



# AGRICULTURAL EXTENSION AND COMMUNICATION MANUAL

**IMPORTANT NOTE:**

This manual is part of an online, internal review class. Do not copy, reproduce, distribute, publish, display, modify, create derivative works, or in any way exploit any such content, nor distribute any part of this manual over any network, including a local area network, sell or offer it for sale, or use such content to construct any kind of database.

| AGRICULTURAL EXTENSION AND COOMUNICATION REVIEW DASHBOARD |  |    |   |           |          |             |               |        |
|---|--|----|---|-----------|----------|-------------|---------------|--------|
|   | Main Topic   | #  | Subtopic  | Days left | Schedule | URC Lecture | Review Manual | Status |
|   | <b>PRETEST</b>   |    |   |           |          |             |               |        |
| 1   | <b>History of Extension</b>                            | 1  | Origin of Extension                                     |           |          |             |               |        |
|   |  | 2  | Birth of modern Agricultural Extension Service          |           |          |             |               |        |
|   |  |    | <b>QUIZ</b>   |           |          |             |               |        |
| 2   | <b>Extension in the Philippine Setting</b>             | 3  | Spanish regime  |           |          |             |               |        |
|   |  | 4  | America regime  |           |          |             |               |        |
|   |  | 5  | After Japanese Occupation                               |           |          |             |               |        |
|   |  | 6  | Recent Development in the Agricultural Extension system |           |          |             |               |        |
|   |  |    | <b>QUIZ</b>   |           |          |             |               |        |
| 3   | <b>Philippine Agriculture</b>                          | 7  | President Manuel L. Quezon                              |           |          |             |               |        |
|   |  | 8  | President Jose P. Laurel                                |           |          |             |               |        |
|   |  | 9  | President Manuel A. Roxas                               |           |          |             |               |        |
|   |  | 10 | President Elpidio Quirino                               |           |          |             |               |        |
|   |  | 11 | President Ramon Magsaysay                               |           |          |             |               |        |
|   |  | 12 | President Carlos P. Garoa                               |           |          |             |               |        |
|   |  | 13 | President Diosdado Macapagal                            |           |          |             |               |        |
|   |  | 14 | President Ferdinand Marcos                              |           |          |             |               |        |
|   |  | 15 | President Corazon Aquino                                |           |          |             |               |        |
|   |  | 16 | President Fidel V. Ramos                                |           |          |             |               |        |
|   |  | 17 | President Joseph E. Estrado                             |           |          |             |               |        |
|   |  | 18 | President Gloria M. Arroyo                              |           |          |             |               |        |
|   |  |    | <b>QUIZ</b>   |           |          |             |               |        |
| 4   | <b>Meaning of Extension in other Countries</b>         | 19 |   |           |          |             |               |        |
|   |  |    | <b>QUIZ</b>   |           |          |             |               |        |
| 5   | <b>Extension Terminologies</b>                         | 20 | Extension Teaching                                      |           |          |             |               |        |
|   |  | 21 | Learning Experience                                     |           |          |             |               |        |
|   |  | 22 | Extension Model   |           |          |             |               |        |
|   |  | 23 | Extension Strategy                                      |           |          |             |               |        |
|   |  |    | <b>QUIZ</b>   |           |          |             |               |        |
| 6   | <b>Agricultural Extension Education</b>                | 24 |   |           |          |             |               |        |
|   |  |    | <b>QUIZ</b>   |           |          |             |               |        |
| 7   | <b>Objective of Agricultural Extension</b>             | 25 | Hierarchy of Extension Objectives                       |           |          |             |               |        |
|   |  | 26 | Core Objective  |           |          |             |               |        |
|   |  | 27 | Direct Objective  |           |          |             |               |        |
|   |  | 28 | Result Objective  |           |          |             |               |        |
|   |  |    | <b>QUIZ</b>   |           |          |             |               |        |
| 8   | <b>Four Major Paradigms of Agricultural Extensions</b> | 29 | Technology Transfer                                     |           |          |             |               |        |
|   |  | 30 | Advisory Services                                       |           |          |             |               |        |
|   |  | 31 | Non-formal Education (NFE)                              |           |          |             |               |        |
|   |  | 32 | Facilitation Extension                                  |           |          |             |               |        |
|   |  |    | <b>QUIZ</b>   |           |          |             |               |        |
|   |  | 34 | Altruistic Dimensions                                   |           |          |             |               |        |
|   |  | 35 | Educational Dimension                                   |           |          |             |               |        |
|   |  | 36 | Communication Dimention                                 |           |          |             |               |        |
|   |  | 37 | Behavioral Dimention                                    |           |          |             |               |        |
|   |  | 38 | Technology Dimensions                                   |           |          |             |               |        |

|    |  |    |  |  |  |  |  |  |  |
|----|--|----|--|--|--|--|--|--|--|
| 9  | Nature or Dimentions of Extensions     | 39 | Research Dimension                                       |  |  |  |  |  |  |
|    |  | 40 | Input Dimension  |  |  |  |  |  |  |
|    |  | 41 | Income Dimension   |  |  |  |  |  |  |
|    |  | 42 | Management Dimension                                     |  |  |  |  |  |  |
|    |  |    | QUIZ   |  |  |  |  |  |  |
| 10 | Methods for Influencing Human Behavior | 43 | Advice   |  |  |  |  |  |  |
|    |  | 44 | Compulsion or Coercion                                   |  |  |  |  |  |  |
|    |  | 45 | Exchange   |  |  |  |  |  |  |
|    |  | 46 | Openly Influencing Farmer's Knowledge Level and Attitude |  |  |  |  |  |  |
|    |  | 47 | Manipulation   |  |  |  |  |  |  |
|    |  | 48 | Providing Means  |  |  |  |  |  |  |
|    |  | 49 | Proving Services   |  |  |  |  |  |  |
|    |  | 50 | Changing Farmer's Social and or Economic Structure       |  |  |  |  |  |  |
|    |  |    | QUIZ   |  |  |  |  |  |  |
| 11 | Philosophy of Extension Education      | 51 | Definition of Philosophy                                 |  |  |  |  |  |  |
|    |  | 52 | Structure of Philosophy                                  |  |  |  |  |  |  |
|    |  | 53 | Philosophy of Extension Education                        |  |  |  |  |  |  |
|    |  |    | QUIZ   |  |  |  |  |  |  |
| 12 | Principles of Extension                | 54 | Communication and Education                              |  |  |  |  |  |  |
|    |  | 55 | Works with Rural People                                  |  |  |  |  |  |  |
|    |  | 56 | Accountability to Clientele                              |  |  |  |  |  |  |
|    |  | 57 | Two-way Process Linkage                                  |  |  |  |  |  |  |
|    |  | 58 | Cooperate with Other Agencies                            |  |  |  |  |  |  |
|    |  | 59 | Work with Different Target Groups                        |  |  |  |  |  |  |
| 13 | Communication in Extension             |    | QUIZ   |  |  |  |  |  |  |
|    |  | 60 | Definition of Communication                              |  |  |  |  |  |  |
|    |  | 61 | Communication as Interaction                             |  |  |  |  |  |  |
|    |  | 62 | Concept of Communication                                 |  |  |  |  |  |  |
|    |  | 63 | Basic Communication as a Process                         |  |  |  |  |  |  |
|    |  | 64 | Field of Experience                                      |  |  |  |  |  |  |
| 14 | Basic Elements of Communication        |    | QUIZ   |  |  |  |  |  |  |
|    |  | 65 | Source   |  |  |  |  |  |  |
|    |  | 66 | Message  |  |  |  |  |  |  |
|    |  | 67 | Channels   |  |  |  |  |  |  |
|    |  | 68 | Receiver   |  |  |  |  |  |  |
|    |  | 69 | Feedback   |  |  |  |  |  |  |
| 15 | Extension Approach                     | 70 | Barriers of Effective Communication                      |  |  |  |  |  |  |
|    |  |    | QUIZ   |  |  |  |  |  |  |
|    |  | 71 | Approach Method Technique                                |  |  |  |  |  |  |
|    |  | 72 | Strategy   |  |  |  |  |  |  |
|    |  | 73 | Different Extension Approaches                           |  |  |  |  |  |  |
|    |  |    | QUIZ   |  |  |  |  |  |  |
| 16 | Communication Models                   | 74 | Berlo's Model  |  |  |  |  |  |  |
|    |  | 75 | Laswell's Model  |  |  |  |  |  |  |
|    |  | 76 | Shannon and Weaver's Model                               |  |  |  |  |  |  |
|    |  | 77 | Osgood and Schramm's Model                               |  |  |  |  |  |  |
|    |  |    | QUIZ   |  |  |  |  |  |  |
|    | Extension Approach                     | 78 | Approach Method Technique                                |  |  |  |  |  |  |
|    |  | 79 | Strategy   |  |  |  |  |  |  |

|    |   |     |  |  |  |  |  |  |  |
|----|---|-----|--|--|--|--|--|--|--|
| 17 |   | 80  | Different Extension Approaches                               |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
| 18 | <b>Extension Teaching Methods (ETM)</b>                 | 81  | ETM According to Form  |  |  |  |  |  |  |
|    |   | 82  | ETM According to Number of Clientele                         |  |  |  |  |  |  |
|    |   | 83  | Media Combination and Use of Audio-Visual Aids               |  |  |  |  |  |  |
|    |   | 84  | Use of Folk Media  |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
| 19 | <b>Community Organizing</b>                             | 85  | Community  |  |  |  |  |  |  |
|    |   | 86  | Community Characteristics                                    |  |  |  |  |  |  |
|    |   | 87  | Community Organizing   |  |  |  |  |  |  |
|    |   | 88  | Community Organization: Values, Goals and Principle          |  |  |  |  |  |  |
|    |   | 89  | Organizing Approaches  |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
| 20 | <b>Approaches to Rural Change</b>                       | 90  | Concentration Approach                                       |  |  |  |  |  |  |
|    |   | 91  | Team Approach  |  |  |  |  |  |  |
|    |   | 92  | Cooperative Approach   |  |  |  |  |  |  |
|    |   | 93  | Institutional Approach                                       |  |  |  |  |  |  |
|    |   | 94  | Utilizing Local Leaders                                      |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
| 21 | <b>Adoption Process</b>                                 | 95  | Innovation   |  |  |  |  |  |  |
|    |   | 96  | Adoption   |  |  |  |  |  |  |
|    |   | 97  | Characteristics of an Innovation that Determine its Adoption |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
| 22 | <b>Diffusion Process</b>                                | 98  | Awareness  |  |  |  |  |  |  |
|    |   | 99  | Interest   |  |  |  |  |  |  |
|    |   | 100 | Evaluation   |  |  |  |  |  |  |
|    |   | 101 | Trial  |  |  |  |  |  |  |
|    |   | 102 | Adoption   |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
| 23 | <b>Innovation-Decision Process Theory</b>               | 103 | Knowledge  |  |  |  |  |  |  |
|    |   | 104 | Persuasion   |  |  |  |  |  |  |
|    |   | 105 | Decision   |  |  |  |  |  |  |
|    |   | 106 | Implementation   |  |  |  |  |  |  |
|    |   | 107 | Confirmation   |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
| 24 | <b>Individual Innovativeness Theory</b>                 | 108 | Innovators   |  |  |  |  |  |  |
|    |   | 109 | Early Adopters   |  |  |  |  |  |  |
|    |   | 110 | Early Majority   |  |  |  |  |  |  |
|    |   | 111 | Late Majority  |  |  |  |  |  |  |
|    |   | 112 | Laggards   |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
| 25 | <b>Strategies to Effective Adoption</b>                 | 113 | Extension Worker Intervention                                |  |  |  |  |  |  |
|    |   | 114 | Progressive Farmer Strategy                                  |  |  |  |  |  |  |
|    |   | 115 | Mass Marketing   |  |  |  |  |  |  |
|    |   | 116 | Follower-farmer Strategy                                     |  |  |  |  |  |  |
|    |   | 117 | Selective Farmer-to-Farmer                                   |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
| 26 | <b>Explanation for Rejection/Adoption of Technology</b> | 118 | "Individual-blame" Hypothesis                                |  |  |  |  |  |  |
|    |   | 119 | "System-blame" Hypothesis                                    |  |  |  |  |  |  |
|    |   | 120 | "Pro-Innovation" Bias  |  |  |  |  |  |  |
|    |   |     | <b>QUIZ</b>  |  |  |  |  |  |  |
|    | <b>Framework for Sustainable Development</b>            | 121 | Economically Viable  |  |  |  |  |  |  |
|    |   | 122 | Ecologically Sound   |  |  |  |  |  |  |

|    |  |     |                                   |  |  |  |  |  |
|----|--|-----|-----------------------------------|--|--|--|--|--|
| 27 |  | 123 | Socially Just and Humane          |  |  |  |  |  |
|    |  | 124 | Culturally Acceptable/Appropriate |  |  |  |  |  |
|    |  | 125 | Grounded in Holistic Science      |  |  |  |  |  |
|    |  | 126 | Resilient and Low Risk            |  |  |  |  |  |
|    |  | 127 | Biodiversity-Oriented             |  |  |  |  |  |
|    |  | 128 | Productive                        |  |  |  |  |  |
|    |  | 129 | Participatory                     |  |  |  |  |  |
|    |  |     | <b>QUIZ</b>                       |  |  |  |  |  |
| 28 | <b>Sustainable Agriculture</b>               | 130 |                                   |  |  |  |  |  |
|    |  |     | <b>QUIZ</b>                       |  |  |  |  |  |
| 29 | <b>Components of Agriculture Development</b> | 131 | Governance                        |  |  |  |  |  |
|    |  | 132 | Research                          |  |  |  |  |  |
|    |  | 133 | Extension/Education               |  |  |  |  |  |
|    |  | 134 | Marketing                         |  |  |  |  |  |
|    |  | 135 | Production                        |  |  |  |  |  |
|    |  | 136 | Supply                            |  |  |  |  |  |
|    |  |     | <b>QUIZ</b>                       |  |  |  |  |  |
| 30 | <b>Agricultural Knowledge System (ASK)</b>   | 137 |                                   |  |  |  |  |  |
|    |  |     | <b>QUIZ</b>                       |  |  |  |  |  |
| 31 | <b>Pluralistic Extension Policy</b>          | 138 |                                   |  |  |  |  |  |
|    |  |     | <b>QUIZ</b>                       |  |  |  |  |  |
| 32 | <b>ASK as Technology/Knowledge System</b>    | 139 | Technology Generation             |  |  |  |  |  |
|    |  | 140 | Technology Transfer               |  |  |  |  |  |
|    |  | 141 | Technology Utilization            |  |  |  |  |  |
|    |  | 142 | Agricultural Policy               |  |  |  |  |  |
|    |  |     | <b>QUIZ</b>                       |  |  |  |  |  |
|    | <b>POST-TEST</b>                             |     |                                   |  |  |  |  |  |

# HISTORY OF EXTENSION

## EARLY EXTENSION INITIATIVES

### Origins

#### 1800 BC

In Iraq (Mesopotamia in the early days), archeologists unearthed clay tablets with inscribed advice on watering crops and getting rid of rats.

Some hieroglyphics on Egyptian columns gave advice on avoiding crop damage and loss of life in Nile's floods.

#### Second Century BC

Texts on practical farming experience were written to help Roman landowners and tenants. The state made it a matter of concern to disseminate information on agriculture.

### Beginnings in England

#### 19<sup>th</sup> Century

The term EXTENSION was first used to describe adult education programs organized by Oxford and Cambridge universities in England starting in 1867. These programs helped extend the work of these universities beyond the campus and into the neighboring communities.

The term was later formally adopted in the United States in conjunction with the land grant universities originally established in the 1860s as teaching institutions.

In the early 20<sup>th</sup> century, United Kingdom transferred responsibility for agriculture extension activities to the Ministry of Agriculture. These activities were then officially called ADVISORY SERVICES.

This term (in English) was used by most European countries as they developed and/or expanded similar advisory services within their respective ministries of agriculture.

#### 1840s

The term "University Extension" or "Extension of the University" was first used in Britain

#### 1850s

In Oxford and Cambridge, discussions began about how they could serve the needs of the rapidly growing population in the industrial and urban areas

**1867**

The first practical attempt was made in what was designated “University Extension”, not for students enrolled in the universities, but to bring the university outside of its campus to people who could not qualify for entry into university

**1871**

James Stuart, a fellow of Trinity College, Cambridge and considered as the “Father of University Extension”, appealed to the authorities of University of Cambridge to organize Centers of Extension Lectures under the university’s supervision.

**1872**

University of Cambridge adopted the system.

**1876**

University of London adopted the system.

**1878**

University of Oxford adopted the system.

**1880s**

The extension system became well-established and developed into what was to be called Extension Movement.

## **BIRTH OF MODERN AGRICULTURAL EXTENSION SERVICES**

### **Europe**

**1841**

The Royal Agricultural Improvement Society (RAIS) was founded in Britain.

**1845**

In Ireland where the predominantly peasant community relied on potatoes as staple food, potato blight resulted in the coming into existence of the first agricultural extension service.

**1847**

Then newly appointed British viceroy to Ireland, the Earl of Clarendon, urged RAIS to appoint lecturers to travel around the distressed districts to help small farmers improve their farming and grow other nutrient-rich crops.



## 1890s

Universities incorporated agricultural subjects in their lectures.

### United States of America

Morill Act of 1862 by President Lincoln:

- created Land Grant Colleges and Universities
- established demonstration centers and experimental stations using Federal funds
- started Farmers' Institute Movements that organized meeting (1-2 days) for farmers with professors from state colleges and universities as speakers

## 1890

Second Morill Act, extending the Land Grant concept in other areas of USA

## 1891

University of Chicago and University of Wisconsin began organizing extension programs that led to the establishment of land grant colleges and the establishment of agricultural extension work in the country.

## 1914

Smith-Lever Act established the Cooperative Extension Service, a tripartite cooperation among the federal government, the state government and the local county government in association with state colleges and universities as extension agencies.

## BEGINNINGS OF AGRICULTURAL EXTENSION IN DEVELOPING COUNTRIES

### 1940s – 1960s

Latin America and the Caribbean established agricultural extension organizations

### 1960s – 1970s

Many African nations started establishing extension organizations

## EXTENSION IN THE PHILIPPINES

### Spanish Era

## 1965



Granja Modelos or model farms were established by the first Spanish missionaries to educate rice, corn and tobacco farmers in large encomiendas.

- experimental stations for the Spanish government
- demonstration center for farmers

### ***American Era***

#### **October 8, 1901**

Beginning of extension work under the American regime

#### **April 30, 1902**

Creation of Bureau of Agriculture under Department of Interior to boost extension work. The bureau's Administrative Division took charge of the extension work.

#### **July 1910**

Creation of Demonstration and Extension Division (DED) under Bureau of Agriculture

- the first formally organized government department implementing research and extension programs

Agricultural schools were established to educate and train government agricultural extension workers and others who were engaged in agriculture. Many elementary and secondary schools from the Spanish era were converted to normal, vocational, business and agricultural schools.

#### **July 1919**

The role of DED was expanded to include organization of cooperatives for farmers which focused on rural credit, marketing and animal insurance. The persons who carried out this work were called **farm advisers**.

#### **1923**

Demonstration and Extension Division was renamed Agricultural Extension Service

- Home Extension Work was started in Division of Organic Chemistry of Bureau of Science. Its service was mainly on food preservation.
- **Maria Y. Orosa** founded the Home Extension service

#### **1929**

Bureau of Agriculture was reorganized and split into Bureau of Plant Industry (BPI) and Bureau of Animal Industry (BAI), both expanding their respective extension activities

Agricultural Extension Division was placed under Bureau of Plant Industry and later on renamed Agricultural Division in 1932. This division carried out extension services up to the assumption of Mr. Manuel L. Quezon as President of the Commonwealth in 1938.

### **1936**

Commonwealth Act No. 85 established the Provincial Extension Service. The Provincial Agriculturist was in-charge of agricultural extension in the whole province. Positions for Home Demonstrators were created to cater to the training needs of rural women.

### **Undated**

Commonwealth Act No. 649 was passed, increasing the amount appropriated for extension work. Setup of the agricultural extension service continued until the outbreak of World War II.

### **Japanese Occupation**

### **1942-1945**

Home economics and agricultural extension work suffered drawbacks. Literally, extension work was paralyzed.

### **Post-World War II**

### **1947**

Home Extension Unit under BPI was fused with Agricultural Extension Unit of Bureau of Agriculture.

### **1949**

Philippine Government requested USA to send an economic survey mission to the Philippines to “consider the financial problems of the country and to recommend measures that will enable the Philippines to become and to remain self-reliant”.

### **October 28, 1950**

The results of the **Bell Survey Mission** were submitted with the following recommendation, among others – the consolidation of the scattered extension service of organizations of the different bureaus (BPI, BAI, BS, BFor, BFis) into one bureau that would adequately extend information to farm families for improved farming, homemaking and rural organization.

### **July 16, 1952**

Bureau of Agricultural Extension (BAEx) was created by virtue of RA 680. BAEx consolidated all existing extension services being carried out by different government offices.

### **January 6, 1956**

The role of BAEx was reduced with the creation of Presidential Assistance for Community Development to implement the Philippine Community Development Program that coordinated on a national scale the effort of

various governmental and civic agencies to improve the living conditions of the barrio residents nationwide and make them self-reliant.

### **1963**

BAEx was changed to Agricultural Productivity Commission (APC) with the enactment of RA 3844 or Land Reform Code. It was placed directly under Office of the President.

Teams of agriculturists, home demonstrators and 4-H Club officers provided technical assistance to the rural people.

### **Undated**

Rice and Corn Authority (RCA) was created by virtue of Executive Order No. 62. It extended credit for seeds, pesticides and harvesting and had fertilizer subsidy for participating farmers.

### **1965**

Rice self-sufficiency program was re-conceptualized to include rice production, marketing and distribution and the consolidation, integration and the concentration of government and private sector resources.

### **1967**

Republic Act No. 188- BAEx functions were decentralized and autonomous powers were granted to the local government units to appoint their respective provincial agriculturist and municipal extension workers.

### **1969**

National Food and Agriculture Council (NFAC) was created by virtue of EO No. 183. NFAC was given full control of the food production program and controlled a large portion of the funds for agriculture and funds from USAID.

## **Martial Law Era**

### **1972**

Presidential Decree No. 1 (PD No. 1) and Presidential Letter of Implementation No. 9 reverted APC to its original name BAEx (Nov. 1, 1972) and its control was returned to Department of Agriculture and Natural Resources.

Functions and personnel assigned in cooperatives were transferred to Department of Local Government and Community Development (DLGCD). PD 970 abolished Farm Management Office of DAR. Its extension function was transferred to BAEx.

### **July 1, 1973**

BAEx was transferred back to DA. Abaca and Other Fibers Board was fused with BAEx.

### **1977**

World Bank Mission appraised the Philippines' Agricultural Extension Service upon request of the Philippine government.

**Result:** The Philippines adopted Training and Visit System (T & V) which evolved into a development strategy designed to improve the quality of life of farm families through a pool of resources.

## **1978**

PD 1579 created regional offices in Ministry of Agriculture, where 12 regional directors and 24 assistant regional directors (1 for livestock and 1 for crops in each region) were appointed. In 1970, 75 Provincial Agricultural Officers were appointed.

## **1978**

PD NO. 1579 and LOI No. 595 created ministry-wide regional offices in Ministry of Agriculture and the appointment of 12 ministry-wide regional directors and 24 assistant regional directors, and 75 PAOs in 1980.

## **March 27, 1979**

National Extension Project (NEP) became operational with a World Bank loan of US\$ 35M.

EO No. 967 renamed Ministry of Agriculture into Ministry of Agriculture and Food (MAF) and transferred BFAR from Ministry of Natural Resources to MAF.

## **1982**

EO No. 803 designated the province as the political unit of management, inducing agricultural development coordination and supervision of agencies involved in the delivery of agricultural services.

RA 51885 (Decentralization Act) – the provincial governments were empowered to have their own extension services.

## **1987**

EO No. 116 merged BAEx, Agricultural Training Council and Philippine Training Center for Rural Development into Agricultural Training Institute (ATI). The 'birth of ATI meant the "death of BAEx.

### **Recent Developments in the Agricultural Extension System**

## **1991**

To ensure the delivery of basic services in the agricultural extension system, Congress of the Philippines enacted Local Government Code (RA No, 7160) into Law. Among other provisions, the code decentralized authority to local government units (LGUs) the management and supervision of agricultural extension system of the country.

## **1997**

RA 8435 – Agriculture and Fisheries Modernization Act (AFMA)

• **Major concerns of AFMA:**

- ♦ food security
- ♦ poverty alleviation and social equity
- ♦ income enhancement and profitability especially for farmers and fisher folk
- ♦ global competitiveness
- ♦ sustainability

## **PHILIPPINE AGRICULTURE**

### **Spanish Era**

The myrrh birds (Martinez) from China were introduced and acclimatized to fight against migratory locust infestation in the Philippines.

Plan General Economico included the income-generating monopolies of tobacco, jareta nut, spirituous liquors and explosives.

### **American Occupation**

- June 23, 1897 – creation of Department of Agriculture and Manufacturing
- Homestead Law – every Filipino citizen had the opportunity to acquire at least 24 hectares of land
- Torrens Act – safeguarded all titles to cultivated lands owned by private persons
- 1902 – creation of Bureau of Agriculture, now Bureau of Plant Industry, to promote agriculture
- Philippines exports hemp, sugar, tobacco, copra and embroideries

### **President Manuel L. Quezon**

- Division of Soil Survey was created to undertake soil and agronomical survey
- the period of “Rude Awakening” – the realization that Philippines did not raise enough food for the people and was not self-sufficient

### **President Manuel A. Roxas**

- Parity Rights to the Americans – the disposition, exploitation, development and utilization of all agricultural, timber and mineral lands of the public domain
- Rehabilitation Finance Corporation (RFC, now known as Development Bank of the Philippines or DBP) – for the rehabilitation and development of agriculture, among others

### **President Elpidio Quirino**

- Bureau of Agricultural Extension
- made the rice industry the first commodity sector to have an integrated national planning
- Rural Bank Act – organization of a system of rural banks with substantial capital participation of the government
- Agricultural Credit Cooperative Financing Administration (ACCFA) – authorized to organize Farmers’ Cooperative Marketing Associations (FACOMAS)

### **President Ramon Magsaysay**

- Philippines became a member of UN-FAO
- National Rice and Corn Program – launched along with Rice and Corn Coordinating Council
- Rice and Corn Coordinating Council – forerunner of National Food and Agriculture Council (NFAC), now known as National Agriculture and Fishery Council (NAFC)

**President Carlos P. Garcia**

- Austerity Program – urged the people to live simple lives and do away with luxurious lifestyles
- Filipino First Policy – encouraged the people to patronize Filipino-made products and to promote Filipino labor

**President Diosdado Macapagal**

- International Rice Research Institute – established at UPLB
- Focus to solve the problem of the sugar industry

**President Ferdinand E. Marcos**

- RA 6389 – automatic conversion of share tenancy to leasehold and retention rate of 75-24 hectares must be lowered; the creation of Department of Agrarian Reform (DAR)
- Masagana 99 – program with massive dispersal of modern package of technology including high yielding varieties, fertilizer and pesticides
- Coconut replanting program

**President Corazon C. Aquino**

- CARP

**President Fidel V. Ramos**

- Medium Term Agricultural Development Program (MTADP)
- Grains Production Enhancement Program (GPEP)
- Key Commercial Crops Development Program (KCCDP)
- Medium Term Livestock Development Program (MTLDP)
- Medium Term Fisheries Management Development Program (MTFMDP)
- GATT Safety Measures was adopted

**President Joseph E. Estrada**

- Constitutional Correction for Development (CONCORD)
- Agrikulturang Makamasa
- Biotechnology was approved in the Philippines

**President Gloria M. Arroyo**

- Ginintuang Masaganang Ani (GMA)
- Countrywide assistance for rural employment and services
- Hybrid Rice Commercialization Program



### Meaning of extension in other countries

| Term                         | Country     | Meaning  |
|------------------------------|-------------|--|
| Voorlichting                 | Netherlands | Lighting the path ahead to help people find their way  |
| Penynluhan                   | Indonesia   | Lighting the path ahead with a torch   |
| Perkembangan                 | Malaysia    | Education, the way USA interprets it   |
| Beratung                     | Germany     | “Advisory work” – an expert can give advice on the best way to reach one’s goal but leaves the person the final responsibility for selecting the way |
| Aufklärung                   | Germany     | “Enlightenment” so that one knows clearly where he/she is going  |
| Erziehung                    | Germany     | “Education”, that is, to teach people to solve their problems themselves   |
| Förderung                    | Austria     | “Furthering” or stimulating one to go in a desirable direction   |
| Vulgarisation<br>Animation   | France      | Simplification of the message for the common man   |
| Capacitacion<br>Consultacion | Spain       | Improving people’s abilities, normally through training  |
| Extension                    | USA         | Education, or influencing people to change their behavior  |

### EXTENSION TERMINOLOGIES

**Adoption** – decision to make full use of an innovation as the best course of action available

**Agricultural extension** – a non-formal system of education organized to provide rural people with useful and practical knowledge/technology in agriculture and teach and encourage them to apply these in their respective farms and homes. It is both a teaching and an influence process (O.F. Sison)

**Andragogy** – the science of teaching adults

**Barriers** – factors obtaining in a given place over a given time that tend to impede or block or decelerate the communication process. Synonymously, they are called “filters of communication”

**Communication** – the process by which participants create and share information with one another in order to reach a mutual understanding for a given purpose at any given place over a given period of time

**Credibility** – the degree to which a communicator is perceived as knowledgeable and expert on a subject matter

**Development** – a change or transformation process of any target audience regardless of direction

**Diffusion of an innovation** – the total process by which an innovation spreads out among farmers

**Extension** – the process of sharing any development-oriented idea/concept with others

**Extension method** – educational techniques employed by extension system

**Extension model** – representation of a system that specifies the parts and its components as well as relationship among them



**Extension strategy** – series of steps, set of procedures and activities that operationalize the approaches that will facilitate accomplishment of goals

**Extension teaching**

- the art of stimulating, directing and guiding the learning process
- The process of guided interaction
- Process designed to help people develop and become capable of guiding successfully their own destinies
- Proving effective learning situations that create new learning experiences for people

**Innovation** – anything perceived to be new by somebody in any given place and time; a new way of doing something, something regarded as new in a given locality or by a group of people

**Innovation-Decision Period** – the length of time required to pass through the innovation-decision process

**Innovation-Decision Process** – the process through which an individual passes from the first knowledge of an innovation to forming an attitude towards it, to a decision to adopt or reject, to implementation of the idea and to confirmation of this decision

**Learning experience** – a series of activities and appraisals from which one gains meanings in facing new problems and planning new experiences

**Pedagogy** – the science of teaching children

**Safety-Credibility** – the degree to which a communication source or channel is perceived as trustworthy

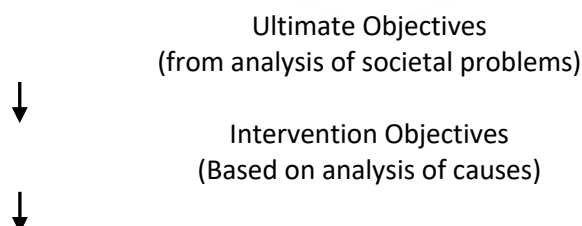
**Technology** – a design for instrumental action that reduces the uncertainty in achieving desired outcome

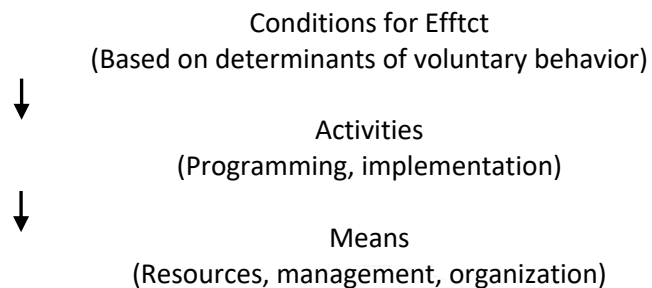
# AGRICULTURAL EXTENSION EDUCATION

- a system of educating and training the rural people to develop skills and abilities in farming, homemaking and youth building
- a well-planned program of bringing results of agricultural research and technology to rural families to help them solve problems of agricultural production and home and community living
- a two-way process that brings agriculture and homemaking technologies from research agencies and/or universities to rural families in forms applicable to their own situations and in turn present their problems in farming and homemaking for study of these institutions
- a process of getting useful information from people (communication dimension); teaching farmers' management and decision-making skills as new technology inevitably places more demand on those abilities; and helping rural people develop leadership and organization ability so that they can better organize, operate and/or participate in cooperatives, credit union and other support services, and to participate actively in making their local community conductively livable

## OBJECTIVES OF AGRICULTURAL EXTENSION

**Hierarchy of extension objectives** (Neils Roling, 1988)





### Core objectives

- emphasizes the client-centered approach
- all the efforts of extension are geared towards changing elements related to the client system, the farmers

### Direct objectives

- what the extension system is trying to achieve in terms of specific activities that will hopefully bring the core objectives

### Result objectives

- end goal

## MAJOR PARADIGMS OF AGRICULTURAL EXTENSION

### Technology Transfer

- this extension model was prevalent during colonial times and re-emerged with intensity during the 1970s and 1980s when the Training and Visit (T & V) system was established in many Asian and Sub-Saharan African countries
- a “top-down” model, it primarily delivers specific recommendations from research, especially for the staple food crops, to all types of farmers (large, medium and small)
- its primary goal is to increase food production which helps reduce food costs

### Advisory Services

- in response to farmers’ inquiries about particular production problems, extension workers in both public and private sectors still commonly use the term advisory services
- in most cases, farmers are “advised” to use a specific practice or technology to solve an identified problem or production constraint
- public extension organizations should have validated information available from research about the effectiveness of different inputs or methods in solving specific problems so that inquiring farmers receive objective and validated information

### Non-formal Education (NFE)

- this paradigm dominated the earlier days of extension in Europe and North America when universities gave training to rural people who could not afford or did not have access to formal training in different types of vocational and technical agriculture training
- continues to be used in most extension systems, but the focus shifted more toward training farmers how to utilize specific management skills and/or technical knowledge to increase production efficiency or to utilize specific management practices such as Integrated Pest Management (IPM) as taught through Farmer Field Schools (FFS)

#### **Facilitation Extension**

- facilitated extension evolved over time from participatory extension methods used decades ago and now focuses on getting farmers with common interests to work more closely together to achieve both individual and common objectives
- frontline extension agents primarily work as “knowledge brokers” in facilitating the teaching-learning process among all types of farmers (including women) and rural young people

### **NATURE OR DIMENSIONS OF EXTENSION**

#### **Altruistic Dimension**

- extension is aimed at helping farmers
- a basic premise of extension that must be observed by practitioners

#### **Educational Dimension**

- extension is a non-formal method of adult education
- extension professionals must be imbued with knowledge on how adults learn

#### **Communication Dimension**

- extension is a communication intervention
- extension personnel should have adequate understanding of basic communication process and its dynamics

#### **Behavioral Dimension**

- extension is aimed at inducing behavioral changes among farmers
- the aforementioned aim makes behavioral change the end goal of extension
- if farmer has not changed his behavior (for his betterment), no extension has been done

#### **Technology Dimension**

- extension helps in the transfer of technology
- extension should be able to identify technologies appropriate to clientele
- the need for alternative approaches and methods for diagnosing technical problems should be recognized

### Research Dimension

- extension aims at linking research with farmers
- ways to foster closer links between the farmers and the researchers need further understanding

### Input Dimension

- provision of technical inputs plays an important linking function in the transfer of technology
- requires that extension professional be knowledgeable of these technical inputs

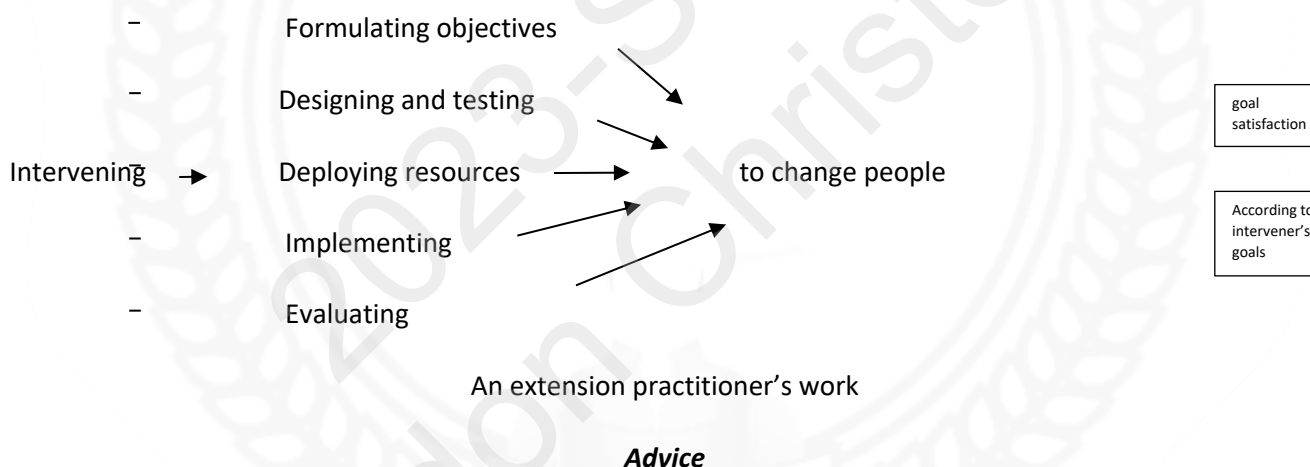
### Income Dimension

- extension is aimed at increased income for the farmer through increased production and productivity

### Management Dimension

- extension aims to function according to sound management principles
- this requires that the extension professional is a good manager

## METHODS OF INFLUENCING HUMAN BEHAVIOR



### • Used if:

- ♦ farmers agree with extension agent about the nature of their problems and the criteria for choosing the "correct" solution
- ♦ extension agent is knowledgeable of the farmers' situation and has adequate information to solve their problems in a way that has been tested scientifically or in practice
- ♦ farmers are confident that the extension worker can help them with a solution to their problems
- ♦ extension agent does not think it necessary or possible for farmers to solve their problems themselves
- ♦ farmers have sufficient means at their disposal to carry out the advice

### Compulsion or Coercion

- party forcing somebody to do something

- has power and authority

ex.: Government regulations make people conform to traffic rules, public health policies, environmental upkeep, etc.

### **Exchange**

- exchange of goods and services between two individuals
- applicable if
  - ♦ each party considers the transaction to be in their favor
  - ♦ each has the goods/services desired by the other
  - ♦ each can only deliver his/her part when the exchange goods/services have been delivered by the other

### **Openly Influencing Farmer's Knowledge Level and Attitude**

- applicable if we believe that the farmer can't solve his/her own problems because he/she has insufficient or incorrect knowledge and/or because his/her attitude does not match his/her goals
- we believe that the farmer can solve his/her own problems if he/she has more knowledge or has changed his/her attitudes
- we are prepared to help the farmer collect more and better knowledge or influence his/her attitude
- farmer trusts our expertise and motives and is prepared to cooperate with us in changing his/her knowledge and/or attitudes

### **Manipulation**

- influence farmer's knowledge level and attitudes without him being aware of it
- possible if we believe:
  - ♦ it is necessary and desirable for farmer to change his/her behavior in certain direction
  - ♦ unnecessary/undesirable for farmer to make independent decisions
  - ♦ we can control techniques for influencing farmers without them being aware of it
  - ♦ farmers don't actively object to being influenced in this way

### **Providing Means**

- may involve taking over certain tasks from farmers
- possible when:
  - ♦ we have knowledge and/or means available to perform the tasks better or more economically than farmers
  - ♦ we agree with farmers that it is useful to perform these tasks
  - ♦ we are prepared to perform them for him/her

### **Changing Farmer's Social and/or Economic Structure**

- we agree with farmer that he/she could perform optimally
- farmer, though, is not in a position to behave this way because of barriers in the economic and/or social structure
- possible when:

- ♦ we consider changes in these structures desirable
- ♦ we have the freedom to work toward these changes
- ♦ we are in a position to do this, either through power or by conviction





# EXTENSION AS A MAJOR FUNCTION OF A STATE UNIVERSITY/COLLEGE

## FUNCTIONS OF A STATE UNIVERSITY/COLLEGE

### Instruction

An agricultural state university or college devotes substantially more effort, attention and fiscal and human resources to manpower strength in agriculture, forestry, veterinary science, animal science, fisheries, horticulture, agronomy, dairy science and social science and churn out graduates with operational skills and managerial competencies needed to spur agricultural and rural development.

### Research

An agricultural state university or college makes continuous exploration and discovery of new knowledge and new skills possible, and make instruction more useful and substantial as time goes on.

### Extension

Extension in an agricultural state university or college is concerned with functions that are primarily educational. In general, it aims to improve the productivity, profitability, equity and well-being of the farmer and fisher folk.

## SPECIFIC FUNCTIONS

- Provides pre-service and service training for extension workers in the region
- Releases information through the different extension techniques/methods
- Provides backstopping in subject matter and technical knowledge to change agents and special interest groups in the fields of agriculture, cooperatives, homemaking, land reforms, etc.

Under Section 90 of Agriculture and Fisheries Act 8435, state universities and colleges are mandated to primarily focus on the improvement of the capability of LGU extension service by:

- Degree and non-degree training programs
- Technical assistance
- Extension-cum-research activities
- Monitoring and evaluation of LGU extension projects
- Information support services through the tri-media and electronics

Under AFMA of 1997, SUCs are not to deliver direct extension services but work with DA operated extension. SUCs play a significant role in addressing the shortage of well-trained agricultural extension staff in the field level through trainings and non-degree programs.

Instead, extension in a university complements and supplements extension work of other government agencies especially that of the LGUs

SUCs can revitalize the Agricultural Extension curriculum through student internships, field work as well as interactions with allied disciplines like agricultural education, development communication and rural sociology.

## **INTERRELATIONSHIP AMONG THE FUNCTIONS OF A UNIVERSITY/COLLEGE**

The integration of the three functions (instruction, research and extension) is quoted in a publication from Cornell University in Ithaca, New York (cited by Chi-Wen Chang), and it reads

“The mutual stimulation of research, teaching and extension is essential to the best progress of colleges (universities) of agriculture. Teachers need contact with research in order to keep abreast with their profession; researchers need the stimulations of students and of farm problems which they can help to solve; and extension specialists have nothing to extend unless they have research results”.

The three functions complement each other. The extension worker learn from the farmer and conveys his new awareness of farmer problems, needs and interest to the scientist. The scientist then would be able to incorporate a greater awareness of the realities of the farmer into his research plans and priorities.

## **SOURCES OF INFORMATION AND TECHNOLOGY**

- International Agricultural Research Centers – IRRI, CIMMYT etc.
- University Agricultural Research Centers – DTRI, IPB, BIOTECH, NCPC, FSSRI, IAS, etc.
- Research Institutes of Department of Agriculture – PhilRice, DA-BAR, EVIARC, etc.
- Private firms – Del Monte, Dole, etc.
- Banks, agribusiness firms, stock agents, agriculture magazines
- Farmers’ cooperatives/organizations
- Farmers’ experience and knowledge (indigenous knowledge)
  - ♦ knowledge that is unique to a given culture
  - ♦ passed down from generation to generation
  - ♦ dynamic, never static and are continually influenced by internal creativity and experimentation
- Informal sources like parents, neighbors, friends and the like

# PHILOSOPHY OF EXTENSION

## Philosophy

- a background of theory, knowledge and beliefs that explains and justifies a way of life
- an overall vision or attitude towards life and its purpose. It seeks to address the problems and needs (“the gap”) of the people in their current state (“what is”) to attain the ideal view of life (“what ought to be”).

A philosophy of extension includes the set of beliefs and principles that serves as basis for making decisions and judgments in the field of extension.

## STRUCTURE OF PHILOSOPHY

**Beliefs** – one’s mental convictions, view of the world, or acceptance of something true or actual

**Ethics** – the basic principles of right action/conduct as defined by profession, society and nation; also referred to as the ideal of conduct

**Value** – something regarded as desirable, worthy or right. The intensity or degree of valuing something may change in time.

## Philosophy of Extension Education

- **Begins where the people are, with what they have**
  - ♦ Extension should work at the level where the people are – at their level of understanding, interest and degree of readiness
  - ♦ Begins identification and consideration of local condition and environment, social structure, habits, traditions, attitudes and beliefs
  - ♦ New ideas must be related to what the farmers already know and that with which they are familiar
- **The classroom is where the people are – in their farm, in their homes and/or even in their barangays**
  - ♦ In extension education, the formal classroom setting is done away with
- **Extension programs are based on people’s needs and decided by them**
  - ♦ The farmers make effort to determine their needs, interests, problems and aspirations
  - ♦ The extension workers assist the people in exploring possible solutions to their problems
- **People learn to do by doing**

- ♦ The extension worker demonstrates the activities and later on makes the clientele do the activities themselves
- **Education is carried on with groups or with individuals**
  - ♦ Group method reaches more people and promote leadership and joint actions
  - ♦ Individual approach – although expensive, is more effective in clarifying specific problems of individual client
- **Extension works with and through people**
  - ♦ Extension workers use cooperators to teach and eventually adopt recommended practices
- **The spirit of self-help is essential in a democratic living**
  - ♦ The clientele plans and works on his project while the extension worker provides technical assistance

**Essential Considerations in Building Up  
an Effective Extension Service  
(Chang, 1969)**

- Extension must be closely related to research and can never be separated from it
- Agricultural extension must be educational
- Extension workers must live in the rural area where they serve (live with the people)
- Extension workers must be satisfactorily trained, both technically and socially, to do the job required of them
- Extension workers must be provided with an ample supply of useful teaching materials
- Local people must be involved in extension program planning
- Extension workers must assist the farmers in carrying an extension project to a successful conclusion, and help solve problems as they arise

**GUIDING PRINCIPLES OF EXTENSION**

**Communication and Education**

- Extension agent's role is as communicator and educator
  - ♦ **communicator** – transfers useful information or technology to the clientele
  - ♦ **educator** – helps people acquire the necessary skills, knowledge and attitude

**Works with Rural People**

- for impact and sustainability, **work with**, not **work for** people
- people must participate and make decisions that will benefit them; extension agent must assist them by providing all the information needed and possible alternative solutions to clientele problems

**Accountability to Clientele**

- the extension agent must justify to the organization whatever action he/she takes and be accountable and responsible to the clientele on whatever advice or information given to him
- the clientele is the one to pass judgment on the success or failure of the extension programs

### **Two-way Process Linkage**

- disseminate information and technology to and receive feedback from clientele so that their needs can be better fulfilled
- learn from the clientele the wealth of their experiences

### **Cooperate with Other Agencies**

- extension is only one aspect of the many economic, social, cultural and political activities that hope to produce the change for the betterment of the rural masses
- it should therefore cooperate and collaborate with both GOs and NGOs to accomplish the goal
- Extension cannot be effective on its own as its activities must be interdependent on other related activities

### **Work with Different Target Groups**

- Extension clientele is made up of various target groups with different needs, social status and cultural and economic background
- Extension therefore cannot offer a package of technology for all its clientele due to this heterogeneity
- Therefore, there must be targeting of extension – meaning, different programs and technology packages for different target groups

## **PURPOSE OF EXTENSION**

### **Informative Extension**

- helps people make well-considered choices among alternatives provided by extension for the individual to achieve his/her goals

### **Emancipatory Extension**

- an instrument for developing, 'forming' an individual or enhancing her/her capabilities to make decisions to learn, to manage, to communicate, to organize, etc.

### **Persuasive Extension**

- a policy instrument to induce preventive behavior with respect to societal concerns such as environmental pollution, health hazards, vandalism, drug addiction, rape, etc. Such preventive behavior is in the interest of the society as a whole or of the future generation

# COMMUNICATION IN EXTENSION

## COMMUNICATION

### Etymology

“**Communis**” – to make common or establish commonness between two or more people

“**Communico**” – to share

- a process by which two people exchange ideas, facts, feelings or impressions so that each gains common understanding of the meaning and intent of the message
- a process by which an idea is transferred from a source to a receiver with a purpose of changing his behavior

### Communication as Interaction

**Interaction** – the process of reciprocal role-taking, the mutual performance of emphatic behaviors

If two individuals make inferences about their own roles and take the role of the other at the same time, and if their communication behavior depends on the reciprocal taking of roles, then they are communicating by interacting with each other.

**Empathy** – the ability to project ourselves into other people’s personalities

### Concept of Communication

Communication can be conceptualized in terms of the **S-M-C-R** model

- It is a process by which a

**SOURCE** sends a  
**MESSAGE** to a  
**RECEIVER** by means of a  
**CHANNEL** to produce a  
**RESPONSE** in accordance with the intention of the source

### Basic Communication Process

When an extension worker communicates or talks to his clientele, he is the sender; what he says is the message; the spoken word is the channel; and the clientele being talked to is the receiver.



The reaction of the clientele to what the extension worker says is the feedback or response. In the transfer of information, it is necessary that there should be some level of past experience, some level of similarity and some level of shared meaning between the sender and receiver.

### ***Participatory Communication***

- a social process which starts with farmers and brings together both extension workers and farmers in a two-way sharing of information
- this highlights the importance of cultural identity, local knowledge and community participation

## **IMPORTANCE OF COMMUNICATION IN EXTENSION**

- rural agricultural development is a complex process in scope and content
- rural agricultural development is a dynamic process, hence, Heracletus' philosophy, "importance of being", is at work in any development situation
- Technological inventions that are meant for development or change are oftentimes "foreign" to target beneficiaries. They must be "simplified" if not "purified"
- Target beneficiaries of any extension activity/program are equally complex possessing varied personalities or idiosyncrasies that require different approaches or strategies to effect change
- Extension benefits are oftentimes perceived to be "angels in satanic attire"

## **ATTRIBUTES OF COMMUNICATION AS A PROCESS**

### **Dynamic**

- Communication has an ever-changing character. It fluctuates constantly, is never fixed, and has no clear beginnings and endings.

### **Systemic**

- Communication should be recognized as a system that consists of a group of elements that interacts with each other and the system as a whole.

### **Interaction through Symbols**

- Symbols should arouse in one's self what it arouses in another.
- The language or symbol we select and the way in which we organize it affect how others will interpret our messages.

### **Meaning is Personally Constructed**

- No two people construct the same meaning even if they hear or see the same thing.

Interpretation is bounded by our experiences, thoughts, feelings, needs, expectations, self-concept, knowledge, etc.

- Each of us is unique so we interpret in unique ways.

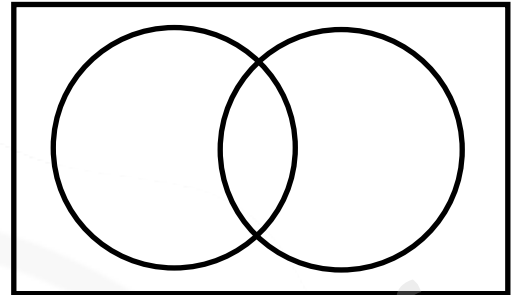


## Field of experience

- The sum total of an individual's experiences that influences his/her ability to communicate.
- Communication can take place between people only to the extent that they share a common field of experience or similar experiences.

The two overlapping circles in the figure represent the field of experience of communication participants A and B

The overlap in the two circles represents the common field of experience of A and B, or their shared similar experiences.

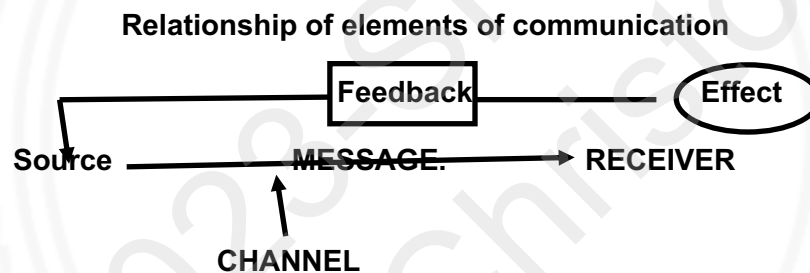


## Feedback

- The information that is sent or fed back to the source by the receiver, intentionally or unintentionally

## Purpose

- Tells the source whether the receiver is paying attention to the message, understands it, is not bored, or likes the presentation. The source is informed whether he/she should revise his/her communication act.



## Source

- sends message/information to receiver
- characteristics of source:
  - ♦ **Credibility** – a set of perceptions about the source held by receiver in terms of competence, trustworthiness and dynamism
  - ♦ **Homophily** – the degree to which a receiver perceives the source as similar to him in certain attributes

## Message

- sign or symbol that has meaning to both sender and receiver

## Channel

- the medium through which the message is sent from the source to the receiver

## Effect

- the difference between what the receiver thinks, feels and does before and after exposure to a message
  - ♦ **Cognitive effect** – knowledge, awareness, thought and skills
  - ♦ **Neutralization** – shifting of an existing attitude to the neutral zone
  - ♦ **Boomerang effect** – a shift opposite to the intended direction
  - ♦ **Conservation** – maintenance of existing attitude
  - ♦ **Attitude reinforcement** or strengthening of existing attitude
  - ♦ **Shift to the opposite sign**, from (+) to (-) and vice versa

### Philosophy

- the body of principles underlying a given branch of learning of major discipline, a religious system, a human activity or the like
- guides a person's actions
- a view of life – what ought to be and its components of “what is” and “how to bridge the gap” between “what is” and “what ought to be”

## ELEMENTS OF THE COMMUNICATION PROCESS

### Source

An extension worker should have credibility because this determines the acceptance or rejection idea by the person or group with whom he communicates; adequate knowledge of his guidance, his message and the effective channels to use; genuine interest in the welfare of his audience; careful preparation of his message via use of language that intended receivers understand, to ensure successful reception; clear way of speaking; establishment of mental understanding between teacher and learner; and awareness of time limit.

### Characteristics of the source

#### • Homophily

- ♦ refers to the degree to which a receiver perceives the source as similar to him or her in certain attributes such as age, sex, language, regional background, beliefs, values, etc.
- ♦ homophily of source and receiver in certain attributes contributes to effective communication

#### • Credibility

- ♦ a receiver's perception of the believability of the source in a particular situation
- ♦ high or low according to the degree to which a source is considered by the receiver as believable in a given situation based on four dimensions

### Dimensions of credibility

- ♦ **Character** – when a source is perceived as honest, trustworthy, friendly, reliable, pleasant, warm, etc., his or her credibility is based on the character dimension
- ♦ **Competence** – when a source is perceived as well-trained, competent, intelligent, experienced, witty, bright, etc., his or her credibility is based on the competency dimension
- ♦ **Composure** – when a source is perceived in terms of self-confidence, poise, dignity, level-headedness, etc., his or her credibility is based on the composure dimension
- ♦ **Dynamism** – when a receiver rates a source in terms of being bold, aggressive, extrovert, etc., his or her credibility is based on the dynamism dimension

### Message

- The message should contain the purpose or the specific outcome desired from the message whether it can be change in behavior or change in knowledge, skills and attitude on the part of the learner.
- The treatment of the message refers to the manner the message is presented in understandable, logically organized, interesting and in conformity with acceptable standards.
- a set of symbols arranged deliberately in certain ways in order to communicate information or meaning

### Message factors

- ♦ **Code** – symbols used in communicating; both sender and receiver should understand in order to communicate
- ♦ **Content** – the idea or substance selected to express the purpose of the source for communicating
- ♦ **Treatment** – the manner by which the materials are arranged in order to be meaningful to the receiver

### Categories of non-verbal communication

#### 1. Physical

- the personal type of communication
- includes facial expressions, tone of voice, sense of touch, sense of smell and body motions

#### 2. Aesthetic

- the type of communication that takes place through creative expressions – playing instrumental music, dancing, painting and sculpturing

#### 3. Signs

- the mechanical type of communication which includes the use of signal flags, the 21-gun salute, horns and sirens

#### 4. Symbolic

- the type of communication that makes use of religious, status or ego-building symbols

### Message meaning and understanding

- ♦ meanings are in people
- ♦ meanings are never fixed. As experience changes, meaning changes.

- ♦ No two people can have exactly the same meanings to the extent that they have the same experiences.
- ♦ Denotative or referential meaning – the relationship between a word-sign and an object or the sign-object relationship.
- ♦ Connotative meaning – meaning associated with the personal experiences of the person using the word.

### Channels

- the various methods available to any communicator to reach his audience with the message; may be classified as **visual**, **spoken** or **written** or a **combination of two or three channels**; and the techniques in using these methods determine the success or failure of the communication process

### Dimensions of channels

- mode of encoding or decoding so that a message can be seen heard, touched or felt, smelled, tasted
- message vehicles are in the form of:
  - ♦ interpersonal channels
  - ♦ mediated channels
  - ♦ mass media channels
  - ♦ folk media channels

### Interpersonal channels

- **“Gatekeeper”** – someone who
  - controls the flow of information
  - decides what information to transmit and to whom he will transmit it
  - evaluates the content to determine its relevance and value to the potential receivers
  - has the power to delete, alter the flow, add, subtract or distort the message
- **“Opinion leader”** – a person who is
  - approached by others for advice on certain matters
  - perceived as credible, influential and authoritative in the community

### Receiver

- The audience in extension education is composed of farmers, homemakers and youth.

As receivers of the message whose behaviors the extension worker expects to change, they differ in intelligence, beliefs, experience and social standing in many other ways.

- The individual differences in people may result in different interpretations of the message in kind and in extent.

### Receiver characteristics

- Psychological orientation – psychological factors that are salient to a receiver’s personality

- selective exposure
- selective perception
  
- selective remembering
- selective acceptance

### **Selective processes**

- Selective exposure – receiver tends to expose him/herself only to information that agrees with or supports hi/her existing behavior
- Selective perception – receiver tends to “notice” or assign meaning only to messages that
  - serve some immediate purpose
  - reinforce his or her mood
  - fits his/her cognitive structure
  - are meaningful to him/her
- Selective retention – receiver tends to learn or remember only information that supports or agrees with his/her attitude, beliefs, behaviors
- Selective discussion – receiver tends to discuss only information that might be of interest to him/her and to his/her listeners

### **Feedback**

- information that is sent or fed back by the receiver intentionally or unintentionally to the source
- this is an important element of effective communication that makes it a two-way process. If a farmer is viewed as the receiver, then he must be given the opportunity to function as the sender with the extension worker as the receiver
- in the absence of an reaction from the farmer, it is virtually impossible to gauge the appropriateness of the message content or channel in the implementation of an information campaign
- feedback serves as corrective function by preventing communication breakdown. Feedback helps determine whether or not a message was perceived as intended. If not, adaptations, modifications can be made.

## **LEVELS OF COMMUNICATION IN EXTENSION**

- the effective or efficient technique/s or approaches through which a target audience may be vulnerable or exposed to the communication process
- may refer to the “weaknesses” or the so-called “killing points” in communication

### **According to Social Structure**

- **Institutional/Group** – communication of any given idea is through the community
- **Individual** – “one-on-one” or “man-to-man” level
- **Combination** of the two

### According to Formality

- **Formal** – communication is facilitated through established norms of action
- **Informal** – communication is made possible through unorganized and day-to-day and casual interaction between communicators
- **Combination** of the two

## EXTENSION WORKER AS A COMMUNICATOR

- **Extension worker** – essentially an agent of change

**Change agent** – an individual who influences clients' innovation decisions in a direction deemed **desirable by a change agency**

- in decentralized diffusion system, the potential adopters may control their change agents; in some cases, certain clients serve as their own change agents
- in relatively centralized diffusion systems, the long-range goal of many agents is to create a condition in which clients can help themselves and thus work the change agent out of the job

### Change Agent as Linker

- he/she facilitates the flow of innovations from a change agency to an audience or clients
- for this type of communication to be effective, the innovations must be selected to match the clients' needs and problems
- for the linkage to be effective, feedback from the client system must flow through the change agent to the change agency so that it can make appropriate adjustments on the basis of previous successes and failures
- a change agent would not be needed in the diffusion of innovation where there are no social and technical chasm between the change agency and the client system

Heterophily in technical competence  
Heterophily in sub-cultural language  
Heterophily in socio-economic stage  
Heterophily in beliefs and attitudes

- he/she is a marginal figure with one foot in each of the two worlds
- his or her success in linking the two sub-systems often lies at the heart of the diffusion process
- he is essentially a primary actor in the process

### Sequence of Change Agent's Roles

#### Develops need for change

- he/she is required to help his or her clients become aware of the need to alter their behavior



- he/she offers new alternatives to existing problems, dramatizes the importance of these problems – consultation is highly recommended

### **Establishes an information-exchange relationship**

- he/she must develop rapport with his or her clients, which can be done by creating credibility in his/her competence, trustworthiness and empathy with the clients and problems
- he/she must be accepted first before the change

### **Diagnoses problems**

- he/she must view the situation empathically from the clients' and not his perspectives to arrive at a diagnostic conclusion
- he/she must psychologically zip him or herself in to the clients' skins and see their situation through their eyes

### **Creates intent to change in the clients**

- he/she seeks to motivate the client to be interested in the innovation
- he/she must be client-centered, not innovation-centered

### **Translates intent into action**

- he/she seeks to influence his/her clients' behavior in accordance with recommendation based on the clients' needs

### **Stabilizes adoption and prevents discontinuance**

- he/she may direct reinforcing messages to clients who have adopted, thus "freezing" the new behavior

### **Achieves a terminal relationship**

- his/her main goal is to develop self-renewing behavior on the part of the client system

## **Factors in Change Agent Success**

### **Change agent effort**

- the extent of effort that a change agent expends in communication activities with clients
- generalization: his/her success is positively related to the extent of change agent's effort in contacting clients

### **Change agency versus client orientation**

- a change agent's success is positively related to a client-orientation, rather than to a change-agency orientation

### **Compatibility with clients' need**

- a change agent's success is positively related to the degree to which the diffusion program is compatible with clients' needs



### **Change agent empathy**

- a change agent's success is positively related to empathy with clients

### **Homophily and change agent contact**

- change agent contact is positively related to higher social status among clients
- his/her contact is positively related to greater social participation among clients
- his/her contact is positively related to higher education among clients
- his/her contact is positively related to cosmopolitanism among clients

### **Change agent contact with lower status clients**

- underprivileged clients (less educated, lower income) need the assistance of change agents more than elite clients
- the question: why doesn't he not concentrate his efforts on them?
  - ♦ one reason: homophilous principles. Homophily is the degree to which pairs of individual who interact similarly in attributes like beliefs, education, social status, dialect, political affiliation, age, sex, marital status, etc.
  - generalization: more effective communication occurs when two individuals are homophilous unless they have high empathy
  - ♦ less privileged clients often lack the necessary resources to adopt the innovations that are being promoted
  - ♦ many change agents do not really try to contact the needy, lower status clients because of a self-fulfilling prophecy that the change agents have developed from their past experience and of the probable thought that needy clients are not responsive to change agents' efforts at diffusion
  - ♦ The aforementioned stereotype in the change agents' mind serves to discourage them from initiating contacts with less privileged clients. They capitalize on the diffusion theory that presupposes that innovation would trickle down from the elite clients to the less advantages clients.

### **Change agent's credibility**

- heterophilous sources/channels (like professional change agents) are perceived as competent, credible and homophilous channels like paraprofessionals are perceived as having safety credibility
- An ideal change agent represents a balance of competence and safety credibility. He/she must be homophilous with his or her clients in social characteristics (socio-economic status, ethnicity, etc.) but heterophilous with regard to technical competence about the innovations being diffused.
  - ♦ Generalization: change agent success is positively related to credibility in the client's eyes

### **Opinion leader**

- Opinion leadership is the degree to which an individual is able to influence formally other individuals' attitudes or overt behavior in a desired way with relative frequency.

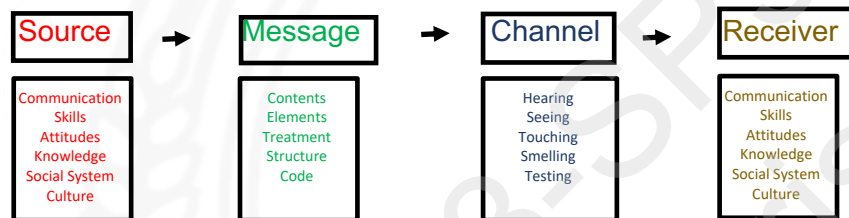
- ♦ generalization: change agent success is positively related to the extent that he works through opinion leaders

### Clients' evaluation ability

- technical competence – one of the change agent's unique contributions to the diffusion process, allowing him to provide this expertise to clients in making innovation decisions
- if he takes a long range approach to change, he should seek to raise the clients' technical competence and ability to evaluate potential innovations themselves
- ♦ generalization: change agent success is positively related to increasing clients' ability to evaluate innovations

## COMMUNICATION MODELS

### Berlo's Model



- focuses on the individual characteristics of communication and stresses the role of the relationship between the source and the receiver as an important variable in the communication process
- the more highly developed the communication skills of the source and the receiver, the more effectively the message will be encoded and decoded
- represents a communication process that occurs as a SOURCE drafts messages based on one's communication skills, attitudes, knowledge and social and cultural system
- the messages are transmitted along CHANNELS that can include sight, hearing, touch, smell and taste
- a receiver interprets messages based on the individual's communication skills, attitudes, knowledge, and social and cultural system
- the limitation of the model is its **lack of feedback**

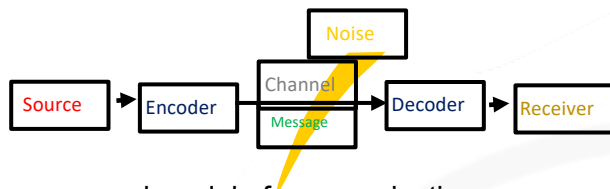
### Laswell's Model



- a macroscopic theory that is concerned with media's impact on culture and society – for example: cultural studies theory

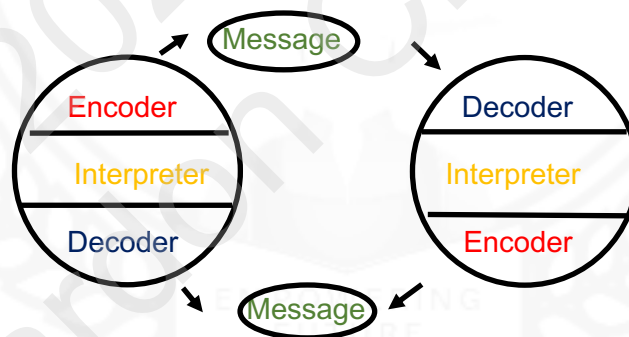
- theories of mass communication have always focused on the “cause and effects” notion, i.e., the effects of the media and the process leading to those effects, on the audience’s mind
- Laswell’s (1949) essential question is timeless: *“Who says what in what channel to whom with what effects?”*

### Shannon and Weaver’s Model



- a general model of communication
- involves breaking down an information system into sub-systems so as to evaluate the efficiency of various communication channels and codes
- Shannon and Weaver proposed that communication must include six elements – **Source**, **Encoder**, **Channel**, **Message**, **Decoder** and **Receiver**
- often referred to as an “information model” of communication
- one drawback – it looks at communication as a one-way process, but remedied with the addition of the feedback loop
- **Noise** – indicates factors that disturb or otherwise influence messages as they are being transmitted

### Osgood and Schramm’s Model



- emphasizes the circular nature of communication
- the participants swap between the roles of source/encoder and receiver/encoder
- Wilbur Schramm stated: *“In fact, it is misleading to think of the communication process as starting somewhere and ending somewhere. It is really endless. We are little switchboard centers handling and rerouting the great endless current of information...”*

## BARRIERS TO EFFECTIVE COMMUNICATION

**Barriers** – analogous to filters of the communication process

### External Factors

**WARNING:** For UPSTEP REVIEW CENTER student’s use only. Unauthorized distribution of this manual is prohibited and will be penalized. Contact Upstep Review Center at 0929-410-2162

- some considerations outside of the communication process but which directly or indirectly influence its operation

### **Socio-economic factors**

- ♦ availability of financial institution which can provide credit
- ♦ land tenure arrangement
- ♦ economic motivation in farming
- ♦ market (inputs and outputs)

### **Labor situation**

### **Socio-political factors**

- ♦ political environment where communication in extension operates: democratic versus autocratic form
- ♦ cultural values that are inherent among Filipinos:
  - kumpadre system
  - palakasan
  - partido system

### **Socio-psychological factors**

- ♦ the degree of access of communicators to potential sources of information on agricultural and rural development

### **Socio-physical factors**

- ♦ the instance/existence of road/transportation network within the communication target

### **Internal Factors**

- the quality and quantity consideration that are directly inherent in the elements of communication

### **Sender**

- ♦ credibility
- ♦ access/availability

### **Message-related factors**

- ♦ characteristics of the technological information that tend to influence its diffusion

**Relative Advantage** - the degree to which An innovation (a new idea or practice) is superior to the one it is intended to replace

**Compatibility** - the extent to which an innovation fits into a farmer's views about what ought to be, what he does on the farm and how he does it

**Complexity** - the fact that some innovations are more complicated than others. A practice will be adopted more quickly when it is seen as simple and not difficult to understand

**Trialability** - the degree to which an innovation can be experimented or duplicated on a small scale basis

**Observability** - the extent to which an innovation or its results can be observed or seen. If the results of an innovation can be easily seen, it will tend to be adopted quickly.

### Channel-related factors

- ♦ the various considerations that are inherent in the different strategies, ways, approaches, techniques that influence the flow of information from the source to the receiver

#### Appropriateness/Compatibility of the channel to the

- purpose of the communication
  - kind and quality of the receiver
  - competence of the use
  - kind/nature of the messages which are being communicated
- ♦ timeliness of its use

### Receiver-related factors

- ♦ the different considerations that are inherent in the communication receiver that tend to influence his vulnerability to change-related communication

#### Socio-economic characteristics

- age (not related)
- education (positive)
- literacy (positive)
- higher social status (positive)
- upward social mobility (positive)
- large-size units (positive)
- commercial (positive)
- attitude towards credit (positive)
- more specialized operation (positive)

#### Personality variables

- empathy (positive)
- dogmatism (negative)
- ability to deal with abstraction (positive)
- rationality (positive)
- intelligence (positive)
- attitude towards change (positive)
- ability to cope with uncertainty (positive)
- attitude towards education (positive)
- attitude towards science (positive)
- fatalism (negative)

- achievement motivation (positive)
- higher aspiration for education, occupation (positive)

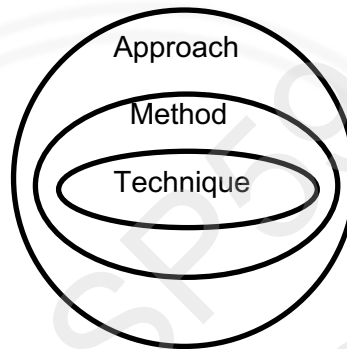
### Effects-related factors

- ♦ the possible consequences brought about by an introduced innovation
- ♦ consequences – changes that occur to an individual or a social system as a product of communication
- ♦ there are at least three classifications of consequence:
  - desirable versus undesirable consequences, depending on whether the effects of an innovation in a social system are functional or dysfunctional
  - direct versus indirect consequences, depending on whether the change to an individual or society occurs in immediate response to an innovation as a second-order result
  - anticipated (expected) versus unanticipated consequences, depending on whether the changes are recognized and intended by the members of a social system or not
- ♦ change agents usually introduce innovations into a client system that they expect will be desirable, direct and anticipated
- ♦ change agents are seldom able to predict another aspect of an innovation's consequences, its meaning, the subjective perception of the innovation by the client



# APPROACHES IN EXTENSION

## APPROACH METHOD TECHNIQUE



### Definitions

- **Approach** – embraces the entire spectrum of the process. It states a point of view, a philosophy, an article of faith (Garcia, 1989). There can be several methods within an approach.
- **Method** – a procedural consisting of a series of actions arranged logically for the smooth flow of operation.
- **Technique** – a particular trick, strategy, individual artistry of the teacher/extension worker

**Extension approach** – an organized and coherent combination of strategies and methods, designed to make rural extension effective in a certain area

- embodies the philosophy of a system
- spells the doctrine of the system
- style of action which by and large, determines the direction and nature or style of the various aspects of the system (e.g. structure, leadership, program, methods, resources and linkages)

**Strategies** are approaches and method chosen or developed to reach a particular set of goal; used to define the operational design by means of which the national government or other sponsoring organizations implement its policies.



## APPROACHES IN EXTENSION

1. General Agricultural Extension Approach
2. Commodity Specialized Approach
3. Project Approach
4. Farming Systems Development Approach
5. Training and Visit System Approach
6. The Cost-sharing Approach
7. Agricultural Extension Participatory Approach
8. Educational Institution Approach

### General Agricultural Extension Approach (GAE)

#### General nature

- Transfer of technology (TOT)

#### Basic assumption

- Technology and information are available but are not being used by farmers. If these could be communicated to them, farm practices would be improved.

#### Purpose

- to help farmers increase their production

#### Program planning

- controlled by the government
- changes in priority, from time to time, are made on a national basis with some freedom for local adaptation

#### Implementation

- carried out by a large field staff assigned throughout the country
- demonstration plots are major technique

#### Advantages

- interpret national government policies and procedures to the local people
- covers the whole nation
- relatively rapid communication from the department level to the rural people

#### Disadvantages

- lacks two-way flow of communication
- fails to adjust extension messages to different localities
- field staff not accountable to rural people
- expensive and inefficient

### **Measure of success**

- increase in national production of the commodities being emphasized in the national program

## **Commodity Specialized Approach**

### **General nature**

- highly specialized
- focuses on one export crop or one aspect of farming

### **Basic assumption**

- the way to increase productivity and production of a particularly commodity is to concentrate on that one grouping extension with such other functions as research, input supply, output marketing, credit and sometimes price control, will make the whole system productive.

### **Purpose**

- increase production of a particular commodity
- sometimes to increase utilization of a particular agricultural input

### **Program planning**

- controlled by the community organization

### **Implementation**

- carried out by a large field staff assigned throughout the country
- demonstration plots are major technique

### **Advantages**

- technology tends to “fit” the production problems and so extension messages tend to be appropriate because of coordination with research and marketing people
- messages tend to be delivered in a timely manner
- focus on a narrow range of technical concerns
- higher salary incentives
- closer management and supervision
- fewer farmers per extension worker
- easier to monitor and evaluate
- relatively more cost-effective

### **Disadvantages**

- interests of farmers may have less priority than those of the commodity organization

- does not provide advisory service to other aspects of farming
- commodity organization may be promoting its commodity even in situation where it is no longer in the national interest to be increasing production of that particular commodity

### **Measure of success**

- increase in yield, and total production of the crops being emphasized

## **The Farming Systems Development Approach (PSDA)**

### **General nature**

- interdisciplinary approach i.e. involves several disciplines

### **Basic assumption**

- technology that fits the needs particularly the needs of small farmers, is not available and needs to be generated locally

### **Purpose**

- to provide extension persons, and through their farm people, with research results tailored to meet the needs and interests of local farming systems conditions

### **Program planning**

- evolve slowly during the process for different climatic farm ecosystem types since program takes into account a holistic approach to the plants, animals and the people in each particular location
- control of program shared jointly by local farm men and women, extension people and agricultural researches

### **Implementation**

- through partnership of research and extension personnel with the local people, taking a systems approach to the farm
- requires research personnel to go to the farm, listen to farmers and in collaboration with them and the extension personnel, understand the farm as a system

### **Advantages**

- local control of program planning increases relevance of program content and methods to needs and interests of clientele
- higher adoption rates
- effective communication between local people and extension personnel
- lower cost to central government and local people

### **Disadvantages**

- some degree of difficulty in working in a multi-disciplinary team
- no quick results in development of appropriate technology

### **Measure of success**

- extent to which farm people adopt technologies developed in the program and continue to use them over time

## **The Training and Visit Approach (T & V)**

### **General nature**

- highly disciplined and patterned with fixed schedules for training of extension workers, SMSs, and visits by extension workers to partners

### **Basic assumption**

- extension personnel poorly trained, not up-to-date and tend not to visit farmers, but stay in offices
- management and supervision are not adequate
- two-way communication between research and extension units and between extension staff and farmers can be achieved

### **Purpose**

- to induce farmers to increase production of specified crops

### **Program planning**

- centralized
- what to teach and when to teach it is decided upon by professionals and is delivered down to farmers
- program planning follows cropping pattern of priority crops

### **Implementation**

- fortnightly training of village extension workers (VEW) by SMSs
- fortnightly visits by village extension workers to small groups of farmers or to individual “contact” farmers

### **Advantages**

- pressure on governments to organize a large number of small agricultural units into one integrated system
- brings discipline to the system village extension workers become more up-to-date with information
- closer technical observation

### **Disadvantages**

- high long-term costs to governments due to expanding size of VEWs
- lack of actual two-way communication
- technology relevant to farmers not integrated
- lack of flexibility to change programs as needs and interests of farmers change staff tires of vigorous, patterned activities without appropriate rewards

### **Measure of success**

- increase in yield, and total production of the crops being emphasized

### **The Cost-Sharing Approach (CSA)**

#### **Basic assumption**

- any non-formal education program is more likely to achieve its goals if those who benefit from it share some part of the cost
- program would more likely serve interest of the client if costs are shared between “outside” sponsors and “inside” target groups
- commitment of learners to participate if they pay some part of the costs

#### **Purpose**

- to make funding of agricultural extension affordable and sustainable both at central and local levels

#### **Program planning**

- shared by various levels paying the cost but must be responsive to local interest in order to maintain cooperative financial arrangements

#### **Advantages**

- some measure of local control of program planning increases relevance of program content and methods to needs of client
- higher adoption rates
- effective communication between local people and extension worker
- lower cost to central government and local people
- local people tend to have strong voice in program planning

#### **Disadvantages**

- more difficult for central government to control either program or personnel

#### **Measure of success**

- farm people’s willingness and ability to provide some share of the cost, individually or through their local government units

### **The Agricultural Extension Participatory Approach (AEPA)**

#### **General nature**

- puts responsibility of determining agricultural extension programs in the hands of farmers making them partners with GOs and NGOs

#### **Basic assumption**

- that farming people have much wisdom regarding food production from their land

- there is an IKS different from the scientific knowledge system but there is much to be gained from the interaction of the two
- needed is participation of farmers, research and related services
- there is a reinforcing effect in group learning and group action
- extension efficiency is gained by focusing on important points based on expressed needs of farmers

### **Purpose**

- to increase production of farming people
- to increase consumption and enhance the quality of life of rural people

### **Program planning**

- controlled locally, often by farmers' association

### **Implementation**

- features many meetings and discussions of farmers' problems
- exploring situations with extension officers

### **Advantages**

- relevance or fit of the program
- mutually supportive relationships which develop among participants
- lesser cost
- stimulates increased awareness, confidence and activity among farm people

### **Disadvantages**

- lack of control of program from central government
- difficulty of managing, reporting and accounting
- pressure people might bring on central units
- people's influence on personnel management like transfer, selection, promotion, etc.

### **Measure of success**

- continuity of local extension organizations and the benefits to the community
- extent of participation of key stakeholders in program planning and implementation

## **EXTENSION TEACHING METHODS (ETM)**

### **ETM According to Form**

#### **• Written form**

- |                    |                 |                    |
|--------------------|-----------------|--------------------|
| ▪ Bulletins        | ▪ Leaflets      | ▪ Personal letters |
| ▪ Circular letters | ▪ News articles |                    |

#### **• Spoken**



- Employed during meetings
- Office calls
- Farm and home visit
- Radio calls

• **Visual or objects**

- Exhibits
- Posters
- Slides
- Motion pictures
- Result demonstration
- Television

• **Spoken and visual object**

- Demonstration
- Slides
- Meeting involving motion pictures
- Visual aids

**ETM According to Number  
of Clientele**

• **Individual approach**

- ♦ This approach proceeds from a mutual discussion that is basically interpersonal.

Several modes are:

- participatory model where the extension agent and the farmer resolve a problem together
- counseling model which uses the non-directive technique of having empathy and compassion with the farmer
- diagnosis: prescription model where the problem of the farmer is analyzed by the extension agent and the solution is prescribed

▪ **Farm and home visit**

- an extension teaching method in which the extension worker goes to the farm and home and meets the farmer, homemakers and youth
- Generally, farm and home visits are for providing and getting information and also an opportunity to arouse interest in farm, home or community improvements not yet recognized by the individual as desirable.
- If the visit is primarily for the purpose of obtaining information, that information can be interpreted and used more effectively because of the extension worker's first-hand knowledge of the circumstances involved.

▪ **Office calls**

- a teaching method wherein farm people go to extension office for information or assistance.
- involves direct personal contact between the extension worker and the individual desiring information or assistance
- the fact that the farmer or homemaker calls on the extension worker, there is recognition of the problem to be solved and a strong desire to solve it
- the climate of readiness is even more favorable to learning and action than in the case of the visit to the farm and/or home

▪ **Letters and correspondence**

- do not seem very important in disseminating agricultural information



- the main value lies in answering inquiries about new kinds of seed of different crops, new publication and control of pests and diseases of crops

- **Group approach**

- **Lecture** – a verbal presentation by a single speaker to a group of listeners

- used extensively by extension technicians and subject matter specialists to present technical information or develop background and appreciation of and to integrate ideas
    - for most part a one-way communication from speaker to audience
    - frequently, questions at the end of the lecture establish some interaction between the speaker and the audience
    - should not be confused with method demonstration

- **Discussion following a lecture**

- often called lecture forum
    - anyone in the audience who desires more information may ask the speaker some questions
    - if somebody wants to add to the speaker's statement, he may present his remarks in the form of questions

- **Demonstration**

**Method demonstration** – short-time demonstration given by an extension worker or trained leader for the purpose of reaching skills to a group or to show a better way to carry out a practice

- shows how something is done step-by-step, e.g. how to use a tool, a new planting technique to prevent soil erosion or how to cook a newly introduced viand or delicacy
    - not concerned in proving the worth of a practice but “how to do something”
    - an effective method because during the process, all best teaching means – seeing, hearing, discussing and doing are employed

**Result demonstration** – long-time demonstration carried out under the supervision of an extension worker in the farm or in the home of a reliable cooperator

- the main purpose is to prove that the new practice is superior to the one currently being used and is practicable under local conditions
    - helps to establish confidence in scientific farming methods as opposed to traditional methods, by teaching farmers why they should adopt a new practice
    - proves the advantages of an improved farming or homemaking practice
    - shows the advantages of applying scientific methods to everyday situations
    - dramatizes and arouses interest by showing old and new practices side by side
    - convinces people as they see for themselves which is the better practice

- **Educational tour/Field trip** – a group travels to another location to observe agricultural practices, projects or demonstrations not available locally

- A destination may be an agricultural experimental station, a farm or a community organization such as a successful farmers' marketing cooperative, etc.

- **Field day** – a day or days in which an area containing successful farming or other practices is open for people to visit

- Usually held on farms, experimental stations or government centers to demonstrate successful farming techniques or to see field tests, machinery demonstrations, athletic contests, or other events
  - an activity designed to influence a large number of people gathered in one place at one time
  - may consist of an activity or a combination of activities where the teaching and learning situation are made public to a large audience
  - an effective tool in creating awareness and interest in new or improved agricultural and homemaking practices
- ♦ **Meeting** – an organized and purposive assembly of a constituted group of farmers, homemakers and youth for the purpose of deliberating, planning, deciding on or executing specific business of the constituted group
- held to introduce and discuss new ideas or practices, to obtain the opinions of a community and, if possible, gain their support on local problems and extension programs
  - **Group discussion**
    - commonly used as part of a seminar-workshop
    - the audience is divided into a group of about 15 and are given a specific period within which to discuss a topic
- Brainstorming** – an activity to which a deliberate attempt is made to think and speak out freely and creatively all possible approaches and solution to a given problem
- Open forum** – clarifications, questions, objection to ideas
- Phillip 66** – 6-person, 6-minute discussion
- **Informal group discussion** – farmers/neighbors can get together in a certain place and time to get acquainted with each other, to exchange farming information and ideas and to share common problems in order to help each other and the community
    - discussion groups lead to direct interaction possible between an extension agent and the farmers and among the farmers themselves
    - these make it possible for the extension agent to adapt his information more closely to the farmers' needs and knowledge level when using the mass media approach
  - **Panel discussion** – a moderated meeting in which a limited member of experts or specialists (2-8) give short presentations on the same subject
    - An informal discussion of a topic participated in by a group of 2-8 speakers for the benefit of listeners
    - ideally, each panelist represents a different field of discipline
    - a leader presides, introduces the speaker, and encourages the less talkative to shoot his questions
  - **Symposium** – a short series of lectures usually, by 2 to 5 speakers, each with a different viewpoint

- a modification of the lecture, but differs in that there is more than one speaker and more than one point of view
- the subject is not necessarily controversial
- unless speakers are approximately equal in ability, one speaker may dominate the meeting
- **Role playing** – a dramatization in which an open-ended scenario is described and participants are assigned roles to act out the situation or the problem
  - the scenario used to set up a role playing exercise may be simple but it must be based on the local reality
  - the dramatization shows emotional reaction of participants assuming an identity other than their own
  - real or hypothetical problems in interrelation and other areas are presented
- **Extension classes**
  - short courses consisting of selected subject matter courses in agriculture and family living, programmed into specific number of learning sessions for farmers, homemakers and youth
- **Seminar-workshop**
  - extensively used in the training of extension personnel and local leaders who participate in development programs
  - the training consists of actual work; participants are to perform certain directed activities
- **The film forum**
  - a discussion before and after the viewing of an educational film is similar to the lecture forum, except that the film takes over the question and answer function of the lecturer in the film forum
- **Program planning meetings**
  - extension workers participate in several meetings concerned with program planning
  - may involve a committee of voluntary leaders, the entire membership of an organized group, or those in attendance at publicly advertised neighborhood or community meeting
- **Educational tours**
  - a group of farmers, homemakers and other interested group are taken to a central research station, agricultural institution or to successful farm or projects, to observe and acquaint the farmers/homemakers of the modern technologies used in such institution or farm
- **Camps**
  - a group method with special functions, thus, has a firm place specially for 4-H Club
  - emphasizes cooperation, stimulates interest in all group activities and offers special opportunities for training in health, conservation, group actions, arts and crafts, safety and many other subjects
- **Achievement days and rallies**

- held for the purpose of giving public recognition to worthwhile accomplishments
- may be an all-day or a five-day affair frequently held with members exhibiting their project work, giving demonstration, announcement or winners of awards, delegates chosen for bigger events and outstanding local leaders honored

#### • Mass methods

- ◆ channels in communication that can expose large number of people to the same information at the same time
- ◆ include media that convey information by sound (radio, audio etc.), moving pictures (television, film, video) and print (posters, newspapers and leaflets)
- ◆ Via use of publications that are circulated as in
  - bulletins
  - pamphlets
  - circulars
  - leaflets
  - new stories
- ◆ Others such as
  - posters
  - exhibits
- ◆ mass media serves to create awareness of innovations and stimulation of interest

#### Mass Media

##### ▪ Advantages

- reach a large number of people rapidly
- create awareness and spread information
- lead to changes in weakly held attitudes
- low cost per individual reached
- high accuracy of message communicated

##### ▪ Limitations

- high probability of selected screening
- low clarity of content
- one-way flow of message
- low speed of feedback
- low accuracy of feedback

#### Radio

- one of the fastest and most powerful means of mass communication that can reach all cultural levels
- radio plays an important role in
  - a. promoting changes in attitude that lead to adoption of new farm practices
  - b. increasing awareness and appreciation for agricultural information

- c. promoting rural people's awareness about important rural-urban differences
- d. serving as a source of family living patterns and helping solve some problems in family relations
- e. stimulating new wants/desires for the acquisition of certain advertised products

- radio program helps create awareness and interest in innovations
- gives timely information to the public
- informs the public about extension activities
- stimulate people to seek advice of the extension officers
- the most important mass medium for farmers in less industrialized countries

**- advantages:**

1. reaches many people more quickly in all parts of the country without delay
2. extremely useful in reaching the countryside where some people are not fully literate
3. enhances the effectiveness of other extension teaching methods such as demonstrations or meetings

**- drawback:**

- ◊ not all provinces have radio stations

**Television**

- ◊ the extensionist can give "how-to-do-it" method of demonstration, which is not always possible on radio
- ◊ an effective media specially in face to face approach of the masses, as it can reach both urban and rural people

**Print/Publications**

- ◊ bulletins, pamphlets, leaflets and other reading materials supplement other extension methods and techniques
- ◊ distributed to interested parties who may call or write for them
- ◊ printed materials furnish ready answers to queries
- ◊ well organized at relatively low cost

**Exhibits**

- ◊ tell a story much quicker than any communication tool
- ◊ in a few seconds, can convey a message than other media such as demonstration, lecture, movie and radio would do in a longer time
- ◊ used to gain support for extension programs
- ◊ are carefully designed and constructed so they can be dismantled and transported for reassembly and display at various other centers
- ◊ posters, photograph enlargements, models, drawing and other devices are used to emphasize the principal object of extension work

**Educational campaigns**



- ◊ the coordinated use of different extension methods for the purpose of forecasting the attention of the public in a particular widespread problem and its solution e.g. black bug problem
- ◊ resorted to whenever the problem with which it is connected is important to the majority and the solution of which requires the massive involvement of the people

### Audio-visual Aids

- ◊ assume considerable importance in extension work
- ◊ people learn through all their senses – the more senses used, the more the learning is increased. With audio-visual aids, people use sight and hearing to learn.

#### ◊ Types of visual:

1. **presentation visuals** – used to reinforce or clarify a speaker's message. They include samples and specimen, models, photographs, blackboards, flannel graphs, flipcharts and flashcards.
2. **display visuals**
  - 2.1 **posters** – used to announce extension activities or to publicize campaign objectives
    - » a good poster tells what, where and when
    - » the “what” is the subject matter and must be placed in an important place in the poster
    - » a poster's job is to get attention, to stimulate interest and not to tell the whole story
  - 2.2 **wall charts** – provide explanatory support to the main teaching activity. They contain graphically certain process, like the life cycle of
  - 2.3 **pests and pest control techniques**
  - 2.4 **bulletin board** – carry posters, wall charts, bulletins, handouts and announcement of extension activities, agricultural information and news
  - 2.5 **extension literature** – classified both under print/publication and as visual aids
    - » **bulletins** – contain complete summary of the information available on a particular subject e.g. certain specialized poultry, livestock or crops
    - » **leaflets** – provide practical advice on farming or homemaking problems and practices
    - » **handouts** – used to aid recall of the message
  - 2.6 **projected visuals** – include color slides, lantern slides, filmstrips, overhead projector and cinema films
  - 2.7 **tape recorders** – store sound for reuse
  - 2.8 **music, plays and puppets** – folk songs, dances and drama are a great fascination for people

- » socio-drama is a tool that may be used either in the classroom, in a meeting, or out in the open in a barangay
- » role play teaches the very important skills of putting yourself in the other fellow's shoes to understand how he will react in a particular situation, and enables one to see and appreciate his point of view
- » puppets are dolls that can be made to move about and appear to speak

2.9 **mobile units** – have the following facilities: public address system, slides and projectors, a tape play back desk, record player and stock of extension literature

2.10 **story board** – useful in planning certain types of visual aids like films, filmstrips, sets of slide, flashcards and flip books

### Media Combination and Use of Audio-visual Aids

- combinations of mass media and group discussion bring about substantial changes in behavior
- the use of many types of **audio-visual aids (video tapes, sound slides)** increases extension effectiveness
- messages presented through different aids must be synchronized carefully so that the target audience is not overloaded with information
- audio-visual materials must be pre-tested before general use

### Use of Folk Media

- the consultative and participative approach to extension planning, budgeting, implementation, monitoring and evaluation have brought about the interest and increased use of folk media as an extension methodology
- folk media are participated in by the grassroots
- effective in arousing motivation to change
- communication messages are easily understood in the local language
- there is freedom in conveying sentiments on current problems and issues to concerned sectors or individuals by the scriptwriters, thus eliciting appropriate actions or resolutions
- folk and modern media complement each other and evidenced in its use by the Barangay Integrated Development Approach for Nutrition Improvement (BIDANI) program in the Philippines

## ELECTRONIC MEDIA

- media that requires the use of electricity or electric power

### Categories of Electronic Media

- still projection media – slides, filmstrips, overhead transparencies, opaque materials
- audio media – cassette and reel tapes, disc recorders, radio, telephone, cellular phones
- audio plus visual media – sound slide tapes, sound filmstrips, voice and text cell phones
- motion picture – 16 mm films, 8 mm films, super 8 mm films, 35 mm films
- television – aerial and cable TV
- internet – needs the following: computer system, fax modem, telephone system and ISP server



## **Internet**

- a global network of computers, the computers linked via a telecommunication system such as the telephone system and the communication satellite
- internet users need a personal computer (PC), a laptop computer, tablet or smart cell phone, a fax modem and an ISP server in the area
- used in sending e-mails, connecting to other computer databases, sending data or computer files to other computers, surfing the worldwide web (www), watching real-time videos, chatting with friends, reading the day's news headlines, accessing many other information and advertising oneself in the net by creating a web page

### **The World Wide Web**

- ♦ contains web pages or information that are made available via the internet using hypertext links
- ♦ information may contain text, pictures, sound and video
- ♦ a browser is used to view these information on the web
- ♦ to find information, an address or uniform resource locator (URL) is used. The links are followed, and a search engine or subject directory is used.

### **Browser**

- ♦ a software that is connected to the internet to see information via the Web e.g. Netscape, Navigator/Communicator and the Internet Explorer

### **Web site**

- ♦ contains web pages like paper pages of a book
- ♦ has a home page like the cover + mini table of contents of a book

### **Search engine**

- ♦ a special site on the web
- ♦ it is where keywords are typed to search for web sites
- ♦ examples are yahoo, google, etc.

### **Intranet**

- ♦ a private internet or network of computers (e.g. in offices) where staff can communicate with any other staff using the instant messaging software, conduct conferences or joint chat

### **Extranet**

- ♦ several related intranets connected with each other (supplier organizations, clients, etc.)

### **Local Area Network (LAN)**

- ♦ a network of computers in a small area (e.g. college or university) where units are wired and connected

### **Wide Area Network (WAN)**

- ♦ a network of LANs or intranets that facilitate communication among the interconnected LANs or intranets



# COMMUNITY ORGANIZING

## COMMUNITY

- an organization of families and individuals settled in a fairly compact and contiguous geographical area, with significant element of common life as shown by its elements:
  - ♦ **Manners** – a way of doing something
  - ♦ **Customs** – the social convention carried on by tradition
  - ♦ **Tradition** – handing down of customs, beliefs and others from generation to generation
  - ♦ **Mode of speech** – the language of a certain people or group
- also refers to people and the pattern of social relationship which may be characterized by:
  - ♦ **a common system of values**
    - **value** – hints at what ought to be or at those that relate to the ultimate ends, goals or purposes of social action
  - ♦ **normatively defined relation**
    - **norms** – accepted ways of behaving that govern group life in all societies and at all times.
    - “rules” or standards of behavior shared by members of a social group and ideal patterns of behavior that most members of society consider to be correct and proper in particular situations
  - ♦ **Interdependence**
    - “needing and depending upon each other”. The prefix “inter” refers to that which exists “between and among” discrete entities.
  - ♦ **Recognition of belongings**
    - everybody wants to feel liked and accepted by others
    - people get their greatest joys through association with others who make them feel that they have unity
  - ♦ **System of stratification**
    - the way in which a large group of people living together is divided into classes
    - makes people differ from each other by the place that they occupy in a historically determined system of social production, by their relation to the means of production, by their role in the social organization of labor and consequently by the dimensions of the share of social wealth of which they dispose and the mode of acquiring it
  - ♦ **Locality**
    - the area occupied by closely-knit members of a community

- varies according to the term of reference used

## COMMUNITY ORGANIZING

- a development strategy for building people's capabilities towards self-determination and self-reliance
- a method and process of educating, organizing and mobilizing people that leads to their own development
  - ♦ **method** – it follows some basic steps. However, situations tend to be fluid. The correctness of strategy depends on sound community diagnosis.
  - ♦ since it is a **process**, the particular stage or entry point a community organizer utilizes depends upon his or her reading of the local condition
- it is a continuous process of:
  - ♦ educating people to understand their critical consciousness or their existing conditions
  - ♦ organizing people to work collectively and efficiently on their problems
  - ♦ mobilizing people to develop their capability and readiness to respond and take action on their immediate needs towards solving their long-term problems

### Three Major Components of Community Organizing

1. Training and Education
2. Organization building
3. Mobilization

### Tasks and Functions of a Community Organizer

#### • As a facilitator

- ♦ enhances individual and group strengths and minimize weaknesses and conflicts
- ♦ heightens group unity
- ♦ assists individuals and groups to respond to common interests

#### • As a trainer

- ♦ assesses training needs
- ♦ plans and conducts educational program
- ♦ assists leaders in training others
- ♦ engages in praxis (action-reflection-action) through continuous dialogue with people

#### • As an advocate

- ♦ analyzes and articulates critical issues
- ♦ assists others to reflect upon other issues
- ♦ evokes and provokes meaningful discussions and actions

#### • As a researcher

- ♦ conducts social analysis

- ♦ engages in participatory technology development
- ♦ simplifies and enriches appropriate research concepts and skills
- ♦ engages in social integration to understand social phenomena from the eyes of the people

• **As a planner**

- ♦ conducts analysis of area resources and potentials
- ♦ assists local groups in planning for their common goal
- ♦ systematizes group actions

• **As a catalyst**

- ♦ initiates debates and actions regarding critical problems
- ♦ monitors and nurtures growth of individuals and groups

## **COMMUNITY ORGANIZATION**

- the process of bringing about and maintaining adjustment between social welfare needs and resources in a geographical area of special field of service (Durham, 1958)
- process by which a community identifies its needs and objectives, orders/ranks or objectives, develops the confidence and will to work at these needs and objectives, takes action in respect to them and in so doing, extends and develops cooperative and collaborative attitudes and practices in the community (Ross, 1955 and 1976)
- a systematic, planned and liberating change process of transforming a complacent, deprived and malfunctioning community into an organized, conscious, empowered, self-reliant, just human entity and institution (PESP)

## **VALUES, GOALS AND PRINCIPLE**

### **Values of Community Organization**

- Human rights
- Social justice
- Social responsibility

### **Goals of Community Organizing**

#### **People's empowerment**

- community organization aims at achieving effective power for the people
- people learn to overcome powerlessness and develop their capacity to maximize control over their situation and start to place the future in their own hands

#### **Building relatively permanent structures and people's organization**

- community organization seeks to create a conducive environment for the development of human creativity and solidarity through equitable distribution of power and resources

#### **Improved quality of life/standard of living**

## Popular democracy

## National social transformation

### Principles of Community Organizing

- People's participation
- Self-determination
- Experiential learning
- Self-reliance

### Organizing approaches

- **Issue-based approach** – organizing approach that revolves around issues or problems that:
  - ♦ are felt by a significant number of people in the community
  - ♦ require people to negotiate from a position of strength usually outside the community for issue resolution
  - ♦ have a high probability of being resolved if collectively acted upon
- **Socio-economic project-based approach** – organizing approach that centers on the introduction of socio-economic projects such as health care, IGP, enterprise development, MPC formation, etc.
- **Church/Faith-based approach** – organizing approach used by organizers with the structures of a church or within components of church-based programs

## SOME APPROACHES TO RURAL CHANGE

### The Concentrated Approach

- the change agent does not cover the whole area at once but limits his operation on a limited area or project
- the change agent works closely with a limited number of individuals known as **cooperators**, with the hope that the new information or ideas would later on radiate to the other farmers in the community
- the approach is suited to areas newly covered by a technician or change agent

### The Team Approach

- technicians with different fields of specialization work together as a team in developing an area
- the technicians come from one agency and works as a team in developing a particular area or community
- the team may be composed of a livestock technician, crop technician, farm management technician and a home management technician
- team members can reinforce each other's activities in meeting the client's varied field problems
- this approach works well in areas far from agricultural experiment station or agricultural college

### The Cooperative Approach

- different agencies are involved
- every agency has its own specialized functions as stated in the program



- written agreements are needed so that the specific responsibilities of each participating agency are spelled out

### The Institutional Approach

- the aim is to organize farmers into associations so that they can eventually manage their own program or activities
- examples are **farmers' associations**, **samahang nayon** and **cooperatives**, etc. The organized groups are used as instrument for rural development activities.

### Utilizing Local Leaders

- formal and informal leaders are indispensable in rural development work
- leaders assist in carrying out development programs in the locality and serve as the link between the people and the extension service
- proper selection and the need for training and development should be instituted before the local leaders are put into action

# THE ADOPTION PROCESS

**Innovation** – an idea or practice or technology perceived as new by a person

**Adoption** – the process by which a person is exposed to, evaluates and accepts/practices or rejects a particular innovation. It is the decision to make full use of the technology as the best option possible.

## DIFFUSION PROCESS

- the spreading of information from a source to its intended or unintended receivers or users and the stages through which adoption passes
- a process by which an innovation is communicated through certain channels over time among the members of a social system

### Stages in the Adoption Process

#### 1. Awareness

- ♦ a stage when a person knows that an idea exists but lacks details and information about it

#### 2. Interest

- ♦ a stage when a person seeks more factual information as to what it is, how it works and what its advantages are

#### 3. Evaluation

- ♦ when an individual shows marked interest in the idea as it applies to his farming operation and family

#### 4. Trial

- ♦ a stage whereby an individual has weighed the advantages and risks involved and whether he can try it on a small scale, the individual actually applies the new idea on a small scale in order to determine its utility in his own situation

#### 5. Adoption

- ♦ the final stage of the diffusion process, described as full or large scale and continuous use of the idea

#### Note:

- ♦ the farmer can also reject the innovation based on his or her observation and assessment

- ♦ the five stages may not always occur in specified order, the trial stage may be skipped and evaluation stage may occur throughout the whole process
- ♦ adoption may not always be the end process but more information may be needed to confirm, reinforce or switch decision

### **Stages in the Adoption Process (further explanation)**

#### **Awareness**

- the individual becomes aware or exposed to the new idea
- he knows the new idea exists, but he lacks details and information about it
- Example: the farmer may know only the name, but he may not know what the idea or product is, what it will do or how it will work

#### **Interest**

- the individual wants more information about the idea or product
- he wants to know what it is, how it works and what its potentialities are
- he may say to himself that this might help him increase his income, or help him control insects of diseases, or improve farming or home life in some other way

#### **Evaluation**

- the individual makes an assessment of the new idea
- the individual makes mental application of the new idea to his present and anticipated future situation and decides whether or not to try it
- the farmer applies the information obtained in the previous stages to his own situation
- he considers the advantages and disadvantages of using the innovation

#### **Trial**

- farmer tests the innovation on a small scale basis if he decides that the idea is going to be beneficial for him
- apparently, individuals need to test a new idea even though they have thought about it for a long time and have gathered information about it

#### **Adoption**

- characterized by large scale, continued use of the idea, and most of all, by satisfaction with the idea in preference to the old method

### **Innovation-Decision Process Theory**

#### **Knowledge**

- stage when the individual learns of the existence of the innovation and gains some understanding of its function
- the individual is exposed to the innovation's existence and gains some understanding of how it functions

## Persuasion

- the individual forms a favorable or unfavorable opinion of the innovation

## Decision

- the individual engages in activities that lead to a choice between adoption and rejection of the innovation

## Implementation

- the individual puts an innovation into use

## Confirmation

- individual seeks further reinforcement of his decision or reverses his decision if he found conflicting messages about the innovation

### ***Individual Innovativeness Theory***

- states that individuals who are risk takers or otherwise innovative will adopt an innovation earlier in the continuum of adoption or diffusion
  - ♦ **Innovativeness** – the degree to which an individual is relatively earlier in adopting new ideas than the other members of the system. It is the best single indicator of modernization.
  - ♦ **Modernization** – the process by which individuals change from a traditional way of life to a more complex, technologically advanced and rapidly changing style of life

## TYPES OF ADOPTER

1. Innovators
2. Early adopters
3. Early majority
4. Late majority
5. Laggards

### **Innovators (Venturesome)**

- the first people in a locality to adopt an innovation or new idea
- have larger farms, higher net worth, more educated and informed
- highly respected and have prestige
- take calculated risks
- experiment

### **Early Adopters (Respectable)**

- follow the innovators
- usually younger than average, have higher education than those slower to adopt

- participate actively in community organizations and programs
- more informed, read papers and magazines

### Early Majority (Deliberate)

- slightly above average in age, education and farming experience
- not elected leaders but are active in the community
- most likely informal leaders and have limited resources than innovators and early adopters
- adopt new ideas after they are convinced of its value as seen from early adopters

### Late Majority (Skeptical)

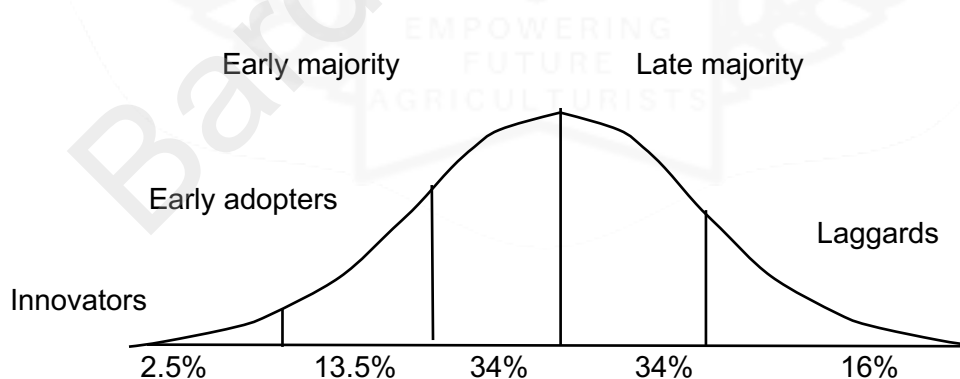
- make up a large block of farmers in the community
- have less education and older than the early majority
- less active in associations and organizations
- skeptical about new information and ideas
- hesitant to discard old knowledge and techniques learned
- adopt a practice only when it is adopted by majority by the community

### Laggards (Traditional)

- last people to adopt an innovation
- suspicious of innovations, innovators, and change agent
- very conservative
- usually the older, least educated and wealthy
- not risk takers
- usually believe in superstitions and indigenous knowledge
- decision to adopt depends on their past experiences

## ADOPTION RATE

**Rate of adoption** – the relative speed with which an innovation is adopted by member of a social system, measured as the number of receivers who adopt a new idea in a specified time period



The distribution of adopters according  
to the rate of adoption

Innovations diffused over time resemble an s-shaped curve

- rate of adoption theorizes that diffusion takes place over time with innovations going through a slow, gradual growth period, followed by dramatic and rapid growth, and then a gradual stabilization and finally, a decline

## STRATEGIES TO EFFECT ADOPTION

1. Extension Worker Intervention
2. Progressive Farmer Strategy
3. Mass Marketing
4. Follower-farmer Strategy
5. Selective Farmer-to-Farmer

### **Extension Worker Intervention**

- extension workers are valuable agents for quick diffusion and adoption of innovations
- as “carriers of information”, they must possess important traits such as credibility because of good understanding of farmers and their problems, nature of technology, extension methods, research results, etc.

### **Progressive Farmer Strategy**

- extension agents are usually in direct contact with progressive farmers from whom innovations diffuse
- use of progressive farmers has its attraction to extension workers if they are working under the pressure of targets (e.g. fertilizers to be distributed, areas to be planted with new varieties, etc.

### **Mass Marketing**

- uses advertising to reach each member of the target market directly
- involves huge communication systems to give information regarding product availability to consumers
- feedbacks data to producers re: consumers' wants
- can create broad public awareness of critical issues
- can be used to introduce new product (e.g. new brand of chemical fertilizer), the modification of existing ones (e.g. organic composting), restricted consumption of inputs (e.g. use of herbicides), and promotion of changes in existing institutions
- requires careful design and delivery of products to properly identified and analyzed homogeneous target markets

### **Follower-Farmer**

- emerged from the T & V system introduced in many third world countries largely through the encouragement and support of World Bank
- contact farmers are identified from among groups of families or households in one village
- extension worker works with contact farmers
- revolves around an intensive visit of extension workers to contact farmers
- during visits, extension worker transfers information to contact farmers who in turn pass on the information to the farm households that they are in charge of



### Selective Farmer-to-Farmer

- knowledge or information acquired by a farmer is transferred to another farmer through information discussion in fields and villages
  - conversation can also happen during leisure time and on social and religious occasions
- relatives, friends and others listen to and participate in the discussions

### Explanations for Rejection/ Adoption of Technology

**INDIVIDUAL-BLAME Hypothesis** – I am poor, I have low educational attainment, traditional, fatalistic

**SYSTEM-BLAME Hypothesis** – leadership is traditional, power relationship is exploitative, etc.

**PRO-INNOVATION Bias** – the innovation is okay, it is the farmer's fault

## FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

1. Economically viable
2. Ecologically sound
3. Socially just and humane
4. Culturally acceptable/appropriate
5. Grounded in holistic science
6. Resilient and low risk
7. Biodiversity-oriented
8. Productive
9. Participatory

### Sustainable Agriculture

- maintaining or prolonging the productive capacity of the natural resource base to meet human needs
- conservation of the natural resource base and the orientation of technological and institutional change that ensures the attainment of a continued satisfaction of human needs for present and future generations

### Components of Agriculture Development

1. Governance
2. Research
3. Extension/Education
4. Marketing
5. Production
6. Supply

## **AGRICULTURAL KNOWLEDGE SYSTEM (AKS)**

- a system of beliefs, cognitions, models, theories, concepts and other products of the mind

The different systems within an agricultural system

### **Pluralistic Extension Policy**

- ♦ a practice allowing several organizations to provide extension work to the different farmers of the country
- ♦ extension work was done By DA industry bureaus, DA commodity agencies, SUCs, NGOs and private companies

### ***AKS as Technology/Knowledge System***

#### **4 Components**

- **Technology generation**
  - ♦ consists of planning, administration and implementation of research activities that develop, assess, adapt and test improved agricultural technology for farmers and other users
- **Technology transfer**
  - ♦ further evaluates and adapts research outputs for users and then widely disseminates the knowledge and inputs to different target adopters
- **Technology utilization**
  - ♦ encompasses the users of the agricultural technology, user awareness, adaptation and adoption of the technology
- **Agricultural policy**
  - ♦ relates to the government development goals and strategies, market and price policies and the levels of resources investment in the system

## **FACTORS THAT INFLUENCE TECHNOLOGY AND INFORMATION FLOW IN AGRICULTURAL TECHNOLOGY SYSTEM**

### **Macro Factors**

#### **Agroecological**

- differences in temperature, rainfall, soil type, evapotranspiration, etc., are reflected in the diversity of farming conditions and production systems

## **Political-Economic**

- the percentage of resource-poor smallholder farmers influences the type of technology to be transferred
- high turnover of top managers undermines management experience and continuity in leadership

## **Socio-cultural**

- language differences and illiteracy can impede the communication of improved technology
- the division of labor between sexes can differ along cultural lines and influences the nature of farming systems in different regions

## **Policy**

- policy-making bodies of the government set development goals and objectives such as achieving food security or surplus agricultural production to stimulate economic growth, or providing health care or education for rural development
- government sets policies on consumer and producer commodity prices, subsidies for inputs, credit availability, import substitution, export earnings, food self-sufficiency, and natural resource management

## **Infrastructure**

- farmers in areas that cannot be reached by road or transport vehicles are difficult to reach with improved technology, and they will have problems transporting inputs and farm produce
- farmers' access to mass media such as publications, radio or television may be limited, thus reducing options for communicating messages

## **Institutional**

### **Research**

- includes lack of financial resources, acute shortages of well-trained scientists, lack of farmer feedback to ensure relevance of research results, lack of access to external sources of knowledge, inadequate research facilities and equipment, low staff morale, and inadequate operating budgets, staff incentives and remuneration

### **Education and training**

- content of the curricula of universities and training institutes, number and qualification of their graduates are limiting or enabling in any country

### **Input supply**

- availability of new plant and animal varieties with higher yields or resistance to pests and diseases
- availability of agrochemicals and other inputs at the farm level
- access to information like recommendations for fertilizer types and amounts suited to local soil conditions, animal feed mixtures and practices and the control of animal pests and diseases

## Credit

- facilitates farmer's ability to purchase inputs such as improved variety/breed and fertilizer
- understanding of government and bank policies, availability of credit, and the institutional relationship involved in credit delivery

## Farmer organizations and other NGOs

- agreement should be reached with the private sector, both nonprofit and commercial organizations, so that duplication of effort is minimized and conflicting messages to farmers are avoided
- farmer organizations offer an effective channel for extension contact with large number of farmers
- feedback on farmer needs, production problems and the results of adoption from such groups will be an increasingly important consideration

# REFERENCES

BENDER, Ralph E. et al. 1972. Adult Education in Agriculture. Charles E. Merrill Publishing Company, Columbus, Ohio

Chang, Chi-wen. 1969. Rural Asia Marches Forward: Focus on Agricultural and Rural Development. UPLB, College, Laguna

Chang, Chi-wen. 1974. A Strategy for Agricultural and Rural Development in Asian Countries. SEARCA, College, Laguna

LIONBEERGER, Herbert F. and Paul H. GWIN. 1982. Communication Strategies: A Guide for Agricultural Extension Agents. Illinois: the Interstate Printers and Publishers

MABUTAS, Andres. 1978. The Philippine Agricultural Extension Service. VERA Printing Press, Manila. Pp. 106-117

MEDINA, Amadea R. and R.R. ANCHETA. 1988. Agriculture and Home Extension in Philippine Setting. Publisher's Press, Quezon City

PETERSON, Warren. 1997. The Context of Extension in Agricultural and Rural Development. In Swanson, B.E., R. P. Bentz and A.J. Sofranko (Eds.). Improving Agricultural Extension: A Reference Manual. Rome, Italy: Food and Agriculture Organization of the United Nations (Fao)

## AGRICULTURAL EXTENSION

### OUTLINE

- I. OVERVIEW OF EXTENSION
  - A. Definition of Terms
  - B. Meaning of Extension in other Countries
  - C. Philosophy and Principles of Extension
  - D. Nature and Dimension of Extension
- II. HISTORY OF EXTENSION IN THE WORLD
- III. HISTORY OF EXTENSION IN THE PHILIPPINES
- IV. EXTENSION AS ONE OF THE MAJOR FUNCTIONS OF A UNIVERSITY/ COLLEGE
- V. AGRICULTURE AND FISHERIES MODERNIZATION ACT of 1997
- VI. COMMUNICATION IN EXTENSION
  - A. Definition of Communication
  - B. Elements of Communication Process
  - C. Purpose of Communication
  - D. Attributes of Communication as a Process
  - E. Source characteristics that may determine communication success
  - F. Characteristics of the Source
  - G. Barriers to Effective Communication
  - H. Communication Models
- VII. ADULT TEACHING AND LEARNING
- VIII. TECHNOLOGY ADOPTION AND DIFFUSION PROCESS
  1. Stages of Adoption Process
  2. Types of Adopters
  3. Attributes of Technology
- IX. EXTENSION TEACHING METHODS (ETM)
  1. Important Concepts
  2. Classification of Extension Teaching Methods
  3. Advantages and Limitations
- X. EXTENSION APPROACHES
- XI. COMMUNITY ORGANIZING
- XII. DEPARTMENT OF AGRICULTURE AND ITS UNDER AGENCIES



### XIII. SOURCES OF INFORMATION AND TECHNOLOGY

### XIV. THE CHALLENGE OF AGRICULTURAL EXTENSION

#### I. OVERVIEW OF EXTENSION

##### A. DEFINITION OF TERMS

**Agricultural Extension** - a non-formal system of education organized to provide rural people with useful and practical knowledge/technology in agriculture and teach and encourage them to apply these in their respective farms and homes. It is both a teaching and an influence process (*O.F. Sison*)

**Adoption** -decision to make full use of an innovation as the best course of action available

**Andragogy** -the science of teaching adults or adult learners

**Barriers** -factors obtaining in a given place over a given time that tend to impede or block or decelerate the communication process. Synonymously, they are called “filters of communication”

**Communication** -came from the Latin word “communicare” and Greek word Cummunis which means ‘understanding’.

It is the process of sending message by the source to the receiver through a channel with an intended effect (Berlo, 1960)

**Credibility** -the degree to which a communicator is perceived as knowledgeable and expert on a subject matter

**Development** -is a change or transformation process of any target audience regardless of direction.

**Diffusion of an innovation** -the total process by which an innovation spreads out among farmers

**Extension** -is a process of sharing any development –orientated idea or concept with another.

**Extension Method** -educational techniques employed by extension system

**Extension model** -representation of a system that specifies the parts and its components as well as relationship among them.

**Extension strategy** -series of steps, set of procedures and activities that operationalize the approaches that will facilitate accomplishment of goals.

**Extension services** -the provision of the following: training, information and support services by the government and NGOs to the agriculture and fisheries sectors to improve the technical business and social capabilities of farmers and fisherfolks

**Extension teaching** -the art of stimulating, directing and guiding the learning process. The process of guided interaction.

The process designed to help people develop and become capable of guiding successfully their own destinies.

**Global competitiveness** -the ability to compete in terms of price, quality and volume of agricultural and fishery products relative to those of other countries.

**Innovation** -anything perceived to be new by somebody in any given place and time;

A new way of doing something, something regarded as new in a given locality or by a group of people.

**Innovation- Decision Period** -the length of time required to pass through the innovation-decision process

**Innovation-Decision Process** -the process through which an individual passes from the first knowledge of an innovation to forming an attitude towards it, to a decision to adopt or reject, to implementation of the idea and to confirmation of this decision.

**Learning experience** -a series of activities and appraisals from which one gains meanings in facing new problems and planning new experiences.

**Pedagogy** -the science of teaching children.

**Poverty alleviation** -providing the poor with equitable access to resources.

**Rural** -also called as countryside.

A geographic area that is located outside towns and cities

**Safety credibility** -the degree to which a communication source or channel is perceived as trustworthy

**Technology** -is a design for instrumental action that reduces the uncertainty in achieving a desired outcome.

#### B. MEANING OF EXTENSION IN OTHER COUNTRIES

| COUNTRY     | WORD FOR EXTENSION  | MEANING  |
|-------------|---------------------|--|
| Netherlands | <b>Voorlichting</b> | Lighting the pathway ahead to help people find their way |
| Germany     | <b>Beratung</b>     | An expert can give advice on the best way to reach one's |

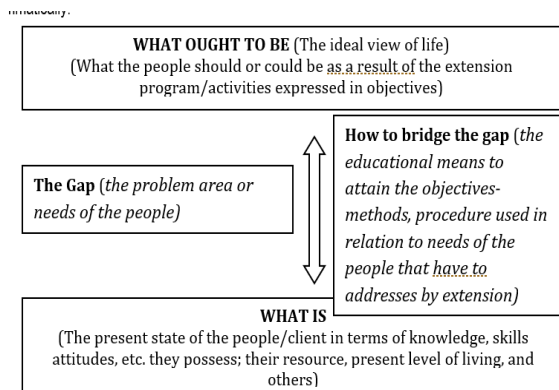
|           |  |  |
|-----------|--|--|
|           | <p><b>Aufklärung</b></p> <p><b>Erziehung</b></p> | <p>goal but leaves the person the final responsibility for selecting the way.</p> <p>Enlightenment, so that one knows clearly where he/she is going.</p> <p>Education, that is, to teach people to solve their problems themselves</p> |
| Austria   | <b>Forderung</b>                                 | Furthering or stimulating one to go in a desirable direction   |
| France    | <b>Vulgarisation</b>                             | Simplification of the message for the common man   |
| Spain     | <b>Capacitation</b>                              | Improving the abilities of people, normally through training   |
| USA       | <b>Extension</b>                                 | Education  |
| Indonesia | <b>Penynluhan</b>                                | Lighting the way ahead with a torch  |
| Malaysia  | <b>Perkembangan</b>                              | Education the way USA interprets it  |

### C. PHILOSOPHY & PRINCIPLES OF EXTENSION

#### DEFINITION OF PHILOSOPHY

- The body of principles underlying a given branch or major discipline, a religious system, a human activity or the like.

- A guide to a person's actions.
- A view of life – what ought to be and its components of “what is” and “how to bridge the gap” between “what is” and “what ought to be”



A scheme within which extension may be viewed in relation to a view of life (Sison, et al., 1983).

### Educational Philosophy of Extension

- Humanism- Man, his interest, and development are central and dominant
- Pragmatism- the value of ideas, knowledge and skills that extension offers its clientele is measured in terms of the practical consequences to these people for extension efforts are directed.

### Six Principles of Extension (C-W-A-T-C)

- Communication and Education
- Work with Rural People
- Accountability to the Clientele
- Two-way Process Linkage
- Cooperative with other agencies

#### A. Communication and Education

- -Extension agent's role- communicator and educator
- As communicator – pass on useful information or technology to people who need them.
- As an educator- help rural people acquire the knowledge, skills, and **attitude that** will help them effectively utilize the information or technology.

#### B. Work with Rural People

- - for impact and sustainability, work with and not for the people.
- People must participate and make decisions that will benefit them; extension agents must assist them by providing them with all the information needed and possible alternative solutions to clientele problems.

#### C. Accountability to the Clientele

- Extension agents must justify to the organization whatever action s/he takes and be accountable and responsible to the clientele on whatever advice or information given to them.
- The clientele is the one to pass judgment to the success or failure of the extension program.

#### D. Two-way Process Linkage

- Disseminate information and technology to and receive feedback from the clientele so that their needs can be better fulfilled.
- Learn from the clientele the wealth of their experiences.

#### E. Cooperative with other agencies

- Extension is only one aspect of the many economic, social, cultural and political activities that hope to produce change for the betterment of the rural masses
- Extension should therefore cooperate and collaborate with both GOs and NGOs to accomplish the above.
- Extension can't be effective on its own as its activities must be interdependent on other related activities.

#### PURPOSE OF EXTENSION (P-I-E-F)

- A. Persuasive Extension
- B. Informative Extension
- C. Emancipatory Extension
- D. Formative Extension

##### A. Persuasive Extension

- a policy instrument to induce preventive behavior with respect to societal concerns such as environmental pollution, health hazards, vandalisms, drug addiction, rape, etc. such preventive behavior is in the interest of the society as a whole or of the future generation.

##### B. Informative Extension

- Helps people make well-considered choices among alternatives, provided by extension for the individual to achieve his/her goals.

##### C. Emancipatory Extension

- An instrument to uplift the poor, to achieve societal goals, to correct structural problems
- Paulo Freire calls it *pedagogy of the oppressed*.

##### D. Formative Extension

- an instrument for developing, 'forming' an individual or enhancing his/her capabilities to make decisions to learn, to manage, to communicate, to organize. etc.

Table -. Differences between the formal and non-formal type of education. (Battad, Coloma & Paderes, 2013)

| Criteria               | Formal  | Non-formal                         |
|------------------------|---|------------------------------------|
| Educational Objectives | For future application / preparation for life | Immediate application              |
| Clientele              | Generally youth                               | Youth and adult (or heterogeneous) |

|               |  |   |
|---------------|--|---|
| Curriculum    | Fixed curriculum or course of study    | Based on people's needs/ no fixed curriculum or course study                            |
| Venue         | Classroom/Schools                      | Where the people are, in the community  |
| Sponsorship   | National government and other agencies | National government and other sources (funding agencies, NGOs, LGUs, private companies) |
| Certification | Confers degree and diploma             | Certificates  |

### THREE MODES OF EDUCATION

#### 1. Formal Education (*Supe, 1983*)

-Primary School to University Education

- √ highly institutionalized
- √ chronologically graded
- √ hierarchically structured

#### 2. Non-formal Education (*Supe, 1983*)

-educational activity

- √ organized by GAs, NGOs, private companies
- √ systematic
- √ carried on outside the framework of the formal education system

#### 3. In-formal Education (*Supe, 1983*)

-life long process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment, at home, at work etc.

- √ unorganized
- √ unsystematic
- √ Yet, it accounts for the great bulk of a person's **lifetime learning** spontaneous

### D. NATURE AND DIMENSIONS OF EXTENSION

#### (C-A-M-E-B-I-I-T-R) (*came biitr*)

1. Communication dimension
2. Altruistic Dimension
3. Management Dimension
4. Educational Dimension
5. Behavioral Dimension
6. Input Dimension
7. Income Dimension



8. Technology Dimension
9. Research Dimension

- **Communication dimension** - Extension is a communication intervention. Knowledge of basic communication process and its dynamics must be adequately understood.
- **Altruistic dimension** - Extension aimed at helping farmers. This is a basic premise of extension that must be observed by practitioners.
- **Management dimension** - Extension aims to function according to sound management principles.
- **Educational dimension** - Extension is a non-formal method of adult education. As such, extension professionals must be imbued with knowledge on how adults learn.
- **Behavioral dimension** - Extension is aimed at inducing behavioral changes among farmers. Behavioral change is the end goal of extension.
- **Input dimension** - The provision of technical inputs plays an important linking function in the transfer of technology.
- **Income dimension** - Extension is aimed at increased income through increased production and productivity.
- **Technology dimension** - Extension helps in the transfer of technology. Extension should be able to help identify technologies appropriate to clientele. The need for more alternative approaches and methods for diagnosing technical problems should be recognized.
- **Research dimension** - Extension aims at linking research with the farm. Ways to foster closer links between the farmers and the researchers need further understanding.

## II. HISTORY OF EXTENSION IN THE WORLD

| Period                                     | Place              | Significant Event  |
|--|--------------------|--|
| The Distant Origins                        |                    |  |
| 1800 BC                                    | Mesopotamia (Iraq) | Unearthed clay tablets are inscribed with advice on watering crops and getting rid of rats.  |
|  | Egypt              | Some hieroglyphics on Egyptian columns gave advice on avoiding crop damage and loss of life in Nile's floods.                                    |
| 2nd Century BC to 3rd Century BC           | Ancient Rome       | Latin texts and drawing on practical farming experience with an aim to help Roman landowners to maintain and improve their estates and revenues. |
| 221 BC-1912 AD                             | Imperial China     | Dissemination of agricultural information was the concern of state which heavily relied on taxes and revenues from landowners and tenants.       |
| The 19th Century England: Early Beginnings |                    |  |
| 1840s                                      | Britain            | University Extension or Extension University was coined.   |

|   |  |  |
|---|--|--|
| 1850s   | Oxford<br>England<br>and<br>Cambridge,<br>UK | discussion about how to serve the needs of rapidly growing population in the industrial and urban areas  |
| 1867  |  | The first practical attempt was made in what was designated “University Extension”, not for students enrolled in the universities, but to bring the university outside of its campus to people who could not qualify for entry into university |
| 1867-1868   | North<br>England                             | 1st practical steps were taken by James Stuart who gave lectures to women's associations and men's clubs. Stuart-Father of University Extension.   |
| 1871  | University<br>of<br>Cambridge,<br>UK         | James Stuart organized center of extension lectures under the university's supervision   |
| 1872  |  | The University of Cambridge adopted the system   |
| 1873  |  | The term extension education was first introduced in the University of Cambridge   |
| 1876  | London, UK                                   | University of London followed the adoption of the system by the University of Cambridge  |
| 1878  | Oxford,<br>England                           | University of Oxford followed the adoption of the system by the University of London   |
| 1880s   |  | The extension system became well established and developed and was referred to as the extension movement.<br><br>EXTENSION became a more INSTITUTIONALIZED function of the universities.   |
| Birth of Modern Agricultural Extension Services: Europe |  |  |
| 1841  | Britain                                      | Royal Agricultural Improvement Society(RAIS) was founded in Britain<br>-central society for numerous local agricultural societies.   |
| 1845  | Ireland                                      | 1st agricultural extension service came as a response to potato blight outbreak in Ireland   |
| 1847  | Europe                                       | The newly appointed British viceroy to Ireland named Earl of Clarendon urged the RAIS to appoint itinerant lecturers to travel around the distressed districts to help farmers improve their cultivation and grow nutritious crops.            |
| 1890s   | Universities<br>in Europe                    | universities incorporated agriculture subjects in lectures   |
| Birth of Modern Agricultural Extension Services: USA    |  |  |
| 1850s   | USA  | (1) Morrill Act of 1862 was signed by Pres. Lincoln during the Civil War:<br>-led to the creation of Land Grant Colleges and Universities.   |

|   |                                 |   |
|---|---------------------------------|---|
|   |                                 | -eventually led to funding of demonstration centers/ experimental stations  |
|   |                                 | (2) Farmer Institute Movements: one to two day meetings for the farmers and invited professors from SUCs as speakers.   |
| 1890  | Philadelphia, Pennsylvania      | American Society for Extension of University Teaching was established in Philadelphia<br>-The society publishes journals  |
|   | USA                             | Second Morrill Act was passed<br>-also known as the Agricultural College Act of 1890<br>-Led to the extension of Land Grant concept in other areas of USA   |
|   |                                 | The Farmers Institute Movement has been institutionalized with Federal support and supervision.   |
| 1891  | Chicago and Wisconsin, USA      | The University of Chicago and University of Wisconsin began organizing extension programs which lead to the establishment of Land Grant College and the formal establishment of agricultural extension work in the country.   |
| 1914  | USA                             | Passage of the Smith-Lever Act<br>-which established the Cooperative Extension Service, a tripartite cooperation among the federal government, the state government and the local county government in association with state colleges and universities as extension agencies |
| <b>Agricultural Extension in Developing Countries</b> |                                 |   |
| 1940s-1960s   | Latin America and the Caribbean | Agricultural extension organizations were established   |
| 1960s-1970s   | African nations                 | most extension organizations were started.  |

### III. HISTORY OF AGRICULTURAL EXTENSION IN THE PHILIPPINES

| Date                    | Significant |                                   |
|-------------------------|-------------|-----------------------------------|
|                         | Event       | Highlights (Person, Organization) |
| Spanish Era (1565-1898) |             |                                   |

|   |   |  |
|---|---|--|
| 1565  | Establishment of “granjas modelos” or model farms by the Spaniards. These model farms served both as experimental stations of the Spanish government and demonstration centers for farmers.   | Granjas modelos  |
| <b>(1898-1941) American Regime Presidents:</b><br><br>1899-1901 Emilio Aguinaldo<br><br>1935-1944: Manuel L. Quezon<br><br>1943-1945 (2nd Philippine Republic): Jose P. Laurel 1944-1946: Sergio Osmeña |   |  |
| At the turn of the 20th Century   | -The coming of Americans. -Brought a more serious attempt to extend agricultural services in the country.   | The coming of Americans  |
| Oct. 8, 1901  | -Date when extension work during the American Regime started, but there was no definite plans followed.   | Extension work during American Regime  |
| April 30, 1902  | -Bureau of Agriculture under the Department of Interior was organized to give a boost to extension work. -The Administrative Division of the Bureau of Agriculture took charge of the Bureau's Extension Program.   | -Bureau of Agriculture (BA) under the Department of Interior. -Administrative Division under BA. |
| July 1910   | -Demonstration of the Extension Division (DED) was created in the Bureau of Agriculture . -DED is now the first formally organized department implementing extension and research programs. -Several experiment stations and demonstration farms were set up in strategic places in the country. -Agricultural schools were also established. | Demonstration of Extension Division  |
| March 6, 1909   | The College of Agriculture, University of the Philippines (UPCA) was established.   | UPCA   |

|               |   |   |
|---------------|---|---|
| July 10, 1919 | -The extension service organization of the Philippines was made a separate unit of the Bureau of Agriculture. - Since then the Demonstration and Extension Division (DED) expanded its activity to include:(a) farmer's cooperatives, (b)organizations, (c)rural credit, (d)marketing, (e) animal insurance and (f) farm advisers | The extension service organization of the Philippines |
| 1923          | DED --> Agricultural Extension Service (AES)  | DED, AES  |
| 1923          | Ms. Maria Y. Orosa, founded the home extension service which began as a unit under the Organic Chemistry Division (OCD) of the Bureau of Science.   | Maria Y. Orosa, OCD                                   |
| 1925          | Food Preservation Section (FPS) of the OCD was organized. Activities included: (a) food preparation, (b)food preservation, (c ) home management, (d) demonstration work   | Food Preservation Section                             |
| 1926          | FPS was expanded to form the Food Preservation Division (FPD)of the Bureau of Science   | FPD   |
|               | Fiber Standardization Board (FSB) was created as separate office to take charge of educational work on fiber.   | FSB   |
| 1929          | Bureau of Agriculture was reorganized in to two: the Bureau of Animal Industry (BAI) and the Bureau of Plant Industry (BPI) The two bureaus continued to expand their extension activities.   | BAI and BPI   |
| 1932          | BPI's Agricultural Extension Division was renamed to Agricultural Division which carried out extension services up to the Commonwealth Act was passed.  | BPI AED -> Agricultural Division                      |

|               |  |   |
|---------------|--|---|
| 1933          | The Fiber Standardization Board was abolished and the Fiber Inspection Service was returned to the Department of Agriculture and Commerce, at the same time transferring the educational inspector to BPI. Simultaneously, The Food Preservation Division of the Bureau of Science was made a special division of the Department of Agriculture and Commerce and was called the Division of Economics. | DAC added functions -fiber inspection service<br><br>- food preservation division |
| 1936          | Division of Home Economics was transferred to the Bureau of Plant Industry and merged with the Utilization Division of the said Bureau   | Division of Home Economics, BPI   |
| 1935-1946     | American Regime: Commonwealth Period (1935-1946) Presidents: Quezon--> Osmeña --> Roxas  |   |
| 1936          | -The passage of Commonwealth Act No. 85 which established the Provincial Extension Service and created the position of Provincial Agriculturist. - Positions for Home Demonstrators were also provided to render training services for women.  | Commonwealth Act No. 85, Provincial Extension Service, Provincial Agriculturist   |
| 1937          | -Commonwealth Act 85 authorized each province to employ a few home demonstrators to show home extension work.  | Commonwealth Act 85   |
| June 16, 1941 | Enactment of Commonwealth Act 649 which increased the budget for extension work.   | Commonwealth Act 649  |
| 1938          | -Bureau of Animal Industry (BAI) also organized its own extension activities by establishing a Livestock Extension Division (LED), charged with the responsibility of demonstrating and disseminating information materials on livestock and poultry production.   | BAI and Livestock Extension Division (LED)  |



|      |   |     |
|------|---|-----|
| 1941 | <p>-BPI's extension service covered mainly the cultivation of fruit trees, vegetables and ornamental plants. In 1941, greater attention was directed to the improvement of rice, corn, tobacco, and other major crops.</p> <p>World War II in 1941 broke out and all the provincial extension work was suspended.</p> | BPI |
|------|---|-----|

|           |   |  |
|-----------|---|--|
| 1942-1945 | Japanese Occupation (2nd Philippine Republic): Pres. Jose P. Laurel   |  |
| 1942-1945 | -Home Economics and agricultural extension work, particularly in the provinces, suffered drawbacks. Extension work was paralyzed. |  |

**Post-World War II Period (Third Republic of the Philippines )**

|           |  |   |
|-----------|--|---|
| 1946-1965 | Post-World War II Period Third Republic of the Philippines 1946-1948: Manuel Roxas 1948-1953: Elpidio Quirino 1953-1957: Ramon Magsaysay 1957-1961: Carlos P.Garcia 1961-1965: Diosdado Macapagal  | Third Republic of the Philippines ->Roxas<br>-> Quirino ->Magsaysay<br>->Garcia<br>-> Macapagal |
| 1947      | The Home Extension Unit of the Plant Utilization Division of the Bureau of Plant Industry was fused with the Agricultural Extension of the Bureau. Thus, purely research functions were left with the Plant Utilization Division .                     | Home Extension Unit of the Plant Utilization Division of the Bureau of Plant Industry           |
| 1947      | 4-H (Head, Heart, Hands, and Health) Club work was started by the Agricultural Extension Division  | 4H Club, Agricultural Extension Division  |
| 1949      | The Philippine Government requested the USA to send an economic survey mission to the Philippines to "consider the financial problems of the country and to recommend measures that will enable the Philippines to become and to remain self-reliant". | Economic survey mission to the Philippines  |

|                  |  |                                     |
|------------------|--|-------------------------------------|
| 1949             | The Bell Report(or Bell Survey Mission), named after the chief of the Mission, Daniel W. Bell recommended among other things that the agricultural extension services of the government be consolidated under one administration for the sake of efficiency.   | Bell Report(or Bell Survey Mission) |
| October 28, 1950 | The results of the Bell Survey Mission were submitted with the following recommendation, among others – the consolidation of the scattered extension service of organizations of the different bureaus (BPI, BAI, BS, BFor, BFis) into one bureau that would adequately extend information to farm families for improved farming, homemaking and rural organization.   | Bell Report(or Bell Survey Mission) |
| July 16, 1952    | Bureau of Agricultural Extension (BAEx) was created by virtue of RA 680. BAEx consolidated all existing extension services being carried out by different government offices.  | BAEx, RA 680                        |
| 1954             | Executive Order No. 57 was signed creating the Community Development Planning Council (CDPC). This Council was tasked to coordinate and integrate on a national scale, the efforts of various governmental and civic agencies to improve the living conditions of the people. Also, it was established to eliminate confusion, duplication, waste and jealousies among the agencies in the implementation of their programs for rural development. | EO 57: CDPC                         |
| January 6, 1956  | The role of BAEx was reduced with the creation of Presidential Assistance for Community Development (PACD) to implement the Philippine Community Development Program that coordinated on a national scale the effort of various governmental and civic agencies to improve the living conditions of the barrio residents nationwide and make them self-reliant. The ultimate objective was to increase their                                       | PACD                                |

|                |  |             |
|----------------|--|-------------|
|                | effectiveness, achieve maximum benefits and avoid overlapping and duplication of activities. The self-help philosophy was emphasized together with the idea of partnership between the people and government.  |             |
| 1957           | The thrust of PACD programs was changed in 1957. It reduced its agricultural extension work. In the same year, there was a shift in the direction of agricultural extension policies and programs. In agriculture, the attention was directed to the problem of low rice and corn production.  | PACD        |
| 1958           | The Rice and Corn Production Coordinating Council (RCPCC) which was organized as the highest governing body to exercise direct control and management over the Rice and Corn Production Program. It aimed at affecting an immediate and considerable increase in the national supply of rice through domestic production.  | RCPCC       |
| 1959           | RCPCC was organized in 1959 as the highest policy making and coordinating body.  | RCPCC       |
| August 8, 1963 | BAEx was changed to Agricultural Productivity Commission (APC) with the enactment of RA 3844 or Land Reform Code. It was placed directly under Office of the President. Under the APC, the Agricultural Tenancy Commission was organized as separate office. Moreover, the APC together with the Land Authority, Agricultural Credit Administration and the Land Bank was placed at the "Crest of the land reform program" | BAEx to APC |

|      |  |                               |
|------|--|-------------------------------|
| 1964 | Executive Order No. 62 Series of 1964 was promulgated to emphasize rice and corn production. This document created the Rice and Corn Authority (RCA) which replaced RCPCC. An added feature of RCA was the extension of credit for seeds, pesticides and harvesting as well as a fertilizer subsidy program for participating farmers. | EO 62: RCPCC -> RCA           |
| 1965 | Reconceptualization of the Rice Self Sufficiency Program to include rice production, marketing and distribution and the consolidation and integration and the concentration of government as well as all private sector resources.   | Rice Self Sufficiency Program |
| 1966 | Executive No. 38 changed the Presidential Assistant for Community Development to Presidential Arm for Community Development and at the same time elevating the PACD to cabinet rank.   | EO 38: PACD -> PACD           |
| 1966 | Executive Order No. 62 series of 1964 was revoked while Executive Order No. 50 was issued to restore the power and responsibility for the implementation of the Rice and Corn Production Program to the RCPCC (Oamar, P. et al as cited by Sison, 1991).   | EO 62, EO 50 of 1966          |
| 1967 | Republic Act 188 granted autonomous powers to the local governments to decentralize the function of the bureau.  | RA 188                        |

|      |   |                             |
|------|---|-----------------------------|
| 1969 | By virtue of Executive Order No. 183, the National Food and Agriculture Council (NFAC) was created in place of RCPCC. NFAC performed the functions of RCPCC with the additional responsibility of the coordination, administration and implementation of the national program of self-sufficiency in foodstuffs. With these functions and responsibilities, it controlled a large portion of funds for agriculture and the funding from the United States Assistance for International Development (USAID). In discharging its tasks, NFAC had also assumed a major responsibility for overseeing the effective delivery of agricultural extension (Oamar, P. et al). This created misunderstanding and power struggle in the alignment of people and tasks in the implementation of the extension program. | EO 183 series of 1969: NFAC |
|------|---|-----------------------------|

| Date      | Significant  |   |
|-----------|--|---|
|           | Event  | Highlights (Person, Organization)   |
| 1965-1986 | Marcos Era   | Ferdinand Marcos  |
| 1972      | <p>Several organizational changes affecting agricultural extension took place with the declaration of Martial Law in 1972.</p> <p>Presidential Decree No. 1 which embodied the integrated reorganization plan of the government and the Presidential Letter of Instruction dated November 1, 1972 reverted the Agricultural Productivity Commission to its original name, Bureau of Agricultural Extension.</p> <p>Functions and personnel in cooperatives were transferred to the Department of Local Government and Community Development. (DLGCD)</p> | <p>Martial Law declaration PD 1; APC back to BAEx, DLGCD; PD 970: abolished BFM</p> |

|              |   |                      |
|--------------|---|----------------------|
|              | <ul style="list-style-type: none"> <li>· Presidential Decree 970 abolished the Bureau of Farm Management of the Department of Agrarian Reform (BFM) and its extension function was transferred to the Bureau of Agricultural Extension.</li> </ul>  |                      |
| July 1, 1973 | The Bureau of Agricultural Extension was placed again under the Department of Agriculture. The Abaca and Other Fibers Board was merged with BAEx.   | BAEx, DA,            |
| 1977         | Upon the request of the Philippine Government, the World Bank Mission appraised the Philippine agricultural extension service and gave the following recommendations:   | WB Mission           |
|              | <ul style="list-style-type: none"> <li>· The Ministry of Agriculture, through the Bureau of Agricultural Extension, took over the preparation of the Project study on the adoption of the Training and Visit System (T and V System) in the Philippines agricultural service (Villorente, 1982).</li> </ul>                             | MA, BAEx, T&V System |
|              | <ul style="list-style-type: none"> <li>· The proposal for the National Extension Project (NEP) was appraised by the World Bank Mission from February to March 1978. The World Bank approved a loan of US \$35 million.</li> </ul>   | NEP                  |
|              | <ul style="list-style-type: none"> <li>· The NEP became fully operational on March 27, 1979.</li> </ul>   | NEP                  |
|              | <ul style="list-style-type: none"> <li>· The T and V System Philippine Model evolved into the complementation program “a development strategy designed to improve the quality of life farm families through the resource pool (1) Marketing Assistance Centers (MAC), (2) Technology Packaging (Tech Pack), (3) Cooperatives</li> </ul> | T&V System           |



|  |  |                              |
|--|--|------------------------------|
|  | Development (Coop Dev), with (4) Extension Delivery System (EDS).  |                              |
|  | - The Philippine Agricultural Extension service was strengthened with facilities and resources, both softwares and hardwares, acquired by the Ministry of Agriculture and Food through its World Bank assisted National Extension Program. This brought about innovative changes in the agricultural extension service delivery system (Serrano, 1985).  | PAE, WB, NEP                 |
| <b>The Bureau of Agricultural Extension becomes a staff Bureau</b> |  |                              |
| 1978   | Ministry-wide regional offices were created in the Ministry of Agriculture by virtue of Presidential Decree No. 1579 (Bonifacio, 1982).  | Presidential Decree No. 1579 |
| 1980   | The Structural set-up of the Ministry of Agriculture was streamlined for a more unified extension service with the reorganization under Presidential Decree No. 1579 and Letter of Instruction No. 595. Under this set-up, 12 ministry-wide regional directors and 24 Assistant Regional Directors (one for livestock and one for crops in each region) were appointed. This was followed by the designation of 75 Provincial Agricultural Officers in 1980. | PD 1579, PAOs,               |
| 1980   | Under the new organizational set-up, the Bureau of Cooperatives Development (BCD) and the Bureau of Fisheries and Aquatic Resources (BFAR), which used to be line agencies, became staff bureau. Thus as a result of this change, the Bureau Directors no longer exercised direct command or direct supervision in the field. Matters that have to be communicated to the extension fieldworkers from the Central Office must                                | BCD, BFAR                    |

|  |  |                      |
|--|--|----------------------|
|  | pass through the Regional Directors  |                      |
| 1980   | By virtue of Executive Order No. 595, the Bureau of Cooperative Development, which was created under the Ministry of Local Government and Community Development (MLGCD) in the 1972 reorganization, was likewise placed under the supervision and control of the Ministry of Agriculture   | EO 595 S 1980, MLGCD |
| 1982   | <p>In 1982, Executive Order 803 established an integrated management system for agricultural services for the unification of government efforts at providing adequate and timely agricultural services and inputs.</p> <p>- Executive order 803 recognized the political will as a vital factor in agricultural development. As the province was designated the political unit management for inducing agricultural development, coordination and supervision of operations of the various agencies involved in the delivery for agricultural service became the responsibility of the provincial governor (Executive Order 803, 1982). However, its implementation left much to be desired.</p> | EO 803 S 1982        |
| <b>Post Martial Law Years: The Creation of Agricultural Training Institute (ATI)</b> |  |                      |
| (1981-1986)  | <b>Fourth Philippine Republic</b>  |                      |
| 1986 to Present  | Fifth Philippine Republic Corazon C. Aquino to Present   |                      |

|      |  |   |
|------|--|---|
| 1987 | <p>By the virtue of Executive Order No. 116 the Bureau of Agricultural Extension, the Philippine Agricultural Training Council and the Philippine Training Center for Rural Development were merged into the Agricultural Training Institute. Thus, the Agricultural Training Institute (ATI) was born.</p> <p>Executive Order No. 116 declares that it is the policy of the State “to promote the well-being of farmers (including the share tenants, leaseholders, settlers, fishermen and other rural workers) by providing an environment where they can increase their income, improve their living conditions and maximize their contributions to the national economy. Moreover, it shall be the policy to accelerate agricultural development and enhance the production of agricultural crops, fisheries and livestock by optimizing the use of resources and applying advanced farming systems/modern technologies with the end in view of attaining food security for domestic use and expanding/diversifying agricultural production for export.”</p> <p>Thus, Agricultural Training Institute is mandated by Executive Order 116 to be “responsible for the training of all agricultural extension workers and their clientele, who are mostly farmers and other agricultural workers; ensure that training programs address the real needs of the agricultural sector; ensure that the research results are then communicated to the farmers through the appropriate training and extension activities.”</p> | EO 116 s. 1987 BAEx +PATC + PTCRD = ATI |
| 1991 | The agricultural extension services of the DA were devolved to the LGUs by virtue of R.A. 7160 also known as Local Government  | LGC of 1991, RA 7160                    |

|  |  |  |
|--|--|--|
|  | Code of (1991)   |  |
| <b>The Agriculture and Fisheries Modernization Act of 1997</b> |  |  |
|  | Fifth Philippine Republic 1992-1998: Fidel V. Ramos 1998-2001: Joseph E. Estrada |  |

|      |   |         |
|------|---|---------|
| 1997 | <p>RA 8435 created the AFMA Law of 1997</p> <p>“This is an act prescribing urgent related measures to modernize the agriculture and fisheries sectors of the country to enhance their profitability, and prepare said sectors for the challenges of globalization through an adequate, focused and rational delivery of necessary support services, appropriating funds therefore and for other purposes”, otherwise known as the “The Agriculture and Fisheries Modernization Act of 1997”.</p> <p>-Legal instrument to prepare the agriculture sector for the challenges of globalization through the delivery of necessary support services.</p> <p>Major Concerns of the AFMA: 1. Food security</p> <p>2. Poverty alleviation and social equity</p> <p>3. Income enhancement and profitability especially for farmers and fisherfolks 4. Global Competitiveness</p> <p>5. Sustainability</p> <p>Section 86 declares the policy of the State to promote science and technology as essential for national development and progress. The State shall give priority to the utilization of research results through formal and non-formal education, extension, and training services. It shall support the development of a national extension system that will help accelerate the transformation of Philippines agriculture and fisheries from a resource-based to a technology-based industry.</p> <p>Section 87 on Extension Services states that Agriculture and Fisheries extension services shall cover the following major services to the farming and fishing community:</p> | RA 8435 |
|------|---|---------|

|  |   |  |
|--|---|--|
|  | <p>a) Training services;</p> <p>b) Farm or business advisory services;</p> <p>c) Demonstration services; and,</p> <p>d) Information and communication support services through tri-media.</p> <p>Section 88 which is about the Special Concerns in the Delivery of Extension Services that the delivery of Agriculture and Fisheries Extension Services shall be multidisciplinary and shall involve the farmers, fisherfolk, and their organizations, and those engaged in food and non-food production and processing, including the private and public sectors.</p> <p>There shall be a national merit and promotion system governing all extension personnel, regardless of source of funding, to promote professionalism and achieve excellence and productivity in the provision of the government extension service.</p> |  |
|--|---|--|

#### IV. EXTENSION AS ONE OF THE MAJOR FUNCTION OF A UNIVERSITY/ COLLEGE

##### 1. Instruction

-offers degree programs for the baccalaureate to doctoral programs.



## 2. Research

-conducts basic & applied research from social science to natural science.

## 3. Extension

-An instrument of premeditated, deliberate intervention to achieve the intervener's goal.  
Can be effective by inducing voluntary change  
hence satisfying client's goals.

## Legal Basis

Section 90 of Agriculture and Fisheries Act 8435

-states that universities and colleges are mandated to primarily focus on the improvement of the capability of LGU extension service by:

- Degree and non-degree training programs
- Technical assistance
- Extension-cum-research activities
- Monitoring and evaluation of LGU extension projects
- Information support services through the tri-media and electronics

Extension function of a university aims to do the following:

- a. improve the productivity
- b. profitability
- c. equity
- d. well-being of the farmer and fisher folks.

## V. LEGAL INSTRUMENT: AGRICULTURE AND FISHERIES MODERNIZATION ACT of 1997 (Republic Act 8435 )

5 Major Concerns:

1. Food security
2. Poverty alleviation and social equity
3. Income enhancement and profitability especially for farmers and fisherfolks
4. Global competitiveness
5. Sustainability

## DEFINITION:

The process of **TRANSFORMING THE AGRICULTURE AND FISHERIES** sectors... into one that is **DYNAMIC, TECHNOLOGICALLY ADVANCED, COMPETITIVE** yet centered on **HUMAN DEVELOPMENT** and guided by the sound practices of **SUSTAINABILITY** and the principles of **SOCIAL JUSTICE**.

## IMPORTANT CONCEPTS

### Poverty Alleviation and Social Equity

providing the poor

- equitable access to resources
- income opportunities

- basic and support services
- infrastructure

especially in areas where productivity is low as a means of improving their quality of life.

### **Competitive Advantage**

Competitive edge in terms of product quality and/or price.

The ability to produce a product with the greatest relative efficiency in the use of resources.

### **Food Security**

The policy objective, plan and strategy of meeting the food requirements of the present and future generations of Filipinos in substantial quantity, ensuring the availability and affordability of food to all, either through local production or importation, or both based on the country's existing and potential resource endowment and related production advantages, and consistent with the overall national development objectives and policies.

### **Global Competitiveness**

The ability to compete in terms of price, quality, and volume of agriculture and fishery products relative to those of other countries.

### **Resource-Based**

Utilization of natural resources

### **Technology-Based**

Utilization of technology.

### **Extension Services**

The provision of training, information and support services by the GO and NGOs to the agriculture and fisheries sectors to improve the technical, business and social capabilities of farmers and fisherfolks.

### **Medium and Long-term Goals**

-to address Food Security, Poverty Alleviation, Social Equity and Income Enhancement

### **Medium and Long-term Goals**

1. Increased income and profit of small farmers and fisherfolks;
2. Availability of rice and other staple foods at affordable prices;
3. Reduction of rural poverty and income inequality;
4. Reduction of rural unemployment;
5. Reduction of the incidence of malnutrition; and
6. Improvement in land tenure of small farmers.

### **Medium and Long-term Goals**

**to address Global Competitiveness and Sustainability**

### **Medium and Long-term Goals**

1. Increase in volume, quality and value of agriculture and fisheries production for domestic consumption and for exports;
2. Reduction in post-harvest losses;

3. Increase in the number/types and quality of processed agricultural and fishery products;
4. Increase in the number of international trading partners in agriculture and fishery products;
5. Increase in the number of sustainable agriculture and fishery firms engaged in domestic production, processing, marketing, and export activities;
6. Increase in and wider level of entrepreneurship among farmers and fisherfolk area;
7. Increase in the number of farms engaged in diversified farming; and
8. Reduce use of agro-chemicals that are harmful to health and the environment.

## **Structure of the Agricultural Extension Service in the AFMA**

### **Mandate:**

“The provision of training, information and support services by the government and non-government organizations to the agriculture and fisheries sectors to improve the technical, business and social capabilities of farmers and fisherfolks.”

### **The AFMA calls for**

“the utilization of research results through formal and non-formal education, extension and training services and the development of a national extension system that will help accelerate the transformation of Philippine agriculture and fisheries from a resource-based to technology-based industry.”

### **The AFMA recognizes that**

“the delivery of extension services shall be multi-disciplinary and shall involve farmers, fisherfolks and their organizations and those engaged in food and non-food production processing, including the private and public sectors”

### **Role of LGUs**

Responsible for delivering direct agriculture and fisheries extension services. The province is mandated to “integrate the operations of the agriculture extension services and undertaken an annual evaluation of all municipal extension programs.”

### **Role of private sector**

Encourage especially the participation of farmers and fisherfolk cooperatives and associations and others in the private sector in the training and other complementary extension services especially in community organizing, use of participatory approaches, popularization of training materials, regenerative agricultural technologies, agribusiness and management skills.

### **Role of SUCs**

Assist in the LGUs extension system by improving their effectiveness and efficiency through capability-building and complementary extension activities such as technical assistance, training of LGU personnel, improvement of physical facilities, extension cum research and information support services.

### **Financing scheme**

- Allocation of multi-year budgets that shall be treated as grants;
- Transfer of funds from the DA to the LGUs as extension grants;
- Placing the budget for agriculture and fishery at a minimum of 1% of the Gross Value Added.

## VI. COMMUNICATION IN EXTENSION

### Objectives

-Presents the communication as an area which is the fundamental basis of the extension process.

### What is communication?

Etymology:

“*communis*” to make common or establish commonness between two or more people;

“*Communico*” to share.

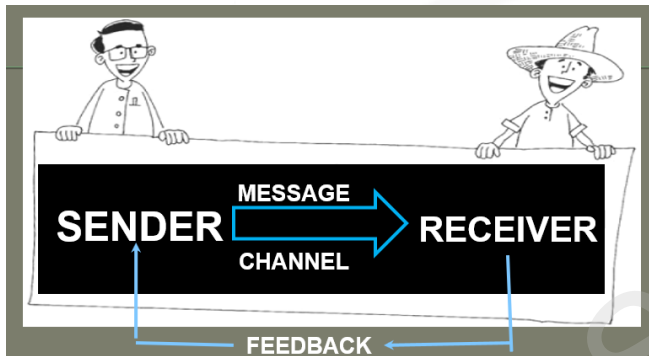


Figure 1. Elements of a communication process.

Communication is a process by which a source sends a message to a receiver by means of a channel to produce a response in accordance with the intention of the source. (Berlo, 1960)

### Key points in the definition:

- Communication is a process.
- Communication is shaped by several elements.
- The effectiveness of communication is achieved if the receiver's response matches the intention of the source.

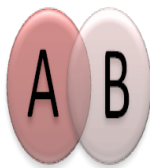
### Purpose of Communication

**Purpose of Communication:** concerned with eliciting specific behavioral changes with what they know (knowledge), what they feel (attitude) and what they do (practice)

**Persuasive Communication:** The process which involves a conscious attempt by one individual to change the attitudes, beliefs, or overt behavior of another individual or group through the transmission of some messages.

### Common Field of Experience

Field of Experience – the sum total of an individual's experiences, including one's culture and language which influences his ability to communicate.



The overlap in the two circles represents the common field of experience of A and B, or their shared similar experiences.

### Principles:

- ☒ The wider the common field of experience between two people, (or the more similar the experience they share), the greater is the likelihood that they can communicate effectively.
- ☒ If the common field of experience is narrow, the communication that can take place is limited or is likely to be successful or effective.

### Attributes Communication as a Process (M-I-D-S)

**Meaning is personally constructed** - no two people construct the same meaning even if they hear or see the same thing.

**Interaction thru symbols** - essential in communication that what symbols we select and how they are organized affect other's interpretation of our messages

**Dynamic** - has an ever-changing character, fluctuates constantly never fixed, no clear beginnings and endings

**Systemic** - as a system, it consists of a group of elements which interact to influence each other and the system as a whole

### Communication as a process:

| Early notion of communication:                                   | Communication should be viewed as:        |
|--|---|
| one-way  | two-way                                   |
| top-down transfer of messages from extension workers to farmers. | multi-dimensional, interactional activity |

### Basic elements of Communication

- Source (scientists, technology generators, opinion leaders, change agents,)
- Message (innovation)
- Channel (interpersonal, mass media)
- Receiver (community, any social system)
- Response/ Feedback (changes in knowledge, attitude, practice)

### Message:

- Sign and symbols arranged deliberately in certain ways in order to communicate information or meaning.
- **Message factors: (C-C-T)**
  - **Code-** symbols used in communicating; both sender and receiver should understand in order to communicate.
  - **Content-** the idea or substance selected to express the purpose of the source for communicating
  - **Treatment** - the manner by which the materials are arranged in order to be meaningful to the receiver.

#### Forms of communication:

- **Verbal (either written or spoken)**
- **Non-verbal**
  - kinesics (body language)
  - physical characteristics (e.g., body types, height, weight, skin color, facial features, etc.)
  - facial expressions and eye contact
  - tactile (touching behavior)
  - space and territory
  - environment
  - paralanguage (tone, pitch, quality of voice, rate of speaking)
  - use of silence and time.

#### Categories of non-verbal communication: (P-A-S-S)

- **Physical-** The personal type of communication  
Includes facial expressions, tone of voice, sense of touch, sense of smell, and body motions.
- **Aesthetic-** The type of communication that takes place through creative expressions: playing instrumental music, dancing, painting and sculpturing.
- **Signs-** The mechanical type of communication, which includes the use of signal flags, the 21-gun salute, horns, and sirens.
- **Symbolic-** The type of communication that makes use of religious, status, or ego-building symbols.

#### Dimensions of meaning

| Denotative Meaning                         | Connotative Meaning  |
|--|--|
| dictionary and literal meaning of the word | meaning associated with the personal experiences of the person using the word. |
| dictionary definition                      | emotional tone of the word   |

#### Channel

- the message through which the message is sent from the source to the receiver.



### Dimensions of Channel

- the message through which the message is sent from the source to the receiver.
- Methods and materials / media

### Message Vehicles (I-M-M-F)

**Interpersonal channels-** face to face, most universally used extension method

**Mediated channels** – SMS, emailing, use of social media

**Mass media channels-** impt. For making a large group of people aware of innovations and stimulate interest. E.g. broadcast media channels, printed media channels

**Folk media channels-** or traditional channels

### Interpersonal channels: GATEKEEPER

-someone who

- Controls the flow of information
- Decides what information to transmit and to whom he will transmit it
- Evaluates the content to determine its relevance and value to the potential receivers
- Has the power to delete, alter the flow, add, subtract, or distort the message

### Interpersonal channels: OPINION-LEADER

– a person who is

- approached by others for advice on certain matters
- perceived as credible, influential, authoritative in the community
- 

### Receiver

-another person (or another group of persons, an organization, an agency, institution, etc.) receiving the idea.

-targets of communication

-decoder

### Characteristics of a Receiver (P-S-S-P-S-S-S)

**Psychological orientation** – psychological factors that are salient to a receiver's persuasibility

**Selective exposure** – receivers tend to expose her/himself only to information that agrees with or supports his/her existing behavior.

**Selective perception** - receivers tend to “notice” or assign meaning only to messages that serve some immediate purpose to reinforce his or her mood. fits his/her cognitive structure are meaningful for him/her.

**Perception** – is influenced by past experiences, needs and motivations, mental set and interests.

**Selective retention** - receivers tend to learn or remember only information that supports or agrees with his/her attitude, beliefs, behaviors.

**Selective discussion** – receivers tend to discuss only those information which might be of interest to them and to their listeners.

**Social-psychological** – factors related to receivers' persuasibility

- open-mindedness
- self-esteem
- beliefs and values

- achievement motivation
- risk orientation
- group membership
- Roles and functions in membership groups etc.

## Feedback

- The information that is sent or fed back by the receiver intentionally or unintentionally to the source.
- Serves as a corrective function by preventing communication breakdown.
- Helps determine whether or not a message was perceived as intended. If not, adaptations, modifications can be made.

**Characteristics of Feedback**

|                         |                                       |
|-------------------------|---------------------------------------|
| Observable or overt     | Covert or not openly shown            |
| verbal(oral or written) | non-verbal (symbols or body language) |
| internal                | external                              |
| intentional (comments)  | unintentional (yawning)               |
| directive(evaluation)   | non-directive(non-evaluative)         |
| formal (instruments)    | informal                              |

1. **Observable or overt not covert** - The source should be able to perceive (that is, receive through one or more of the five senses) the feedback coming from the receiver.

### Feedback vs responses:

- A receiver's response may be observable (overt) or unobservable (covert).
  - One covert response is a positive change in attitude toward the source, the message, or the strategy.
  - Only if there is an overt manifestation of the covert response (such as smiling, clapping, etc.) can the sources receive feedback about that change.
2. **Verbal or non-verbal** - The source can receive verbal feedback through oral and written communication.
    - Non-verbal feedback can be received through the receiver's use of symbols or body language (e.g., facial expressions, gestures, etc.).
  3. **Internal or external**
    - Internal feedback occurs when you hear and feel yourself respond (e.g., when you mispronounce a word and you repeat it with the correct pronunciation).
    - External feedback occurs when you respond to the receiver's message (e.g., when you raise your hand to ask a question).

4. **Intentional or unintentional**

- Intentional feedback - messages that are **consciously** sent by the feedback giver, whether these messages are verbal or non-verbal (e.g., asking questions, giving comments and suggestions, nodding the head, clapping of hands, etc.)
- Unintentional feedback - messages that are **unconsciously** sent but nevertheless are perceived by the source.
- Many non-verbal feedback are not consciously intended by the receiver, but they are often more accurate in revealing the feelings of the responder than the verbal feedback (e.g., yawning, evasive eye movements, etc.)

**5. Directive or non-directive**

- Directive feedback communicates an evaluation by the responder about the source, the message or the strategy. Directive feedback may be positive or negative, rewarding or disturbing.
- Non-directive feedback is non-evaluative. It aims to describe, report what is observed or felt, ask questions and avoid judgment.

**6. Formal or informal**

- Formal feedback is solicited by the message sender usually in writing or through other mediated means (e.g., telephone) using structured evaluation instruments such as questionnaires, attitude/opinion rating scales, and interview schedules.
- Informal feedback may be solicited from or spontaneously given by the audience in a face-to-face setting (e.g., when a facilitator pauses to ask if there are questions, or a member of the audience asks for clarification.)

**Factors Affecting Communication Effectiveness**

**1. Elements of a communication process**

Source-receiver factors  
Message factors  
Channel Factors  
Purpose Factors

**2. Resources in the community**

**Human resources-** people whom the extension worker has to communicate to convey a message.

**Non-human resources-** natural or physical resources.

-the existing condition of these resources could spell the success or failure of the communication transaction.

**3. Attributes of technology**

Relative advantage  
Compatibility  
Complexity  
Triability  
Observability

**4. Communication media/materials**

**5. Communication/ extension methods**

Human Factors

- a.1. Extension Worker as a Teacher
- a.2. The client-learners
- b. Objectives of the teaching-learning process
- c. Subject Matter
- d. Available Materials and Facilities
- e. Time consideration
- f. Available budget support

**Source characteristics that may determine communication success: (C-A-K-S)**

- Communication skills (encoding)
- Attitude (predisposition to respond to any situation)
- Knowledge
- Socio-cultural context

**Characteristics of the Source: (C-H-E-A-K)**

1. Credibility
2. Homophily
3. Empathy
4. Attitude
5. Knowledge
1. **Credibility**

- refers to a receiver's perception of the believability of the source in a particular situation.
- can be high or low according to the degree to which a source is considered by the receiver as believable in a given situation based on four dimensions.

**Dimensions of Credibility (C-C-C-D)**

**Character** - When a source is perceived as honest, trustworthy, friendly, reliable, pleasant, warm, etc. his or her credibility is based on the character dimension.

**Competence** - when a source is perceived as well-trained, competent, intelligent, experienced, witty, bright, etc. his or her credibility is based on the competency dimension.

**Composure** - when a source is perceived in terms of self-confidence, poise, dignity, level-headedness, etc. his or her credibility is based on the composure dimension.

**Dynamism** - when a receiver rates a source in terms of being bold, aggressive, extrovert, etc. his or her credibility is based on the dynamism dimension.

**Socio-cultural context**

- role in society
- group he/she belongs to
- prestige other people attach to the source
- norms or rules he abides by
- beliefs and values he holds

**2. Homophily**

- refers to the degree to which a receiver perceives the source as similar to him or her in certain attributes such as age, sex, language, regional background, beliefs, values, etc.
- Homophily of source and receiver in certain attributes contributes to effective communication.

3. **Empathy**

- The ability to project ourselves into other people's personalities
- The ability to project oneself imaginatively into another's position

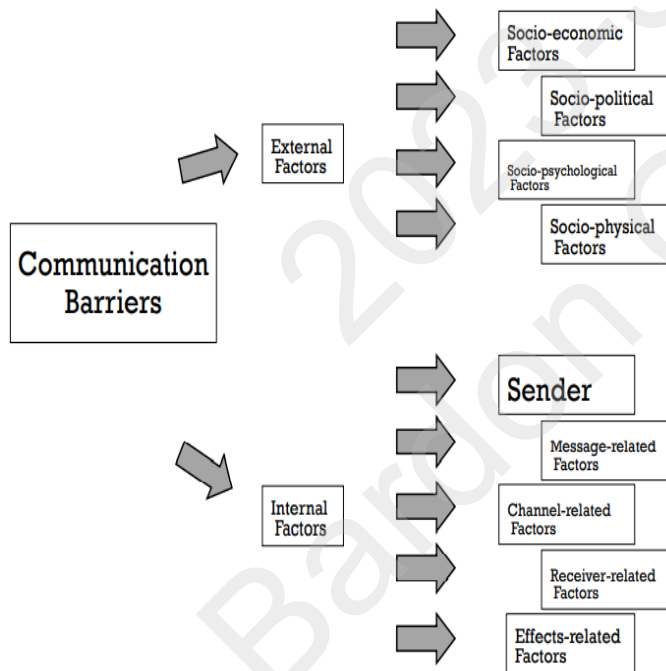
4. **Attitude**

- Predisposition to respond to any situation
- Towards receiver / source
- Towards subject matter
- Towards himself

5. **Knowledge**

Subject matter  
Audience

**Barriers to Effective Communication**

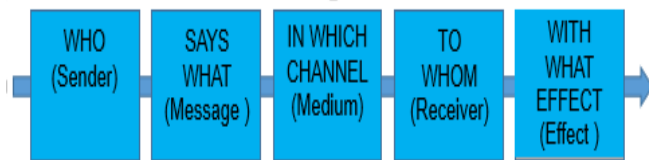


**Communication Models**

**Lasswell's Model of Communication Process (1948)**

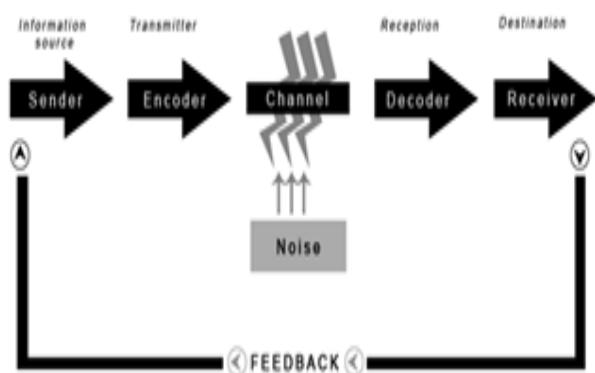
-a.k.a. Sender – receiver Model or Linear Model of communication

This model of communication describes Who says What, in Which channel, to Whom, with What effect?



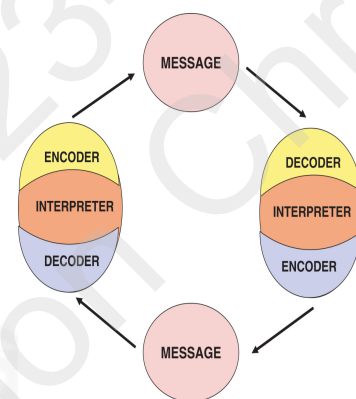
### Shannon and Weaver's model of communication process (1949)

This model is specially designed to develop the effective communication between sender and receiver. Also they find factors which affect the communication process called “Noise”.



### Osgood and Schramm's Model of Communication Process (1954)

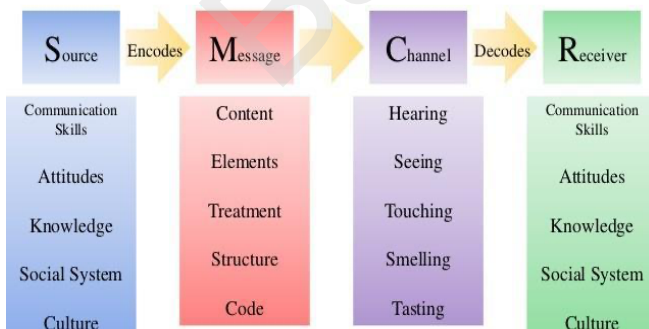
illustrates a process which emphasizes the exchange of roles between participants. i.e. the source becomes the receiver and vice versa.



### Berlo's Model of Communication Process (1960s)

- a.k.a. S-M-C-R Model

- A source encodes a message for a channel to a receiver who decodes the message.



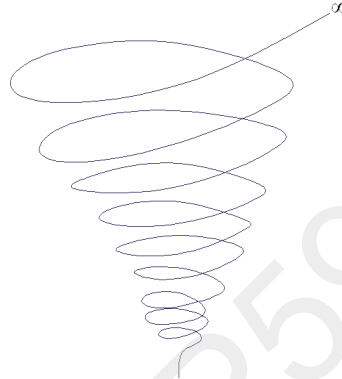


### Dance's Helical Model of Communication Process (1967)

Dance finds communication and this helical structure similar as the bottom or starting of this model is very small then it gradually moves upward in a back and forth circular motion which form the bigger circle in the top and its still moves further.

Communicators share information only with small portion of themselves and gradually develops into next level. Later the communicators commit more and share more portions of themselves.

A Helical Model of Communication  
from Dance, 1967



| Models of Communication Process   | Distinct Characteristic/s   |
|-----------------------------------|---|
| Berlo's Model                     | Source encodes a message for a channel to a receiver who decodes the message.   |
| Lasswell's Model of Communication | This model of communication describes Who says What, in Which channel, to Whom, with What effect?   |
| Shannon and Weaver's Model        | Considers noise as a factor which affects the communication process   |
| Osgood and Schramm's Model        | Emphasizes the exchange of roles between participants.  |
| Dance's Helical Model             | Like the helix structure, communicators shares a small portion of themselves and gradually commit more and share bigger portions of themselves. |

## VII. ADULT TEACHING AND LEARNING

Who is an Adult

**PSYCHOLOGICAL definition:**

“A person is an adult to the extent that he or she perceives himself or herself to be essentially responsible for his or her own life.”

**SOCIOLOGICAL definition:**

“An individual is a person who has come to the stage of his life in which he or she has assumed full responsibility for himself and usually for others, and who has concomitantly accepted functionally productive roles in his community.”

**Adult Learner Characteristics**

- ☑ THE NEED TO KNOW - Adult learners need to know why they need to learn something before undertaking to learn it.
- ☑ LEARNER SELF-CONCEPT - As a person matures his self-concept moves from one of being a dependent personality toward one of being a self-directed human being.
- ☑ ROLE OF EXPERIENCE - As a person matures he accumulates a growing reservoir of experience that becomes an increasing resource for learning.
- ☑ READINESS TO LEARN - As a person matures his readiness to learn becomes oriented increasingly to the developmental tasks of his social roles.
- ☑ ORIENTATION TO LEARNING - As a person matures his time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly his orientation toward learning shifts from one of subject-centeredness to one of problem centeredness.

**Principles of Adult Teaching and Learning**

- Adult learning is maximized when WHAT LEARNERS SAY REFLECTS what they both THINK and FEEL.
- Adults realize that learning is a PAINFUL PROCESS since CHANGING behavior often requires GIVING UP OLD COMFORTABLE.
- People LEARN best as a result of EXPERIENCE.
- Adults learn best when they are motivated to learn.
- Adults learn best when they have opportunities to practice the new knowledge and skill.
- Adults learn through different AVENUES OF LEARNING.
- Adults learn best when they receive REINFORCEMENT for exhibiting desired behavior
- STANDARDS of performance and expectations should be CLEARLY COMMUNICATED to the adult learners
- Adults learn best when they find the learning activity to be REWARDING and ENJOYABLE.
- Adults learn best because of the TIMELINESS of the subject matter to be learned

**1.1. Stages in the Learning Process**

- ☑ NOTICE something (AWARENESS)
- ☑ WANT something (NEED)
- ☑ DO something (ACTION)
- ☑ GET something (SATISFACTION)

**1.2. Matching Beliefs and Principles of Adult Learning**

| Belief:                        | Principles:  |
|--------------------------------|--|
| Learning is an ACTIVE process. | Stress LEARNING BY DOING. Learning to a point of ADOPTION. |

|   |   |
|---|---|
| Learning is CONTEXT-BOUND.                  | Take into account learner's CULTURE. MOTIVATING force is NEEDS.   |
| Learning is PURPOSEFUL                      | WHERE/WHAT do learners WANT TO BE?<br>LEARNER – not subject-CENTERED<br>Consider the "HERE" and the "NOW"   |
| NO ONE-SHOT DEAL in learning                | Stress REPETITION, EXERCISE, or DRILL   |
| Easier to LEARN THE NEW IN TERMS OF THE OLD | Strive to KNOW VERY WELL THE LEARNERS.<br>- their experiences, knowledge level, etc.  |
| Learning BRINGS SATISFACTION                | LEARNER-FRIENDLY environment:<br><br>- NONE OF FORMAL SCHOOL characteristics or environment<br><br>- NOT TEACHER, but FACILITATOR, ANIMATOR, or RESOURCE PERSON |

## VIII. TECHNOLOGY ADOPTION AND DIFFUSION PROCESS

Objective:

- To present the adoption process and its components in technology delivery.

### Adoption

- A process by which a particular farmer (clientele) is exposed to, considers, and finally rejects or practices a particular innovation.

### Diffusion (Mercado, 1964)

- The process of spreading technology/information from agency to another; from one person to another person; from generation to generation.
- Ultimate objective: user's adoption of the technology.
- The **role of extension agencies** is more than just the process of diffusion, but to make sure of the adoption of the adoption of technology.
- The **real measure of success** is not on the methods used but in the **number of technologies adopted** and **its effect and impact on the social and economic life** of the people

## 5 Stages of Adoption Process

### 1. Awareness

The farmer becomes aware that the technology or innovation exists, but he lacks the adequate information about it.

#### Source of information:

Mass media

- radio
- news articles
- news letters
- result demonstration

**2. Interest**

- Farmer becomes interested and seeks more information.
- He believes that the technology or information is possible for him.
- He wants to know what is “how it works, what is its potential.
- Usually he is aroused by mass media, result demonstration and farm visit.

**3. Evaluation**

- farmer evaluates technology with his conditions, expectations, resources, and decides whether or not to try it.
- Can be improved by method demonstration and group discussion

**4. Trial**

- farmer collects the required inputs, learns any new skills that are required, commits some land, labor and money for the trial, sees what happens.
- normally a farmer tries on a small scale. Friends and neighbors are usually the best form of information.

**5. Adoption**

- Decision making stage!
- should not be assumed that every first trial will lead to repeated use.
- Characterized by large scale and continuous use of the idea.

**5 Categories of Adopters**

**1. Innovators (2.5%)**

- High risk takers!
- 1<sup>st</sup> person to adopt
- They go ahead the experiment.
- People who travels a lot, exposed to different resources.
- They are really the ones who are looking for innovation.

**2. Early Adopters (13.5%)**

- Respectable
- Those who follow quickly the lead set by the innovators
- The man to check with”
- Younger than the average
- Has higher educational attainment.
- Socially active
- Read more than the early majority

**3. Early Majority (34%)**

- Watch the innovators and early adopters first, but do not delay much longer before adoption.

**4. Late Majority (34%)**

- Skeptical

-Are conservative and careful. Do not adopt until most or a great number of neighbors have adopted/changed their practice

**5. Laggards (16%)**

- Traditional
- The last to adopt
- Suspicious of innovators and change agents.

**Attribute of Technology**

- Factors affecting adoption and diffusion process

**Types of Technologies**

1. Product- physical goods
2. Process- system
3. Service- complementary activities
4. Information-significant findings that may indicate valuable economic and technical database

**Attributes of Technology**

**1. Relative Advantage**

Degree to which an innovation is perceived as better than the previous one.

- The proven effectiveness or superiority of the new idea that includes the cost of technology

**2. Complexity**

Favor a practice that requires less time and effort

Simpler = Higher Adoption rate

**3. Compatibility**

The difficulty or ease to understand, to do or to follow a technology.

- Consistency with existing values, experiences needs and resources of the farmer.

**4. Trialability**

**5. Observability**

To see is to believe."

- degree to which results of an innovation are visible to others.

**Characteristics of Clientele that Influence Adoption or Diffusion**

1. Educational Level
2. Family Size
3. Farmer's Experience
4. Family Aspiration
5. Tenure Status
6. Value and belief Systems
7. Personality Characteristics

**Characteristics of Change Agent**

**1. Credibility**

- refers to the competency, trustworthiness and dynamism of the change agent as perceived by clients

## 2. Homophily

-degree to which the change agent has rapport with the clientele, his sense of belongingness.

## 3. Personality Traits

-Personal attributes such as intelligence, emphatic ability, commitment, resourcefulness  
-concern for farm people, ability to communicate, persuasiveness and development orientation.

## Additional

-Biophysical environment, socio-economic and socio-cultural also influence adoption or diffusion of technology.

## IX. EXTENSION TEACHING METHODS

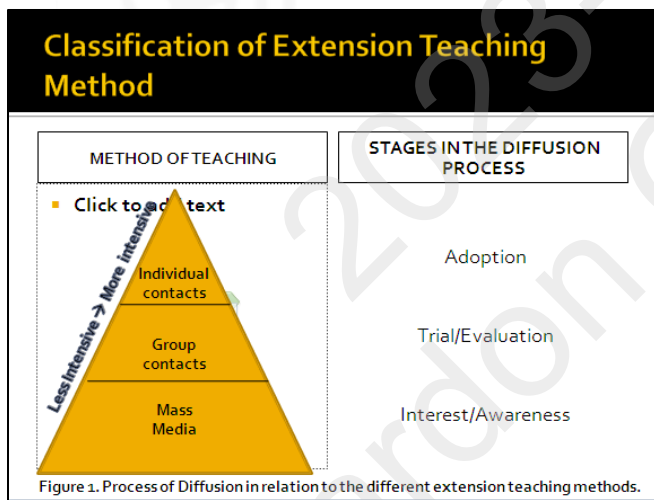
### Important Concepts:

**Teaching-** process of transmitting the ff: a) ideas, b) information, c) technologies from one person to another with the intent of enhancing/modifying the learner's knowledge, attitudes and/or other skills.

**Method-** refers to the systematic procedure employed by extension workers in getting the vital information across the client-learners.

**Techniques-** refer to the art or skill of performance. It involves the use of action or gestures, changing facial expressions to depict different moods, varying voice pitch, tempo and timbre.

**Device-** "little method". Teaching aid or a tool used to facilitate instruction. It is used to make instruction better, meaningful or more interesting.



### 1. Individual Contacts:

(a) Farm and home visit, (b) office call, (c) telephone/cellphone and SMS, (d) correspondence and (e) result demonstration

**2. Group contacts:** (a) Lecture, (b) method demonstration, (c) group discussion, (d) lakbay-aral, (e) seminar-workshops (f) conference, (g) role-playing, (h) panel discussion and (i) farmers field school.

### 3. Mass Media:

(a) radio, (b) TV, (c) printed media and (d) exhibits



| Extension Teaching Method     | Description  | Strong Point   | Weak Point   |
|-------------------------------|--|--|--|
| <b>A. Individual Contacts</b> |  |  |  |
| 1. Farm and home visit        | Involves interpersonal interaction between extension worker(EW) and clientele in the farm or farmer's home   | The interaction gains less distraction compared to the group methods.<br><br>The extension worker can easily establish rapport with the clientele and his family.  | Expensive on the part of the extension worker.<br><br>The EW may only be able to visit a few farmers/ farms in a day.  |
| 2. Office calls               | Refers to the use of landline and cellphone by the clientele in order to seek technical assistance or information from EWs.  | Not expensive in the part of the EW.<br><br>Provides clientele the opportunity to get to know the services offered by the extension office.  | Most farmers do not take advantage of the services of the extension office, hence they may not feel the need to go to the extension office.<br><br>lacks face-to-face contact. |
| 3. Letter                     | Used by EWs to transmit important information. Used to transact official business.   | Used to convey messages in written form whenever personal communication is not feasible.<br><br>Can be used as future reference when filed/kept properly.  | May not be used to transmit messages to all clientele as some may not know how to read.<br><br>-Not practical in areas where there is no efficient mail/courier service.       |
| 4. Result Demonstration       | Usually conducted in the farmer's field involving the cooperation of selected cooperators whereby a component technology or a recommended practice is demonstrated side by side with an existing practice. | Appeals to people who want proof before trying or those with the "to see is to believe" attitude.<br><br>The result of the demonstration will "speak for itself" whether the practice or technology is worth trying/adapting or not. | -Results may be affected by unexpected circumstances and calamities.<br><br>-Sometimes, getting willing and cooperative farmers as cooperators is difficult.                   |

| B. Group Methods             |   |   |  |
|------------------------------|---|---|--|
| 5. Lecture                   | Involves interpersonal interaction between extension worker(EW) and clientele in the farm or farmer's home  | When properly planned and skillfully delivered, it can present more material in a given time than any other method of instruction.<br><br>Can be used whether in-door or out-door, as long as necessary audio-visual equipment are available. | Sometimes it is difficult to hold the interest of the audience.<br><br>Audience is usually passive.<br>-Most of the time it does not permit exchange of ideas between the trainer and the audience.  |
| 6. Meetings                  | Gathering of the officers and members of the organized group, or a group of intended clientele with the extension worker for a definite purpose.                      | The meeting also provides the attendees with the opportunity to interact with one another.  | Finding a common schedule for the meeting is sometimes difficult.<br><br>Some people have the habit of coming late thereby delaying the start of the meeting.  |
| 7. Method Demonstration      | Emphasizes the principle of learning by not only telling how but showing how the skill is being done.   | Provides the EW with the opportunity to see, hear and discuss the learning progress on a particular skill with a clientele.   | Demands careful preparation and organization.<br><br>Considerably expensive.   |
| 8. Lakbay-Aral or Field Trip | Planned and guided visit of a group of participants to a specific site/s for the obtaining the first-hand information about a organization and its services/products. | It allows for an exchange of ideas.<br><br>It motivates people to adopt some improved practices through actual observations.  | It may not be applicable to all subjects.<br><br>It requires a lot of preparation and coordination with people responsible in projects/ organizations to be visited.<br><br>Long distance trips may be too tiresome esp. older participants. |

|                      |  |  |   |
|----------------------|--|--|---|
| 9. Seminar           | Discussion of a result in a meeting and activity with a specific purpose.  | It is a very effective method of disseminating technical know-how for human resource development.  | Wrong planning and procedures, and the speaker's lack of experience can result in the failure of the seminar.<br>-Participants may be reluctant to get involved in the discussion even when given a chance as the presence of an expert may inhibit them. |
| 10. Conference       | Meeting of individuals, preferably a small number usually in a round table situation, who meet for a specific purpose.   | The most important advantage of a conference consists of group exposure to ideas developed by a leader or speaker.<br><br>It is a direct economical method of transmitting information that applies to all members of a group. | The conference may become dull if there is inadequate preparation about the purpose.  |
| 11. Role Playing     | Method of adopting roles from real life. A.k.a. role fitting and role-taking.  | Is useful for purposes of demonstration, for developing skills in sensitivity to the feelings of others, for intensive training and for use with small groups.   | Spontaneous role playing requires extremely high skill on the part of the trainer which may not be available in all situations.   |
| 12. Group Discussion | Is an activity where a group of three to 10 meet together to discuss informally but deliberately a topic of mutual concern usually under the guidance of the leader. | It encourages full participation of every individual present in the discussion.  | In this system, a bossy leader or a few members may dominate the discussion.  |

|                                |   |   |  |
|--------------------------------|---|---|--|
| 13. Farmers Field School (FFS) | Is a season-long event conducted in the field wherein the farmers are encouraged to explore and discover for themselves new technologies/options in a systematic manner and to make decisions based on their own learnings.   | When properly planned and executed, FFS can be an effective means of developing the analytical skills of the participants<br><br>Knowledge obtained by the farmers through their own efforts is more easily internalized and put into practice. | Needs a lot of groundwork to ensure success.<br><br>The challenge of sustaining the number of participants in this series of events.                                       |
| C. Mass Media                  |   |   |  |
| 14. Print Media                | Are the different publications produced to disseminate technologies and other valuable information to intended clientele.   | Information is usually well organized and written in language that intended readers can easily understand.<br><br>Can be used to supplement other teaching methods.   | People with limited education may not fully appreciate the printed information.<br><br>Revisions have to be made from time to time to make sure that contents are updated. |
|                                | Description   |   |  |
| 14.1 Primer                    | Is a pamphlet <b>more than four pages</b> containing essential information on a technology package.   |   |  |
| 14.2 Leaflet                   | Is a <b>single-sheet</b> printed material containing brief information on a specific information that is not necessarily a step by step procedural instruction to follow, but is also needed by the farmer. -It can be <b>back to back</b> and <b>may be folded</b> . |   |  |

|                      |   |
|----------------------|---|
| 14.3 Brochure        | <b>Thin</b> , unbound book containing a specific topic; more detailed than a leaflet.   |
| 14.4 Booklet         | Consists of <b>up to 20 pages</b> joined at the spine, longer than a brochure.  |
| 14.5 Handouts        | Supplemental to lectures, contains some topics/important information discussed in a lecture.  |
| 14.6 Newsletter      | A regularly issued publication keeps people updated to what is happening in their field of interest.  |
| 14.7 Factsheet       | Contains useful information/instructions about a specific subject matter.<br><b>One-page</b> , continuous publication.  |
| 14.8 Photonovel      | Generic for printed material in comics format<br>Includes illustration and text.  |
| 14.9 Newspaper       | Provides a valuable channel for transmission of educational information where they exist and where rural people receive and read them.  |
| 14.10 Wall newspaper | This material is similar in size and appearance to posters, their difference though is that the wall newspaper usually attempts to communicate more than one idea and has more illustrations.<br><br>Posted at busy and strategically located bulletin boards or walls or reading centers, schools or barangay halls. |
| 14.11 Flyer          | Is a <b>single sheet</b> printed material summarizing information on technology packages or component technology.<br><br>Reference for further technical assistance and for use as advance handout information.<br><br>Bears <b>print only on one side</b> .  |
| 14.12 Poster         | <b>Single sheet visuals</b> containing <b>photographs</b> and <b>captions</b> to highlight a recommendation and promote awareness.<br><br>Intended to attract initial attention or provide constant reminders about a recommendation or message.  |
| 14.13 Bulletin       | Is a semi-technical publication on a package of technology intended for extension workers.  |
|                      | Description   |
| 15. Broadcast Media  |   |
| 15.1 Radio           | Presentation medium which basically makes use of the audio mode in disseminating information simultaneously to thousands or even millions of potential receivers.   |
| 15.2. TV             | Adds another dimension to the capability of radio by disseminating information with additional visual features.   |

|              |  |
|--------------|--|
| 16. Exhibits | Regarded as a public display of technologies, innovations, products or even services available to the farmers, fisherfolks, entrepreneurs and the public in general. |
|--------------|--|

## X. EXTENSION APPROACHES

### Objective

Develops critical thinking in analyzing extension as a field of study and practice, and goes on to explain the role of extension in agricultural development especially in the technology transfer process.

1. Commodity Approach
2. Area Approach
3. Transfer of Technology Approach
4. Farming System Approach
5. Participatory Extension Approach
6. Participatory Technology Development
7. Farmer's Field School
8. Training and Visit Approach
9. General Agricultural Extension Approach
10. Farming Systems Development Approach
11. Project Approach

#### 1. Commodity Approach

- multi-purpose or integrated approach.
- promotes the production of a certain important crop by emphasizing the available production factors such as the ff:
  - use of improved varieties
  - better farm inputs
  - different cultural methods, etc.

#### 2. Area Approach

- aims to improve the whole area.
- Efforts are often made to have a whole village /community grow just one variety of crop that is best adapted to the locality.
- Aims to produce a volume for the market to attract better prices.

#### 3. Transfer of Technology Approach

- (TOT) model is based on the assumption that the transfer of technology and knowledge from scientist to farmers will trigger development.
- Researcher's task to identify, analyze and solve farmers' technical problems.
- Solutions have normally been developed at research stations.
- Results will be translated as messages to farmers via extension worker, who is the link between researcher and farmers.

#### 4. Farming System Approach

- Improvement of TOT approach
- Identifies farm level constraints to technology adoption.
- Encourages the direct communication of researchers, farmers, and development workers.



### **5. Participatory Extension Approach ( PEA)**

Farmers are involved in the whole process of decision-making;

- (1) from data collection and analysis
- (2) identifications of problems, constraints and opportunities
- (3) preparation of improvement plans to implementation
- (4) monitoring and evaluation.

### **6. Participatory Technology Development (PTD)**

-The main aim of PTD is enhancing the local capacity to analyze ongoing processes and to develop relevant and feasible technological innovations suited to the local condition.

### **7. Farmers' Field School**

-Refers to the experiential learning approach where the farmer's field serves as a primary learning resource in carrying out an intensive training on integrated pest management throughout the entire growing season of the crop.

- a.k.a School without walls

The field school (School without walls) trains farmers to become IPM experts in their own fields.

### **8. Training & Visit approach**

-has been devised in order to bring about agricultural development through the involvement of responsible farmers

- premised on the theory that peer influence is effective in disseminating new technologies.

### **9. General Agricultural Extension**

- Its program planning is controlled by the government and changes priority from time to time.

-Its program planning is made on a national basis with some freedom for local adaptation.

-the extension approach practiced by DA-ATI.

- Extent to which farm people adopt the technologies developed in the program and continue to use them overtime.

- Measure of success: Continuity of local extension organizations and the benefits of the community of extension activities.

### **10. Farming Systems Development Approach**

-Extent to which farm people adopt the technologies developed in the program and continue to use them overtime.

Measure of success: Continuity of local extension organizations and the benefits of the community of extension activities .

### **11. Project Approach**

- An extension approach with a basic assumption that better results can be achieved in a particular location.

## **XI. COMMUNITY ORGANIZING**

A development strategy for building people's capabilities towards self-determination and self reliance

A method and process of educating, organizing and mobilizing people that leads to their own development method

It follows some basic steps. However, situations tend to be fluid.  
The correctness of strategy depends on sound community diagnosis.

### Three Major Components of Community Organizing (T-O-M)

1. Training and Education
2. Organization building
3. Mobilization Tasks and Functions of a

#### Community Organizer

As a **facilitator** enhances individual and group strengths and minimize weaknesses and conflicts heightens group unity assists individuals and groups to respond to common interests

As a **trainer** assesses training needs plans and conducts educational program assists leaders in training others engages in praxis (action-reflection-action) through continuous dialogue with people

As an **advocate** analyzes and articulates critical issues assists others to reflect upon other issues evokes and provokes meaningful discussions and actions

As a **researcher** conducts social analysis engages in participatory technology development simplifies and enriches appropriate research concepts and skills engages in social integration to understand social phenomena from the eyes of the people

As a **planner** conducts analysis of area resources and potentials assists local groups in planning for their common goal systematizes group actions

As a **catalyst** initiates debates and actions regarding critical problems monitors and nurtures growth of individuals and groups

### COMMUNITY ORGANIZATION

Is the process of bringing about and maintaining adjustment between social welfare needs and resources in a geographical area of special field of service (Durham, 1958)

A process by which a community identifies its needs and objectives, orders/ranks or objectives, develops the confidence and will to work at these needs and objectives, takes action in respect to them and in so doing, extends and develops cooperative and collaborative attitudes and practices in the community (Ross, 1955 and 1976)

A systematic, planned and liberating change process of transforming a complacent, deprived and malfunctioning community into an organized, conscious, empowered, self-reliant, just human entity and institution

## XII. DEPARTMENT OF AGRICULTURE AND ITS UNDER AGENCIES

### Attached agency

A business or organization established to provide a particular service, typically one that involves organizing transactions between two other parties.

Action or intervention, especially such as to produce a particular effect.

- Agricultural Credit Policy Council
- Fertilizer and Pesticide Authority
- National Fisheries Research and Development Institute
- National Meat Inspection Service
- Philippine Carabao Center
- Philippine Center for Postharvest Development and Mechanization
- Philippine Council for Agriculture and Fisheries
- Philippine Fiber Industry Development Authority
- Philippine Rubber Research Institute

### **Attached corporation**

a company or group of people authorized to act as a single entity (legally a person) and recognized as such in law.

- National Dairy Authority
- National Food Authority
- National Tobacco Administration
- Philippine Coconut Authority
- National Dairy Authority
- National Food Authority
- National Tobacco Administration
- Philippine Coconut Authority
- Philippine Crop Insurance Corporation
- Philippine Fisheries Development Authority
- Philippine Rice Research Institute
- Sugar Regulatory Administration

### **Bureau**

Is a state agency directly under a state department but with an independent administrative unit.

The lines are blurred when it comes to naming them as they can be called Administration, Agency, Commission, Authority, etc depending on what their purpose for creation

- Agricultural Training Institute
- Bureau of Agricultural Research
- Bureau of Agricultural and Fisheries Engineering
- Bureau of Agriculture and Fisheries Standards
- Bureau of Animal Industry
- Bureau of Fisheries and Aquatic Resources
- Bureau of Plant Industry
- Bureau of Soils and Water Management

## **XIII. SOURCES OF INFORMATION AND TECHNOLOGY**

**International Agricultural Research Centers** – IRRI, CIMMYT etc.

**University Agricultural Research Centers** – DTRI, IPB, BIOTECH, NCPC, FSSRI, IAS, etc. Research

**Institutes of the Department of Agriculture** – PhilRice, DA-BAR, EVIARC, etc.

**Private firms** – Del Monte, Dole, etc. Banks, agribusiness firms, stock agents, agriculture magazines

**Farmers' cooperatives/organizations**

**Farmers' experience and knowledge** (indigenous knowledge)

-knowledge that is unique to a given culture

-passed down from generation to generation -dynamic, never static and are continually influenced by internal creativity and experimentation

**Informal sources**- like parents, neighbors, friends and the like

#### **XIV. THE CHALLENGE OF EXTENSION**

- Wide geographic area of coverage
- Topographical Area
- Culture and Problem of the people
- Globalization, information and communication revolution
- Commercialization and agri-business
- Established technical practices going obsolete
- Mandanas Ruling

#### **REFERENCES:**

Agricultural Extension by Teodora T. Battad, Ph.D., Pastora S. Coloma, Ph.D., and Aurora S. Paderes, Ph.D.  
Makati City: Grandwater Publications.

Aggie Board Review material.

Communication theory. retrieved from <<https://www.communicationtheory.org/shannon-and-weaver-model-of-communication/> > July 28, 2019

Schramm, W. (1954). How Communication Works. In W. Schramm (Ed.), The Process and Effects of Mass Communication. Urbana, Illinois: University of Illinois Press.

Shannon, C. E., & Weaver, W. (1949). The Mathematical Theory of Communication. Urbana, Illinois: University of Illinois Press.

Paderes, Ph.D. Makati City: Grandwater Publications.

