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THE PHILIPPINE AGRICULTURAL EXTENSION SERVICE:
EVOLUTION, STATUS AND TRENDS

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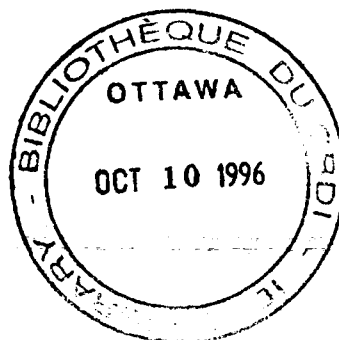
ABSTRACT

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The agricultural extension service in the Philippines is traced back to its colonial beginnings and to government reforms and reorganizations. The Department of Agriculture (DA) through its Agricultural Training Institute (ATI), formerly Bureau of Agricultural Extension (BAEx), is responsible for the country's agricultural extension service (AES). The mandate of the AES is to provide extension and training support to programmes geared toward the following strategies: farming systems, human resources development, institutional development, linkages and agency service complementation. The goals are to improve farm income and profitability, food security, nutrition and ecological balance.

The signing of a memorandum of agreement between DA-ATI and PCARRD's Applied Communication Division (ACD) has paved the way for a strong linkage between research and extension and has facilitated the development of community-based location-specific and farm family-focused technologies in the 12 regions of the country. The smooth flow of technology from the research institutions to the farms has been facilitated through interagency collaborative undertakings of the Regional Applied Communication Office (RACO's) and the DA extension system through the National Integrated Applied Communication Program (NIACP).

The paper describes the DA-PCARRD research-extension linkage, the extension strategies and approaches being used for production, postproduction and marketing information, the role of extension in enforcing regulations on the animal, plant and fishery industries, and the strengths and weaknesses of AES. Despite its weaknesses brought about by unpooled applied communication skills and resources, need for evaluation research and systematic synthesis of past communication research to feed on extension policy, lack of funds, and inadequacy of competent manpower, the country's agricultural extension system moves on to positive and timely adjustments in policies on organizational reforms, interventions on supervised credit, marketing, prices, and subsidies.



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THE PHILIPPINE AGRICULTURAL EXTENSION SERVICE: EVOLUTION, STATUS, AND TRENDS

INTRODUCTION

The Philippines, otherwise known as the Gateway to the Far East and "Pearl of the Orient Seas," is a Manila-dominated country. Most of the opportunities especially modern conveniences and sophisticated facilities can be found in Manila, the capital city. About ten million of the country's 55 million population reside in this city.

Beyond Metro Manila - in the countryside - lies the bulk, about 70 percent, of the country's population who experience the thinning out of commercial, industrial, socio-cultural, recreational, mass media, and educational opportunities and services (Castillo, 1979). Despite rapid urbanization and industrialization in this area, the great majority still lives in the rural areas where agriculture is a way of life.

As this archipelagic country of 7,100 islands moves on to agro-industrial development, the Philippine economy remains predominantly agricultural. The agriculture sector absorbs about 55 percent of the labor force; it contributes about 60 percent of exports and about 33 percent of the Gross National Product. The main thrusts of the country's agriculture sector have been geared towards the attainment of increased farm productivity and net income, quality nutrition, and more savings for re-investments in income-generating projects (Serrano, 1985).

In the Philippines, as in any agricultural country, agricultural extension (AE) plays an important role in hastening agricultural and rural development. AE is a potent machinery by which the government reaches out to the small farmers and their families - the reason for its development efforts.

AE is a continuing non-formal education designed mainly for farm families and landless farm labourers to develop farming systems (production mixes) which could give them the highest productivity and net profit, thereby enabling them to attain quality nutrition and generate savings for re-investments in complementary income-generating projects.

As an educative process, AES has three important characteristics: it is farm family-focused, community-based, and location-specific (Serrano, 1986). This paper discusses how AE facilitates agricultural development in the country and outlines policies for future growth and development.

HISTORICAL BACKGROUND

Since the role of AE is crucial in attaining agricultural development, it is necessary to analyze how it came into being. The evolution of AE in the Philippines has been associated with government reforms and reorganizations (Serrano, 1986).

A. Spanish Regime

The beginnings of agricultural extension date back to the Spanish era when the Spanish missionaries established the "Granjas Modelos" (model farms) which later became the Settlement Farm Schools. Changes in cropping patterns in answer to market demands created impacts in neighbouring farms that became prototypes of "haciendas" due to the encomienda system that was later institutionalized.

B. American Regime

In 1902, the Americans created the Bureau of Agriculture. A division for Demonstration and Extension Service was established under this Bureau in 1910. Five years later, the activities of this extension division was expanded to include cooperative farmer's associations, rural credit, and animal insurance. In 1929, the Bureau of Plant Industry (BPI) and the Bureau of Animal Industry (BAI) were created. The Agricultural Extension Division remained with the BPI. In 1936, the Commonwealth Government enacted Commonwealth Act No. 85 which created the provincial agricultural extension service. This Act provided for the appointment of Provincial Agricultural Extension Supervisors and Municipal Agricultural Inspectors.

C. Philippine Republic

In 1952, Republic Act (R.A.) No. 680 created the Bureau of Agricultural Extension (BAEx) which integrated the AE service of the then Department of Agriculture and Natural Resources (DANR). Upon recommendation of the Bell Mission in 1953, BAEx was mandated to implement an agricultural extension program designed for farm management, home management, and rural youth management.

In 1963, upon enactment of R.A. No. 3844 otherwise known as the Land Reform Code, BAEx was turned into the Commission on Agricultural Productivity (CAP) and placed under the Office of the President. The promotion and development of Agricultural Cooperatives was intensified while the programmes, projects, and activities of the Commission were realigned to support the agricultural land reform programme.

In 1967, R.A. No. 5185 otherwise known as the Decentralization Act, empowered the local government to undertake agricultural extension services. About 16 other government agencies were found doing AE in view of the increased demand for such services brought about by the small-scale farming system in the land areas and the series of reorganisations.

In 1969, Executive Order (E.O.) No. 128 implementing the Decentralization Act of 1967 rationalised the implementation of the AES.

D. Martial Law Regime

In 1972, the Integrated Reorganisation Plan mandated by Presidential Decree (PD) No. 1 reverted the CAP to its original name - BAEx, back to the DANR.

Gradually, regional offices were established by the line bureaus and Regional Directors were appointed. In 1974, Letter of Instruction (LOI) Nos 447 and 448 authorized the Ministers to delegate substantial powers/responsibilities to the Regional Directors. The Ministry of Agriculture (MA) was among the first to delegate such powers and responsibilities to its Regional Directors.

In 1978, P.D. No. 1579 was issued to reorganise the M.A. This P.D. converted the former line bureaus: Bureau of Soils (BS), Bureau of Animal Industry (BAI), Bureau of Plant Industry (BPI), and Bureau of Agricultural Extension (BAEx) into staff bureaus while at the regional, provincial, and municipal levels ministry-wide regional, provincial, and municipal offices were created. Regional Directors with two Assistant Regional Directors per region were appointed by the President. Seventy-five Provincial Agricultural Officers were designated in 75 provinces; 60 City Agricultural Officers and 1,558 Municipal Agricultural Officers corresponding to the cities and municipalities respectively were also designated.

In May 1980, E.O. No. 595 transferred the Bureau of Cooperatives Development (BCOD) from the Ministry of Local Government and Community Development (MLGCD) to the M.A. This mandated the Ministry to strengthen community-based organizations for agricultural cooperation towards programs on savings and reinvestments to complement income-generating projects. AE was called upon to transfer appropriate technology for farming systems; accelerate institutional development as well as massive efforts on human resource development.

E. Post-Martial Law Regime

On June 30, 1984, E.O. No. 697 renamed the MA into the Ministry of Agriculture and Food (MAF) and transferred the Bureau of Fisheries and Aquatic Resources (BFAR) from the Ministry of Natural Resources (MNR) to MAF. Accordingly, MAF was made responsible for the formulation of policies and goals for promoting the production of agricultural crops, livestock, poultry and fisheries through the implementation of appropriate programs and projects and the provision of suitable services for administration, research, and extension.

F. Revolutionary Government under the Freedom Constitution

In 1987, E.O. No. 116 was issued renaming MAF into MA which was later transformed into the Department of Agriculture (DA) upon adoption of the 1987 Constitution. As a consequence, BAEx was then reorganised into Agricultural Training Institute (ATI) absorbing the training and extension functions of DA.

CURRENT MANDATES AND OBJECTIVES

AE has been mandated to operationalise the research-extension interface as the educational arm of the agriculture sector. The DA/ATI and PCARRD/ACD are the agencies responsible for this mandate.

A. Mandate of DA/ATI

Section 4 of E.O. No. 116 mandates the DA to be responsible for the promotion of agricultural development by providing the policy framework, public investments, and support services needed.

In the fulfillment of this role, it shall be the primary concern of the Department to improve farm incomes and generate work opportunities for farmers, fishermen and other rural workers. It shall encourage people's participation in agricultural development

through sectoral representation in agricultural policy-making bodies so that the Department policies, plans, and programmes are formulated/executed to satisfy their needs.

It shall also use a bottom-up self-reliant farm systems approach that will emphasize social justice, equity, productivity, profitability and sustainability in the use of agricultural resources.

The DA, in addition to the Department Proper based in Manila comprising the Office of the Secretary, the Offices of the Undersecretaries, Assistant Secretaries, their immediate staff, the Planning and Monitoring Group and Support Group, consists also of the Services, Bureaus, and Regional, Provincial, Municipal and Barangay Offices.

The functional groups on: (1) Production, (2) Research, Training and Extension and Agricultural Cooperatives, (3) Agribusiness, (4) Planning and Monitoring, (5) Support Services, (6) Attached Units, (7) Corporations and Agencies, (8) Special Concerns Office, are all supporting the frontline services delivery at the Regional, Provincial, and Municipal Offices.

The DA/ATI takes as its basic premise that man is the centre of all development activities. Man's active involvement in every aspect of development is vital to his self-realization. Hence, mobilizing collective efforts through human resources development and creating appropriate structures for their viability are fundamental to farm family-focused, community-based, and farm and home management-oriented agricultural and rural development.

As provided for under Section 14 (b) of E.O. No. 116, the ATI shall be responsible for the training of all agricultural extension workers and their clientele.

Section 20 (b) of E.O. No. 116 sets the general objective of ATI as: "to train department field technicians in extension work with emphasis on technology transfer techniques; train generalists in regional field offices, and conduct multi-level training programmes to promote and accelerate rural development" (ATI, 1988).

Specifically, the ATI aims to:

1. Formulate policy guidelines on continuing education and training of DA personnel and farm families.

2. Establish and operationalize six national training centres, 12 regional training centres, and 77 farmers' training centres.
3. Design and conduct location-specific training courses that are responsive to the needs of both DA personnel and clientele.
4. Institutionalize linkages with research institutions, state universities and colleges of agriculture, DA Regional Offices, local government units/councils, non-government organisations and farm community-based organisations.
5. Assist in the education and training of personnel and clientele of agencies attached to the DA .
6. Assist in the education and training of agrarian reform beneficiaries.
7. Collaborate with the Department of Health on the education and training of farmers and fishermen on health, nutrition, hygiene, and sanitation.
8. Develop and produce applied communication materials (audio visual softwares and print materials) in the form of comprehensive project messages on credit, production programming, post production, marketing, processing, agricultural cooperatives, and support services such as irrigation, farm-to-market roads, ports and transport facilities, environmental protection, etc., to guide extension workers and the rural clientele.
9. Ensure that research results are communicated to the farmers through appropriate training and extension activities.
10. Evaluate the impact of education and training programmes of the ATI with the end view of ensuring that programmes are relevant vis a vis DA's goal of making farming profitable for the farmer clientele.

As shown in Figure 1, the organisational structure of ATI is composed of the Director as the head, three Assistant Directors, and four Division Chiefs. The ATI holds responsibility for 6 national training centers, 12 regional training centers, and 77 farmers' training centers all over the country.

B. PCARRD/ACD and the RACOs

The Philippine Council for Agriculture, Forestry and Natural Resources Research and Development (PCARRD) is a sectoral planning council for agriculture, forestry, and natural resources research and development of the Department of Science and Technology (DOST) which backstops the AE service in the country. (Figure 2).

PCARRD's mandate goes beyond technology generation. Since its inception in 1972, PCARRD has been guided by the dictum "unutilized research results are wasted public investment." In other words, it has upheld the truism that research to be useful must be effectively disseminated and utilized.

PCARRD recognises the important role communication can play in hastening the dissemination of research information to its various types of clientele. In view of this, the Council taps the services of its Applied Communication Division (ACD) for effective technology transfer activities.

Applied Communication (AC) is a specific domain under the bigger umbrella of Development Communication (devcom). While devcom is the planned and systematic use of communication for the upliftment of the quality of life and human dignity, the focus of AC is the communication of research-based information. It is the planned and systematic use of communication for the application of science.

To describe it rather comprehensively, "applied communication is a special type of communication aimed at effecting the internalization and utilization of research information and indigenous knowledge and technology by producers so that such information and technology are integrated into the development process."

PCARRD implements its AC thrusts through the ACD. To facilitate dissemination and utilisation of research information, ACD specifically aims to:

- 1) Bring about effective exchange and interaction on research-related information and appropriate indigenous knowledge among farmer-producers, researchers, political leaders, policy makers, administrators, and extensionists so that they may actively participate in priority setting, in the formulation of the national research framework, and in the process of socialisation and popularisation of research findings and technology.

2) Reach farmer-producers, extensionists, administrators, policy makers, and industry leaders with research information and technology through a variety of appropriate communication channels, modern communication technology, and inter-institutional arrangements and strategies so that they may actively participate in research diffusion and utilisation.

The applied communication thrust of PCARRD is hinged on the intent of the R and D sectors to make a beneficial impact on the lives of the ultimate users of agriculture, forestry, and natural resources technology. To operationalise this thrust, PCARRD established a subnetwork for applied communication in various regions of the country called the Regional Applied Communication Offices (RACOs). At present, there are 15 RACOs which are working components of the national and regional research consortia and centers which PCARRD coordinates.

Figure 3 shows how the National Agriculture and Resources Research and Development Network (NARRDN), established and coordinated by PCARRD, is geographically located in the 13 regions of the country. At present there are 14 consortia and one centre within the network. PCARRD's consortium scheme forges the necessary interagency linkages among research centres, institutions and state colleges and universities and extension systems toward maximised research resources and technology utilisation.

Each RACO consists of core staff that serves as the secretariat for the larger information sub-network composed of communication specialists from consortium member-agencies. The RACOs have the following tasks:

1. To provide communication support to the research activities of the regional research centres/consortia.
2. To pool the scant communication resources of consortium member and cooperating agencies.
3. To foster interagency cooperation by providing the venue for cooperative communication work.
4. To develop and upgrade regional communication capability.
5. To translate technologies into low-cost acceptable and useful communication materials.

There are six general activities that RACOs undertake. These activities are:

1. **Publications preparation and production** - Publications produced range from integrated centre/consortium annual reports and newsletters to fact sheets, leaflets, and brochures on practicable technologies. They appear in three-to-four color formats, depending on the funding and publication-management expertise available.
2. **Instructional materials development** - The RACOs produce posters for use in the field, instructional slide-tape presentations, and fact sheets on recommended technologies. They have realized the limitations of publications and feel the need for low-cost, location-specific references. A number of information/communication officers of member-agencies have been trained by PCARRD in instructional materials production, as well as on the basics of communication materials preparation: writing, editing, and basic photography.
3. **Scientific literature service** - Besides the traditional service to researchers and students done mainly by informing them of available literature and procuring photocopies of requested materials from PCARRD, the regional SLS retrieves research information from the researchers and students who have done their research. This activity is in orchestration with PCARRD's national research information retrieval and documentation programme.
4. **Audio-visual/mass media services** - Most RACOs are utilizing radio broadcasts as a medium for technology dissemination. Where the DA is a member-agency, the group is tapped to provide software for the Department's ongoing radio programs. RACO members translate technical materials into localized radio scripts which are sent to rural broadcasters of local stations.

5. **Communication/social research** - Some RACOs have been involved in communication/social research and evaluation for the past years. However, it is this component of RACO activities which needs to be strengthened in order to generate useful information for more effective technology transfer among various audience levels, with varying political, economic, social, cultural nuances, commodity lines, farming systems, and ecological zones.

6. **Training** - Most RACOs have organized trainings and workshops on communication skills and technical expertise. This is being strengthened with the implementation of the DA-PCARRD National Integrated Applied Communication Programme (NIACP) in the regions.

The strength of the RACO lies in:

1. A region-based organization of communication specialists who have access to research information that are ready for dissemination/transfer and who are aware of the needs of the agriculture communities at the same time;

2. Capability to produce communication materials translating technical information to forms comprehensible and useful to the field worker and the farmer;
3. Access to an existing corps of field workers maintained by development-oriented member/cooperating agencies who have established relationships with the rural communities and who are not considered as foreign intruders;
4. Pooled communication resources and member-cooperating agencies to reduce cost, avoid duplication and contradictory recommendations, and make for stronger simultaneous impact on the participating agencies' respective clientele;
5. A strong linkage with the research coordinating agency through ACD. This linkage enables RACOs to 1) promptly become aware of trends in agriculture research, 2) arrange its activities in anticipation of expected results of R and D endeavors, even as research and development policy makers are advised on the needs and problems in the technology-using sector as gathered by the RACOs; 3) make necessary adjustments when/where possible;
6. Opportunity for the RACOs to upgrade their respective communication capabilities and learn from their experiences, while retaining the freedom and flexibility to design their own communication programmes to suit the region's unique needs and purposes;
7. Development of a sense of cooperation and common responsibility for the whole region among the applied communication units of each member agency (ACUs), breaking down inter-agency rivalries and strengthening mutual commitment to the cause of regional development.

As representative of PCARRD, ACD:

1. is an active member of each RACO;
2. provides technical assistance and guidance in the pursuit of the six applied communication activities;
3. trains RACO members to further develop their communication skills;

4. helps RACO identify local communication resources, problems and their solutions;
5. guides the RACOs in the direction or redirection of regional communication efforts;
6. assists the RACOs in identifying specific communication activities that they may pursue and in drawing up a meaningful plan of work for their respective RACO;
7. carries the voice of the RACO and makes the regions' needs and problems known to the rest of the R and D sector.

The development of every RACO and other respective ACUs is an outreach program of ACD that intends to contribute to the regional efforts for countryside development.

PCARRD has organized 15 RACOs in the following consortia:

1. Bicol Consortium for Agriculture and Resources Research and Development (BICARRD)
2. Central Mindanao Agriculture and Resources Research and Development Consortium (CEMARRDEC)
3. Central Luzon Agriculture and Resources Research and Development Consortium (CLARRDEC)
4. Central Visayas Consortium for Integrated Regional Research and Development (CVCIRRD)
5. Cagayan Valley Agriculture and Resources Research and Development (CVARRD)
6. Highland Agriculture and Resources Research and Development Consortium (HARRDEC)
7. Ilocos Agriculture and Resources Research Consortium (ILARRC)
8. La Granja Agricultural Research Center (LGARC)
9. Northern Mindanao Consortium for Agriculture and Resources Research and Development (NOMCARRD)
10. Palawan Agricultural Research Center (PARC)
11. Southern Mindanao Agriculture and Resources Research and Development Consortium (SMARRDEC)

12. Southern Tagalog Agriculture and Resources Research and Development Consortium (STARRDEC)
13. Visayas Coordinated Agricultural Research Programme (VICARP)
14. Western Mindanao Agriculture and Resources Research and Development Consortium (WESMARRDEC)
15. Western Visayas Agriculture and Resources Research and Development Consortium (WESVARRDEC)

PCARRD provides leadership and support (organisational, administrative, and training) to different RACOs.

DA-PCARRD RESEARCH-EXTENSION LINKAGE

Research and extension serve as tools of agricultural development. Research focuses on technology development while extension serves as the machinery for technology transfer.

As far as research is concerned, the Philippines has a strong central planning, coordinating, and monitoring body in PCARRD which has dramatically eliminated the erstwhile fragmented, undirected and unproductive system of conducting research in agriculture and natural resources. PCARRD does not only possess a considerable degree of autonomy but also national and international funding to carry out its responsibilities, and good links to national agencies and the private sector. It has effectively directed all research towards national and regional priorities and development. More importantly, it has established a network of research centres and consortia in different strategic areas in the country - the National Agriculture and Resources Research and Development Network (NARRDN). (Bautista and Lastimososa, 1987).

Technology transfer is enhanced if the technology itself fits perfectly into the socioeconomic conditions prevailing in the clientele's environment, and if the clientele themselves are directly involved in the identification of specific field problems and their solutions.

Working on this rationale, PCARRD has devised and implemented an information delivery system by which the already functioning national research system can, despite limited resources, actively assist in accelerating the

transfer and utilisation of agricultural technologies from the research institutions to the farms to improve agricultural productivity.

For this reason, a tie-up between the DA and PCARRD was forged for an inter-agency collaborative effort in transferring and identifying location-specific technologies.

The signing of a memorandum of agreement between PCARRD and the DA led to the launching in 1986 of the National Integrated Applied Communication Programme (NIACP). This signalled active interfacing of research and extension and paved the way for more dynamic research utilisation. (Bautista and Mojica, 1987).

The NIACP is a joint undertaking of PCARRD/ACD and the DA/ATI. It aims to: 1) institutionalise research-extension linkages, 2) pool scant communication resources in the regions, 3) provide a mechanism for ensuring the flow of information and knowledge, and 4) mobilize various units involved in the processing of research information and knowledge.

The NIACP is a relatively recent and positive approach to the research-extension-farmer tie-up which is jointly implemented by PCARRD and the DA at the national, regional, and farm levels. At the national level, the programme backstops technology transfer and maintenance activities of the PCARRD R and D network by retrieving and processing technical information for technology transfer purposes. It develops these technical information into communication materials directly usable by farmers and producers, mass-produces and distributes these materials to the regions, and finally evaluates their impact. The program also establishes permanent linkages with agricultural communication/information offices within the R and D network in order to tap research information from all regions of the country. It provides skills training for the communication staff of the research centers to enable them to implement a viable multimedia information-dissemination activity in support of agricultural development workers to make them more effective in the field.

A Task Force in every region executes these functions (at the regional level), except mass production and distribution of communication materials, which are the responsibility of the DA/ATI. Specifically, these regional Task Forces identify appropriate technologies generated by research centres; design, field test, package, and translate appropriate technologies in consultation with the clientele (farmers), into forms usable by subject matter specialists, agriculture and food technologists, and farm families; evaluate and recommend to the extension system effective

communication channels, approaches, techniques and materials; and set up feedback mechanisms for monitoring and evaluating the appropriateness or responsiveness of technology disseminated to the regions. At the PCARRD Secretariat, the ACD helps these Task Forces package and translate appropriate technologies into prototypes. Again, the DA mass-produces and distributes these materials to the intended users.

The DA-PCARRD research-extension linkage in the regional level is coordinated by the Regional Information Officers (RIOs) and Regional Integrated Agricultural Research System (RIARS) Managers of DA and Regional Applied Communication Officers (RACOs) from the PCARRD network of research centres and stations.

To operationalise the implementation of the integrated applied communication program in the national and regional levels, PCARRD/ACD and the DA/ATI spearheaded in 1988 a series of seminar-workshops on technology development and transfer and communication materials production and pretesting.

The seminar-workshop aimed to: (1) improve the capabilities and enhance the competencies of PCARRD and DA regional offices in the development and utilization of appropriate farming systems or production mixes that would increase the real income of farmers, and (2) strengthen the capabilities of the communication offices of PCARRD and DA in the regions in terms of communication materials production.

The major accomplishments of the seminar-workshops include the identification of location-specific technologies and the production of communication materials prototypes, such as primers, leaflets, flyers, posters and STP. The importance of a strong linkage between research and extension was emphasized in the seminar-workshops. (Mojica, 1987).

The DA-PCARRD Integrated Applied Communication Program has the following features:

1. Interagency linkage - This is operationalized through the organisation of an interagency Applied Communication (AC) Task Force. The AC Task Force pools communication resources of participating agencies in the implementation of a planned techno-transfer strategy. The AC Task Force is the single body that plans and implements the communication strategies for farming systems, fisheries, agroforestry and livestock technology transfer.

2. Feedback mechanism - Through the technical departments of PCARRD, the AC Task Force links with the on-site research management units in the regions. The aim is to provide researchers with a mechanism to transfer research information/knowledge to end-users even as field problems are channelled to research management.
3. Design and implementation of communication strategies - These are based on existing development/action programs or projects and available communication resources within the region.
4. Development of communication materials - These are meant to meet the information needs of farmers and extension workers. The communication materials are used in the context of the overall communication strategies designed for a specific site.
5. Pre-testing of prototypes - Before the actual production of a limited number of each communication material, its prototype is field-tested on a representative sample of the clientele. The prototype is revised based on the results of the pre-test.
6. Mass-production and distribution - Once the revisions are finalized, these materials are mass-produced and disseminated according to the overall communication strategy.
7. Training - Field workers are trained on the methodologies of the recommended technology and its transfer.
8. Documentation of technology use - The implementation of the communication strategy and materials in each site are monitored and documented, to compile information on the real field needs and problems relevant to technology transfer and subsequent adoption.

The research and extension efforts of the DA are focused on the development and quick transfer of location-specific, income-enhancing technology. The DA recognizes that there have been deterrents to the effectiveness of the research and extension network (DA, 1987):

- . First, government funding for research in general and for extension-communication research in particular have been extremely low, if not almost nil for the latter.
- . Second, most agricultural and communication research activities have not been aligned to farmers' needs and are neither problem-oriented nor location-specific. Also, there was fragmentation and duplication in research activities.
- . Third, the pace of technology transfer has been slow because of the weak linkage between research and extension.

To deal with these problems, the DA has developed the following strategies:

- a. Together with the Department of Budget and Management, Department of Finance and National Economic and Development Authority, it works for increased funding for agricultural research - from the level of 0.3% of agriculture's gross value added in 1982 to 0.8% by 1992.
- b. The DA has drawn up a five-year national research and extension agenda for agriculture to serve as a guide for the directions and priorities that research should take over the medium term.
- c. This has been complemented by the establishment of the Bureau of Agricultural Research under the DA which functions to unify research priorities to help ensure that research activities are practical and aligned to farmers' needs.
- d. To facilitate the quick transfer of technology to farmers' fields, the following are being undertaken:
 - . intensification of on-farm research with farmers' participation, building on available technologies;
 - . strengthening of regional research and extension networks through the PCARRD-DA tie up via the NIACP thereby linking up the Department's extension and training force with the other departments, research centers, regional state colleges and universities and non-government organizations working in the rural areas;

- . upgrading of the skills of extension workers through improved training programs at the Agricultural Training Institute, with emphasis on the development of market-oriented extension skills;
- . establishment of a network of outstanding farmers and institutionalisation of a Farmer Exchange Program whereby farmers are brought on observation tours to learn new technologies from their peers in other regions.

STRATEGIES AND APPROACHES

According to Serrano (1986), the mandate of AE is to provide extension and training support to programs geared toward the following strategies/approaches:

1. The Farming Systems Approach

The farming systems approach looks at the total farming system including off-farm employment and income. It is a search for the best production mix in the short term (cropping season) and in the long term taking into consideration the controllable factors of production in farm management and the less-controllable factors such as soil types and agro-physical (climate, weather, ecology) conditions.

This approach uses to advantage community-based agricultural cooperation and is anchored toward the development of community resources management systems for self-reliance.

2. Human Resources Development

The development of community resources management system for self-reliance is delimited by the lack of relevant knowledge, appropriate skills and desirable attitude towards work of both the client system (farm families) and the extension technologists. Their continuing education and training will increase and update their capabilities to integrate usable technologies necessary in the improvement and sustainance of productivity and net income in the production mix.

3. Institutional Development

The requirements of the AE service in the 7,100 islands, comprising 75 provinces, 60 cities, 1,558 municipalities, and more than 42,000 barangays is quite enormous and expensive. At present there are about 14,000 extension workers under the Department of Agriculture, or about one extension worker for 100 - 200 farmers.

The organization, training, and development of community-based organizations through participative planning, programming, budgeting, implementation, monitoring and evaluation, are therefore imperative in order to synergistically complement the development of an efficient community resources management system.

Institutional development connotes organization for growth and development, coordination for unity of purpose and cooperation; credibility for commitment, innovation for progress, and flexibility for better human relations.

4. Linkages and Agency Service Complementation

In order to have realistic and meaningful linkages and/or agency service complementation, there must be understanding and agreement on shared responsibilities, resources and commitments. This sharing must necessarily be based on agency mandate to ensure commitment of personnel and resources. Mutual respect should also be considered to make the service complementation lasting. (DA, 1987).

ROLE PLAYED BY COMMUNICATION IN AN EXTENSION PROJECT

Communication is the link between the researcher, the extension worker, and the farmer. This is one reason why PCARRD and the DA initiated the NIACP which is guided by the idea that research utilisation is a cyclical continuum rather than a relay. It involves researchers, extension workers, and communicators in a complementary rather than a lead-support service relationship.

Figure 4 illustrates the role of applied communication (AC) as the link between research and extension systems as facilitated by the RACOs and backstopped by the DA extension system. The figure likewise shows the flow of research information generated by and from research and development (R & D) agencies concerned with basic and applied agricultural research. The flow of technology transfer is a coordinated, collaborative activity operating in a cyclical continuum.

The following guidelines illustrate how messages are formulated in effecting the transfer of location-specific technologies through low-cost communication materials:

1. Definition of the "Area Development Isolate," an area that has the same soil type and agro-climatic conditions. This area has more or less the same cropping pattern.
2. Firming up the production mix for every area development isolate thru a process consultation with the farm family/community who will decide on the more profitable production mix, considering resources, capability, market forces and values.
3. Participative formulation of project messages shouldered comprehensively by covering credit, production, post production technology, agribusiness (inputs and outputs marketing, processing) and other support services (infrastructure, irrigation, institution building, etc.) by research and extension agencies (PCARRD and regional research network in colleges and universities of agriculture, DA, RIARS, NGO's) and farmers group. The latter group validates the project messages thru a field testing of prototypes written in the local language.
4. The project messages should be written in simple, understandable language, requiring only judicious and cost-effective use of indigenous and commercial inputs.
5. The messages should especially emphasize the agribusiness components (credit, marketing, processing, post production technology).
6. The messages should delimit coverage of the defined area development isolate only.

7. The project messages should have multiple uses: for farmers, homemakers, rural out-of-school youths, technicians, group training, radio farmcasting, demonstration on extension methods and results of on-farm verification trials.
8. The messages should be mass-produced in low-cost print materials so that they can be easily revised/updated.
9. As much as practicable, the use of messages in training methods and result demonstrations, farm-casting, etc. should be functionalized, i.e., these may be used before and during the undertaking of the farm and home activities.
10. Impact evaluation and monitoring, using impact indicators, should be a built-in component in the use of project messages to ensure their validity and usefulness.

DELIVERY OF MARKETING INFORMATION

The farmer's access to stable markets here and abroad is critical to helping him develop into an entrepreneur capable of holding his own products in the market place. To strengthen this area, the DA has established a reliable market information service - using primarily print and radio - to provide daily guides on prices, stock movements, weather conditions and the like.

A total of 312 radio stations all over the country has been tapped by the DA to promote a regular delivery of market information and to establish an efficient communications network. This operation has been backstopped by the Bureau of Agricultural Statistics (BAS) which provides timely market information and production estimates (DA, 1987).

The DA-BAS through its Agricultural Marketing Statistics Analysis Division (AMSAD) disseminates timely, reliable marketing information through the Agricultural Marketing News Service or AMNEWSS. The Market Price Bulletin is published by BAS every Monday, Wednesday and Friday to provide farmers, traders and policy makers comparative wholesale and retail prices of selected commodities. The prevailing prices of cereals, fish, meat, poultry, fruits and vegetables in selected areas all over the country are contained in this publication. Additional marketing information is published every Wednesday for current world market prices of selected commodities.

The DA-BAS is currently implementing a project for a more responsive Agricultural Marketing Information System (MARIS) for unprocessed agricultural commodities. The main thrust of, MARIS is to target the farmer-producer as the priority recipient of marketing information in order to improve the farmer's income and profitability. The project works mainly toward:

1. Disseminating timely marketing information to different types of farmers, with the assistance of the agricultural production technologists (APTs) of the DA;

2. Guiding farmers in their production decisions; post-production decisions and practices; and marketing decisions and activities;

3. Establishing an effective marketing information, exchange network among government and private institutions. The MARIS communication strategy uses radio broadcasts, market information bulletin boards in strategic locations, price bulletin releases and market/news features in national and local newspapers, monthly barangay level farmers' meetings with the APTs and yearly outlook conferences with traders and farmer-producers (Stuart, 1988). It is also tapping the RACOs for assistance in packaging marketing information.

EXTENSION AS ENFORCER OF GOVERNMENT REGULATIONS

The agricultural extension system enforces government rules and regulations in the following ways:

- a. Animal industry - Implements policies and procedures governing the flow of livestock products through various stages of marketing, as well as the proper preservation and inspection of such products; standards for quality in the manufacture, importation, labelling, advertising, distribution and sale of livestock, poultry and allied industries.

- b. Plant industry - Carries out the protection of agricultural crops from pests and diseases; selection, production and certification of improved planting materials; plant and quarantine policies.

- c. Fishery industry - Implements rules and regulations governing illegal fishing in both inland and salt waters.

CONCLUSION

As gleaned from the historical perspectives of the agricultural extension service, the major events that have taken place reveal the following:

1. The growth and development of agricultural extension service was a consequence of and answer to the problems/issues during a given period.
2. Significant changes were effected by the joint intervention of the legislative and the executive branches of the government.
3. The apparent weaknesses of the extension service such as the proliferation of government agencies doing overlapping functions, relatively low salary/wages, lack of operational funds for methods and result demonstrations, unpooled applied communication skills, inadequate technical and managerial competence of technicians were consequences of weak organizational and coordinative structures resulting from changes due to successive reorganizations.
4. The strengths of the agricultural extension service were brought about by positive and timely adjustments in policies on organizational reforms, interventions on supervised credit, marketing, prices, and subsidies.

SUMMARY OF STRENGTHS AND WEAKNESSES OF THE AES

Well-Defined Institutional Structure

Over the past three decades, the Philippines has experimented with and implemented a variety of extension approaches and programmes. Compared to other developing countries, it has a reasonably well-defined institutional structure for extension administration, and the staff employed in the extension services are better educated and of a higher calibre. There is continuing government commitment to strengthen the agricultural extension service further and the new perspectives on decentralization is to make it more responsive to local needs and priorities.

Area Specific Farming System Thrust

The thrust of the current extension approach, in contrast to the previously adopted commodity-specific extension programmes, is on area-specific farming systems/community development aimed at the enhancement of farm incomes and profits. However, there is no consensus on how this is to be operationalized.

Regional Programme Implementation

Under the present arrangement, the responsibility for the implementation of extension programmes rests with the regional rather than the central services of DA. Although most of the regional directorates are capable of discharging this responsibility and exerting operational and technical control over the extension staff, their capability for developing extension methodology and formulating programmes to fit their regional requirements is very limited.

There is an important but hitherto unfulfilled role for the ATI in assisting the regions to develop and implement their extension schemes. There is also a need for the DA centre to play a key role in the formulation of national policies and strategies for agricultural extension, for monitoring the performance of extension programmes in different regions and in coordinating the preparation of regional extension plans with the national agricultural production, post-production and marketing programmes.

Institutional Focus: Field Operations

The institutional foci for the management of extension services in the regions are the Field Operations Division of the Regional Directorate of DA, Field Operations Division of the Provincial Agricultural Officer (PAO) and the Office of the Municipal Agricultural Officer (MAO). The MAO has emerged as the most important focal point for extension administration. There is a need to plan and more clearly define the work schedules of the extension personnel of these institutions.

Limited Technical Competence of Field Personnel

The technical personnel in the Operations Divisions at the regional and provincial levels perform staff functions and hence tend to be preoccupied with administrative responsibilities. In general, they have limited subject matter competence and give insufficient priority to providing technical support to the MAOs and

APTs and to contacting regional institutions involved in research. There is an urgent need to either redefine the duties of the subject matter specialist (SMS) staff or find faster alternative means for raising the technical competence of the field staff.

Generalist Extension Workers

In regions where the new extension system is in operation after the 1988 reorganization, the services of the extension workers (EW) which formerly belonged to different DA bureaus, have been unified. In its place are the generalist extension workers or Agricultural Production Technologists (APTs) who work under the supervision of the MAO. There are from five to 25 APTs under each MAO. Each APT in turn covers the farming population in one to two barangays, or about 75-100 farm households. This change is envisioned to help minimize the problems of duplication/overlapping of extension services, reduce overhead and supervisory costs, cover larger numbers of farm families than before, and institute a framework for more effective administration of extension services at the local level.

Multiplicity of APT's Functions

The generalist APTs are expected to perform a wide variety of tasks in the preparation of barangay profiles, programmes and plans based on local needs for barangay agricultural development, promotion of farmer participation and self-reliance, organization of cooperatives and income-generating activities; identification and dissemination of profitable packages which can increase farm incomes. This multiplicity of functions which is not yet very clearly defined in many areas underscores the enormous expectations on the APTs in promoting farmers' adoption of improved practices in agricultural production, post-production and even in marketing.

While this present arrangement could facilitate farmers' participation in decision-making and hence become responsive to local priorities, it also presents many practical problems. It demands a breadth of knowledge and skills which few APTs presently possess. It leads to a defusion of objectives/activities which complicates the definition of priorities, the scheduling of work, and the eventual evaluation of performance.

Establishment of Agriculture and Fishery Councils

Agriculture and Fishery Councils have been established from the regional, provincial and municipal levels (RAFCs, PAFCs, MAFCs) to help articulate local priorities for extension and promote higher standards of community development performance. There remains the danger however, that these councils could become dominated by larger farmers' interests, and hence, lead to the concentration of extension efforts to the more prosperous farms.

Imbalanced APT - Farmer Ratio

Field observations suggest that there is a considerable imbalance between the more fertile rice/corn growing areas (wherein field staff have traditionally been concentrated in the implementation of past programmes, where communications and transportation are readily available, where farmers have already adopted innovations) and the more remote upland areas where farmers' need for assistance is greatest. When the Comprehensive Agrarian Reform Programme (CARP) gathers momentum, the imbalance would become even greater and the need for redeployment more important.

Need for Seed Money to Prime Local Development

In many areas, the effectiveness of extension activities appears to be inhibited by the non-availability of funds for farm demonstrations, seeds, irrigation, and other related purposes. In some localities, DA provides funds to as much as P50,000 per municipality per year as seed money for initiating development activities. Funding depends upon availability of counterpart funds from local bodies, supply of labour and farm-produced inputs by participating farmers.

Farmers and EWs Lack Involvement In Research

The results of the work undertaken by the DA-Bureau of Agricultural Research through its Regional Integrated Agricultural Research Stations (RIARS) have not been systematically brought to the farmers' attention because of the slight involvement of DA extension personnel in the verification trials in farmers' fields.

Need for Agricultural Communication Evaluation Research

Most of the support communication materials have so far been produced by the Extension Communication Division at the DA Centre. The 15 Regional Applied Communication Offices throughout the country have started developing and pretesting location-specific prototype communication materials which are mass-produced at the DA-ATI. In spite of the commitment of DA resources to mass production of information materials, there is little systematic follow-up to assess the effectiveness of such communication support. Examples of forms that are used for evaluating the performance of the extension staff are provided in the appendix.

There is a need for more systematic research on the evaluation of extension, ie, interpersonal and media strategies. More action-oriented research is needed to look into local needs of farmers for information and support services, on the appropriateness of communication materials, on the processes involved in extension delivery, and on the effects and impact of technology transfer and utilization. These research activities should input into more responsive extension policies geared toward food security, better nutrition, income improvement and ecological balance.

While there is a need to do research on agricultural extension and communication, there is also a need to review and synthesize the findings of past research along this area, particularly those conducted by state colleges and universities such as the University of the Philippines at Los Banos, Central Luzon State University and other SCUs with academic programmes in development communication and agricultural education/extension.

Need for Training and for Localised Handbooks for EWs

Extension staff at all levels need additional training. Many of the newly-deployed generalist APTs do not have adequate knowledge and skills on agriculture, extension methods and sociology. Most of the MAOs who form the immediate supervisory staff for the APTs need to be acquainted with the latest technology, its location-specific use, in management, extension approaches, and others. To support the training, localised Extension Worker's Handbooks need to be developed, pretested and produced to provide extension staff with handy reference materials and guides for all relevant activities.

Inadequate Facilities and Funds for Training

The regional training centres of the ATI and their sub-training centres, which are mainly concerned with the training of extension workers and farmers, need repair and rehabilitation, lack a sufficiently trained cadre of trainers, lack operational funds, appropriate training equipment and facilities for the production of training materials.

Need for Further Assistance to Strengthen AES

Despite the remarkable improvements in the AE structure, in the establishment of one unified extension service and the deployment of field personnel to cover larger numbers of farm families, the extension service still remains weak and ineffective. Further assistance to strengthen the extension service is necessary and conditional on the government's assurance to clearly define the role and activities of extension personnel at different levels, to prepare location-specific agricultural development programmes, procedures and materials for a more effective extension delivery.

The project investment could provide for:

(AT THE NATIONAL LEVEL)

- a. Strengthening the ATI by providing operational support to the regions; in formulating appropriate extension methodologies; in planning extension programmes; and in coordinating and evaluating extension activities.
- b. Strengthening the applied communication system of the RACOs in its six activities to ensure effective backstopping of extension delivery services.
- c. Improving training capabilities, methodologies and facilities in the national training centres.

(AT THE REGIONAL LEVEL)

- a. General support for extension activities particularly logistical support.
- b. Piloting of new extension approaches with the through the RACOs.
- c. Seed money to undertake extension activities such as field demos, setting up nurseries, etc.

d. Training support:

- i. Rehabilitation/upgrading of existing regional and sub-regional training centres; provision of training equipment and facilities for the production of training materials;
- ii. Training of extension-communication staff from the regional to the field levels, and key farmers.

Serrano (1985) outlines some policy issues on AE in the country, as follows:

1. Agricultural extension service is a continuing non-formal education designed for farm families interested in developing farming systems of the best production mix calculated to increase productivity and stabilize real income with the end in view of attaining food security, hence promoting nutrition and generating savings for re-investment into complementary income-generating projects. This extension philosophy shall be consonant to the thrusts and defined mission of the DA. Through effective applied communication methods and techniques and participative/consultative processes it shall lead the farm family to come to a decision on what combination of projects and activities shall be brought to a successful conclusion.
2. As a non-formal education process, the extension service should be based on basic concepts and principles founded on an evolving Filipino ideology showcasing the Filipino identity. It should be developed from the freedom of choice of the people who will be involved and be affected by its services.
3. To be truly efficacious, it has to proceed from an organized service delivery system of the agriculture sector and other support services, using systematic service delivery channels (local government units at all levels) to ensure that it will cost-effectively reach an equally organized receiving system - the farming clientele.
4. The system should utilize strategies, approaches and methods of implementation which are simple, easy to understand, cost-effective, participatively formulated through planning and budgeting done from the lowest implementation level.

5. The consultative democratic process should be practiced in the identification, planning, implementation, and monitoring/evaluation of programs, projects and activities. The people involved and affected by such PPA's should be organized for the consultation process with the local government Sanggunians or village councils. This is in consonance with and mandated by the Local Government Code and Executive Order No. 203.
6. The agricultural extension system should recognize that the search for the most appropriate farming system that will give the highest possible net income is a continuing dynamic process which should be market-oriented, based on farm family/community values and heavily influenced by factors such as input and output marketing, price policies, cost of credit, and policy interventions by organized/syndicated groups and the government.
7. Extension service must recognize that the human resource is the most valuable resource of development because it is endowed with the inherent power of choice to decide. Its capability has to be developed to its optimum potential to become the army of citizen-workers with relevant knowledge, appropriate skills and desirable attitudes. It must know not only its rights and privileges but more importantly its duties and obligations.
8. The establishment of linkages should be truly based on mutual respect/benefit, within its operational mandate to clout it with legal bases for coordination, collaboration and commitment.

The research-extension linkage must be institutionalized in a continuum where research generates/verifies appropriate/usable technology while extension packages and transfers it to the end-users. It also provides feedback on technology use, research and policy needs.
9. The ultimate goal of agricultural extension is to build and develop community-based organizations (CBO's) that are self-reliant, self-propelling, and self-actualizing so that such CBO's will be able to develop their own community management system.

###

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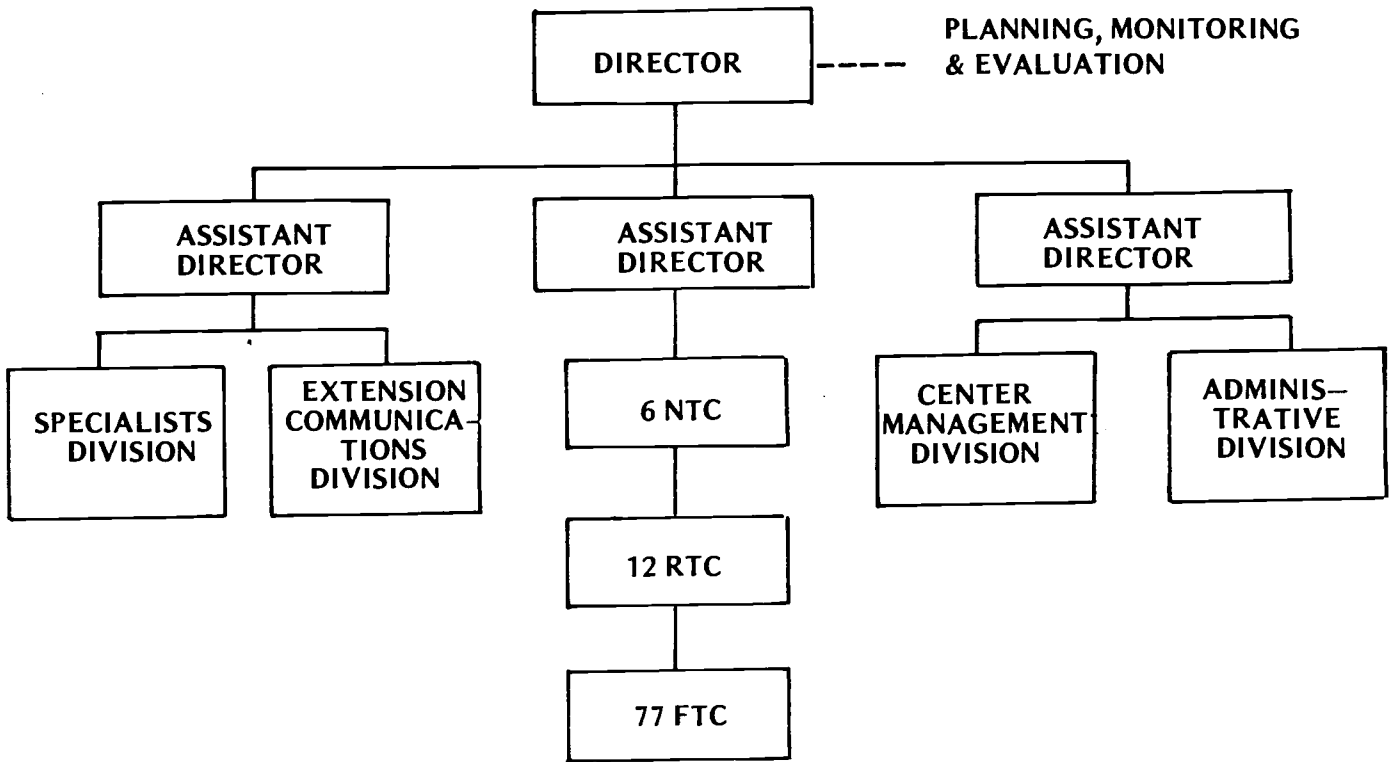


Figure 1. Organizational structure of the Agricultural Training Institute (ATI).

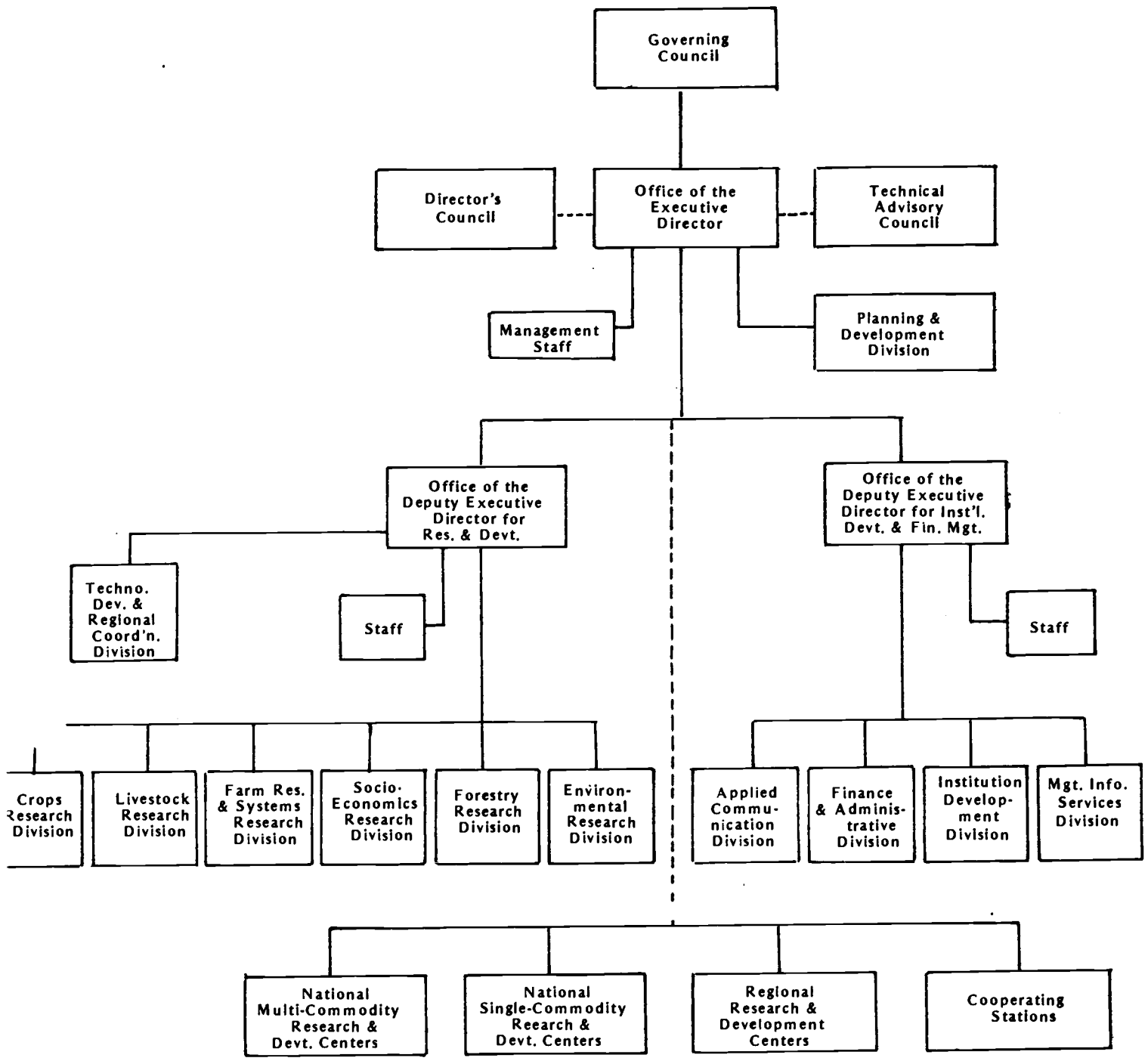


Figure 2. PCARRD Organizational Chart

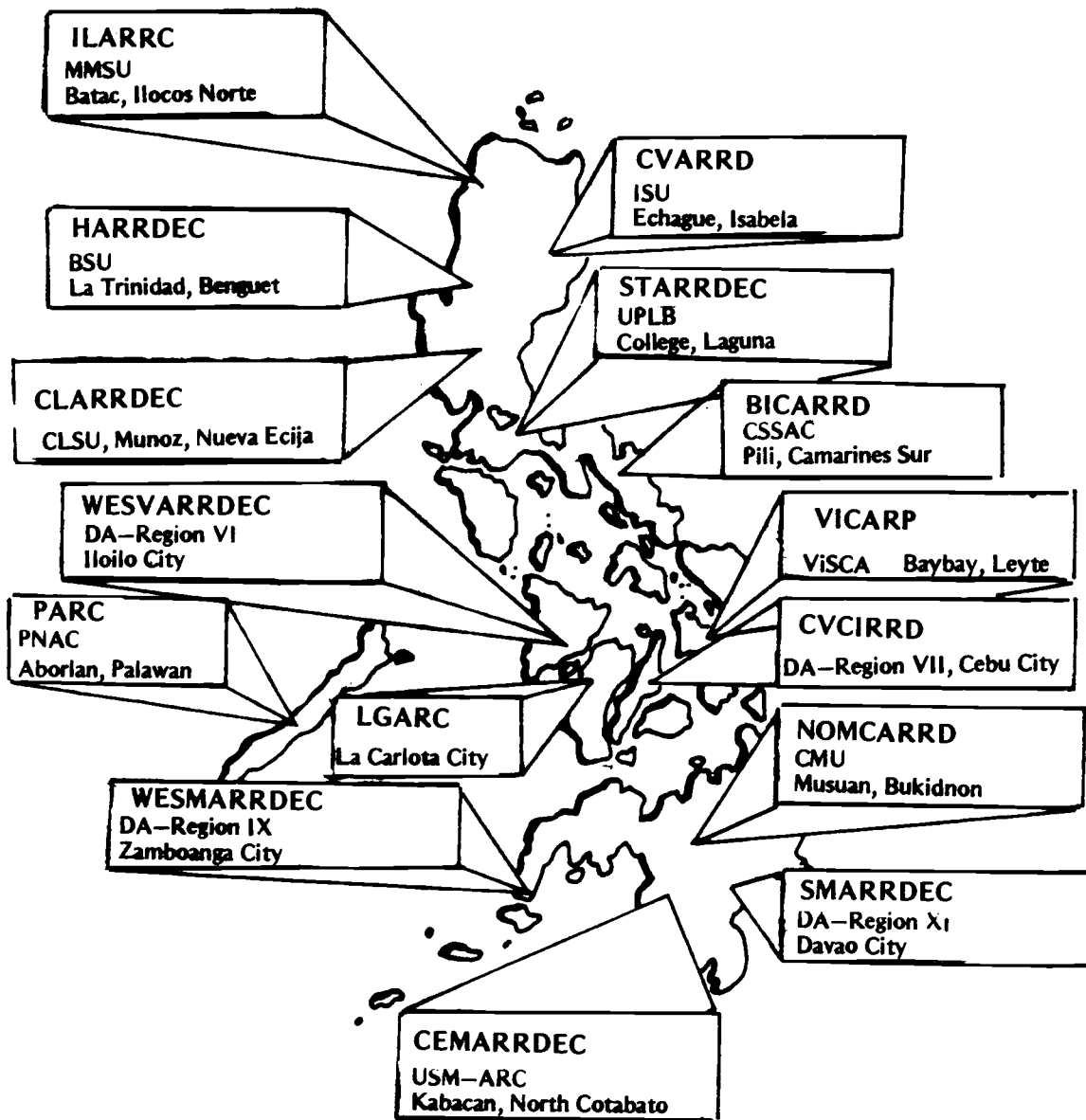
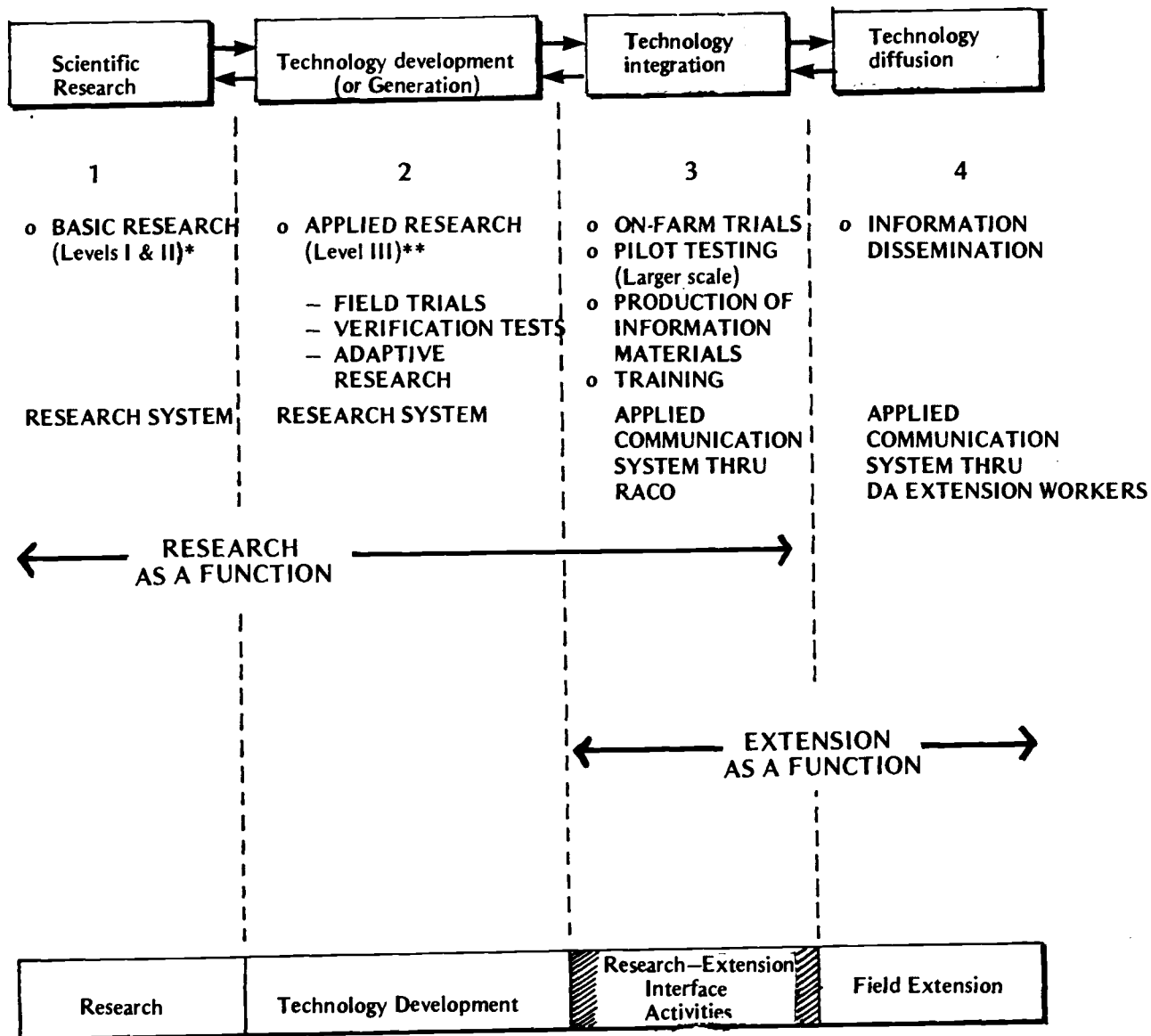


Figure 3. The 15 regional consortia, their respective base agencies and headquarters.



*Level I research – basic research in general sciences such as chemistry, physics and mathematics and Level II research – basic research in plant genetics, plant physiology, entomology, plant pathology, nutrition, etc.

**Level III research – applied research or technology development such as in plant breeding, control of insect pests and diseases and fertilizers.

Figure 4. The Research-Extension Process, (Adapted from Bernardo, 1986).

**EDS MONITORING FORM
FOR MAO/AFT**

PROVINCE: _____ Name of MAO/AFT: _____
 MUNICIPALITY: _____
 OFFICE LOCATION: _____

I. OFFICE REQUIREMENT POSITION/ON-FILE	PRESENT	NONE
A. Regular/Fixed Scheduel of Visit	_____	_____
B. Whereabouts	_____	_____
C. Daily Time Record	_____	_____
D. Map of Area	_____	_____
E. Pictorials/Display	_____	_____
F. Municipal/Barangay	_____	_____
G. Action Plan (Municipal/Barangay)	_____	_____
H. Master List	_____	_____
1. Contact Leaders	_____	_____
2. Farmers	_____	_____
3. Homemakers	_____	_____
4. Rural Youth	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
I. Report files	_____	_____
J. Others (Specify)	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

3. Trainings served as resource speaker at MAO/AFT Level (1987 to present)

<u>Field of Trainings</u>	<u>Date</u>	<u>Subject Matter Discussed</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Participants
(MAO/AFT's/CL/Farmers) : No. Served

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

4. Communication:

<u>a) Source for New Technical Knowledge</u>	<u>Ranking</u>
1. Trainings	_____
2. Instructional Materials	_____
3. Radio Broadcast	_____
4. Research Institutions	_____
5. Publications	_____
6. VTR-Slide Tape Showing	_____
Others (Specify)	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

b) Information Materials developed and prepared (1987-present)

TITLE	PRINTED	DISTRIBUTED
	(Pls. check)	
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

5. Applied Research Conducted: (1987 to present)

Kinds of Applied Research	STATUS	
	Completed	On-going
	(Pls. check)	
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

6. Information Needs:

Subject Matter	*Forms	Ranking
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

*(1) Pamphlet (2) Leaflet) (3) Comics (4) Poster (5) Others

7. List down your Duties/Responsibilities as SMS

8. Identify the Strengths and Weaknesses of EDS (T & V)

STRENGTHS

WEAKNESSES

9. Research/Extension Linkages:

- 1. Research Institutions
- 2. SCU
- 3. NGO
- 4. Farmers
- 5. RIARS/PTVT
- 6. Local Government
- 7. Others/Identify

Area (s) of Linkages

<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

10. Comments/Suggestions:

Date: _____
 Enumerator: _____

EDS - Evaluation for MAO

Municipality: _____ Province: _____

1. Name of AFT	Barangays Covered (No.)	Frequency of Visit*				
		(1)	(2)	(3)	(4)	(5)
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

(Attach additional sheet if necessary)

*(1) Weekly (2) Twice a Week (3) Fortnightly (4) Monthly
 (5) Others (Specify)

2. A. Trainings attended by MAO (1987 to present)

Field of Trainings	Date	Sponsor/Conducted by
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. Trainings Needs:

Field of Trainings	Ranking
_____	_____
_____	_____
_____	_____
_____	_____

C. Information Needs

Subject Matter	Forms†	Ranking
_____	_____	_____
_____	_____	_____
_____	_____	_____

*Pamphlet/Leaflet/Comics/Poster/Others (specify)

6. Project/activity initiated and actually implemented from 1987 to date

Project	Status of Implementation (Please Evaluate)	
	Completed	On-Going
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

7. List down your duties/responsibilities as MAO

8. Identify the strengths and weaknesses of EDS (T & V)

STRENGTHS

WEAKNESSES

9. Comments/Suggestions:

Date: _____
 Enumerator: _____

EDS - Evaluation Form for AFT's

Municipality: _____ Province: _____

1. Coverage

a) Barangay	Contact Point (Pls. Specify)	No. of Contact Leader			No. of Clientele		
		F	HM	Y	F	HM	Y
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

* (F) Farmer (HM) Homemaker (Y) Youth

2. Rural Organization

	No. of Organization	Total Membership
a) FA	_____	_____
b) RIC	_____	_____
c) 4-H	_____	_____
d) SN	_____	_____
e) Cooperative	_____	_____
f) Others (Specify)	_____	_____
_____	_____	_____
_____	_____	_____

3. a) Trainings attended since 1987 to present.

Field of Trainings (Specify)	Date	Sponsored/Conducted by
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

b) Training Needs

Field of Trainings	Ranking
_____	_____
_____	_____
_____	_____

4. Trainings organized/conducted for clientele (1987 to present)

Field of Trainings	Participants Clientele* : No.
-----	-----
-----	-----
-----	-----
-----	-----
-----	-----

*Clientele (Farmers, Homemakers, Rural Youth & others)

5. Visits:

	Frequency of Visits* (Pls. Check)				
	(1)	(2)	(3)	(4)	(5)
PAO & other Supervisor to AFT's	:	:	:	:	:
SMS to AFT's	:	:	:	:	:
MAO to AFT's	:	:	:	:	:
AFT to Contact Leaders/Others	:	:	:	:	:

*(1) Twice a Week (2) Once a Week (3) Fortnightly (4) Monthly
 (5) Others

6. Communication:

a) Source of new technical knowledge (Pls. check)

	Ranking
Training by SMS/MAO	-----
Field Visits by SMS/MAO	-----
Other technicians	-----
Farmer	-----
Instructional Materials	-----
Radio Broadcast	-----
Research Institutions	-----
Publications	-----
VTR-Slide Tape Showings	-----
Others (Specify)	-----
-----	-----
-----	-----
-----	-----
-----	-----

2. State your actual duties as AFT's

3. Strengths and Weaknesses of EDS (T & V)

STRENGTHS

WEAKNESSES

4. Comments & Suggestions
