Entrepreneurship education, innovation and capacity-building to Reduce Unemployment and improve Rural livelihoods in Papua New Guinea

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Source: India Labour report, MIT / PTI
Youth Unemployment and Underemployment

• Almost 191.8 m people were unemployed in the world in 2005 an increase of 2.2 m since 2004 (ILO,2006).

• Jobless youth in Asia and Pacific make up more than 50% of some 33 m young people

• Youth unemployment tends to be 3-4 times than non-youth unemployment

• Unemployment rates are generally higher for the more educated than those who are less educated (UN-ESCAP).
Vicious Cycle of Poverty, Illiteracy, Low Technology & Rapid Population Growth

1. Low level of literacy
2. Low level of skills
3. Hurdles in the use of technology
4. Rapid growth of population
5. Inadequate output and food
6. Increase poverty
7. Low level of education
Entrepreneurial Success in the Third World

Reduction in poverty, crime and unemployment

Building a sustainable model for economic growth
Entrepreneurship and Innovation

- Entrepreneurship and innovation are increasingly recognized as important drivers of economic growth, productivity and employment, and as a key aspect of economic dynamism.

- The ultimate objective of entrepreneurship education policies should be to facilitate the creation of an entrepreneurial culture, which in turn, will help potential entrepreneurs to identify and pursue opportunities.

- Government policies on entrepreneurship education are critical for ensuring that entrepreneurship is embedded into the formal educational system, and offered through partnership with the private sector, the informal community, and rural and apprentice training programmes.
What is creativity?

• Education provides the foundation for creativity, flexibility, and wealth creation in the society.

• Creative behaviors possessing an element of newness, novelty, and difference (Herrmann, 1996)

• Creativity is an act, an idea, or product that changes an existing domain, or that transforms an existing domain into a new one, and creative person is whose thoughts or actions bring these changes. (Csikszentmihalyi)

• Wallas’ description of creative thinking, suggests a model in four stages:
  – Preparation: problem definition
  – Incubation: resting phase, subconscious mind
  – Illumination: idea of a solution comes to mind
  – Verification: solutions are tested
Creativity and Innovation

• Creativity leads to innovation

• “Innovation is the specific instrument of entrepreneurship. The act endows resources with a new capacity to create wealth. Innovation, indeed, creates a resource.” (Drucker)

• Entrepreneurship is all about innovation

• Innovation is economic or social, rather than a technical term
The entrepreneurial ecosystem

Role of Educational Institutions

• Education and research institutions, as producers, repositories and diffusers of knowledge and technology, play a central role in such systems.

• Entrepreneurship education policies and programmes can contribute to generating jobs, and fostering innovation and poverty reduction through the empowerment of marginalized members of the community.

• Education policies, therefore, are crucial in order to materialize the potential contribution of entrepreneurship and of innovation.
Entrepreneurship

• “Entrepreneurship is a way of thinking, reasoning and acting that is opportunity obsessed, holistic in approach and leadership balanced.”

• Entrepreneurial qualities
   commitment and determination, leadership, opportunity
   obsession, tolerance of risk, ambiguity and uncertainty,
   creativity, self-reliance and ability to adapt, and the
   motivation to excel,
   ability to use failure experience as a way of learning
Factors influencing entrepreneurship

- Environment
- Individual
- Support systems
- Socio-cultural factors

Indirectly influencing entrepreneurship (individual support system and environment)

Directly influencing entrepreneurship through individual and support system
STEP – Functions and Activities

Selection

Database and Information
Continuing Education And Skill Development
Business Facilities
Quality Assurance

Entrepreneurship
Research and Development Incubation
Product and Prototype Development
Technology Transfer
Awareness of new opportunities

• Production oriented opportunities
• Environment oriented opportunities (Renewable energy, waste utilization, clean technologies, green technologies, DRM)
Entrepreneurial ideas

• Resource based ideas
• Export import related ideas
• Special product ideas
• Service sector ideas
• Increased focus on rural sector, women and Youth (boys and girls)
• Traditional technical and craft skills
• Utilization of local materials, cost effective and appropriate technologies
Strategy 2: Raise Professional Competence

- Basic skills: Using technology, Practicality, Business orientation, Planning & organising activities, Self-management
- Communication skills: Team skills, Customer service, Cultural understanding
- Interpersonal skills: The interpersonal (or social) cluster with underpinning personal attributes & values e.g., emotional intelligence, self-understanding
- Enterprise, innovation creativity skills: Enterprise, Entrepreneurship, Creativity, Innovation, Learning, Thinking, Analytical capability & problem solving, Systems thinking, Adaptability
- Learning, thinking & adaptability skills: The cognitive cluster with underpinning personal attributes e.g., willingness to learn positive attitude to change & complexity, mastery of mental models
Strategy 2: Raise Private Sector Participation

Relationship between TVET and Labour Market

Qualifications: Supply Side

TVET

Training and Working

Initial Training

Further Training

Employment System

Working and Training
• Strategy 3. Reduce overlapping roles
• Strategy 4. Eliminate obsolescence
Opportunities
Agriculture Sector is the biggest source for SME development

• A world class agricultural sector that is responsive to international and domestic markets for a diverse range of products and provides the best available income and job opportunities (DSP/MTDP)

• Target: Transformation of 70% subsistence farmers into small/med. agricultural enterprises
Agricultural Value Chains consists of groups of businesses around Agric. commodities.
Example 1 Sweet potato Value Chain

- Quality planting material supply (PT)
- Soil fertility
- Organizing farmers
- Producer
- SP weevil control
- Access credit
- On-farm postharvest - curing

Transport:
- Transporters
- Shippers
- Bottlenecks

Marketing:
- Alternative packaging
- Consumer studies
- Quality standards

Value adding:
- Volume of produce marketed
- Production of SP flour

Promoting Excellence in Agricultural Research for Development
Rice Value Chain

Inputs

- 4 released lowland varieties (NR1, 9, 15, 16)
- 2 released cold tolerant varieties (NR 2, 3)

Production

- Quality foundation seed production and distribution (10t/yr)

Processing

- Mechanization support weeding, harvesting, drying, threshing

Marketing

- Farmer participatory research and farmer training

Promoting Excellence in Agricultural Research for Development
Rice Value Chain

Inputs
- Development and adaptation of simple milling devices;
  performance testing of motorized mini mills

Production
- Working with partners:
  - Trukai – NR 1 and 15
  - CLTC – NR 2, 3 Waghi rice
  - Bougainville rice: NR 1, 15, 16

Processing

Marketing

Consumption
- Consumer studies, taste panels etc.
Galip Nut Value Chain

- High value crop (potential export markets)
- Comparative advantage for PNG, SI, Vu
- Suitable for less accessible areas
- Low input multi-purpose crop
Galip nut Value Chain

**Inputs/Production**
- Selection of elite trees
- Mass propagation methods (non-mist propagator, seeds)

**Processing**
- Stable products:
  - Nut in shell (on-farm) cracking
  - Nut in testa (processing factory)
  - Removal of testa
  - Shelf life, packaging
  - Oil extraction
- Secondary products

**Marketing**
- Identification of promising domestic and overseas markets
- Regulatory framework (quality, biosafety)
- Market access
BETWEEN INCEPTION (of an idea) & IMPLEMENTATION LIES A LOT OF Blood, Sweat & Tears
Steps for success

- Strategise
- Systemise
- Synergise
- Supervise
- $Wise and Succeed
The Must-haves for Success

- A strategy
- A good product or service
- Motivation – a passion for what you are doing
- Determination
- Luck – lots of it
- A good bank manager
- A great accountant
- Attitude
- Single-mindedness
- An ethic of hard work
The Must-haves for Success

- An understanding partner and family
- Foresight
- Management ability
- Calmness under pressure
- Some start-up capital
Thanks for your time