

Impact of Climate Change on Children: A Malaysian Perspective

Evidence and recommendations from the first study in Malaysia to focus on children, climate change and environmental degradation*

A global emergency



Climate change

Although a natural phenomenon, climate change is being harmfully accelerated by **greenhouse gas emissions** from

anthropogenic (i.e. human) activities such as:

1. Burning of fossil fuels
2. Deforestation
3. Livestock farming
4. Fertilizers
5. Fluorinated gases.



Environmental degradation

Caused by **pollution** as well as:

1. Changes in land use and land cover
2. Urbanization
3. Overpopulation
4. Industrialization.



Malaysia has been exposed to climate change in various forms:



Altered rainfall patterns



Rising temperatures



Life-threatening weather conditions

The Malaysian context: six key findings

Not all aspects of children's rights have been adequately considered in Malaysia's governance framework on climate and environment.

While girls tend to be more vulnerable than boys, **each gender is affected differently**.

Children living in marginalized communities are more vulnerable to climate and environmental risks. These risks are exacerbated by factors such as poverty, illiteracy, poor access to basic services and information, poor housing and living conditions.

Climate change and environmental degradation are **intensifying** in Malaysia alongside rapid development.

Children's rights are protected to varying degrees depending on societal and geographical conditions.

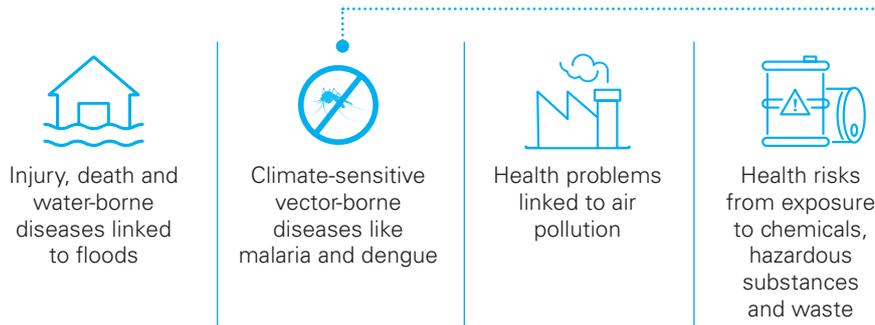
Accelerated climate change and environmental degradation present **serious risks for children** in Malaysia. From floods and vector-borne diseases to worsening air quality and improper disposal of hazardous wastes, children will bear the brunt of the impacts, with consequences seen in terms of:

- health and well-being
- education
- future income

* This exploratory study was conducted between March 2020 and May 2021 by Universiti Kebangsaan Malaysia, Universiti Malaysia Sabah and UNICEF Malaysia.

Impacts on children's health and well-being in Malaysia

In Malaysia, climate change and environmental degradation impact the health and well-being of children mainly **in four ways**.



Dengue and climate change

- Warmer conditions** → enable mosquitoes to reach maturity more rapidly
- Rainfall** → creates breeding sites
- Humidity** → influences the evaporation rates for these sites.

Opportunities for intervention in Malaysia

At the community as well as policymaking levels, children's needs should always be at the heart of Malaysia's climate change mitigation and adaptation strategies.



1 Move towards a more child-sensitive governance framework.

- Laws, policies and plans that explicitly address children's vulnerability to climate change and environmental degradation.
- All sectors aligned in addressing impacts.
- Environmental hazards recognized as a potential cause of harm to children within the Malaysian legal framework.
- Improved coordination and synergy between federal and state levels.

2 Strengthen the education sector to be climate-smart.

- Climate-smart educational content included in the Malaysian curriculum.
- Support for teachers to successfully teach climate science, local impacts and solutions.
- Climate-smart schools and infrastructures resilient to natural disasters.

3 Support advocacy and representation for children and vulnerable groups.

- Meaningful participation of children in policy processes.
- Involvement of civil society and other actors.
- Use of digital platforms (including social media) for civic engagement.

4 Conduct more research and development (R&D).

Priority areas include:

- Child-centric guidelines on health components and indicators related to climate and the environment.
- Climate change training modules for teachers, and materials for students.
- Alternative education modalities to minimize disruption in teaching and learning during periods of environmental and climate stress.
- Monitoring and evaluation mechanisms for intervention programmes.

5 Build public-private partnerships.

Examples include:

- Develop and promote innovative solutions to mitigate and adapt to climate change.
- Advances in private education systems can be applied in the development of climate-smart education.
- Adoption of environmental, social and governance programmes that increase child participation.

Marginalized children

Marginalised children are particularly impacted by extreme weather events in five ways:

1. **Infectious diseases**, with marginalised children being more susceptible due to low awareness of personal hygiene, lack of access to clean water and improper garbage disposal habits
2. **Disrupted education** when children are unable to reach schools
3. **Disrupted access to basic services and supplies** such as health services, water and food
4. **Family income instability** leading to greater risk of children dropping out of school
5. **Health hazards and threats to general well-being** arising from damage to homes and other infrastructure, and being confined to small spaces for prolonged periods.