



Sri Lankan Experience with implementation of a National STI Strategy and opportunities and constraints for long term mobilization of capital financing



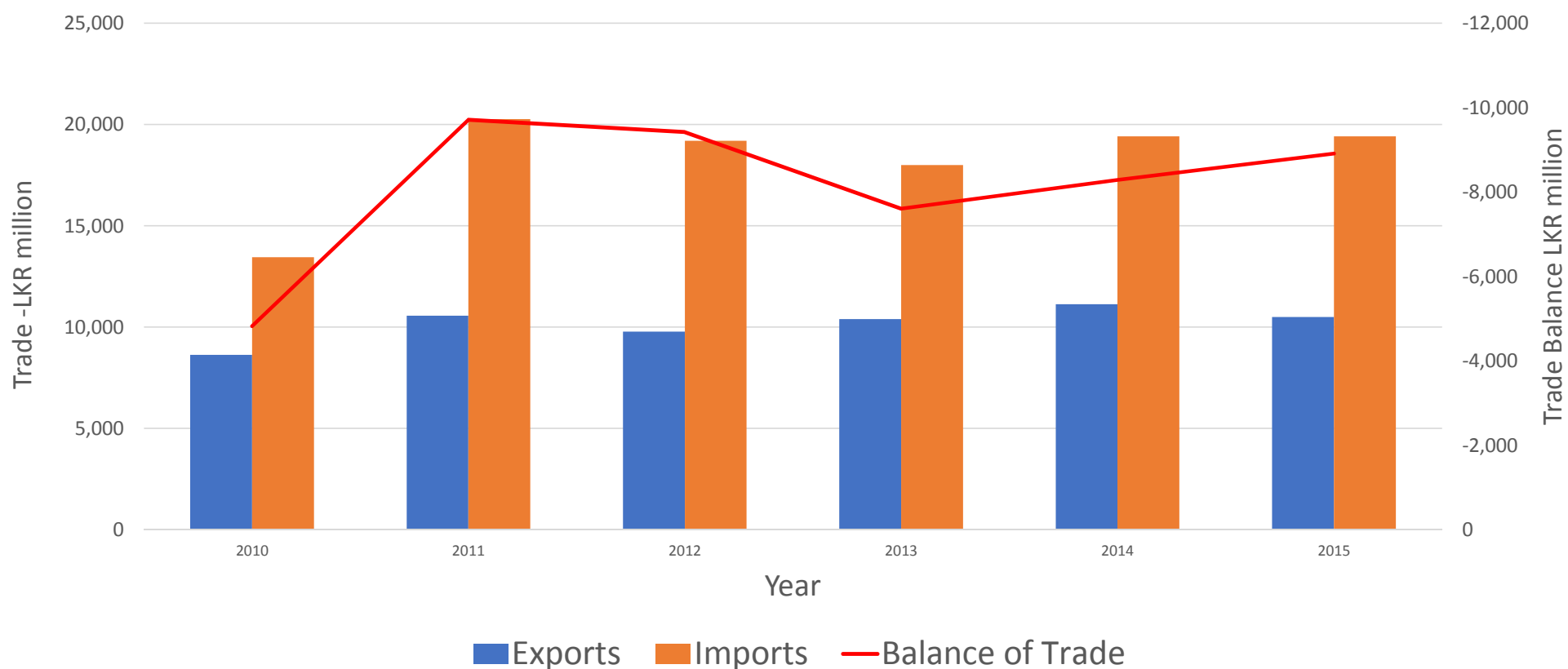
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ECOSOC Forum on Financing for development Follow up
Round Table D: Trade, science, technology, innovation and
capacity-building
(Action areas D and G)

25 May 2017

Sri Lanka's International Trade

... Need for high value added exports



Government policy to increase high tech exports

Foreign earnings	US \$ m in 2015
Immigrant remittances	6400
Apparel	4554.75
Tea	1324.5
ICT	800
Rubber	787.3
Coconut	522.69

- Increase high tech exports from present 1% to 10% by 2020
 - In STI Strategy
 - In Budget 2016

Status of Exports in 2014

	Global market US \$ Millions	Export Revenue for Sri Lanka US \$ Millions	Jobs in Sri Lanka
Total Exports	18,641,000	11,118.00	8,300,000
ICT Industry 2014	5,429,000	800	82,000
Electronics Industry 2014	1,500,000	343.4	40,000
Biotech Industry 2014	123,000	7	1000

Sustainability principles

Scientifically literate Society

World class National Research and Innovation Eco-System

**Hi
Tech
Initiative**

**Rapid Socio-
Economic
Development**

**Techno-
entrepreneur-
ship initiative**

Directed Innovation

World class National Research and Innovation Eco-System

Scientifically literate Society

Sustainability principles

The 3 pillars of Directed Innovation





Lab/ field level Research



Product or process Development

Policy direction/ guidelines



Large scale production/ use

Beyond Research

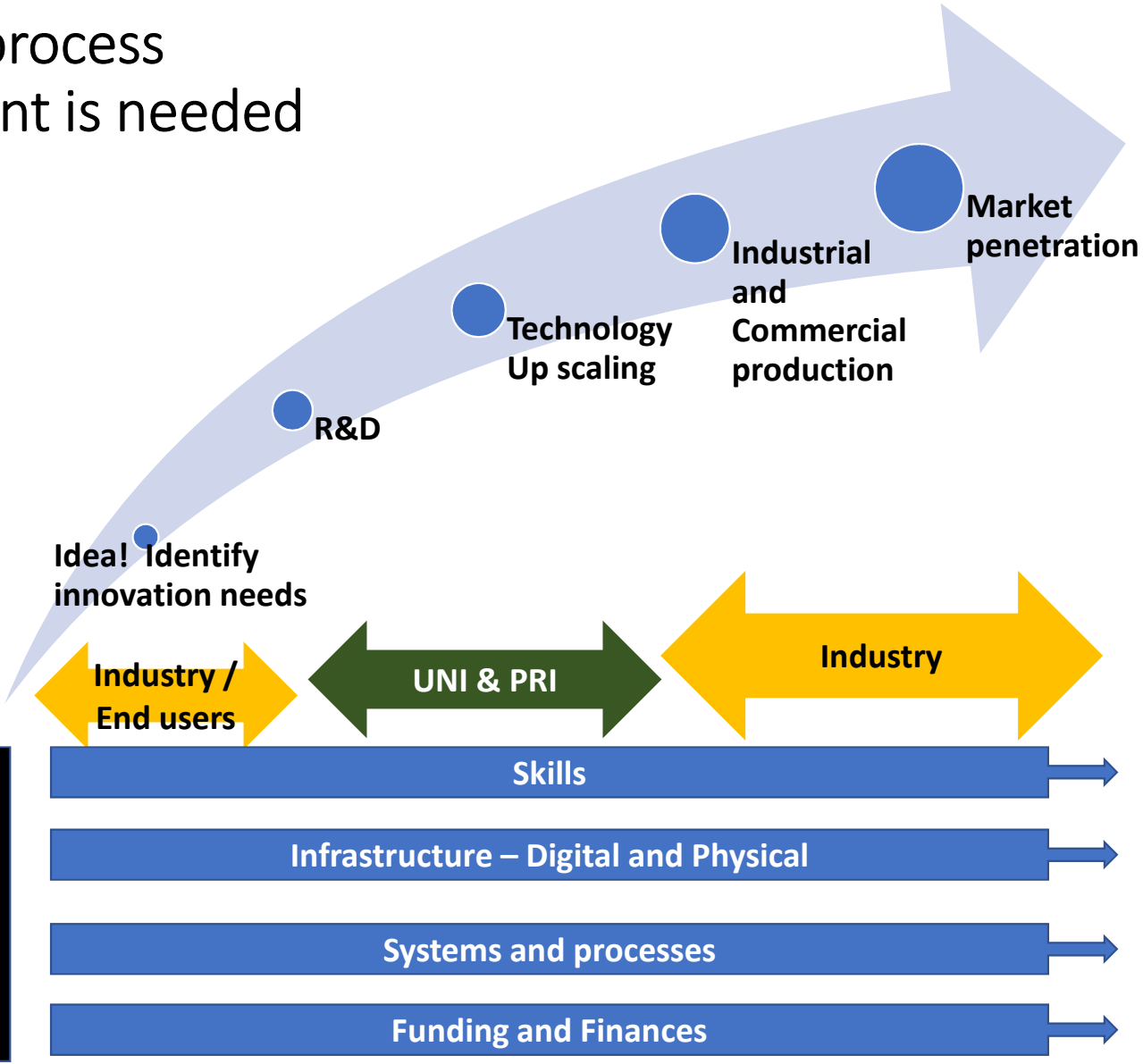
Commercialization

Economic development

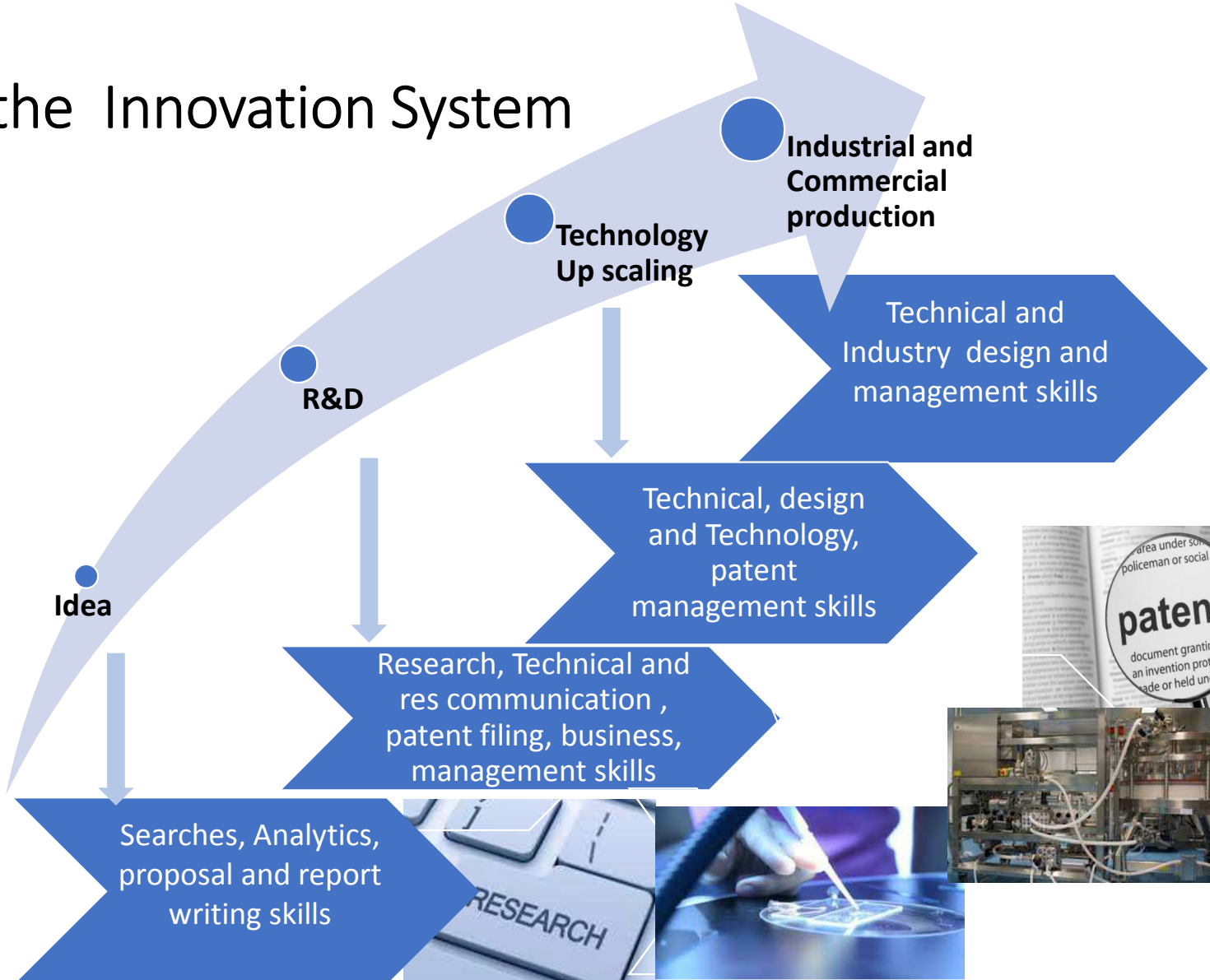
INNOVATION

**Welfare of the people
Social Development**

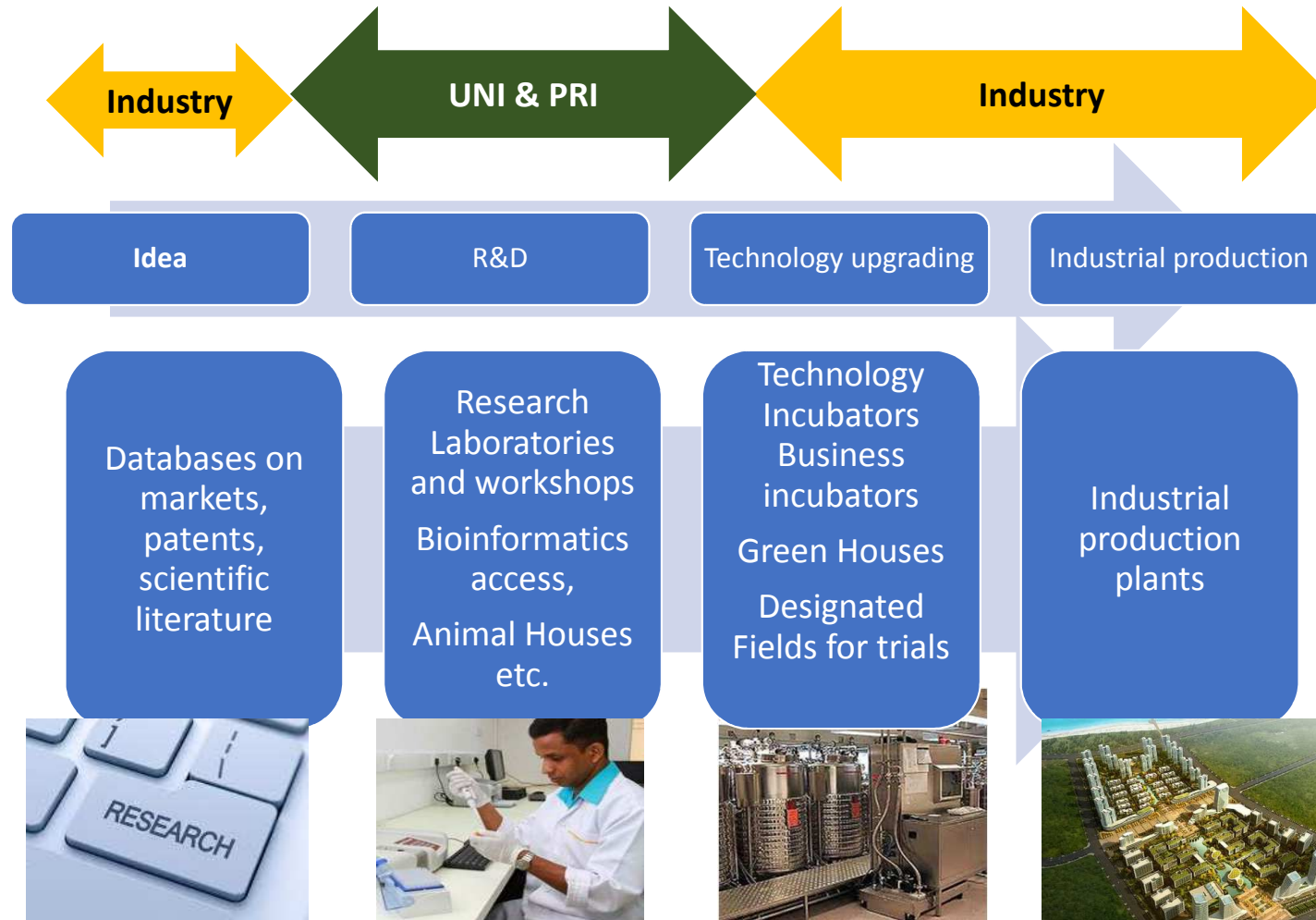
The innovation process Where investment is needed



Skills for the Innovation System

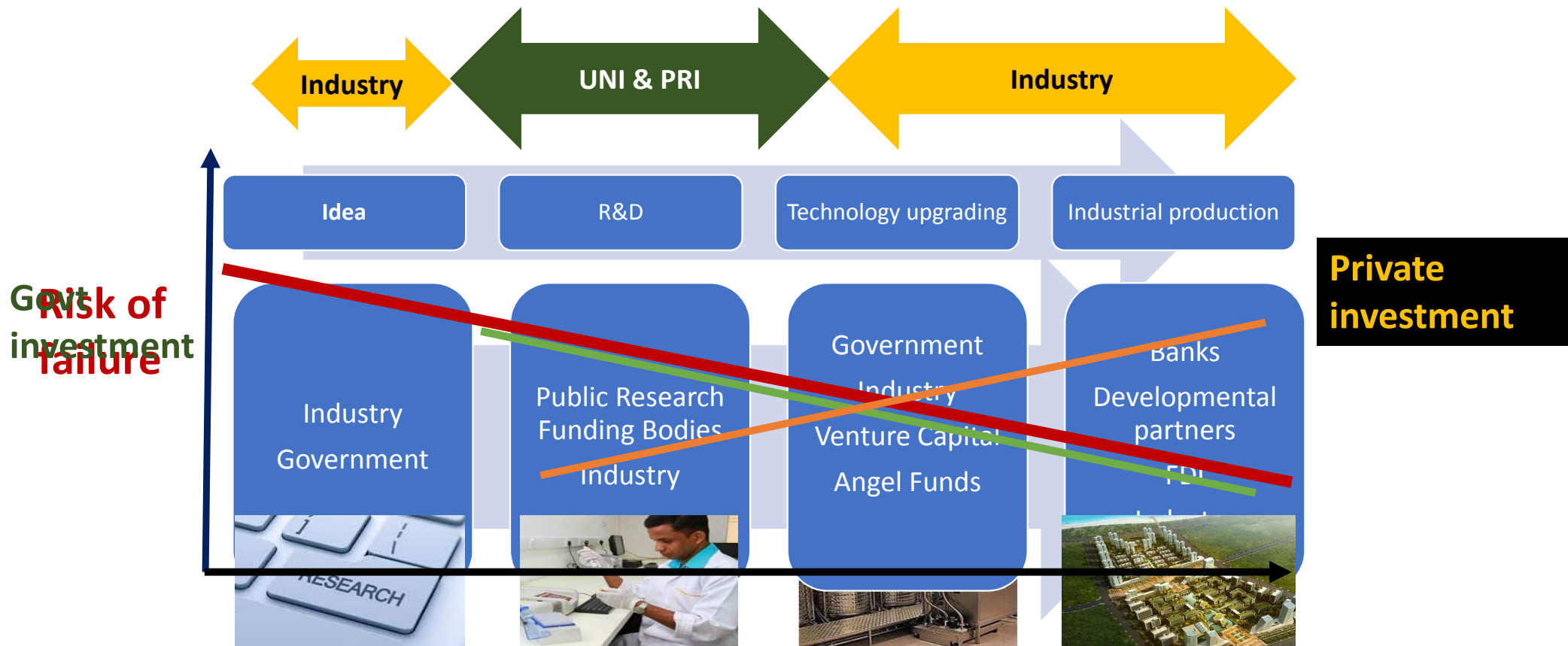


Innovation Infrastructure



Innovation Funding

Important to synergize, harmonize and coordinate





The status of the innovation system in Sri Lanka

Rank in the Global Innovation Index-142 Countries

A vicious cycle

Inadequate human resources for R&D
79/142

Low Investment in R&D
118/142

Outdated R&D infrastructure
92/142

Poor patenting and commercialization culture
100 /142

Ad-hoc R&D projects instead of focused programmes

Low level of industry oriented R&D
115/142

Poor investment in R&D by local industries
74 /142

Poor adoption/visibility of R&D output
76/142

- No significant contribution by R&D for wealth creation in SL
- Only 1.5% of our manufactured Exports are High Tech

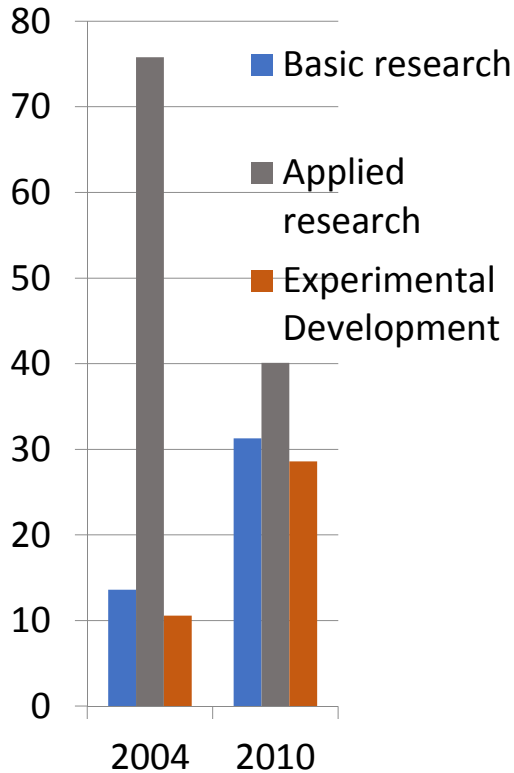
Government initiatives to increase high tech industries – Ministry of Science Technology and Research of Sri Lanka



Initiative	Partners	Year
National Nanotech Initiative (NNI)	NSF and 6 private companies	SLINTEC started in 2008 as a PPP
Centre of excellence in Robotic application (CERA)	COSTI and Ministry of Industries and Ministry of Science Technology and Research	2015
Sri Lanka Biotech Innovation park	COSTI and NBIA	(Approved by Cabinet in 2016 and to be initiated in 2017)

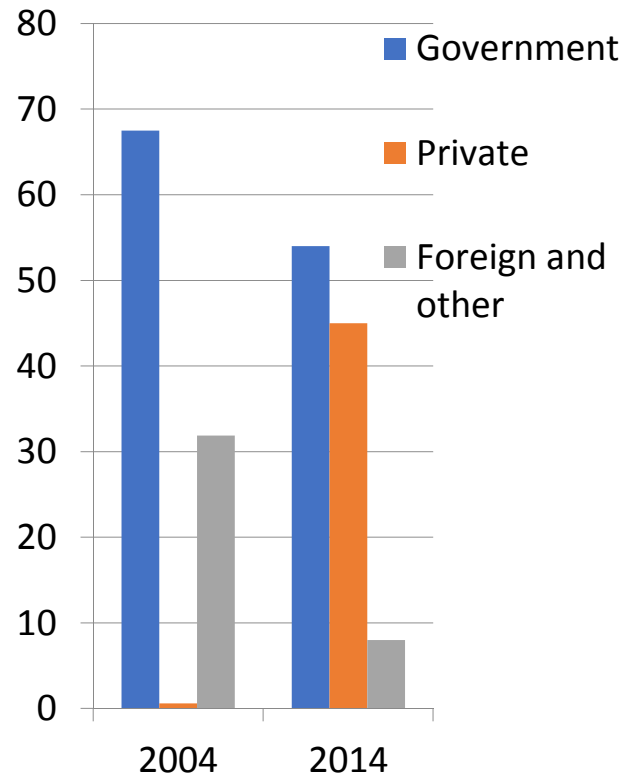
Changing landscape of the Sri Lankan research and financing

- A shift towards experimental development and research commercialization



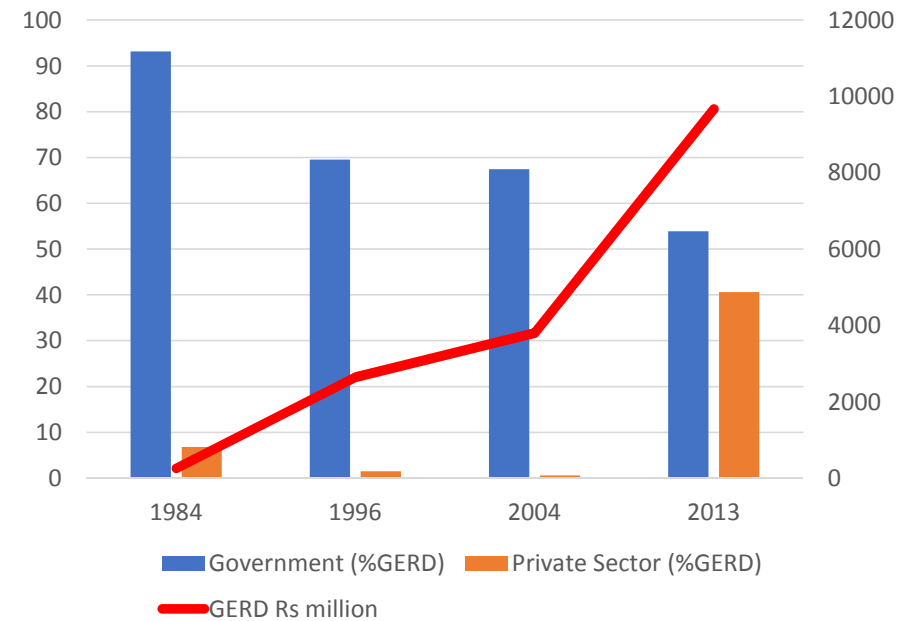
National GERD by type of Research

- Private sector enthusiasm for investing in R&D



National GERD by source

- Rise in total Government Expenditure on R&D (but not in keeping with rise in GDP – as %GDP)



Government and private sector investment in R&D (Gross and % GERD)

Constraints

- Competition to access regional and international markets
- Inadequate tools and skills to Identify niche opportunities and respond fast
- High migration of skilled workers and skills gaps and mismatches
- High cost of innovation infrastructure – not a preferred area yet for Governments (appointed for 5 yrs), development partners or FDI
- Failure of SL Accounting standards to capture intangible assets
- Risk averse financing systems