

## **SODA SANAYIII A.S.; A Global Company**

Soda Sanayii A.S. is the leading producer of sodium carbonate, sodium bicarbonate and sole producer of chromium chemicals in Turkey. The management and the sales offices are located in İstanbul/Turkey while the production activities takes place at its Mersin plant on a 1.000.000 square meter site with its production capacity, products quality and wide spread and effective marketing network, is a reliable supplier that meets not only Turkey's demand but also makes Turkey an international player in the global market. Soda Sanayii A.S. has two manufacturing plants, Soda Ash plant and Kromsan plant. They produce chemicals that are used as raw material in more than 100 products from glass to detergents, from the chemical industry to the leather industry and pharmaceutical industry. Soda Sanayii develops new Technologies and products for more than 30 years in compliance with the high quality market requirement and environmental standards with its R&D center in Mersin dedicated to soda ash and chromium chemicals.

Soda Sanayii at its Soda Ash plant produces sodium carbonate and sodium bicarbonate. The production capacity is 1.200.000 tons/year and is the 4 th largest in Europe and 8th largest in the world.

Kromsan plant produces sodium sulphate, sodium dichromate, chromic acid and Cr+3 products such as basic chromium sulphate, chromium nitrate and chromium chloride, Kromsan uses environmentally friendly technologies of the highest Standard. The production capacity is 180.000 tons per year that makes Kromsan the largest in Europe and 3rd largest in the world. But is the largest in capacity and the leader in the market for its basic chromium sulphate product which is mainly used in the leather industry.

Soda Sanayii possess ISO 9001 Quality Management System, ISO 14001 Environmental Management System, OHSAS18001 Occupational Health Management System certificates. Also possesses ISO 22000 Food Safety Management System and GMP+ for its sodium bicarbonate product to comply with the codex of food and feed grade. Soda Sanayii successfully implements the managements systems of environment, health and safety under its commitment to Responsible Care which is a voluntary commitment of the world wide chemical industry.

Soda Sanayii is an international model with its environmental investments and its social commitments to the Kazanli Municipal and its public.

## **PROTECTION AND CONSERVATION OF SEA TURTLE IN KAZANLI MERSIN/TURKEY**

Soda Sanayii is carrying out its activities in the Kazanli site in Mersin and feels the responsibility to protect the environment and enhance the community focused on education and research, health and social needs and cultural initiatives. As a global company, Soda Sanayii's social commitment is illustrated by financing projects mainly in Kazanli for many years. With respect to the environmental issues, the 4.5 km beach at Kazanli is the second most important chelonia mydas nesting beach in the Mediterranean, and is seriously threatened by several factors. Monitoring studies have been going on since 1988 by many researchers. Soda Sanayii A.S. has volunteered to fund the projects at various years. As part of long-term monitoring, a sea turtle survey was carried out in Kazanli between 1<sup>st</sup> of June and 31<sup>st</sup> of August, 2010 this study will be the scope of the application for the CEFIC award 2011.

The main purpose of the presented project is to conserve and enhance the populations and habitats of sea turtles and to protect the eggs from the looting and natural predators in order to obtain a bigger quantity of baby turtles in the Kazanli. Other objectives were to identify possible threats to the nesting populations, to carry out relevant conservation measures and to raise public awareness about the serious threats facing sea turtles. The research programme in 2010 is started with the cooperation of the Biology Department of the University of Mersin, Biology Department of Osmaniye Korkut Ata University, volunteers and Soda Sanayiii A.S. (Research group). The project was financed by Soda Sanayii A.Ş.

Of the 7 species of sea turtles, 2 are found in Kazanli sea waters: chelonia Mydas and loggerhead. Chleonia Mydas nestling is concentrated mainly in Turkey and Kazanli is the second important area in the Mediterranean Sea nestling area of the Chelonia Mydas species.

Altogether 264 chelonia mydas nests and 15 loggerhead turtle nests were counted. The hatching success rate was determined as 71.86% and the success rate of hatchlings reached the sea was determined as 70.63% for chelonia mydas while the hatching success rate was determined as 56,89% and the success rate of hatchlings reached the

sea was determined as 54.77% for loggerhead turtle.

The number of eggs in each chelonia mydas nest ranged from 51-205 while the number ranged from 45-118 for loggerhead turtle.

On the beach 29 mature loggerhead and 4 chelonia mydas were found dead. The reasons of death and the sex were investigated, carapace were measured and checked if they are carrying labels or not. The dead turtles were rotten which indicated that they have being dead long time ago in the sea.

There were predators such as sea gulls and dogs. Cages were manufactured in the premises of Soda Sanayii A.S. and placed over the nests to protect them from the predators.

The security officers were taught and informed about protecting and observing the sea turtles and were instructed to inform the research group if any dead sea turtle was found on the beach.

An activity was organized to clean up the beach where the public from the community, the research group and the Soda Ash A.S. workers had participated.

Fishing activities also have effect on the death of the sea turtles. Kazanli and the neighbour Karaduvar are fishing villages. The fishermen were informed about the sea turtles and communicated how to behave when a sea turtle was tangled in their net. Posters were posted in the fishers association.

Teaching activities on the sea turtles were carried out by the research group in primary schools of Kazanli. The children showed great interest on the courses.

Lighting may orient the baby turtles on the opposite direction away from the sea and they may not be able to reach the sea which will definitely cause their death. The apartment complex and the wedding lounge lights were to high and they are warned about using not so bright lights. But this was not so successful.

## PICTURES FROM THE PROJECT



**PICTURE 1:** Satellite view of the research area and the location of Soda Sanayiii A.S.K4 is where the company is located.



**PICTURE 2:** A nestling sea turtle



**PICTURE 3:** A dead loggerhead found on the beach



**PICTURE 4:** A dead loggerhead found on the beach



**PICTURE 5:** Eggs in the nest



**PICTURE 6:** Eggs in the nest



**PICTURE 7:** Lighting of the apartment complex



**PICTURE 8:** Lighting of the wedding lounge



**PICTURE 9:** Fishing activities carried in Kazanli



**PICTURE 10:** Garbage on the beach of Kazanli



**PICTURE 11:** Clean up activity of Kazanli beach



**PICTURE 12:** Clean up and shaping of the Kazanli beach



**PICTURE 12:** Teaching activities of the Kazanli Primary School