

# Role of ICT

in imparting the Youth with Skills, Training  
and Employment Opportunities to  
accomplish Human Development  
Challenges

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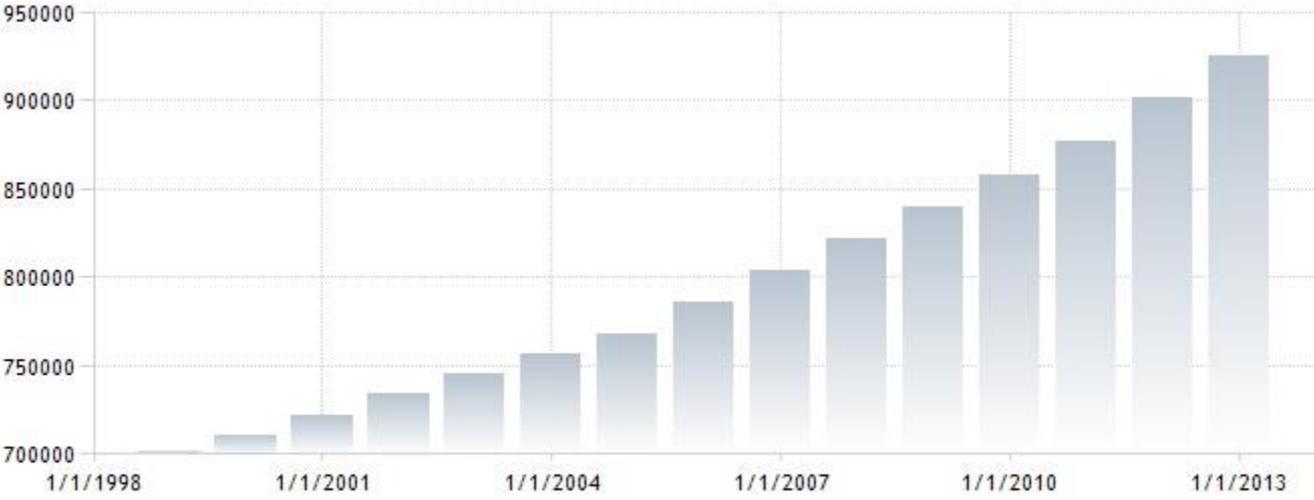
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# Urbanization

- 85% of the young people in the age group of 15-24 across the world are living in urban setup.
- As per 2014 statistics, Papua New Guinea has 19.7% of its population between the ages 15-24 and majority of them live in urban areas.
- Many of these young people are in the attempt of transition from their studies to work.

# Urbanization statistics in PNG



Urban Population Statistics in PNG

# Present job options for the youth

- Getting jobs in the informal economy with insecurity and poor wages and working conditions.
- Getting jobs in the low-tier service industries.
- Developing their vocational skills to benefit from new opportunities in the professional and advanced technical/knowledge sectors.

Although having an overall literacy rate of 67%), a large portion of young people in PNG are not able to choose among any of these options causing long-term unemployment.

# Knowledge Economy

- The knowledge economy can apply its fast increasing knowledge effectively in work and social situations to increase productivity and general well-being, and to create and apply new knowledge.
- In the knowledge economy, any country's greatest asset is human capital and nations need to take time to invest by benefiting from new technological opportunities through educational or employment programs for their people.

Unarguably, the important factor that is causing long-term unemployment in knowledge economy is the gap between skills and newly created jobs.

# Pacific Islands Scenario

- According to International Labor Organization (ILO), 25% or more of the youth population is unemployed.
- PNG is facing huge scarcity of skilled human resources in various sectors like engineering, mining, construction and ICT.
- As a result, there is a sharp increase of 336% in the number of work permits issued to foreign professional/technical/administrative staff during the period from 2001 – 2009.
- Major reasons to employ foreign workers according to employer feedback is to bridge skill gaps and to acquire more diligent workforce.

# Criteria for employment in modern world

- In the knowledge era, criteria for employability are getting higher and higher every day and more advanced skill requirement is becoming a prerequisite of employment.
- Importance of knowledge for economic development and the greater capacity to classify information and knowledge are rapidly increasing.
- The number of unskilled, semi-skilled and entry level jobs in a wide variety of sectors have reduced and the demand for relevant, often high-level, skills is growing.
- Hence, providing education, vocational training and advanced skill development to young people for their workforce participation have become extremely important.

# Role of ICTs

- ICTs have dramatically reshaped employment markets around the world.
- The production and use of ICTs have become the influential force of change in the modern world.
- ICTs are playing a pivotal role in reforming the ways in which most of the traditional services are produced, traded and delivered.
- ICTs have become key in offering opportunities for the generation of new activities and employment in many service industries.
- ICTs have changed the economics of many sectors facilitating an expansion in employment in small and medium enterprises (SMEs), and created new skilled employment opportunities.
- Hence, upgrade of skills and use of domain relevant ICTs have become quite essential for job seekers across the world.

# ICT Infrastructure and Access in PNG

- Access to ICT infrastructure and services in PNG is among the lowest in the world, particularly in rural and remote areas.
- Service providers rolled-out second-generation (2G) mobile services, that is, basic voice and text, in rural areas rather than third-generation (3G) or higher capacity networks that offer faster data transmission (mobile broadband).
- Fixed broadband penetration is below 1% of the population, and remains far beyond the affordability of average citizens and small businesses.
- Percentage of people using internet in PNG is under 5% and educational institutions are yet to start using ICT as their major aid to quality education.

# PNG Indicators on ICT Infra and access

Indicators	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
<b>Fixed telephone subscriptions</b>	64,835	61,610	62,059	62,885	63,456	63,720	61,500	60,000	66,846	91,125	121,172	130,000	139,000
<b>Fixed telephone subscriptions per 100 inhabitants</b>	1.21	1.12	1.1	1.08	1.07	1.05	0.98	0.94	1.02	1.36	1.77	1.85	1.94
<b>Mobile cellular telephone subscriptions</b>	8,560	10,700	15,000	17,500	48,311	75,000	100,000	300,000	874,000	1,417,546	1,909,078	2,400,000	2,709,000
<b>Mobile cellular telephone subscriptions per 100 inhabitants</b>	0.16	0.19	0.27	0.3	0.81	1.23	1.6	4.69	13.35	21.15	27.84	34.22	37.78
<b>Estimated Internet Users per 100 inhabitants</b>	0.84	0.9	1.32	1.37	1.51	1.72	1.75	1.79	1.15	1.61	1.28	2	2.3

Source: Commonwealth Telecommunications Organisation

# ICT Constraints in PNG

- The main constraints to widespread broadband Internet development in PNG include:
  - The high cost of international connectivity, due to capacity constraints as well as regulatory factors; and
  - The lack of high-capacity domestic backbone networks.
- Solutions
  - The rural communication project under process in PNG aims at improving access to telecommunications infrastructure and services in rural and remote areas of Papua New Guinea. The project is expected to be complete by 2015.
  - Government of PNG should initiate necessary measures to bring down the internet connectivity costs to small/medium businesses and households.

# Digital Divide

- The pace of technological development in the new knowledge economy has created more powerful ICTs and rising demand on workers with advanced ICT skills.
- Technology availability cannot guarantee everyone can get the training and skills required. People who cannot access necessary information & training on these advanced ICT skills will still be left behind and vulnerable as the new knowledge economy has already imposed chaos in unskilled and semi-skilled employment.
- In developed and some of the developing countries, governments and non-governmental organizations (NGOs) have been working on a wide range of ICT initiatives to close the ever growing digital divide.

# Initiatives to narrow the digital divide

- Some initiatives include but are not limited to:
  - Providing public ICT access through libraries and community centers;
  - Offering ICT skill training programs;
  - Providing ICT access and training to disadvantaged target groups including people with disability and their caretakers;
  - Distributing free computer training resources through libraries, shop fronts and community centers; and
  - Providing subsidized electronic gadgets to learning community through government initiatives. For instance Government of India is planning to distribute low cost tablet devices to the student community.
  - Establishing computer reuse schemes to provide affordable refurbished computers to people on low income and non-profit community groups.

# Strategies on ICT initiatives targeting youth

- Some of these initiatives are clustered and presented in eight groups. These groups include initiatives on:
  - Providing ICT and skill training;
  - Education through ICT;
  - Narrowing the digital divide;
  - ICT employment generation through entrepreneurship;
  - Promoting public-private partnership to generate employment;
  - Using ICT-based employment opportunities for disadvantaged youth;
  - Bridging the gap between the knowledge economy and the informal sector; and
  - Putting young people in charge.

# Successful initiatives on ICT & Skill training: TAFE

- One of the many successful initiatives that provide skills training including ICT is the Australian Technical and Further Education (TAFE).
  - TAFE institutions are publicly-funded postsecondary organizations that provide a range of technical and vocational education and training courses and small business courses including niche areas, such as viticulture, aquaculture, ICTs and biotechnology.
  - Each State and Territory in Australia has its own TAFE system, and TAFE programs provide industry-relevant, leading-edge skills that can help get people into the workplace faster, upgrade existing skills, or prepare them for further tertiary studies

(Source: [www.tafe.qld.gov.au](http://www.tafe.qld.gov.au))

# Another Example: SEWA

- Another example can be Self employed women's association (SEWA), India.
  - SEWA is a trade union in India for poor, self-employed women workers who earn a living through their own labor or small businesses.
  - Most of the members of SEWA are young women under the age of 25.
  - SEWA's main goals are to organize women workers for full-employment whereby workers obtain work security, income security, and social security.
  - SEWA has been one of the first organizations in India to realize the potential for harnessing ICT to help women in the informal sector. It has sought to develop the organization's capacity to use computers by conducting awareness programs and imparting basic computer skills to its team leaders

(Source: [www.sewa.org](http://www.sewa.org))

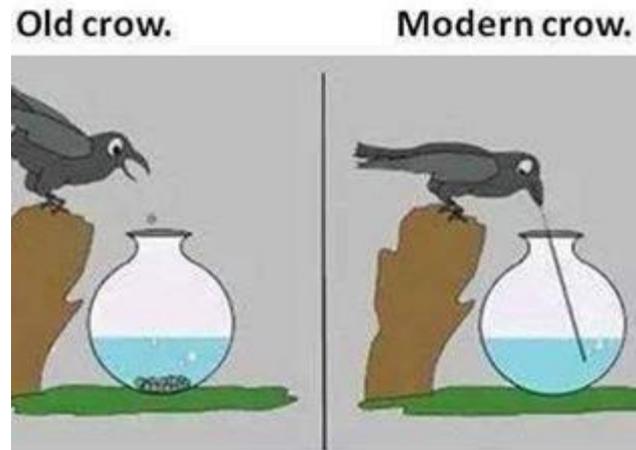
# Initiatives in PNG

- The Australia-Pacific Technical College (APTC) is an Australian Government initiative announced at the Pacific Islands Forum in October 2006 and welcomed by Pacific Island leaders. APTC operates in PNG from Port Moresby.
- The APTC was designed as a centre of excellence for training, helping people to gain Australian-standard skills and qualifications for a wide range of vocational careers throughout the Pacific where skilled employees are in high demand.
- However, the efforts of APTC may not be abundant to cater to the training needs of growing number of PNG youth.
  - Government, NGOs and Private organizations may consider imparting ICT related skills training through their training divisions across the country.
  - Universities may consider offering vocational training programmes with emphasize on usage of ICT tools to bridge the skill gap.

# Conclusion

- Promoting youth employment and employability requires important integrated effort in the areas of education, skills development, job supply and support.
- Developing a range of supporting strategies and an enabling ICT environment is essential.
- Applying ICTs in education is a key to provide young people with ICT skills.
- Encouraging young people in the development and implementation of initiatives involving the use of ICTs to generate employment.
- Mentor support for starting ICT-related enterprises is an important service that governments, NGOs or international organizations could organize to provide advice and guidance to young entrepreneurs.

# Q & A



Upgrade your skills to remain in competition and escalate employability.