

An Assessment of University Based Farmer Extension Services in the Philippines Through Agro-Ecological /Organic Lens*

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An over all assessment ..

Extension services to the farmers in the Philippines had weakened during the past decades ... 3 reasons

→ devolution, rationalization; and attrition law affected the extension services

Devolution – from the national ,the Dept. of Agric staff were given to local government officials for direct supervision

- 1) Local government officials are agriculture-oriented, then extension/ support services to the farmers are alive;
- 2) If the local officials' interest is not in agriculture, the agriculture staff are given non-agriculture responsibilities; and
- 3) Devolution made the local government units shoulder the salaries and operating expenses of the agriculture staff.

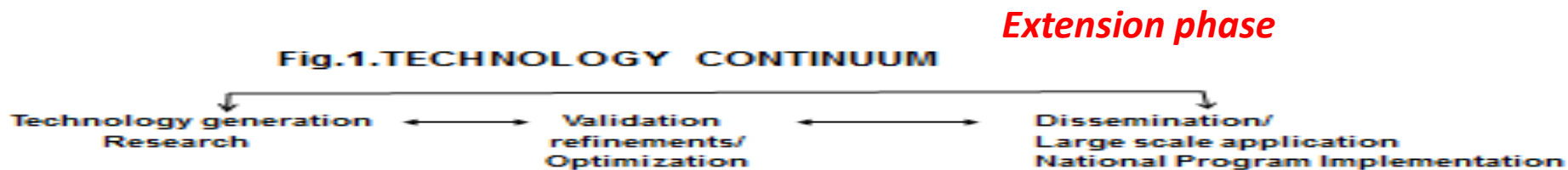
Attrition law* – no filling up of vacated position

Rationalization*-- re engineering/ streamlining of govt. staffing pattern

..*effects of the interrelated structural adjustment programs (SAPs) imposed by the major lending institution – World Bank, IMF (Ofreneo et al 2016)

...not simply the weakened extension services hounding the extension workers

→The massive promotion of Green Revolution of the seventies found extension workers being perceived not as change agents but as agents of the status quo.* Their roles were relegated merely supportive to research in the agricultural technology process (Flor,2006).



**Extending/promoting chemical/green
....brown revolution agriculture**

Strength, Weaknesses, Opportunities and Constraints (SWOC)

Analysis of Agro ecology/Organic agriculture Extension , Philippines

Strengths

- There are prominent “advocates” and practitioners of AE/Organic Agriculture both in the academe (SUCs) and government
- Law on Organic Agriculture (RA 10068) made many LGU-DA/ Universities start doing researches & promoting Organic Agriculture

Weaknesses

- Only two (2) SUCs had declared as pro-Organic Agriculture University (BSU & CBSU)
 - Agriculture curriculum is still conventional/chemical agriculture
- No clear/sustained technical and input support to farmers during the conversion period
- Lack of comprehensive, integrated, coherent support mechanisms for AE/OA*
- Tenure issue- farmers do not own the lands they farm

Opportunities

Demand Side

Increasing recognition/demand for AE/organic products

Health conscious consumers are increasing- Middle class and above are looking for organic products

Demand is huge considering the Phil. Population-105million

Production

Organic Agriculture Act (RA 10068) provides legal basis for the support (P 1 Billion)

AE/OA is perceived to be the “4th wave agricultural revolution”..
“systematically greening agriculture”- lessening energy& CO2-GHG emission, less pollution, safe and healthy food

Constraints

- Do not translate to effective/reliable demand
- Narrow demand “niche market” -- those who can afford
- Lack of comprehensive, integrated, coherent support mechanisms for AE/OA
- Tenure issue-many farmers do not own the lands
- Support is inadequate or minimal compared with the promotion of Green Revolution in the 70's
- Conversion period takes sometime (3-5 - →10 years or more)
- Expensive/difficult certification (3rd party, PGS)
- No clear sustained support from the consumers to patronize organic products. OA products are perceived to be expensive
- CA products are cheap-true costs are not imputed to the price stream
- For the professors/researchers, budgets for research, incentive and rewards systems favor conventional /chemical agriculture

Role of Universities

Philippines → 131 institutions under the National Agriculture and Fisheries Education Systems (NAFES),

→ 31 categorized as National Universities and Colleges of Agriculture and Fisheries (NUCAFs)

→ 84 Provincial Institutes of Agriculture and Fisheries (PIAFs)

The future→

- **3 million students** enrolled in higher education in the Philippines,
- 2.8% are enrolled in agriculture, forestry, and fisheries degree programs.
- reasons for the decline in enrollment in agriculture are:
 - a) negative perception of agriculture as a profession;
 - b) insufficient government investment in SUCs;
 - c) rapid urbanization of agricultural areas; and
 - d) low salaries of agriculture graduates

What we
propose
is....

ValueChain University-based Agro-

Industry Extension framework for promoting AE/OA

.... *production-to- post –production... farm –to- plate*

→ technology generation to consider the production environment (degraded soil, climate change), increasing prices of oil and oil-based inputs, small (dis-economic) farm sizes; hardware requirements from -> capital infusion for machines- tractors, attachments-farm implements, farm tools;

--Logistics: trucks for hauling- all weather roads... bridges, etc.

TECHNOLOGY CONTINUUM

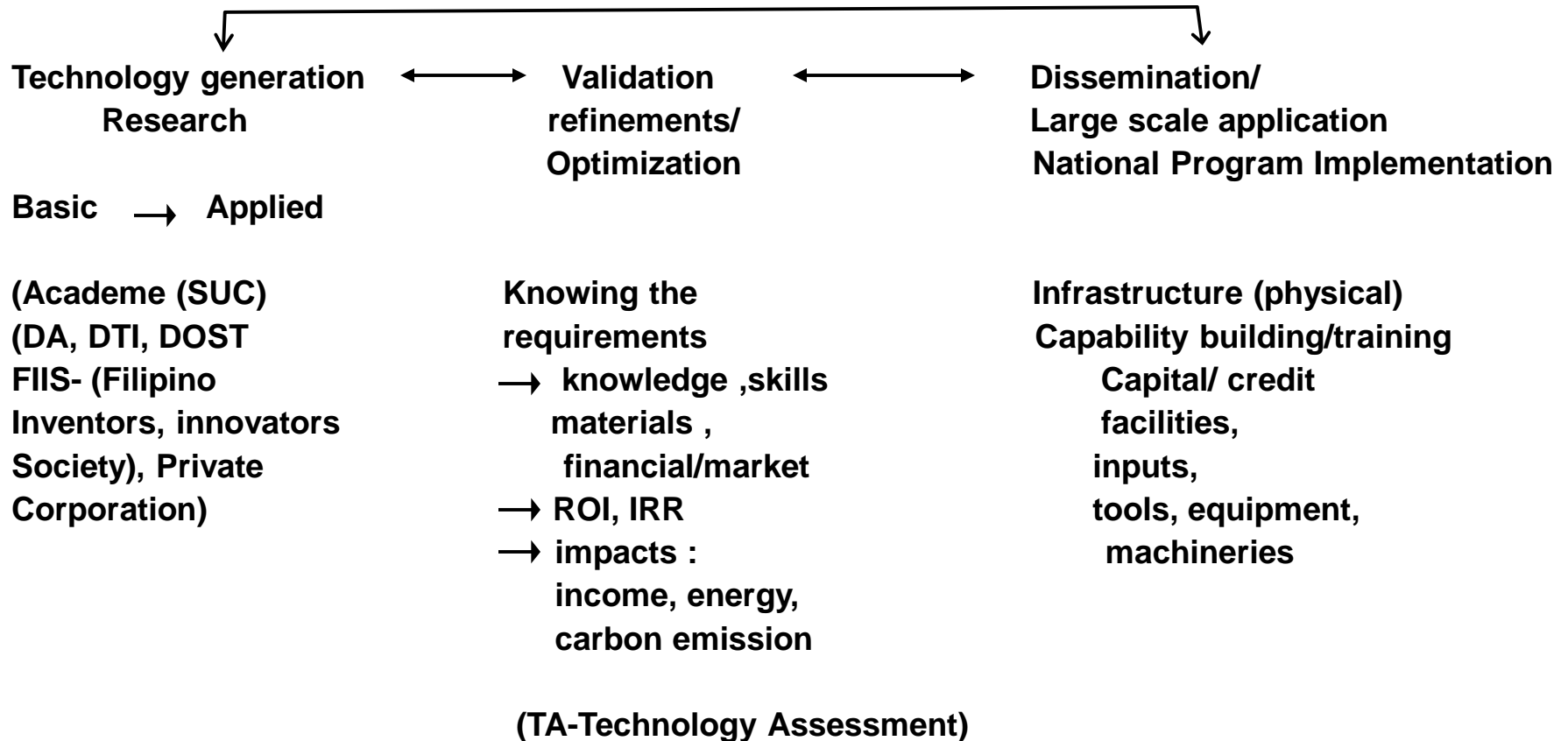


Fig. 2. The Technology Continuum

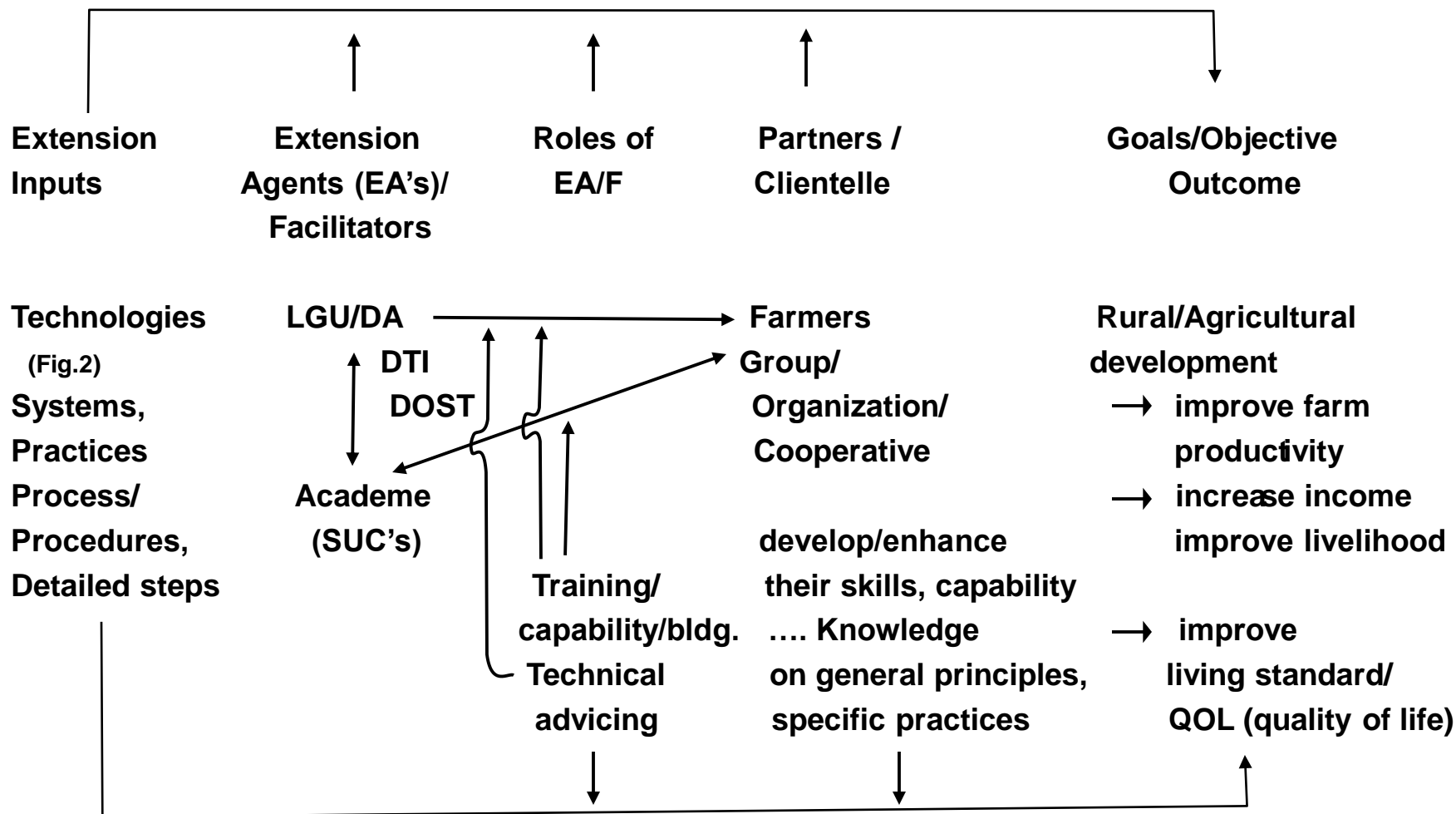


Fig. 2. The Agro-Industry Extension Framework

University-based extension services should address the requirements across the value chain-
farm-to-plate or the full life cycle of the product.

The pitfall of conventional agriculture that was promoted earlier simply emphasized field level production – (HYV seeds, inputs, fertilizer, insecticides, fungicides, herbicides)

Hardware –local fabrication of engines-machines ,tools, equipment were not addressed..

Remedy! Just import them.

Recent Developments

The Buddhist proverb states *“When the students are ready, the teacher will appear.”*

“Time has changed!”

In 2004, the President of Benguet State University (BSU) declared BSU as pro- Organic Agriculture University.

In 2009, Central Bicol State University of Agriculture did the same. (In the National Organic agriculture Board (NOAB), the academe has a seat in the board. The 1st to sit in the board was BSU President followed by CBSUA.

→Commission on Higher Education (CHED) had mandated that all SCUs should include the teaching of Ecological Agriculture in the BSA curriculum

Recommendations to improve University based agroecology/ organic agriculture farmer extension services

- POLICIES ON CURRICULUM DEVELOPMENT
- RESEARCH AND DEVELOPMENT
- EXTENSION DELIVERY SYSTEMS
- SUSTAINABLE /ORGANIC AGRICULTURE PRACTITIONER
- AGRICULTURAL INDUSTRIES
- BUDGETARY SUPPORT
- ON MONITORING AND EVALUATION
- On legal matters



QED

Recommendations to improve University based agroecology/ organic agriculture farmer extension services

CHED Policies On Curriculum Development

Revisit CHED policies for instituting curricular amendments and enhancements geared towards offering a BSA major in Sustainable/organic Agriculture and a BS in Sustainable/organic Agriculture in the long term

Research And Development

Promote more participatory R&D projects (farmer-led, scientists supported, community wide) on Sustainable Agriculture must be conducted .

Extension services

- Following the value chain and capitalizing on ones' strength and recognizing each weaknesses, professors/instructors/researchers/scientists on a “doing and learning mode” work with the farmers.

Sustainable Agriculture Practitioners

- Awarding of equivalent degrees to SA farmer practitioners to give them credibility and prestige, so that other farmers may follow their examples; their farms credited or recognized as SA learning centers; and consider giving monetary reward such as lifetime pension

Agricultural Industries

- Instruction, research and extension must match or supply the manpower needs of the agro-based industries, not to mention the cost-efficient techniques, prototyping tools and machine requirements from raw material production to processing.

Budgetary Support

- Philippines budget for education ranged from 2.5 % to 2.8 % of GDP during the last decade (2006- 2016) .UNESCO recommends 6 % of GDP be invested on education
- In 2012 the Philippines allocates only 0.14 % of its GDP to R&D (Gross expenses on Research and Development, GERD) UNESCO suggests 1 % GDP. Our ASEAN neighbors have exceeded the UNESCO's 1% recommended allocation for GERD.
- South Korea, Japan and Singapore have >3.0% GERD.

Monitoring And Evaluation

- The Technical Panel for Agriculture Education (TPAE) must include the evaluation of teaching and RDE Programs of HEIs on AE/OA

Legal matters

- Amend the Local Government Code and the AFMA or a new law on agriculture and fisheries extension in the Philippines be enacted