“Tourism is one of the worst affected areas by Covid. The government will take all possible measures to ease the current problems being faced by the tourism industry. Since to revive the tourism industry, the government will prepare a master plan for the comprehensive development of different tourism destinations. The government plans to expand the tourism sector by including places of historical significance and cultural heritage and develop tourism centres by utilizing the potential of domestic tourism. Priority would be to promote domestic tourism and arrivals from other States. At least one destination will be developed in each panchayat in Kerala for the development of domestic tourism. At the same time, the existing tourism centres will be properly maintained and retain the destinations very attractive.

The state government has already initiated action to revive the tourism sector in 2021-22. The tourism marketing wing is functioning effectively for this purpose. The tourism sector has given top priority to the heritage-Spice route tourism projects. The areas from Kodungalloor in Thrissur to Paravur in Ernakulam come under the Muziris heritage project, the largest heritage conservation project in the country. It is the Kerala government's first Green Project. Jewish museums, Paliam palace museums and first European forts are the major attractions in the regions. Backwater cruise connects all the heritage destinations, which increased the tourist footfall in these destinations last year. Beautification of Munakkal beach, development of Canal House, Pathinettarayalam Kovilakam, Kodungalloor Temple Museum, Cheraman Palli, Holy Cross Church, Gothuruthu Chavittu Nadaka Museum are the new projects under the Muziris project. Once these are commissioned after the restoration and conservation work, the region will be holding a remarkable position in the world heritage tourist destinations.
Munakkal Beach is as important as the ancient port of Muziris. Munakkal must have been the gateway to the port on the banks of the river Churni or Periyar. This estuary might have attracted many ancient foreign traders. According to various sources, Sangham literature claimed that large ships sailed through the Indian Ocean were anchored at the estuary and brought pepper and other spices in small boats using inland waterways from different parts of the Muziris. The Romans and others offered them excellent gifts, including gold coins. Historians believe that the estuary was filled with sand during the floods of 1341 and was replaced by the Kochi port over time. Today, Munakkal Beach, one of the largest beaches in Kerala, attracts tourists worldwide. The Muziris Heritage Project aims to renovate the park and other buildings. Munakkal Beach covers an area of about 35 acres.

Construction of cycle tracks, CCTV, guard post, ample parking facilities and other tourist facilities including bicycle tracks, CCTV, guard posts, ample parking facilities, entertainment facilities for children and adults alike, walkways and lighting from Pulimuttu area, and special seating for sunset are being implemented as part of the project at Munakkal Beach at the cost of ₹5.97 crores. Landscaping and maintenance using automated irrigation systems are also being implemented as part of the project. In addition, the construction of a boat jetty for Rs. 73 lakh is started. Once the boat jetty is completed, tourists can visit the museums and return to the beach to enjoy the sunset. With the completion of the beach, including the boat jetty, Muziris Munakkal Beach will become one of the best and most attractive beaches in Kerala.

Domestication of crops is one of the greatest inventions of the human race, and it has played a vital role in the progress of human civilization. Rice is one of the earliest domesticated crops, as well as a model species for cereal crops. Cultivated rice species, which were domesticated from wild rice species, are important food crops worldwide. Morphological traits, physiological characteristics, and ecological adaptability of cultivated rice are very different from those characters of wild rice. Rice belongs to the Oryza genus, which is composed of more than 20 species. However, archaeological evidence shows that the domestication of Asian rice began as early as 9000 years ago in the Yangtze Valley of China and the Belan river valley site Koldihwa; in the Indian context, the origin of cultivated rice is still a relatively complex and contentious topic.

During the domestication from wild rice species to cultivated rice species, a series of marked changes in morphological traits, physiological characteristics, and ecological adaptability have occurred. These changes include the transition from prostrate to erect growth, loss of grain shattering, shortened awns or awlessness, hull and grain colour, increased grain number and weight, and improved regional adaptability. These agronomic traits feature are scarcely found in indigenous Pokkali, a type of paddy crop cultivated in the coastal area of central districts of Kerala in India for about six months from May to October.

Pokkali crop is widely grown in the fields in thirty-three Panchayath, two municipalities, and one city corporation area in the Alappuzha, Ernakulam, and Thrissur districts of Kerala. Pokkali cultivation is still prevalent in Cherai, Edavanakkad and Nedungad areas of Vypin Island, Ezhikkara, Kottuvalli in Ernakulam district and Mala, Vellangallur, Kuthiyathodu in Thrissur district. Pokkali fields are low-lying marshes and swamps situated near the estuaries of streams and rivers not far from the sea. Pokkali paddy, grown in saline soils, can resist acidity and survive floods and waterlogging. This paddy plant does not rot even if it is covered with water during the monsoon, and its genotypes can keep their panicles above water level. Pokkali is the name given to the paddy cultivation method, sowing seed and cultivable land. The word Pokkali derived from the Malayalam
word “pokkam”, which means high or tall; this refers to the tallness of the rice plant, which usually grows to a height of 1.5 to 2 m to survive in the waterlogged fields.

Pokkali cultivation in Central Kerala is one of the most important organic growing food items globally and at the same time agriculture style is also sustainable. In Pokkali agriculture, nutrients are recycled, and Pest and disease incidence are below a threshold level. The tidal flows make the field more fertile. It is a rare variety of paddy which has been received a geographical indication in 2008. A geographical indication (GI) is a sign used on products that have a specific geographical origin and possess qualities due to their origin. In order to function as a GI, a sign must identify a product as originating in a given place. Kerala Agricultural University, Thrissur and Pokkali Land Development Agency, N. Paravur, Ernakulam had taken initiative in this regard. The GI tag is used for branding and marketing local products for sale. The Pokkali varieties are rich in antioxidants and these content levels are even higher than those of the medicinal rice Navara. Pokkali rice is also considered to be good for people with diabetes. However, these specialities did not bring any significant benefits to the cultivation of pokkali rice. Pokkali, which was once cultivated on 30,000 hectares, is now cultivated on only 2500 hectares.

The Pokkali agricultural process involves alternate cultivation of paddy and prawn during the heavy southwest monsoons (June to October) and November to mid-April, respectively. Pokkali’s method is to drain the field water in the summer, strengthen bunds, prepare mounds to wash down dissolved salt, plough the land and sow the seeds. Paddy cultivation involves traditional Pokkali cultivars and wide–yielding varieties derived from these cultivars. The seeds are tightly packed in a basket made of pleated coconut leaves, the inside of which is lined with banana or teak leaves. These baskets are immersed in freshwater ponds for 12 hours. They are then taken out and stored in the shade. The radicle sprouts and remains sluggish under this condition for about seven days. When the soil and weather conditions become favourable or before being sown on the mounds, the seeds’ basket is re-soaked for 6 hours. The seedlings will be ready for scattering by July (in about 30 days). At this point, the seedings on mounds will be scooped up and scattered throughout the field. It is then matured in water during the rainy season. The panicles of the plant are harvested, leaving the larger part of the stubble in the field. The preservation method of Pokkali rice is also very typical. Certain traditional practices are still prevalent among Pokkali cultivars. Especially Makaramasathe Manju kollikkal, pathirodukoodi unakkal etc are few among them. In terms of sustainable agriculture, Pokkali is a natural crop with no fertilizer application, rich in nutrients and medicinal properties.

Pokkali cultivation should meet the challenges of surplus production and malnutrition - against a backdrop of population growth, increased pressure on natural resources, and the uncertainties associated with climate change. Recently, Pokkali cultivation has declined due to reduced paddy fields, the acid content in the soil, industrial activity, modern human encroachment, and increased labour, etc.
Inauguration: The renovation work of Azhikode Muziris Munakkal Dolphin Beach

Minister Mohammad Riyas inaugurated the renovation work of Azheekkodu Muziris Munakkal Dolphin Beach on August 18, 2021, online. Munakkal is set to become the largest beach in Kerala with tourism amenities and advanced infrastructure development. The project begins with construction work to preserve the existing beauty of the beach. Kaipamangalam M.L.A. E.T. Tyson Master presided over the event. Eriyad panchayath president K.P. Rajan, Panchayath member Sumitha Shaji, Muziris Heritage Project Managing Director P. M. Noushad and Marking Manager Ibrahim Zabin were present.

Visit of tourism minister

Honorable Minister for Public Works Department and Tourism, Government of Kerala Sri. Mohammad Riyas visited the birthplace of Sahodaran Ayyappan Memorial Museum on August 14, 2021. Sahodaran Ayyappan was the Minister for public works in the Travancore - Cochin State in 1947. He was better identified as a social reformer, thinker, rationalist, journalist, and politician. He was associated with several events related to the Kerala reformation movement. Ayyappan dared to question the age-old system of untouchability and made a call for Misrabhojanam, the dining along with lower castes, a blasphemous act in those times. He began the Sahodara Prasthanam [brotherhood movement] to take his mission forward.

Vaippin MLA Sri. K. N. Unnikrishnan presided over the function. Former Minister S. Sharma, Muziris Managing Director Sri. P.M. Noushad, Pallippuram Panchayat President Ramani Ajayan, Vipin Block Panchayat President Tulasi Soman, Kochi - Biennale Co-ordinator Bonnie Thomas, Tourism Deputy Director T.G. Abhilash and DTPC Secretary Vijayakumar spoke on the occasion.
**75th Independence Day in Muziris**

On the 75th Independence Day of the country, Nehru Yuva Kendra Thrissur and the National Service Scheme launched the ‘Azadi Ka Amrit Mahotsav’ on August 13 at 8 am from the Freedom Fighter - Abdul Rahman Sahib Memorial Library Eriyad. The marathon, which started in Eriyad as the ‘Fight Thinkers Freedom Run’, ended at the home of Muhammad Abdul Rahman Sahib, which was converted into a museum as part of the Muziris heritage project.

A week-long class on Freedom Fighters and a week-long video presentation (depicting Abdul Rahman’s biography) began on August 13. Dr. Binu T.V., District Co-ordinator NSS Thrissur, M Anilkumar, Deputy Director NYKS and Muziris Heritage Project Museum manager Dr. Midhun C. Sekhar were present.

**Launch of Hippalus, the safety boats**


The modern boat has an engine of 90 HP and a top speed of 25 knots. In two phases, 8 boats will be purchased as part of the heritage project. In the first phase, four boats will be launched at the cost of `3.13 crore. The boat’s construction was completed to make it convenient for passengers to travel along with safety measures. The function was presided over by Municipal Council Chairperson Smt. M.U. Shinija. Vice-Chairman Sri. K.R. Jaitran, Councilor Smt. L.C. Paul, Muziris Heritage Project MD, P.M. Noushad and Marketing Manager Ibrahim Zabin were present.

**Graffiti work**

Sudhi Shanmughan, a member and artist of the Kodungallur Film Society, has been carrying out graffiti work on the Kottappuram waterfront and toilet walls.

**Junior vlogger**

The video, made by a six-year-old young girl named Mazha based on various monuments, including the Portuguese fort at Kottapuram in the Muziris heritage project area, has attracted many people. Muziris Heritage Project honoured Mazha, the junior vlogger.
The 2018 floods had significantly affected the Muziris suburbs. There are 11 boats, including water taxis, in the Muziris Heritage Project. Muziris Heritage MD Shri. P.M. Noushad said that with the opening of the tourist attractions after the epidemic, all the boats on the Muziris waterway would be repaired, painted and made attractive.

Brahmi Script

Museum: Pattanam Children Museum
Name of Object: Red Ware
Material: Clay
Size: Potsherds

Site Description:

Potsherd recovered from the archaeological site called Pattanam (N. Lat. 10°09.434'; E. Long. 76°12.587'), located in Vadakkekara village of Paravur Taluk in the Ernakulam District in Kerala, India.

Artefact Description:

Excavation at Pattanam yielded two sherds with post firing Brahmi letters on the body sherds of a local ware. One of the sherds are having 5 letters in Tamil-Brahmi inscribed on the rim portion of a storage jar. The 4th and 5th letters are not clear and have been understood as ‘te’ and ‘kei’ respectively. The renowned epigraphist Dr. Iravadam Mahadevan, deciphered the letter as ‘aman’ and the link may be the word ‘amanen’, meaning a Senior Jain Monk. The style of the letters allows the script to be dated to the early centuries of Christian Era.