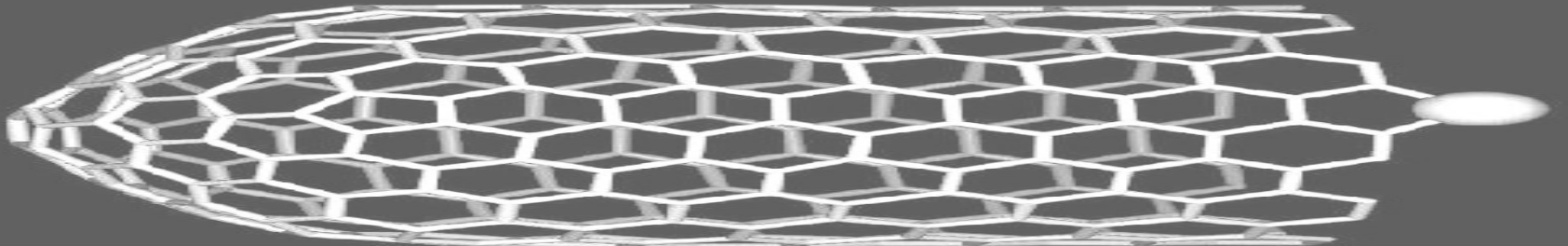
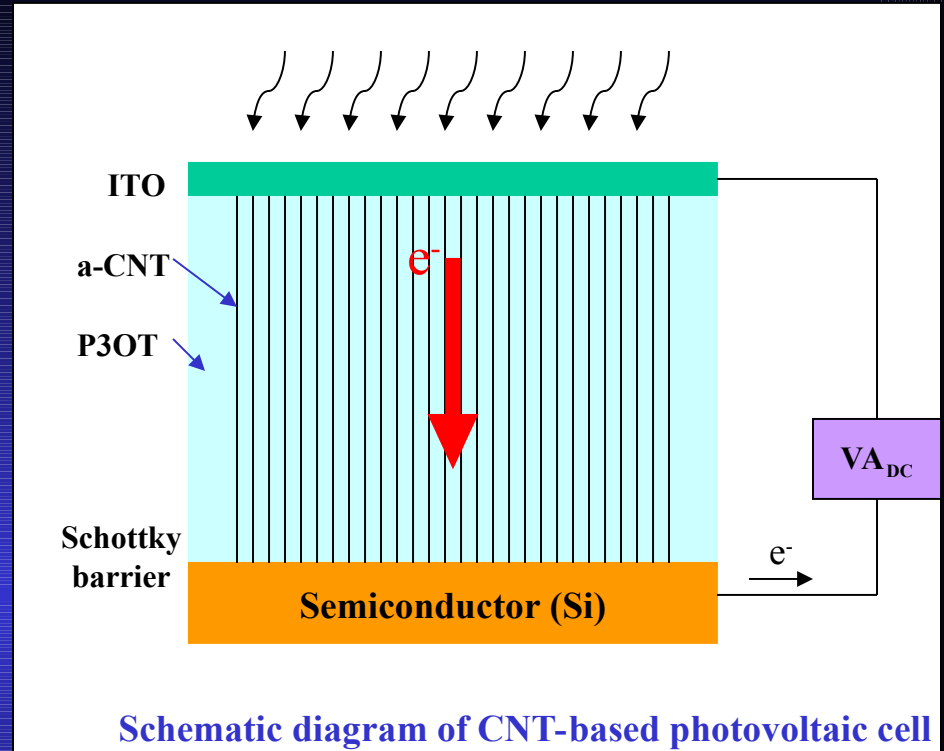


# CNT/Polymer Composite Based Photovoltaic Cell

Use poly(3-octylthiophene) (P3OT) as the photo-excited electron donors and nanotubes as the electron acceptors.

Aligned configuration to enhance contact area between polymer and CNT for better charge transfer Operating principle of this device

It provides around 50% Efficiency



# Liver Transplantation – Case Study

## Walking with a British Liver

Early Symptom

First Investigation

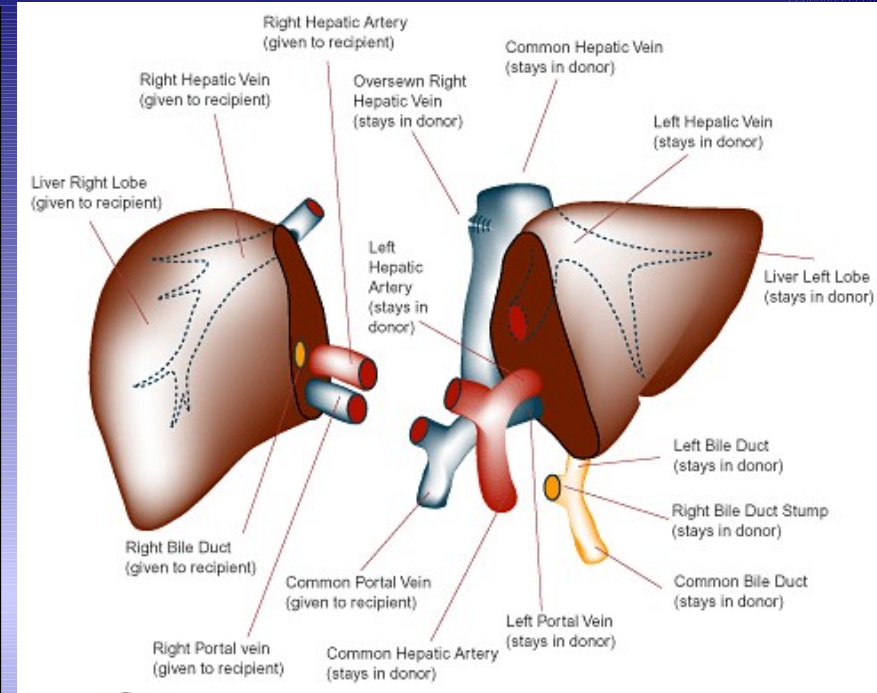
Recurrence in 1999

Alternative Treatment

Acute Condition

Decision for Liver Transplant

Long wait and Treatment in UK



- Address the problem of diagnosing this type of Liver disease in the early stage
- Intensive research to be carried out and find low cost medicines for post operative life long care of liver transplant patients
- India to have a specialized Health centre/Hospital for safe liver transplant

# TECHNOLOGY : INTERFACES

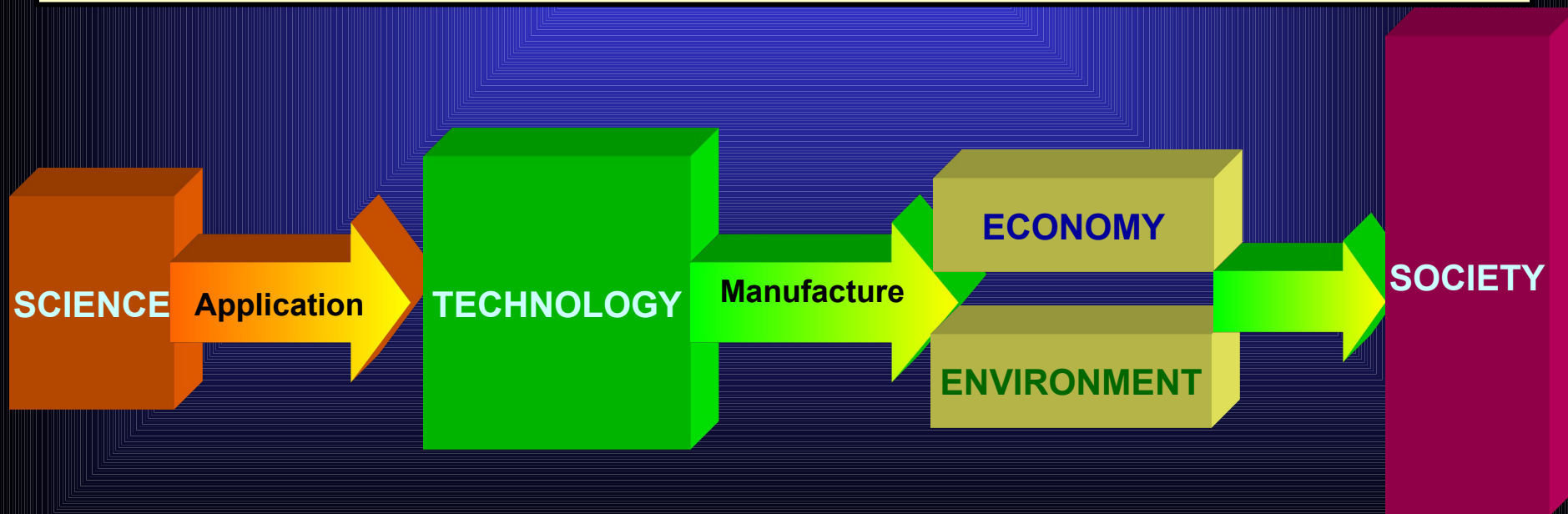
Technology is the most **Non-linear tool**

*Technology can effect the most fundamental changes in the ground rules of economic competitiveness*

**Science** is linked to **Technology** through Applications

**Technology** is linked to **Economy and Environment** through Manufacture

**Economy and Environment** link Technology to **Society**



# Our National Mission – Challenges

- We are one billion+ people
- 600,000 villages with 700 millions people
- 260 million are below poverty line ( 36 million are unemployed)
- How to uplift?

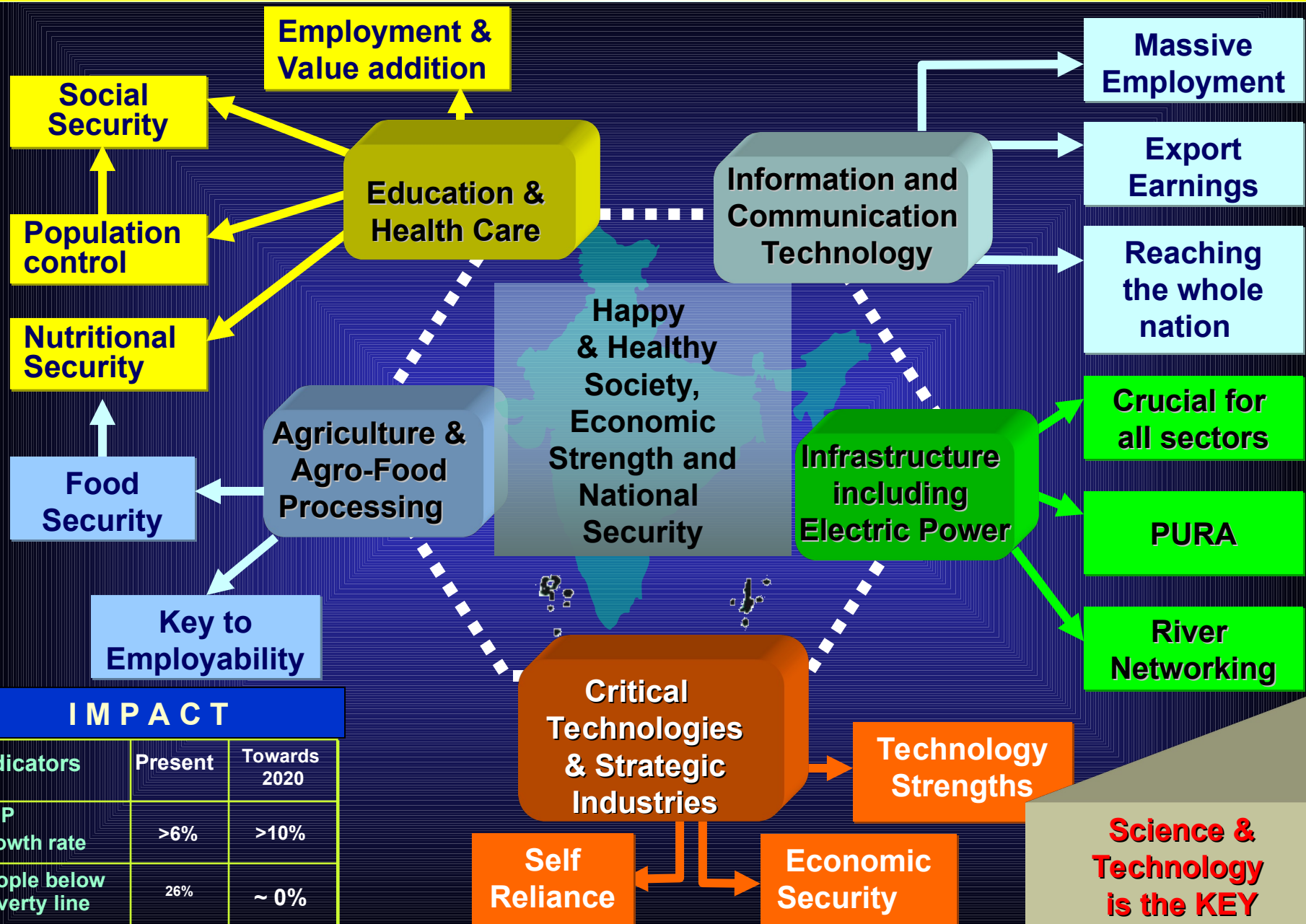
- Habitat
- Infrastructure
- Healthcare
- Education
- Employment
- Market connectivity
- Quality of Life

**Integrated,  
Simultaneous,  
Connected  
Actions**

**PURA – Providing Urban Amenities in Rural Areas  
Target : 7000 PURAs**



# INTEGRATED ACTIONS FOR DEVELOPED INDIA



# INTEGRATED ACTION FOR DEVELOPMENT

“Education  
for  
All”

Agricultural & Agro  
food Processing  
industries

Infrastructural  
facilities (Water  
& Energy)

Health Care –  
Nutritional  
Security

Potential for  
Industrial Growth  
– *Geo Strategic  
Initiatives*

CONNECTIVITY IS THE KEY

Population Management (1.1)

**MISSION  
OBJECTIVES**

**EMPLOYMENT  
GENERATION**

**&**

**RURAL  
PROSPERITY**