

# IDENTIFICATION OF THE SKILLS GAP FOR INNOVATION AND SUCCESSFUL INDUSTRIAL DEVELOPMENT IN TZ

Thomas Richard

Energy Efficiency Coordinator

CONFEDERATION OF TANZANIA INDUSTRIES  
(CTI)

# Introduction

- Unemployment rate is high (10.7% according to 2011 estimates by NBS)
- At the same time employers can't find the workers

# Introduction cont..

- **Commons skills demanded by industrial employers**
  - ✓ Knowledge of mechanical and electrical engineering processes
  - ✓ Ability to work with computerized systems
  - ✓ Ability to read and write machine programming code
  - ✓ Ability to read manufacturing blueprints
  - ✓ Ability to operate automated manufacturing systems
  - ✓ Understanding of hydraulic, pneumatic, and electrical systems
  - ✓ Basic management and communication skills

# What is skill and skills gap?

Skill is an ability acquired through learning to carry out a task with pre-determined results within a given time, energy or both.

Skills gap is the gap between what employers need and what the job seekers can offer. A familiar sound by most of employers is “Employment is up but can’t find the workers I need”

# Manufacturing sector situation in Tanzania's

- Manufacturing sector contributes about 11 % of formal employment
- About 85% of manufacturing sector work force are unskilled compared to 55% for most middle income countries.
- Majority of manufacturing industries are sourcing outside workers for the positions of managers, professionals, technicians and associate professionals

# What are the impacts of skills gap in Tanzania industrial development

- **Retardation of innovation and growth**

Government vision 2025 is Tanzania to be Mid-Sized Economy Country and this will be achieved through industrialization. Without addressing the skills gap challenges, this will be slowed down

- **Industries become uncompetitive**

To be competitive industries need to be innovative in quality of products, efficiency of production and even packaging.

# Causes of skills gap in Tanzania

- **Inadequate training institutions**

Tanzania do not have adequate training institutions

For engineering field (Engineers to population ratio)

UNESCO recommendation 1: 365

ERB data (2012) – 4000 Engineers

Ratio (2012) – 1: 10,000

# Causes of skills gap in Tanzania cont..

- **Inadequate right graduates**

Supply side (institutions) offering courses that do not match what is required by the demand side (employers)

More theoretical than practical

Labour based economy – Vocational skilled > professionals

Vice –versa in Tanzania

Enrollment for engineering (manufacturing & construction students is lower than expected but enrollment for social sciences, humanities, business management, law and administration is higher than expected (2012/2013)



## Causes of skills gap in Tanzania cont..

- **Reluctance of industries to provide training to employees**

Employers are unwilling to provide training because they fear that employees once trained will seek for greener pasture elsewhere

# Causes of skills gap in Tanzania cont..

- **Lack of coordination between the relevant policies**
  - *Supply side* - Education and training policy , National Science and Technology Policy
  - *Demand side* - National Employment policy

Missing link between supply and demand side (policy on skills development- skills/competence needed in the labour market)
- **Reluctance of industries to provide and support students during their practical training/internship**

Fear of damage to machines, production inefficiency, reduced production speed e.t.c

## Causes of skills gap in Tanzania cont..

- **The growing need for soft skills.**

Apart from skills relevant to areas of specialization, employers need other skills such as communication skills, management skills, leadership skills and other basic skills

*Labour market survey* – 70% of employers are of the view that low level of soft or behavioral skills on part of employees is a matter of serious concern as it affects productivity negatively.

# Causes of skills gap in Tanzania cont..

- **“Degree-holder-syndrome on the part of employees”**

Many institutions converted into higher learning institutions for the past five years

The move has suffocated the growth and development of technical education

The ratio between vocational skilled and professionals becomes more unbalanced

The rate of conversion means that there are limited resources (lectures and learning materials) and thus poor output from institutions.

# Addressing skills gap challenges

- **Improve the number of right graduates**

There should be a match between what institutions are supplying and what employers are demanding

- **Increase the number of training institutions**

These are especially institutions offering technical skills rather than professional courses to fit the labour based economy (ration between technicians and professionals)

# Addressing skills gap challenges gap cont

- Tanzania Vocational Education Training (TVET) is usually more adaptable to industrial needs as the private sector is often engaged in its design and even execution. VETA, nonetheless, will have to resolve the Reputation issue among the general public, which sees TVET as an alternative for those who do not perform well at school, rather than as a mechanism that enhances future employability through the acquisition of industrial skills.

## Addressing skills gap challenges gap cont...

- **Regulation to ensure that employers provide training to its employee to enhance their skills**
  - Due to reluctance of employers to provide training, awareness on the importance of practical training to students and themselves
  - Regulations should also be put in place to ensure this is successful
  - It has to be understood that demand for skills in industry is contently changing and this a need for constant enhancement of skills

## Addressing skills gap challenges gap cont...

- **Employers should be encouraged to support students undertaking practical training**

Apart from encouraging this, institutions should emphasis on more practical time.

Currently practical time is far less than class room hours.



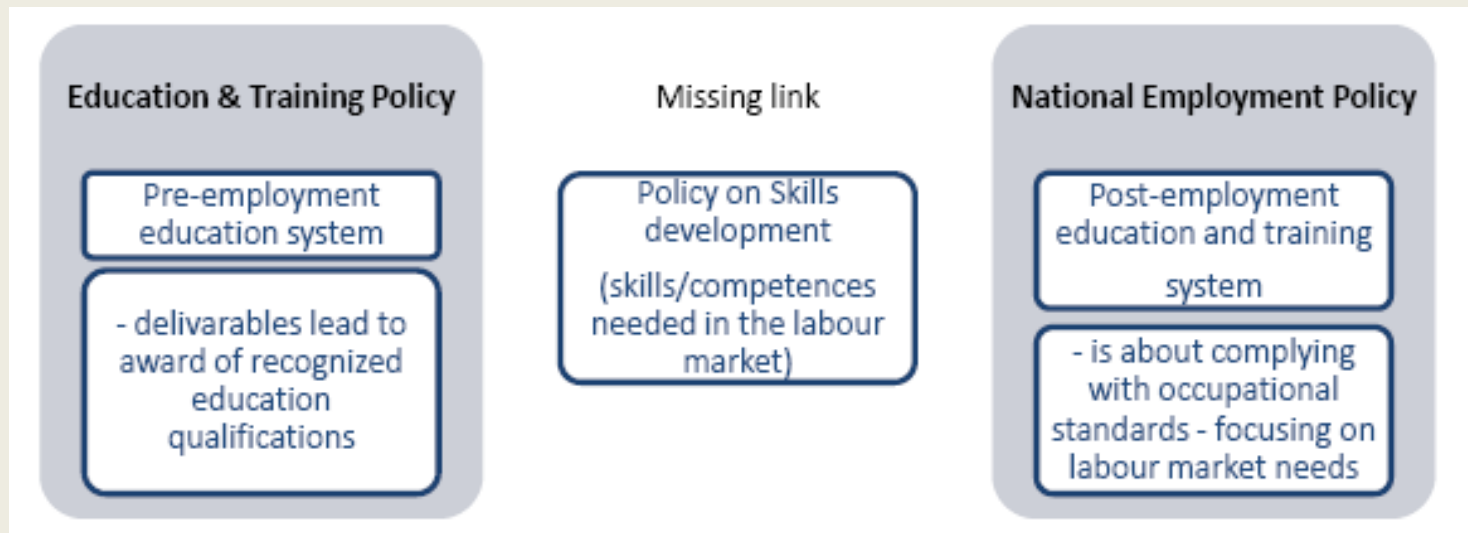
# Addressing skills gap challenges gap cont...

- **Encourage soft skills to students/trainees**

Institutions should change their curriculum to encourage more learning on soft skills to complement other courses undertaken by students

- **There should be a link between the relevant policies**

Skills development policy should come in between education



# Conclusion

## **Skills development**

- Formulation of skills development policy
- Skills development strategies should be integral part of the national development like in South Africa, Singapore and India
- Skills Development Levy (SDL) and other funds allocation should be clear to contributors mainly industries in order to encourage them promote skills development.

## **Private sector participation**

- Industry/employers and NGO's should fully participate in addressing skills gap
- Industry role include enterprise training, sponsorship and participation in decision making

# Conclusion cont..

- Private sector need to continue participating the way of:
  - In identifying the skills and competences required
  - Invest in training of workers and managers
  - Promote a culture of lifelong learning and innovation
  - Encourage workplace learning
  - Facilitate knowledge sharing
- “Formalize” relationships between industry and academia through “strategic partnership” – built around shared research & learning vision, establishing deep professional ties, trust, and ensuring that goals and benefits are shared clearly.

*Thank You for your  
kind attention*