

STRICTLY EMBARGOED – 05:00AM UK TIME (BST) WEDNESDAY 09TH SEPTEMBER

Over one billion people at threat of being displaced by 2050 due to environmental change, conflict and civil unrest

LONDON, September 09, 2020, Today marks the launch of the inaugural Ecological Threat Register (ETR), that measures the ecological threats countries are currently facing and provides projections to 2050. The report uniquely combines measures of resilience with the most comprehensive ecological data available, to shed light on the countries least likely to cope with extreme ecological shocks. The report is released by leading international think-tank the [Institute for Economics & Peace](#) (IEP), which produces indexes such as the Global Peace Index and Global Terrorism Index.

Key results

- 19 countries with the highest number of ecological threats are among the world's 40 least peaceful countries including Afghanistan, Syria, Iraq, Chad, India and Pakistan.
- Over one billion people live in 31 countries where the country's resilience is unlikely to sufficiently withstand the impact of ecological events by 2050, contributing to mass population displacement.
- Sub-Saharan Africa, South Asia, the Middle East and North Africa are the regions facing the largest number of ecological threats.
- By 2040, a total of 5.4 billion people – more than half of the world's projected population – will live in the 59 countries experiencing high or extreme water stress, including India and China.
- 3.5 billion people could suffer from food insecurity by 2050; which is an increase of 1.5 billion people from today.
- The lack of resilience in countries covered in the ETR will lead to worsening food insecurity and competition over resources, increasing civil unrest and mass displacement, exposing developed countries to increased influxes of refugees.

The Ecological Threat Register analyses risk from population growth, water stress, food insecurity, droughts, floods, cyclones, rising temperatures and sea levels. Over the next 30 years, the report finds that 141 countries are exposed to at least one ecological threat by 2050. The 19 countries with the highest number of threats have a combined population of 2.1 billion people, which is around 25 per cent of the world's total population.

The ETR analyses the levels of societal resilience within countries to determine whether they have the necessary coping capacities to deal with future ecological shocks. The report finds that more than one billion people live in countries that are unlikely to have the ability to mitigate and adapt to new ecological threats, creating conditions for mass displacement by 2050.

The country with the largest number of people at risk of mass displacements is Pakistan, followed by Ethiopia and Iran. Haiti faces the highest threat in Central America. In these countries, even small ecological threats and natural disasters could result in mass population displacement, affecting regional and global security.

Regions that have high resilience, such as Europe and North America, will not be immune from the wider impact of ecological threats, such as a significant number of refugees. The European refugee crisis in the wake of wars in Syria and Iraq in 2015 saw two million people flee to Europe and highlights the link between rapid population shifts with political turbulence and social unrest.

However, Europe, the US and other developed countries are facing fewer ecological threats and also have higher levels of resilience to deal with these risks. Developed countries which are facing no threats include Sweden, Norway, Ireland, and Iceland. In total there are 16 countries facing no threats.

Steve Killelea, Founder & Executive Chairman of the [Institute for Economics and Peace](#), said:

“Ecological threats and climate change pose serious challenges to global peacefulness. Over the next 30 years lack of access to food and water will only increase without urgent global cooperation. In the absence of action civil unrest, riots and conflict will most likely increase. COVID-19 is already exposing gaps in the global food chain”.

Many of the countries most at risk from ecological threats are also predicted to experience significant population increases, such as Nigeria, Angola, Burkina Faso and Uganda. These countries already struggle to address ecological issues. They already suffer from resource scarcity, low levels of peacefulness and high poverty rates.

Steve Killelea, said:

“This will have huge social and political impacts, not just in the developing world, but also in the developed, as mass displacement will lead to larger refugee flows to the most developed countries. Ecological change is the next big global threat to our planet and people’s lives, and we must unlock the power of business and government action to build resilience for the places most at risk.”

Food Insecurity

The global demand for food is projected to increase by 50 per cent by 2050, meaning that without a substantial increase in supply, many more people will be at risk of hunger. Currently, more than two billion people globally face uncertain access to sufficient food. This number is expected to increase to 3.5 billion people by 2050 which is likely to affect global resilience.

The five most food insecure countries are Sierra Leone, Liberia, Niger, Malawi and Lesotho, where more than half of the population experience uncertainty in access to sufficient food to be healthy. COVID-19 has exacerbated levels of food insecurity and given rise to substantial price increases, highlighting potential volatility caused by future ecological change.

In high income countries, the prevalence of undernourishment is still high at 2.7 per cent, or one in 37 people do not have sufficient food to function normally. Undernourishment in developed countries is a byproduct of poverty; Colombia, Slovakia and Mexico have the highest undernourishment rates of OECD countries.

Water Stress

Over the past decade, the number of recorded water-related conflict and violent incidents increased by 270 per cent worldwide. Since 2000, most incidents have taken place in Yemen and Iraq, which highlights the interplay between extreme water stress, resilience and peacefulness, as they are among the least peaceful countries as measured by the Global Peace Index 2020.

Today, 2.6 billion people experience high or extreme water stress – by 2040, this will increase to 5.4 billion people. The majority of these countries are located in South Asia, Middle East, North Africa (MENA), South-Western Europe, and Asia Pacific. Some of the worst affected countries by 2040 will be Lebanon, Singapore, Israel and Iraq, while China and India are also likely to be impacted. Given the past increases in water-related conflict this is likely to drive further tension and reduce global resilience.

Natural Disasters

Changes in climate, especially the warming of global temperatures, increases the likelihood of weather-related natural disasters such as droughts, as well as increasing the intensity of storms and creating wetter monsoons. If natural disasters occur at the same rate seen in the last few decades, 1.2 billion people could be displaced globally by 2050. Asia Pacific has had the most deaths from natural disasters with over 581,000 recorded since 1990. Earthquakes have claimed the most lives in the region, with a death toll exceeding 319,000, followed by storms at 191,000.

Flooding has been the most common natural disaster since 1990, representing 42 per cent of recorded natural disasters. China's largest event were the 2010 floods and landslides, which led to 15.2 million displaced people. Flooding is also the most common natural disaster in Europe, accounting for 35 per cent of recorded disasters in the region and is expected to rise.

19 countries included in the ETR are at risk of rising sea levels, where at least 10 per cent of each country's population could be affected. This will have significant consequences for low-lying coastal areas in China, Bangladesh, India, Vietnam, Indonesia and Thailand over the next three decades – as well as cities with large populations like Alexandria in Egypt, the Hague in the Netherlands, and Osaka in Japan.

Development Aid

Aid can be used as a mechanism to build resilience to ecological shocks such as droughts, water stress and food insecurity in developing countries. Climate-related aid has increased 34 fold from one billion US dollars in 2000 to US \$34 billion in 2018 and is primarily spent in sub-Saharan Africa, South Asia and Asia-Pacific. India received the largest amount of climate-related aid in 2018, amounting to US \$6.5 billion. Although these increases are substantial, they fall well short of what is needed to address these issues going forward.

For more information, visit economicsandpeace.org

ENDS

NOTES TO EDITORS

The ETR report, articles and interactive maps are available at:

About the Ecological Threat Register (ETR)

This is the inaugural edition of the Ecological Threat Register (ETR), which covers 157 independent states and territories. The ETR is unique in that it combines measures of resilience with the most comprehensive ecological data available to shed light on the countries least likely to cope with extreme ecological shocks, now and into the future.

Methodology

The ETR includes the most recent and respected scientific research on population growth, water stress, food insecurity, droughts, floods, cyclones and rising temperature and sea levels. In addition, the report uses IEP's Positive Peace framework to identify areas where the resilience is unlikely to be strong enough to adapt or cope with these future shocks. The report draws on a wide variety of data sources, including World Resources International, Food and Agriculture Organization, the United Nations, and Institute Economics and Peace.

About the Institute for Economics and Peace

IEP is an international and independent think tank dedicated to shifting the world's focus to peace as a positive, achievable and tangible measure of human well-being and progress. It has offices in Sydney, Brussels, New York, The Hague, Mexico City and Harare.

Global Media Contacts

Hill+Knowlton Strategies: / (0044) 7834 587675 / (0044) 7393 244275