



UNIVERSITI PUTRA MALAYSIA

**FACTORS ASSOCIATED WITH FEEDBACK SEEKING PRACTICES
OF AGRICULTURAL EXTENSION AGENTS IN WEST JAVA,
INDONESIA**

MEI ROCHJAT DARMAWIREDJA

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FACTORS ASSOCIATED WITH FEEDBACK SEEKING PRACTICES
OF AGRICULTURAL EXTENSION AGENTS
IN WEST JAVA, INDONESIA

By

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	xi
LIST OF FIGURES	xiv
LIST OF ABBREVIATIONS	xv
ABSTRACT	xvi
ABSTRAK	xviii
CHAPTER	
I INTRODUCTION	1
Background	1
Extension Roles in Research-Farmers Linkage	3
Organisation of Agricultural Extension in Indonesia	6
National Level	8
Province and District Levels	8
Rural Area Level	9
Problem Statement	10
Objectives	14
Significance of the Study	15
Scope and Limitations of the Study	16
Definition of Terms	17



	Page
II LITERATURE REVIEW	18
Models of Extension	18
Typical Developing Country Extension System	18
Training and Visit (T&V) Model	19
Farming System Research and Development Model	20
United States Cooperative Extension System (USCES)	21
Summary of the Four Models	22
Research-Extension-Farmer Linkage	22
Feedback Seeking Practices	26
Concept of Feedback	26
Usefulness of Feedback	29
Feedback Seeking Practices	30
Ashford's (1986) Heuristic Conceptual Model of Feedback Seeking and the Extension Agents' Feedback Seeking Practices	33
Factors Associated with Feedback Seeking Practices	37
Perceived Uncertainty about Relevance of Technology and Its Potential	37
Perceived Amount of Feedback Received	39
Contact with Researchers, Superiors, and Other Subject-Matter Specialists	40
Perceived Credibility of the Feedback Source	41
Perceived Importance of Goal Attainment	42
Perceived External Propensity	43



	Page
Perceived Risks of Feedback Seeking	44
Perceived Value of the Feedback	45
Perceived Leadership Effectiveness	46
Perceived Expected Rewards	47
Perceived Commonness of Goals, Policies and Implementation Strategies between the Research and the Extension Organisations	48
Summary	49
III RESEARCH METHODOLOGY	51
Conceptual Framework	51
Statement of Hypotheses	53
Location of the Study	55
Subject and Population of the Study	57
Sampling Procedure	59
Research Instrument	62
Pre-testing of the Questionnaire	64
Reliability Test of Scales	64
Data Gathering	67
Data Analysis	68
Descriptive Statistics	69
Correlation.....	70
Multiple Regression	70
Z-test.....	71
Discriminant Analysis.....	72



	Page
Significance Level	73
Operational Definition	73
Feedback Seeking Practices	73
Perceived Uncertainty Regarding the Relevance of Technology and Its Potential	74
Perceived Amount of Feedback Received	75
Contact with the Specialists	76
Perceived Feedback Source Credibility	76
Perceived Importance of the Goal Attainment	76
Perceived External Propensity	77
Perceived Risks of Feedback Seeking	77
Perceived Value of the Feedback	77
Perceived Leadership Effectiveness	78
Perceived Expected Rewards	78
Perceived Commonness of Goals, Policies and Implementation Strategies between the and the Extension Agencies	79
Age	79
Education	79
Training Courses Attended	79
Organisational Tenure	80
 IV FINDINGS AND DISCUSSION	 81
Characteristics of the Respondents	81
Position, Sex and Age	82



	Page
Education, Years of Formal Schooling and Number of Training Courses Attended	83
Experience as Extension Agents and Government Officials	85
Technology Introduced	86
Communication-Related Characteristics	88
Attitude-Related Characteristics	91
Organisation-Related Characteristics	93
Feedback Seeking Practices	97
Relationship between Feedback Seeking Practices and Some Selected Independent Variables	99
Feedback Seeking Practices and Communication-Related Factors	99
Feedback Seeking Practices and Attitude-Related Factors	106
Feedback Seeking Practices and Organisation-Related Factors	111
Feedback Seeking Practices and Overall Independent Variables	116
Comparison of the Relationship between the Independent Variables and the Feedback Seeking Practices of the Field Extension Workers and the Subject-Matter Specialists	124
Discriminant Variables of Extension Agents' Feedback Seeking Practices	127
Appropriateness of the Conceptual Framework: Adapted Ashford's (1986) Model.....	130
V SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS	132
Summary	132
Problem Statement	132



	Page
Objectives	134
Hypotheses of the Study	134
Methodology of the Study	135
Findings	136
Conclusion	141
Implications and Recommendations	143
Implications	143
Recommendations for Practice	147
Recommendations for Further Study	153
BIBLIOGRAPHY	155
APPENDICES	162
A Questionnaire in English	162
B Questionnaire in Indonesian Language	182
C Correspondence	205
D Additional Tables	208
E Rice Technology Package-D	225
CURRICULUM VITAE	227



LIST OF TABLES

Table		Page
1	Population of Agricultural Extension Agents on Food Crops in West Java	58
2	Target Population and Sample of Extension Agents on Food Crops in Selected Areas in West Java	62
3	Test of Reliability of Study Instruments Using Cronbach's Alpha Coefficient	66
4	Distribution of Respondents by Position, Sex and Age	82
5	Distribution of Respondents by Education, Years of Formal Schooling and Training Courses Attended	84
6	Distribution of Respondents by Experience as Extension Agents and Government Officials	85
7	Distribution of Respondents in Relation to the Technologies Introduced to the Farmers in Two Years (1992-1993)	87
8	Distribution of Respondents by Communication-Related Characteristics	88
9	Distribution of Respondents by Attitude-Related Characteristics	92
10	Distribution of Respondents by Organisation-Related Characteristics	95
11	Distribution of Respondents and Summary Statistics by the Level of Feedback Seeking Practices	97
12	Correlation Coefficient between Extension Agents' Feedback Seeking Practices and some Selected Communication-Related Factors	101
13	Multiple Regression between Extension Agents' Feedback Seeking Practices and Communication-Related Variables	105



Table	Page
14	Correlation Coefficient between Extension Agents' Feedback Seeking Practices and some Selected Attitude-Related Factors 107
15	Multiple Regression between the Extension Agents' Feedback Seeking Practices and Attitude-Related Variables 109
16	Correlation Coefficient between Extension the Agents' Feedback Seeking Practices and some Selected Organisation-Related Factors 112
17	Multiple Regression between Extension Agents' the Feedback Seeking Practices and Organisation-Related Variables 114
18	Summary of Correlation Coefficient between Extension Agents' Feedback Seeking Practices and Independent Variables 117
19	Multiple Regression between Extension Agents' Feedback Seeking Practices and overall Independent Variables 119
20	Stepwise Multiple Regression between Extension Agents' Feedback Seeking Practices and some Selected Independent Variables 121
21	Adjusted R-square Value of Three Major Clusters of Variables and also R-square Value of the Combination of the Clusters 123
22	Summary of the Test of Significance for Standard Correlations between Field Extension Worker's Feedback Seeking Practices and Subject-Matter Specialist's Feedback Seeking Practices and selected Independent Variables 125
23	Summary Data for Discriminant Analysis 128
24	Discriminant Analysis: Classification Results of Cases According to Feedback Seeking Practices 130
25	Intercorrelation Among Variables 209



Table		Page
26	Rank Order of Percentage of Respondents' Perceived Uncertainty Regarding the Relevance of Technology and Its Potential	210
27	Distribution of Respondents by Percentage Scores on Level of Perceived Amount of Feedback Received	211
28	Distribution of Respondents by Contact Within Two Years (1992-1993)	213
29	Distribution of Respondents by Percentage Scores on Level of Perceived Credibility of Feedback Source	214
30	Distribution of Respondents by Percentage Scores on Level of Perceived Importance of Goal Attainment	215
31	Distribution of Respondents by Percentage Scores on Level of Perceived External Propensity	216
32	Distribution of Respondents by Percentage Scores on Level of Perceived Risks of Feedback Seeking	217
33	Distribution of Respondents by Percentage Scores on Level of Perceived Value of Feedback	218
34	Distribution of Respondents by Percentage Scores on Level of Perceived Leadership Effectiveness	219
35	Distribution of Respondents by Percentage Scores on Level of Perceived Expected Rewards	220
36	Distribution of Respondents by Percentage Scores on Level of Perceived Commonness between the Research and the Extension Organisations	222
37	Distribution of Respondents by Percentage Scores on Level of Feedback Seeking Practices	223



LIST OF FIGURES

Figure		Page
1	Ashford's (1986) Conceptual Model of Feedback Seeking	35
2	Conceptual Framework of Extension Agents' Feedback Seeking Practices	54
3	Map of West Java as the Location of the Study	56
4	Diagram of Sampling Procedure	61
5	A Proposed Model of Extension Agents' Feedback Seeking Practices	148



LIST OF ABBREVIATIONS

- AAETE - Agency for Agricultural Training, Education and Extension, Jakarta
- AARD - Agency for Agricultural Research and Development, Jakarta
- AATE - Agency for Agricultural Training and Education, Jakarta
- AIC - Agricultural Information Centre
- BIMAS - Mass Guidance on Agricultural Production
- FEW - Field Extension Worker
- FKPPI - Coordination Forum for Agricultural Extension at Provincial Level
- FKPPII - Coordination Forum for Agricultural Extension at District Level
- KPPN - National Committee for Agricultural Extension
- REC - Rural Extension Centre
- SMS - Subject-Matter Specialist
- SPHB - Secretariat for Mass Guidance on Agricultural Production
- SSMS - Senior Subject-Matter Specialist
- WKPP - Agricultural Extension Working Area



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September, 1994

Chairman : Hj. Md. Salleh Hj. Hassan, Ph.D.

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The main objective of the study was to identify factors associated with feedback seeking practices of agricultural extension agents in West Java, Indonesia.

This survey research employed a group self-administered questionnaire. The 254 respondents were selected randomly using multistage random sampling technique to represent 2497 agricultural extension agents on food crops throughout West Java. A five-point scale was used to measure the respondents in terms of (a) feedback seeking practices, (b) perceived uncertainty regarding the relevance of technology and its potential, (c) perceived amount of feedback received, (d) perceived



credibility of the feedback source, (e) perceived importance of goal attainment, (f) perceived external propensity, (g) perceived risks of feedback seeking, (h) perceived value of feedback, (i) perceived leadership effectiveness, (j) perceived expected rewards, and (k) perceived commonness of goals, policy and implementation strategies between the research and the extension organisations. Descriptive and inferential analysis, namely frequency, Pearson's correlation, multiple regression, Z-test, and discriminant analysis have been used to analyse the data.

Of the three major hypotheses, it was found that (a) extension agents who received more feedback, perceived their source of feedback as more credible, and reported more frequent contact with the specialists, were more active in feedback seeking; (b) feedback seeking was also found to be more frequently undertaken by those extension agents with a higher perception of the importance of goal attainment, external propensity, and value of feedback. In contrast, extension agents who considered feedback seeking practices as more risky were less active in feedback seeking. Feedback seeking practices were also found to be higher among extension agents with a higher perception of leadership effectiveness, expected rewards, and commonness of goals, policies and implementation strategies between the research and the extension organisations.



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**FAKTOR-FAKTOR YANG BERKAITAN DENGAN AMALAN PENCARIAN
MAKLUM-BALAS PARA PEKERJA PENGEMBANGAN PERTANIAN
DI JAWA BARAT, INDONESIA**

Oleh

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Objektif utama kajian ini adalah untuk mengenalpasti faktor-faktor yang berkaitan dengan amalan pencarian maklum-balas di kalangan pegawai pengembangan pertanian, di Jawa Barat, Indonesia.

Kajian survei ini menggunakan borang soal selidik yang dijawab sendiri oleh responden secara kumpulan. Seramai 254 orang responden telah dipilih secara rawak berlapis untuk mendapatkan data yang mewakili 2497 pegawai pengembangan pertanian di seluruh Wilayah Jawa Barat. Skala lima mata telah digunakan untuk menilai responden



dalam hal: (a) amalan pencarian maklum-balas, (b) ketidakpastian kesesuaian teknologi dan potensinya, (c) banyaknya maklum-balas yang diterima, (d) kredibiliti sumber maklum-balas, (e) kepentingan pencapaian tujuan, (f) kesukaan terhadap tanggapan pihak luar, (g) risiko pencarian maklum-balas, (h) nilai dari maklum-balas, (i) tanggapan terhadap keberkesanan kepemimpinan, (j) tanggapan terhadap ganjaran, (k) tanggapan terhadap kesamaan mengenai matlamat, polisi, dan penyelenggaraan antara organisasi penyelidikan dan pengembangan. Analisis deskriptif dan inferensi iaitu kekerapan, korelasi Pearson, kaedah regresi, ujian Z, dan diskriminan telah digunakan untuk menganalisis data.

Dari tiga hipotesis utama yang diuji, didapati bahawa: (a) pegawai pengembangan yang pernah menerima lebih banyak maklum-balas, yang lebih mempercayai sumber maklum-balas, dan yang lebih kerap melakukan hubungan dengan pakar didapati lebih kerap mencari maklum-balas, (b) pencarian maklum-balas juga didapati lebih kerap dilakukan oleh mereka yang menganggap lebih penting terhadap pencapaian matlamat, yang lebih suka mendapat maklum-balas daripada pihak luar, dan yang mempunyai tanggapan lebih tinggi terhadap nilai maklum-balas. Tetapi sebaliknya, mereka yang menganggap pencarian maklum-balas mempunyai risiko lebih tinggi didapati kurang kerap mencari maklum-balas. Selain itu, pencarian maklum-balas didapati lebih kerap dilakukan oleh pegawai pengembangan yang mempunyai

tanggapan lebih tinggi terhadap keberkesanan kepemimpinan, ganjaran, dan kesamaan antara organisasi penyelidikan dan pengembangan dalam hal matlamat, polisi, dan strategi penyelenggaraan.

CHAPTER I
INTRODUCTION
Background

Agricultural research and extension have received much attention from the governments of developing countries and international development organisations lately. The main concern of such countries and organisations is on determining the potential capability of the research and extension organisations in catering the needs of the farmers as the end users of technology (Baxter, 1987). This is related to the fact that a wide gap existed between agricultural practice and the backlog of research findings (Mohd.

Establishing a linkage among research, extension and farmers has been an important priority to reduce such wide gap (Mohd. Yusof Hashim and Fatt, 1983). This linkage is expected to create a two-way communication among the three parties. In this type of communication, information will not only flow from research to the farmers and to the extension agents, but also from the farmers to the extension and the research agencies, and from the extension to the research agency. This is the basis upon which feedback from the farmers to the extension



agencies, and from the extension agencies to the research organisations will be developed and sustained.

The importance of feedback from the grass-root levels has always been stressed by researchers and extension agents (Arnon, 1989). From this feedback, the extension agents and the researchers could have some ideas regarding the farmers' needs and the problems faced in adopting a recommended technology. Feedback from the farmers is also important to ensure that the research results fit the needs of the farmers (Rivera and Schram, 1987). Without a continuous feedback from the extension agencies, research will not be socially or economically relevant (Swaminathan, 1979). To carry out an effective research programme, as suggested by the World Bank (Elz, 1984), research staffs must receive continuous information regarding the problems faced by the farmers.

Many programmes which could elicit more feedback from the farmers have been introduced. Among such programmes are the farming system research (FSR), on-farm trials and farmers' participation in experimentation and adaptive research (Arnon, 1989). For instance, the development of the farming system research is related to the renewed awareness of the need for effective two-way communication between the farmers, the extension agents and the researchers (Baxter, 1987). Attempts at employing programmes to ensure that the farmers' feedback are elicited have been organised in Indonesia (Suryatna Effendi, 1985), Bangladesh (Rahman, 1985), Sri Lanka (Wirasinghe et al., 1985), and the Philippines (Gomez, 1985).

Feedback can be acquired by the research and the extension agencies through active and passive methods. Active methods of feedback involve attempts by the research and the extension agencies to elicit the farmers' responses to the research findings and agricultural innovations disseminated to them. Passive feedback relates to the voluntary responses from the farmers without much conscious attempt by the researchers and the extension agents to elicit such responses. In most cases, however, passive feedback is provided by a few farmers when they voluntarily react to the research results communicated to them. This suggests that an increased number of feedback from the farmers can be achieved if the research and the extension agencies are more active and conscious in seeking them.

Extension Roles in Research-Farmers Linkage

The extension roles in research-extension-farmer linkage are related to the extension models used. There are basically three main extension models, namely; transfer of technology model, adult education model, and interdependency model (Bennett, 1989). In the first model, the researchers' activities are considered as the starting point. Extension activities are conducted to make the research output applicable through development and adaptive research. Moreover, the role of the extension is to identify and translate the users' need for potential research output and the users' responses to actual research output.

The second model emphasises the role of extension in educating the users. It begins with the consideration of the extension action such as

assessing the needs of the users. The research agencies' roles in the extension programme and the research output are considered as a source for fulfilling the needs of the users. This is followed by the extension action such as transferring of information to the users.

If the first and the second models view the roles of the extension and the research agencies in sequence, the interdependency model begins with the simultaneous action of both the research and the extension agencies. According to Bennett (1989), both agencies in this model identify networking as their initial role. Networking is used to identify the needs of the farmers and to perform the research and the extension agencies respective roles. However, in extension, networking with users is the key to all the roles of the extension programmes. In contrast, in research, networking with peers within the scientific disciplines may outweigh the importance of networking with the users.

The role of extension can also be seen from the innovation diffusion view. According to this view, the role of the change agent is to diffuse innovations to the clients, in what might seem to be a one-way persuasion process. But for this change process to be effective, the change agent must provide the linkage on the clients' needs and problems to the change agency. This information is crucial in determining which innovations are most appropriate for diffusion to the clients. The change agent's role also include obtaining feedback from the clients regarding the change programmes (Hayward, 1989; Rogers, 1983).