

- 01 **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*



The World Economic Forum is the International Organization for Public-Private Cooperation.

Our purpose is to bring together stakeholders from all sectors of society to shape the future for the better and generate great impact through purpose-driven communities and impact-driven platforms.

## We execute projects via a community-led approach



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.



Synthesize Flagship reports, policy frameworks and strategies to influence government priorities, business strategies and public opinion.



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

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

**94%**

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

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 Great Reset

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



### Soil health monitoring

- Govt. of India's comprehensive soil health card database: macro, secondary and micro nutrient contents, pH, EC, OC (ratio of  $N:P_2O_5:K_2O$ )
- Sensors and crop imagery



### Precision agriculture for input and water use optimization

- Granular weather data, climate variability, seasonal & short-term weather forecasts, crop imagery, monsoon patterns/ rain per unit of crop planted, soil profile and pattern of soil degradation, humidity
- Reduce agriculture's impact on water use by **2-5%**



### Crop health monitoring

Annotated datasets with images that help diagnose plant diseases pests, nutrient deficiencies, crop damages for specific crop-types depending on soil and irrigation profiles

## Promoting value-chain linkages



### Mobile service delivery

Increase farmer income by **3-6%** and reduce food loss by **2-5%**



### Farm Mechanization Efficiency

Digital twins of tractors, power tillers, combine harvesters, diesel engines, electric pump-sets



### Blockchain-enabled traceability

Reduce food loss by **1-2%**

## Creating effective production systems

### Agri credit and Insurance-AI and Big Data



- 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
- Credit history, demographic and financial data

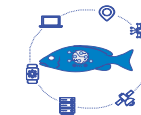
Farmer income could increase by up to **2%**



### Food sensing technologies for safety, quality, and traceability

Reliable assaying and grading based on quality will help drive pan-India participation

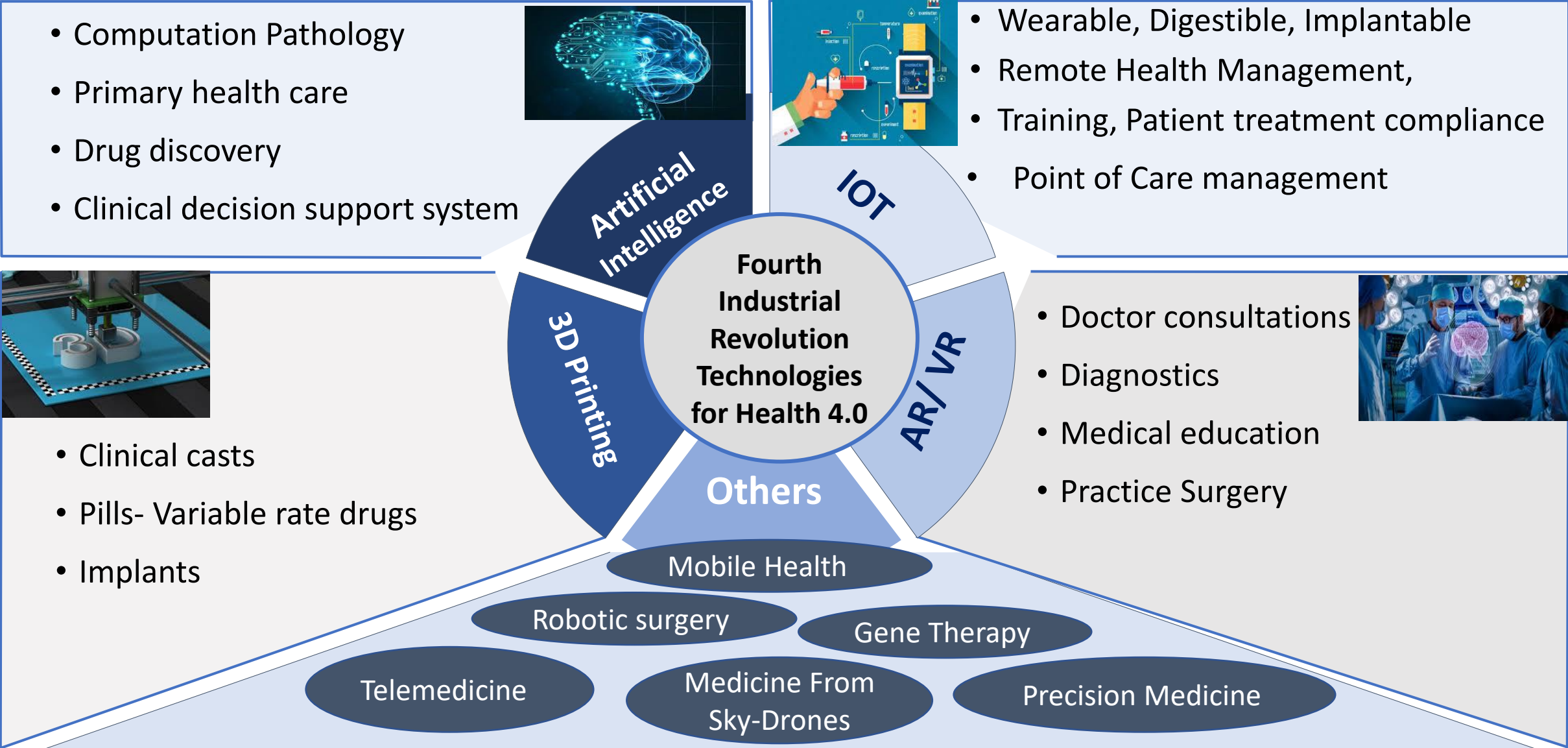
Reduce food waste by **5-7%**



### IOT for real-time supply chain transparency and traceability

Reduce food loss by **1-4%**

# Fourth Industrial Revolution Technologies for Health 4.0



# National Programme on AI

AI computing  
infrastructure for  
advanced processing



**National AI Data  
Platform**



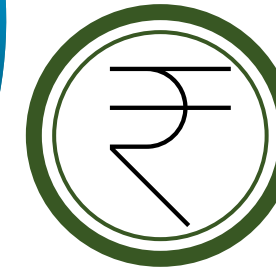
Critical to catalyse innovation  
and harness potential of AI

Ambitious challenges  
solving multi-sectoral  
problems



Delivering solutions in  
various sectors

**FINANCING AI**



Support to Startups at  
Seed, Growth and  
Business Development

**RESPONSIBLE AI**

Creation of guidelines  
and tools to enable  
ethical AI design



**Skilling**

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

