

## VULNERABLE GROUPS



**Rural Poor:**  
365 million

Likely to be subsistence farmers without access to an intact cold chain; may lack access to electricity and properly stored vaccines.



**Urban Poor:**  
680 million

May have some access to electricity, but live in housing of poor quality; may have a refrigerator, but food often spoils due to intermittent power.



**Lower-Middle Income:**  
2.2 billion

May purchase an affordable but likely inefficient air conditioner or refrigerator that raises energy consumption and GHG emissions.

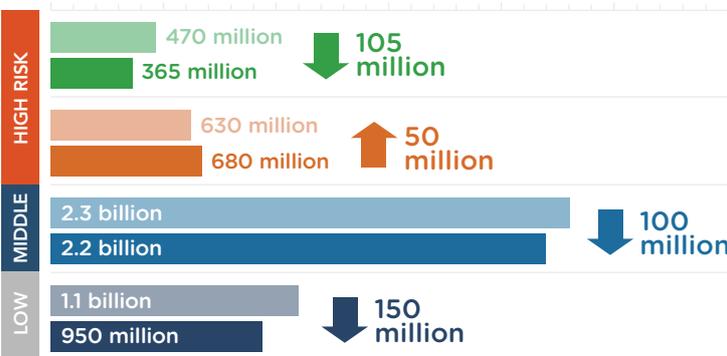


**Middle Income:**  
950 million

May be able to afford a more efficient air conditioner or minimize its use; may move to energy efficient housing and working environments.

## POPULATIONS AT RISK

2018 2019



## Findings and Trends



Significant increase in rural energy access that would enable cooling, notably in India.



Continued urbanization and fast-growing cities in Africa and Asia.



Purchase of cooling devices associated with income growth and associated with lower prices for entry-level units.



Increased purchasing power and growth of an established middle class.

1.05 billion remain at highest risk, compared to 1.1 billion in 2018.



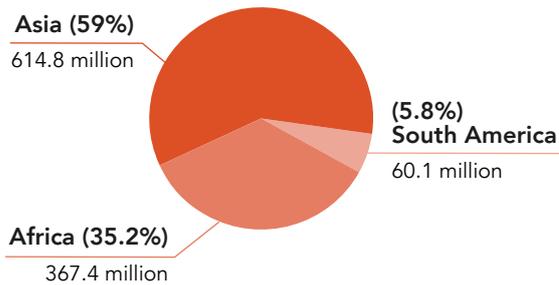
While energy access lowers risk exposure, it does not necessarily imply enhanced access to cooling, given the need for Tier 2 energy access to operate simple fans.



Changes in volume do not necessarily imply a transition from one population at risk to another.

## FINDINGS BY REGION

### Regional share of population at high risk (Rural and Urban Poor)

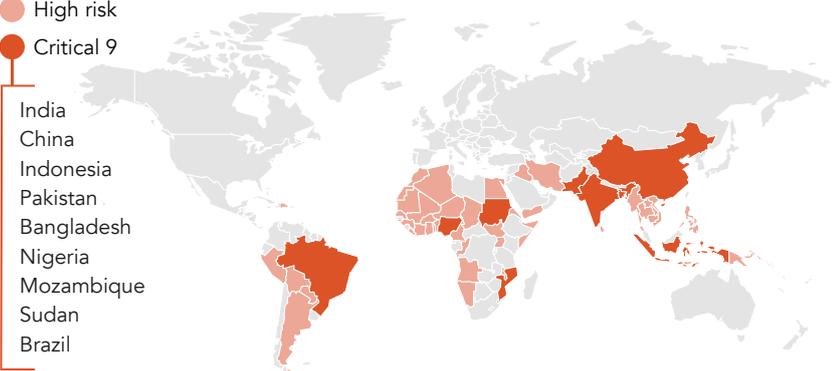


12 countries, Angola, Benin, Burkina Faso, Djibuti, Guinea-Bissau, Liberia, Malawi, Mali, Mozambique, Nigeria, South Sudan and Togo, all located in Africa, have **over 60% of their populations at high risk** (Rural and Urban Poor).

## COUNTRIES WITH POPULATIONS AT HIGH RISK

● High risk  
● Critical 9

India  
China  
Indonesia  
Pakistan  
Bangladesh  
Nigeria  
Mozambique  
Sudan  
Brazil



Critical 9 are the countries with largest number of people at high risk. Of these:



China and India have **already developed National Cooling Plans**



Brazil, Nigeria and Bangladesh are **currently developing National Cooling Plans**



## UNDERSTANDING COOLING NEEDS BETTER

Understanding how to meet cooling needs and Sustainable Development Goals (SDGs) together is possible when using the new Cooling for All Needs Assessment. This assessment allows measurement of cooling needs across human comfort and safety, food security and agriculture as well as health services.

Scan the QR code to learn more.

