Building the capacity of the Cambodian agricultural education and training system

Association of International Agricultural and Extension Education Annual Conference
Wageningen University, April 27-May 1, 2015

Tom Gill (Penn State), Kristal Jones (Penn State, University of Maryland), Rick Bates (Penn State), Melanie Miller-Foster (Penn State)
Who is innovATE?

The program is implemented by a consortium of US universities:

Virginia Tech with:
- Tuskegee University
- Penn State University
- University of Florida
The Challenge

- **HUMAN CAPACITY**: Agricultural sector in less developed and emerging economies, including public and private institutions, needs skilled employees (e.g. appropriate skillsets, degree programs, research and extension training)

- **INSTITUTIONAL CAPACITY**: Public institutions with agricultural programming are weak (e.g. curricula, infrastructure, administrative capacity)
Workforce development and AET systems

Supply

Primary School → Secondary School → University → Vocational/Technical School → Youth

Demand

Inputs → Production → Harvesting → Processing → Distribution → Skills and Jobs

Value Chain (agriculture)

Work-force development
How does innovATE work?

1. USAID Missions express interest in AET
   - Engage InnovATE through

2. Rapid assessment of key AET factors
   - Structured by

3. In-Depth analysis of key AET factors
   - Guided by

4. Plan for AET innovations
   - Implements (typically through Associate Awards)

5. AET projects and activities

Pre-scoping dialogue

Scoping activity

Results in

Engage InnovATE through

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# The case of Cambodia

## Feed the Future Country Fact Sheet

<table>
<thead>
<tr>
<th>Country Profile</th>
<th>Population</th>
<th>Poverty</th>
<th>Stunting</th>
<th>Rural</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>15.1 MILLION</td>
<td>11.6 PERCENT</td>
<td>44 PERCENT</td>
<td>80 PERCENT</td>
<td>7.3 PERCENT</td>
</tr>
<tr>
<td></td>
<td>Number of people living in Cambodia (World Bank, 2013)</td>
<td>Percentage of people living in poverty in Cambodia</td>
<td>Percentage of children under 5 suffering from stunting in rural Cambodia (World Bank, 2013)</td>
<td>Annual GDP growth: Agriculture accounts for 60 percent of GDP (World Bank, 2012)</td>
<td></td>
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</tbody>
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- **Population**: 15.1 MILLION
- **Poverty**: 11.6 PERCENT
- **Stunting**: 44 PERCENT
- **Rural**: 80 PERCENT
- **GDP**: 7.3 PERCENT

## Farmers

<table>
<thead>
<tr>
<th>Farmers</th>
<th>Sales</th>
<th>Nutrition</th>
<th>Land</th>
<th>Investment</th>
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<tbody>
<tr>
<td>32 THOUSAND</td>
<td>$7.6 MILLION</td>
<td>6 THOUSAND</td>
<td>12.5 THOUSAND</td>
<td>$664 THOUSAND</td>
</tr>
<tr>
<td>Farmers using new technology and skills with Feed the Future’s help</td>
<td>Value of Feed the Future farmer sales in FY13</td>
<td>Children under 5 reached with nutrition help in FY13</td>
<td>Heaters installed with improved technologies or management practices in FY13</td>
<td>Now private investment leveraged by Feed the Future in FY13</td>
</tr>
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![Figure 1: Occupations by education among 20-29 years old, 2009](image)

Data from Cambodia Socio-Economic Survey 2009
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Feed the Future focus on three value chains: rice, horticulture and fish

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Research and trial fields at Royal University of Agriculture (Phnom Penh)

Outdoor greenhouse at University of Battambang Campus
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Rapid assessment of key AET factors
  - Structured by

Pre-scoping dialogue

Scoping activity

- Two stages:
  - Pre-scoping visit June 2013
  - Generated initial assessment of and connections to key AET actors
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Stakeholders in Cambodian AET system

**Private sector**
- Cambodia Biologicals Co., Ltd.
- Emerging Markets Consulting
- East-West Seeds

**Non-governmental organizations**
- Aphiyat Strey
- Centre d’Etude et de Développement Agricole Cambodgien (CEDAC)
- Environmental Protection and Development Organization (EPDO)
- Farmer Livelihood Development (FLD)
- GERES Cambodia
- IDE Cambodia
- JVC Cambodia
- Lom Orng Vocational Training Centres
- Prom Vihear Thor Organization
- Skill, Knowledge, and Information for Life (SKIL)
- Srer Khmer
- Village Support Group (VSG)
- Wathnakpheap Organization (WP)

**Educational institutions**
- Royal University of Agriculture (RUA)
- University of Battambang (UBB)
- Prek Leap National School of Agriculture (PNSA)
- Institute of Technology Cambodia (ITC)
- Build Bright University (BBU)

**Research institutes**
- Cambodian Agricultural Research and Development Institute (CARDI)
- Inland Fisheries Research and Development Institute (IFReDI)
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- USAID Missions express interest in AET
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  - Pre-scoping dialogue

- Rapid assessment of key AET factors
  - Structured by
  - Two stages:
    - Pre-scoping visit June 2013
    - Generated initial assessment of and connections to key AET actors
    - Full scoping visit in January 2014
    - Generated a SWOT analysis of the AET system and recommendations for investment
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Plan for AET innovations
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- **CHALLENGE**: Support appropriate human and institutional capacity development in Cambodian context
  - Address skills gaps, support innovative institutional arrangements
- **OPPORTUNITY**: Focus on commercial horticulture value chains
  - Domestic and regional market opportunities
  - Leverage institutional relationships to support workforce development along the value chain

From ACDI/VOCA (2015) Analysis of Three Commodity Value Chains in Cambodia
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- PROPOSAL: Commercial Horticulture Center of Excellence
  - Housed at Royal University of Agriculture
    - Puts research, education and extension under one roof
  - Builds human capacity by using workforce development framework
  - Builds institutional capacity by using innovative research, teaching and extension methods
    - In situ field trials, information technology
    - Modular and short courses
    - Train-the-trainer, building linkages across value chain
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3.5 Horticulture Value Chain Map

From ACDI/VOCA (2015) Analysis of Three Commodity Value Chains in Cambodia
Regional scaling-up

Tajikistan

Nepal

Center of Excellence
Cambodia
How can you connect to innovATE?

AET Community of Practice

www.innovate-community.oired.vt.edu

- Online network of agricultural development professionals
- Collaborative discussion spaces for AET and agriculture
- Gender increasingly addressed
- Global training events database
- French and Spanish discussion pages
- Discussion space for extension?
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