests for funding out of 1,192 buildings, used mainly as private dwellings (which is 11% of the buildings), were submitted. Among these, approximately 100 requests were granted the funds. Approximately 3,000 people out of a total population of 25,776 inhabitants were

interested in the Project. Besides the remarkable success of the two SIRENA Announcements, we can assume that the various public works carried out in the area have had also a multiplying role with regards to the sedimentation of a culture oriented towards respect and improvement of the its environmental context. If we consider the Quartieri Spagnoli area as a sufficiently representative sample of the SIRENA Project, we can deduce that if this were to become more of an ordinary process, the urban context could undergo total transformation and requalification in a matter of just a few years.



Its impact on the construction system

The open list of building contractors

Registration in the open list managed by the SIRENA is an essential for the building contractors to be able to carry out work on the jointly owned parts of the buildings for which funding has been assigned.

The creation and management of this list enables SIRENA to punctually monitor the building contractors involved in the project, thus ensuring that the criteria of legality, transparency and quality required for the undertaking of building work are fully respected.

Since its introduction in 2002, the list has included the total of over 600 building contractors (see Table 1) located almost exclusively in the area of Naples and the province of Naples (91.9% - Table 2), with a concentration of newly registered companies in particular in the two-year period 2002/2003 and 2004, following the publication of the 1st and 2nd public announcements. 12% of the overall number of registered building contractors are members of the Associazione Costruttori Edili della Provincia di Napoli (ACEN – Association of Building Contractors of the Province of Naples), the founding member of SIRENA.

Registrations on the list are almost equally divided between joint-stock companies (46.9% - cf. tab.3) and partnerships (51.9%), with a significant percentage of building contractors holding SOA certificates or ISO quality certificate (42% - see Table 4).

Overall, work was activated to a value of 192.3 million euros thanks to SIRENA funding and has involved, directly in building contractors or in associated activities, a number of workers that can be estimated at over 3,400 unitsⁱⁱ.

Its impact on the construction business system

A deeper analysis in monitoring has led to a selection of a sample of building contractors, among those present on the list since 2002 and with the highest number of building sites open, and to the administration of a questionnaire designed to show the perceived impacts of participation in Project Sirena.

The data collected are a valid tool in identifying the type of construction businesses that have most benefited from the project; alongside the smaller building contractors (60%) with fewer than 10 employees, there are also larger building contractors with a greater staff (40%) and are generally limited partnerships with more than five building sites open over the year.

The results of the study highlight the significant impact of the project on the growth of all the building contractors, in terms of the acquisition of new certification (a statistic confirmed by 60% of those interviewed), the increase in skills and qualifications of the staff (67%), the acquisition of new equipment (86%), and an increase in safety conditions on building sites (“greatly improved” according to 17.5% and “quite significantly improved” according to 66%).

The work carried out on the common parts of condominium apartment buildings has proven to be, according to 51% of building contractors, an opportunity to obtain further commissions by private individuals interested in renovating their apartments, generating an increase in the purchase of building materials in 98% of cases.

Its effects on employment

The success of the Project Sirena, with the financing of 985 new building sites scattered over areas of the historical centre and suburban areas, has undoubtedly boosted the growth of the building sector in the province of Naples in terms of employment.

The study conducted on the selected building contractors has revealed that as many as 88% have taken on new employees; more specifically, 46% have taken on one or two employees, 40% between two and five and 2% more than five.

The data therefore confirm the contribution of the SIRENA model in the increase of employment in the building sector (see Table 6) recorded in Campania between 2001 – when SIRENA did not exist – and 2004.

The positive datum (see Table 7) regarding the increase in the number of building contractors registered in the province of Naples in the same period from 2001-2004 would seem to indicate that there has been a contribution from the introduction of the SIRENA incentives; what is particularly interesting is the fact that the

greatest number of newly registered building contractors was recorded in 2003 and 2004, the years in which the SIRENA 1 and 2 building sites began.

Final assessment

The increase in job opportunities deriving from the introduction of the SIRENA public announcements is the aspect that led almost all of the building contractors to express a positive judgement of the project. There were also plenty who indicated, as a perceived benefit, the possibility of taking an active part in the process of urban redevelopment, and consequently of enjoying greater visibility, prestige, and greater guarantees of safety, regular work, and transparency in undertaking building work and in relations with clients.

Anno/ Year	Nuove registrazioni/ New registrations	Decadute/ Forfeits	Imprese registrate a fine periodo/ Firms registered in the list at the end of the period
2002-2003	393	0	393
2004	143	140	396
2005	65	101	360
Jan-06	3		

Tab.1: Andamento delle iscrizioni nell'elenco aperto / General trend of registrations in the open list
Fonte: Database Imprese S.i.re.na. / Source: Database Imprese S.i.re.na.

Sede/ Location	%
Napoli/ Naples	47,7%
Provincia di Napoli/ Province of Naples	44,2%
Caserta e Provincia / Caserta and prov	6,5%
Benevento e Provincia / Benevento and Prov.	0,7%
Salerno e Provincia / Salerno and Prov.	0,2%
Avellino e Provincia/ Avellino and Prov.	0,2%
Altre Regioni / other regions	0,7%

Tab.1: Andamento delle iscrizioni nell'elenco aperto / General trend of registrations in the open list
Fonte: Database Imprese S.i.re.na. / Source: Database S.i.re.na.

Tipo Impresa / Type of firms	%
SRL /Limited company	44,9%
SNC /General partnership	4,2%
SAS /Limited partnership	13,9%
CONSORZIO /CONSORTIUM	0,3%
SOC COOP A R.L.	6,2%
IMPRESA INDIVIDUALE /PARTNERSHIP	26,3%
SPA /Public Limited Company	2,3%
PICCOLA SOC. COOP./SMALL COOPERATIVE FIRM	1,0%
IMPRESA EDILE /BUILDING FIRM	0,9%
SOC CONS A R.L./Limited SOC CONS.	0,2%

Tab. 3: Tipologia delle imprese iscritte / Type of registered firms
Fonte: Database Imprese S.i.re.na. / Source: Database S.i.re.na

Possesso di Certificazioni /Possession of Certification	
Certificate /Certificates	42%
Senza Certificazione /Without certificate	58%
TOTALE /TOTAL	
Tipo di certificazione posseduta /Type of certification possessed	
Tipo di certificazione posseduta /TOT only SOA (or waiting for SOA)	45,82%
TOT ISO 9000 9001 9002+ SOA	49,00%
TOT solo ISO 9001+9002+9003/TOT only ISO 9001+9002+9003	5,18%
Tra i possessori SOA:/Among possessors of SOA:	
SOA OG1	90%
SOA OG2	43%

Tab.4: Tab.4: Attestazione SOA e Certificazione ISO/SOA and ISO certification
Fonte: Database Imprese S.i.re.na. / Source: Database S.i.re.na.

Acquisizione Certificazioni/ Acquisition of Certifications	
	%
Si/Yes	60%
No	40%

Aumento competenze e qualificazione del personale/ Increase in skills and qualifications of staff	
	%
Si/Yes	67%
No	33%

Acquisto strumentazioni/ Purchase of instruments	
	%
Si/Yes	86%
No	14%

Incremento acquisto materiali/ Increase in the purchasing of materials	
	%
Per niente/Zero	2%
0-15%	44%
15-30%	42%
30-50%	12%

Incremento condizioni di Sicurezza/ Increase in safety conditions	
	%
Molto/Very	17,5%
Abbastanza/Moderate	66,7%
Poco/Small	15,8%

Nuovi assunti / New employment	
	%
Per niente/Zero	12%
1-2	46%
3-5	40%
5-7	2%

Tab. 5: Impatti sulle imprese - dati sul campione delle imprese contattate /Impact on firms – data about the sample of firms contacted

L'occupazione nel settore delle costruzioni in Campania nel quinquennio 2000-2004 /Employment in the building sector in Campania in the five year period 2000-2004				
Anno/Year				
2000	2001	2002	2003	2004
137	147	155	164	170

Tab. 6: Occupati totali nelle Costruzioni in Campania 2000-2004 (in migliaia di unità)
/Total number of people employed in the building industry in Campania 2000-2004 (in thousands of units)

Fonte: Elaborazioni Acen su dati Istat /Source: Acen processing of Istat data

Riepilogo Imprese registrate, iscritte e cessate nel periodo 2001-2004/ Summary of firms registered, enrolled and discontinued in the period 2001-2004											
2001			2002			2003			2004		
Registrate /Registered	Iscritte /Enrolled	Cessate /Discontinued	Registrate /Registered	Iscritte /Enrolled	Cessate /Discontinued	Registrate /Registered	Iscritte /Enrolled	Cessate /Discontinued	Registrate /Registered	Iscritte /Enrolled	Cessate /Discontinued
26654	1342	1498	27728	1496	1433	29373	2017	1366	29963	1956	1554

Tab.7: Imprese operanti nel settore delle costruzioni registrate alla Camera di Commercio di Napoli /Firms operating in the building sector and registered in the Naples Chamber of Commerce

Fonte: Bollettino ufficiale di Statistica della Camera di Commercio /Source: Official Bulletin of Statistics of the Chamber of Commerce

Its impact on the safety and legality on Building Sites

The sector of small and medium construction companies operating in Naples, even in recent times, is infamous for its large number of industrial accidents, most of which were due to the inobservance of safety regulations. It is also well known for its high percentage of illegal workers and for its so-called “submerged economy”.

The fundamental task of Project Sirena is to respect the laws related to work on building sites, particularly those regarding the safety and the economical treatment of the workers.

The effect that Project Sirena has had after only three years of activity on these aspects is very encouraging.

After the first months of activity of Project Sirena (January–September 2003) a report analyzing the way the project respected all the regulations related to safety on building sites (265 building sites working, 230 inspections carried out and 125 building sites visited) revealed that by that time approximately 48% of the building sites had adequate safety conditions.

The information was not completely encouraging, although it was still positive. It was at least proof that things were changing.

Since 2004 SIRENA has been constantly carrying out inspections with the collaboration and consultancy of CPT (an organization made up of the members of trade unions and entrepreneurial associations members), to monitor the safety conditions related to scaffolding and other equipment used to work on the buildings’ façades.

More recently (beginning 2004 – September 2005) approximately 434 analytic inspections have been made in order to evaluate the conditions of tools and equipment. The results are as follows:

- building sites with good or optimal safety conditions = 7%
- building sites with adequate safety conditions = 60 %
- building sites with mediocre safety conditions = 11%
- building sites with bad safety conditions = 22%

Therefore, the results can be considered positive for 67% of cases.

Final considerations

Referring to the total of approximately 1,400 inspections carried out from the beginning of 2003 to January 2006, we can now infer that on the whole the results regarding the general safety conditions of Project Sirena building sites have been positive.

This estimate particularly refers to physical conditions and equipment (scaffolds, machinery, individual safety devices, etc.). Particular attention has been given to fixed and mobile scaffolds, which is the equipment that is most often the cause of serious injuries on building sites (it is useful, here, to compare national and local statistics in this field, which indicate a remarkable number of injuries due to the lack of respect for the safety regulations).

It is important that we highlight the fact that no significant injuries have occurred on Project Sirena building sites over the past 3 years. This attention and sensibility to job safety conditions is certainly due to:

- The initial conditions established for accessing the contributions, which are:
 - the mandatory enrolment on the Open List of construction companies;
 - the declaration of construction companies to respect the safety rules and treatment of workers (which has now become obligatory according to Italian national law);
 - the possibility of loss/withdrawal of funding and possible exclusion from the Open List in cases of serious non fulfilment, etc.
- The inspections carried out on building sites by SIRENA and CPT, which have helped spread awareness among construction companies and technicians of controlled, supervised and monitored procedures where the provider of funding may supervise the work.
- The inspections carried out by SIRENA on behalf of the Local Administration for the granting of funds to the interested condominiums. These inspections pay particular attention to the construction company’s respect for the laws regarding social security insurance payments for the workers.

Therefore, besides the numerical data, the experience of these past three years can certainly be considered very positive. It clearly shows that the procedures chosen to monitor Project Sirena's activities will manage to definitively spread legality across the building construction sector in the maintenance and renovation market, as long as it is applied consistently.

At the same time, it must be remembered that with the activity of promotion, assistance and control of technicians and construction companies, in the coming years the continued stimulus provided by the granting of funds or financial benefits in general, such as the IRPEF tax relief of 36%, on the conditions that all the "rules of the game" are observed, with particular importance placed on those regarding safety and legality on the building sites.

Inspections on the Project's building sites/2003 - 2005

Inspections made on the SIRENA 1 and SIRENA 2 building sites in order to verify the safety conditions and the respect of the procedure during the job. (Last update: January 2006)

Reference period: 2003 – 2005

- 985 financed building sites (of which approximately 150 are due to open by March 2006)
- 721 activated building sites
- 871 building sites visited by SIRENA
- 1,416 total inspections carried out by SIRENA

The impact of planned maintenance

Project Sirena introduced the Building Maintenance Booklet to Naples. For the first time in Italy the basic principles and rules of planned maintenance have actually been applied on private real estate.

The reasons that the Administration decided to propose the Booklet for Building Maintenance and to grant whoever uses it a 5% additional contribution are basically twofold.

The first reason, as we have already mentioned, was that the public authorities were attempting to assist private owners in carrying out work on the structural stability and increasing the value of their buildings, and instruments were needed that could guarantee the maintenance of the results obtained – in terms of performance, efficiency and safety, building quality and therefore urban quality – and were attainable, in this case, by optimising both public and private resources.

The second, which also explains the reasons for such large scale public funding by the public administration for work on private buildings, is that the Local Council has been guaranteed access to the data necessary to create a registry database of buildings, through the compilation of the Building Maintenance Booklet. This database is made up of the data that SIRENA has collected through the information acquired from the Building Maintenance Booklets.

The Maintenance Booklet was drawn up by the Servizio Edilizia Privata (Private Building Service) and SIRENA, with the collaboration of the Department of Building Engineering DINE of the University of Naples, and particularly of the Professor of Engineering Maurizio Nicolella, under the aegis of the UNI, the Italian National Body of Unification. It is therefore an integral part of the grants for the recovery program for the common parts of buildings.

The Booklet is divided in two parts: the first deals with the Building's data and the second deals with the Maintenance Program.

The registry details include the technical data of the building, its territorial context, its legal rulings and restrictions, and further information that describes the construction analytically: the type of building, its structural composition, structural typology, and installed systems such as plumbing, electric, gas, and so on.

The second part has the objective of planning all the monitoring activities and necessary interventions for good maintenance of the buildings. This part includes the Maintenance Manual and the Maintenance

Program. The Manual provides technical instructions for the maintenance work required in relation to every single part of the building over a period of twenty years.

The Maintenance Program schedules all the required work to be done and the inspection dates.

The number of buildings that will qualify for Project Sirena - 985 - 100%

The number of buildings that will use the Maintenance Booklet - 492 - 50%

Last year SIRENA created a computerised version of the Building Maintenance Booklet through a research project financed according to section 3.17 of the Programma Operativo Regionale (Regional Operational Program), in association with the DINE Department of Building Engineering and with the consultancy of ICT computer experts. The technician who is responsible for filling out the building's Maintenance Book – the definition of the maintenance activities and of their coordinated planning over time – is offered an ICT tool that suggests the inspections and the interventions to be carried out on a building based on a study of that specific building, its particular features and its level of deterioration, while still allowing for total autonomy in the planning stages. It must be underlined that the suggestion provided doesn't bind or limit the building company in its individual autonomy of the project. Once the inspections and the appropriate interventions according to the technical features of a building are figured out, the temporal intervals for their execution are suggested according to two criteria: durability and economy. Then, with reference to the chosen plans, the least expensive maintenance program is generated, which the technician can decide to adopt if he or she deems it appropriate. All the information regarding a building that is submitted by the administrator of the Booklet is assimilated into SIRENA's database. In this way, the maintenance plans are acquired along with the information regarding the type of materials and technology used and type of deterioration. Through the compilation of the Maintenance Booklet knowledge is acquired as to what interventions will be undertaken on a building over a period of 20 years.

With this information the possibility arises of considering the Maintenance Booklet as an innovative instrument for the long term monitoring of strategic maintenance plans that are shared and collaborative. In particular, in view of utilising Project Sirena on circumscribed urban contexts, it will take on an operational role in sustaining renovation works for street barrier screens, problems of invasion of space or the installation of power saving technology. Furthermore, in view of beginning further urban maintenance programs in these specific contexts (utility networks, public lighting, paving and furnishing systems) the Maintenance Booklets will be of great help in the coordination of public works with those directly carried out by private citizens.

The consequential impacts of the improvement of the physical/spatial setting

Project Sirena has at times concentrated its works in particular spaces of the city, where it has brought about an overall improvement of the quality/beauty of the physical/spatial setting. Examples of these are the concentrated areas of Via Duomo, Piazza Dante and Piazza del Gesù (compare the pictures before and after the work). Such an increase in quality/beauty has brought with it a greater capacity for attraction and therefore greater economical wealth. It has also determined a social and personal enrichment. In other words, it has had a positive impact on the social and human fabric.

The global effect of these circumstances has in turn contributed in reproducing a "centre" and sense of "place".

Indeed, the quality/beauty of a space is a source of tourism and therefore a localisation of businesses connected to tourist incoming. It is a strong attracting force in the urban space that stimulates the localization of new businesses; it increases the intensity of the pre-existing ones, and also stimulates new demand for the localisation of specialised knowledge. All the information collected about tourist demand confirms that the beauty of the physical/spatial setting is the most important factor in their choices (more than the costs, the weather, etc.)

Through tourism spatial beauty becomes economical beauty.

Particularly, cultural tourism (related to the fruition of heritage, events, festivals, etc.) has been characterized by increasing levels of development.

Yet, improving the quality/beauty of the physical-urban space also means promoting the human and social capital.

There is, in fact, an interdependent relationship between the characteristics of the physical-spatial setting and a perception of wellbeing: an improvement in one has a positive impact on the other.

In particular, the quality/beauty of a physical space determines certain impacts on human beings in terms of: behaviour, health, sense of identity, a healthy disposition towards interpersonal relationships and greater productivity.

Beauty stimulates an emotional relationship between human beings and urban space.

Furthermore, the quality/beauty of physical space brings about positive impacts on the social fabric in terms of: sense of belonging and community; a healthy disposition towards social and civil participation; social care, respect and responsibility; a deeper social cohesion and disposition towards cooperation; and faith in the Institutions.

It has often been proved that a lack of quality/beauty in an urban space generates cases of vandalism, fear, illegality, deviant behaviour and conflict with the public Institutions. In other words, the lack of quality/beauty in an urban space leads to an erosion of the social capital.

Investing in the requalification of the physical-spatial setting and improving its quality/beauty, means indirectly contributing in the promotion of a greater social resilience with regards to the pressures of change, as well as a greater capacity of self-organisation.

The abovementioned aspects, in turn, contribute toward a reconstruction of "places" as "human spaces", that is, as "spaces of closeness and centrality".

Places are not those multifunctional containers such as large shopping malls, major train stations or the important representational spots. Places are those parts of the town where life goes on, people interact and social relationships interweave.

Town squares are a symbol of this openness between people, of not virtual, but personal face-to-face relationships. They are a symbol of relationships, which is the essential dimension of humanity.

Places make a city "human". The image of a city and its identity are the reflection of the image of its places. A lack of places generates unease, crisis and deterioration in a city. The non-places become spaces of uncertainty, insecurities and fear, and a closure towards new possibilities. The quality/beauty of a city's physical space make it richer in places and more able to welcome others: a city that belongs to all, and that therefore stimulates involvement and participation.

The impact on the State of incentive policies for the urban requalification of Naples

Project Sirena's grants and the tax incentives introduced with the legislation 449/97³ do not have the sole aim of encouraging "spontaneous" urban requalification of the built urban areas, but contemporaneously also have the objective of reducing the burden of work that falls on the informal sector of the economy, of protecting employment and consequently contributing to the taxation yield which would otherwise be evaded. In order to evaluate the extent to which these objectives have been met, a specific model has been employed, based on a reconstruction of the behavioural patterns of the two categories mainly involved in the application of these incentives, namely property owners and building contractors; Two aspects were measured: firstly, the financial benefits of utilising the tax incentives instead of resorting to "under the counter" jobs; and secondly, the overall impact of national and local legislative measures, especially on the Government sector⁴.

In the first case, the measuring of the financial benefits provided by the incentives derives from the difference between the "discount" that the property owner would receive by dealing with submerged market operators, and the total tax exemptions or incentives that the same owner would receive by choosing to deal with the legal labour market.

Table no.8 shows the results of this elaboration, and it clearly shows that only with the accumulation of national incentives and those offered by Project Sirena, would the submerged businesses no longer be able to

compete, and would find themselves pushed aside. Consequently, those who commission the work will be stimulated to carry out work in a legal way. This result is interesting because in Campania there is a very low level of participation in the incentives of Law 449/97⁵, and it is clear that only a “synergy” between the actions of the national and local councils can promote clarity and transparency in businesses and protect employment in Naples.

As far as the second point is concerned, i.e., the reconstruction of the global impact of the incentives on public finances, it has been taken into account that the incentives under consideration come hand in hand with considerable financial responsibilities, in terms of reduced tax revenue and/or the granting of State grants or tax incentives. On the other hand, the State manages to recover revenue through VAT, income tax, insurance payments by employees and taxes on businesses that are closely related to building sites. The model measures these direct effects in relation to ordinary and extraordinary maintenance work, restoration and renewal of jointly owned parts of privately owned apartment buildings financed by Project Sirena and work that can be funded according to the legal incentives of Law 449/97; it also estimates the indirect impact of Project Sirena, which consists of the starting up of further maintenance work on private flats⁶ and the increase in volume of businesses created within the building sector.

The mechanism briefly described above can lead to situations in which the revenue obtained by the State exceeds its expenditure of tax incentives related to the application of law 449. This surplus is caused by the additional value created by Project Sirena and therefore may be at least partly transferred to the Naples City Council so that it can be re-used by the Project to finance “conditional funding” for its urban requalification (e.g. by providing incentives for the utilisation of alternative sources of energy, for eliminating architectural barriers, etc.), or to further increase work on the architectural heritage, setting in motion a virtuous circle of funding, building work, positive effects on the State’s finances and increased funding for the Council.

Table no.9 reconstructs the overall impact generated by the total number of building projects financed in Naples by Project Sirena up to December 31st 2005, while table no.10 shows the index numbers that express the values of the incentives granted to private construction companies and the revenue obtained by the State with respect to two different items of reference, set at 100: the first column represents the investment expenditure for extraordinary maintenance, restoration and recovery, while the second column shows the total distribution of SIRENA grants.

It is interesting to note that, for all the types of work considered, the net balance for the State was positive, with a total balance of 71,578,617, which is equal to 22% of the total amount of work carried out, a percentage that rises to 30.1% with regards to the expenditure for only extraordinary maintenance, which benefits from the accumulation of incentives and stimulates additional maintenance work on individual private properties. From the State’s perspective, this positive index becomes even more significant in relation to the total number of grants handed out by SIRENA rather than the index of activated expenditure. In particular, the net benefit for the State’s budget ends up being greater than the sum of the funding paid out by SIRENA if we assume that all the works carried out are additional.

Table no. 11 assumes, instead, that only part of the work is additional, or in other words, that it is generated exclusively by the virtuous process of the aggregation of national and local incentives; in particular, if we assume that 20% of the general work in a building of privately owned apartments and 50% of the work in the apartments themselves would be undertaken even without Project Sirena, we find that the net additional value for the State is reduced from the previously mentioned figure of 71.578.617 to 46.775.563, a sum which does not affect the possibility of a redistribution of funds from the State to the City Council.

If we consider that the opportunity provided by Project Sirena to accumulate the grants and the tax relief offered by law 449/97, is more than able to dissuade owners from associating with submerged businesses⁷, and if we keep in mind that such a mechanism generates extremely positive results on the State Budget, it is feasible to suggest eventual modifications or integrations of the incentive mechanism with the objective of obtaining an improvement in its efficacy in future. Firstly, it should be possible to identify the optimal thresholds for SIRENA incentives according to their eventual accumulation with law 449/97 and specific objectives (financial efficiency, urban redevelopment, energy saving, equity, etc.) even over different areas⁸.

As is mentioned above, considering that the State obtains positive net returns thanks to the additional share of work stimulated by the SIRENA Project, it is possible to imagine that only a part of this net revenue could

be transferred from the State to the Naples City Council⁹. In this way, the financial resources generated by Project Sirena, once they return to the local Council authorities, could contribute to refinancing the project itself, generating a virtuous circle in favour of the redevelopment of its architectural heritage, emergence from the submerged economy and local development, which would be completely in keeping with the objectives both of Project Sirena and Law 449/97. As an example of this, Table no. 12 shows how is it possible for the State to transfer to SIRENA 50% of the sum used for contributions while maintaining a nett benefit of 62% of the grants allocated by SIRENA.

Moreover, if some of the areas of Naples were selected for the allocation of grants according to the "*de minimis*" regime (which would ensure a competitive mechanism around the requests for funding), the money allocated by Project Sirena would guarantee the acceptance of a greater number of requests which, in turn, would generate virtuous effects on the State's finances and consequent opportunities for the State to invest on a long-term intensive basis in the urban redevelopment of Naples.

Table no.8

Benefits	Cost at market prices	Nett cost carried out
A) Work by submerged businesses	111,02	70,81
B) Tax benefits 10-36%	110,00	79,11
C) SIRENA benefits 30%	111,02	80,49
D) Accumulated tax benefits B + C	110,00	48,85
E) Tax benefits 20-41%	120,00	81,62
F) Accumulated tax benefits C + E	120,00	48,61

Table no.9

Type of work	Expenses	Benefits		State Revenue	Nett balance for the State	New jobs
		Sirena	L. 449/97			
a. Ordinary maintenance on common parts of condominium buildings	64.970.000	21.116.095	-	23.530.978	23.530.978	1.260
b. Extraordinary maintenance on common parts of condominium buildings	127.330.000	41.383.905	36.940.402	50.030.272	13.089.870	2.470
Total a + b	192.300.000	62.500.000	36.940.402	73.561.250	36.620.847	3.730
c. Work on individual parts	24.180.000	-	7.014.992	9.500.762	2.485.770	469
d. External induced effects	108.240.000	-	-	32.472.000	32.472.000	902
Total c + d	132.420.000	-	7.014.992	41.972.762	34.957.770	1.371
Total a + b + c + d	324.720.000	62.500.000	43.955.394	115.534.012	71.578.617	5.101

Table no. 10 Index numbers of work and extraordinary maintenance

Type of work	Index numbers for extraordinary maintenance	
	Expenses = 100	Sirena benefits = 100
Expenses for extraordinary maintenance	100.0	307.7
SIRENA benefits	32.5	100.0
449/97 benefits	29.0	89.3
Total benefits	61.5	189.3
State Revenue	39.3	120.9
a) Nett State balance	10.3	31.6
Expenses for private work	19.0	58.4
449/97 benefits	5.5	17.0
State revenue	7.5	23.0
b) Nett State balance	2.0	6.0
Expenses incurred	59.5	183.1
State Revenue	17.8	54.9
c) Nett State balance	17.8	54.9
Total nett balance a +b + c	30.1	92.6

Table. 11 – Impact of only the additional work

Type of work	Additional	Euro
ORDINARY MAINTENANCE	80%	
Additional expenses		51,976,000
Additional nett revenue for the State		18,824,782
EXTRAORDINARY MAINTENANCE	80%	
Additional Expenses		101,864,000
Nett revenue for the State		10,471,896
INDIVIDUAL WORK	50%	
Additional expenses		12,090,000
Additional nett revenue for the State		1,242,885
INDUCED	50%	
Additional expenses		54,120,000
Added revenue for the State		16,236,000
GRAND TOTAL		
Additional expenses	68%	220,050,000
Additional nett revenue for the State	65%	46,775,563

Table no. 12 – Hypothesis for the recovery of a part of the benefits brought by to the State by Sirena

Type of Work	Sirena Funding	Expenses activated	Nett State revenue
Condominium work of O.M.	21,116,095	64,970,000	23,530,978
Condominium work of E.M.	41,383,905	127,330,000	13,089,870
Total Sirena	62,500,000	192,300,000	36,620,847
Individual Work		24,180,000	2,485,770
Induced		108,240,000	32,472,000
Total Impact	62,500,000	324,720,000	71,578,617
Additional impacts of total		220,050,000	46,775,563
Transferable to the City Council 50% Sirena	31,250,000		67%
Additional impact transferral		110,025,000	23,387,781
Nett additional balance for the State generated by Sirena			38,913,344
Nett balance in % Sirena			62%

ⁱ The data considered in this report refer to the quotas for public funding of the 1st and 2nd Sirena public announcements until the 31st December, 2005.

ⁱⁱ In terms of employment, it has been estimated that for every million Euros invested in the building sector, 18 jobs have been created, including 10 directly and 8 through allied activities (SOURCE: Centro studi e ricerche ACEN)

³ Italian Law 449/97 offers the possibility of a 36% IRPEF tax deduction for expenses incurred in the extraordinary maintenance of buildings and the preservative restoration and renewal works carried out on the common parts of buildings. For ordinary maintenance of privately owned buildings only 10% tax is paid; With the 2005 Budget, the incentive mechanism was modified, bring it up to 20%, instead of the regular increase in tax to 41%.

⁴ The model does not take into account the economic effects that cannot be directly quantified in monetary terms, including, for example, the protection and care for architectural heritage, the support of legal employment and respect for the regulations of the formal economy.

⁵ The data from the Revenue Office on the relationship between the number of restoration works that have benefited from the 449/97 incentives and the total number of dwellings (in the period 1998-2005) show that the Campania Region's average participation is 2%, which is decidedly lower than the national average which is 9%.

⁶ The estimate for this phenomenon takes into account the observations of the workers involved and from research among condominium administrators, construction companies and technicians who participated in Project SIRENA. The research was carried out by two graduate students, Ivan Luongo and Stefano Pesce, as part of their Master's course in "The Planning, Evaluation and Selection of Public Funds", organised by the "Orientale" University of Naples.

⁷ The same can be said with regards to the accumulation of SIRENA incentives with the new forms of incentives that were introduced in the 2006 Budget (which calculates 20% VAT tax and tax relief for up to 41% of the value of work carried out)

⁸ Research is still being carried out on this subject.

⁹ The request for greater State funding for the requalification of all UNESCO protected historical centres has been strongly supported by a large number of authoritative voices; however, this request has come up against heavy Budget restrictions, while action taken more specifically in the Neapolitan context would be totally justified in virtue of the extra benefits it draws in for the Naples City Council thanks to the intermediary efforts of SIRENA's incentives.