

PUBLIC KM

SCIENCE CLUSTER

A. Climate Change Mitigation and Adaptation

1. Research

- i. Building Capacity to Adapt to Climate Change in Southeast Asia
 - Project Brief:

 - Monograph: Climate Change Vulnerability Mapping of Selected Municipalities in Laguna, Philippines
<http://searca.org/index.php/knowledge-resources/1603-pre-download?pid=269>
 - Keyword: [must include country beneficiary, partners, if any, etc.]

 - Monograph: Faces of Vulnerability: Gender, Climate Change, and Disaster
<http://searca.org/index.php/knowledge-resources/1603-pre-download?pid=268>
 - Keyword: [must include country beneficiary, partners, if any, etc.]

- ii. Strengthening the Implementation of Adaptation and Mitigation Initiative in Agriculture (AMIA)
 - Project Brief:
 - Keyword: [must include country beneficiary, partners, if any, etc.]

- iii. Primary Productivity of Jakarta Bay in A Changing Environment: Climate Change and Anthropogenic Impacts.
 - Project Brief: Scientific
<http://journal.biotrop.org/index.php/biotropia/article/view/380>
 - Keyword: primary production, anthropogenic, climate change

2. Training

- i. Integrating Climate Change Adaptation (CCA) into Policies, Plans, Programs in Agriculture
 - Activity Brief
http://searca.org/phocadownload/activity_briefs/Integrating-CCA-2015-aug-4-7.pdf
 - Keyword: [must include country of implementation, donor, if any]

- ii. Climate Change Mitigation and Adaptation for Agricultural Productivity in Indonesia

http://searca.org/phocadownload/activity_briefs/Integrating-CCA-2015-aug-4-7.pdf

- Keyword: climate change

B. Food and Nutrition Security and Safety

1. Research

- i. Meta-analysis of SEARCA's Food Security Initiatives

- o Monograph: Meta-analysis of SEARCA's Food Security Initiatives

<http://searca.org/index.php/knowledge-resources/1603-pre-download?pid=290>

- Keyword: [must include country beneficiary, donor, if any, etc.]

- ii. Spatial Decision Support System for Food Security in West Java Province

- o Monograph

<https://www.biotrop.org/specpub.php?act=specpubdet&id=211>

- Keyword: decision support system, food security, spatial planning

- iii. *Aspergillus flavus* population and aflatoxin B1, content of processed peanut products in Municipality of Bogor, West Java, Indonesia.

- o Scientific Paper:

<http://journal.biotrop.org/index.php/biotropia/article/view/251>

- Keyword: *Aspergillus flavus*, aflatoxin

- iv. Identification of *Aspergillus flavus* and Detection of Its Aflatoxin Genes Isolated from Peanut and Peanut Processed Products.

- o Scientific Paper:

<http://journal.biotrop.org/index.php/biotropia/article/view/251>

- Keyword: *Aspergillus flavus*, aflatoxin

- v. Contaminants, GMO

- vi. Food proficiency and accessibility

vii. Biofortification

viii. Dietary exposure Assessment of Aflatoxin B1 and Peanut Products among adults in Jakarta

2. Training

i. Executive Forum on Food Security: Leaders in ASEAN Agriculture and Development (LAAD)

Training Reports

http://searca.org/phocadownload/activity_briefs/Integrating-CCA-2015-aug-4-7.pdf

- Keyword: [must include country of implementation, donor, if any]

ii. Strengthening the Regional Food Safety Systems

<https://www.biotrop.org/news.php?act=news&id=435&kat=>

- Keyword: food safety

C. Agribusiness and Value Chain

1. Research

i. Value Chain Analysis of Carabao and Carabao-based Products in Luzon, Philippines

o Project Brief

<http://searca.org/index.php/project-development/completed-projects/65-projects/completed-projects/completed-projects-rad/2137-landscape-inclusive-agribusiness-in-southeast-asia>

- Keyword:

iii. Investigating the antioxidant and anticytotoxic activities of propolis collected from five regions of Indonesia and their abilities to induce apoptosis.

▪ Project Brief:

- Keyword: antioxidant, anticytotoxic, flavonoid content

iv. Enhanced production level of quinine in cell suspension culture of *Cinchona ledgeriana* Moens by paclobutrazol

- Keyword: quinine, medication, drink additive

2. Training

i. Training on Establishing School Gardens for Nutrition, Literacy, and Entrepreneurship

<https://www.biotrop.org/news.php?act=news&id=525>

- Keyword: life skill development, entrepreneurship, school garden
- ii. Training on Urban Agriculture for Vocational and Special Education Teachers

<https://www.biotrop.org/news.php?id=528>

- Keyword: life skill development, entrepreneurship, urban agriculture

D. Natural Resource Management

1. Research

- i. Climate Resilience and Green Growth in Critical Watersheds
 - Project Brief

- Keyword:

- ii. Estimation of sea-grass coverage by depth invariant indices on Quickbird imagery.

Scientific paper:

<http://journal.biotrop.org/index.php/biotropia/article/view/43>

- Keyword: sea-grass coverage, depth invariant index

E. Agricultural Policies

1. Research

- i. An Assessment of Smuggling on Selected Agricultural Commodities in the Philippines
 - Project Brief

- Policy Paper

<http://searca.org/knowledge-resources/1603-pre-download?pid=233>

- Keyword:

- ii. Improving the Agricultural Insurance Program to Enhance Resilience to Climate Change

- Project Brief

<http://searca.org/index.php/project-development/completed-projects/65-projects/completed-projects/completed-projects-rad/1030-improving-the-agricultural-crop-insurance-program-to-enhance-resilience-to-climate-change>

Keyword:

- v. Southeast Asian Agriculture and Rural Development Primers: Agricultural Policy and Institutional Reforms
 - o Project Brief
<http://searca.org/index.php/knowledge-resources/books-and-monographs/southeast-asian-agriculture-and-development-primer-series>

2. Training

- i. Policy Roundtables
 - o Concept Notes
<http://searca.org/index.php/events/round-table-discussion>
 - o Policy Recommendation
 - Keyword:

F. Farming Systems

- 1. Research
 - i. Piloting and Upscaling Effective Models of Inclusive and Sustainable Agricultural and Rural Development (ISARD)
 - o Project Brief
<http://searca.org/index.php/research-and-development/pilot-testing-of-isard-models>
 - Keyword:

G. Knowledge Management

H. Biotechnology

- 1. Research
 - i. Global Status of Biotech
 - o Brief:
www.bic.searca.org
 - Keyword:
- 2. Training
 - i. Policy Roundtable on Building Capacities for Agricultural Competitiveness of Transition Countries in Southeast Asia: Modern Biotechnology for Food Security in Climate Change Scenario and ASEAN Integration

- Activity Brief:
<http://searca.org/index.php/events/round-table-discussion>

- Policy Notes/Proceedings:

- Keyword:

- ii. Biotechnology and Biosafety for Food Security and Sustainable Agriculture: A Regional Workshop for Media Practitioners

- Activity Brief:
 - Keyword:

I. Fisheries and Coastal Resource Management

1. Research

- i. Implementing an Ecosystem Approach to Fisheries (EAF) in Small-scale Tropical Marine Fisheries Project

- Project Brief

- Keyword:

J. Biofuels

1. Research

- i. Effects of Biofuels on Agricultural Development, Food Security, Poverty and the Environment in the Philippines

- Project Brief

- Keyword:

2. Training

- ii. Biocharcoal Technology for Sustainable Agriculture and Forestry Development

<https://www.biotrop.org/news.php?act=news&id=259&kat=>

Keyword: sustainable productivity

K. Tropical Pest and Disease Management

1. Research

- i. Fungal Infection and Aflatoxin Contamination in Stored Nutmeg (*Myristica fragrans*) Kernels at Various Stages of Delivery Chain in North Sulawesi Province

- Scientific paper:

<http://journal.biotrop.org/index.php/biotropia/article/view/458>

Keyword: storage pest, aflatoxin

2. Training

- i. Training Course on Integrated Storage Pest Management
<https://www.biotrop.org/news.php?act=news&id=319&kat=>
Keyword: storage pest
- ii. Training Course on Phosphine Fumigation Good Practices and the Use of Phosphine Fumigation Equipments.
<https://www.biotrop.org/tsw.php?act=listotherdet&id=6>
 - Keyword: fumigation, good practices

L. Landscape Restoration

1. Research

- i. Restoration Priority Index Development of Degraded Tropical Forest Landscape in Batang Toru Watershed, North Sumatera Indonesia.

Scientific paper:

<http://journal.biotrop.org/index.php/biotropia/article/view/394>

- Keyword: landscape restoration, tropical forest

2. Training

- i. National Seminar and Training on Issues and Models of Agricultural, Fisheries and Forestry-Based Ex-Mined Land Reclamation
- o <https://www.biotrop.org/news.php?act=news&id=344&kat=>
Keyword: restoration

M. Nutritional Assessment

N. Biodiversity Conservation

1. Research

- i. Exotic plants of Halimun Salak Corridor: Micro-environment, detection and risk analysis of invasive plants.

Scientific paper:

<http://journal.biotrop.org/index.php/biotropia/article/view/308>

- Keyword: invasive plants, risk analysis

- ii. Ecological Impact of *Merremia peltata* (L.) Merrill Invasion on Plant Diversity at Bukit Barisan Selatan National Park.

Scientific paper:

<http://journal.biotrop.org/index.php/biotropia/article/view/294>

- Keyword: plant biodiversity, invasive plants

2. Training

a. Training on Invasive Alien Plant Species and Risk Analysis

<https://www.biotrop.org/news.php?act=news&id=252>

Keyword: invasive alien plants

O. Biomedical nutrition

- i. Nutrigenomics/nutrigenetics and child cognition
 - Enetic Variant of Tmprss6 in SNP rs855791, Iron Status, Psychosocial Stimulation as Determinant Factor of Cognitive Function among under-two-year-old Sasaknese Indonesian Children
- ii. Nutrigenomics/nutrigenetics and diseases
- iii. Dietary modulation

P. Nutrition-related diseases

- iii. Nutrition and infectious diseases
- ii. Nutrition and non-communicable diseases

3. Nutritional Policies

- i. Food and nutrient intervention (supplementation, fortification, food-based strategies)
- ii. Nutrition and health promotion
- iii. Tools to develop and evaluate food and nutrient intervention

4. Forestry

1. Research

- i. ASEAN Social Forestry Network Strategic Response Fund (ASRF)
 - o Project Brief

<http://searca.org/project-development/29-projects/rad-projects/1653-asfn-flexible-funding-mechanism>

Keyword:

- ii. Redesigning Indonesian forest fiscal policy to support forest conservation.

Scientific paper:

<http://www.sciencedirect.com/science/article/pii/S1389934115300265>

- Keyword: forest conservation, forest revenue sharing, gap analysis, green fiscal policy

2. Training

- i. Training Course on the Management of Invasive Alien Plant Species in the Framework of Forest Restoration

<https://www.biotrop.org/news.php?act=news&id=379>

- Keyword: invasive alien plant, restoration

2. Training

i. Project Development Assistance

- Activity Brief

- i. Keyword:

Plant Breeding

1. Research

- i. Callus induction of cottoni seaweed (*Kappaphycus alvarezii* (Doty) Doty) collected from Natuna Islands, Riau Islands Province

- Scientific Paper: Optimal medium for callus induction from thallus explants of *Kappaphycus alvarezii* (Doty) Dotys

<http://journal.biotrop.org/index.php/biotropia/article/view/254>

- Keyword: tissue culture

2. Training

- i. Training on Agarwood Inoculation for Asmat Regency Forestry Department Staff

<https://www.biotrop.org/news.php?act=news&id=503&kat=>

- Keyword: inoculation, plant protection

- b. Tissue Culture Techniques for Plant Propagation and Nursery Management

<https://www.biotrop.org/news.php?act=news&id=387&kat=>

Keyword: tissue culture