



**MedStrategy Project - Integrated Strategy for Sustainable  
Development of Mediterranean Rural Areas**  
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### **C3 – TERRITORIES AND INSTITUTIONS: diagnosis and ex ante evaluation**

**Phase 1 - Integrated Territorial Analysis in relation to the three sustainability dimensions**

**“Framework Document of the criticalities of  
local territorial context”  
Intermunicipal Consortium Tindari Nebrodi**



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**KAPE CRES** | CENTRE FOR RENEWABLE  
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**INDEX**

**INTRODUCTION..... 3**

**0. Characterization of context..... 6**  
*Synthetic table of indicators – 0 Characterization of context .....7*

**1. Consumption and lifestyle choices..... 11**  
*Synthetic table of indicators – 1. Consumption and lifestyle choices ..... 12*

**2. Settlement system ..... 16**  
*Synthetic table of indicators – 2. Settlement system..... 17*

**3. Territorial and environmental resources..... 23**  
*Synthetic table of indicators – 3. Territorial and environmental resources ..... 24*

**4. Territorial services ..... 33**  
*Synthetic table of indicators – 4. Territorial Services ..... 34*

**5. Economic activities..... 35**  
*Synthetic table of indicators – 5. Economic activities ..... 36*

## INTRODUCTION

At the end of each thematic section, after the description of the indicators, is included a synthetic table listing the indicators used for the analysis of that specific thematic section and the synthetic conclusions derived by the interpretation of the indicators. You could include for each indicator:

- **Macro-objective:** synthetic description of the main objectives to be pursued in relation to the sustainability principles determined at a European level (e.g. Aalborg Commitments);
- **Indicator typology:** definition, in relation to the DPSIR model, of the indicator typology, or if it is a "Driving force" (D), "Pressure" (P), "State" (S), "Impact", "Response" (R) indicator;
- **Data source:** list of the data sources used for the elaboration of the indicator (Statistic offices, Environmental Agencies, Planning Offices, etc...);
- **Territorial coverage of the data:** definition of the territorial reference area of the data used for the calculation of the indicator (town, province, region, nation, etc...);
- **Time period of the data:** indication of the time period to which the data refer (the time series of the available data or the last available year);
- **Trends:** representation through the “arrow” symbol (horizontal, turned upward or turned downward), also with a synthetic description, of the current situation, with reference to the time series of available data (e.g. in comparison to the last years, today the situation is improved or worsened?);
- **Criticality:** representation through the “smile” symbol, also with a synthetic description aimed at underlining if, with reference to the last available year, standards and objectives fixed by current regulations were respected (or compared to local, national or international level reference levels). Such evaluation keeps in mind the situation of other territorial realities, at the same or superior administrative level. (e.g. The situation is better or worse compared to other territorial realities, at the same or superior administrative level? Crisis points exist or you can talk of situations representing positive signals for the underlined problems?);
- **Responses/Actions:** representation, through the “smile” symbol with a synthetic description, of the eventual presence/absence of actions and politics realised by the public administration or by other subjects. (e.g. Which positive actions were realised? Which actions should be strengthened or activated?)

Time trend, criticality and politics adopted for each indicator are represented, in the table, with a symbology generally used in *'Environmental Reporting'*. The use of symbols (as smiles, arrows, etc.) and of synthetic comments facilitates the reading process and the description of the indicators, also for the non technical users. It will be therefore useful also in the management of the forums.

For every symbol synthetically describing trends, criticality and actions, a synthetic comment is added: it is the result of the evaluations and the main conclusions made by the analysis of each indicator.

Below the structure of the synthetic table and the label of the used symbology.

Synthetic table of indicators

Label	Macro-objective	Indicator typology (DPSIR model)	Data source	Time period	Time trend		Criticality		Responses/actions	
Indicator	...	P	...	...	↑	The situation is <b>improving</b>	😊	These is an absence of crisis points. In other words, a <b>positive situation</b> compared to the one met in other territories	😊	<b>Appropriate current responses</b> , addressed to an improvement of the situation
		S	...	...	↔	The situation is <b>static</b>	😐	There are some <b>small crisis points</b> or lower than the average or a <b>precarious situation</b>	😐	<b>Current responses to be reinforced</b>
		R	...	...	↓	The situation is <b>worsening</b>	😞	There is a <b>negative situation</b> or a <b>big crisis point</b> or higher than the average	😞	<b>Responses</b> by regulations to be activated or <b>not good enough for appropriate solutions</b> or for improving the situation
		D ...	...	...	◇?	Time trend is not present for the absence of time series	◇?	Data are not available or they are not enough to determine crisis points	◇?	Innovative actions or actions to be determined

## 0. Characterization of context

<b>0</b>	<b>Characterization of context</b>	<b>0.1</b>	<b>Total surface of the area</b>
		<b>0.2</b>	<b>Resident population trend</b>
		<b>0.3</b>	<b>Population density</b>
		<b>0.4</b>	<b>Resident population by ages</b> (Resident population by age classes, old age ratio, dependency ratio)
		<b>0.5</b>	<b>Resident population by level of education</b> Educational levels refer to the International Standard Classification of Education (ISCED 5, ISCED 3-4, ISCED 2, ISCED 1, Literate without any title; Illiterate).
		<b>0.6</b>	<b>Gross Domestic Product</b> (total and per capita)
		<b>0.7</b>	<b>Employment and unemployment rates</b> Employment and unemployment rate by gender (females, males) and by age (Juvenile, less than 25 years old)
		<b>0.8</b>	<b>Archaeology, architectural and cultural heritage</b>

Synthetic table of indicators – 0 Characterization of context

Indicator	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality
<b>0.1 Total surface of the area</b>	ISTAT (National Statistics Institute)	National, regional, provincial, municipal	.	◇ Not valued for the absence of time series	😊 Intermunicipal Consortium Tindari Nebrodi has an area of about 41.842 hectares and represents 13% of the province of Messina. Intermunicipal Consortium Tindari Nebrodi includes 16 municipalities: Basicò, Falcone, Ficarra, Floresta, Gioiosa Marea, Librizzi, Mazzarrà S. Andrea Montagnareale Montalbano Elicona, Oliveri, Patti, Raccuja, S. Piero Patti, S. Angelo di Brolo, Sinagra and Ucria. The municipalities that have a greater territorial surface are: Montalbano Elicona (16%), Patti (12%) and S. Piero Patti (10%).
<b>0.2 Resident population trend</b>	ISTAT (National Statistics Institute) “Census of Population and Housing” (1971-2001)  ISTAT Population trend (2002-2009)	National, regional, provincial, municipal	1971-2001 (ten-years variations) 2002-2009 (annual variations)	↓ Between 1971 and 2009 the total resident population of the Intermunicipal Consortium Tindari-Nebrodi shows a decrease of -13,5%; resident population is equal to 55.457 inhabitants in 1971 and to 47.983 inhabitants in 2009. This decrease has affected, although to a different measure, all four decades considered: was less significant in the decade 1981-91 (-1%), and more significant in the last two decades considered, that is equal to -5% in the decade 1991-2001 and -4% in the decade 2001-09.  ↑ In the municipalities of Falcone, Oliveri, Gioiosa Marea, Patti, in opposing trend to what occurred on average on the whole territory of the Tindari-Nebrodi Consortium, in last forty years, there was a significant growth of resident population with increases ranging from 17% to 35%.  ↓ In some municipalities, in the last forty years considered, the decrease of the resident population is significantly higher than the average recorded in the whole territory of the Tindari-Nebrodi Consortium, with decreases exceeding 40% in the municipalities of Basicò (-40,42%), Montalbano Elicona (-42,20%), Floresta (-43,59%), Ucria (-54,77%), Raccuja (-56,70%).	☹️ The significant decrease of the resident population of the Tindari-Nebrodi Consortium is, however, in opposing trend to what occurred in the province of Messina, where the population shows an alternation of positive and negative increments that, however, remain between -3.3% and +2.4%. The data relating to the variation of the resident population of Tindari-Nebrodi Consortium are even more in opposing trend to what occurred at regional and national level where, in the last forty years (1971-2009), the resident population shows an overall increase respectively equal to 7,7% and 11,5%.

Indicator	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality
<b>0.3 Population density</b> (territorial population density and urban population density)	ISTAT (National Statistics Institute) "Census of Population and Housing" (1971-2001)  ISTAT Population trend (2002-2009)	National, regional, provincial, municipal	2001-2009	Not valued for the absence of time series	 <p>In 2009, the territorial population density, obtained by the relation between the total resident population of Tindari-Nebrodi Consortium and the territorial surface of the territory, is equal to 115 inhabitants/km<sup>2</sup>.            This value is significantly lower than that recorded in Province of Messina (201 inhabitants/km<sup>2</sup>), in Region of Sicily (196 inhabitants/ km<sup>2</sup>) and at national level (200 inhabitants/km<sup>2</sup>).            In the municipalities of Falcone, Gioiosa Marea, Patti, Mazzarà S.Andrea and Oliveri, the territorial population density is significantly higher than that recorded, on average, on the whole territory of the Tindari-Nebrodi Consortium (210 and 313 inhabitants/km<sup>2</sup>); just the opposite, in the municipalities of Floresta, Montalbano Elicona, Ucria and Raccuja, territorial population density is significantly lower than that recorded, on average, on the whole territory of the Tindari-Nebrodi Consortium (under 50 inhabitants/km<sup>2</sup>)</p>
					 <p>In 2001, the urban population density, obtained by the relation between the resident population living in the urban centers and the territorial surface of the urban centers is equal to 63 inhabitants/ha.            In the municipalities of Patti, Sinagra, and Mazzarà S.Andrea the urban population density is significantly higher than the average recorded on the whole territory of the Tindari-Nebrodi Consortium and is equal respectively to 106 inha/km<sup>2</sup>, 94 inha/km<sup>2</sup> and 80 inha/km<sup>2</sup>; just the opposite, in the municipalities of Basicò and Montagnareale, the urban population density is significantly lower than the average recorded in the whole territory of the Tindari-Nebrodi Consortium, which is under 30 inhabitants/km<sup>2</sup>.</p>
					 <p>The data relating to the distribution of the resident population in the territory of the Consortium Tindari - Nebrodi municipalities show that about 81,4% of the resident population lives in main urban centers.</p>

Indicator	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality
<b>0.4 Resident population by ages</b>	ISTAT (National Statistics Institute) "Census of Population and Housing" (1971-2001)	Regional, provincial, municipal	1971-2001 (ten-years variations)	<p>In the Intermunicipal Consortium Tindari-Nebrodi, between 1971 and 2001, the resident population aged over 65 years shows a progressive increase (+38%). Infact, the resident population aged over 65 years is 15% of the total resident population in 1971 and is 23% of the total resident population in 2001.</p> <p>Just the opposite there was a progressive decrease (-45%) of the younger population. Infact, the resident population aged from 0 and 14 years is 23% of the total resident population in 1971 while is 14% in 2001. Equally significant, though more contained, is the decrease (-26%) affecting the population aged between 15 and 24 years. the population aged between 15 and 24 years represents 15% of the total population in 1971 and 12% of the total population in 2001.</p>	<p>The data related to the population by age classes show that, in line with trends at the provincial and regional level, the composition of the resident population in the municipalities of the Consortium Tindari - Nebrodi suffered from the gradual increase in life expectancy on the one hand and the simultaneous decrease of birth on the other hand.</p> <p>In line with the data referring to the province of Messina and the Region of Sicily there is a significant number of individuals aged over 45 years in 2001 which represent 46% of the total resident population, compared to younger individuals aged under 24 years, which instead represent 26% of the total resident population.</p> <p>This demographic data are confirmed by the old age ratio related to the Intermunicipal Consortium Tindari - Nebrodi, that is equal to 163, a value significantly higher than that recorded in the province of Messina (125) and in the Region of Sicily (99).</p>
<b>0.5 Resident population by level of education</b>	ISTAT (National Statistics Institute) "Census of Population and Housing" (2001)	National, regional, provincial, municipal	2001	<p>Not valued for the absence of time series</p>	<p>In 2001, in the Consortium Tindari Nebrodi, the percentage of "Graduated" resident population is equal to 6%. This value is lower than the average recorded in Sicily (6.7%), in the province of Messina (8%) and at national level (7.5%).</p> <p>On the other hand, the percentage of "Literate without any title" resident population (13.5%) and the percentage of "Illiterate" resident population (2.4 %) is still much higher than the national average ("Literate without any title": 9.7%/ "Illiterate": 1.5%).</p>
<b>0.7 Employment/unemployment rates</b>	ISTAT (National Statistics Institute) "Census of Population and Housing" (2001)	National, regional, provincial, municipal	2001	<p>Not valued for the absence of time series</p>	<p>In 2001, in the Consortium Tindari-Nebrodi, the employment rate is equal to 36%. This value is broadly in line with that one related to the province of Messina (34%) and slightly higher than the average related to the Region of Sicily (32%); the comparison with the same data collected at national level shows a significant gap between the employment situation of a municipality of southern Italy and the average recorded at national level (43%).</p> <p>In 2001, in the Consortium Tindari-Nebrodi, the unemployment rate is equal to 20%. This value is slightly lower than that recorded at provincial (23%) and regional (27%) level and higher than the unemployment rate recorded at a national level (12%).</p>

Indicator	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality
<p><b>0.8</b> <b>Archaeology, architectural and cultural heritage</b></p>	<p>Landscape Territorial Plan Region of Sicily  Landscape Territorial Plan Province of Messina</p>	<p>Municipal</p>	<p>·</p>	<p>◇  Not valued for the absence of time series</p>	<p>☺ In the territory of the Intermunicipal Consortium Tindari - Nebrodi there is a significant number of archaeological, architectural, historical and cultural resources. In the Landscape Territorial Plan of Region of Sicily have been identified on the whole of the Consortium Tindari-Nebrodi: - 36 archaeological sites that are mainly located in the municipalities of Patti (16), Gioiosa Marea (6) and Basicò (4); - 479 historic and architectural building that are mainly located in the municipalities of Patti (89), Montalbano Elicona (89), Sant' Angelo di Brolo (44) and San Piero Patti (41). Until now, the wealth of archaeological, architectural cultural and historical heritage isn't adequately protected and enhanced. Until now, were not carried out protection activities or regional policies aimed at synergetic enhancing of these resources. However, these resources are an element of potential attractiveness of the Consortium Tindari – Nebrodi: those resources could represent an important opportunity for the development of new economic activities and employment.</p>

## 1. Consumption and lifestyle choices

Part (n.)	Thematic areas	Indicators	
1	Consumption and lifestyle choices	1.1	<b>Use of freshwater resources</b> 1.1a Use of freshwater resources per capita 1.1b Use of freshwater resources by sector
		1.2	<b>Energy consumption</b> 1.2a Energy consumption per capita 1.2b Energy consumption by sector 1.2c Energy consumption by vector
		1.3	<b>Municipal waste generation</b> (Municipal waste generation total and per capita)
		1.4	<b>Road vehicle fleet</b> 1.4a Number of road vehicles by categories 1.4b Motorization rates
		1.5	<b>Environmental quality of road vehicles</b> (vehicles classification according to the CORINAIR methodology: pre-European, European 1, 2, 3, 4, 5)

Synthetic table of indicators – 1. Consumption and lifestyle choices

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>1.1a Use of freshwater resources (water consumption)</b>	To promote technological innovation, improve the resource management system, activate sensitization actions directed to consumers in order to favour the reduction of water consumptions and wastes.	P	ATO (Optimal Territorial Area) Idrico ME	National, municipal	2004-2008	↕ Between 2004 and 2008 the total water consumption recorded in the territory of the Consortium Tindari-Nebrodi, remain almost unchanged (+0.67%). Water consumption per capita instead shows a slight increase (+2.47%).	😊 In the Consortium Tindari-Nebrodi, water consumption per capita is lower (58 m <sup>3</sup> /year/inha) than the national average (70 m <sup>3</sup> /year/inha)	😊 The implementation of the “Plan of the Municipal Aqueducts” (2006) will favour a correct and rational use of water resources.  😊 The proposed Area Plan prepared by the ATO ME (Optimal Territorial Area) of the water services provides for a reduction of water losses of 20% in the medium-long period.
<b>1.2a Energy consumption (total and per-capita)</b>	To reduce the energy consumption through the improvement of the energy efficiency of the processes and of the final electric devices used in housing.	P	ENEL GRTN and ISTAT (National Statistics Institute)	National, regional, provincial, municipal	2000-2004	↓ Between 2004 and 2005 in the Consortium, the total energy consumption shows an increase of +6.4%. Because of the simultaneous decrease of population, the energy consumption per capita shows an increase more significant, equal to +9%.	😊 Although the energy consumptions per capita are constantly growing, remain (2.4 MWh /inha.) lower than the average recorded in the province of Messina (3.6 MWh /inha.), in the region of Sicily (3.7 MWh/inha.) and at national level (5.2 MWh /inha.).	😞 The activities aimed at sustainability of the local energy system should be strengthened and expanded. Until now, there was a limited implementation of measures aimed at energy saving and at the introduction of renewable energy sources.

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>1.2b Energy consumption by sector</b>	To reduce consumption through the improvement of the energy process efficiency and of the final electric devices used in housing, in the tertiary sector, in the productive activities and in the transport systems.	P	ENEL GRTN and ISTAT (National Statistics Institute)	National, regional, provincial and municipal	2000-2004	↓	 <p>In the Consortium Tindari-Nebrodi, the "Residential" sector shows the highest percentage (47%) of energy consumptions followed by the "Tertiary" sector (35%) and by the "Industry" sector (15%). The "Agriculture and Fishing" sector and "Transport" sector together represent a very small percentage (3% of total energy consumptions). The percentage of the energy consumptions recorded in the "Residential" sector and "Tertiary" sector is higher than that recorded at the provincial, regional and national level, while the energy consumptions recorded in the "Industry" and "Transport".sectors is lower than that recorded at the provincial, regional and national level.</p>	 <p>The activities aimed at sustainability of the local energy system should be strengthened and expanded. Until now, there was a limited implementation of measures aimed at energy saving and at the introduction of renewable energy sources.</p>
<b>1.3 Municipal waste generation</b>	To stimulate the actions directed to limit the production of Urban Waste (U.W.), to reduce the quantity/amount of waste disposed of in landfill site (dump/facilities for the disposal of waste in landfill), to increase the separate refuse collection.	P	ISPRA "Waste Management Plan - Region of Sicily" Protection and Research)  ARPA Sicilia "Annual of Environmental Data"	National, regional, provincial	2001-2008	↓	 <p>From 2001 to 2008 the municipal waste production (total and per capita) shows an increase of +14% and +15% respectively. This increase is higher than that recorded at the regional (+9 / +8%) and national (+10% / +5%) level.</p>  <p>In 2008, the annual municipal waste production per capita recorded in the province of Messina, is equal to 503 kg / inha. This value is lower than the average recorded at regional (526 kg / inha.) and national (541 kg / inha.) level.</p>	 <p>The integrated waste management by the ATO (Optimal Territorial Area) did not improve the quality of management services. The reduction of waste production is not among the priorities of the ATO. Until now, therefore, they were not started effective policies and specific initiatives aimed at reducing waste and increasing recycling.</p>

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>1.4a Road vehicle fleet: number of road vehicles by categories</b>	To contain and progressively reduce the number of circulating vehicles: the increase in the number of vehicles, besides directly contributing to the atmospheric and acoustic pollution, indirectly produces, through the realization of new infrastructures (roads, parkings), the fragmentation of the territory and the consumption of urban and suburban ground. This leads to smaller spaces in the cities for a collective way of living, for meeting and for social interaction.	D	ACI (Automobil Club Italia)	National, regional, provincial, municipal	2005-2009	↓	From 2005 to 2009, the increase in the number of vehicles recorded in the Consortium Tindari – Nebrodi is in line with that one recorded in the province of Messina (+ 9.3%) and in the Region of Sicily (+9.9%) but higher than that recorded at national level (+ 6.3%).	?
							The composition of the road vehicle fleet reflects that recorded at the provincial, regional and national level: the "Cars" are the categories of road vehicles most representative and are equal to 78.2% of the total road vehicle fleet.	
<b>1.4b Motorization rates</b>		D	ACI (Automobil Club Italia)  ISTAT (National Statistics Institute)	National, regional, provincial, municipal	2005-2009	↓	In the Consortium between 2005 and 2009, increases the motorization rates refer to vehicles and refers to cars are higher than those recorded during the same period at the provincial (+9.56% / +6.29%), regional (+9.38% / 6.23%) and national (+3.51% / 2.15%) level.	?
							In the Consortium Tindari - Nebrodi the motorization rate related to vehicles and cars is equal to 83 vehicles/100 inha. and 65 cars/100 inha. The motorization rates are slightly higher but broadly in line with the average recorded at provincial, regional and national level.	

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>1.5 Environmental quality of road vehicles</b>	To favour and stimulate the diffusion of vehicles belonging to the smaller environmental impact categories (Euro IV - Euro V) so that to contribute to the reduction of the atmospheric pollution.	D	ACI (Automobil Club Italia)	National, regional, provincial, municipal	2009	⊠ Not valued for the absence of time series	☹ In Consortium Tindari - Nebrodi, in 2009, the vehicles belonging to the EURO 0 class represent still a significant percentage equal to 31%, followed by vehicles belonging to the EURO 2 class (23%), EURO 3 class (18%), EURO 4 class (17 %) and EURO 1 class (11%). Totally negligible is the percentage of vehicles belonging to the EURO 5 class. The data recorded in the province of Messina, in region of Sicily, and especially, in the Consortium Tindari - Nebrodi, show that the environmental quality of road vehicles is lower than that one recorded at national level.	⊠ The available data show that the municipalities (Local Authorities) didn't activate measure to enhance the environmental quality of public road vehicle fleet The only exception is the municipality of Montalbano Elicona where 4 of the 8 cars owned by the municipality are fueled by GPL and 1 by methane.

## 2. Settlement system

Part (n.)	Thematic areas	Indicators	
2	Settlement system	2.1	<b>Land take</b> Land take by the expansion of artificial areas and related infrastructure
		2.2	<b>Local (municipal/provincial/regional) tools and plans on urban and territorial planning</b>
		2.3	<b>Housing stock</b> 2.3a Dwelling units increase 2.3a Vacant household-dwelling units 2.3b Household-dwelling units by number of persons 2.3c Floorarea per person
		2.4	<b>Local (municipal/provincial/regional) rules on the energy certification of buildings</b>
		2.5	<b>Availability/Density of urban green areas</b>
		2.6	<b>Mobility management</b> 2.6a Restricted Traffic Zones (RTZ) 2.6b Pedestrian areas 2.6c Cycling paths and lanes
		2.7	<b>Transport infrastructures</b> 2.7a Density of road infrastructures by road categories 2.7b Density of railways by railway categories (electrical, high speed etc) 2.7c Passenger transport in the port infrastructures 2.7d Passenger transport in the airport infrastructures

Synthetic table of indicators – 2. Settlement system

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend		Criticality	Responses/Actions		
<b>2.1 Land take by the expansion of artificial areas and related infrastructure</b>	To contain land consumption (land take) consequential from the expansion of artificial areas and to favour the realization of politics aiming at the anthropic development compatible with the respect of the natural environment and the agricultural landscape.	I	Environment and Territorial Regional Department (Carta Natura della Regione Sicilia - 2008)  Landscape Territorial Plan Province of Messina  ISTAT (National Statistics Institute)	Municipal	2008	?	Not valued for the absence of time series	☺	In the Consortium Tindari - Nebrodi, the percentage of urbanized areas is equal to 2.65%. In the municipalities of Falcone and Oliveri, the percentage of urbanized area is significantly higher than the average recorded in the whole territory of the Consortium and equal respectively to 10% and 9%. The land take per capita is about 231 m <sup>2</sup> /inha. and is in line with the average recorded at regional level (250 m <sup>2</sup> /inha.). The land take per capita in the municipalities of Oliveri (444 m <sup>2</sup> /inha.), Floresta (353 m <sup>2</sup> /inha.), Falcone (329 m <sup>2</sup> /inha.) and Montalbano Elicona (325 m <sup>2</sup> /inha.) is significantly higher than the average recorded in the Consortium Tindari-Nebrodi.	?	The available data do not allow to assess the content of the Urban Plans current in force in the municipalities of Consortium Tindari – Nebrodi. However the commitment of new agricultural areas foresaw in the Urban Plans should be aimed at the satisfaction of housing needs and mainly restricted to the completion and to the rationalization of the urbanization processes already current, through the recovery of the existing housing stock.
<b>2.2 Local tools and plans on urban and territorial planning</b>	The adoption of urbanistic and territorial politics and planning tools able to: - direct in a sustainable way the "growth" of urbanized areas sizing them on the real housing needs - contain the land consumption through the containment of the urban diffusion processes and the recovery of the existing housing stock	R	ARTA Sicilia Environment and Territorial Regional Department	Municipal	2008	?	Not valued for the absence of time series	☹	Only 7 (Basicò, Falcone, Ficarra, Oliveri, Patti, San Angelo Brolo and Ucria) out of 15 municipalities that fall within the territory of the Consortium Tindari-Nebrodi have a Urban Plan updated in the last 10 years. The Urban Plans of the municipalities of Gioiosa Marea, Mazzarà S. Andrea, Montagnareale, San Piero Patti and Sinagra, was approved between 1970 and 1990 and thus should be updated. In the municipalities of Floresta, Librizzi, Montalbano Elicona and Raccuja the Urban Plan (Piano Regolatore Generale) wasn't yet approved while is still in force the Building Plan (Piano di Fabbricazione).	☹	The available data show that the municipalities of the Consortium didn't update the Urban Plans that are obsolete for more than half of the municipalities. The only municipalities that have recently begun the reviewing process of its Urban Plans are Montalbano (where, although is still in force the Building Plan, has been drawn up the Urban Plan, but it is still stuck at the adoption phase) and S. Piero Patti (where the Urban Plan was approved by Depart. Decree on 19/11/10)

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>2.3a Housing stock: Dwelling units increase</b>	To recover and restructure the existing not used housing stock, so that to contribute to the containment of the building growth and to the reduction of the pressures practiced on the environment.	D	ISTAT (National Statistics Institute) "Census of Population and Housing" (1971-2001)	Regional, provincial, municipal	1971-2001	↓ In the Consortium Tindari - Nebrodi, although from 1971 to 2001 the population shows a decrease of -10%, the number of dwelling units has grown with an increase of +62%.	☹ The increase in the number of dwelling units, although more contained, is broadly in line with that recorded at provincial (71.76%) and regional (72.11%) level, where however the population has grown with an increase of 1 % and 6% respectively.	
<b>2.3b Housing stock: Vacant household- dwelling units</b>	Regulations do not fix precise objectives connected to building production. Nevertheless the objective to be pursued should be the containment of the housing growth: it should be dimensioned to the resident population and therefore to the real housing requirement. Moreover the requirement of residential or other type housebuilding will have to be satisfied through the recovery of disused buildings and the restructuring of the existing patrimony, so that to also contribute to the reduction of the pressure practiced on the environment.	D	ISTAT (National Statistics Institute) "Census of Population and Housing" (1971-2001)	Regional, provincial, municipal	1971-2001	↓ From 1971 to 2001 the number of vacant (not used, not inhabited) dwelling units has significantly increased and is 17% of the total dwelling units in 1971 and 39% of the total dwelling units in 2001.	☹ In 2001 the percentage of vacant dwelling units recorded in the Consortium Tindari-Nebrodi (39%) is higher than that recorded at provincial (30%) and regional (29%) level. In the municipalities of Oliveri, Floresta, Ficarra and Basicò the percentage of vacant dwelling units is very high: infact one house out of two is not inhabited.	◇ The available data do not allow to assess the content of the Urban Plans current in force in the municipalities of Consortium Tindari – Nebrodi. However the commitment of new agricultural areas foresaw in the Urban Plans should be aimed at the satisfaction of housing needs and mainly restricted to the completion and to the rationalization of the urbanization processes already current, through the recovery of the existing housing stock.

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>2.3c Housing stock: Household- dwelling units by number of persons</b>	To measure in an optimal way the existing dwelling units so that to avoid an excessive overcrowding of them and to improve the quality of life inside.	D	ISTAT (National Statistics Institute) "Census of Population and Housing" (1971-2001)	Regional, provincial, municipal	1971-2001	↑ In the Consortium Tindari Nebrodi, from 1971 to 2001, the number of rooms per capita is more than doubled (+108%), and is equal to 1,2 rooms/inha. in 1971 and to 2,6 rooms/inha in 2001. In all municipalities of the consortium Tindari-Nebrodi there is a steady increase in the number of rooms, mainly justified by the improvement of living standards.	😊 The number of rooms per capita recorded in the Consortium Tindari – Nebrodi is higher (2,6 rooms/inha.) than the average recorded in the province of Messina (2,2 rooms/inha.) and in the Region of Sicily (2,1 rooms/inha.).	❓ Innovative actions or actions to be determined
<b>2.3d Housing stock: Floor area per person</b>	To measure in an optimal way the existing dwelling units so that to avoid an excessive overcrowding of them and to improve the quality of life inside.	D	ISTAT (National Statistics Institute) "Census of Population and Housing" (1971-2001)	Regional, provincial, municipal	1971-2001	↑ In the Consortium Tindari-Nebrodi, between 1971 and 2001, in line with what has happened also at provincial and regional level, the floorarea per person has doubled and is equal to 19,84 m <sup>2</sup> / inha. in 1971 and to 35,33 m <sup>2</sup> / inha. in 2001.	😊 In the Consortium Tindari-Nebrodi, the floor area per person, in 2001, is equal to 35,33 m <sup>2</sup> / inha.. This value is slightly higher than that recorded in the Province of Messina (34,34 m <sup>2</sup> / inha.) and in the Region of Sicily (33,91 m <sup>2</sup> / inha.). In the municipalities of Basicò and Floresta the floor area per person is significantly higher than that average recorded in the Consortium Tindari-Nebrodi: it is equal to 43,84 m <sup>2</sup> / inha in the municipality of Basicò and 42,81 m <sup>2</sup> / inha in the municipality of Floresta.	❓ Innovative actions or actions to be determined

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>2.4 Local rules on the energy certification of buildings</b>	The adoption of rules and laws directed to assure that the buildings of new construction and the existing ones satisfy the minimum requirements for energy efficiency. The main aim of these tools will have to be therefore that to guarantee the buildings energy efficiency and a sensitive reduction in energy consumption.	R	Technical Department Consortium Tindari-Nebrodi Municipalities (Data collection sheet)	Municipal	.	⊠ Not valued for the absence of time series	☹ The available data show that most of municipalities didn't start interventions and initiatives aimed at ensuring the energy efficiency of public and private buildings. However, some municipalities declare that were carried out measures of energy saving on public buildings and that the European directives on the energy certification of buildings were absorbed by the national and regional laws/rules.	⊠ Innovative actions or actions to be determined
<b>2.5 Availability/Density of urban green areas</b>	The increase of urban green areas is a remarkable factor for the improvement of the cities quality of life. It is therefore desirable that the extension of urban green areas is accompanied by the adoption of politics and tools directed to guarantee a more efficient management of the existing green areas, to assure their accessibility and to facilitate their fruition for citizens.	R	Technical Department Consortium Tindari-Nebrodi Municipalities (Data collection sheet)	Municipal	.	⊠ Not valued for the absence of time series	☹ The available data show that, although in territory of the Consortium Tindari-Nebrodi there are "Urban green areas", these are not properly sized to the needs of the resident population and to the potential tourist of the Consortium Tindari-Nebrodi municipalities.	⊠ Innovative actions or actions to be determined

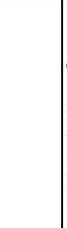
Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>2.6 Mobility management: Restricted Traffic Zones (RTZ), pedestrian areas and cycling paths</b>	The realization and, where already existing, the increase of the surface destined to Restricted Traffic Zones (RTZ), pedestrian areas and cycling paths in order to favour the reduction of mobility with private cars with positive effects on traffic, pollution and urban environment liveableness.	R	Technical Department Consortium Tindari-Nebrodi Municipalities (Data collection sheet)	Municipal	.	⊠ Not valued for the absence of time series	☹️ The available data show that, in almost all Consortium municipalities there aren't Restricted Traffic Zones (R.T.Z.), pedestrian areas and cycling paths. The only exceptions are the municipality of Librizzi, where there is a pedestrian area of 3.000 m <sup>2</sup> , and Montalbano Elicona that implemented a project aimed at enhancing the historic center. This project provides for the whole historic center is defined as "Restricted Traffic Zones" (33.352 m <sup>2</sup> ).	☹️ The available data show that the municipalities of the Consortium didn't still draw up specific tools or plans aimed at mobility management (such as Urban Mobility Plan, Urban Traffic Plan). In addition the municipalities of the Consortium didn't start specific initiatives aimed at the improvement of the urban public transport and at the promotion of innovative modes of transport.
<b>2.7a Transport infrastructures: density of road infrastructures by road categories</b>	To guarantee that politics and planning tools concerning the road sector are directed to the general requalification and to the rationalization of the existing road network. Moreover, where necessary, to fill possible deficits to its expansion, in order to guarantee accessibility, safety and efficiency.	D	ARTA Sicilia Environment and Territorial Regional Department Territorial Plan Province of Messina (2006)	Municipal	.	⊠ Not valued for the absence of time series	😊 The highway A20 Messina-Palermo crosses the territory of the Consortium. This road stretches along the entire coast from Messina to Cefalù and crosses the municipalities of Falcone, Oliveri, Patti and Gioiosa Marea. The highway A20 connects the highway A19 Messina- Palermo and the highway A18, Messina- Catania. The road network is also represented by other different typology of roads such as state roads (S.S.113 Trapani - Messina, Capo d'Orlando-S.S.116 and S.S.185 S. Biagio Randazzo - Giardini Naxos), regional roads, provincial roads and municipal roads. The secondary roads, although they are closely connected to the state roads, appear inadequate to link the inland areas with the coastal areas and to connect the primary roads with the interchange nodes modal of roads and rail.	😊 The completion of the highway A20 Messina-Palermo and the construction of the highway Siracusa-Gela and Catania-Siracusa will contribute to improve the links / communications between the main centers in the Region of Sicily.

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<p><b>2.7b</b> <b>Transport infrastructures: density of railways by railway categories (electrical, high speed etc)</b></p>	<p>To guarantee that politics and planning tools are directed to the general requalification and to the rationalization of the existing rail network. Moreover, where necessary, to fill possible deficits to its expansion, in order to guarantee accessibility, safety and efficiency and increase the competitiveness with use of the private car</p>	D	<p>ARTA Sicilia Environment and Territorial Regional Department  Territorial Plan Province of Messina (2006)</p>	Municipal	.	<p>Not valued for the absence of time series</p>	<p>The Sicilian rail network connects the coastal towns but not the inner towns. The Sicilian railway network isn't suitable to follow the transformation process of combined transport current in Europe and in the northern parts of Italy. The trains, from Messina to Catania and from Messina to Palermo, still travel along a single track. Therefore the rail network isn't sufficiently adequate to be competitive with road transport. Only just over 50% of the Sicilian railway network is electrified, compared with 63% referring to the national territory.</p> <p>The municipality of Messina, which due to its geographical position, is the crux of the rail link with the rest of the country, is the centre of attraction for all rail traffic. The commercial speeds are low and the main lines are reduced to the coastal railway line and to the inner line Palermo - Catania, from which branch the lines heading south of the region.</p> <p>In the two ridges, Tirrenica and Ionica, the railway network has significant infrastructural gap. The most critical are represented by the saturation on the line Catania-Messina in the East of the region.</p>	<p>The program of the Italian Railways related to the doubling of railway track along the lines Messina - Catania and Messina - Palermo, may offer new opportunities to use the rail transport system in the region, configuring it as an axis of medium-speed freight transport alternative to road transport. The implementation of this program of the Italian Railways will also free up the old railway routes now in operation, which can be reused for local can be reused for local transportation or enhanced for their historical value.</p>

### 3. Territorial and environmental resources

Part (n.)	Thematic areas	Indicators	
3	Territorial and environmental resources	3.1	Land use by land use categories
		3.2	Landscape constraints: areas subject to landscape protection
		3.3	Local tools (municipal/provincial/regional) and plans aimed at biodiversity conservation and protected areas management
		3.4	Protected areas (Reserves and Natural Parks founded according to national and/or regional laws in the analysed territories, Protected Sea Areas and Nature 2000 Sites)
		3.5	Local tools and plans (municipal/provincial/regional) aimed at protection and enhancement of landscape
		3.6	Quality of water resources: 3.6.a quality of surface water sources, underground water sources and marine water 3.6.b Bathing coast on the total coast
		3.7	Quality of the air: 3.7a Number and density of fixed monitoring sites 3.7b Number of days the limit value is exceeded for the following air pollutants: sulphur dioxide (SO <sub>2</sub> ), nitrogen dioxide (NO <sub>2</sub> ), particulate matter (PM <sub>10</sub> ), carbon monoxide (CO) and ozone (O <sub>3</sub> ) 3.7c Existence and level of implementation of the plan for the improvement/ management of the quality of the air
		3.8	Energy produced from renewable sources Number of plants by different renewable energetic sources per tipologia di fonte rinnovabile (solar, aeolian, etc...) and quantity of energy produced by the different plants.

Synthetic table of indicators – 3. Territorial and environmental resources

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions	
3.1 Uso del suolo per tipologia	To adopt plans for the protection of natural areas and the residual agricultural territories and the reduction of the urbanized areas; to contain the land consumption, through a correct sizing of the real settlement needs, a coherent distribution and diversification of the different territorial functions, a careful removal of the infrastructures and a re-use and re-functionalization/reutilization of the existing ones.	S	Environment and Territorial Regional Department (Carta Natura della Regione Sicilia - 2008)	Municipal	2008	◇?	Not valued for the absence of time series	 <p>The territory of the Consortium Tindari-Nebrodi is mainly covered by "Agricultural Areas" (49.28%) and by "Natural and seminatural arboreal, shrubby and herbaceous vegetation" (45.65%). The remaining 5% is covered by "Artificial forest vegetation" (2.43%) and "Artificial areas" (2.65%).</p>	 <p>The available data do not allow to assess the content of the Urban Plans current in force in the municipalities of Consortium. However the commitment of new agricultural areas foresaw in the Urban Plans should be aimed at the satisfaction of housing needs and mainly restricted to the completion and to the rationalization of the urbanization processes already current, through the recovery of the existing housing stock, limiting as far as possible the land consumption and protecting the rural landscape and the natural areas.</p>
								 <p>The municipalities in which there is a presence of natural and seminatural areas higher than the average recorded in the whole territory of the Consortium are Floresta (76%), Oliveri (61.20%), Raccuja (60.38%), Ucria (54.62%) and Montalbano Elicona (52.03%).</p>	
								 <p>The municipalities in which there is a presence of artificial areas higher than the average recorded in the whole territory of the Consortium are Falcone (10.26%), Oliveri (9.31%), Gioiosa Marea (6.35%) and Patti (5.92%).</p>	

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>3.2 Landscape constraints: areas subject to landscape protection</b>	To stimulate actions directed to guarantee the respect of the actual territorial constraints and, where necessary, to favour the increase of protected areas for the maintenance of the not yet protected landscape and archaeological resources.	<b>R</b>	Landscape Territorial Plan Province of Messina	Municipal	,	 Not valued for the absence of time series	 The constrained areas, subject to landscape protection, are 45% of the total surface of the Consortium. The constrained areas, subject to landscape protection (pursuant to art. 136 of Legislative Decree 42/04) covered a very small area, equal to 479 hectares (1% of the total surface) and include the promontory of Tindari with the archaeological area and the lakes of Marinello, in the municipality of Patti.	 The adoption of the Landscape Territorial Plan, will promote the strengthening and the enforcement of existing protection measures. However, it is necessary, the application of tools and policies to encourage actions aimed at the protection of existing constraints areas and at the preservation of landscape, archaeological and historical-cultural resource not yet subjected to protection.
							 The constrained areas, subject to landscape protection (pursuant to art. 142 of Legislative Decree 42/04) covered an area of 18.652 hectares (45% of the total surface). The constrained areas, subject to landscape protection, (pursuant to art. 142 of Legislative Decree 42/04) are mainly "wooded areas" (25%), "rivers and its buffer zones"(15%) and "Mountains over 1200 meters "(8%).	

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend		Criticality		Responses/Actions	
3.3 Local tools and plans aimed at biodiversity conservation and protected areas management	The adoption of normative tools and plans directed to - stimulate the activation of measures for maintaining diversity; - guarantee a sustainable management of protected areas; - assure the respect of constraints deriving from the realization of the aforesaid tools.	R	Landscape Territorial Plan Region of Sicily  Department of Cultural heritage and Sicilian Identity	Municipal	.	◇?	Not valued for the absence of time series	☺	The landscape protection is guaranteed by the Landscape Territorial Plan related to the Province of Messina.	☹	Most of the municipalities must update its Urban Plan in relation to the Landscape Territorial Plan forecasts, through the insertion in the Urban Plans of the regulations addressed to the protection of archaeological areas, landscape and cultural heritage.
3.4 Protected areas	The realization of measures directed to maintain current natural and semi-natural habitats in satisfactory conditions and to increase biodiversity, maintaining and extending the surface of protected areas and guaranteeing, where possible, continuity among habitats which is essential to guarantee the necessary genetic exchanges to survive	R	Department (Ministry) of the Environment and Territory protection  ARTA Sicilia Environment and Territorial Regional Department  Landscape Territorial Plan Region of Sicily and Province of	Municipal	.	◇?	Not valued for the absence of time series	☺	In the territory of Consortium tindari – Nebrodi there are: a Natural park (Nebrodi Park), two Natural Reserves founded according to national and/or regional laws and six Natura 2000 Sites designed under the EU “Habitat” and “Birds” directives. Protected areas covered an area of 5.026 hectares (12% of total surface)	☺	The Territorial Plan of Nebrodi Park, together to the Park Regulation will guarantee an efficacious protection and enhancement of the territory of park.
								☹	The protected areas are distributed mainly in the municipalities of Floresta (56.79%) and Montalbano Elicona (23.90%). The remaining 19% occupies the municipalities of Ucria (8.87%), Patti (7.39%), Gioiosa Marea (2.97%) and Raccuja (0.08%). There aren't protected areas in the other municipalities of the Consortium.	☹	The only existing tool that has the purpose of ensuring the protection of natural reserves is Circular n.76475 26/11/04 related to the Natural Reserves The "Arrangement Plans", and the "Utilization Plans" haven't been yet drew up.

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
							 <p>The municipality in which there is a higher presence of protected areas in relation to the total territorial surface is Floresta, where the protected areas are 91% of the total municipality surface.</p>	 <p>The “Management Plans” of Natura 2000 sites should ensure the protection of the territory and establish appropriate protection strategies of habitats and species. Only the “Management Plan” of Natura 2000 site “ITA 030005 Bosco di Malabotta” was approved (August 2010). The others “Management Plans” of Natura 2000 sites were yet approved with conditionally.</p>
<b>3.5 Local tools and plans (municipal/provincial/regional) aimed at protection and enhancement of landscape</b>	The adoption of normative and planning tools to guarantee the protection and enhancement of landscape resources in the analysed territory and the respect of the commitments deriving from the realization of the aforesaid tools.	R	Territorial Plan of Nebrodi Park (2004-2007)	Municipal	,	 <p>Not valued for the absence of time series</p>	 <p>The Council of Nebrodi Park Authority adopted by the resolution n.24/2007, the Territorial Plan of Nebrodi Park, together to the Park Regulation. In 2011, the Territorial Plan of Nebrodi Park, together to the Park Regulation was approved.</p>	 <p>The Territorial Plan of Nebrodi Park, together to the Park Regulation will guarantee an efficacious protection and enhancement of the territory of park.</p>
			Territorial Plan Province of Messina (2006)	Municipal	,	 <p>Not valued for the absence of time series</p>	 <p>The only existing tool that has the purpose of ensuring the protection of natural reserves is Circular n.76475 26/11/2004 related to the Natural Reserves. This circular is aimed at safeguarding the environmental quality of these contexts through the explicit indication of what is allowed to do in the area "A - reserve" and in the area "B - pre-reserve".</p>	 <p>The only existing tool that has the purpose of ensuring the protection of natural reserves is Circular n.76475 26/11/2004 related to the Natural Reserves. The "Arrangement Plans of zones "A", and the " Utilization Plans of zones "B" haven't been yet drew up.</p>
			ARTA Sicilia Environment and Territorial Regional Department Circular n.76475 26/11/2004 related to the Natural Reserves				 <p>Only the “Management Plan” of Natura 2000 site “ITA 030005 Bosco di Malabotta” was approved (August 2010). The others “Management Plans” of Natura 2000 sites were yet approved with conditionally.</p>	 <p>Only the “Management Plan” of Natura 2000 site “ITA 030005 Bosco di Malabotta” was approved (August 2010). The others “Management Plans” of Natura 2000 sites were yet approved with conditionally.</p>

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>3.6a Quality of surface water sources</b>	To assure the achievement, maintenance or improvement of the parameters representing the quality of the surface waters in relation to the objective-values foreseen by local, regional and national regulations current in force.		ARPA Sicilia (Regional Agency for the Environmental Protection) "Annual of Environmental Data"  Province of Messina	Provincial, municipal	2001-2004	 The monitoring campaign carried out by ARPA Sicilia in 2008 involved only 19 monitoring stations, that don't fall within/ which are outside the territory of the Consortium Tindari - Nebrodi. The only data that allow to make a comparison are those related to the period 2001-04. These data show that the Fiumara of Sinagra and the Torrent of Timeto have been subject to the deterioration of ecological status. Instead, the ecological status of the Alcantara River was unchanged.		 The "Plan for the Waters Protection" of the Region of Sicily does not include the monitoring of the surface water sources and of the marine-coastal waters that fall within the territory of the Consortium as they are not considered "significant" under D.Lgs.152/99 and smi.  Local authorities should establish rules to protect the water sources and enhance the monitoring activities.
<b>3.6a Quality of marine water sources</b>	To assure the achievement, maintenance or improvement of the parameters representing the quality of the sea-coastlines/marine waters in relation to the objective-values foreseen by local, regional and national regulations current in force.	S	ARPA Sicilia (Regional Agency for the Environmental Protection) "Annual of Environmental Data"  "Plan of river basin management" Region of Sicily (2010)  "Plan for the Waters Protection" Region of Sicily (2004)	Municipal	2008	 Not valued for the absence of time series		The TRIX index values show that almost all the monitoring stations show a low trophic index (from 0 to 4) This index is an expression of: - high water quality - good water transparency - low trophic level - absence of abnormal coloration of the water - undersaturation of dissolved oxygen in water benthos. The CAM index values indicate the presence of oligotrophic waters and tendentially undisturbed

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend		Criticality		Responses/Actions	
<b>3.6a Quality of underground water sources</b>	To assure the achievement, maintenance or improvement of the parameters representing the quality of the underground waters in relation to the objective-values foreseen by local, regional and national regulations current in force.	S	ARPA Sicilia (Regional Agency for the Environmental Protection) "Annual of Environmental Data"  "Plan of river basin management" Region of Sicily (2010)  "Plan for the Waters Protection" Region of Sicily (2004)	Municipal	2004	⊠	Not valued for the absence of time series	☹	All water bodies included in the territory of the Consortium have a "good" environmental state, according to the classification indicated in Legislative Decree no. 152/99. The only water body that has a "bad" environmental state is the plain of Barcelona - Milazzo, which covers the municipalities of Mazzarà Sant'Andrea and Falcone.	☹	The "Plan for the Waters Protection" of the Region of Sicily provides the semestral monitoring of the underground water sources. It would be appropriate to strengthen the monitoring activities.
<b>3.6a Quality of transition water sources</b>	To assure the achievement, maintenance or improvement of the parameters representing the quality of the transition waters in relation to the objective-values foreseen by local, regional and national regulations current in force.	S	ARPA Sicilia (Regional Agency for the Environmental Protection)	Municipal	2002	⊠	Not valued for the absence of time series. The available data do not allow to highlight a temporal trend of the parameters.	⊠	The available data do not allow to formulate an opinion on the ecological or chemical status of transition water, because the criteria have yet to be defined	☹	The "Plan for the Waters Protection" of the Region of Sicily provides monthly monitoring of the transition water sources. It would be appropriate to strengthen the monitoring activities.

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>3.6b Bathing coast on the total coast</b>	To assure the achievement, maintenance or improvement of the parameters representing the quality of the sea-coastlines waters in relation to the objective-values foreseen by local, regional and national regulation current in forces, through: - the activation of specific monitoring activities directed to verify the water quality and to determine the possible pollution sources; - the adoption of measures directed to reduce or eliminate the pollution sources.	S	ARPA Sicilia (Regional Agency for the Environmental Protection) "Annual of Environmental Data"	Regional, provincial	2005-2009	↓	In the province of Messina, the percentage of bathing coasts on the total controlled coast is 99,5% in 2005 but suffered in the subsequent years until 2008, a slight decrease. Now more than 98% of coast is bathing. 😊	😊
			Ministry of Labour, Health and Social Policies, "Report on Bathing Water" (2005-2009)			↓	From 2005 to 2009, although the percentage of forbidden (not bathing) coasts is contained, there is a slight increase from 0.4% to 1.4%. 😞	
			Ministry of Health "Bathing Water quality. Numerical Report" (2009)	Provincial and municipal	2009	❓	Not valued for the absence of time series 😊	
			Ministry of Health Data "Portale Acque" ( web site: www.portaleacque.it)	Municipal	2009	❓	Not valued for the absence of time series 😊	
The coastal monitoring is regularly carried out in accordance with DPR 470/82. In addition, the "Plan for the Waters Protection" of the Sicilian Region provides seasonal monitoring.								

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>3.7a</b> Quality of the air: number and density of fixed monitoring sites	To guarantee a suitable territorial distribution of the air quality monitoring sites. They will have to assure: - the survey of more important atmospheric pollutants; - the continuity and the effectiveness of the effected surveys.	R	ARTA Sicilia Environment and Territorial Regional Department "Regional Coordination Plan for the Protection of the Environment Air Quality "  ARPA Sicilia (Regional Agency for the Environmental Protection) Data BRACE, 2007	Regional, provincial and municipal	2007	⊠  Not valued for the absence of time series	☹️  In the territory of the Consortium there aren't air quality monitoring sites. The province of Messina has a monitoring network of air quality that includes 16 fixed stations located in some municipalities of the province, and 2 mobile labs.  In some territories within the region of Sicily there aren't air quality monitoring sites, while in others territories, such as the urban areas of Palermo, Catania Messina, and Pace del Mela and the province of Caltanissetta and Siracusa, there are a considerable number of air quality monitoring sites.	☹️  The Sicilian Region is working to draft a project aimed at strengthening and rationalization of the air quality monitoring network, in accordance with Legislative Decree no. 351/99 and D.M. 60/02. In addition, the project aims to encourage the substitution of some environmental parameters (PTS, SO2, NMHC) with others that are high interest for public health (PM10, PM2.5, IPA, metalli).
<b>3.7b</b> Quality of the air. Number of days the limit value is exceeded for the following air pollutants: sulphur dioxide (SO2), nitrogen dioxide (NO2), particulate matter (PM10), carbon monoxide (CO) and ozone (O3)	To guarantee the respect of the limit values fixed by regulations about quality of the air, with reference to those pollutants which are considered the biggest responsible of atmospheric pollution.	S	Web site "BRACE. Data and metadata on the air quality";  ARPA Sicilia (Regional Agency for the Environmental Protection) "Annual of Environmental Data"	Regional, provincial	2004-2006	⬇️  Between 2004 and 2006 the air quality is generally worsened in the different realities of the urbanized area of Sicily.  There was an increase in exceedances of statutory limits on PM10 concentrations in major urban areas of Sicily and, to a lesser extent, on the NO2 concentrations.	☺️  In areas at risk of environmental crisis occurred exceedances of the SO2 concentration. In the area at risk of environmental crisis in Priolo also the ozone concentrations do not observe the statutory limits. Instead, in the urban areas of Palermo and Messina, there were no exceedances and there is a clear improvement compared to the situation in 2005. Only the carbon monoxide concentrations and benzene concentrations did not exceed the limit values imposed by the laws current in force.	☺️  The optimization of the air quality monitoring network should be ensured through a rationalization of operating costs with a quality of services higher than the current one. However the data supplied by the Technical Departments of Consortium Tindari-Nebrodi Municipalities show that didn't start the measures aimed at improving the air quality.

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<p><b>3.7c</b> Existence and level of implementation of the plan for the improvement/management of the quality of the air</p>	<p>The adoption, where not yet existent, of plans for the improvement of the quality of the air and the implementation of the measures foreseen in the plan.</p>	R	<p>Web site "BRACE. Data and metadata on the air quality";</p> <p>ARPA Sicilia (Regional Agency for the Environmental Protection) "Annual of Environmental Data"</p> <p>ARTA Sicilia Environment and Territorial Regional Department "Regional Coordination Plan for the Protection of the Environment Air Quality "</p>	<p>Regional, provincial and municipal</p>	<p>2005-2007</p>	<p>The Sicilian Region has already made, with the D.A. (Department Decree) No 305/GAB of 2005, a preliminary assessment of air quality and an initial zoning of the regional territory. Have been adopted, respectively, with the D.D.U.S. No 07 of 14/06/06 and D.D.U.S. No 19 of 05/09/06, the action plans with the first interventions on the areas at high risk of environmental crisis of Syracuse and Messina. The "Regional Coordination Plan for the Protection of the Environment Air Quality" approved with the DA (Department Decree) ARTA no. 176/GAB of 09/08/07, defined the strategies to achieve high levels of environmental protection and restoration in critical areas.</p>	<p>The "Regional Coordination Plan for the Protection of the Environment Air Quality" divides the regional territory into "zones" with different degrees of criticality in relation to the limits set by law for the different air pollutants. The territory of Consortium, lies entirely into "Zone C". This means that the levels of pollutants are below the statutory limit value. Therefore in the municipalities of the Consortium "Tindari - Nebrodi" should be applied the "Maintenance Plans", which will aim to avoid exceeding of the current levels of pollutants.</p>	<p>Data provided by the Technical Department of Consortium Tindari-Nebodi Municipalities show that didn't activate measures to improve air quality. Specifically, the data show that there aren't air quality monitoring sites and "Improvement plans of air quality"</p>

## 4. Territorial services

Part (n.)	Thematic areas	Indicators	
4	Territorial services	4.1	<b>Public and private services</b>
		4.2	<b>Public transport supply:</b> 4.2a Density of public transport infrastructures/network by categories 4.2b Volume of passenger transport
		4.3	<b>Local tools, plans and initiatives aimed at enhancement (improvement) of public transport and the promotion of innovative modes of transport</b>
		4.4	<b>Waste management</b> 4.4a Number and capacity of waste treatment, waste disposal facilities and waste-to-energy plants 4.4b Separate collection of municipal waste by typology 4.4.c Recycled or recovered waste
		4.5	<b>Management of waste water</b> population connected to waste water treatment plants and population connected to sewage system
		4.6	<b>Efficiency of water distribution system (network/service)</b> Ratio of disbursements and losses

Synthetic table of indicators – 4. Territorial Services

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>4.1 Public and private services</b>	To guarantee a more rational distribution of the public and private services and a suitable sizing in relation to the resident population and its social-economic characteristics.	S-R	Technical Departments of Consortium Tindari-Nebrodi Municipalities	Municipal	.	◇ Not valued for the absence of time series.	☹ The available data do not allow us to define a comprehensive and detailed framework on the availability of services and facilities within the territory of the Consortium Tindari Nebrodi. Overall, however, the available data show that the availability of public and private services and facilities is insufficient to meet the needs of the resident population and inadequate in relation to tourist potential of the Consortium Tindari Nebrodi municipalities.	◇ Innovative actions or actions to be determined
<b>4.4 Waste management</b>	The reduction of the quota of wastes produced and brought to the dumps and the adoption of efficient and sustainable management and disposal systems from an environmental point of view.	S-R	<p>“Waste Management Plan of Sicily”, ISPRA (Institute for Protection and Environmental Research)</p> <p>ARPA Sicilia (Regional Agency for the Environmental Protection) "Waste Report" (2002-09)</p> <p>ARPA Sicilia "Annual of Environmental Data" (2002-09)</p>	National, regional and provincial	2001-2008	😊 Between 2001 and 2008, in the province of Messina, the separate collection of Urban Waste shows a significant increase (+152%). Infact the separate collection is equal to 1% of the total waste production in 2001, and is equal to 4, 7% in 2008. Similarly the separate collection of Urban Waste shows a significant increase at the national (+94%) and regional level (+124%).	☹ In 2008, in the province of Messina, the percentage of separate collection is equal to 4.7%, value that is lower than the regional average (6.7%). The percentage of separate collection recorded in the province of Messina is significantly lower than the national average (30.6%) and than the objectives of the Regional Law No 2 of 8 February 2007, which set the limit at 50% to be achieved by 2009.	☹ The available data show that didn't start policies aimed at increasing the separate collection of Urban Waste.

## 5. Economic activities

Part (n.)	Thematic areas	Indicators	
5	Economic activities	5.1	<b>Local units of enterprises and workers (employees) per sector</b> (Agriculture, hunting, forestry and fishing; Industry; Trade & services)
		5.2	<b>Utilised Agricultural Area (UAA)</b> 5.2a Utilised Agricultural Area (UAA) in relation to Total Agricultural Area (TAA) 5.2b Utilised Agricultural Area, per main cultivation (Sowed grounds, Tree cultivations, Grasslands and pastures)
		5.3	<b>Agricultural holdings</b> 5.3a Agricultural holdings per size of Total Agricultural Area 5.3b Agricultural holdings by type of occupancy 5.3c Agricultural holdings by main cultivation
		5.4	<b>Farms</b> 5.4a Farms per livestock type 5.4b Heads per livestock type
		5.5	<b>Organic farming</b> 5.5a Number of organic farms 5.5b Area under organic farming
		5.6	<b>Typical products</b> Typical products registered PDO/PGI and organic products
		5.7	<b>Manufacturing activities</b> Manufacturing activities based on the promotion and enhancement of local culture and traditional crafts, by typology
		5.8	<b>Tourism</b> 5.8a Arrivals and stays in hotels and other accommodation, by origin 5.8b Offer of accommodation facilities
		5.9	<b>Sustainable management of the local authority and local enterprises</b>
		5.10	<b>Number of industrial and transportation activities at major accident risks, by categories</b>

*Synthetic table of indicators – 5. Economic activities*

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>5.1a Local units of enterprises per sector</b>	To favour a diversification of productive activities and to stimulate the development of new activities also increasing the productivity and the competitiveness through technological innovation.	<b>D</b>	ISTAT (National Statistics Institute) "Census of industry and services" (1971-2001)	Municipal	1971-2001	<p>↑</p> <p>In the period 1971-2001 the Local Units show an increase of +5%. In the decade 1981-1991 the Local Units show a significant increase (+22%), while in the decade 1991-2001 the number of Local Units show a significant reversal of trend with a decrease of -16%. The sector "Industry" has suffered in the thirty years 1971-01, the highest growth (+10%) followed by the "Agriculture hunting, fishing and mining of minerals" sector (+6%) and by the "Trade and services" sector (+2%). However in the last decade (1991-2001) in the "Agriculture, hunting, fishing and mining of minerals" sector and in the "Trade and services" sector, the number of Local Units shows a significant decrease respectively equal to -29% and -21%.</p>	<p>😊</p> <p>In 2001, the number of Local Units recorded in the whole territory of the Consortium Tindari - Nebrodi is equal to 2.620. The percentage of Local Units that belongs to the "Trade and Services" sector is equal to 68%. The percentage of Local Units that belong to the "Industry" sector is equal to 32% while less than 1% belong to the "Agriculture, hunting, forestry cultivation, fishing and extraction of minerals" sector. In particular, 41% of total Local Units belongs to the category of economic activity "Trade and repair", 18% to the category "Construction", 14% to the category "Manufacturing" and finally, a percentage smaller but still significant (9%) belongs to the category "Hotels and restaurants".</p>	<p>☹️</p> <p>There is a lack of local and regional policies that encourage the diversification of production activities according to the capacity enhancement of resources in the area.</p>

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend		Criticality		Responses/Actions	
<b>5.1b Workers (employees) per sector</b>	To favour a diversification of productive activities and to stimulate the development of new activities also increasing the productivity and the competitiveness through technological innovation.	<b>D</b>	ISTAT (National Statistics Institute) "Census of industry and services" (1971-2001)	Municipal	1971-2001	↑	In the period 1971-2001 the number of workers (employees) has grown, with a higher increase (+21%) compared to the Local Units (+5). This increase has been positive until 1991 but has undergone a significant turnaround in the decade 1991-2001. Infact from 1991 to 2001, the number of workers (employees) is reduced with a decrease of 14%. This decrease was caused by the decrease in the number of workers (employees) in "Trade and Services" sector (-16%) and "Industry" sector (-15%).	😊	In 2001, the number of workers (employees) recorded in the whole territory of the Consortium Tindari - Nebrodi is equal to 6.270. The percentage of workers that works in the "Trade and Services" sector is equal to 53%. The percentage of workers that works in the "Industry" sector is equal to 44%, while about 3% works in the "Agriculture, hunting, forestry cultivation, fishing and extraction of minerals" sector. About 27% of employees is engaged in the activities of the "Trade and repair", 23% in the activities that belong to the category "Construction", 20% in "Manufacturing" and finally, a smaller but still significant number of employees (9%) is engaged in the activities that belong to the category "Hotels and restaurants".	😐	Until now they haven't been activated local and regional policies that encourage the diversification of production activities according to the capacity enhancement of existing resources

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
5.2a Utilised Agricultural Area (UAA) in relation to Total Agricultural Area (TAA)	To hinder the abandonment of the agro-forest areas also promoting a sustainable use of the territory and the exploitation of the local productions with the purpose to contribute to the general improvement of the quality of the territory and landscape. In this context it is desirable to guarantee the multifunctionality of the agricultural areas, so that to assure their productive, landscape and historical-identity functions stimulating new development processes based on the enhancement and fruition of rural areas.	D	ISTAT (National Statistics Institute) "Census of agriculture" (1990-2000)	Provincial and municipal	1990-2000	<p>Between 1990 and 2000, in the territory of the Consortium, both the Total Agricultural Area (TAA) and the Utilised Agricultural Area (UAA) show a decrease of -9%.</p> <p>In the province of Messina, the Total Agricultural Area (TAA) and the Utilised Agricultural Area (UAA) show a similar trend with a decrease respectively equal to -13% and -15%.</p> <p>In the municipalities of Mazzarà S. Andrea, Sinagra, Falcone and Oliveri, both the Total Agricultural Area (TAA) and the Utilised Agricultural Area (UAA) show a more significant decrease compared to that average recorded in the Consortium Tindari – Nebrodi. Sometimes these decreases reach up to -60%.</p> <p>By contrast, in the municipalities of Basicò, Patti, Librizzi and Ucria both the Total Agricultural Area (TAA) and the Utilised Agricultural Area (UAA), show an increase also exceed the +40%. Between 1990 and 2000 the ratio of UAA/TAA remains unchanged and is equal to 78% both in the Consortium and in the province of Messina. The ratio UAA/TAA has undergone a sharp decline in the municipality of Oliveri (from 99% in 1990 to 63% in 2000) and in the municipality of Falcone (from 95% in 1990 to 64% in 2000)</p>	<p>In 2000, the T.A.A. is equal to 68% of the total surface (TS), while the U.A.A. is equal to 52%. In the province of Messina, the incidence of the U.A.A. and the T.A.A. on the Territorial Surface is less than that recorded in the Consortium and is equal to respectively 58% and 45%. The municipalities in which there is an higher incidence of TAA on the Territorial Surface (TS) are Raccuja and Oliveri. Infact in the municipalities of Raccuja and Oliveri the ratio TAA/TS is respectively equal to 94% and to 92%. Instead the municipalities in which there is an higher incidence of UAA on the Territorial Surface (TS) are Raccuja and Patti. Infact in the municipalities of Raccuja and Patti the ratio TAA/TS is respectively equal to 75% and 67%. On the other hand in the municipality of Mazzarà S. Andrea the incidence of UAA and TAA on the Territorial Surface is significantly lower than the average recorded in the Consortium Tindari – Nebrodi and is respectively equal to 19% and 25%. In the municipalities of San Piero Patti and Ucria the ratio UAA/TAA is higher than the average recorded in the Consortium and is respectively equal to 88% and to 85%. By contrast, in the municipalities of Montagnareale and Oliveri the ratio UAA/TAA is lower than the average recorded in the Consortium and is respectively equal to 59% and 63%.</p>	<p>Until now they haven't been activated local - scale policies aimed at increasing and strengthen the agricultural production system.</p>

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>5.2b Utilised Agricultural Area, per main cultivation</b>	To hinder the abandonment of the agro-forest areas also promoting a sustainable use of the territory and the exploitation of the local productions with the purpose to contribute to the general improvement of the quality of the territory and landscape. In this context it is desirable to guarantee the multifunctionality of the agricultural areas, so that to assure their productive, landscape and historical-identitary functions stimulating new development processes based on the enhancement and fruition of rural areas.	<b>D</b>	ISTAT (National Statistics Institute) "Census of agriculture" (1990-2000)	Provincial, municipal	1990-2000	 <p>The reduction of the UAA is mainly determined by the decrease in the "Tree cultivations" (-12.8%) and in the "Grasslands and pastures" (-0.4%). On the other hand increase the land for "Arable land" with an increase of +3.94%. The reduction of the SAT is determined by the addition of AA also reduced by the decrease of the "Agricultural Area is not used" and what is known as "Another area" which together show a decrease of -25%. In contrast, the surface intended to "Woods" grows with an increase of +4%</p>	 <p>In 2000, in the territory of the Consortium Tindari - Nebrodi, the "Tree cultivations" are 54% of the UAA and are 42% of the TAA. Within the UAA, "Grasslands and pastures" and "Sowed grounds" are respectively equal to 21% and 15% of the TAA, while Within the business areas not used for agricultural, the woods represent 15% of the total surface.</p>	 <p>Until now they haven't been activated local - scale policies aimed at increasing and strengthen the agricultural production system.</p>

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend		Criticality	Responses/Actions		
<b>5.3a Agricultural holdings per size of Total Agricultural Area</b>	To maintain a wide presence of holdings in the territory, favouring their competitiveness through technological innovation.	D	ISTAT (National Statistics Institute) "Census of agriculture" (1990-2000)	Provincial, municipal	1990-2000	↑	Between 1990 and 2000 there was an increase in the number of agricultural holdings of +4%. The increase only concerned the agricultural holdings up to 1 ha (17%) and the Agricultural holdings over 50 ha (15%); on the other hand the agricultural holdings with size between 1-20 hectares show a decrease of -9%.	☹	In the territory of the Consortium there is a large number (11.323) of small agricultural holdings with a surface less than one hectare. In fact, agricultural holdings with a surface from 0 to 10 hectares are 96% of the total agricultural holdings.	☹	Until now they haven't been activated local - scale policies aimed at increasing and strengthen the agricultural production system.
<b>5.3b Agricultural holdings by type of occupancy</b>	To maintain a wide presence of holdings in the territory, favouring their competitiveness mainly through technological innovation.	D	ISTAT (National Statistics Institute) "Census of agriculture" (1990-2000)	Provincial, municipal	1990-2000	↔	Between 1990 and 2000 the number of agricultural holdings to "directly owned holdings" remains unchanged.	☹	In the territory of the Consortium 98% the agricultural holdings are to "directly owned holdings": 86% of these agricultural holdings are "only with family manpower" (60%) or "mainly family manpower" (26%), while only 14% are "with extra-familiar manpower".	☹	Until now they haven't been activated local - scale policies aimed at increasing and strengthen the agricultural production system.
						↓	However, the agricultural holdings "with other type of occupancy" show a significant decrease (-57%) and are more than halved. Infact, the agricultural holdings "with other type of occupancy" are 644 in 1990 and 279 in 2000.				
<b>5.3c Agricultural holdings by main cultivation</b>	To maintain a wide presence of holdings in the territory, favouring their competitiveness mainly through technological innovation.	D	ISTAT (National Statistics Institute) "Census of agriculture" (1990-2000)	Provincial, municipal	1990-2000	↓	In the Consortium Tindari-Nebrodi, between 1990 and 2000, the number and the surface of agricultural holdings show the effects of the crisis in the sector.	☹	Among the "arable crops", those that affect a larger area of the holding are the "Growing of cereals", which occupy an area equal to 59%, followed by the "forage crops", with 38% and "vegetable crops" with 3%. Within the "woody agricultural crops" crops are the most common "fruit" and "olive" involving respectively 47% and 41% of the acreage for agricultural woody crops, follow the "Citrus" with 8% and 3% with the screw.	☹	
						↑	The only sector where there was an increase in the number and in the surface of agricultural holdings is the "olive-growing", where the number of agricultural holdings shows an increase of 16% and the surface shows an increase of 8%.				

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend		Criticality		Responses/Actions	
<b>5.4 Farms and Heads per livestock type</b>	Permanence in the territory of farmers and maintenance of the consistency of farms.	<b>D</b>	ISTAT (National Statistics Institute) "Census of agriculture" (1990-2000)	Provincial, municipal	1990-2000	↓	Between 1990 and 2000 the number of farms was reduced with a decrease of -35%. This reduction concerns all types of livestock and in particular the farms of Caprines (-69%), Ovines (-64%) and horses (-62%).	☹️	As in the province of Messina, the farms of "poultry" is the type most widespread of livestock in the territory of Consortium, with 1.323 farms and 16.153 heads. Among the most common kind of livestock there are: Ovines (with only 309 farms but 14.616 heads), which represent 33% of the total heads recorded in the Consortium Tindari - Nebrodi.	❓	Innovative actions or actions to be determined
						↓	Between 1990 and 2000 the total number of heads of livestock shows a decrease of -43%. The reduction in the number of heads is mainly determined by the reduction in the number of pigs that shows a decrease of -62%.	😊	In the territory of the Consortium there are 26% of the farms and 10% of the heads present in the whole province. The farms that are employed in the pig farming, are 50% of those recorded in the province of Messina. Infact, the production of "Salame S. Angelo" has recently obtained by the European Commission the registration as PGI (Protected Geographical Indication)		
<b>5.5 Organic farming: number of organic farms and area under organic farming</b>	To favour the diffusion of the holdings practising organic farming.	<b>R</b>	List of certified organic operators, under EC Regulation 834/07, by certification bodies accredited by ACCREDIA	Municipal	2010	❓	Not valued for the absence of time series	☹️	In the territory of the Consortium Tindari Nebrodi there are 31 organic farms located in 7 municipalities; these organic farms are only 7% of the organic farms certified by certification bodies in the province of Messina.	❓	Innovative actions or actions to be determined

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend		Criticality	Responses/Actions		
5.8a Arrivals and stays in hotels and other accommodation, by origin	To redistribute tourist flows in the different months and to increase the development of cultural, naturalistic and gastronomic sustainable tourism.	D	ISTAT (National Statistics Institute) "Arrivals and stays in accommodation facilities" (2004-2008)  "Tourist Development Plan" (2010)	Regional, provincial and "Regional Tourist System"	2004-2009	↓	Between 2004 and 2008 in the municipalities of the "Regional Tourist System (S.T.R.) no. 16 Patti –Tindari", the arrivals of italian tourist and of foreign tourist in the hotels show a decrease respectively equal to -24% and -5%. This reduction is mainly determined by the arrivals of Italian tourists in the other accommodations (-34%) and by the arrivals of foreign tourists in hotels (-28%).	☹️	In 2009, in the municipalities of the "Regional Tourist System (S.T.R.) no. 16 Patti –Tindari", the arrivals recorded are 19.427 of which 39% in the hotels and 61% in the other accommodations. The arrivals of italian tourist are 76% of the total arrivals recorded while the arrivals of the foreign tourist are 24% of the total arrivals.	😊	The institution of the Tourist District "Thyrrenium Tyndaris - Parco Dei Miti" and the "Tourist Development Plan" (2010) should be promote the implementation of an integrated tourist offer and consequently increase the demand for tourism in the different months of year.
						↕	Between 2004 and 2008 in the municipalities of the "Regional Tourist System (S.T.R.) no. 16 Patti –Tindari", in the hotels and in the other accommodations, there was a decrease in the stay of italian tourist (-30%) and an increase in the stay of foreign tourist (+6,8%). The stays of italian tourist show an increase (+16%) in the hotels and a significant decrease in the other accommodations (-50%). In contrast, the stays of foreign tourists show a decrease (-16%) in the hotels and an increase in the other accommodations (+9%).	☹️	In 2009, in the municipalities of the "Regional Tourist System (S.T.R.) no. 16 Patti –Tindari", the stays recorded are 82.007, of which 67% in the other accommodations and 33% in the hotels. The stays of italian tourist are 75% of the total stays recorded while the stays of the foreign tourist are 25% of the total stays.		

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend	Criticality	Responses/Actions
<b>5.8a Arrivals and stays in hotels and other accommodation, by origin</b>	To redistribute tourist flows in the different months and to increase the development of cultural, naturalistic and gastronomic sustainable tourism.	D	ISTAT (National Statistics Institute) "Arrivals and stays in accommodation facilities" (2004-2008)  "Tourist Development Plan" (2010)	Regional, provincial and "Regional Tourist System"	2004-2009	↑  Between 2008 and 2009 in the municipalities of the "Regional Tourist System (S.T.R.) no. 16 Patti -Tindari", arrivals and stays show an increase respectively of +3% and +9%. This increase concerned both the tourist flows of italian tourists and the tourist flows of foreign tourists. In this period the tourist flows show an increase in the other accommodations (arrivals: +11% /Stays: +20%) and a decrease in the hotels (arrival: -8% / Stays: -9%)	☹️  The tourist flows in the hotels and other accommodations located in the municipalities of the "Regional Tourist System (S.T.R.) no. 16 Patti -Tindari" are less than 2% of those recorded in the province of Messina. Furthermore, the reduction in tourist flows in the "Regional Tourist System (S.T.R.) no. 16 Patti -Tindari" is more significant than that recorded in the province of Messina. In the "Regional Tourist System (S.T.R.) no. 16 Patti -Tindari" the variation of tourist flows is significantly negative in comparison with the variation of tourist flows recorded at national level that show an increase in number of arrivals and stay of the italian and foreign tourists.	😊  The institution of the Tourist District "Thyrrenium Tyndaris - Parco Dei Miti" and the "Tourist Development Plan" (2010) should be promote the implementation of an integrated tourist offer and consequently increase the demand for tourism in the different months of year.
<b>5.8b Offer of accommodation facilities</b>	To increase the tourist accommodation capacity privileging the enhancement of the historical-architectural and not used housing heritage and to improve the "environmental performance" of the existing accommodation facilities.	D	ISTAT (National Statistics Institute) "Accommodation capacity" (2004-2009)	National, regional, provincial municipal	2004-2009	↑  In the period 2004-2009, in the Consortium Tindari Nebrodi, the accommodation facilities show an increase of +46%. The increase in accommodation facilities was mainly determined by the significant growth of the other accommodations (+54%) which increase from 35 units in 2004 to 54 units in 2009.	☹️  Hotels are 39% of the total accommodation facilities while the other accommodations are 61% of the total accommodations. Hotels from 1 to 3 star are 75% of the total hotels, while the tourist residences are 11% of the total hotels. There aren't 5 star hotels. The other accommodations are: "Farms holidays" (46%), "B & B" (33%), "Camping" (33%) and "Accommodations for rent" (7%).	☹️  The institution of the Tourist District "Thyrrenium Tyndaris - Parco Dei Miti" and the "Tourist Development Plan" (2010) should be promote the implementation of an integrated tourist offer and consequently increase the demand for tourism in the different months of year.

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend		Criticality		Responses/Actions	
<b>5.8b Offer of accommodation facilities</b>	To increase the tourist accommodation capacity privileging the enhancement of the historical-architectural and not used housing heritage and to improve the "environmental performance" of the existing accommodation facilities.	<b>D</b>	ISTAT (National Statistics Institute) "Accommodation capacity" (2004-2009)	National, regional, provincial municipal	2004-2009	↑	In the period 2004-09, in the Consortium Tindari Nebrodi, the number of beds shows an increase of +19%. The increase in beds was mainly determined by the growth in the number of beds in the hotels (43,02%) which increase from 1.906 units in 2004 to 2.726 units in 2009.	☹	The accommodation facilities are mainly located in the coastal municipalities and are connected to bathing tourist flows tied to the summer season.	☹	The institution of the Tourist District "Thyrrenium Tyndaris - Parco Dei Miti" and the "Tourist Development Plan" (2010) should be promote the implementation of an integrated tourist offer and consequently increase the demand for tourism in the different months of year.
<b>5.9 Sustainable management of the local authority and local enterprises</b>	To favour the introduction and diffusion of Environmental Management Systems among the enterprises and local authorities operating in the analysed territory.	<b>R</b>	List of organizations certified by certification bodies accredited by ACCREDIA	Municipal	2010	↑	In the last years the number of enterprises that adopted Environmental Management System has increased.	☺	Presence, although limited and not yet widespread, of enterprises that adopted Environmental Management System.	☺	Until now they haven't been activated policies and incentives aimed to encourage the diffusion of Environmental Management Systems within the enterprises in order to assure a greater control and a continuous improvement of environmental performance.

Indicator	Macro-objective	DPSIR	Data source	Territorial coverage of the data	Time period of the data	Time trend		Criticality		Responses/Actions	
<p><b>5.10</b> <b>Number of industrial and transportation activities at major accident risks, by categories</b></p>	<p>To stimulate actions and politics directed to reduce the risk of major accidents as well as their frequency and magnitude, through a better location of industrial areas and more efficient preventive actions for limiting and controlling the use of dangerous substances.</p>	<p><b>D</b></p>	<p>Department (Ministry) of the Environment and Territory protection and ISPRA (National Institute for Environmental Protection and Research) “National inventory of the industrial activities at major accident risks pursuant to the Legislative decree no. 334/1999 (2005-2010)</p>	<p>Regional, provincial municipal</p>	<p>2005-2010</p>	<p>↕</p>	<p>Between 2005 and 2010, in the province of Messina, the number of industrial and transportation activities at major accident risks remains unchanged.</p>	<p>😊</p>	<p>In the province of Messina there are 5 plants at major accident risks, which represent 7% of the total plants recorded in the Region of Sicily. None of the 5 plants at major accident risks is located in the municipalities of the Consortium Tindari Nebrodi.</p>	<p>After years of waiting for intervention by regional authorities and ASI, the Special Office for areas at risk of a major accident of the Sicilian Region has started on a participative process (AG21 local) in order to identify local policies to and recovery. But not yet been defined for the risk areas identified in the province of Messina specific interventions for the clean-up.</p>	