

Biosafety & Biosecurity

Gatekeeper for Sustainable Biotechnology

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9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
Is innovation in biotechnology safe & sustainable?

10 REDUCED INEQUALITIES
Is the technologically feasible and useful in the sense of security and reduced inequalities?

Vision of Sustainable Development Impacts of Biotechnology

- 1) Improved crops
- 2) Improved livestock
- 3) Better diagnostics
- 4) Personalized medicine
- 5) New biotherapies (e.g., gene therapy)
- 6) Targeted, speedy vaccine production
- 7) Genetic modification of disease vectors
- 8) Synthetic replacement of organs
- 9) Biofuel production
- 10) Biomanufacturing (more sustainable)
- 11) Bioremediation



➤ **Sustainable biotechnology should complement but not contradict various SDG**

Defined by the multi-stakeholder Forum on Science, Technology and Innovation for the SDGs New York, 15-16 May 2017, for SDGs see <https://sdgs.un.org/goals>

Ensure sustainable biotechnology through global partnership and quality education in biosafety and biosecurity

- Foster and support regional and local biosafety organizations and their interaction and information exchange, globally
- Support adoption of ISO35001 Biorisk management for laboratories and other related organizations
- Engage in the development of the ISO/TS5441 Competence requirements for biorisk management advisors

