



UNIVERSITI PUTRA MALAYSIA

**EXTENSION AGENTS' CONTENT PREFERENCE AND
INFORMATION UTILIZATION OF AGRICULTURAL EXTENSION
PUBLICATIONS: A CASE STUDY IN THE STATE OF PAHANG,
MALAYSIA**

SAODAH WOK

FPP L 1981 1

EXTENSION AGENTS' CONTENT PREFERENCE AND
INFORMATION UTILIZATION OF AGRICULTURAL
EXTENSION PUBLICATIONS: A CASE STUDY IN
THE STATE OF PAHANG, MALAYSIA

by

Saadah Wok

A thesis submitted in partial fulfilment of
the requirement for the degree of Master of
Science (Development Communication) in the
Universiti Pertanian Malaysia.

March 1979



In memory of beloved father, Haji Wok Awang bin Haji Ibrahim.



ACKNOWLEDGEMENT

The author wishes to express her most sincere appreciation and much thanks to all those who had helped her throughout her study and research work especially to:

Encik Mohd. Yusof Hussain for his guidance and positive support throughout her entire graduate program;

Encik Rahim Md. Sail for his suggestions and help;

Prof. Lloyd R. Bostian for his guidance and beautiful suggestions during the initial stage of her study;

Dr. Nayan Ariffin for his valuable ideas and suggestions;

Dr. Alang Perang Abdul Rahman Zainuddin for his help in computer programming and analysis of results;

Encik Mohd. Fadzilah Kamsah for his concern, support and guidance;

Dr. J.J. Augustin and Cik Mazli Shahurain for editing the final manuscript;

Cik Jamaliyah Mohd. Yassin for assisting her during the survey;

Ahmad Shukor and Nasrudin Abdul Rahman for their patience and efficiency in coding the data;

Rokiah Hashim and Armi Shamsuar for their efficient typing of the manuscript;

Sheikh Johari, Yusof, Salmah, Ong and Bokhari of the FELDA Computer Centre for their help in the running of the programs;

Respondents from the Department of Agriculture, Federal Land Development Authority (FELDA), Rubber Industry and Smallholder Development Authority (RISDA) and Farmers' Organization Authority (FOA) in Temerloh, Kuantan and Pekan for their sacrifice, help and cooperation and

finally to the loved ones -- thanks for everything especially the love, much care, encouragement and inspiration and to them, this work is dedicated.



TABLE OF CONTENT

	Page
ACKNOWLEDGMENT	iv
LIST OF TABLES	ix
ABSTRACT	viii
CHAPTER	
I INTRODUCTION	
A. Introduction	1
B. Background Statement	2
C. Statement of the Problem	6
D. Objectives of the Study	8
E. The Significance of the Study	9
F. Limitations of the Study	10
G. Definition of Terms	11
II AGRICULTURAL EXTENSION PUBLICATIONS IN MALAYSIA	
A. Introduction	13
B. The Department of Agriculture	13
a) Agricultural Technical Leaflets	14
b) The Malaysian Agricultural Journal	14
c) Other Publications	14
C. The State Department of Agriculture	14
a) Warta Pertanian	15
b) Leaflets	15
c) Pamphlets	15
d) Folder	15
D. Federal Land Development Authority (FELDA)	16
a) Majalah Peneroka	16
b) Suarawati	17
c) Other FELDA Publications	17



CHAPTER	Page
E. Rubber Industry Smallholder Development Authority (RISDA)	17
a) Berita Bergambar Pekebun Kecil	18
b) Suara RISDA	18
c) Other RISDA Publications	19
F. Farmers' Organization Authority (FOA)	19
a) Farmers' Cooperatives : Tools for Development of Small Farmers in Malaysia	19
b) Other FOA Publications	20
G. Malaysian Agricultural Research and Development Institute (MARDI)	20
a) MARDI Research Bulletin	20
b) Risalah MARDI	21
c) Other MARDI Publications	21
H. Rubber Research Institute of Malaysia (RRIM)..	21
a) Planters' Bulletin	22
b) Other RRIM Publications	23
I. Muda Agricultural Development Authority (MADA)	23
J. Universiti Pertanian Malaysia (UPM)	23
a) Majalah Pengembangan	24
b) Buletin Pengembangan	24
c) Penerbitan Pengembangan	25
d) Other UPM Publications	25
 III LITERATURE REVIEW	
A. Introduction	26
B. The Role of Communication in Development	26
C. The Role of Extension Agents	29
D. Information	31
a) Information Seeking Habit	31
b) Relevancy of Information	32
c) Types of Sources	33



CHAPTER	Page
E. The Importance and Functions of Publications ...	34
F. Utilization of Publications	35
a) Reading Habits	35
b) Reasons for Reading	36
c) Factors Associated with Reading	37
d) Content Preference	40
e) Factors Associated with Information Utilization	40
f) Views Regarding Publications	42
 IV METHODODOLOGY	
A. Introduction	43
B. Sampling	44
C. Pretesting	46
D. Conceptualization of the Variables	48
E. Operationalization of the Variables	50
F. Collection of Data	52
G. Statistical Analysis	53
 V RESULTS OF THE STUDY	
A. Introduction	54
B. Characteristics of the Respondents	55
C. Respondents' Sources of Agricultural Information	69
D. Respondents' Information Needs	78
E. Agricultural Extension Publications	79
a) Knowledge of Agricultural Extension Publications	79
b) Agricultural Extension Publications Read..	81
c) Methods of Securing the Agricultural Extension Publications	82



CHAPTER	Page
F. Readers' Reading Habits	88
G. Readers' Content Preference	91
H. Readers' Views and Opinions on the Agricultural Extension Publications	95
a) Readers' Views	95
b) Readers' Opinions	97
I. Reasons for Reading Agricultural Extension Publications	100
J. Non-readers	104
K. Relationship Between Some Selected Variables and Reading of Agricultural Extension Publications	108
L. Relationship Between Some Selected Variables and Information Utilization	126
 VI	
SUMMARY, CONCLUSION, IMPLICATION AND RECOMMENDATION	
A. Introduction	143
a) The Problem	143
b) Objectives of the Study	144
c) Methodology	145
B. Summary of the Findings	145
C. Conclusion	159
D. Recommendations	161
E. Recommendations for Future Research	162
 BIBLIOGRAPHY	164
 APPENDIX 1	170
Questionnaire	171
Daftar Pertanyaan	188
 BIOGRAPHICAL SKETCH	210



LIST OF TABLES

TABLE		Page
1	DISTRIBUTION OF RESPONDENTS BY AGENCIES	43
2	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES	47
3	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND MONTHLY INCOME	56
4	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND AGE	57
5	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND AGRICULTURAL EXPERIENCE	59
6	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND EXTENSION EXPERIENCE	60
7	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND NATURE OF WORK	62
8	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND EDUCATION	63
9	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND TRAINING EXPOSURE	65
10	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND COSMOPOLITENESS PER YEAR	66
11	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND CONTACT WITH FARMERS/SETTLERS	67
12	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND JOB ASPIRATION	68
13	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND PERCEPTION OF THEIR ROLES AS EXTENSION AGENTS	70
14	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND USAGE OF NEWSPAPERS AS SOURCE OF AGRICULTURAL INFORMATION	72
15	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND USAGE OF RADIO AS SOURCE OF AGRICULTURAL INFORMATION	75



TABLE	Page
16	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND USAGE OF TELEVISION AS SOURCE OF AGRICULTURAL INFORMATION 77
17	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND INFORMATION NEEDS 80
18	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND KNOWLEDGE OF AGRICULTURAL EXTENSION PUBLICATIONS.. 83
19	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND NUMBER OF PUBLICATIONS KNOWN 84
20	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND AGRICULTURAL EXTENSION PUBLICATIONS READ 85
21	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND NUMBER OF PUBLICATIONS READ 86
22	DISTRIBUTION OF READERS BY JOB CATEGORIES AND METHODS OF SECURING AGRICULTURAL EXTENSION PUBLICATIONS 87
23	DISTRIBUTION OF READERS BY JOB CATEGORIES AND READING HABITS 89
24	DISTRIBUTION OF READERS BY JOB CATEGORIES AND FREQUENCY OF READING 90
25	DISTRIBUTION OF READERS BY JOB CATEGORIES AND CONTENT PREFERENCE 92
26	DISTRIBUTION OF READERS BY JOB CATEGORIES AND RANKING OF CONTENT PREFERENCE 93
27	DISTRIBUTION OF READERS BY JOB CATEGORIES AND VIEWS REGARDING THE STYLE OF THE PUBLICATIONS AND DEGREE OF UP-TO-DATENESS OF INFORMATION 96
28	DISTRIBUTION OF READERS BY JOB CATEGORIES AND VIEWS REGARDING THE USEFULNESS OF INFORMATION IN THE AGRICULTURAL EXTENSION PUBLICATIONS 98
29	DISTRIBUTION OF READERS BY JOB CATEGORIES AND VIEWS REGARDING THE TIMELINESS OF THE INFORMATION TO LOCAL NEEDS 99
30	DISTRIBUTION OF READERS BY JOB CATEGORIES AND THEIR OPINIONS REGARDING PREFERRED LANGUAGE AND WILLINGNESS TO PAY FOR THE PUBLICATIONS101



TABLE	Page
31	DISTRIBUTION OF RESPONDENTS BY JOB CATEGORIES AND THEIR OPINIONS REGARDING THE COMPETENCY OF SOME OF THE PUBLISHING AGENCIES 102
32	DISTRIBUTION OF READERS BY JOB CATEGORIES AND THEIR REASONS FOR READING THE AGRICULTURAL EXTENSION PUBLICATIONS 103
33	DISTRIBUTION OF NON-READERS BY JOB CATEGORIES AND THEIR REASONS FOR NOT READING THE AGRICULTURAL EXTENSION PUBLICATIONS 104
34	DISTRIBUTION OF NON-READERS BY JOB CATEGORIES AND THEIR OTHER SOURCES OF AGRICULTURAL AND EXTENSION INFORMATION 106
35	DISTRIBUTION OF NON-READER BY JOB CATEGORIES AND THEIR INTENTION OF READING AGRICULTURAL EXTENSION PUBLICATIONS 107
36	ANALYSIS OF VARIANCE OF MEAN SCORES ON NUMBER OF PUBLICATIONS READ BY POSITION 109
37	ANALYSIS OF VARIANCE OF MEAN SCORES ON NUMBER OF PUBLICATIONS READ BY FRONT-LINE WORKERS BY COMPLEXITY OF ROLE 111
38	ANALYSIS OF VARIANCE OF MEAN SCORES ON NUMBER OF PUBLICATIONS READ BY SUPERVISORS BY COMPLEXITY OF ROLE 112
39	MEAN NUMBER OF PUBLICATIONS READ BY ADMINISTRATORS WITH SIMPLE AND COMPLEX JOB RESPONSIBILITIES 113
40	MEAN NUMBER OF PUBLICATIONS READ BY FRONT-LINE WORKERS WITH LOW AND MIDDLE LEVEL OF EDUCATION 114
41	ANALYSIS OF VARIANCE OF MEAN SCORES ON NUMBER OF PUBLICATIONS READ BY SUPERVISORS BY LEVEL OF EDUCATION 115
42	MEAN NUMBER OF PUBLICATIONS READ BY ADMINISTRATORS WITH MIDDLE AND HIGH LEVEL OF EDUCATION 116
43	ANALYSIS OF VARIANCE OF MEAN SCORES ON NUMBER OF PUBLICATIONS READ BY FRONT-LINE WORKERS BY TRAINING EXPOSURE 118



TABLE	Page
44	ANALYSIS OF VARIANCE OF MEAN SCORES ON NUMBER OF PUBLICATIONS READ BY SUPERVISORS BY TRAINING EXPOSURE 119
45	ANALYSIS OF VARIANCE OF MEAN SCORES ON NUMBER OF PUBLICATIONS READ BY ADMINISTRATORS BY TRAINING EXPOSURE 120
46	RELATIONSHIP BETWEEN SOME SELECTED VARIABLES AND RESPONDENTS' NUMBER OF AGRICULTURAL EXTENSION PUBLICATIONS READ 121
47	RELATIONSHIP BETWEEN READERS' POSITION AND INFORMATION UTILIZATION 127
48	RELATIONSHIP BETWEEN READERS' INCOME AND INFORMATION UTILIZATION 128
49	RELATIONSHIP BETWEEN READERS' AGE AND INFORMATION UTILIZATION 130
50	RELATIONSHIP BETWEEN READERS' AGRICULTURAL EXPERIENCE AND INFORMATION UTILIZATION 131
51	RELATIONSHIP BETWEEN READERS' EXTENSION EXPERIENCE AND INFORMATION UTILIZATION 132
52	RELATIONSHIP BETWEEN READERS' COMPLEXITY OF ROLE AND INFORMATION UTILIZATION 134
53	RELATIONSHIP BETWEEN READERS' EDUCATION AND INFORMATION UTILIZATION 135
54	RELATIONSHIP BETWEEN READERS' TRAINING EXPOSURE AND INFORMATION UTILIZATION 136
55	RELATIONSHIP BETWEEN READERS' DEGREE OF COSMOPOLITENESS AND INFORMATION UTILIZATION 138
56	RELATIONSHIP BETWEEN READERS' CONTACT WITH FARMERS AND INFORMATION UTILIZATION 139
57	RELATIONSHIP BETWEEN READERS' JOB ASPIRATION AND INFORMATION UTILIZATION 140
58	RELATIONSHIP BETWEEN READERS' PERCEPTION OF THEIR ROLES AS EXTENSION AGENTS AND INFORMATION UTILIZATION 142



ABSTRACT

EXTENSION AGENTS' CONTENT PREFERENCE AND INFORMATION UTILIZATION OF AGRICULTURAL EXTENSION PUBLICATIONS: A CASE STUDY IN THE STATE OF PAHANG, MALAYSIA

by

Saodah Wok

The study emphasized on the assessment of Agricultural Extension Publications that was made by extension agents in three randomly selected districts namely, Temerloh, Kuantan and Pekan in the state of Pahang. The general objective of the study was to determine the extension agents' content preference in the Agricultural Extension Publications and the extent of utilization of agricultural information by extension agents in the course of carrying out their duties.

The concern for the study arose as a result of the realization of the existence of many locally published Agricultural Extension Publications in the country. Thus, it was envisaged that it was pertinent to make an evaluation of such publications. The study attempted to find out extension agents' other sources of agricultural information, their information needs, reading habits, their views and opinions regarding the Agricultural Extension Publications that they read and the reasons for reading such publications. The relationship between some selected variables with the number of



Agricultural Extension Publications read and the extent of information utilization were also determined. The twelve independent variables in the study were extension agents' position, income, age, agricultural experience, extension experience, complexity of role, education, training exposure, degree of cosmopolitanism, degree of contact with farmers, job aspiration and perception of their roles as extension agents.

The study was conducted using a self-administered questionnaire. The respondents of the study comprised extension personnel from four main development agencies in Malaysia namely, the Department of Agriculture, Federal Land Development Authority (FELDA), Rubber Industry Smallholder Development Authority (RISDA) and Farmers' Organization Authority (FOA). There were altogether 208 respondents in the study. The 208 respondents were classified into three categories namely, the front-line workers, supervisors and administrators.

The statistical analysis used were frequency distribution, Pearsonian correlation, t-test, one-way analysis of variance and Chi-Square test.

The main findings of the study were:

- 1) The majority of the respondents read some of the Agricultural Extension Publications. Apart from the publications, most of the respondents obtained agricultural information from newspapers, radio and television.
- 2) The majority of the respondents preferred to read articles on Agronomy/Plant Protection, Agricultural Economics



and Extension/Communication. They also preferred the publications to be published in Bahasa Malaysia.

- 3) The majority of the respondents regarded the information in the publications that they read as up-to-date and useful but felt that the information was not timely.
- 4) Most of the respondents were willing to pay for the publications that are currently given free to them.
- 5) The respondents perceived the Universiti Pertanian Malaysia (UPM) as being the most competent among the publishing agencies to produce Agricultural Extension Publications followed by the Department of Agriculture, Malaysian Agricultural Research and Development Institute (MARDI) and FELDA.
- 6) The respondents' main reasons for reading the Agricultural Extension Publications were: to increase their knowledge, to help disseminate up-to-date information, to use as future reference material and to occupy their leisure time.
- 7) There was no significant relationship between respondents' complexity of role and training exposure with the number of Agricultural Extension Publications read. However, there was a significantly positive relationship between supervisors and administrators' educational level to reading of publications. Income, degree of cosmopolitaness, job aspiration and perception of roles were also positively related to reading of publications. On the other hand, the number of publications read was negatively related to age, experience



in agriculture, experience in extension and the degree of contact with farmers.

- 8) Only cosmopolitanism was found to be statistically significant to information utilization. Generally, complexity of role, contact with farmers and perception of roles showed a positive relationship with information utilization.



CHAPTER I

INTRODUCTION

A. Introduction

Writing was of little importance many years ago as the spoken word was the only means of interaction between people. With the invention of the printing press, written messages could reach a large audience though at the outset the spread of information was slow due to poor transportation system. With the present day situation, written messages could reach even larger audiences in the shortest possible time.

Written messages concerning progress and development in agriculture should be made known to all especially those who are involved in the field of agriculture. Agricultural workers should keep pace with the progress and development in agriculture. One of the ways they could do this is through reading agricultural and related publications.

Agricultural extension publications include among others: agricultural magazines, bulletins, leaflets, booklets and pamphlets. These publications are useful reference material to agricultural workers. By reading these publications, readers' minds are constantly stimulated with the latest information in agriculture and hopefully, they could become more effective and efficient agricultural workers.



There are many agricultural extension publications produced locally for extension agents. However, the usefulness or effectiveness of these publications to the extension agents is difficult to assess.

This study attempts to find out the types of content of the agricultural extension publications preferred by the extension agents. Pragmatically, the findings of the study will serve as a guideline for future publications. Feedback from the readers is important to both publishers and writers. It helps them to improve their publications and materials. The writers can then produce reliable and timely information to encourage readership of such publications.

B. Background Statement

Malaysia is a developing country with a multi-racial population consisting of three major races: Malay, Chinese and Indian. Peninsular Malaysia (Malaya) had a population of about 10.4 million (Syed Husin Ali, 1975) -- 52.8 per cent Malays, 35.5 per cent Chinese, 10.5 per cent Indians and 0.8 per cent others. Of the total population, 68.0 per cent live in the rural areas. The Malays, being the majority living in the rural areas, are mainly engaged in agriculture which plays an important role in Malaysia's economy.

The government emphasizes the development of the agriculture sector. This is evident from the fact that the total allocations for agricultural development under the Third Malaysia Plan (1976 - 80) amount to \$4.7 billion, an increase of 96 per cent over the Second Malaysia Plan (1971 - 75) allocation of \$2.4 billion. The amount represents 26 per cent of the total allocation for development (Third

Malaysia Plan, 1976). The emphasis on agricultural development is in line with the New Economic Policy of the Government. The policy aims at elevating the economic conditions and quality of life of the poor by increasing their access to land, capital, training and other public facilities.

There are several factors that influence the agricultural development. One of the most important factors is the existence of an efficient agricultural education program. Such a program is necessary to provide extensive agricultural education and specialized training for skilled and trained extension agents. In this respect, the College of Agriculture at Serdang had played an important role in fulfilling national needs in trained extension agents. In 1971, the Universiti Pertanian Malaysia was formed as the result of the merger of the College of Agriculture and the Faculty of Agriculture, University of Malaya.

The agricultural education and training needs of the extension agents are also being fulfilled by six Agricultural Institutes and five Vocational Agriculture Schools in the country. Extension agents in the agricultural agencies have varied educational levels ranging from as low as having the primary school education (of course, with experience) to as high as having a Masters Degree.

In the First Malaysia Plan, \$31.9 million (one Malaysian ringgit is about 0.45 US dollars) were allotted to expanding the program for extension workers, field supervisors and agricultural specialists. The ultimate objective was to have an extension worker



for every 500 acres of farm land, a field supervisor for every four extension workers and a professional specialist for every three supervisors (First Malaysia Plan, 1965). It is hoped that they would educate the farmers, either directly or indirectly, in the use of modern technology in the production and processing of farmers' crops. Extension agents play an important role in reaching the farmers for agricultural development.

Extension agents should have adequate knowledge on agriculture themselves before they could inform, educate and train the farmers in methods and techniques of farming. They should keep abreast with the development in agriculture and one of the ways they could do this is through the use of the mass media such as the radio, television, newspapers, magazines and books.

In Malaysia, radio and television services are entirely owned and operated by the government. Radio Television Malaysia produces several agricultural programs. Among the agricultural programs broadcast by the radio are "Fajar Di Bumi Permata", "Desa Jaya", "Perbualan Kaum Desa" and "Ke Arah Kemakmuran" while the television section telecasts programs such as "Kebun Kita", "Bumi Jaya", "Pembaharuan" and "Belia". These programs highlight the activities and achievement of the farm people and agricultural research workers. In a way, the programs provide information and educate extension agents, farmers and research workers, besides creating awareness among the public of the progress and success of the farmers, research workers and agricultural agencies.

All newspapers are exclusively owned by private organizations and occasionally they carry articles pertaining to agriculture. Utusan Melayu, a major newspaper, has a special weekly page on agriculture.

Development agencies have also introduced programs to upgrade the technical and extension knowledge of their extension agents. For instance, the Department of Agriculture and Federal Land Development Authority (FELDA) conduct in-service training for their own staff. Other agencies like Rubber Industry and Smallholder Authority (RISDA), Farmers' Organization Authority (FOA) and Kemajuan Masyarakat (Kemas) conduct in-service training for their staff is in cooperation with other educational institutions especially with the Universiti Pertanian Malaysia.

An in-service training program gives extension agents the opportunity of being exposed to the latest information pertaining to agriculture. It also helps the extension agents to up-date their knowledge through participation and exchange ideas and opinions with resource personnel and other participants.

Extension and research agencies have also produced publications for extension agents. The Department of Agriculture was the first agency to produce such publications. Its publications include agricultural technical leaflets and "Malaysian Agricultural Journals". Besides the Department of Agriculture, extension publications are also produced by FELDA, RISDA, Malaysian Agricultural Research and Development Institute (MARDI) and the Universiti Pertanian Malaysia.



C. Statement of the Problem

Extension agents are change agents. A change agent has various definitions; among others are: (1) A change agent is limited to one who personally bridge the organizational source of the diffusing item with the potential recipient, or at least, the local influentials (Ryan, 1969) , (2) A change agent is the person attempting to induce or effect a change; the target is the group or individual at which the change is aimed (Leagans, 1971), and (3) Change agents are technicians who provide professional advice or service (Ziltman, 1973). Extension agents also serve as communication links between the professionals in the knowledge centers and the farmers.

In Malaysia, 15 - 30 per cent of the Malay peasant farmers are illiterate (Nayan, 1975; Mohamad Fadzilah, 1977). In this group of farmers, it is up to the extension agents to inform them, particularly through their opinion leaders, about new ideas in farming and other agricultural information. Opinion leaders are persons who are influential in their own respective areas. A person is said to be influential if his thoughts, words and/or actions can affect or motivate the behaviour of others in the way that he wants them to; and a number of people whose behaviour can be affected by him shows the degree of his influences (Syed Husin Ali, 1975). Examples of such leaders are village heads, village teachers or political leaders.

An extension agent should be credible. This characteristic helps smoothen the process of communication. However, to be credible is not that simple. One has to strive, learn and study the

various aspects of a subject matter so that his receivers believe in what he says. For example, in the field of agriculture, one has to know some aspect of agronomy, plant protection, extension and communication, animal husbandry and other related fields. One should also be well informed on how to secure agricultural subsidies and inputs such as credit, fertilizer, insecticides, weedicides and planting materials from the appropriate sources.

A credible extension agent normally has the confidence to inform, guide and teach farmers the correct methods of farming so as to increase production. Once the farmers have the confidence in the ability of an extension agent, they will consult him whenever they have problems especially those pertaining to their farming activities.

In Malaysia, development agencies have realized the importance of upgrading the technical and teaching competencies of extension agents. In-service training programs are conducted regularly for all levels of extension staff. In addition, extension publications are produced to continuously supplement extension agents with knowledge that is relevant to their work. Extension publications are produced by the Department of Agriculture, FELDA, RISDA and MARDI mainly for the consumption of their own staff. Since 1976, Universiti Pertanian Malaysia has also produced extension publications for the consumption of Malaysian extension workers.

The extension publications produced are varied in nature and reach a diverse audience ranging from farmers to extension administrators. Certain extension publications are intended for specific audience

while others cater for a more general audience. For instance, the "Penerbitan Pengembangan" of Universiti Pertanian Malaysia is meant for extension administrators and supervisors. On the other hand, the agricultural technical leaflets are meant for extension agents at all levels.

Do the publishers of the agricultural extension publications produce information needed by the extension agents? Is it worthwhile producing such agricultural extension publications? If so, do the extension agents gain any information that can help to reduce their uncertainty? And finally, do they make use of the information to help farmers? These are some of the questions which any publisher of extension publications should attempt to answer so that their publications will be useful, relevant and timely for the consumption of the end users.

D. Objectives of the Study

This study hopes to determine the extension agents' content preference in the agricultural extension publications. It also attempts to find out the extent of utilization of the agricultural information in the publications by the extension agents in the course of carrying out their duties.

The specific objectives of the study are to determine:

- 1) the extension agents' characteristics, such as age, income and education;
- 2) the extension agents' sources of agricultural information;