

***“STRENGTHENING UNIVERSITY-BASED FARMER EXTENSION SERVICES
IN SOUTHEAST ASIA
FOR AGRO-ECOLOGICAL KNOWLEDGE & IMPACTS:
Preliminary Lessons from a New Research for Development Initiative”***

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Global Conference on Agricultural Research for Development (GCARD)
SOUTH AFRICA

**GCARD 3: Theme 1 Session –
“Scaling up from Research to Impact”**

8 April 2016

OVERVIEW

- 1. Global/Theoretical and CGIAR Contexts-Problems**
- 2. South East Asian (regional) & ASEAN Contexts**
- 3. Thai Extension Services, Chulalongkorn University Research, Bangkok) – Case Study (Problem Example)**
- 4. Other Recent Activities/Outputs (Sida funded HESA – Project)**
- 5. New ASEAN Regional Extension Research Project planned (underway 1 May 2016 – 30 Apr 2017) – 5 to 8 Countries partners invited**

**1. Problem Introduction
(Global-Theoretical-Ecological-CGIAR &
OA/AE Extension-specific)**

1. Introduction

CGIAR Capacity Development Framework (in the SRF)

CGIAR Perspectives/Assumptions on Capacity Development

- **Capacity development** is a strategic enabler of impact for both CGIAR and its partners...
- Stronger academic institutions in low-income countries enables CGIAR to concentrate on developing capacity for strategic and translational research in relevant fields...
- CGIAR can further leverage its capacity development by strengthening whole organizations and institutions, not just individuals.
- Significant institutional changes are needed within CGIAR as well as in our relationships with our partners (pp. 24-25)

Reference

CGIAR Consortium. nd./2015 approx. ***CGIAR STRATEGY AND RESULTS FRAMEWORK 2016-2030 Redefining how CGIAR does business until 2030***: Montpellier, France CGIAR

Simple Premises/Assumptions (1)

(About/Why Capacity strengthening research)

Why discuss “Capacity” Issues?/What is Capacity strengthening research?

- **Capacity** a major **limiting factor** in **failed development** programs and initiatives
- **Capacity strengthening research** can contribute to better understanding pathways through which capacity strengthening improves the quality and performance of the various institutions
- **RESEARCH-based information** on how to strengthen capacity in developing countries **SEVERELY LACKING** (Babu and Sengupta, 2006)

Reference

Babu, Suresh Chandra and Debdatta Sengupta. September 2006. ***Capacity Development as a Research Domain: Frameworks, Approaches, and Analytics***. ISNAR Discussion Paper International Service for National Agricultural Research (ISNAR) Division, Washington, IFPRI.

Simple Premises/Assumptions (2)

Extension Research is Capacity strengthening research

Basic Assumption (CGIAR) “Element # 9: Research on capacity development”

- ...to develop more effective approaches to capacity development, activities should involve research on lessons learned... to improve the achievement of outcomes... (p.13)

Reference

CGIAR Consortium. 2015. *Capacity Development Indicators for the second phase of CGIAR Research Programs*, November 18, 2015

Contexts/Rationale for Chula Project/Paper

- **Research about university-based extension services** (this project) is essentially “**Capacity strengthening research**” (sometimes CGIAR-linked, sometimes Not)
- Social and Educational **Research (about Post-Secondary Extension Services)** is needed to
 - better understand Learning/Knowledge content, processes, gaps and capacities
 - Document and evaluate adoption/impact Pathways for Sustainable Development

Simple Premises/Assumptions (3)

(Strengthening how/what in University-Based Extension services?)

Introduction/Premise(s) – UNIVERSITY KNOWLEDGE is (poorly understood) POWER

- Research about Extension Objectives, Content, Capacities and partnerships essential to study types of science or knowledge valued, delivered, learning effectiveness, application, etc.
- New Research can help define Post-Secondary indicators (for AE/OA in Sustainable Development Goals (**SDGs**))
- New Research can help document and assess processes, outcomes and impacts with university teachers, extension agents, farmers and other stakeholders or delivery/implementation partners (agronomic, social, economic, environmental, etc.)
- Institutional capacity strengthening (universities/other Post-secondary) can focus on lessons learned to assess/improve Organic/Agro-ecological knowledge, curricula and its application

Targeted Development Outcomes/Impacts

- Organic/Agro-ecological knowledge in University-based extension can bring associated health, ecological, social, community and economic BENEFITS cutting across many SDGs

WHY? Note Trade and Environment Review (e.g.) (UNCTAD, 2013)

Wake up before it is too late: Make agriculture truly sustainable now for food security in a changing climate (Calls for **RADICAL** change in Global Food & Agriculture System toward more **ORGANIC/SUSTAINABLE** approaches)

- **Questions:** 1) How Is the AR4D community and CGIAR Responding?
2) Do the new SDGs convey this message?
3) Are (university-based) **EXTENSION SERVICES** adequate to the challenge?



Key UNCTAD Messages - URGENT

Two Key UNCTAD Messages (among others):

- ...The world needs a paradigm shift in agricultural development: from a “green revolution” to an “ecological intensification” approach...
- ...in pursuing a fundamental transformation of agriculture, one should take into account systemic considerations...in particular...the need for a two-track approach that drastically reduces the impact of conventional agriculture, on the one hand, and broadens the scope for agro-ecological production methods on the other...” (UNCTAD, 2013, p. i).

Reference

United Nations Conference on Trade and Development (UNCTAD). 2013. *Trade and Environment Review 2013 - Wake up before it is too late: Make agriculture truly sustainable now for food security in a changing climate*. UNCTAD/DITC/TED/2012/3. Geneva: United Nations.

Conceptual-Definitional Challenges (Problematizing SDGs, “**URGENCY**” & SA education/extension)

BASIC ISSUE/CONCERN: Need to Define and Problematize Sustainable Agriculture (SA) and education/research about SA in global *Sustainable Development Goals (SDGs), 2015-2030*.

NO URGENCY in SDGs or clear call for a PARADIGM SHIFT toward SA or sense of what this implies

- **SDG 2** “*End hunger, achieve food security and improved nutrition and **promote sustainable agriculture***” does not define SA and targets are vague:
- “*2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and EXTENSION SERVICES...*”
- **SDG 4** “*Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*” calls for (target 4.7) to promote “education for sustainable development” but DOES NOT mention agriculture education, training or research

Premise/Assumptions (If we want adequate impact)

- Need to better define SA with agro-ecological (AE) sub-targets and indicators
- Need to link SDGs 2 & 4 (education/farmer extension & AE/OA education extension research)
- Need new Research (Educational/social & Agricultural) to demonstrate SDG 2/4 links, define indicators and assess if/how extension services (university-based and others) meet SDGs

Some Related Policy Debates/Recommendations for (Agroecological) SA (& **EXTENSION EDUCATION**)

Policy goals

- **Increase food production sustainably, while minimizing negative impacts** on the environment and farmers, particularly poor producers and women.
- Provide farmers with **knowledge** (i.e. **through EXTENSION**) about a **basket of options....**
- Increase funding for **bottom-up, farmer agricultural research and development** that combines the benefits of modern science with those of traditional knowledge.

Policy options

- **Reorientation of agricultural research** aims (Alternative methods to intensify production that are sustainable and equitable with a holistic farming systems approach)
- Greater information and research on **agro-ecology** and traditional agriculture (in **education institutions and EXTENSION SERVICES**)
- Better agricultural research methods of carrying out (toward interdisciplinary)
- **Governments and development agencies should implement policies that encourage and support the application of or conversion to agro-ecology**

Reference

Naranjo, Sofia, E. Dulloo, S. Thabet, M. Villarreal and others. 2007. ***Sustainable Agriculture and Rural Development (SARD). Policy Brief 11***. FAO. www.fao.org/sard/initiative

Empowering Education/Research and Policies for Improved OA/AE Learning, Practices and Farming Systems

Selected UNCTAD-UNEP Recommendations for OA/AE Education/Research support:

- 26. **ORGANIC EXTENSION SERVICES need to be established** and the staff trained. Organic extension should be developed and implemented in a participatory manner and have the farm and the farmer as the centre of attention
- 27. Traditional **knowledge** about pest control treatments et al. should be surveyed and brought into the **extension service**
- 32. **Organic agriculture should be integrated into the curriculum** for primary and secondary schools. Specialized institutions involved in training... should be supported. Higher education in organic agriculture should be developed.
- 33. **Special research programmes should be established for organic research**, and the sector should be involved in priority setting. Research and development (R&D) in organic agriculture should be participatory, build on and integrate traditional knowledge (where relevant)... (pp. viii-xiv, 32-35)

UNCTAD-United Nations Environment Programme (UNEP). 2008. ***Best Practices for Organic Policy What developing country Governments can do to promote the organic agriculture sector***. New York/Geneva: United Nations

University Research-Extension Issues/Challenges – Impact How & for What

Challenges/Debates

- **UNIVERSITIES Roles in Extension are POORLY STUDIED** (inadequate data, lack of technical reports or peer-reviewed publications on institutions, content, partnerships, delivery, etc.)
- CGIAR Foundations (links to universities, research and extension in Southeast Asia) are problematic (Green Revolution, agrochemical, technical expert - vs social, partnerships, organic/agro-ecological)
- Conflict, Limits/**Bias of CGIAR re Extension** (Science-knowledge Transfer) Top-down, **scientism vs social science** (and historical **lack of support for OA/AE research and extension** approaches). Need to reconcile division and debate (which will also facilitate greater impact)

References

- CAPSA-ESCAP 2014. *Expert Consultation on Strengthening Linkages between Research and Extension to Promote Food and Nutrition Security*. 11-12 Dec 2013, Bangkok, (Rep). Centre for Alleviation of Poverty through Sustainable Agriculture (CAPSA)
- Nelles, Wayne. 2011. “**Environmental Education, Sustainable Agriculture, and CGIAR: History and Future Prospects,**” *Comparative Education Review*. Vol. 55, No. 3, pp. 398 423.

2. ASEAN Contexts

2. South East Asian (regional) & ASEAN Contexts

ASEAN/Southeast Asian Contexts/Challenges

Hunger & Food Insecurity (Regional Data/Statistics – Need Disaggregation by Country-Sub-regions & Updating)

Number of undernourished and prevalence (%) of undernourishment (Southeast Asia)

2010–12 period (data mixed, some incomplete)

- 72 million undernourished
- 12.1 % of Southeast Asian population
- Variation within and between countries

2014–16 period (Some projected data with provisional estimates) - Improving but.....

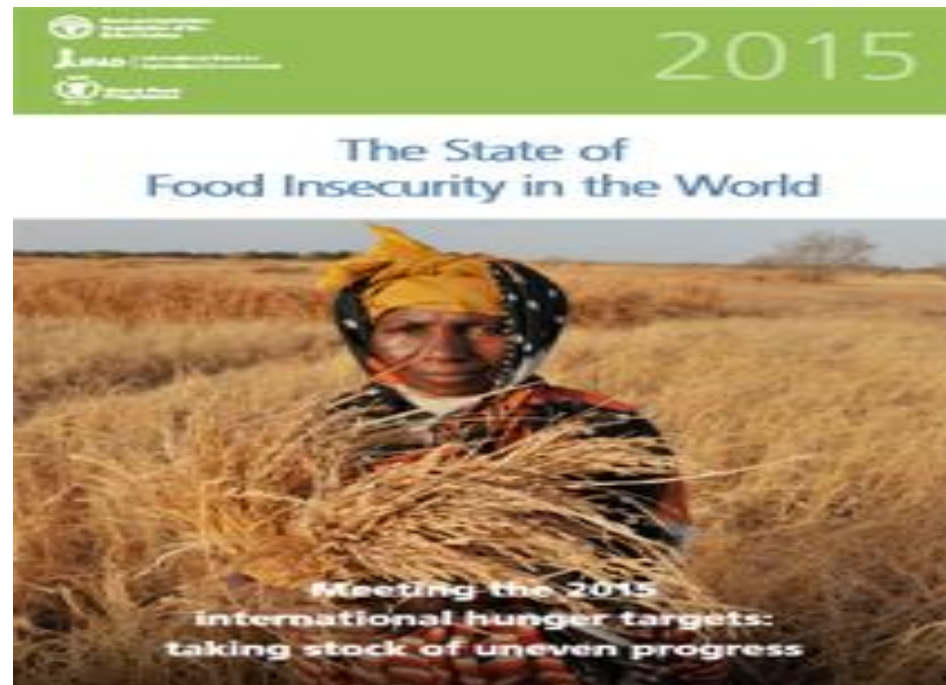
- 60.6 million still undernourished regionally
- 9.6 % of Southeast Asian population
- Still variation/inequality within and between countries and urban/rural areas

References

FAO, IFAD and WFP. 2015. *The State of Food Insecurity in the World 2015. Meeting the 2015: International Hunger Targets: Taking Stock of Uneven progress*. Rome: Food and Agriculture Organization of the United Nations (FAO). (Table 1 p. 8)

SOFI Report (FAO, 2015)

- **Existing agri-food system** does NOT meet basic subsistence, socioeconomic or health needs (Poverty reduction/Income generation, nutritional) (**795 Million still malnourished** or poor in ASEAN or world-wide)
- FAO, IFAD and WFP. 2015. *The State of Food Insecurity in the World 2015. Meeting the 2015: International Hunger Targets: Taking Stock of Uneven progress*. Rome: FAO



ASEAN Food Security and Sustainable Agriculture

Nelles, et. al. Eds (2014), Chulalongkorn University Press.

15 Chapters (several Chula and other authors)

National case studies

- Cambodia, Indonesia, Myanmar, Philippines, Singapore and Thailand

Theoretical and Regional/Comparative (Analytical, Critical Perspectives)

- Asia-Pacific and ASEAN Institutions
- Climate Change
- Civil Society Organizations and Movements
- Education Networks and **EXTENSION SERVICES**
- Energy
- Green Economy
- Health
- Research Issues

Appendices

- Symposium Report
- Bangkok Declaration
- ASEAN official Documents (Selections)

Nelles, Wayne, Anop Kunawongkrit, and Surichai Wun'Gaeo, Eds (2014). ***ASEAN Food Security and Sustainable Agriculture in a Green Economy: Cross-Sectoral and Interdisciplinary Perspectives.*** Bangkok: Chulalongkorn University Press (CUP).

ASEAN Food Security and Sustainable Agriculture

Nelles, et. al. Eds (2014), Chulalongkorn University Press



Weakness of Research-Extension linkages for SA (in Asia-Pacific and ASEAN)

Asia-Pacific Research and Extension Conference Results (reported) with further Analysis

- Research and extension are not integrated well enough. The extension side often blames research for not being capable of delivering good technologies that farmers need, while the research side... points out the weaknesses of the extension systems...(citing Ballabh 2007).
- **Effective research-extension systems are critical** for the success of the *ASEAN Integrated Food Security (AIFS) Framework, 2009-2013* (p. 383) and its successor
- Most importantly, farmers need to be regarded as clients undertaking their own adaptive research rather than as beneficiaries of final science products (p. 389)
- A **paradigm shift (needed)** from **input-intensive to knowledge-intensive agriculture**....The institutional capacity of extension systems thus needs to be better aligned with the change in research focus towards climate-smart agriculture and sustainable practices....” (p.391)

Reference

- Varma, Anshuman, Katinka Weinberger, Takashi Takahatake, and Martina Spisiakova. 2014. “**Framework for Strengthening Linkages between Research and Extension to Promote Food and Nutrition Security in the ASEAN region,**” in Nelles, Kunavongkrit, and Wun’gao, Eds. *ASEAN Food Security and Sustainable Agriculture in a Green Economy: Cross-Sectoral and Interdisciplinary Perspectives*. Bangkok: CUP, pp.379- 398.

**3. Thai Extension Services 2015 Study
(Chulalongkorn University, Bangkok)**

**3. Thai Extension Services Study (2015)
(Chulalongkorn University,
Bangkok)**

Thailand's Agrochemical (and Land-Degradation) Problem (Data/statistics reflecting unsustainable agriculture affecting extension)

Thai Agrochemical Data/Statistics with Impacts on Public and Farmers

- Between 1961 and 2004 total inorganic chemical fertilizer use **increased more than 100 times**, from 18 thousand tonnes in 1961 to 2 million tonnes in 2004.
- Pesticide imports to Thailand more than doubled 1987 to 1996 (from 20, 537 to 44,701 metric tons)
- Pesticide imports then again more than tripled from 42,089 tons in 1997 to 137,594 tons in 2009.
- In 2011 tests in Thai supermarkets revealed **some produce containing up to 202 times the allowable amount of chemicals by European guidelines**
- Herbicide imports and use show the most dramatic increases over the past decade (see table next)
- Thailand has few standards, monitoring or enforcement mechanisms about agrochemical sale/use

Selected References:

Alternative Agriculture Network (AAN) Esan (26 Jan 2011). *Thailand's Pesticide Problem*.

Kasem, Sukallaya and Gopal B. Thapa. 2012. "Sustainable Development Policies and Achievements in the Context of the Agriculture Sector in Thailand," *Sustainable Development*. Vol. 20, pp. 98–114

Tirado, Reye, Andrew J. Englande, Luksamee Promakasikorn and Vladimir Novotny (February 2008). *Use of agrochemicals in Thailand and its consequences for the Environment*. Greenpeace Lab, Technical Note, 03/2008 School of Biosciences, University of Exeter, (UK).

Wipatayotin, Apinya (26 Jan 2011). Pesticide levels pose threat to Thai vegetable exports. *Bangkok Post*.

Imported Pesticides to Thailand (with other agrochemicals)

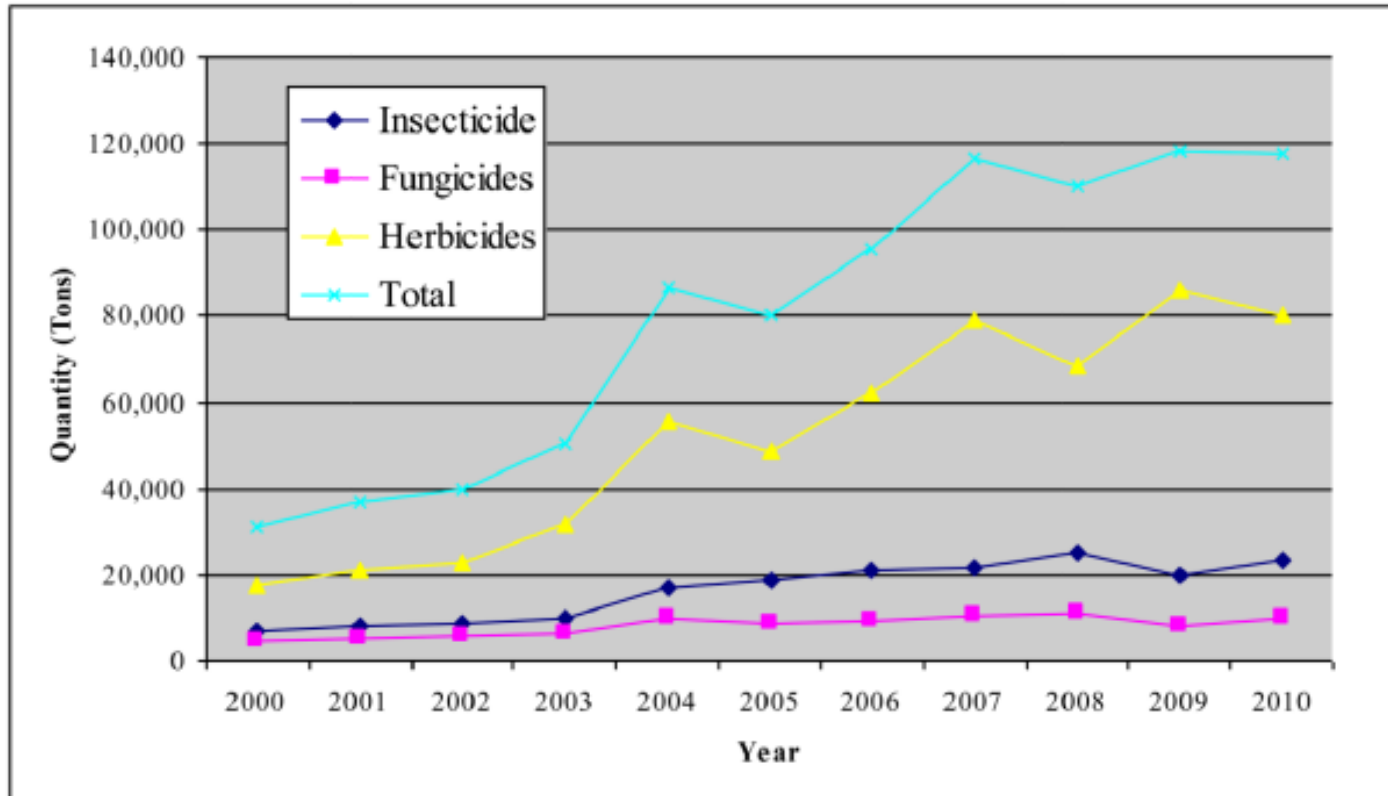


Table Borrowed From :

Panuwet et.al. 2012. "Agricultural Pesticide Management in Thailand: Situation and Population Health Risk" *Environ Sci Policy*. 17: 72–81.

**Deforestation for cash crop (Maize), Nan Province, THAILAND
(especially associated with heavy use of Herbicides)**



Agrochemical Dependency: A major global, Thai and ASEAN concern (reinforced by Extension Services)

We define “Agrochemical dependency” as:

“The unhealthy, dangerous, toxic and sometimes lethal addiction to, and often abuse of, synthetic agrochemicals (herbicides, fungicides, pesticides and fertilizers) manufactured and sold by private, profit-making corporations, ostensibly for ‘crop protection’ or to increase agricultural yields, incomes and food security.” (Nelles and Visetnoi; 2015)

Implications and Links

- Whether or not, or under what circumstances, agrochemicals are necessary for crop protection or food security is moot (but not debated here).
- However, **agrochemical dependency** (and its mitigation) as a poorly addressed and contentious **policy issue** as well as **practical problem** for Asia and especially for **Thai public extension** and farmers

Reference:

Nelles, Wayne and Supawan Visetnoi (2015). “**Thailand’s Department of Agricultural Extension (DOAE) and Agrochemical Dependency: Perspectives on Contributing Factors and Mitigation Strategies.**” *Journal of Agricultural Education and Extension*, pp. 1-16.
[DOI: 10.1080/1389224X.2015.1063519](https://doi.org/10.1080/1389224X.2015.1063519)

<p style="text-align: center;">Perceived Contributing Factors to AGROCHEMICAL DEPENDENCY and abuse</p> <p>(Table adapted/borrowed from: Nelles, Wayne and Supawan Visetnoi, 2015). <i>“Thailand’s Department of Agricultural Extension (DOAE) and Agrochemical Dependency: Perspectives on Contributing Factors and Mitigation Strategies,” Journal of Agricultural Education and Extension</i>).</p> <p>NOTE: EDUCATION, RESEARCH & TRAINING (EXTENSION SERVICES) implied</p>	<p style="text-align: center;">Number of Bangkok DOAE Officials mentioning</p>	<p style="text-align: center;">Number of Nan DOAE Officials mentioning</p>
1) Criminality or corruption in government and private cooperatives	1	3
2) EDUCATION/KNOWLEDGE and ability to examine issues	2	1
3) Corporations over-advertisement	2	4
4) Lack of sufficient substitutes and alternatives to meet farmers’ needs	2	2
5) Moral and ethical awareness/Consumers’ need in making demand/ Lack of farmers’ self-discipline	2	3
6) Incoherence and inconsistency of policy (and jurisdictional confusion)	1	3
7) Populism policy/political behavior (spoiling farmers/”vote-buying”)	2	1
8) Lack of law enforcement and adequately strict regulations	1	3
9) Lack of budget for protection/prevention (before crises/plant diseases)	2	-
10) Easy use/quick results and less labor-force required	1	5
11) Officials with limited man-power but multiple tasks	1	3
12) Climate (tropical, more prone to plant disease/pests)	-	1
13) Non-cash payment incentives (loans, payback later schemes, etc.)	-	1
14) Social pressure and poverty	-	1
15) Lack of DOAE officials’ TRAINING	-	1
16) Economic factors (high yield and more income)	-	3

Thai Chula Extension Study (2015)

Conclusions/Implications

Thai Extension Study (Preliminary Conclusions)

- **Problem** – Overuse/abuse of agrochemicals reinforced by privatization of public extension (Corporate advice and training for public officials and farmers)
- **University Roles** - Government extension offices and “Crop-life” (formerly called Thai Pesticide Association) have MOU/work closely together and are on the Kasetsart University (KU) campus while academic “experts” collaborate with agro-chemical companies
- **Impacts** – Pseudo sustainable agriculture (guided by corporate experts, profit motives and corruption is perpetuated alongside farmer dependency on external inputs which continues to destroy environments, harm farmer health, and discourage less costly, viable alternatives
- **Implications** - Organic and Agro-ecological approaches or investments in extension are discounted/avoided while farmers and environments suffer as agrochemical models (and vested interests) dominate

Reference

Nelles, Wayne and Supawan Visetnoi. 2015. “**Thailand’s Department of Agricultural Extension (DOAE) and Agrochemical Dependency: Perspectives on Contributing Factors and Mitigation Strategies,**” *Journal of Agricultural Education and Extension*. pp. 1-16.

4. Other Recent Chula Activities/ Outputs

4. Other Recent Chula Activities/ Outputs

Contexts for New Higher Education Study

(Paucity of Research on Agricultural Teaching, Sciences and Extension)

Southeast Asia has over 600 million people, **at least 6,500 higher education institutions** (HEIs) and some 12 million post-secondary students. But....we still know little detail about

- **Numbers, scope, types and quality of agriculture education** and sciences or **university extension systems**, teachers and students across ASEAN
- **Priorities for Agriculture teaching, curriculum and research**
- National or HEI institutional **capacities, budgets or needs**
- **Numbers. scope, types and quality of agriculture extension services** (by Faculty members or HEI-based), or how they now or could contribute rural development, regional food/nutrition security and farmers' livelihoods
- How/if HEI's collaborate with CGIAR, NAROs, and others to design and deliver **agriculture extension services** of what quality, type and for what impacts - What related studies have been done? Or should be?

CHULA ASEAN PROJECT

Higher Education for Sustainable Agriculture (HESA) and Food Security in Southeast Asia”

PROJECT - Expert Group on Higher Education for Sustainable Agriculture (HESA) in SE Asia

DONOR: Swedish International Agricultural Network Initiative (SIANI) with Swedish Sida funding

HOST/COORDINATOR: Chulalongkorn University School of Agricultural Resources (CUSAR)

OVERVIEW

“This group will assess challenges, capacities, best practices and policy options on Higher Education for Sustainable Agriculture (HESA) in the Association of Southeast Asian Nations (ASEAN) region while exchanging knowledge, and exploring interdisciplinary curriculum reform, teaching and **research-extension needs** as a contribution to strengthening regional poverty reduction, food/nutritional security and environmental protection.”

ACTIVITIES

- National Consultations & Academic-Government Dialogues
- Laos, Philippines and Thailand - pilot countries
- “Write-shops” & Policy Brief Drafting-Publishing

WEBSITE (Home Page) www.siani.se/expert-groups/hesa (with Document Repository)

Chula-HESA Activities (2015)

POLICY BRIEFS – Extension Recommendations

HESA-SIANI Policy Briefs Identified Curriculum, Policy and Research Needs/Gaps including Post Secondary Capacities and **Extension/Advisory Services** - Needs/Knowledge (& Practice) Gaps and **RECOMMENDATIONS:**

1. LAOS

- New type of agricultural extension worker/needed (Practice-, market- business-oriented)
- A pilot project called for on vocational training for sustainable agriculture

2. PHILIPPINES

- Need to operationalize comprehensive agricultural extension and training support services for small-scale family farms
- Strengthening university-farmer partnerships can help Farmer-led, scientist-supported and community-based technology transfer for improved farm productivity
- Combine modern science/technology with farmers' traditional knowledge and experiential learning
- Extension activities must be given workload credits on par with instruction and research.
- Universities need to conduct extension services in their respective agro-ecological zones.

3. THAILAND

- improved documentation is essential to help better assess existing capacities and new needs of sustainable agriculture programmes, curricula and research
- Knowledge and understanding are needed on how to implement sustainable agriculture policies and curricula by Thai scholars and universities or their extension services
- Self-interest or pursuit of profit, instead of prioritizing community well-being... adversely affect farmers' knowledge and the provision of extension services
- More systematic study of the sustainable agriculture teaching, as well as of the research and service provision by universities and colleges in Thailand, could guide curriculum reform, research and improvements in extension service

**5. New Chula ASEAN
University Extension Research Project**

**5. New Chula ASEAN
University Extension Research Project
Planned
(1 May 2016 – 30 April 2017)**

New Chula ASEAN Extension Research Project Begun/Planned (May 2016 – Apr 2017)

New Project planned/underway (1 May 2016 – 30 Apr 2017)

- UNISEARCH Fund “ASEAN Cluster” Project approved *“Mapping and Assessing University-based Farmer Extension Services in ASEAN through an Agro-ecological/Organic Lens”*
- **FOCUS:**
 - > **Tier1:** Indonesia, Laos, Philippines, Thailand and Viet Nam; and
 - > **Tier 2** Cambodia, Malaysia and Myanmar (subject to available/additional resources funding)
 - > **Representing:** 5 to 8 countries with strong agriculture economies in ASEAN.
- Call for Expressions of Interest (EOI) for National Focal Points/Partners – (issued March 2016)

Planned Project Outputs:

- Completed Surveys (with new baseline data) of university-based extension
- Policy Brief(s)- 1 regional (synthesis) up to 8 National Briefs (according to partners).
- Peer Reviewed Journal article (at least one or more) submitted (early 2017)
- Possible graduate theses (focus/numbers TBA)
- Impacts on National Policies/programs

Chula 2016 ASEAN Extension Research Project

Partners & Commitment (to Date)

Partner Research Commitments & Co-Funding (or in Kind) so far

- Agroecology Learning Alliance in South East Asia (ALiSEA/GRET)
- Asia Pacific Island Rural Advisory Services (APIRAS) – connected to GFRAS
- International Center for Tropical Agriculture (CIAT) Asia Regional Office, CGIAR Hosting Viet Nam research workshop
- Southeast Asian Ministers of Education Organization (SEAMEO), Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA)
- University of the Philippines Los Baños (UPLB);
- More (TBA)

Research Meetings (tentative) and National Studies

- National meetings/studies on Post-secondary-based Extension services In 5 to 8 ASEAN countries with strong agriculture-based economies
- Partners (Universities, CGIAR, FAO, and Govt.) to engage and assist in Completed Surveys & Summary Reports – May, June, July and August, 2016
- Regional Research and Policy Dialogue (reports/lessons learned/sharing), November 2016, Bangkok

Graduate Research Potential (thesis work already discussed/planned), Philippines/Regional

- SEAMEO SEARCA – providing some scholarships and travel support
- UPLB (hosting extension students)

TARGETED RESULTS

(Realistic? Or Desired/Hoped for)

Desired Outcomes and Results Expected (from Process and Outputs)

- More and Better Baseline Data on University-based Extension Services in ASEAN countries
- Five (5) to Eight (8) completed surveys documenting OA/AE specific extension institutions, knowledge, activities, and programs
- Useable Knowledge/Empirical Evidence (of capacities, programs and issues) to better Inform Policy dialogue, reforms, and curriculum development. This can also aid national SDG reporting (based on project defined indicators and measurable results)
- Practical reforms or Strengthening/Scaling-up of existing OA/AE Knowledge, planning documents and budgets for Post-Secondary Extension Services
- New Institutional knowledge Reforms leading (eventually?) to specific development Impacts:
 1. Reduced use of (unnecessary) agrochemicals by farmers and harm to environments
 2. Cost savings by governments and farmers (due to fewer external inputs or health costs)
 3. Safer and Healthier communities
 4. Stronger university-farmer research partnerships and knowledge exchanges through improved extension services in local communities and agro-ecologies
 5. Increased incomes in farm communities through sales of higher value OA/AE products.

End
Questions-Comments?

Thank you