The local culture, traditions, the use of the land, and the profitability of the salt pans in Piran

The salt industry of Piran has a long history and has played an important role in the local economy and the lives of the people for around 700 years.¹

The salt plantations in Piran are very unique since the salt-workers today are still using the exact

same methods for harvesting the salt that the salt workers 700 years ago used.

The salt is harvested during the months from June to mid-September and during the salt making the workers use some very traditional tools. As a first step of the salt production cycle, the water is led into the evaporation basins. From there on it's led into the crystallisation basins where a layer of gypsum, algae and minerals called "petola" is cultivated. While the water is condensing and the petola gets compact, the workers prepare the salt basins. They do this by forming access routes with mud which causes the mould not to enter the basins. This way the salt remains pure. The salt is then gathered with the so called "gavero" to form small salt pyramids. Once the water has left the basins, the salt is



transported in carriages to places where it is then left to dry and the process is finished.²

This method of harvesting the salt is very time consuming since it is very complex and has to be done manually. Back in the days this was the only way to gain salt, but today machines are being used in other places of the world to speed up the process of the salt harvesting. Today there are also many different types of salt available on the market and it is more accessible than in the distant past and therefore cheaper. However there was a time when salt was extremely rare and precious. With it, soldiers were paid and there's a saying that goes: "All great empires grew on salt" because salt is seen as the first trade object in history.³

This shows that the salt harvesting in Piran is not done in the most efficient way but is therefore able to maintain the regions history and traditions.

 $^{^1\,}https://www.portoroz.si/en/experience/natural-sights-and-attractions/4457-object-krajinski-park-secoveljske-soline$

² Information from the Museum of Salt Making in Piran

³ Information from the Museum of Salt Making in Piran



The preservation of the region's history and traditions is one of the best perspectives in the regional development of the salt plantations. By preserving the traditional methods of the salt production, the industry is able to maintain a strong connection to the local culture and traditions. This strengthens the community in Piran and the citizens are proud to say "Piran is the result of salt" which means that the city is the result of wealth, since salt used to be so precious. It's also what sets Piran apart from other salt harvesting regions and makes it something special because barely any other region has such a long salt history and was able to keep the traditions alive this well.

Another positive perspective in the development of the salt plantations is that the worlds salt deposits are expected to never be exhausted. Experts access that the wolds salt domes hold 100 trillion tonnes of salt and each year around 240 million tonnes are being used, meaning that there is enough salt for all needs.⁵ In addition to that the salt market is expected to grow at the compound annual growth rate of 6.61% during the years from 2022-2027. ⁶

Because of the increasing demand of salt and the ever lasting salt supplies, the salt industry in Piran is able to provide jobs and income for local residents which improves the standard of living for Piran's citizens and can help to revitalise the region.



Another important aspect is that the salt harvesting in Piran is a nature friendly business. The mentioned Petola that is produced during the salt harvesting, produces more oxygen than a 30-40 meters tall tropical rainforest would do on this surface. In addition to that, Piran's salt-pans are home to several species of terns, gulls and waders which use the area as a breeding habitat. There can also be found a variety of plants that grow best under the difficult saline conditions. This way the land is not only valuable to humans, but also to 296 species of birds and plenty of plants.⁸

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⁴ https://www.slovenia.info/en/press-centre/news-of-the-tourism-press-agency/6105-the-story-of-the-salt-on-the-slovenian-coast

⁵ https://www.planet-

⁶ https://www.mordorintelligence.com/de/industry-reports/gourmet-salt-market

⁷ https://artsandculture.google.com/story/a-sweet-story-about-salt-slovenian-tourist-board/TQVxFwftXRafrA?hl=en

⁸ https://artsandculture.google.com/story/a-sweet-story-about-salt-slovenian-tourist-board/TQVxFwftXRafrA?hl=en

In conclusion, the regional development of the salt plantations in Piran shows a lot of positive aspects. The region is able to preserve the local culture and traditions very well, even though it is not done in the most efficient way. By doing this it strengthens the community and makes Piran's citizens proud. The business is also able to provide jobs for the people and this way improves the citizens standard of living. In addition to that the salt harvesting is a very nature friendly and sustainable business.

Ersa Marku

extraction and tourism. Strict implementation of a plan is required to ensure that biodiversity, protection of natural assets and cultural heritage are not jeopardised in any way and that the saline ecosystem remains intact. This exceptional wetland's cultural aspects are reflected in the heritage of traditional salt extraction. They can be appreciated through observation of the salt workers during salt extraction, during many related cultural events organised by the Salt Works, including the "Salt Workers' Festival" or the St. George Salt Works Festival, as well as in the Salt Extraction Museum. 12

Education

Schools organise excursions to the salt pans and tours for educational purposes starting in primary school, as salt production in Slovenia is highly recognised. Schools organize excursions to the salt panels and tours for educational purposes starting in primary school, as salt production in Slovenia is highly recognized. In addition, the teachers showed us different ways of using salt during the excursion, for instance, homemade bath lavender

on and cultural role: the produced salt is a delicacy for gastronomes; the the saltworks' traditions and habits has been supported by raising awareness eritage; the saltworks area shelters rare species of plants and animals and is a refuge for the ecologically valuable living environment of man and a of the currently disappearing landscape.7

did not systematically lead marketers to select production sites and prove salt quality until competition pressure induced them to change their the size of the salt plants proved to be an essential factor in meeting the nd adequately. If the climate is temperate, solar salines can produce 50 to per ha (crystallizer). Hence, the available area must be spacious if annual ald exceed tens or hundreds of thousands of tonnes. Since the climatic vary from year to year, the intended saline's nominal capacity should be 25
the demand for salt that can be anticipated to be supplied. The workers t in the brine, dragged the salt with a rake, and carried it on their shoulders to ces. Small salt works fulfilled the requirements of the cottage industry as long and market development did not affect the production process. A total of or salt works functioned worldwide. In half of them, production never tonnes per year.

ction in Slovenia decreased by 3.6 percent year-on-year in November 2022, Jecrease of 3.9 percent in the previous month. Notably, the second nth of decline in industrial activity shows a negative impact by mining and percent compared to -13.8 percent in October) and electricity, gas, and water ercent compared to -13.5 percent. Simultaneously, manufacturing production ercent was lower than in the previous month (0.7 percent). Industrial monthly seasonally adjusted data basis rose by 0.6 percent in November, a downwardly revised decline of 0.9 percent in October.9

ırism

tourists from all over Europe travel to Piran to enjoy the breathtaking view of iding the town, the picturesque but lively events and festivals, and the salt. the prime consumers of Piran salt in Slovenia, Europe, and the rest of the s appreciate the quality of Piran salt for its excellent taste, which is a perfect idient for their dishes. Over the last few years, there have been attempts to o the salt pans. It enables them a chance to see with their own eyes how the d and inform themselves about the production process. e Salt Museum and Souvenir Shop in Piran to attract visitors where they

e their salty souvenirs come from, adding a modern museum to explain the story behind the tradition. The Plan also offers a spa that provides salt baths, i, salt rubs, and a range of products using Piran's salt as an ingredient. isit Piran, you will have the chance to experience one of the city's grandest Festival. At the event, local traders sell their products, including those made ith other crafted products. The Tartini Square also presents live musical

k SeÊovlje Salina stretches over 750 ha along the Slovenian-Croatian border ı Slovenia, in southern Piran town. 11 alina Nature Park management is entrusted to a commercial company, Soline

pany receives the right to conduct income-generating activities such as salt

ne.si/en/salt-panning/nature-park ces.gnest.org/Conferences/Saltworks_post/049-065.pdf onomics.com/slovenia/industrial-production ledpaths.com/blog/everything-need-know-piran-salt line.si/en/salt-panning/nature-park

¹² https://www.medwetculture.org/news_items/success-story-the-saltpans-of-secovlje-in-slovenia-salt-is-thesea-that-could-not-return-to-the-sky/

Touristic use of the salt pans

The salt pans in Piran, Slovenia have been used for centuries to harvest salt from the sea. In recent years, the salt pans have become a popular tourist destination.

Visitors can take guided tours of the pans and learn about its history and process of salt production. The tours often include a demonstration of the traditional methods used to harvest salt, such as raking the salt crystals from the pools. 1



It also consists of a visit of the museum that is located at the salt pans. The museum shows a model of the saltpans. A model of one of the workers houses is also included in the museum. Another thing the museum has in hand is a movie about the saltpans that explains how the farming works and informs the viewer about the different variety of bird species and about the importance of the salt pans as a protected area for migratory birds.²

At the End of the tour the tourists can visit a shop and buy goods such as chocolate, soap etc. with the salt of the pans.

In addition to the guided tours, the salt pans offer other activities such as cycling, hiking and picnicking. The salt pans are also used to host cultural events like concerts and exhibitions.

The salt also is used for spa. The salt, water and mud from the salt pans get used for baths and body treatments. Many spas such as the spa "Lepa Vida" advertise about using ingredients of the salt pans for their spa.3

The salt pans are considered to be an important part of the cultural heritage of Piran since it is one of the main attractions for touristic visitors.





change much in future. All the touristic attractions are timeless. e still interesting hereafter and things like going to the spa or will probably still be very attractive for visitors in future. Only e because machines and computers respectively robots can he member of workers needed will be reduced continuously.

e tourists in Piran is a movie: in September 2022 a new Netflix for that is the Italian look of the city. The movie could lead to vanting to where the movie was made.4

riety of jobs. For example, there are workers at the salt pans. by raking the Pans by hand and have to live close by. Their onths straight every morning to evening. In the time that the workers can go on vacation or use their free time differently, salt Pans again.

salt Pans are the jobs for the visitors and tourists, such as the ır guides. In order to create the goods by using the salt of the re needed: The people to transport the salt and the ones that

ers such as massagers or an administrator, cleaning people and reception.

that come to Piran in order to visit the salt Pans, Jobs in Another possible job to participate in because of the salt Pans, rtation. Customers for the restaurants that can be found in hich leads to many chefs and waitresses working in Piran.⁵

sustainable because of how the salt gets farmed-by hand and ct, as already mentioned, the rare bird species.⁶

e considered that the salt sometimes has to be shipped long tion of salt being harvested by hand. But most of the salt is masks for the spa at local factories.

rnten/6191651/Mark-Wahlberg-Halle-Berry_Piran-ist-derzeit-Filmkulisse-

astline

Julina Kurze

¹ Having a guided tour myself ² Visiting the museum myself

³ https://www.slovenia.info/en/places-to-go/attractions/piran-and-salt-pans

Katharina Maas

The changes and development in agriculture, climate, income and the workforce in the salt pans of Piran

Ρ

The salt pans in Piran are a very unique area in Slovenia.

The procedure of salt harvesting depends on many different factors such as the weather, the geographical area and many others. The harvesting of 'Piranska sol' is based on a 700 years old tradition¹. Since the first record of the Piran salt pans in the year 804 ²the production had to be adapted to the climate as well as geology and local environmental conditions.

The harvesting is done according to the same techniques that have been used for 700 years³. The traditional salt production has decreased for about 20% as well as the number of workers. That could be because the manual harvesting in the sun is physically demanding and exhausting. The workers must harvest tons of salt every single day to receive the premium quality salt⁴. Furthermore the industrial production of salt increased and is less expensive and does not afford this hard work.



Not all of the areas of the saltpans are in use anymore. There are old fields, mostly in the abandoned southern part of the reserve called Frontanigge, which now function as a reserve for animals. The buildings in this area, which used to be inhabited by the workers now are vacent and not used anymore.

Even though the production has decreased, the salt pans now offer other tourist attractions such as a spa, a museum and a shop. Through this changes they want to keep up the tradition and want to promote the Piran salt pans as a unique destination.

One of the most threatening changes for the salt pans is the climate change. The Mediterranean region is warming 20% faster than the global average and is more and more at risk of thunderstorms and heavy precipitation⁵. The sea-level rise which as well is an effect

¹ https://agriculture.ec.europa.eu/farming/geographical-indications-and-quality-schemes/geographical-indications-food-and-drink/piranska-sol-pdo en

² https://agriculture.ec.europa.eu/farming/geographical-indications-and-quality-schemes/geographical-indications-food-and-drink/piranska-sol-pdo_en

³ https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52013XC1203(06)&from=EN

⁴ https://youtu.be/FrAfoJZvwng

⁵ https://www.unep.org/unepmap/resources/factsheets/climate-change

of the climate change leads especially in the costal zones to a higher risk of flooding and erosion⁶. The process of the harvesting is premised on a complex water transport system. It consists of inflow and outflow channels, pumping stations, sluices for the regulation of discharges and a main sluice with return flaps for the filling or emptying of basin directly into the sea or channels connected with it. The rising sea-level could lead to a flooding of the salt pans or the higher amount of water could make the harvesting of the 'Piranska sol' impossible.



In conclusion the salt pans in Piran have undergone different changes and development. The manual harvesting of salt decreased in contrast to the industrial production, the reserve itself changed and the impact of the climate is threatening the future harvesting. But especially for the region of Piran the traditional production is important and a big part of the culture.

Best / worst perspectives in the regional development of the salt plantations in Slovenia

Introduction- Elisa Koenigs

The salt plantations in Piran are a part of Slovenia which can be taken as an example of a vibrant region in which people tried to establish a sustainable future but also tried to maintain the regions traditions.

But to what extend are the inhabitants of Piran able to realise their goal and what would the best or worst case future scenario for the region look like?

Tradition- Elisa Koenigs

To start off one can say that Piran's inhabitants have been able to maintain the traditions of the salt plantations for about 700 years. Due to using the same methods for harvesting the salt that the people used centuries ago, the region is able to keep a strong connection to its past. Piran's salt plantations are also some of the very few plantations worldwide that still use the traditional salt harvesting methods. The old methods may not be as profitable as the new ones which are using improved techniques that speed up the harvest and ease the process for the workers, but they make the region very unique and attractive for tourists. This means that keeping the traditions alive is giving the region a great perspective concerning its economy.

Tourism-Julina Kurze

The area provides many free-time activities to attract tourists. As mentioned in another text above, are many activities made for families. For example, the bike tours or the museum at the salt pans. With having hotels close by that use the salt for their spa treatments, tourists that may come alone or with their partners also are interested in going to Piran. On the other hand, are the Salt Pans in Piran often used as a class trip for the students to learn more about the flora and fauna nearby. People who are generally interested in the history of salt gaining

⁶ https://www.unep.org/unepmap/resources/factsheets/climate-change

may also come as tourists to the salt pans in Piran. Overall are the tourists attracted by Piran because of the Salt pans. Their ages vary between little children and up to the oldest people can get.

Jobs-Julina Kurze

The jobs provided by the salt pans have a big range. There are jobs at the hotels and spas, jobs at the Salt Pans to harvest or to provide touristic activities and tourist magnets. This leads to many possible workplaces where different skills are expected and needed. Because of that, the Salt Pans are because of that very important for the inhabitants of Piran. The Salt Pans also help the city's infrastructure by attracting tourists that need a place to stay. When they want to go out eating and such things waitresses and Chefs also are needed.

Effects of the Piran salt pans on the population and demographics

The Piran salt pans have been an important part of the local economy for centuries, providing high-quality sea salt to various industries such as food, cosmetics and healthcare. They draw tourists ,making Piran a popular travel destination and provide employment opportunities for the locals, but the manual labor required can be overwhelming. Nonetheless, the skilled labor force creates a distinct cultural identity in Piran, and the salt pans have facilitated intercultural exchange and migration, attracting immigrants from various parts of Europe who bring their own traditions and languages to Piran.

Impacts of Salt Pans in Piran on Employment

The economy of Piran heavily relies on high-quality salt production, which creates employment and significant economic benefits. Traditional techniques for salt extraction may boost the cultural heritage of the area and increase tourism. However, salt harvesting can lead to unemployment during the off-season, physical health issues for employees, and environmental pollution, which can harm other industries. Measures need to be taken to ensure the sustainability of salt production in Piran for the benefit of both the local economy and the environment.

agriculture – Katharina Maas

The salt pans of Piran are singular. The agriculture in this singular habitat is threatened by the changes and the development. The agricultural work decreased during the last years. Even though they opened a spa and recruit the salt pans as a travel destination, the agricultural use of the salt pans got less. In the future the agriculture of the salt pans probably will decrease even more.

climate - Katharina Maas

This as well is related with the environmental changes. The rising sea level which results in the climate change could lead to a flooding of the salt pans and the higher amount of water could make the harvesting of the 'Piranska sol' impossible. The area would have to adapt to this changes.