TRACKING SUSTAINABLE COOLING FOR ALL

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TRENDS IN COOLING ACCESS | POPULATION AT HIGHEST RISK

RURAL POOR: APPROXIMATELY 109 MILLION IN ASIA

- Likely to be subsistence farmers without access to an intact cold chain
- May lack access to electricity and properly stored vaccines

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
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</thead>
<tbody>
<tr>
<td>2018</td>
<td>182 million</td>
</tr>
<tr>
<td>2019</td>
<td>140 million</td>
</tr>
<tr>
<td>2020</td>
<td>109 million</td>
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</tbody>
</table>

- Lack of access to energy
- Share of rural population living in poverty

- Significant increase in rural energy access that can provide energy for fans or refrigerators
- Positive trend in most Asian countries, with major improvements in India, Myanmar, Indonesia, Philippines

Source: SEforALL analysis, Chilling prospects
TRENDS IN COOLING ACCESS | POPULATION AT HIGHEST RISK

URBAN POOR: APPROXIMATELY 484 MILLION IN ASIA

- 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

2018: 460 million
2019: 472 million
2020: 484 million

- Lack of access to energy
- Share of urban population living in slums

Continued urbanization and fast-growing cities in Asia
Alarming trend in countries where more than 50% of urban population is at risk (Bangladesh, Cambodia, Yemen)

Source: SEforALL analysis, Chilling prospects
TRENDS IN COOLING ACCESS | POPULATION AT MEDIUM RISK

LOWER-MIDDLE INCOME: APPROXIMATELY 1.8 BILLION IN ASIA

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
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<tbody>
<tr>
<td>2018</td>
<td>1,826 million</td>
</tr>
<tr>
<td>2019</td>
<td>1,804 million</td>
</tr>
<tr>
<td>2020</td>
<td>1,800 million</td>
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</tbody>
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- Proportion of population living on less than USD 10.01 per day outside of rural or urban poverty

Risk of purchasing less-sustainable cooling devices associated with income growth and lower prices for entry-level units

Source: SEforALL analysis, Chilling prospects
**MEDICAL COLD CHAINS**
- Medical cold chains are at the basis for storing safely temperature sensitive vaccines
- **Five countries in Asia** (India, Pakistan, Indonesia, Philippines, Vietnam), of which three are at critical risk due to lack of access to cooling, account for **30 percent of unvaccinated children**
- As the world develop vaccines to prevent future pandemics, **access to cold chains remains essential**

**PRODUCTIVITY LOSSES**
- **USD 630 billion of annual economic loss due to heat stress in Asia**
- Due to climate change, developing economies are experiencing increasing heat stress, and the long-term impact that lack of access to cooling has on economic growth
- Of the top ten countries for jobs lost to heat stress by 2030 and associated GDP cost eight are **in Asia** (India, China, Pakistan, Indonesia, Bangladesh, Vietnam, Thailand, Philippines), for a total of **59 million** full-time jobs lost. **India** alone accounts for **34 million job losses**.

Source: International Labour Organization, UNICEF, SEforALL analysis
NEW RELEASE OF CHILLING PROSPECTS 2020 REPORT ON JULY 16, 2020

Information and resources available at: https://www.seforall.org/cooling-for-all

THANK YOU!