

Regional Workshop on New Paradigms of Innovation and Technology to Address the challenges of COVID-19 pandemic

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Role of the new and emerging technologies to address COVID-19 and sustainable development

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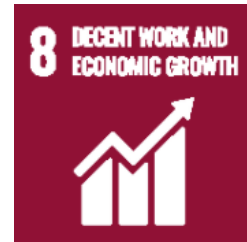
Outline

- COVID-19 and Sustainable Development
- STI responses to COVID-19 pandemics
- Examples from Asia-Pacific on use of new and emerging technologies to combat COVID-19
- STI strategies to fight against COVID-19 and for post COVID-19 economic recovery
- Conclusion – need for long term strategy

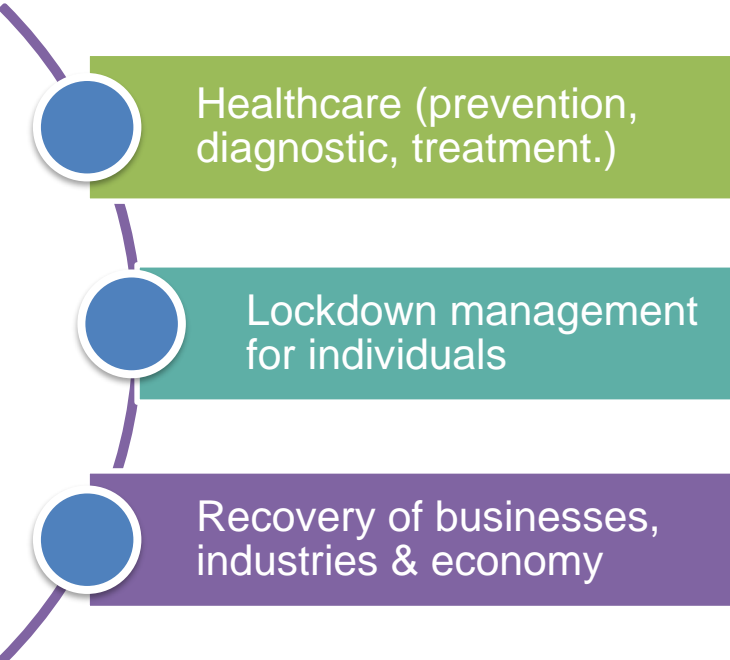


COVID-19 and Sustainable Development

- COVID-19 pandemic imposed countries serious challenges to achieve UN Sustainable Development Goals
- It impacts not only the SDG 3 (Good Health and Well Being) but also other SDG goals.
- Science, technology and innovation (STI) systems ultimately offer the solutions –vaccines and treatments– that will allow returning to the pre-Covid-19 situation.



STI responses to COVID-19 pandemics



Healthcare (prevention, diagnostic, treatment.)

Vaccination, medicines, disinfectants, protective gear, mobile diagnostics, drone delivery, digital stethoscope, wearable sensors, etc.

Lockdown management for individuals

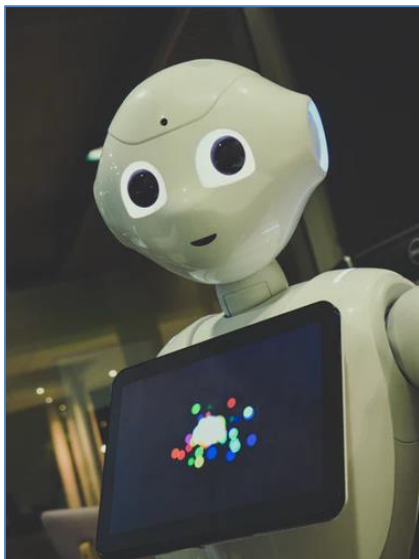
Remote working, online learning, indoor workout platforms, e-commerce, online stress management, etc.

Recovery of businesses, industries & economy

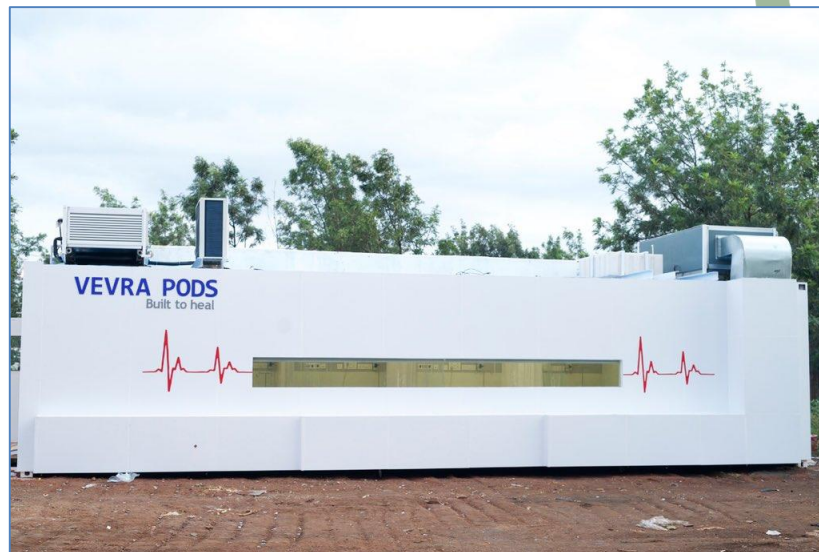
Post COVID-19 recovery – fourth Industrial revolution technologies, etc.

Potential of applications of emerging technologies in coping up with COVID-19 is endless

Examples from Asia-Pacific on use of new and emerging technologies to combat COVID-19



Use of New AI system to diagnose COVID-19 faster with 96% accuracy in Hospitals of China



AI-driven movable hospital to treat COVID-19 patients in India

Examples from Asia-Pacific on use of new and emerging technologies to combat COVID-19



Using AI to repurpose drug therapies for COVID-19, Singapore



3-D Printed Respirator, Japan

STI strategies to fight against COVID-19 and for post COVID-19 economic recovery

- Accelerating the pace of research through open science
- Supporting start-ups and SMEs to help speed up the recovery.
- Assisting technology companies to pivot toward new services and models, across sectors and in different markets/geographies
- Governments to facilitate development of digital ecosystems, including digital infrastructure and human capital (digital skills)



Conclusion – need for long term strategy

- Economic crisis may cause long-term damage to innovation system
- It is important to design economic recovery packages with innovation support as an integral part of the package. Ensure to address other important challenges, like climate change
- Learn from international experiences

