Industry 4.0 for Inclusive Development

Introduction of the Report of the Secretary-General (E/CN.16/2022/2) by the CSTD Secretariat

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The big picture

- Increasing inequality
- Uneven and slow industrialization
- Effects of COVID-19
Industry 4.0

- "Smart" and connected production systems
- Few countries and firms lead the development of Industry 4.0
Benefits

Productivity

- Visibility of processes and optimization
- Increase in production line availability by 5 to 15%.
Benefits

- Use of energy sensors & IoT reducing power consumption
- Changes in algorithms increasing energy efficiency of robots
Benefits

- Reducing waste in production processes
- Savings in using 3D printing
Industry 4.0 and inequalities

- Jobs, wages and profits
  - Profitability of firms & wages of skilled works
- Technological revolutions
  - Technological gaps
Specific challenges

Loss of jobs

Reshoring

Protecting workers

Gender perspective
Tackling the pre-conditions for Industry 4.0

- Diversification
- Digital infrastructure
- Digital skills
- National strategy
- Multistakeholder mechanism
- International partnerships
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<th>Fostering adoption of Industry 4.0</th>
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<td>Raise awareness</td>
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<td>Investment promotion plan</td>
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<td>Financing</td>
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<td>Protecting workers and easing workforce transitions</td>
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International collaboration

- Share Knowledge & information
- Design policies, strategies & implement initiatives
- Build capacity
- Promote technology transfer
- Legal frameworks, guidelines, norms & standards
Conclusions

- Diversification and increasing manufacturing competency
- Investment in digital infrastructure and workforce skills for industry 4.0
- Ethical frameworks and guidelines
- International cooperation on exchange of knowledge and experiences
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