



# **From Research to Innovation – Role of technology transfer and innovation to implement the Sustainable Development Goals**

**International Workshop on Promoting Biotechnology Education, Research and Knowledge Transfer in Asia and the Pacific**  
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# Structure of the Presentation

- 1. Biotechnology and SDGs**
- 2. Scientific Discovery and Innovation**
- 3. Challenges in commercializing technologies**
- 4. Policies to facilitate innovation**
- 5. What APCTT could do**

# Current Global Challenges



**Climate change**



**Economic  
development  
and employment**



**Finite natural  
resources**

# Innovation is the key



# Innovation and Sustainable Development





# Biotechnology and Sustainable Development Goals





# Scientific discovery & Innovation

**New scientific discoveries/new technologies may lead to a patent**

**Innovation only takes place when this novelty is used**

**Then the benefits for the economy will emerge**



# Who produces innovations?



**Large  
enterprises**



**Small and  
Medium Sized  
Enterprises**

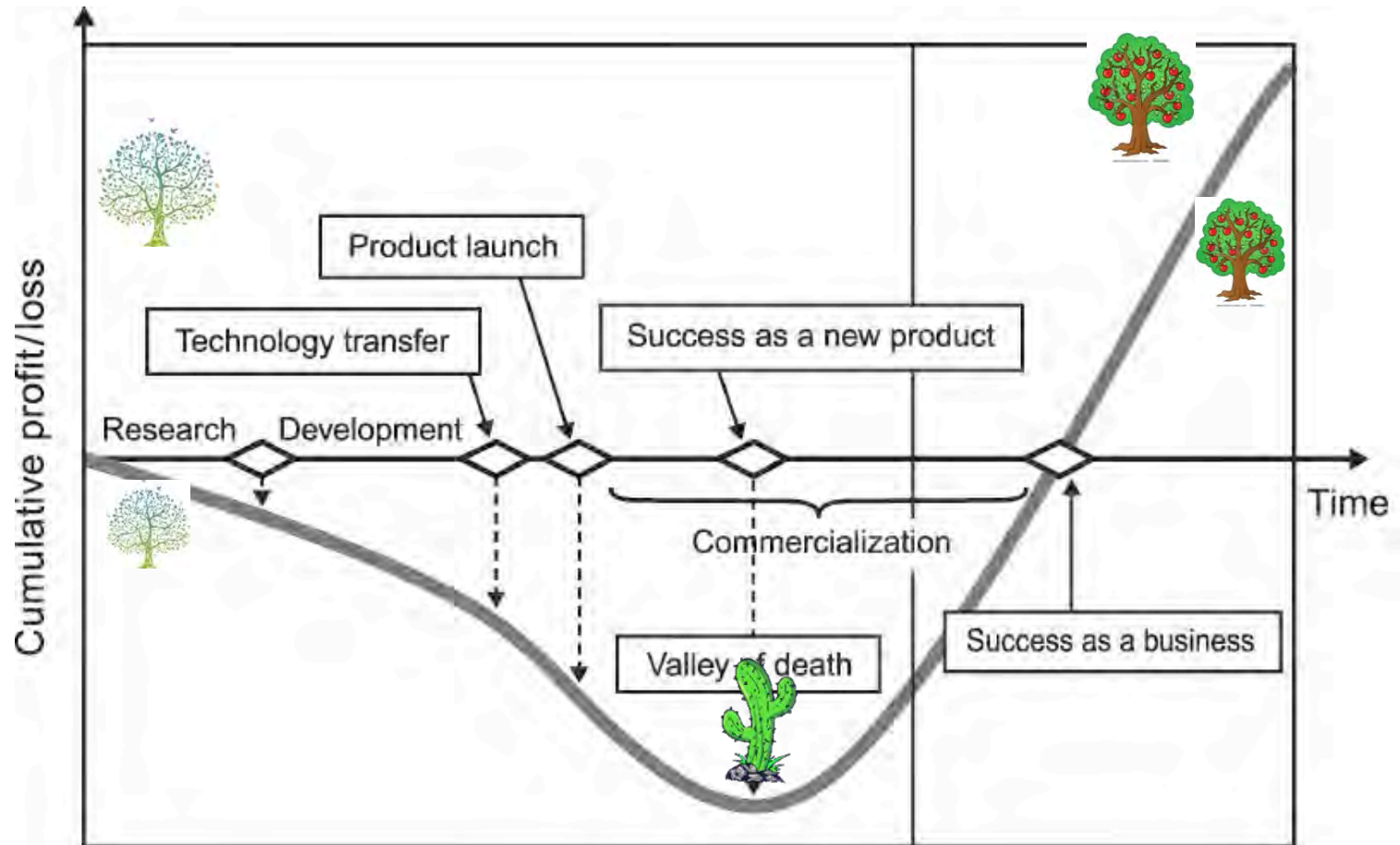


**Innovative  
entrepreneurs**



# Typical challenges Valley of Death

Source: Osawa and Miyazaki (2006)





# Enabling environment



1. High quality education, international cooperation, mobility of researchers, R&D expenditures
2. Robust intellectual property right (IPR) regimes
3. Efficient banking sector, venture capital and other sources of risk financing
4. Consistent and clear tax regulations
5. Attraction of innovation-friendly foreign direct investments
6. Good infrastructure (e.g. broadband internet access)
7. More entrepreneurship education

# Cooperation and linkages are important



[http://www.ecocleval.com/idi\\_en.html](http://www.ecocleval.com/idi_en.html)

# Innovation is a flower

Supporting sticks

Water

Enabling environment

Good seed

Good Soil

## & Government as a gardener

# Asian Pacific Centre for Transfer of Technology (APCTT) of the United Nations ESCAP



Established in Bangalore, India in 1977 by ESCAP member countries.

Assisting member countries of ESCAP in strengthening their capabilities to:

- Develop and strengthen science, technology & innovation policy
- Facilitate transfer, adaptation and application of new technologies;
- Capacity-building supports to improve the terms of transfer of technologies; and
- Identify and promote the development and transfer of technologies relevant to the region.

# What APCTT can do for you



Science, Technology  
Innovation Policy



Technology  
Transfer



Technology  
intelligence



**Thank you**