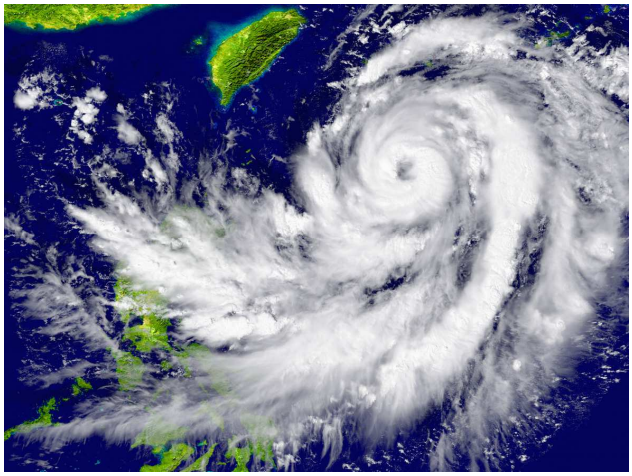
Climate changes, natural disasters and refugees

One person every second. This is the rate at which – on average from 2008 to 2014 all over the world – natural disasters like hurricanes, flooding and earthquakes have forced an increasingly large number of people to flee their homes. In 2014 alone, according to data supplied by the United Nations, approximately 19.3 million people were displaced due to environmental disasters, 17.5 million of whom due to climate-related calamities and 1.7 million due to calamities of a geophysical nature, such as eruption of volcanoes.
From 2008 to 2014, the average number of people displaced because of climate was around 22.5 million, the equivalent of about 62 thousand individuals per day. To get a better understanding of this figure, it is as if every 24 hours, a number of people equal to those who normally fill the Olimpico Stadium in Rome to see a football match, suddenly found themselves without a home to live in. Obviously, other factors also influence this figure - already staggering in itself – above all the intensity of the more large-scale events and the vulnerability of the areas hit. Again from 2008 to 2014, the 34 worst disasters, each affecting over 1 million people, accounted for around two thirds of total migrations.



A tropical cyclone seen from a satellite in South-East Asia

Natural calamities and geographic distribution

But at global level, which natural calamities most affect our communities? In the seven-year period considered in the UN report, the main cause of migrations due to natural disasters were flooding (55%, 102 million people), followed by tropical cyclones (29%, 53.9 million). However, while it is true that the events with the highest impact are related to surfeit of water, in other areas drought forces people to migrate.
Each year, Morocco, Tunisia and Libya lose 1000 kilometres of productive land due to desertification, forcing people to migrate towards the cities of Maghreb or towards Europe. The same phenomenon regards many families whose livelihood depends on subsistence farming and animal breeding in the Horn of Africa (Somalia, Ethiopia, Eritrea). Moreover, in the period concerned, approximately one million people (1% of the total) were forced to migrate by extreme temperatures.
Regarding geographic distribution, Asia is without a doubt the continent where displacement linked to natural calamities has the highest impact (82% of the global figures between 2008 and 2014). No less than 11 of the 20 countries most affected by this phenomenon in 2014 are Asian and, more specifically, China, India and the Philippines were the three hardest hit countries. Following Asia in this sad record is the American continent (10% in the period considered), closely followed by Africa (8%).

In general, there is a high risk in small island developing states, like Cuba and Haiti, while it is important to stress that in some countries the issue of natural calamities is added to that of conflicts, as in India, Pakistan, the Philippines, Sudan and South Sudan.

Flooding in South-East Asia

Vulnerability and resilience

According to the *Global Estimates 2015, People displaced by disasters* report, published by UNHCR (the United Nations Refugee Agency), the increase in displacement due to natural disasters is linked mainly to the climate and weather trend, above all flooding. This trend, in itself very alarming, has been made much worse by the growing vulnerability of the populations, due to a number of reasons, including for example, the increased frequency and intensity of extreme events, growth in the number of people living in areas deemed to be at risk, population expansion in urban areas, which has increased by 187% from 1970 to date, a percentage that rises to 326% in developing countries. We often assume that natural disasters make no class distinction, but inequalities (between countries, or within the same countries) considerably influence the capacity for resilience of a community, whether it is a family or a village, therefore limiting the possibility of returning to live in the areas affected. It is no coincidence if – again between 2008 and 2014 – 95% of migrations due to calamities concerned developing countries and the worst hit were those with middle or lower-middle incomes (above all Asia), where exposure to risk.

Refugee camp in the Horn of Africa

The future and refugee status

According to scientists, the number of refugees due to natural calamities will rise to 50 million a year by 2050, but some think that number will grow by as much as 200 million. And the Lancet Countdown predicts that, again in 2050, there will be one billion climate refugees.

These are shocking figures that are difficult to imagine, but they should not surprise us if, for example, we think of countries like Bangladesh, where around half the population lives at minus 5 metres below sea level. In the opinion of the researchers, by 2050, Italy will have lost approximately 17% of its land above sea level, a loss that on its own would create 20 million climate refugees. The situation is not expected to be much different for countries like the Maldives, located right in the middle of the Indian Ocean, which is already working with Australia, India and Sri Lanka to prepare an evacuation plan in the event that it is needed.

This is an enormous problem, which needs to be addressed both in terms of land and climate change management, and in terms of international law, because climate or environmental refugees are not protected under international law and often risk being sent back to their countries of origin.

Furthermore, very often, environmental refugees who are displaced within their national borders, moving from the coastal or rural areas to urban areas, often having to change from subsistence economies to economies that are totally unknown to them, in which it is hard for them to find a role for themselves.

In short, no matter how much climate changes are considered for the most part to be a subject that concerns science and technology, it is becoming increasingly urgent that another consideration be taken into account: climate changes have an ever more important impact on society, either directly, as floods, hurricanes and other extreme events show, or indirectly, by fuelling conflicts over resources such as water, food or cultivable land.

Refugee children in Kenya waiting to register, 2011

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