

# Giardino



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# Current environmental problems

## 15 LIFE ON LAND



- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Something you  
don't know about  
land deterioration

## land deterioration

## Deforestation

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Timeline  
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Do you know?

- Fish populations essential for food and jobs have ~~eroded~~ by 50% in the last 4 decades.

## Biodiversity reduction

The population sizes of mammals, fish, birds, reptiles and amphibians have experienced a decline of an average of 68% between 1970 and 2016.

Astonishing  
Data! You might never  
know in your lifetime,

Do you know how many countries are involved in illegal trade??

## resource scarcity



# Current environmental problems

## 15 LIFE ON LAND

- Protect, restore and promote sustainable use of terrestrial ecosystems, sustain mangroves forests, desertification, halt and reverse land degradation and halt biodiversity loss.

Something

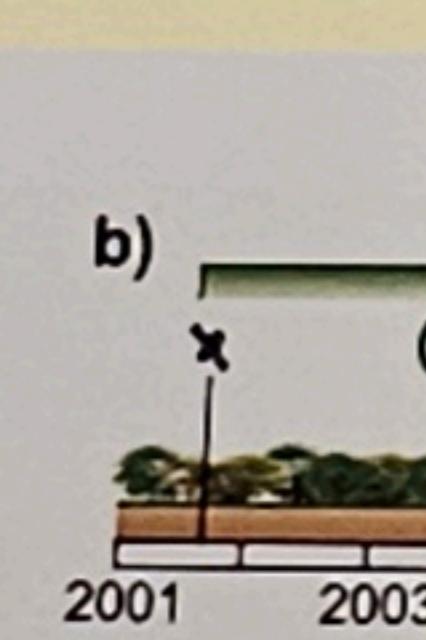
don't know  
land deteriorat

- At present, about 600 square kilometers of land in the world fall into desertification every year, and loss of agricultural productivity will be as high as \$42 billion.

- Currently, an estimated 2 billion people live on drylands vulnerable to this phenomenon, and scientists predict that the effects of desertification could lead to the displacement of around 50 million people by 2030.

## Deforestation

Pull  
The Timeline



- For one acre and a half, the area equivalent to one hectare, about 10% of annual CO<sub>2</sub> emissions enter the atmosphere every year.
- Forests absorb nearly 5 billion tonnes of CO<sub>2</sub> into the atmosphere every year, equivalent to 10% of annual CO<sub>2</sub> emissions.

### Do you know?

- Fish populations essential for food and jobs have crashed by 50% in the last 4 decades.

## Biodiversity reduction

120

countries engage in illegal trade.

Over 800 known animal species, 80% are extinct, and 22% are on the verge of extinction.

50%

global GDP is dependent on nature.

More than 1 billion people rely on forests for their livelihoods.

## Astonishing Data!

You might never know in your lifetime,

Do you know how many countries are involved in illegal trade??

Global material extraction to double between 2060 and 2080 is expected to reach 10 billion tons. The amount required to meet the needs of the world's population is projected to increase from 2060 to 2080.



**Environmental**

- Each species has a unique role to play in maintaining the balance of nature. Additionally, different plant species provide essential services.
- Biodiversity is the basis of the climate regulation services provided by nature. Natural ecosystems play a crucial role in the carbon mitigation by both storing large amounts of carbon in vegetation and soils, and sequestering carbon dioxide from the atmosphere.



# Topic: ecosystem

Invasive Species

Will be the threat to the Grassland ...

Overgrazing

Farm

Climate

Carbon storage

California's grasslands and store more carbon than forest

Because they are less vulnerable to wildfires and droughts.

Insects

Humans



• Grassland account for 20% to 40% of the world's land area. Research shows that only a small part (10%) of the world's grassland are protected.

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Protecting Forests can ...




Productivity

Nutrient Cycling

These make up the Forest .....

Decomposition

Energy Flow



# National Strategy and Sustainable development

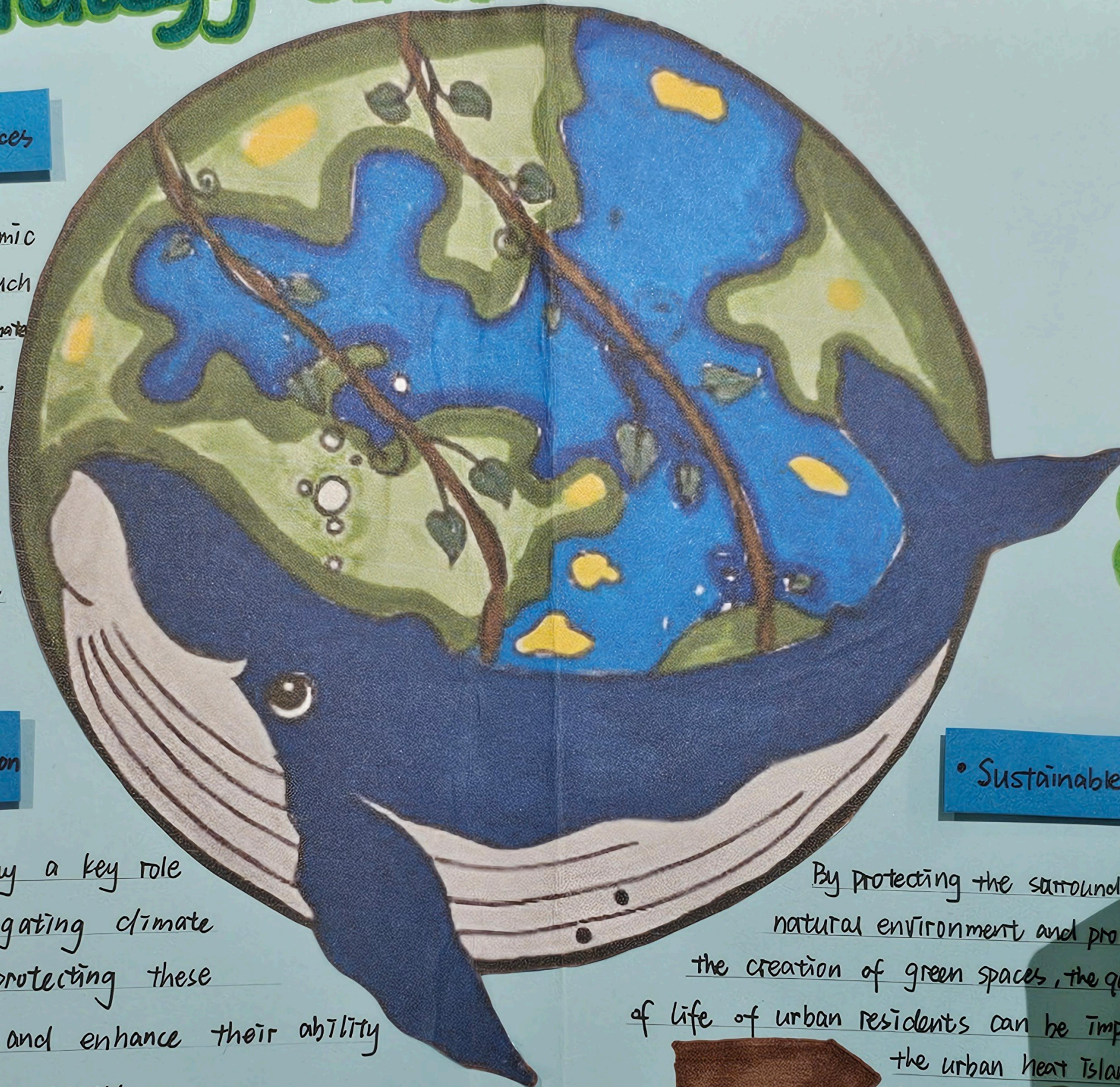
## Economic growth and ecosystem services

Ecosystem services are the basis of economic activities and provide necessary resources, such as clean water sources, fertile land and climate regulation, which are essential for agriculture, forestry, tourism and other industries.

National strategies can promote the health and diversity of ecosystem, thus supporting economic growth and sustainable development.

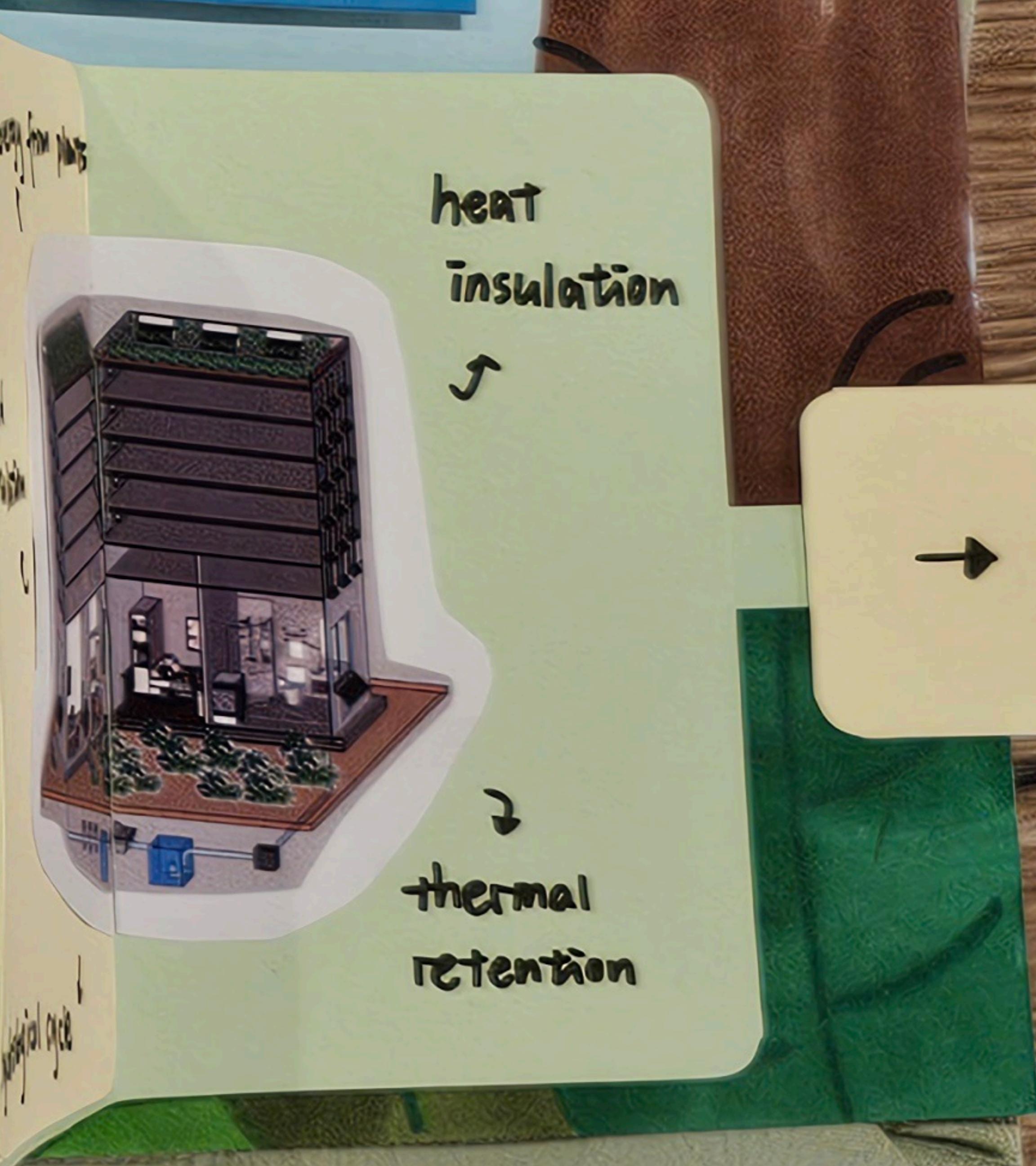
## Climate change mitigation and adaptation

Forest and other terrestrial ecosystems play a key role in absorbing greenhouse gases and mitigating climate change. By absorbing, restoring and protecting these ecosystem, can reduce disaster risks and enhance their ability to adapt to extreme weather events.



## Sustainable urban development

By protecting the surrounding natural environment and promoting the creation of green spaces, the quality of life of urban residents can be improved. The urban heat island effect can be reduced.

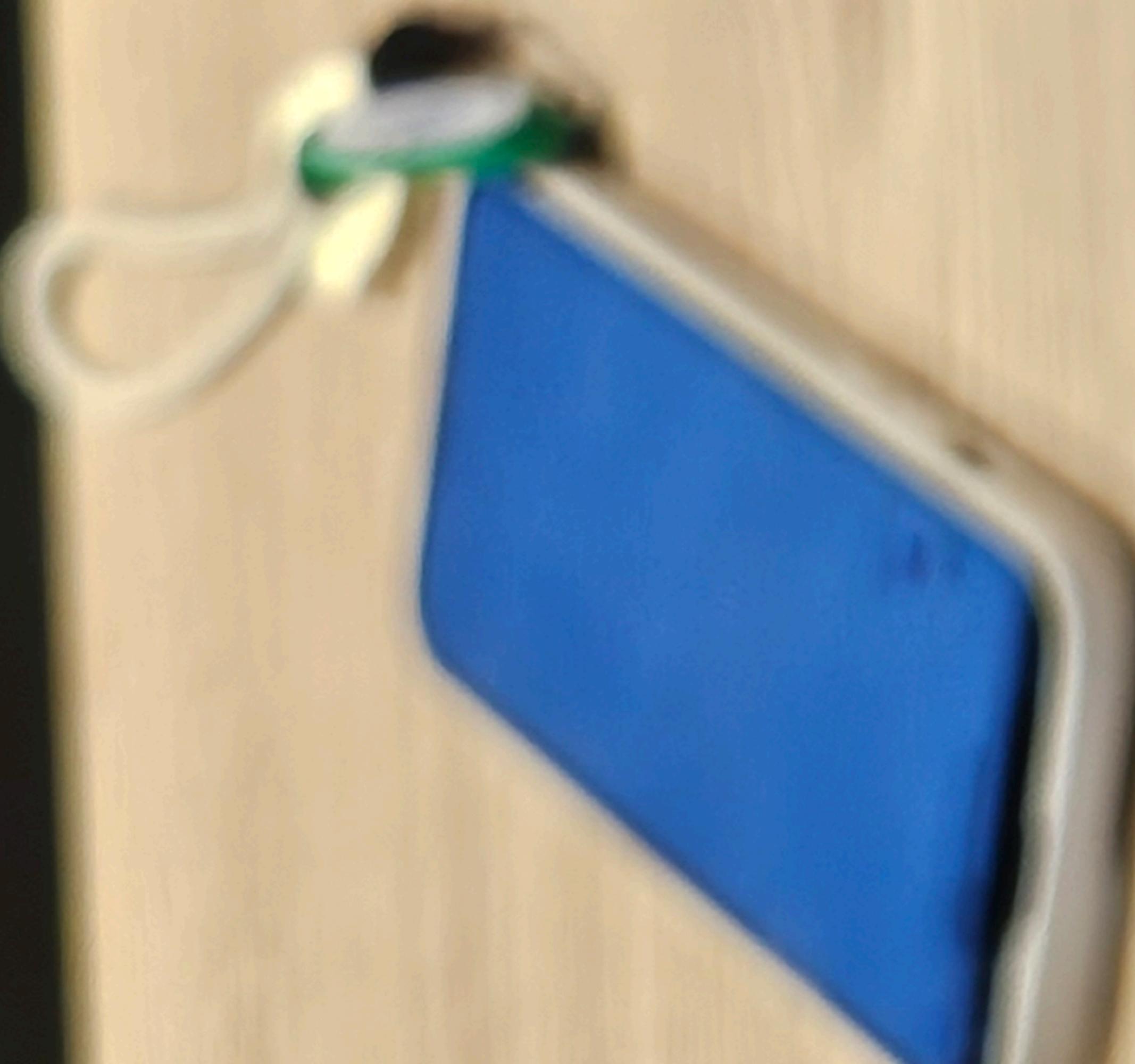


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