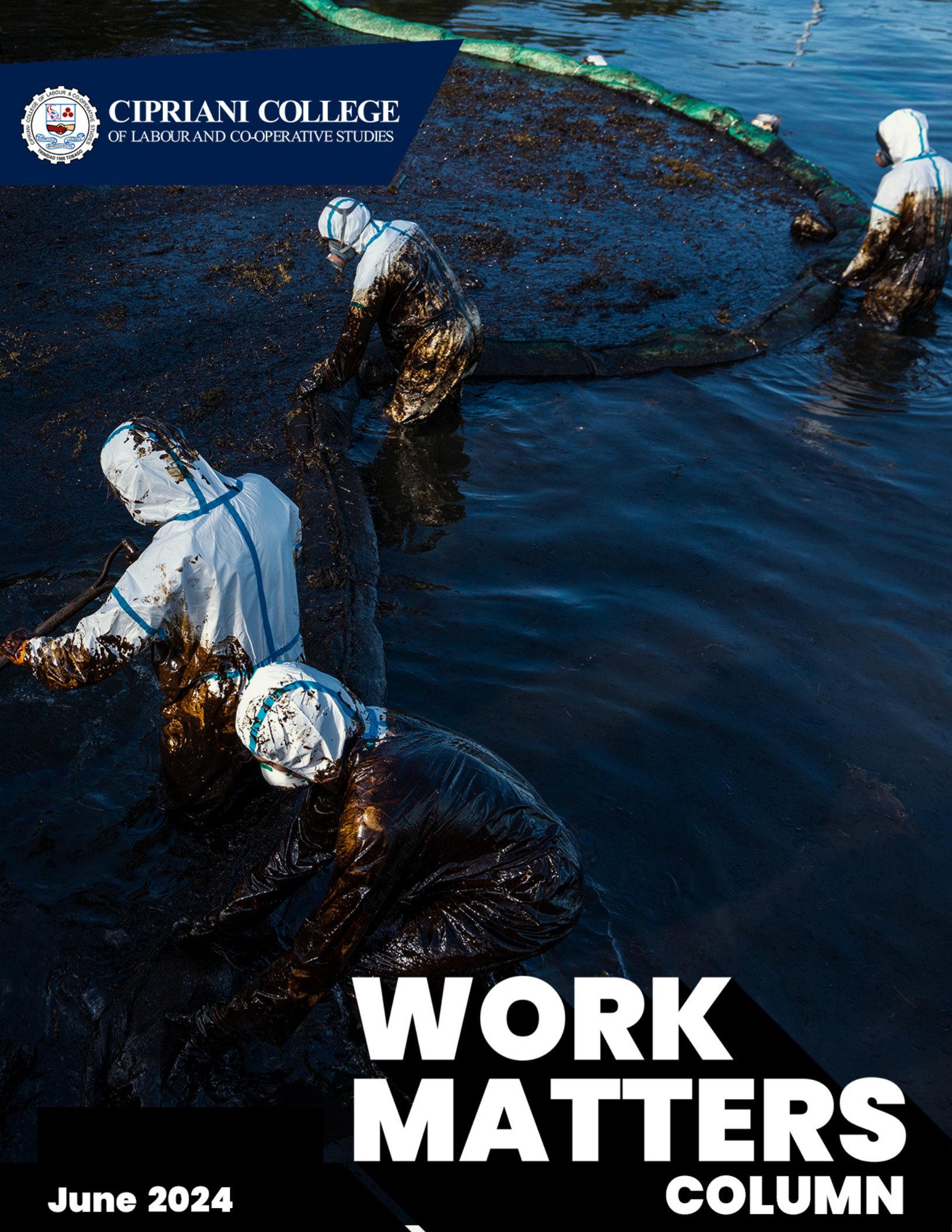




**CIPRIANI COLLEGE**  
OF LABOUR AND CO-OPERATIVE STUDIES



# WORK MATTERS COLUMN

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# ENVIRONMENTAL DEGRADATION FROM OIL SPILLS

On February 7th an oil spill occurred in Tobago resulting in a national emergency. According to the Office of Disaster Preparedness and Management (ODPM), approximately 15 kilometers (9 miles) of the coastline “is now blackened” by the oil. There has been immediate action taken in cleaning up the oil spill from the Tobago Emergency Management Agency as well as the Ministry of Energy and Energy Industries. The oil rapidly spread to the capital Scarborough of the small island which blackened the shores of this area. With an oil spill being the release of various oils in the marine ecosystem it is highly concerning as the island’s main income is derived from tourism.

Tobago is known for its diverse culture, beautiful beaches, activities and coral reefs that attract tourists throughout the year which brings in the majority of the country’s revenue. It plays a major role in Tobago’s economic system. However, this has been heavily affected by the oil spill especially as it occurred during the carnival season which was the time for the most tourism. The coral reefs and beaches are home to many species of coral and a wide variety of sea creatures which were covered in crude oil. The constituents of crude oil are very harmful and toxic to marine life whether it is via absorption or ingestion. The crude oil can permanently destroy these ecosystems as food chains are disrupted, animal homes are destroyed and marine life deteriorates in those areas affected. When corals are affected by oil it results in a low rate of re-growth and are in danger of dying once in contact with oil. Other animals such as birds that may come to the surface of the water to feed may also get trapped in the oil spills.

Additionally, the fishing industry was also affected as it not only plays an economic role but also provides employment for their citizens. It would be difficult for fishermen if areas are significantly affected by the oil spill. Most sea animals could have ingested or been exposed to crude oil which is not safe for human consumption, and this can lead to serious health issues. Some may be left without jobs as working in the fishing sector was

their only source of income. Persons of the nation will also be in distress not only because of the economic status, and the decrease in tourism, but also the loss of jobs.

An example of another country where an oil spill incident occurred is in Mauritius. In an interview, the UN Development Programme Resident Representative for Mauritius and Seychelles shared that during the Covid-19 pandemic in July 2020, there was approximately 1,000 tonnes of oil that spilled in to south-eastern reefs of the country. Mauritius’s main income is heavily dependent on the tourism and fishing sector which is similar to Tobago. There was serious damage to marine life and irreversible ecological effects in the coastal areas. It was also clear that forty eight thousand Mauritians living in near these coastal areas were affected by the oil spill. Numerous fishermen lost their source of income as they were not able to fish in the affected areas. This comparison shows how Tobago can suffer the same long term effects on their economy, marine life and citizens. Additionally, it further displays the damage that oils spills pose to the environment.

There are recommendations that can be implemented to reduce and even eliminate the oil spill. Recommendations in which the oil spill can be cleaned are dispersion - chemical dispersion is achieved by applying chemicals designed to remove oil from the water surface by breaking the oil into small droplets. Secondly, burning also referred to as “in situ burning,” this is the method of setting fire to freshly spilled oil, usually while still floating on the water surface. Sorbents are materials used to absorb oil, and include peat moss, vermiculate, and clay. Synthetic varieties usually plastic foams or fibers come in sheets, rolls, or booms. Bioremediation a bacteria that naturally do the work of breaking down oil to clean it up. For example, various bacteria such as fungi, archaea, and algae degrade petroleum products by metabolizing and breaking them into simpler and non-toxic molecules (mostly fatty acids and carbon dioxide). Manual labour is also an option, as it requires hand-held tools to clean up the spill.

In conclusion, the oil spill that occurred can lead to long term economic and ecological effects of Tobago. Therefore, it is crucial to understand what type of oils were exposed as well as the effects it has and most importantly implement strategies not only to remove the oil spill but prevent this situation from reoccurring

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