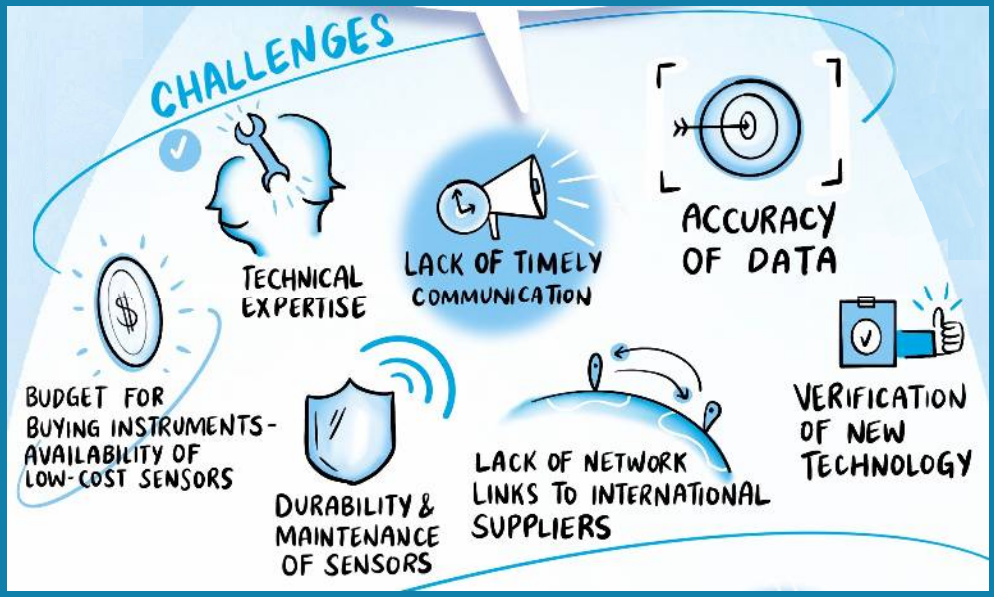
Air quality data remains a challenge in developing Asia.

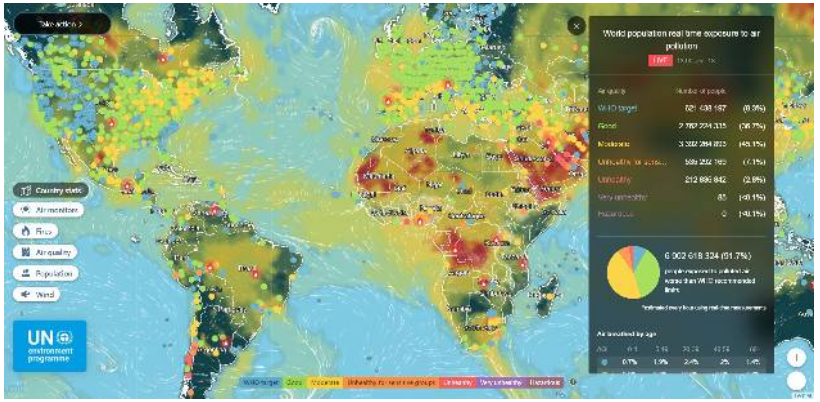
- According to World Health Organization, over 6,000 cities in 117 now monitor air quality
- Many continue to struggle to establish and maintain a sustainable air quality monitoring network.
- Air quality monitoring mechanisms are not a legal requirement in **37%** of countries globally.
- About **60%** of countries, accounting for 1.3 billion people, have no routine, annual ground-based monitoring of $PM_{2.5}$ at all.



Challenges from the Second Technical Meeting of the Communities of Practice on Air Quality Monitoring in Asia Pacific on 10 September 2021

UNEP’S efforts to address data gaps – GEMS/Air Programme

UNEP’s Global Environment Monitoring System for Air (GEMS Air) catalyzes scalable innovation using science and technology know-how, to enable developing country governments to drive transformation that improve the air their citizens breathe



Find out more: https://www.unep.org/explore-topics/air/what-we-do/monitoring-air-quality
https://www.unep.org/explore-topics/air/what-we-do/monitoring-air-quality/urban-air-action-platform

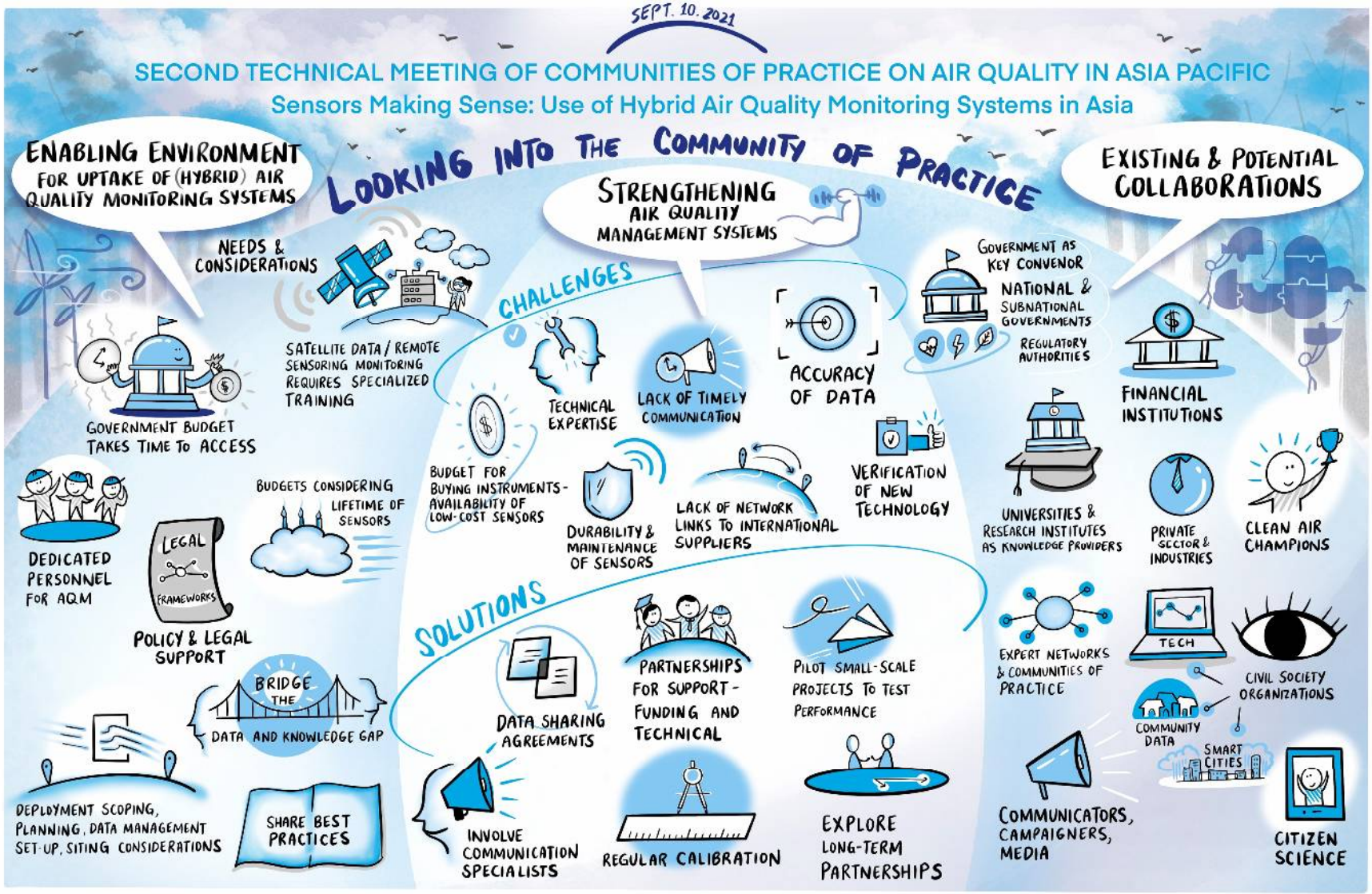
In 2020, UNEP partnered with IQAir and UNHabitat to launch world’s largest air quality data platform. Last year, it was expanded to include real-time air pollution exposure calculator.

GEMS/Air Programme Work Programmes

GEMS/Air Programme is anchored around five work packages that facilitate air quality management services to countries and cities.

Open-source data management system to promote data sharing, cooperation, and integrated analytics

- Support developing countries with data management using sensors and reference grade instruments.
- Involve partnerships instrument suppliers, data collection, data management and visualization expertise, etc.
- Initial version will be released soon.



UN environment programme 50 1972-2022

ASIA PACIFIC CLEAN AIR PARTNERSHIP APCAP JOINT FORUM

CLEAN AIR ASIA

International Day of Clean Air for blue skies

Visual Story By: TOFUCREATIVES.COM

C40: SENSING CHANGE How cities are using new sensing technologies to achieve air quality goals

Recommendations for sensor technology improvements draw on and respond to these technical challenges:

1. Clear protocols for co-location and frequency of calibration
2. Recent and reliable data on sensor accuracy, under local conditions:
3. Solutions to energy supply disruptions and city-specific conditions
4. Estimating the useful lifetime of sensors
5. Robust and responsive customer support
6. Offer training to increase local staff capacity
7. Anticipate and reduce e-waste from sensors
8. Support with project-level budgeting
9. Guidance on data sharing and data management platforms

https://www.c40knowledgehub.org/s/article/Sensing-Change-How-cities-are-using-new-sensing-technologies-to-achieve-air-quality-goals?language=en_US