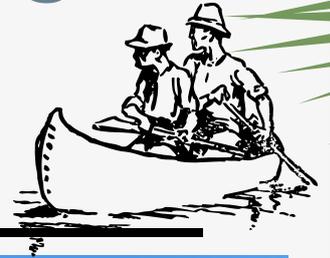


SAVE THE RIVER

# HYMERA TEAM NEWS

*At the School of Opencohesion 2021/2022*



## THE FANTASTIC HYMERA TEAM

Hello, everybody!

We are the Hymera Team of Istituto Fermi, from Licata.

Our civic monitoring will deal with the project Opencoesione called "Works for eliminating the obstruction of River Salso's mouth". We will focus on the river which crosses our town, its history and its relevance to the territory.

The keywords on which we will build our research are SUSTAINABILITY, HISTORY, ENVIRONMENT, RESPECT, SAFETY.

To carry out the project 400.000€ have been financed. What about that? Is this money being spent? Who are the protagonists of this action? Follow us, and you will find out a lot about our town Licata, an ancient and glorious town inhabited, over the centuries, by a lot of different peoples coming from many parts of the world.



## MONITORING THE RIVER'S HEALTH

Our civic monitoring will deal with the project Opencoesione called "Works for eliminating the obstruction of River Salso's mouth". We will focus our attention on the river crossing Licata, our town, its history and relevance to the territory. Licata is an ancient town which over the centuries has been inhabited by different peoples from many parts of the world. The keywords of our research are: sustainability, environment, respect, history and safety.

The project we are monitoring has been financed with 400.000€. The contextual information will be searched on websites, portals, online newspapers. The aim of our monitoring is to let people understand the importance of making the river safe, preventing hydro-geological disasters.

We will involve experts on the theme. In order to engage our citizens we will organize a photo exhibition and a talk in the City Council, surveys and interviews.

Our research could make citizens be aware of public and European funds. People could get informed about the importance of a river in a town. If the river ecosystem was respected, the city could take many advantages especially for tourism, watersports and fishing. It could be interesting both for ordinary people and the town administration, since its safety could improve everyone's quality of life.



# WORKING TOGETHER TO SAVE THE RIVER SALSO



With reference to the Project "Works for eliminating the obstruction of River Salso's mouth" we found some articles on online newspapers and on the official website of Sicily Region. The first news about the project date back on 21 November 2018 when the Civil Protection operators carried out an inspection in the area of River Salso's mouth. On 21 January 2019 a work assignment was given to the town of Licata. On 19 September 2019, the municipal government assigned the works to a building company. The works had to be started by 30 September 2020 and the articles report that they started on 21 September of the same year. On 10 November 2020 an official document was emitted for financing the project. The end of the works was scheduled by 31 December 2020. But on the site Opencoesione there is not any news about the end of the works which still seem to be in progress. Therefore we do not know if the disobstruction has actually been completed and we will try to discover it. On the basis of these data, we are going to investigate to disclose how the works were carried out and if they brought good results which will be sustainable in the future, since we are aware of the relevance of the River for the territory of Licata.

Not everybody knows that the area of the River Salso's mouth has a vegetation characterized by reeds of *Phragmites australis* in association with glasswort (*Salicornia glauca*), *Atriplex prostrata* and various species of *Cyperaceae*, including the rare sea scirpo (*Bolboschoenus maritimus*). The area has a great ornithological value: in spring and autumn you can see the gray heron (*Ardea cinerea*), the little egret (*Egretta garzetta*), the black-winged stilt (*Himantopus himantopus*), the great curlew (*Numenius arquata*) and avocet (*Recurvirostra avosetta*). The presence of the mute swan, the black stork, the flamingos and the great white heron (*Egretta alba*) is sporadic. Waders, coots and seagulls are residents all year there.

The continuous obstructions are due to the fact that the gullies that are supposed to collect rainwater and convey it to the river are completely blocked by weeds, reeds and even trees and therefore they cannot perform their natural function. Because of the obstruction, when there are heavy rains, there is a risk of flooding.



There have been a lot of floods over the years since the end of the XIX century. Documents record the flood in November 1915 when the wooden bridge fell down and about 100 people died. Other floods were in 1930, 1932, 1976, 1991. The most recent ones have frequently been registered since 2014. The last ones occurred in 2016, 2018, 2019 till December 2021.

In reference to the questions we asked at the beginning of our monitoring, we have found interesting information, but we haven't found anywhere the information about the conclusion of the works. We are planning to contact as soon as possible the people involved in the works and go onto the site to see what the current state of the river's mouth is. By using an amount of 400.000 euros there will be surely a lot of benefits and advantages both for the territory and for people. But we also aim to inform and raise awareness in Licata citizens about the value and the potential of the river Salso. The monitoring will be a way to learn more about our town and share our discoveries with its inhabitants.

# INTERVIEW TO THE ARCHITECT SALVATORE LA MENDOLA, THE MANAGER OF WORKS

**Can you solve definitely the problem of the river mouth's obstruction?**

No, it is impossible. Every year in the River Salso's mouth there are obstructions due to the streams of the river watershed, It gets worse when the river streams meet the seastreams because they create sandings,

**What are the procedures for the disobstruction?**

In order to disobstruct the river mouth runways, where excavators pass. are created at the edge of the riverbed. After the cleaning from the sand, the runways are removed and the riverbed is clear.

**Could these works cause damages to the environment?**

No, because when projects are made, they try to respect the environment. We just want to assure that the works are carried out periodically.

**Do you think that man's interventions have worsened the river's conditions?**

Oviously. Overbuilding in the last 50-60 years have caused a damp-proofing of the agricultural soil, so that rain waters flows more violently causing, sometimes, floods.A remedy would be stopping building in agricultural lands.



Architect Salvatore La Mendola, Chief of Ciivil Engineering Office



## LET US LEAVE THE WORD TO THE PUBLIC WORKS ASSESSOR MR RIPELLINO

**Are you satisfied of the continuous works made in favour of the disobstruction?**

Of course. There will be new funds for the maintenance of the river. They will be spent for the northern part near the State Street 123 Licata-Ravanusa where the floods usually hit the area of Mollarella. One of the most expensive procedures is the treatment of the sand that must be considered as special waste.

## SOME QUESTIONS TO DIRECTOR OF THE ENVIRONMENT OFFICE TONINO NAPOLI



### WHAT ARE RIVER MOUTH'S OBSTRUCTIONS CAUSED BY?

The obstruction of River Salso's mouth is caused by the sand comping from Marianello beach, so some sea-inlets are formed. When there are coastal storms the sea- inlets get bigger and the river's water can not flow and there are risks of food.

### HOW IS THE RIVER'S FLOW CONTROLLED?

But luckily these risks are overcome by the presence of a Venturi tube

This device (named after the physicist Gian Battista Venturi) is used to measure the flow rate, i.e. the quantity of liquid flowing inside pipes and ducts. It consists of a horizontal tube with a restriction, to which a pressure gauge (an instrument that measures the pressure of fluids) is applied. It controls the flow of the river. Moreover the reshaping of the river was made in a natural way.

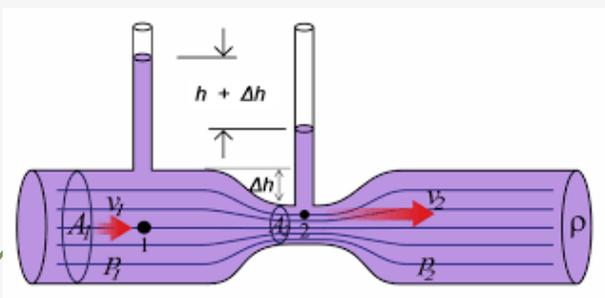


### WHEN DOES THE FLOOD'S DANGER OCCUR?

When it rains in town, the water is collected by drainage channels. The most serious risk is when it rains in the areas of Palermo-Caltanissetta, crossed by the river Salso. It is 143 km long so it carries all the materials it comes across while flowing. The river flowing takes about six hours from Caltanissetta to Licata. So if there was a serious risk of flood starting from the area of Caltanissetta, we would have time to evacuate people.

### WHAT ARE THE AREAS IN LICATA WHICH RISK MORE?

They are the lands in the area of Mollarella beach.



Venturi Tube

# An imaginary interview

## A very curious tourist

**Local inhabitant:** Good morning, Can I help you?

**-Tourist:** Yes, thanks. Can I ask you some questions about the River Salso?

**-Local inhabitant:** Sure, just ask what you want.

**-Tourist:** there are many rivers all over the world such as the Nile or the Tiber and your lively town, Licata is crossed by the River Salso, Why is it called like that?

**-Local inhabitant:** Well, the River Salso derives its name from the saltiness of its waters, due to the salty clays. It is also called Southern Hymera.

**-Tourist:** I know there are a lot of interesting animals and plants around it.

**- Local inhabitant:** a friend of mine, the WWF president Gino Galia told me there is an avifaunistic observatory.

**-Tourist:** What kind of fauna can be found inside the salty river?

**- Local inhabitant:** Well, in spring and autumn you can see the gray heron, the little egret and avocet while all year round we can find seagulls and coots.

**-Tourist:** Does it happen that the river is dangerous for your town?



**- Local inhabitant:** Yes, Historians tell that there have always been floods that can cause various problems to the citizens and the territory of Licata

**-Tourist:** Really? What interesting information!

What are the floods caused by?

**-Local inhabitant:** Heavy rains and obstructions cause flooding.

**-Tourist:** What are obstructions due to?

**-Local inhabitant:** Constant obstructions are due to the fact that the channels should collect rainwater and convey it to the river but are completely blocked by weeds.

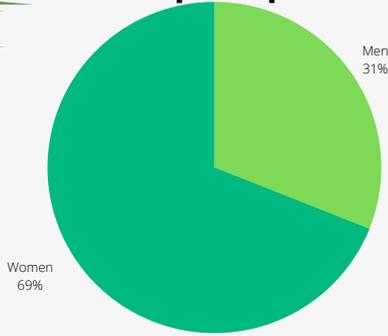


# A Survey

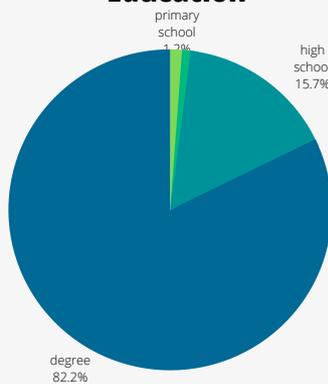
## How much do you know the River Salso?

Hymera Team carried out a survey to verify if Licata citizens know their River. On this page you will read the results in the graphics.

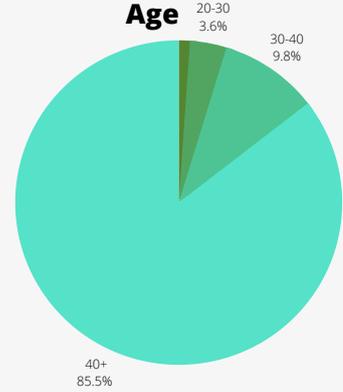
**Genres of participants**



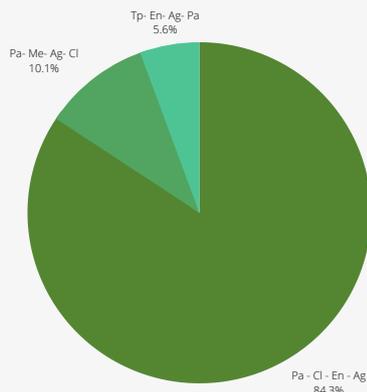
**Education**



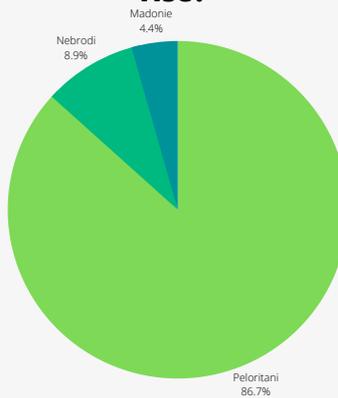
**Age**



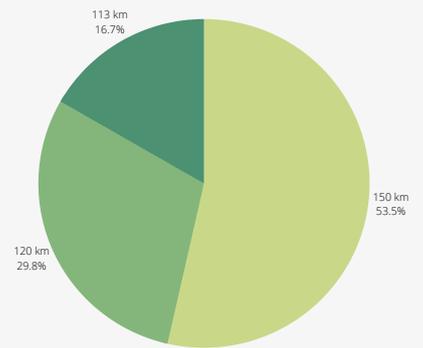
**Areas in which the River flows**



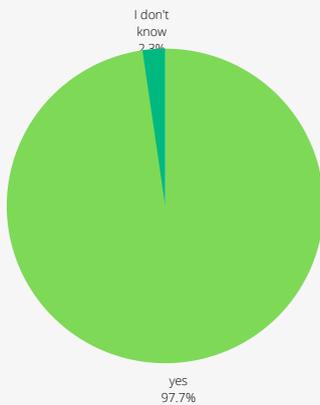
**Where does the river rise?**



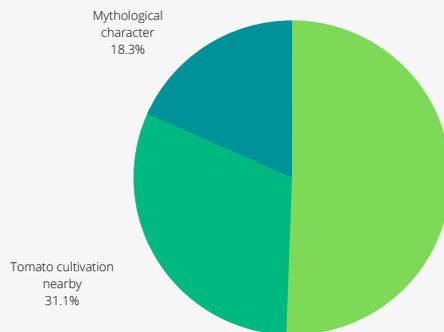
**How long is the River Salso?**



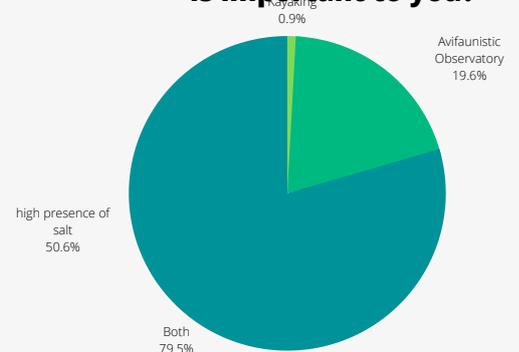
**Is the River a resource?**



**The name Salso is referred to:**



**Which aspect of the river is important to you?**



The southern Imera or Salso Himeras is an important river in central and south-western Sicily. It is 144 km, it is the main watercourse in Sicily by length, but the second for width. It originates at an altitude of about 1600 meters from the Madonie chain in the province of Palermo, crosses the provinces of Enna and Caltanissetta until it flows into the territory of Licata.

The river was the landing point for the fleets that, crossing the Mediterranean from here, entered the heart of Sicily. The Salso denomination refers to the high salinity of the water in the southern stretch of the river (from Caltanissetta to the mouth), originating from the composition of the rocks of the areas that the river crosses along its path. In the provinces of Enna and Caltanissetta, crossed by the river, there are in fact large mines, now abandoned, from which sulfur minerals, potassium salts and rock salt were extracted along a territory called the "Imera Valley mining basin".

# Which future for our River?

We are trying to understand if the River could be an attraction for tourism and a resource for work.



Mayor Angelo Biondi 2003/2008

During our monitoring we have found out a lot of potentialities of the River Salso. That's why we have interviewed some former administrators. Angelo Biondi, mayor from 2003 to 2008 told us that during his government a project was elaborated but, unfortunately, it was not financed. The project planned pedestrian cycle paths along the right bank, equipped areas, areas for sport and leisure, the chance of navigability (small boats, pedal boats, rowing), a small dock for the shelter of boats.

In the years 2015-2016 the Tourism Assessor Massimo Licata D'Andrea presented an idea later transformed in project for the installation of a panoramic wheel. The project envisaged the contribution of local entrepreneurs. The Wheel was thought to be built without negative impacts on the territory, considering that it is exposed to hydrogeological risks



Assessor Massimo Licata D'Andrea 2015/2016

## The word to Gino Galia, responsible of WWF in Licata



Gino Galia, WWF President

Before the 2010 near the River Salso there was an observatory. It was created by WWF section of Licata led by Franco Galia. It was located on the right bank of the river mouth close to the embankment. It consisted of an observation hut, located at a height of one metre from the ground, which was accessed by a wooden ramp after crossing a "nature path" of about one hundred and twenty metres long where you could observe some floristic essences typical of river environments and a series of didactic signs. The whole area was masked by a barrier of reeds to prevent the fauna from being disturbed by the presence of visitors.

The scientific activity was aimed at the naturalistic study of the focal habitat through the bird census, the study of migratory flows, the monitoring of the waters, the study of coastal fauna and flora, etc. In 2015 they tried to rebuild the observatory, but there are not any funds at the moment.

# Hymera Team: long life to River Salso

By doing this project we had the opportunity to know something that was foreign to us until recently. The river has always flowed through the city, yet we never realised how important it could be and what a relevant tourism resource it could become. The Salso is a treasure to be re-evaluated, a commitment that must see all citizens united to ensure that it becomes a living place and a green lung for our city. We imagine it as an ideal place to spend pleasant hours strolling in the open air. May our work be the first step on a path that will bring those with the strength and tools to make our project a beautiful reality.



## PARTICIPANTS OF THE PROJECT

Alabiso Angela Maria, Alesci Alessia, Alesci Giuseppe, Bona Giulia, Cammarata Giorgia, Cannizzaro Simona, Carrozza Mario, Curella Elisa, Farruggio Concetta, Franco Mariaurelia, Giarratano Angelo, Greco Tommaso, Leto Salvatore, Mazzerbo Samuele, Messina Giada, Mulé Silvia, Oliveri Veronica, Rizzo Davide, Sanfilippo Andrea, Sferrazza Angelo, Sitibondo Fatima Angela, Truisi Angelo e Vittorioso Vincenzo Pio



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