Introducing the World Economic Forum

02 Introducing C4IR India

03 4IR Transforming core sectors

04 Core challenges for Scaling and Adoption
World Economic Forum: Introduction

The International platform for multi-stakeholder cooperation since 1971

We execute projects via a community-led approach

1. **Create Communities**
   The Forum brings together leaders from business, government, academia, civil society and youth to work together to drive positive change. It starts with building awareness and facilitating cooperation.

2. **Shape agendas and mindsets**
   Synthesize Flagship reports, policy frameworks and strategies to influence government priorities, business strategies and public opinion.

3. **Execute Projects**
   Partners drive collective action through commitment to multi-stakeholder initiatives. Projects and collaborations started or supported by the Forum impact millions of people.
An unprecedented new global context

3.5 trillion
of earnings wiped out by COVID-19 for millions of people globally

94%
of workers are in countries where restrictions are in place. And 32% in countries where all but essential workplaces are closed

In 2020 global growth was
-3.5%

The World Bank Group expects to deploy up to
$160 billion
over next 15 months to support countries' responses to COVID-19

Fiscal stimulus packages have played a significant role supporting businesses in high-income countries but threatens to increase inequalities between richer and poorer countries
The COVID-19 pandemic has laid bare longstanding ruptures in our economies and societies. We are experiencing a social crisis of global proportions that forces us to rethink capitalism.

The “Great Reset” is a collaborative effort to reflect, reimagine, and reset our world, creating a healthier, more equitable, and more prosperous future.

The Forum provides organizations with unique opportunities to shape the principles, policies and partnerships needed to set the world back on track for sustainable economic growth.

The 5 dimensions of the Great Reset

- Advancing global and regional cooperation.
- Driving responsible industry transformation and growth.
- Harnessing the technologies of the Fourth Industrial Revolution.
- Designing cohesive, sustainable and resilient economic and social systems.
- Enhancing stewardship of the global commons.
C4IR India - Aligning to National Priorities and Scaling Globally

Accelerating the Adoption of Emerging Technologies for more Sustainable, Resilient and Prosperous Future for all through

- Innovative Governance
- Business models
- Community Ecosystems

Core Technology Areas
Ongoing Initiatives
2022 Priorities
Transformative technologies impacting Agriculture

**Sowing, Precision Agriculture and Crop health**

<table>
<thead>
<tr>
<th>Soil health monitoring</th>
<th>Precision agriculture for input and water use optimization</th>
<th>Crop health monitoring</th>
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<tbody>
<tr>
<td>- Govt. of India's comprehensive soil health card database: macro, secondary and micro nutrient contents, pH, EC, OC (ratio of N:P₂O₅:K₂O)</td>
<td>- Granular weather data, climate variability, seasonal &amp; short-term weather forecasts, crop imagery, monsoon patterns/ rain per unit of crop planted, soil profile and pattern of soil degradation, humidity</td>
<td>Annotated datasets with images that help diagnose plant diseases pests, nutrient deficiencies, crop damages for specific crop-types depending on soil and irrigation profiles</td>
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<tr>
<td>- Sensors and crop imagery</td>
<td>- Reduce agriculture's impact on water use by 2-5%</td>
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**Promoting value-chain linkages**

<table>
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<tr>
<th>Mobile service delivery</th>
<th>Farm Mechanization Efficiency</th>
<th>Blockchain-enabled traceability</th>
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<tbody>
<tr>
<td>Increase farmer income by 3-6% and reduce food loss by 2-5%</td>
<td>Digital twins of tractors, power tillers, combine harvesters, diesel engines, electric pump-sets</td>
<td>Reduce food loss by 1-2%</td>
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**Creating effective production systems**

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<tr>
<th>Agri credit and Insurance-AI and Big Data</th>
<th>Food sensing technologies for safety, quality, and traceability</th>
<th>IOT for real-time supply chain transparency and traceability</th>
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<tbody>
<tr>
<td>- Digital land records, risk based on past cropping patterns, acreage , yield estimates, periodic evaluation of farm-plot performance to reduce NPA-risk (crop growth, crop stage analysis), Smart sampling points for crop-cutting experiments</td>
<td>Reliable assaying and grading based on quality will help drive pan-India participation</td>
<td>Reduce food loss by 1-4%</td>
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<tr>
<td>- Credit history, demographic and financial data</td>
<td>Reduce food waste by 5-7%</td>
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Farmer income could increase by up to 2%

"estimated impact by 2030*
Fourth Industrial Revolution Technologies for Health 4.0

- Wearable, Digestible, Implantable
- Remote Health Management,
- Training, Patient treatment compliance
- Point of Care management

- Doctor consultations
- Diagnostics
- Medical education
- Practice Surgery

- Computation Pathology
- Primary health care
- Drug discovery
- Clinical decision support system

- Clinical casts
- Pills- Variable rate drugs
- Implants

- Mobile Health
- Robotic surgery
- Gene Therapy
- Precision Medicine
- Medicine From Sky-Drones
- Telemedicine
National Programme on AI

AI computing infrastructure for advanced processing

Ambitious challenges solving multi-sectoral problems
Deliverying solutions in various sectors

RESPONSIBLE AI
Creation of guidelines and tools to enable ethical AI design

National AI Data Platform
Critical to catalyse innovation and harness potential of AI

FINANCING AI
Support to Startups at Seed, Growth and Business Development

Skilling
Creation of new interventions to solve demand-supply gap for AI Talents in India