UNIVERSITY-BUSINESS COOPERATION FOR REGIONAL DEVELOPMENT Case of Indonesia

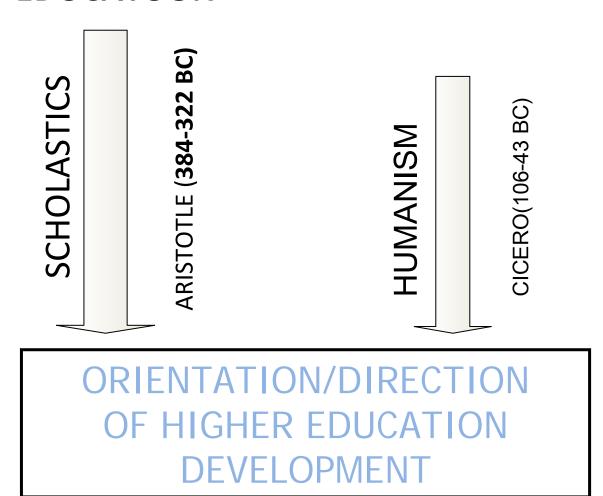
Edwan Kardena

- World is facing many problems. There are problems in the US...early this week Bill Gate was interviewed in CNN and aksed on what is his opinion on if student follow his path..drop out from university but the success in doing business...He is addressing the problem in US higher education..by saying that education is somtehing that need to be invested..
- In the UK there are also problems...to day the cost of tuition fee for home students was increased significantly
- I believe there are also problems in Europe and also Asia...

- Global issues such as climate change, global economic resession, food and energy security, environmental and water...are need to be seriously addressed.
- If not university...who else can take the initiative..
- University can contribute not only by the work of their professors through research, development and innovation but also by producing graduates having global competences that can survive and meet high criteria of global world

- International Presidential Forum hosted by KAIST in Korea on 8th November 2011 pointed out the need of university to adjust themselve so that they can produce graduates with global competences.....a borderless and creative education is needed....
- New academia must be created....To establish undergraduate and postgraduate programs we only need PhDs/Professors...to establish research university we need research culture..but soon this mind set will also be the pass...Creative Education..that will produce creative and innovative students need creative and innovative system of educations

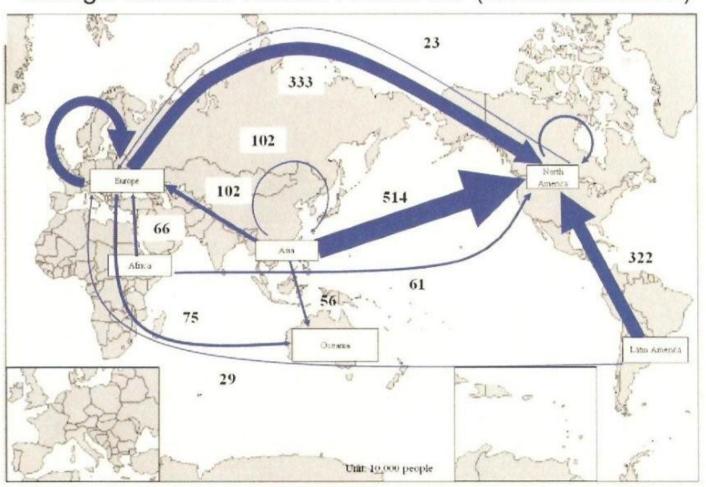
ORIENTATION OF HIGHER EDUCATUON



Globalisation in Higher Education

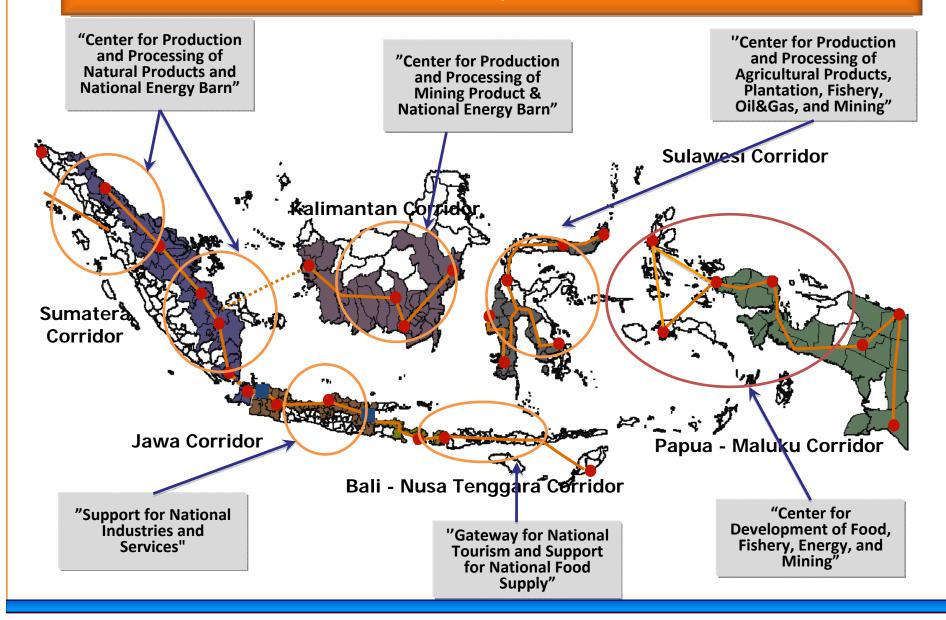
- Best students want to go to the best university
 - Case of Japan: Best students from (even) best university in Japan want to study in "better university"..such as in to the US or Europe
 - Case of Indonesia: Best students want to study abroad
- Best graduates want to go to the best job.
 Best job in a global context...means that best graduates will mostly go global

Interregional Migration of College Graduate Human Resources (stock base 2000)



Source: B. Lindsay Lowell, Trends in International Migration Flows and Stocks, 1975-2005,OECD SOCIAL, EMPLOYMENT AND MIGRATION WORKING (PAPERSDELSA/ELSA/WD/SEM(2007)13) (2007-09-27)

Accelerating Expansion of Indonesian Economic Development



Strategies for Development Expansion Acceleration

Strategies

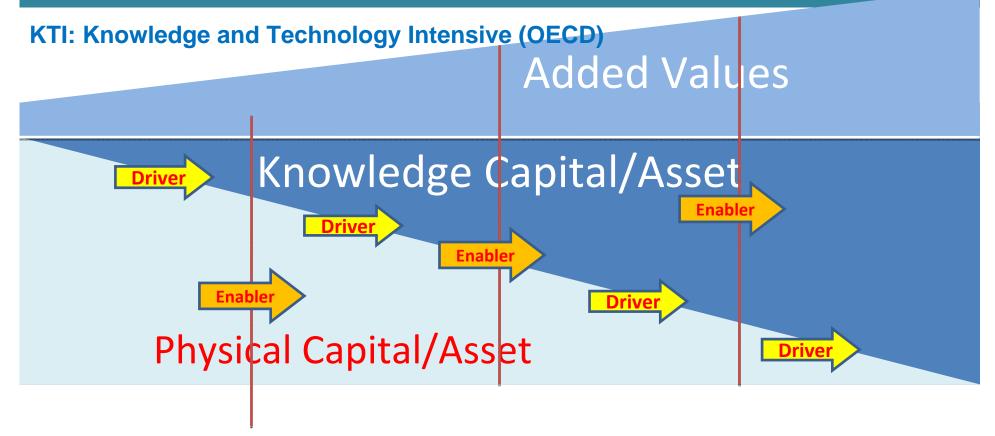
- 1. Develop Economic Potensials Through Economic Corridors
 - 2. Strengthen National Connectivity
- 3. Increase the Capabilty of National HR and National Science and Technology.

Policy

Develop Higher Education in Science & Technology (including engineering and mathematics) to conduct activities on teaching and learning, research, and community services completely and comphrehensively to support and in line with economic development program

Roles of Ministry of Education and Cultures

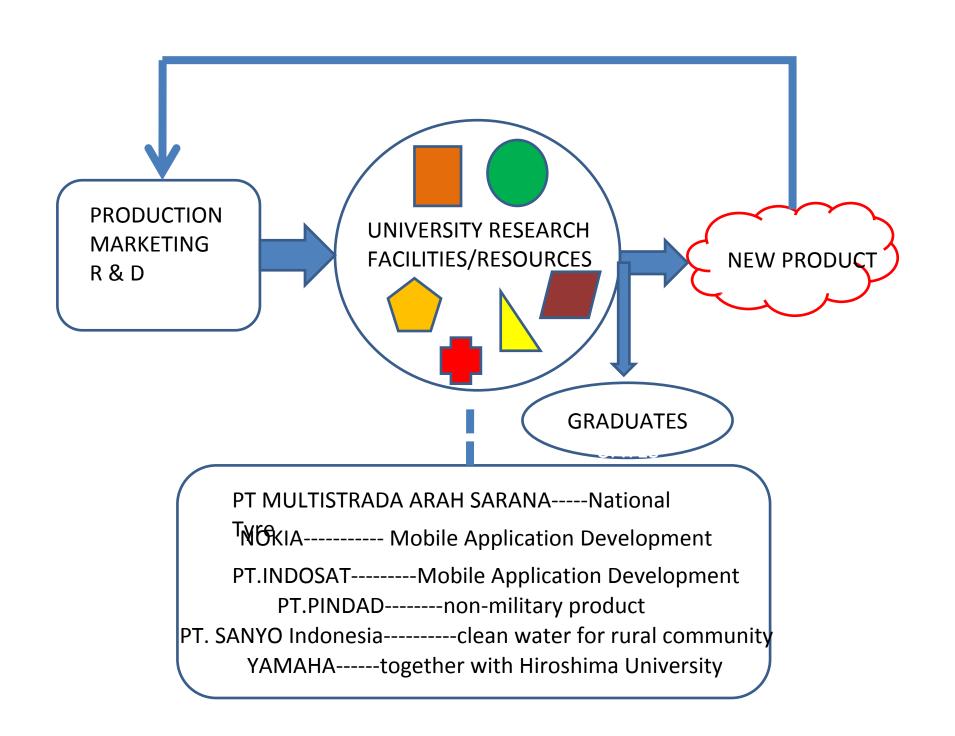
Roles of Higher Education in Economic Development

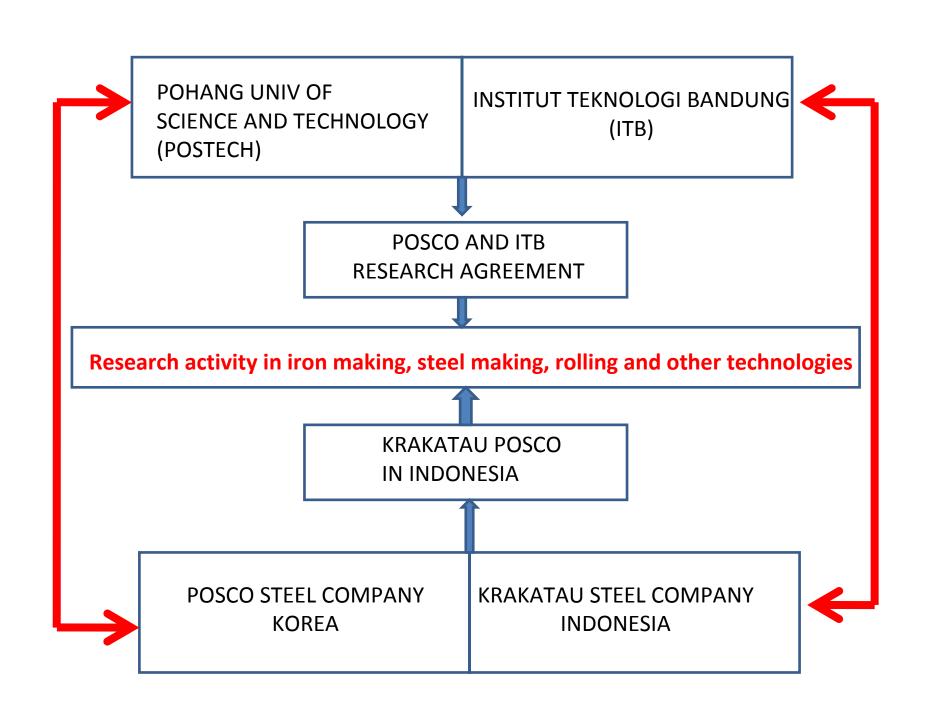


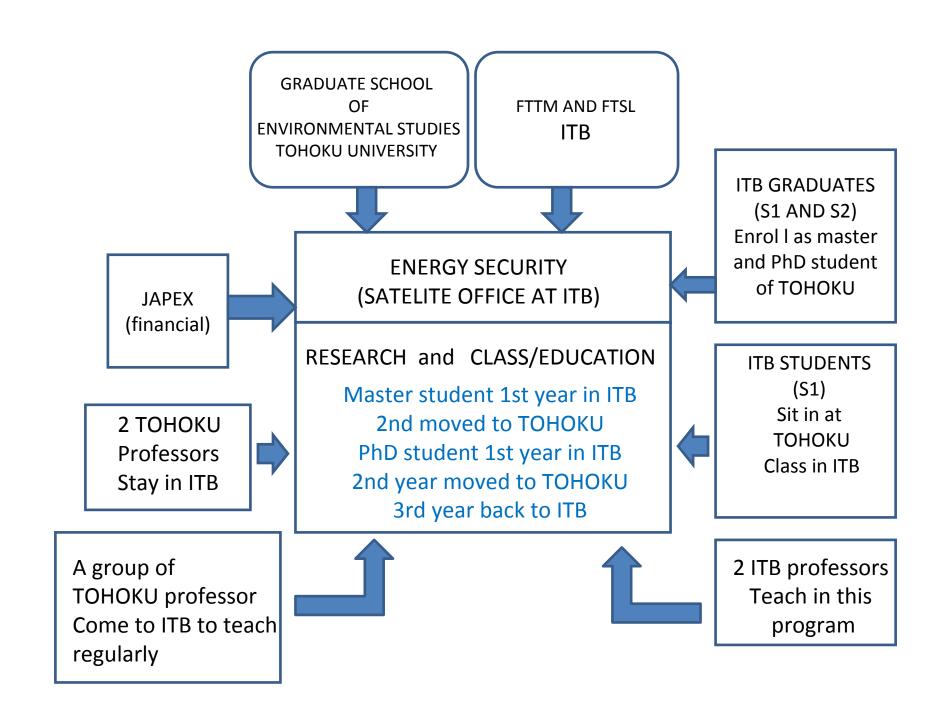
Primary Industries Secondary Industries Tertiery Industries KTI Industries

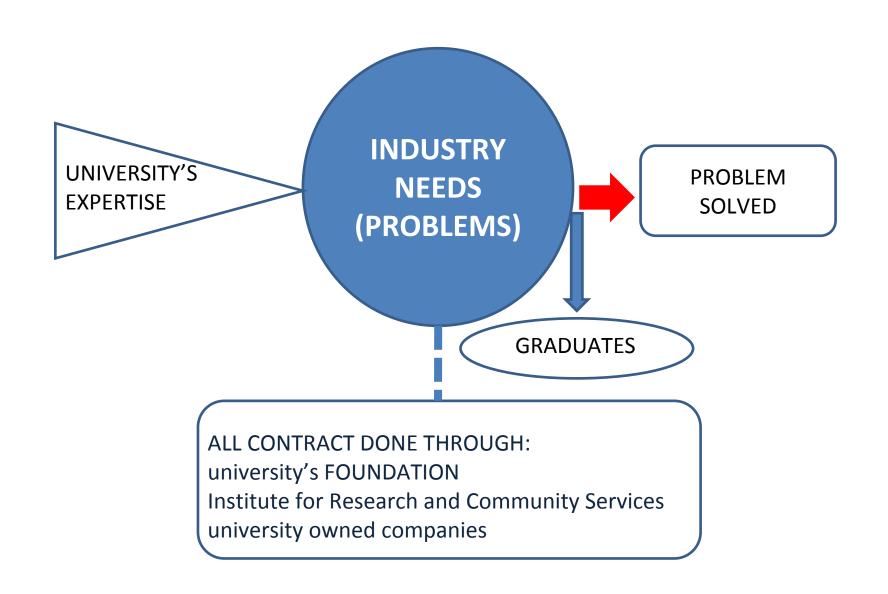
Driver	Produce skilled labors that can improve the work processes so that higher education graduates can increase productivity and added values to industries
Enabler	Produce research that can be implemented in product and process innovation so that new industries with higher added values are created.

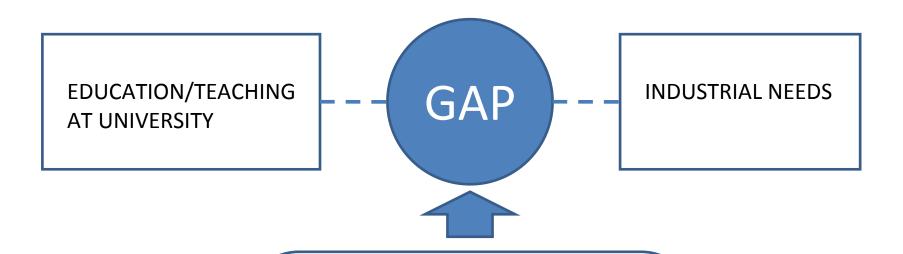
Model cooperation at the established/big universities











Training Center -----HUAWEI Indonesia

Software donation-----Schlumberger

Equipment donation-----TOTAL Indonesie
Internship-------PT Garuda Maintenance Facilitiies
(GMF)

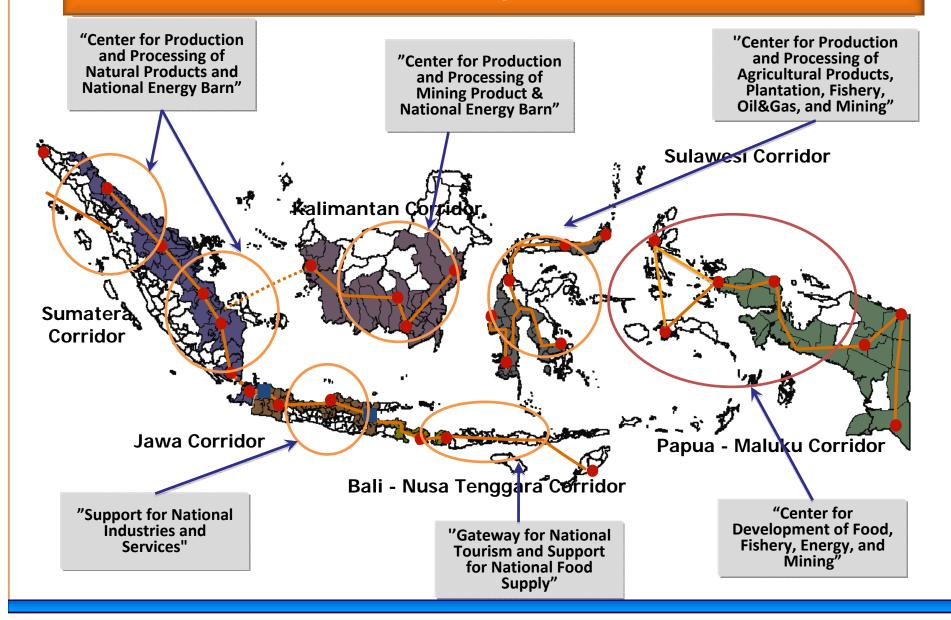
- UNIVERSITY JOB FAIR......
- CAREER DEVELOPMENT CENTRE (CDC)
- INFORMATION SESSIONS
- AGREEMENT WITH INDUSTRIES TO PROVIDE FACILITIES FOR STUDENT INTERNSHIP
- DEVELOPING ENTREUPRENERIAL SKILL through Institute for Innovation and Entreuprenerial Development/Incubator business

Ordered Oriented Training

- Normally at master level
- Students are employee of industries
- Examples:
 - Master of logistic (ordered by BULOG)

Regional Development

Accelerating Expansion of Indonesian Economic Development



Expansion of Laboratorium of Kampar Palm Oil Polytechnique (Sumatra)

- Establishment New Laboratorium for teaching and innovation in down stream process (especially using waste as material)..enabling students to learn how to establish zero waste palm oil mill industries
- Involving budget from KOICA and company from Korea
- Supported by 36 palm oil mill industries in the region
- Supervised by one big national university

Other Polytechniques linked with Industries

- Chevron/Caltex Polytechnique (Sumatera)
- Balikpapan Politechnique (Kalimantan)
- Art Polytechnique (Central Jawa)

Development of New Program Related to the Specific Need of the Region

- Mining Engineering at Cendrawasih University (Papua)
- Maritime/Ocean Engineering at Pattimura University (Maluku)
- Involving funding and technical assistant from Dutch government and universities...partnering with Indonesian universities...ITB for mining engineering and ITS for maritime/Ocean engineering