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SUSTAINABLE DEVELOPMENT GOAL 9
INDUSTRY, INNOVATION AND INFRASTRUCTURE

TRADE, QUALITY AND SAFETY OF PRODUCTS IN THE TIME OF COVID-19 WHAT LESSONS SO FAR?

Bernardo Calzadilla-Sarmiento, PhD
Managing Director, Directorate of Digitalization,
Technology and Agri-Business, UNIDO



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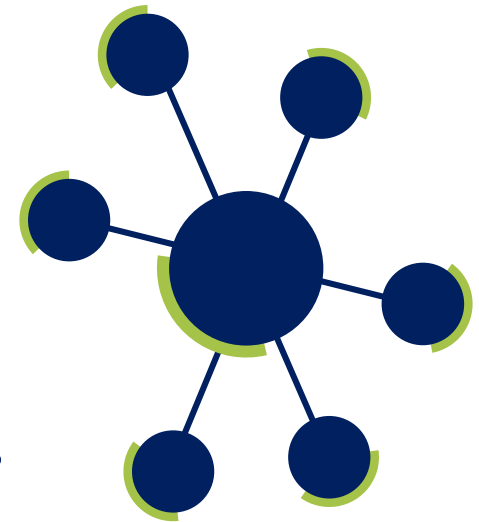


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QUALITY INFRASTRUCTURE IN THE FIGHT AGAINST COVID-19

Disruption calls for Change

The **COVID-19** pandemic is primarily a global health crisis, but it also has far-reaching economic consequences. Worldwide, it is already disrupting millions of people's livelihoods, with disproportionate impact on the poor, thereby jeopardizing the successful achievement of the United Nations Sustainable Development Agenda 2030.



QI Response to COVID-19

PEOPLE

Millions of people around the world depend on international trade for their food security and livelihoods

- **Trade** along global value chains needs to be ensured to sustain global supply of essential goods
- **Hygiene practices and food safety standards** are key to ensure global food supply



The number of infected people increases exponentially, while adequate medical equipment is scarce

- **Reliable results** of medical laboratories conducting tests to detect the virus are essential
- **Quality control and product testing** ensure that medical equipment is fit-for-purpose
- **Laboratories** support the development of new medicines and vaccines through related scientific testing



Additional medical and hazardous (infected) waste is generated

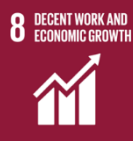
- **Standards** help to manage the increased hazardous waste
- **Testing laboratories** can detect pollution levels



PLANET

QI Response to COVID-19

Global trade contracts, while trade of medical equipment increases



- **Trade** plays an important role in ensuring the availability and affordability of vital medicines, medical products and protective gear
- **Mutual recognition of accredited test results** facilitate the trade of essential goods

Quality infrastructure helps to mitigate the negative effects of the crisis and ensures the provision of essential services



- **Quality infrastructure** ensures the identification and dissemination of relevant standards, accurate measurement (metrology) and provides attestation (accreditation) of reliable test results
- **Standards** ensure technologies used in mitigation of the crisis are safe, and that privacy and users are protected

Businesses worldwide struggle to keep up production of essential goods



- **Business continuity, risk and emergency management standards** are key to ensure the uninterrupted production of essential goods
- **Standards** ensure that goods produced in response of COVID-19 (protective masks, gloves, etc.) are fit-for-purpose while workers are kept safe

PROSPERITY



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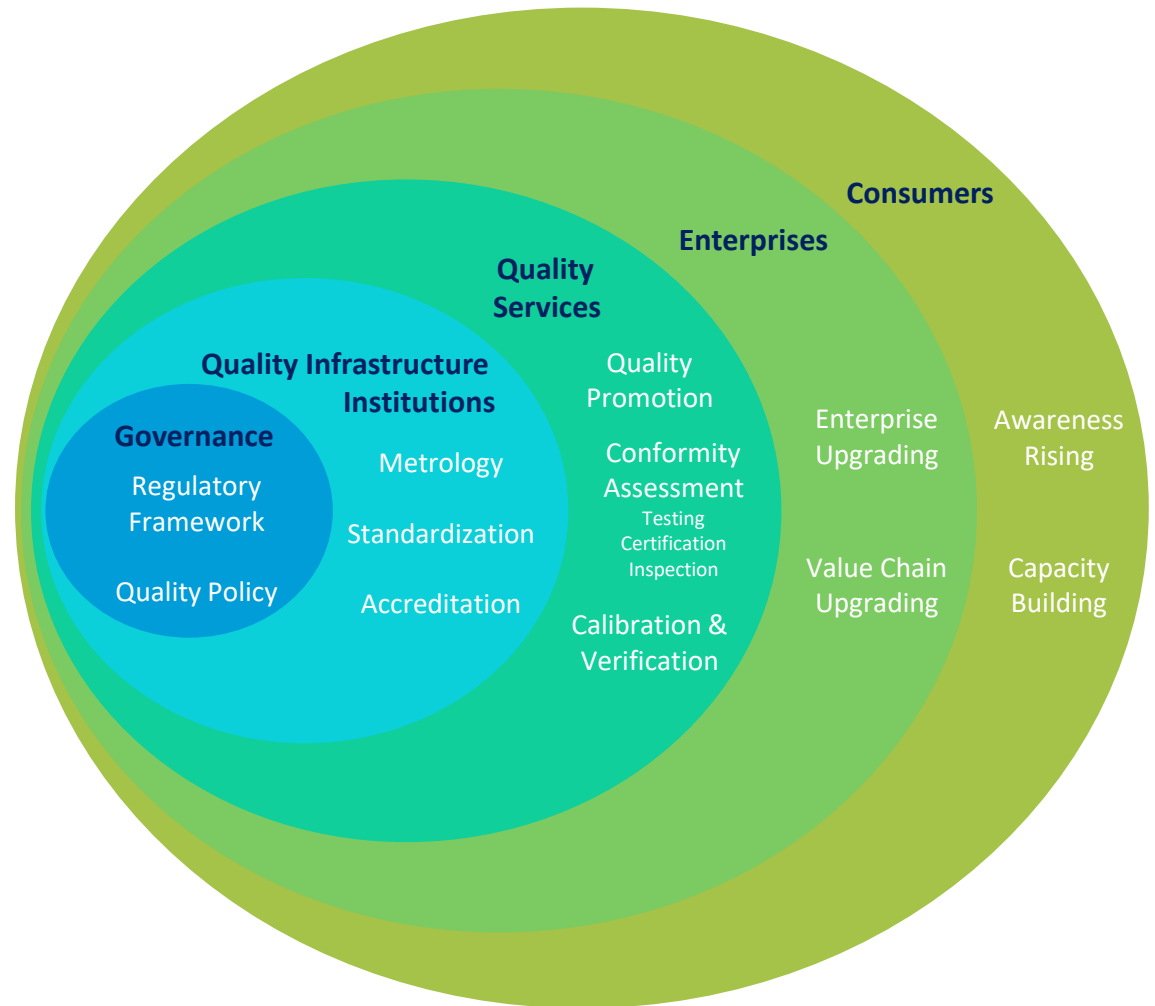
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UNIDO's RESPONSE

Quality Infrastructure System

UNIDO's approach to QI development

- SYSTEMIC
- HOLISTIC
- DEMAND-DRIVEN





UNIDO's Work

Over the last twenty years, UNIDO has supported **more than 1,000 CABs in 58 countries** in regions across the world, helping numerous developing countries increase their productive capacity, export base and engage in international trade.



Responding to the crisis by building a better future



Promote innovative solutions to respond and adapt to the evolving situation and increase business sector resilience

CONTAIN

ADAPT

RECOVER

Support to contain impacts of disruptions and protect supply chains, business sector and its workers



Support towards the recovery of an inclusive, resilient and sustainable economy in the era of the 4IR



1. Contain and mitigate



UNIDO launches special webinar series

Through the interactive webinars, renowned international experts will give an insight into the particular important role of quality and standards in mitigating the negative effects of the outbreak.



Standards for Personal Protective Equipment (PPE)

UNIDO joined hands with WHO, EC, UNECE, BMILP and SOAC to support national, regional & international QI institutions to bridge the gaps in the global landscape of PPE standards and conformity assessment systems.

2. Adapt and respond



Tajik and Armenian SMEs diversify into PPE production

UNIDO is supporting local national textile enterprises to diversify production to include medical masks and gowns and provide much-needed supplies of protective equipment to combat the spread.



Resilience roadmap for value chains in Ghana

UNIDO is preparing a series of online technical trainings and webinars to support local producers in the fruits, cassava and cosmetic sectors defining a resilient roadmap to minimize COVID-19 impact.



Trade, Investment and Innovation Knowledge Hub

Interactive online platform allows for remote knowledge transfer, online trainings, exchange of experience and news sharing, webinars and other online communication.

3. Recover

**COVID-19 INDUSTRIAL
RECOVERY PROGRAMME**
A BRIEF SUMMARY



COVID-19 Industrial Recovery Programme (CIRP)

UNIDO has developed a programme primarily focused on LDCs and MICs to provide targeted support to national governments with the restructuring of their industrial sector in the recovery phase

Promotion of sustainable technology transfer

ITPO Tokyo is supporting the development of capacities in developing countries to mitigate impacts of COVID-19 epidemic crisis through appropriate technology transfer from Japan

UNIDO ITPO Tokyo's

STePP

Sustainable Technology Promotion Platform

Partnerships

International cooperation is essential in order to mitigate the further spread of the corona virus and to reconstruct our societies once the present outbreak has been tamed.

17 PARTNERSHIPS FOR THE GOALS



REGIONS



INTERNATIONAL



DONORS





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LOOKING INTO THE FUTURE

A crisis amidst a paradigm change

The repercussions of the pandemic in all aspects of our lives have accelerated the Fourth Industrial Revolution (4IR), with COVID-19 becoming a **driver for digital transformation**



Profound and long-lasting impacts on how we work, innovate, live, and interact

Unique **opportunity to future-proof productive sectors** and foster long-term resilience

Quality Infrastructure 4.0

Metrology 4.0: The term used to describe existing innovations in non-contact metrology, such as applying smart measuring sensors, 3D scanning, and mobile-tools for real-time calibration and measurement.

Smart Laboratories: Where automation and informatics can come together to drive change. Examples of the kinds of technologies in Smart Laboratories include:

- **AI and machine learning**, such as using digital images in a semi-automated process to reduce mistakes and take away the uncertainty of conformity assessments in industrial testing.
- **Big Data**, to help the management and analysis of the increasing qualities and types of data available for testing and inspecting products.
- **Cloud computing**, to share data instantly, report issuing and automate certification. This has already been developed in some CABs, resulting in greater insight for customers and their supply chains.



Quality Infrastructure 4.0



Blockchain Technology: This offers a new means of transparent, secure and decentralized verification of certificates, can be applied for traceability

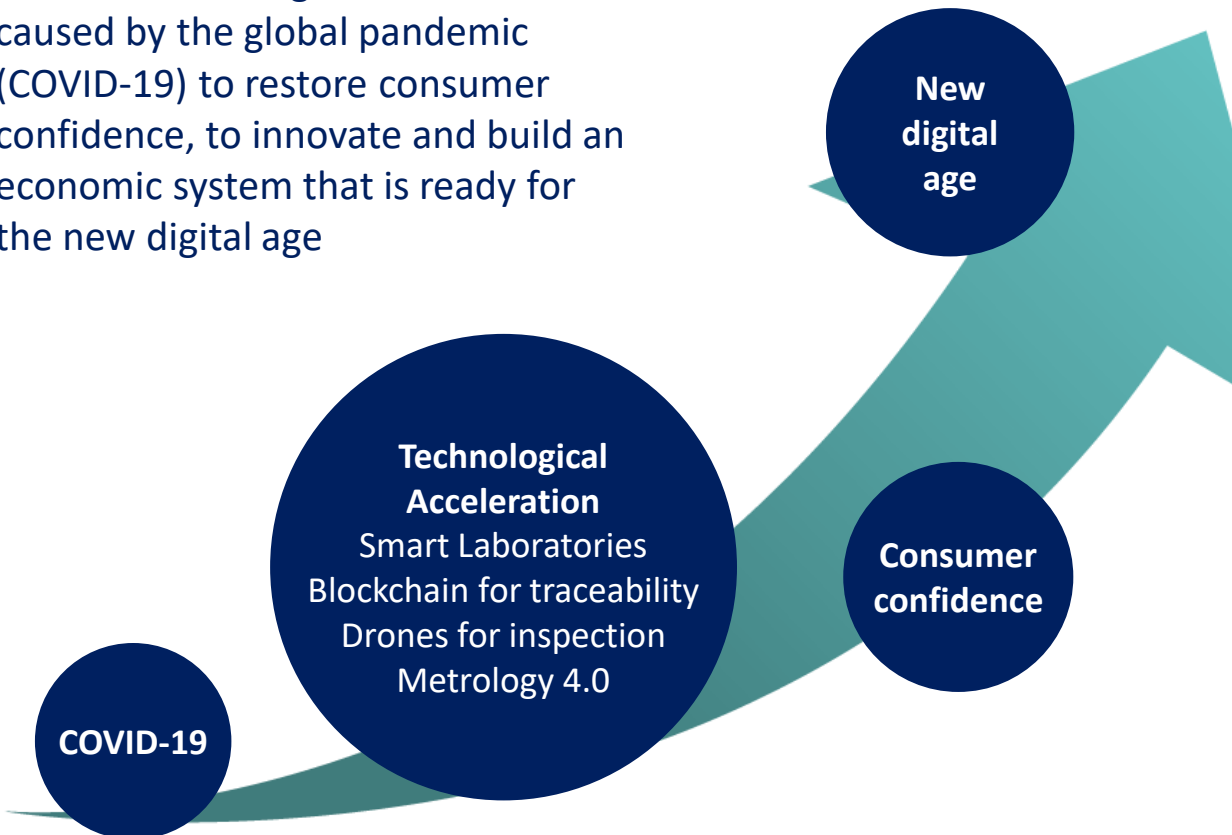
Drones: Drones offer new ways of conducting remote inspections and aerial mapping. They can be equipped with multispectral sensors for precise measurements in agriculture, or thermal cameras for measuring heat distribution.

Sensors: Sensors will also play an increasingly important role in process control and automated production lines. This can bring greater opportunities for connectivity, data sharing and integration with logistics, providing valuable data and feedback from markets.

Real-time information: Management systems can be improved by remote access to information in real-time. When brought together with the analysis of big data, remote working, it can promote more efficient ways of auditing conformity to management system standards such as ISO 9001 (Quality), ISO 14001 (Environmental) and ISO 50001 (Energy).

Shaping the Future

Use the technological acceleration caused by the global pandemic (COVID-19) to restore consumer confidence, to innovate and build an economic system that is ready for the new digital age





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THANK YOU