

# SURAT KHABAR MALAYSIA

## MALAYSIA SUFFERS GREATLY FROM CLIMATE CHANGE

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The rapid changes in local conditions because of climate change over the past 30 years have led to ongoing hardship throughout Malaysia – and the New Year continues with these trends.

The landmass of Peninsular Malaysia is literally smaller with sea levels that have risen and covered numerous coastal cities and towns – especially those that sit on the Malacca Straight. Several of the country's islands in this same area are submerged – some having only mountain peaks remaining. Not that long ago, these were important areas for Malaysia's tourism activities.

The once extensive mangroves along Malaysia's coasts have vanished because of increased sea levels along with much of the natural life these areas harbored. These areas used to host aquaculture, industry, housing, hotels and tourism.

Cities, such as Malaysia's capitol Kuala Lumpur, have become much more crowded with vast numbers of people having moved in from former and threatened coastal towns. People have also moved out of rural areas where agriculture activities have all but disappeared, joining the crowds in the cities. The population continues to grow.

Tens of thousands of people have left the country altogether to try to find better conditions in other parts of the world. Migrants endure harsh travel conditions, over-crowding, low socio-economic status, low rates of vaccination, illness, and limited access to healthcare. Many have returned to Malaysia from countries that rejected them because they can't support the overwhelming numbers of international environmental refugees.

Kuala Lumpur sits in a region where rainfall has substantially decreased leading to regular and long periods of drought. Safe water is difficult for its population to get, especially in the dry season, and water shortages are far worse than they were even thirty years ago.

In Malaysia's most vulnerable states, the conditions of poverty, over-crowding, and food that is too scarce and pricey for many, have enhanced the conditions for the spread of infectious diseases. Cholera and dengue fever are among the diseases that have become familiar, along with increased parasitic diseases introduced from other parts of the world.

Other regions in both East and Peninsular Malaysia have also seen decreases in rainfall and regularly suffer drought.

But while some regions experience extended drought and water shortages, others are in the path of increasing numbers of storms. When it rains, storms are intense and heavy. Monsoons in the low-lying central and east coast regions of Peninsular Malaysia have led to frequent floods washing away people's homes and making farming on previously productive land impossible.



**Kuala Lumpur has seen reduced rainfall during the growing season, threatening agricultural sustainability.**

Source: Pikist

Air quality is a serious issue too. Airborne mold spores resulting from flooding, particulate air pollution from wildfires, toxic algal blooms and pollen all contribute to air pollution. As a consequence, respiratory infections, lung cancer, asthma and other conditions have all increased in the population.

The average increased temperatures have had an impact too. The changed rainfall patterns combined with increased temperatures have severely impacted the once thriving rubber, palm, and cocoa industries. Extensive mudslides and land erosion have resulted as a combination of previous deforestation activities and ongoing storm activity. Damage from more frequent and intense storms is seen on both of Malaysia's main landmasses.

High intensity storms also disrupt aquaculture structures, remove shellfish from sea beds, and increase fish escapes from fish farms. Coastal regions experience more sediment loading due to increased rainfall and storm events which continue to stress and cause physical harm in fish and shellfish. The cost of this recurring damage is high adding to infrastructure costs and contributing to overall economic hardship.

Unstable weather patterns mean there are fewer safe fishing days. Fishers are earning 75% of what they would've earned only a couple of decades ago. Injuries are more common. Extreme weather events are a noticeable cause of death, both inland and on the coast.

Malaysians, who have always relied on the fisheries for food, now depend on them even more for survival, supplemented with foods imported from the "Earth's breadbasket" (i.e., the mid-latitude regions of the globe where food production is concentrated).

The conditions caused by climate change have affected other parts of agriculture too, such as the ability to raise livestock. Good quality grain is hard to get, meaning livestock often don't get the level of calories or nutrients they need to be healthy. Many have stunted growth as a result.

Rice production has gone down during both the growing and off seasons. Because of the warmer temperatures, crops need more water compared to the past. The warmer weather also provides conditions that are friendlier to a wider number of plant pathogens, pests and weeds adding more challenges in growing crops. This includes invasive organisms introduced to the country.

Livestock of various types are heat-stressed, and have weaker immune systems and reproductive problems. The animals don't thrive as well as they used to. Dairy cattle produce less milk and fewer offspring than their forbearers. Food prices for humans and livestock alike have gone up substantially.

Similarly, aquaculture stock are exposed to more pathogens, vectors, and wild marine-life which can carry pathogens, increasing exposure to, and transmission of, communicable diseases. Financial, medical, and animal systems are all impacted by 'exotic' disease outbreaks.

Because clean water is scarce, reclaimed waste water is now used as drinking water for both livestock and people, and in some areas for crops. This brings with it the risk of disease-causing pathogens as well as a need to treat the water before use.

Climate change has led to more challenging economic and health conditions for the country as a whole, though efforts are ongoing to improve the situation and prepare for the future.