

EXTENSION POLICY DEVELOPMENT: CHOOSING THE BEST AMONG THE ALTERNATIVES*

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INTRODUCTION

The Extension concept originated in England almost 200 years ago. Extension service was started by agriculture teachers who recognized that knowledge, information and farming practices taught in the agricultural schools could improve farming and increase yields if known and practiced by the farmers around the locality. In their spare time, these agriculture teachers would go out to the villages to *extend* knowledge, improved techniques and approved farming practices by teaching these to the farmers in the villages around the Agricultural School. This resulted in better farming practices and increased production by participating farmers. Consequently, farming communities asked for more of this kind of agriculture teachers *extending* agricultural know-how to the farmers. The question arose: can this extension service to farmers be institutionalized. Colleges of agriculture as a source of improved farming knowledge and technologies were called “ivory towers” because they were not *extending* these to the farming communities.

Actually, the first institutionalization of agricultural extension to farmers happened in the United States of America. It was there where the first national Extension Policy on record was promulgated, known as the Smith-Lever Act of 1914. The Smith-Lever Act was the national policy of extension which organized, funded and operated the COOPERATIVE AGRICULTURAL EXTENSION Service in all the States of the USA which had a Land Grant College of Agriculture. (Note that the Agricultural Extension Service in the USA was a cooperative financing and administrative responsibility between the Federal Department of Agriculture and the State government). Happily, in 2014, the USA celebrated the 100th Anniversary of the US Cooperative Agricultural Extension Service. It is a testimony of the soundness, the maturity, the usefulness and stability of the thinking behind the US Extension Policy.

But it was only after the WW II that Agricultural extension was introduced by the USA to other countries through its US AID program. From what I know, in Asia, the Philippines was the first country where the Americans introduced the concept and practice of agricultural extension Service. By around 1954, Republic Act ___ was promulgated and passed by the Philippine Congress creating,

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funding and operating the BUREAU OF AGRICULTURAL EXTENSION (BAEX). This became the first and the model national extension policy in Asia. Agricultural development leaders and policy makers of Thailand, Indonesia, Malaysia, South Korea including India, came to the Philippines to study the concept, the organization and the operation of an effective national agricultural extension service. Of all these envious countries, Thailand adopted in to-to the BAEX model around 1957.

Thailand continued to followed this model up to this present. Today, it is one of the best National Agricultural Extension services in the 2nd and 3rd world countries. Note that the budget of Thailand Agricultural Extension Service has been growing throughout these last 60 years. As an incentive, the

extension policy of Thailand was to increase or decrease the yearly extension budget according to the annual rate of growth of the AGDP.

Since 1914, every country that adopted the agricultural extension service has an extension policy. From 1950's until the 1990's FAO (Food and Agriculture Organization of the United Nations) assisted several member countries develop their agricultural extension services. In some countries FAO assisted member countries to develop their agricultural extension policy and the resulting agricultural extension service. A case in point is China's Agricultural Extension Policy and Program which started with the FAO High Level Mission on Extension in 1983. Based on FAO's experience, it can be said that every country extension policy has its story or history. Moreover, every country extension policy has its own agricultural, socio-economic, political and institutional context. For this reason, Extension Policy and practice differs from one country to another.

AGRICULTURAL EXTENSION AND AGRICULTURAL MODERNIZATION & DEVELOPMENT OF NATIONS

Around the last quarter of the 19th century, traditional farming was no longer able to feed the population of Europe and the rest of the known old world. There was widespread hunger and under nutrition and low level of living in the rural areas in Europe, the USA and elsewhere in the world. These triggered the study and teaching of agriculture in schools. These also led to the first United Nations organization of the Food and Agriculture Organization (FAO) in 1946. This was followed by the establishment of agricultural colleges for research and teaching. This in turn ushered agricultural modernization, most prominently in the agricultural country of the United States of America. In experimental stations of the Land Grant Agricultural Colleges, high yields and good quality of crops were being achieved. But the low productivity and low level of living of the traditional farming population remained. Hence it became clear that there was a knowledge and technological gap between the Experiment Stations and the multitude of traditional farmers. This led to the concept of Extension as the bridge between research in the experiment station and the farming population. This further led to the concept and policy in the Smith Lever Act of the three functions of the Land Grant Colleges of Agriculture: Instruction/Teaching, Research and Extension.

When the farm crops yield issue was resolved, many secondary problems arose. Among these were post-harvest handling, food processing, marketing, farm management and increasing the quality and level of living of the rural farming families, etc. Researches were directed to these secondary problems and knowledge and technologies developed were integrated into the agricultural extension service. To address the quality and level of living of rural families, Home Economics Departments (or Home Economics colleges) were created with the three functions of teaching, research and extension. After the WW II, USAID introduced and promoted agricultural extension to the free world countries such as the Philippines. Furthermore, FAO included in its program of technical assistance to member countries, agricultural extension and training of agriculture personnel of developing member countries.

Evaluation and impact studies of adequately funded, well organized, well trained extension agents and well administered agricultural extension services have consistently shown its high impact on participating farmers. This is manifested in the increased level of knowledge and skills, improvement of farming practices, increased production and productivity, better management of the farm, higher income and level of living of farmers. Hence, a well crafted Extension Policy is a good policy instrument: a) for agricultural development (increasing food production in the farm, improving national food security, alleviating rural poverty) b) to attain a good return to public investment in agricultural and rural development, and c) to establish a good political platform to educate and increase the socio-economic standing of the farming population.

EXTENSION POLICY LANDSCAPE WORLDWIDE AND IN THE PHILIPPINES

Since 1914, when Agricultural Extension services are seen in terms of their **Organization, Financial and Administrative Control**, the Extension policy landscape worldwide can be viewed in six models:

1. **National Centralized Extension**
2. **National Decentralized Extension**
3. **Decentralized Extension**
4. **Specialized Commodity Extension**
5. **Privatized & Non-Government Organization Extension**
6. **A Country's Pluralistic Extension**

Over the years, some countries like the Philippines have tried two or more of these Extension models or policies with varying results. The general characteristics of each of the 6 Extension Models can be learned in terms of the following parameters:

- a) **Organizational structure**
- b) **Objectives**
- c) **Financing source(s)**
- d) **Administration (personnel, supervision & logistic support, accounting, monitoring and evaluation, reporting)**
- e) **Extension approaches & methods**
- f) **The clientele and scope of coverage**
- g) **Source of authority/mandate**

The characteristics of the 6 Extension models with their respective policy are as follows:

1. **The National Centralized Agricultural Extension policy (NCAE)**

The agricultural extension service is a fundamental functional unit of the Department or Ministry of Agriculture in relation to its important constituent farming population. It is organized and administered nation-wide from the national capital to the lowest farming localities. The objectives are to improve the knowledge and skills of the country's farmers in adopting modern farming information and technologies (including farm management), to increase the quality and quantity of the yields of farm crops and animals, and to raise the income and the level of living of the farm family. It is totally funded by the national government as a public service to its important basic socio-economic farming population. All the employees: the subject matter specialists (SMS), agricultural extension workers and management leaders and administrative employees are classified as national employees. The clientele of the National Agricultural Extension Service are the farmers and the family of the entire country. The good examples of this model are the Philippines when it had the Bureau of Agricultural Extension (BAEX) (from around 1954 to 1987) and the Kingdom of Thailand with its Department of Agricultural Extension of the Ministry of Agriculture (from around 1957 to the present). In both the Philippines and Thailand National Agricultural Extension Service, the mandate and source of authority is a law passed by Congress/Parliament adding the Extension function to the Department/Ministry of Agriculture of the Country.

2. **National Decentralized Agricultural Extension (NDAE)**

The agricultural extension service is nation-wide in scope of a big country. It is a fundamental and functional support of the Department or Ministry of Agriculture to the farming work of farmers in the States of a Federal Government System or the Local government unit (Provincial) of a Unitary government system. The objectives of a National Decentralized Agricultural Extension are the same as those in the National Centralized Agricultural Extension except that these have to be realized at the individual State or Provincial Unit level. But the fundamental

difference of the NDAE is its being administered and financed jointly or cooperatively by the Central/National government and the State government in a federal system or with the Local government unit (Provincial LGU) in the case of a unitary government system. The policy spells out the financial sharing between the central and the state/LGU. For example in China, the financial sharing is 50% County government (more than 1 million population), 30% provincial government (with 65 to more than 100 million population) and 20% from the National government (with 1.1 billion population in 1983). The clientele of the Extension service are the farmers and their families in the different States or Provinces. In the case of China in 1983, the clientele of the decentralized agricultural extension service were 800 million peasants (73% of the labor force) who were disbanded from the communal farming system to individual family farms in 2,300 Counties in 21 huge Provinces.

Our examples of the NDAE are the US Cooperative Agricultural Extension Service and the Peoples' Republic of China County Agro-technological Extension Center network (CATEC) of the National Agricultural Extension Service of China. Although both are funded and administered cooperatively between the Central and the State/Local government units, their operational approaches are not the same. In the case of the USA, the operational location of the agricultural extension service is the State Agricultural College while in China, it is the newly created County Agro-Technological Extension Center (CATEC).

Uniquely, the CATEC has 3 functions besides its being the physical location of the extension service, namely: 1) Experimentation, 2) Training and 3) Dissemination. Technical information & technologies coming from provincial and national research institutions are tested/tried/demonstrated by the subject matter specialists in the CATEC's Experimentation Laboratory and field demonstration land. The locally adaptive information and technologies are used in training the agricultural extension workers, who after training, disseminate the information through the radio/mass media and the techniques and technologies are brought and taught (including method and result demonstration) to the farmers in their farms. Many of the aggressive farmers go to the CATEC to see the field trials, ask clarification and buy farming materials such as seedlings of new varieties of plants or new production inputs.

In the case of the US Cooperative Agricultural Extension Service, its mandate and authority comes from the Smith-Lever Act of 1914 which was a legislative action of the US Congress in 1914, or 102 years ago. In the case of the China's CATEC Network, what I know was the pronouncement of Minister of Agriculture He Kang, that in 10 years, all the 2,300 Counties in China will have a CATEC following the two years successful FAO assisted Pilot CATECs in Shuangliu County in Sichuan Province (with provincial population of 110 million in 1983) and in Wu County in Jaingshu Province (with provincial population of 68 million in 1983). (Note that the choice of the County as the operational unit of the China Extension service was based on three principles: small enough to be close to the farmers, small enough to cut operational red tapes and big enough to have economic scale of extension operation such as the construction of the CATEC facilities, the hiring of subject matter specialists, etc. Note further that in 12 years, 85% of the 2,300 counties in China had operating CATECs following the "radiation strategy" of rapid expansion.)

3. Decentralized Agricultural Extension Model (DAE)

In the mid 1980's there was criticism of centralized government services as being expensive, top-down, long red tapes and the lack of participation of the people and local governments in the governance of programs that affect their lives. The idea of peoples' participation and empowering the local people in development became popular. Thus, for whatever reason or

motivation, around 1987, one of the first reorganization acts of the new President, Corazon Aquino was to decentralize or devolve BAEx into the Local Government Units (LGUs), retaining as a national function of DA agricultural training in place of BAEx which was named Agricultural Training Institute (ATI). The idea was for ATI to support the devolved extension personnel by providing them training in agricultural development matters.

When the Local Government Law was passed, the Agricultural Extension function, administration and funding was devolved to the Municipality level of the LGUs. Personally, I have not seen the objectives and organizational structure of the Agricultural Extension Service of the country when it was devolved. Presumably, the Objectives and the identified clientele of the devolved extension service was the same as when it was BAEx. On the administration of the decentralized agricultural extension service, the Municipal Agriculturist and the Agricultural Extension workers were being recruited, appointed and were responsible to the Mayor and were co-terminus with the elected Mayor. Officially, organizationally and administratively the devolved Agricultural Extension was not formally linked with the Department of Agriculture nor probably with the National Agricultural Research System. However In practice, the DA is able to support the decentralized extension work by giving them funds to implement DA rice production program and projects.

The mandate and source of authority of the Philippine Decentralized Agricultural Extension system was President Corazon Aquino Executive Order (EO) which became part of the Local Government Act of (1989?).

(Personal Note: It appeared that since the BAEx was devolved to the LGU's, rice and other farm production have been declining from the high farm productivity before and during the Massagana 99 program that used BAEx to work with the country's rice farmers. On the other hand, rice and other farm production have been increasing with the Thai's centralized Department of Agricultural Extension. As an incentive for increasingly professionalized Thai Extension workers, their budget is being increased annually according to the rate of growth of agriculture GDP in the previous year.)

4. Specialized Commodity Extension Model (SCE)

During the 1970's when developing countries were producing export commodities such as cotton, coffee, cacao, etc. Commodity Boards were created to administer and manage the government commodity enterprises. To improve the knowledge, skills and competence of the commodity farmers, the Commodity Boards would create, fund and administer their specialized commodity extension system. These proved to be effective because the clientele was not too many and were provided with the resources that they needed, the information, knowledge, skills and technologies be taught to the farmers were clear and available and the marketing of farm products were handled by the Boards. But this could not be transferred into the DA/MA general agricultural extension service even in the countries where the Specialized Commodity Extension was successfully implemented.

5. Privatized or NGO Extension (P/NGOE)

In the late 1980's towards the end of the World Bank funded T&V (Training and Visit approach of extension) and the privatization fever was high in UK, some European countries and some Latin American countries, there was a challenge of governments spending huge amount of public money being spent on publicly funded agricultural extension services. The USA, Thailand, Japan and other countries did not agree with this criticism of the publicly funded agricultural extension services. But countries such as the Netherlands, Brazil and Chili tried to move into Privatizing the Agricultural Extension Services. In the Netherlands, the dominant covered farming farmers were getting their advice and technology from private research and manufacturers of covered

agriculture materials and technologies did not need the public extension service whose public research institutions were far behind the private research and manufacturing companies.

But in Brazil, while the huge EMBRATER (the Agricultural Research Agency of the Ministry of Agriculture) remained to be completely a public service, the huge EMATER (the Agricultural Extension Agency of the Ministry of Agriculture) was being phased out to give way to private extension providers. As in Chili, the professional agricultural extension agents were encouraged to put up their own Private Agricultural Extension firms, to be funded from the consultation fees of farmers. There were attempts by the government to give farmers coupons that they could give to the Private Extension Provider for consultation. After about 5 years of trying to privatize agricultural extension which practically destroyed the vibrant public agricultural extension service and productive farms, the Latin American experiment on private extension was abandoned and the National Public Agricultural Services was gradually restore.

6. A Country's Pluralistic Extension Service

In the 1990's there were several countries specially in Africa and Asia with inadequate national funds and personnel to meet the needs for an effective agricultural extension services of large number of poor farming population spread all over the country. Furthermore, the Central governments were too weak to implement effectively foreign funded public extension service. Because of the high demand for agricultural extension work among farmers, foreign funded private agri-business companies, rural development NGOs' and domestic rural development institutions and NGOs offered to do extension work with farmers. The different sources of funding, the different groups or institutions providing extension with different approaches of providing agricultural extension services and without central coordination and monitoring, this system was labeled and understood as a country's pluralistic Extension service. The specialized commodity extension and several private extension services in a country are meaningfully recognized as a part of a country's Pluralistic extension system.

From what I know, there is no country that has a legal mandate and authority to adopt a pluralistic extension system. This seems to be a spontaneous and a *de facto* occurrence in many countries. This is actually happening in the Philippines when one recognizes the agricultural extension work of private agri-business companies, the extension work of the different bureaus of the DA such as the Bureau of Soil and Water Management, Bureau of Plant Industry, Bureau of Animal Industry, PhilRice, the agricultural extension work of PCARRD and a number of regional State Universities College of Agriculture, etc.

Actually, there is a need for a legal mandate of a National or Central government entity that should accredit, give direction and monitor the agricultural extension activities of these different government agencies, private firms and NGOs.

AGRICULTURAL EXTENSION POLICY DEVELOPMENT, THE CASE OF:

A. The USA Cooperative Agricultural Extension Service

Cooperative Extension Service of the Federal DA and the State government

In the years before the passage of the Smith Level Act of 1914, farm labor shortage with the freedom of the slaves, agricultural societies, cooperatives movement and demand for agricultural modernization was strong. This led to the establishment by the Federal government of the Land Grant Colleges of Agriculture for Agricultural Education and Research as the fundamental step towards agricultural modernization of the vast agricultural resources. It became clear that the knowledge and technology being generated by the Land Grant Colleges were not benefitting the millions of farmers who needed these new and more productive farming

practices and technologies, more importantly farm mechanization, soil fertility improvement, soil conservation, pest and disease control, etc. These farming conditions ushered the conception, policy formulation and the establishment of the USA Cooperative Agricultural Extension Service. The policy features of the US Cooperative

Agricultural Extension Service include the following features:

1. Public service to meet the farming technological and modernization needs of the American farmers; to provide the farmers objective knowledge and information on modernizing and improving the productivity and profitability of farming. For this reason, the American Agricultural Extension service never entertained the movement of privatizing agricultural extension in the 1990s. Before adopting a new technology (farm machine, fertilizer, insecticides, planting materials, etc.) from the private source, the farmers would consult first their trusted technically objective extension agents.
2. Agricultural Extension Service is a cooperative or joint funding and administration responsibility of the Federal government and the State government. The law provides regular funding a formula of sharing and auditing of funds. One provision (For example, in practice the FDA provides a standard salary for the Extension Agents throughout the USA and the State government tops the salary of the extension agents according the financial capacity of the State government and the value of the extension agent(s).)
3. The government's extension program was designed to bridge the knowledge and technological gap between the agricultural research at the College of Agriculture and the farmers if the State.
4. The Operational Unit of the US Cooperative Agricultural Extension policy is the State Land Grant Agricultural College. The Land Grant College of Agriculture has three functional directors: The Director of Instruction, The Director of Research and The Director of Extension. The College Director of Extension is the Director of the State Cooperative Agricultural Extension. In the Land Grant College, there is an Extension Division where the Director of the State Agricultural Extension Service operates. The Dean of the College of Agriculture ensures the linkage between Research and Extension and the Training support to extension of the Instruction/Teaching program of the College.
5. The Director of Extension who is jointly funded, annually reports and submits the Extension Program and Budget to the State Governor's Office and the USDA Federal Extension Division in Washington.
6. Based on the Cooperative Agricultural Extension law, the regular annual budget of the Federal Cooperative Agricultural Extension Service is a regular item in the US Federal Department of Agriculture. The State legislature allocates regularly the annual budget share of the State Cooperative Agricultural Extension

B. The Philippine Agricultural Extension Service

Unlike the stable US Cooperative Agricultural Extension Policy, the Philippine Agricultural Extension policy have been unstable. In 33 years (from 1954 to 1987), the Agricultural Extension Policy has shifted from the National Bureau of Agricultural Extension (BAEx) to a Commission of Agricultural Extension and back to BAEx. Then in 1987, by an EO, BAEx was completely Decentralized to the Municipality level. Most probably, this is not the last shift given the importance of agricultural extension in the modernization and development of agriculture to attain national food security, make farmers well off and to eliminate poverty in the agriculture sector.

During the turn of the 20th century, the Americans found Philippine agriculture to be in its primitive traditional level. They established the UP College of Agriculture in 1908 and

subsequently established regional agricultural schools in Central Luzon, in Munoz, Nueva Ecija, the Baybay Agricultural School in the Visayas and the Central Mindanao Agricultural School in Musuan, Bukidnon. Then they established Experiment Stations of the Department of Agriculture. After the WW II, The Americans started some form of extension service coming from the UPCA and the 3 regional agricultural schools. This was too limited and slow, so in 1954, the Philippine Congress passed the law creating the Bureau of Agricultural Extension Service (BAEx) as one of the Bureaus of the Department of Agriculture. Like the US Cooperative Extension Service, the BAEx had a Home Economics Division which also handled the 4-H Clubs for the farm youth in addition to the major work on agricultural extension which covered crops and animal husbandry extension. The work of the BAEx made Philippine agricultural development progressive and rural life improvement exciting.

The BAEx became an attraction and model of the different countries in Asia. Seeing the political arm potential of the BAEx, one President of the Republic tried to use and control the BAEx by changing it into Presidential Agricultural Extension Commission with an EO. It did not work, so BAEx was restored by President Marcos. Since BAEx was dependent upon the UPCA for new knowledge and technology (until around 1975, 80% of research was from UPCA and the other 20% from DA Experiment Stations & the 3 regional agricultural colleges) President Marcos created PCARF 1984RD in 1972 and several state colleges of agriculture. When the Accelerated Rice and Corn Production Program was being implemented followed by the Masagana 99 Program, the BAEx was at the forefront of the program with research and training support from UPCA, IRRI, PCARRD and the additional state colleges of agriculture. BAEx was highly credited for its important role in the historic in rice self-sufficiency. It even had a taste of exporting some rice which was strongly opposed by the established rice import interests.

But when President Corazon Aquino took the Presidency and reign of power, by an EO, she abolished BAEx and devolved it to the LGUs. In its place was the Agricultural Training Institute. The highly trained professionalized agricultural extension manpower of BAEx was dissipated, the assignment and appointment of LGU extension staff became political and its linkage with agricultural research became weak or none existent in most cases. Whether acknowledged or not, the abolishment of the BAEx led to the progressive decline of Philippine agriculture. When the BAEx trained rice farmers all over the country retired, the farmers who succeeded them did not get the training and guidance of the BAEx type of Extension agents. As a result, many of them reverted to traditional rice cultivation with lower yields. Interestingly the constant decline of rice production problem (due in part to the ineffective decentralized agricultural extension service for which DA has no control), is blamed on the DA and not on the LGUs.

Observable features of the Decentralized Agricultural Extension Service with policy implications may include the following:

1. The organizational structure of the Extension Service above the municipality level is not clear. The organizational structure above the operational unit municipality gives the different support and direction of the extension service in the locality.
2. The municipality as the operational unit of the extension service is too small to have economy of scale in the use of trained extension operation managers, subject matter specialists, the use of facilities and equipment, etc. which are needed in an effective agricultural extension set-up.
3. Since the financing of BAEx was not transferred to the devolved extension, the regularity and adequacy of financing the devolved extension is not clear, and therefore unsettling to career agricultural extension workers.
4. Agricultural Extension work is a technical – professional undertaking. While the devolved BAEx extension workers were professional and technically trained, there are no indication,

that this has been maintained or improved under the devolved extension policy. Furthermore, the elected Mayor as the top administrator of the extension service may not have the training, understanding and passion to lead the agricultural extension service in his municipality. His choice of the municipal agriculturist and extension workers may not be based on their technical and professional qualification to do a good job in agricultural extension service.

5. The objectives and technical subject matter coverage of the devolved agricultural extension service is not clear which makes evaluation of extension effectiveness difficult.
6. Since BAEx was developed, it is hard to find annual report of its clientele and subject matter coverage, its impact on farmers' attitude, knowledge and skills, farm productivity, farm income and level of living of the farm family.
7. The sources of authority and mandate (the EO and the extension policy in the Local Government Law) of the decentralized agricultural extension in the Philippines should be reviewed by experts for its soundness, appropriateness and adequacy.

C. The Thailand Agricultural Extension Service

The Thai Agricultural Extension Service is a typical National Centralized Agricultural Extension. It is a Department of Extension of the Ministry of Agriculture of the Kingdom of Thailand. It was created by law in around 1957 and has progressively developed into one of the most effective and well funded agricultural extension system in the 2nd & 3rd world.

The Kingdom of Thailand is an ancient civilization. By nature it is an agricultural country. Even before modern agriculture, Thailand food security was solid, exporting rice long before the WW II. But after WW II, Thai leaders recognized modernization of agriculture spreading from USA to the Philippines. Around the late 1940's Prince Sacra van (not sure of the spelling) studied agriculture at UPCA with Dean Dioscoro Umali. So when he learned about the Bureau of Agricultural Extension and its good work among farmers in the Philippines, Mr. Yukti, the first Director of the Thailand Agricultural Extension Service went to the US and UK before coming to the Philippines to study seriously the concept, organization and operation of the BAEx. He went back to Thailand determined to have a similar agricultural extension service there. By around 1957, the Thai Parliament passed a law creating within the Ministry of Agriculture, the Department of Agricultural Extension and Cooperatives. This was followed by many Thai students studying agriculture and agricultural extension at UPCA.

Just like the BAEx, the Thai Department of Agricultural Extension was headed by a national Director. In the Provinces, they had Provincial Agriculturists who administered the Agricultural Extension and Home Economics & Rural Youth Extension programs. The Ministry of Agriculture used the Agricultural Extension Service in increasing productivity and quality of traditional farm products such as rice, fruits, vegetables, flowers; increasing the variety of farm products such as the introduction and promotion of green grapes, increase farm food processing, preservation and packaging and improving the quality of rural life. With the recognized impact of Thai Extension service, its budget was increased every year based on the rate of increase of the AGDP.

In the 1980's the World Bank was dangling huge loans for Extension on condition that they adopt the T&V system (Training & Visit System) of Extension. Most countries, including India, Indonesia and the Philippines took the World Bank Loan and T&V system but Thailand rejected it because they did not like to disrupt their own extension system. In the 1990s, the bi-lateral donors from Europe were advocating privatization of the public extension services to reduce

central government expenses. Some countries tried it and failed but Thailand and the USA resisted such extension policy shift.

D. The Brazilian Agricultural Extension Service

The Brazilian Agricultural Extension is included here because the country created special national agencies for agricultural research (EMBRATER) and for Agricultural Extension Agency (EMATER). These were nominally linked to the Brazilian Ministry of Agriculture. They were big, powerful and well funded. In the 1990's with the issue of cutting subsidy of agricultural production, privatization idea in Europe and Latin America, there was a move to privatize extension services of EMATER. The proponents thought that farmers should pay for the advisory services of the extension providers. But EMBRATER was spared because it was not providing direct advisory service to the farmers.

Extension staff of EMATER were advised to form their Advisory Services Company and the farmers were asked to pay for their services. The small farmers who could not afford to pay the extension advice were given coupons by the Ministry of Agriculture. This policy shift destroyed EMATER and the public extension service that it was giving to Brazilian small and big farmers.

E. The People's Republic of China Agricultural Extension Service

The Chinese Agricultural Extension Service Piloted in 1984 is a National Decentralized Agricultural Extension system piloted in 1984 and established in 1985-86. To a certain extent it is similar to the US National Decentralized Agricultural Extension System which was conceived and established in 1914.

Under the Modernization and Responsibility System policy of the Peoples' Republic of China, the 800 million peasants of the country (73% of the country's labor force) were to be freed from the communes and changed into independent family farmers. Given this policy of modernization of agriculture and responsibility system of farming, In 1983, Minister of Agriculture He Kang, went to FAO in Rome, Italy to ask the Director General for assistance in developing an agricultural extension service that can help the 800 million peasants become productive independent family farm operators. As a response, FAO organized and sent a High Level Mission on Agricultural Extension. The FAO Agricultural Extension Mission consisted of Dr. Dioscoro Umali as Mission Leader, Mr. Peter Meyer, Agronomist, Mr. Colen Fraser, Support Communication, Dr. Tito Contado, Extension Expert (Mission's Secretary).

After being in China for two weeks, The FAO High Level Mission on Agricultural Extension outlined and recommended the following for consideration in developing a Chinese Agricultural Extension service for its 800 million peasants:

1. The Chinese Agricultural Extension System must have an Extension Operational Unit close to the farmers. Operating the extension system in the capital of Beijing is too far and not advisable nor the Provincial capital with provinces having a population of 65 to 110 million people.
2. The Extension Operational Unit must be:
 - a) Small enough to be close to the farmers
 - b) Small enough to cut administrative red tapes
 - c) Big enough to allow economy of scale of extension operation

Note: with this criteria, the County was chosen as the Operational Unit of the National Extension Service. There are 2,300 Counties with an average population of no less than 500,000 to 1 million people.

3. There should be a physical agricultural extension center in the Operational Unit of China's Agricultural Extension System.

Note: The adopted name of the physical agricultural extension center is COUNTY AGRO-TECHNOLOGICAL EXTENSION CENTER (CATEC)

4. The Physical Agricultural Extension Center in the County should have three functions:
 - a) Experimentation
 - b) Training
 - c) Dissemination

Note: Each of these three functions are interrelated and must have sufficient number of trained staff and must be provided with the needed facilities, equipment and materials.

5. There should be four members of the County Agricultural Extension Service Executive Board, namely:
 - a) Representative of the County government Agriculture – chairman
 - b) Representative of the County Communist Party
 - c) Representative of the Provincial government agriculture
 - d) Representative of the National Ministry of Agriculture, Extension & Education department
6. The County Agro-technological Extension service must be a joint or cooperative undertaking and responsibility by the County, Provincial and National government. Therefore, the formula of cooperative funding of the CATEC shall be:
 - a) 50% County
 - b) 30% Province
 - c) 20% National

7. FAO would provide funding and consultants from its Technical Assistance Program (TCP) to put up two Pilot CATECs for two years and study tour of the agriculture and extension leaders of the two pilot counties.

8. Two pilot counties were selected and visited. They were Shuangliu County of Sichuan Province (for the south-west central China) and Wu County of Jiangshu Province (for the north-east-south China)

In 1984, the study tour of 12 Chinese leaders who could not speak or understand English went on tour to the USA, Holland, some to Thailand and some to the Philippines.

In that same year, with very high motivation, the two Pilot CATECs were started and soon became operational with the help and guidance of FAO consultants. The farmers, the extension agents, the SMSs, the agriculture ministry people and the government people were all for it with lots of enthusiasm and patronage.

Before the end of two pilot years, Minister He Kang inspected the two Pilot CATECs. Having been satisfied with what he heard and saw, he declared that this is the Chinese Agricultural Extension system and declared further that in 10 years all the counties (2,300) in China will have a CATEC. In a way, this was a policy pronouncement by the Minister of Agriculture. How he crafted a legislated policy in the Chinese language, we do not know.

In my last visit to China in 1995, they reported that “there were only 1,955 CATECs” or 85% of the 2,300 counties! I was also informed that the farming labor force in China declined from 73% to 37%, (and in 2013, I was informed the farming labor force has declined further to 10%). They said that there were lots of adjustments to make but that they were coping with it. Their question to me was how they could put up CATECS in the remaining 15% poorer counties.

CHOOSING THE BEST AMONG THE ALTERNATIVES

There are two ways that I can suggest to choose the best among the policy alternatives being considered. One is by using a team of experts approach. The other one is to use a criteria. Of course even a team of experts can do well if they use an agrees criteria.

For purposes of this Policy Symposium, my suggested criteria in choosing the best alternative extension model for the Philippines are as follows:

1. Effectiveness in the number of farmers helped, improving farming technology & management and increasing productivity of the farm enterprise
2. Linkage with research and training service providers and the scope of subject matter coverage
3. Education, Technical competence and professionalism of the Extension personnel
4. Organizational set-up: a) closeness to farmers, b) general extension workers supported by subject matter specialists, c) Clear line of authority, not complex and confusing, d) structure that minimizes red tape, e) the operational unit big enough to gain economy of scale.
5. Adequacy, predictability and timely releases of Extension funding and extension message.
6. Extension delivery efficiency and effectiveness
7. Operational cost-effectiveness
8. Stability and sustainability

After this review and considering these criteria, as an expert in Extension, my policy choice for the Philippines is the National Decentralized Agricultural Extension System with the Province as the Extension Operational Unit (and not the municipality). There is so much that can be learned from the FAO/Chinese model.

Tec/10/10/63

<<<<<<<THANK YOU >>>>>>>