



**Asia-Pacific
Economic Cooperation**

2013/SOM3/HRDWG/016
Agenda Item: EDNET 4.6

Cooperative Alliance for TVET / CTE (Progress Report on Self-Funded Project)

Purpose: Information
Submitted by: Chinese Taipei



**35th Human Resources Development
Working Group Meeting
Medan, Indonesia
24-26 June 2013**



Cooperative Alliance for Technical and Vocational Education and Training (TVET) / Career and Technical Education (CTE)

HRD 04 2013S

Self-funded project by Chinese Taipei

Dr. Sheng-Tung Huang
June 25th

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TVE EXCELLENCE



OUTLINE

- 1 Historical development of TVE
- 2 Current TVE system
- 3 Recent TVE highlights
- 4 Chinese Taipei project proposal 2013

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**Chinese Taipei in the 1950s:
Agriculture as
Foundation to Economic Development**

Agriculture industry attracted majority of labor and capital

Agricultural gross constituted over 32% GDP

Agricultural population made up over 52% of working population

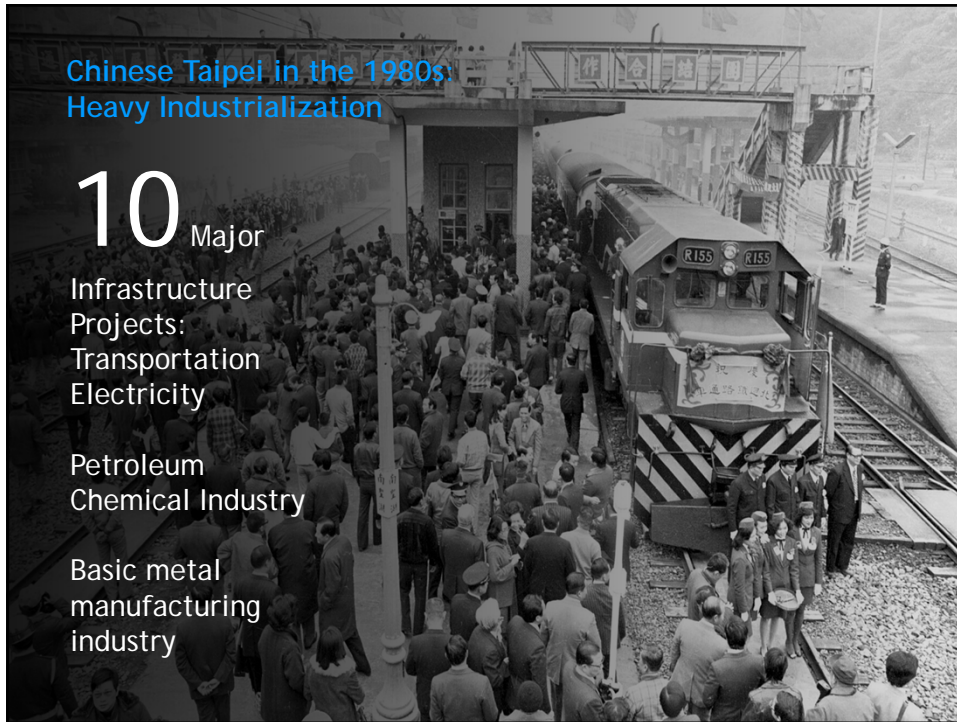


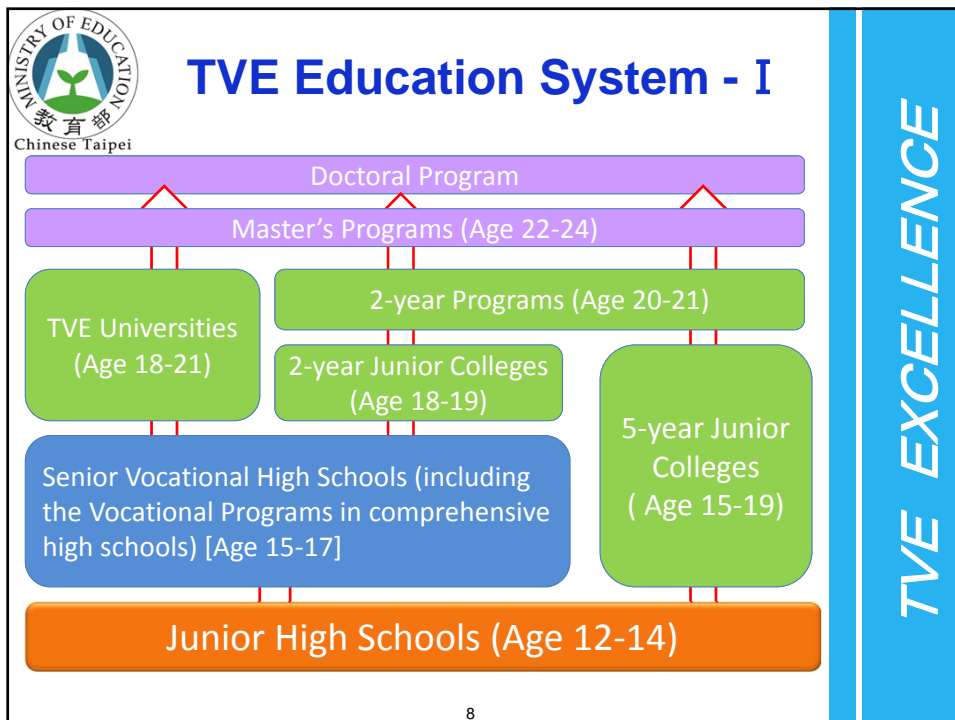
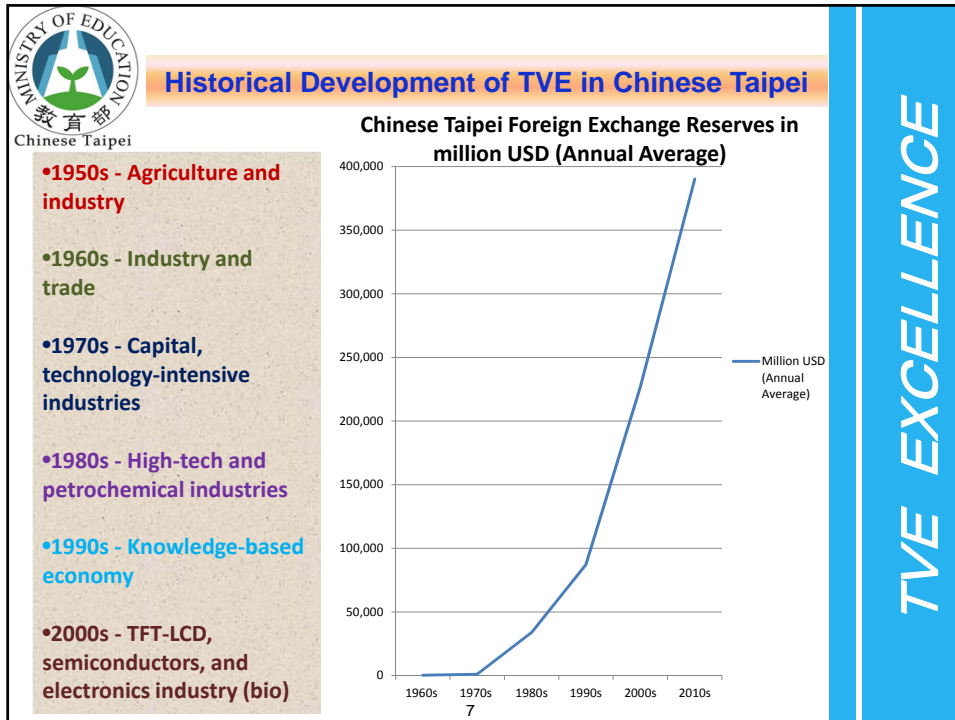
**Chinese Taipei in the 1960s-70s:
Light Industrialization**


Agricultural surplus became the foundation of industrialization

Excessive labor forces were released to the cities

Industry gradually drew both labor and capital from agriculture



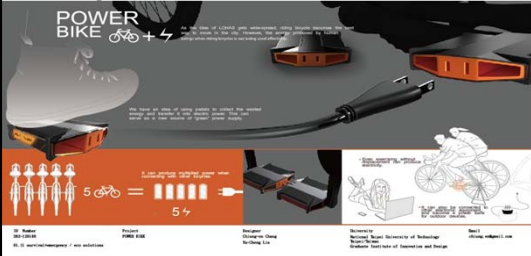




MINISTRY OF EDUCATION
教育部

Chinese Taipei


Recent TVE Highlights - I



POWER BIKE

5 bicycles = 1 person

- 2013 iF Concept Award – POWER BIKE



Kicked door

- 2013 iF Concept Award – Kicked door

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Chinese Taipei

Recent TVE Highlights - II



2010 iF Concept Award – 20Kg Weight Limit

- 2010 iF Concept Award – 20Kg Weight Limit



Goodriver

- 2013 iF Concept Award – Goodriver

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Recent TVE Highlights - III



- 2013 Geneva International Exhibition of Inventions (Switzerland) – Water Saving Planting Frame & Life Saving Socket
- 2012 Seoul International Invention (Korea)- Modern Garbage Bin and Modern Safety Helmet

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Chinese Taipei – Diverse TVE Curricula



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Chinese Taipei

APEC Project Goals

Cultivate manpower
Increase mobility
Eliminate unemployment



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Chinese Taipei


Chinese Taipei Self-Funded Project Proposal 2013 - I

- **Project Title & Number:**
Cooperative Alliance for Technical and Vocational Education and Training (TVET) / Career and Technical Education (CTE) --- **HRD 04 2013S**
(Project Overseer – Leehter Yao, President of Taipei Tech)

1. Create a discussion platform among interested APEC economies to share policy/ideas and practices.
2. Cultivate manpower for enhanced global mobility in rapid changing economy.
3. Facilitate TVE-industry cooperation in innovation, research and development, and personnel training to bridge the gap between TVE and industrial needs.

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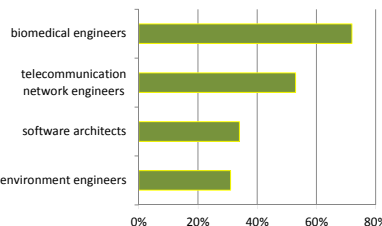


Increasing Demand for Engineers

Chinese Taipei

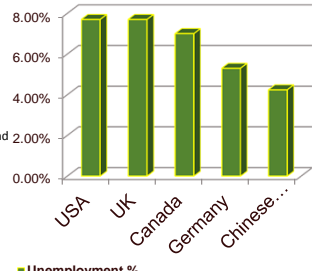
- **The U.S. Department of Labor expected the demand for engineers to increase by 11% between 2006-2016. (1)**
- **In the next 10 years, the U.S. demand for system engineers will increase by 45%. (2)**
- **Demand for engineers in Chinese Taipei in the recent five years has reportedly increased twofolds. (3)**

The US demand for engineers in the next 7 years:



Field	% Increase
biomedical engineers	~75%
telecommunication network engineers	~55%
software architects	~35%
environment engineers	~30%

2013 Unemployment Rate



Country	Unemployment %
USA	~8.0%
UK	~7.5%
Canada	~7.0%
Germany	~5.5%
Chinese Taipei	~4.5%

(1) CH2M HILL. (2013). *Inspiring the Next Generation of Engineers: Engineers Week (EWeek)*. Retrieved from CH2M HILL Web Site <http://www.careers.ch2m.com/worldwide/en/why-ch2m-hill/community-service/engineers-week/>
 (2) Abolowang. (2011). *Best job in the minds of Americans? Retrieved from Abolowang Web site* <http://tw.abolowang.com/life/2011/03/22/200018.html>
 (3) BCC New Networks (2013). *企業需求：5大工程師薪資需求變遷*. Retrieved from BCC New Networks <http://tw.newspub.com/FE%9C%81%EE%A5%AD%E6%90%B6%E6%89%8D-%E5%A4%A7%E5%B7%A5%E7%A8%8B%E5%B8%AB%E8%96%AA%E8%B3%87%E9%9C%80%E6%B1%82%E9%9B%99%E6%BC%B2-052734614.html>

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Chinese Taipei Self-Funded Project Proposal 2013 - II

Chinese Taipei

- **2014 Conference:**
 - **Focus on Engineering & Technology**
 - **Gained support of Australia, Indonesia, Japan, Malaysia, Russia, United States (in alphabetical order)**
- **Future highlights: Culinary & Hospitality Design & Cosmetology**

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 **Chinese Taipei Self-Funded Project Proposal 2013 - II**
Chinese Taipei

TIMELINE:

- August 2012 – Drafting of proposal
- January 2013 – Dissemination of draft proposal
- April 2013 – Submission of proposal
- May 2013 – Notification of acceptance
- 2014 – Conference

• Welcome to Taipei !!!

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Thank you for your attention!

Dr. Sheng-Tung Huang
Dean of International Affairs
Taipei Tech