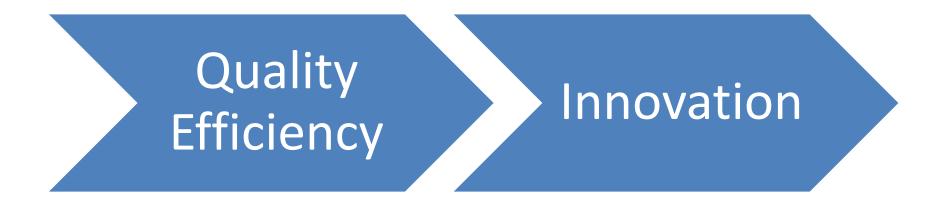
## S&T Workers for Innovation and Growth in Sri Lanka

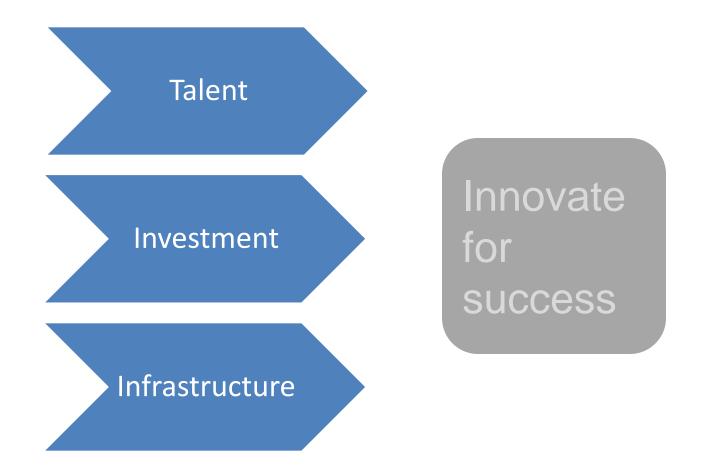
Nisha Arunatilake Institute of Policy Studies of Sri Lanka ADB-Asian Think Tank Development Forum 2018



Council on competitiveness, 2005, Innovate America



2





Innovate America (*Council on competitiveness 2005*)

### Skilled workforce

Sound business env.

Knowledge creation and diffusion

Promote Innovation

## Innovations

#### Better governance

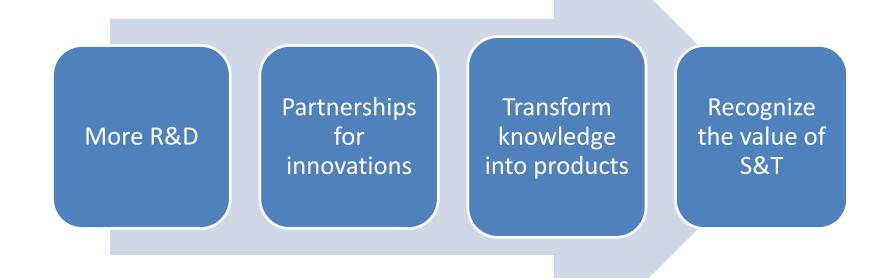


**OECD** Innovation Strategy 2015

## "Science, technology and innovation are central ... for building a more innovative and vibrant economy"

Source: Malaysia's S&T policy for the 21st century





#### Source: Malaysia's S&T policy for the 21st century



Among other things ...

"A high proportion of science and technology workers are needed for driving innovation!"

## OECD (2012) - 40%





## **S&T workers - Definitions**

Who is a science and technology worker (narrow definition)?

- Everyone who has successfully completed post-secondary education in an S&T field
- Or, is working in an associated S&T occupation

Canberra Manual, 1995



## Human Resources in S&T

Tertiary Educated (HRST-EDU)

University Level -Degree or above (ISCED 6-8)

## Technical Level -(ISCED 5)

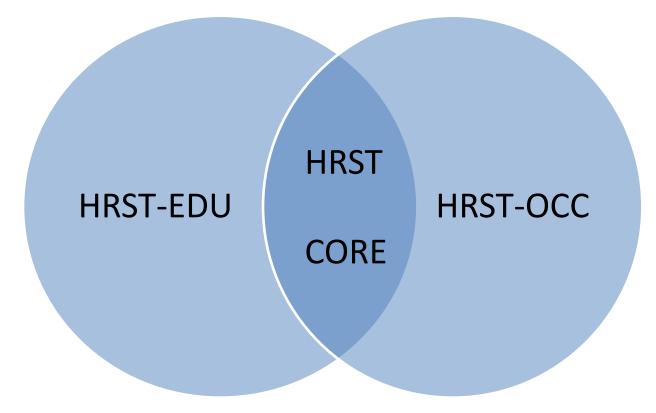
Occupied in a job requiring tertiary education (HRST-OCC)

> Professionals (ISCO – 2)

Technicians and Associate Prof. (ISCO-3)



## Measuring HRST

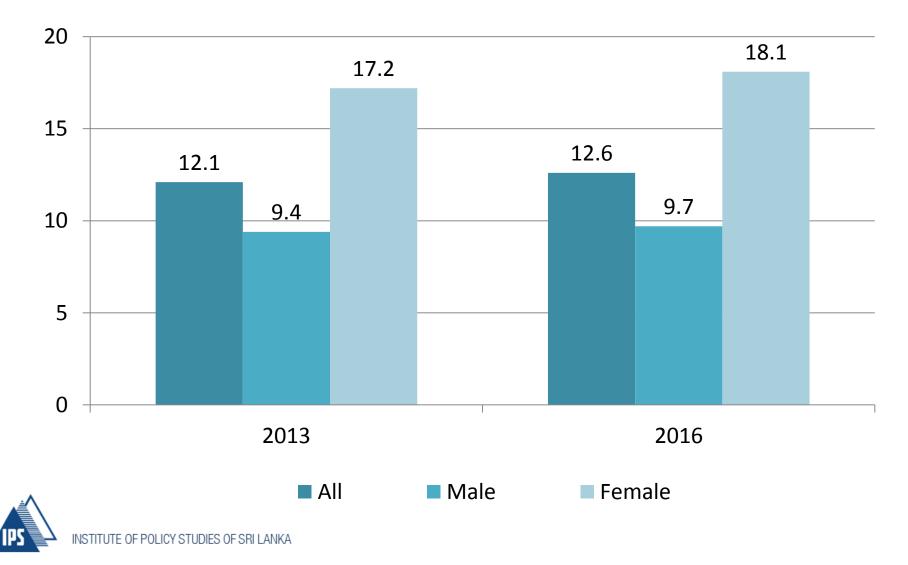




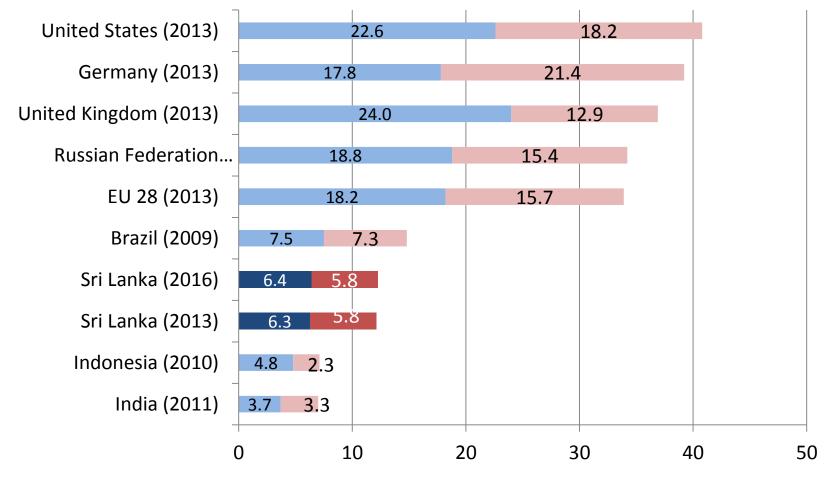
The Canberra Manual 1995

## Employment in S&T in Sri Lanka

# Share of HRST, by gender (%)



# Share of HRST in Employed (%)

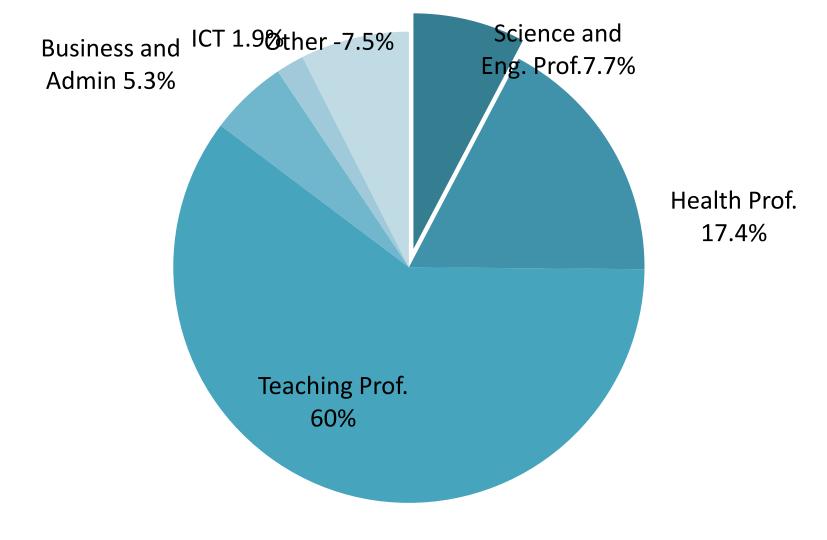


Professionals (ISCO 2) Technicians and associate professionals (ISCO 3)



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Source: OECD,2013 & LFS

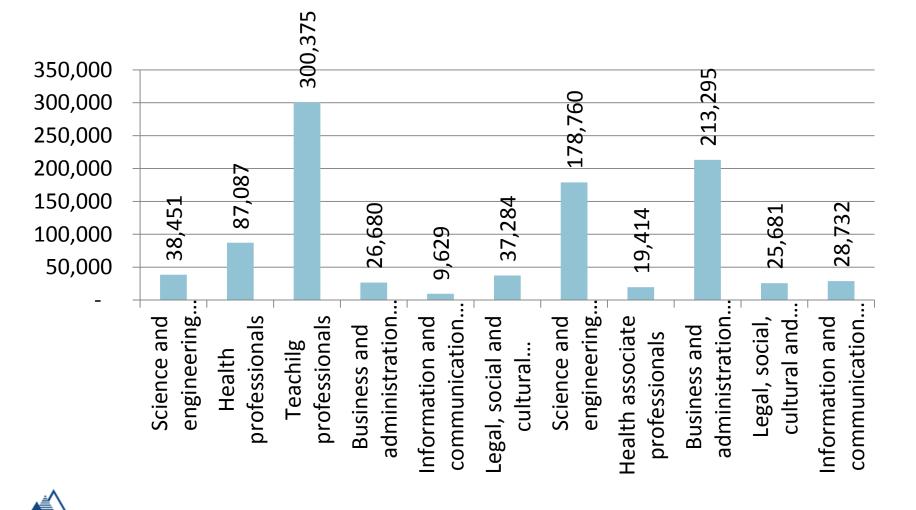


## Professionals, by type (%)



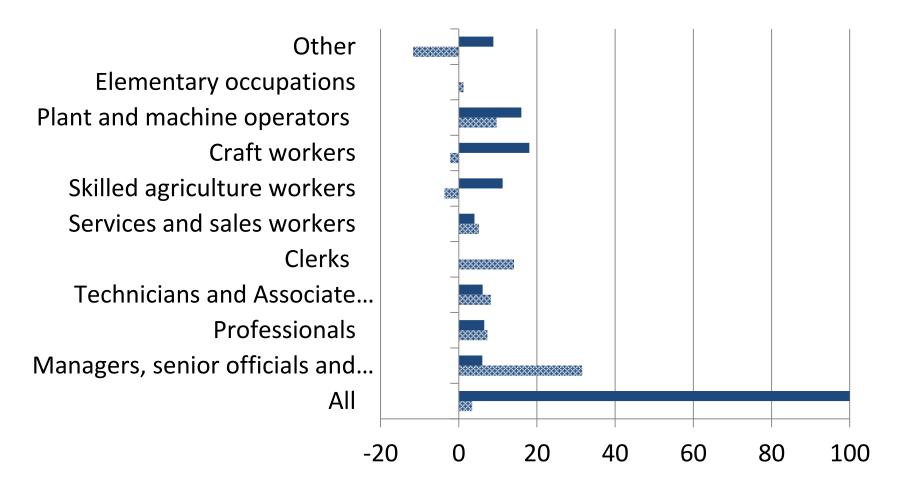
Source: Arunatilake 2016

## S&T Workers, by type (No.)



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# **Employment trends**



Model and the second se

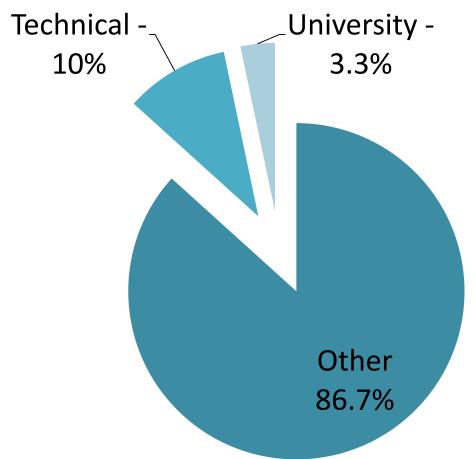


Source: LFS data

## **Tertiary Educated in Sri Lanka**

## **Tertiary Educated (HRSTE)**

15 and above population

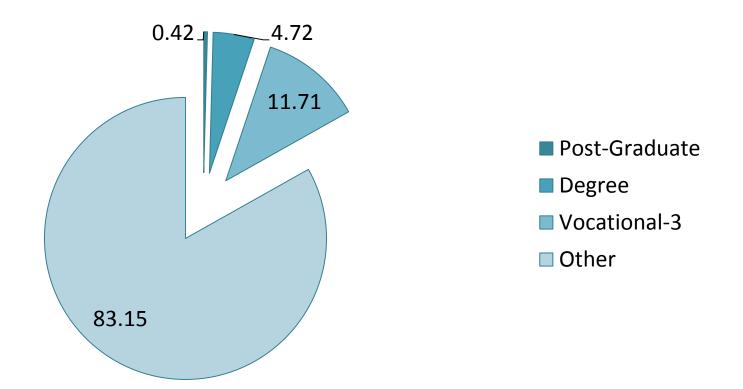






Census 2002 data

## Education of 30-39 year olds (%)



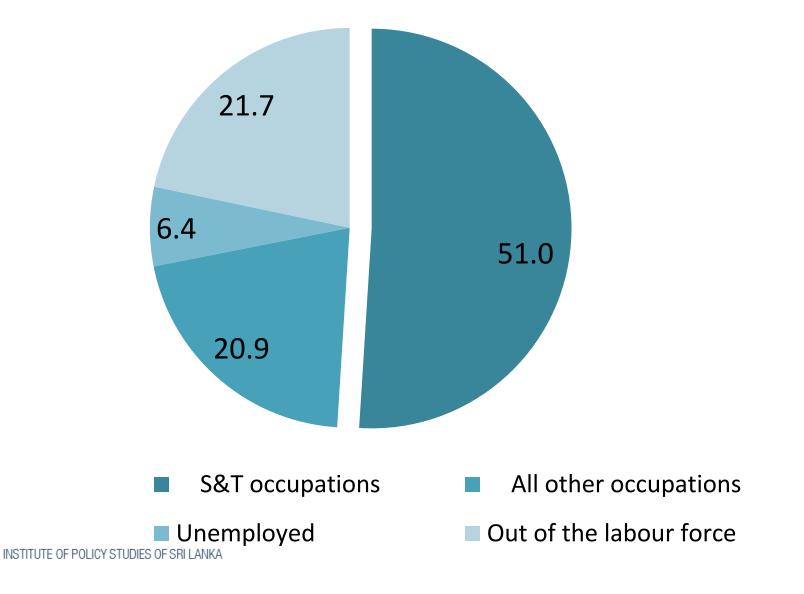
### • OECD tertiary educated target: 40% (30-34 year olds)



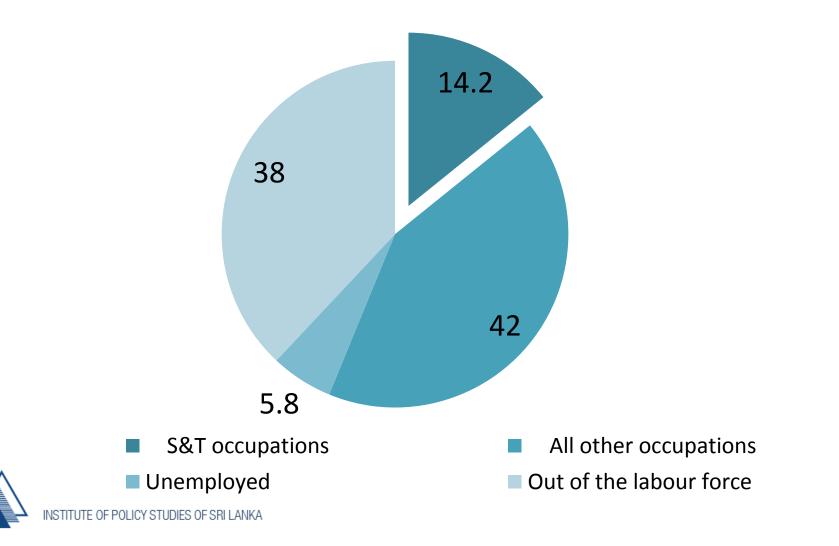
Source: Census 2002 data

Tertiary educated working in S&T occupations (HRST-CORE) in Sri Lanka

## University Educated, by activity



# Tertiary Educated – Technical Level, by activity

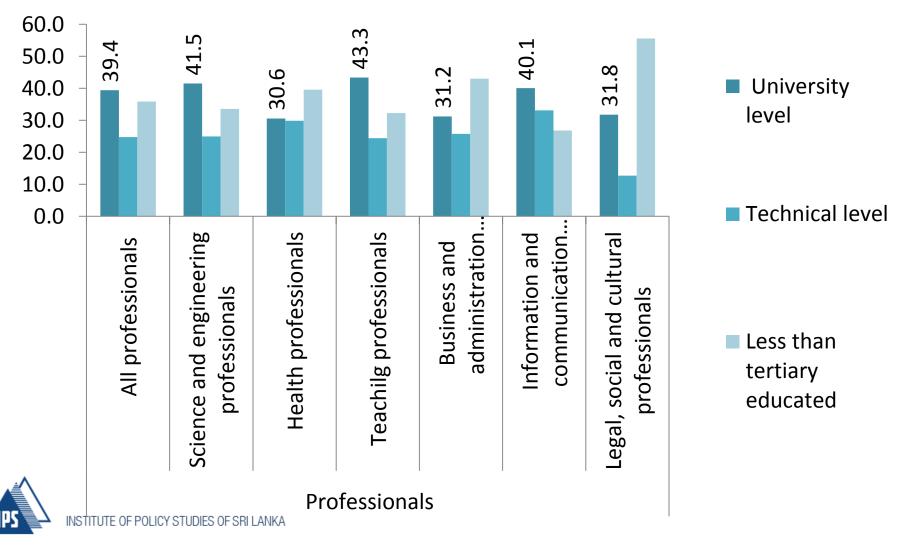


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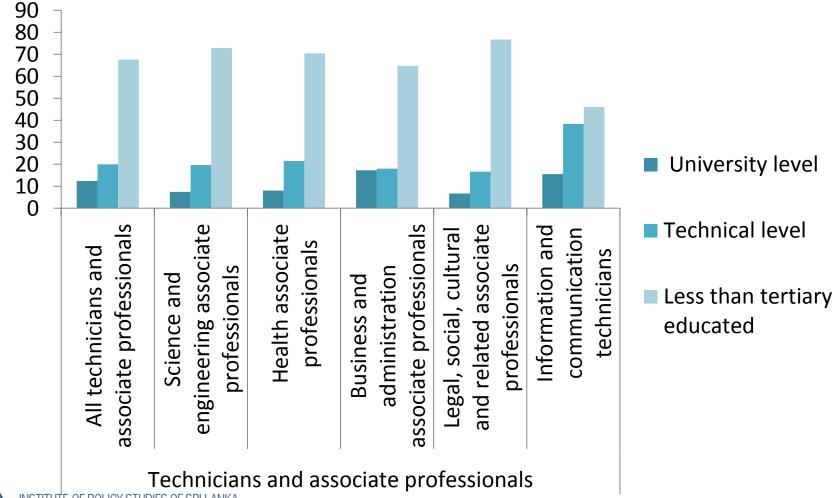
## Not Tertiary Educated – Technical Level, by activity



# Professionals, by Education



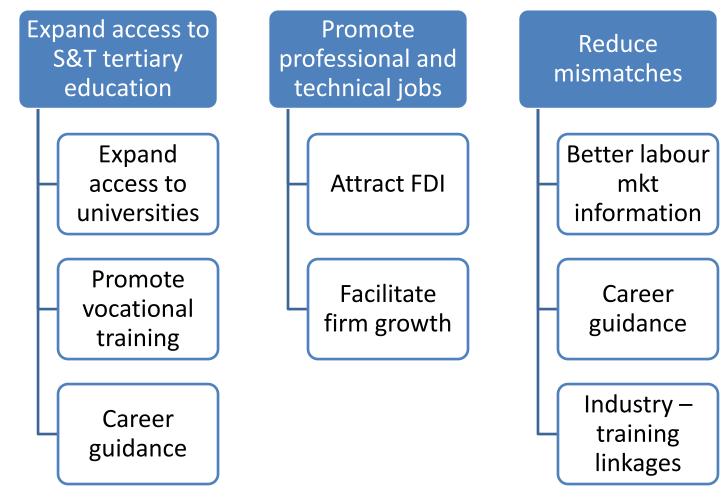
# Technicians and Associate Professionals, by education



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## Recommendations



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