



**UNIVERSITI PUTRA MALAYSIA**

**INFORMATION NEED AND  
INFORMATION-SEEKING BEHAVIOUR OF AGRICULTURAL  
EXTENSION WORKERS IN DAERAH ISTIMEWA YOGYAKARTA,  
INDONESIA**

**RETNO WULANDARI  
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AGRICULTURAL EXTENSION WORKERS IN DAERAH ISTIMEWA  
YOGYAKARTA, INDONESIA**

**By**

**RETNO WULANDARI**

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**INFORMATION NEED AND INFORMATION-SEEKING BEHAVIOUR  
OF AGRICULTURAL EXTENSION WORKERS  
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**Chairman : Siti Zobidah Omar, PhD**

**Faculty : Modern Languages and Communication**

One of the important factors that contribute to agricultural development is information. As such, agricultural extension workers who link agricultural agencies to the farmers must have adequate and up-to-date information about agriculture practices before they could inform, educate and train the farmers on the methods and techniques of farming. Previous studies have shown that agricultural extension workers seldom use the internet, read books, or even go to the library and university, and research institution to obtain relevant information pertaining to their work. Therefore, there is a need to determine information seeking strategies used by these agricultural extension workers in obtaining work information relevant to their professions.

This study aimed to determine the types of information needed by agricultural extension workers, the sources of information used by them to obtain information and the information seeking strategies used by the agricultural extension workers. It is also tried to identify the information seeking strategy according to selected demographic variables, and to determine the factors influencing information seeking strategies used by agricultural extension workers.

This study used survey design, and it was conducted in Daerah Istimewa Yogyakarta, Indonesia. The total population of the study was 338 agricultural extension workers; cluster sampling method was used to select 181 respondents as its sample. The dependent variables involved in the study include information seeking strategies (which were further categorized as passive, active and interactive strategy), while the independent variables are selected demographic variables, types of information needs and types of information sources. A structured-questionnaire was employed as the instrument for gathering data. The data were analyzed using the Statistical Package for Social Science (SPSS version 16) and Pearson Chi Square Test was used to determine the factors influencing information seeking strategies of agricultural extension workers.

In general, the finding showed that agricultural extension workers needed various information related extension service, innovation and extension role. Most of the agricultural extension workers need innovation information. Besides that, most agricultural extension workers used interpersonal source

in seeking information. These agricultural extension workers also used various types of strategies; there are active, passive and interactive strategies to seek the required information. Regardless of the types of information, most agricultural extension workers were found to have used active strategy by seeking agricultural information inside and outside the agency. In addition, they also utilized interactive and passive strategy for all types of information which was sought by means of direct enquiring method and seek the information inside the agency.

Factors influencing information seeking strategy used by agricultural extension workers indicated that types of information need influenced the information seeking strategy used by agricultural extension workers. Print media; electronic media and scientific meeting source influenced the information seeking strategy used by agricultural extension workers for extension service information. Whereas for information related to innovation, electronic media and scientific meeting influenced information seeking strategy. For extension role information, interpersonal, print media, electronic media and scientific meeting influenced information seeking strategy.

Therefore, it was suggested that further study be conducted to cover a wider geographical area such as other provinces in Indonesia with different geographical characteristics, farming system, custom and traditions. By covering wider area, a better picture of information seeking strategies used by agricultural extension workers could be obtained.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia  
sebagai memenuhi keperluan untuk ijazah Sarjana Sains

**KEPERLUAN MAKLUMAT DAN PERILAKU PENCARIAN MAKLUMAT  
OLEH PEKERJA PENGEMBANGAN PERTANIAN DI DAERAH ISTIMEWA  
YOGYAKARTA, INDONESIA**

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Satu daripada faktor penting yang menyumbang kepada pembangunan pertanian adalah maklumat. Oleh itu, pekerja pengembangan pertanian yang menghubungkan agensi-agensi pertanian dengan kaum petani perlu mempunyai maklumat yang cukup dan terkini tentang amalan-amalan pertanian sebelum mereka boleh menyebarkan, mendidik dan melatih kaum petani menggunakan kaedah dan teknik pertanian. Bagaimanapun, kajian lalu menunjukkan bahawa pekerja pengembangan pertanian jarang menggunakan Internet, membaca buku, ataupun pergi ke perpustakaan, universiti dan institusi penyelidikan bagi mendapatkan maklumat tentang kerja mereka. Oleh itu, terdapat satu keperluan untuk mengenalpasti strategi pencarian maklumat yang diguna oleh pekerja pengembangan pertanian.

Tujuan kajian ini adalah untuk menentukan jenis maklumat yang diperlukan oleh pekerja pengembangan pertanian, sumber maklumat yang digunakan untuk mendapatkan maklumat; strategi pencarian maklumat yang digunakan, untuk mengenal pasti pencarian maklumat strategi menurut pembolehubah terpilih daripada demografi dan bagi menentukan faktor yang mempengaruhi strategi pencarian maklumat digunakan oleh pekerja pengembangan pertanian.

Kajian ini menggunakan reka bentuk tinjauan dan dilakukan di Daerah Istimewa Yogyakarta, Indonesia. Populasi kajian adalah seramai 338 pekerja pengembangan pertanian dan kaedah persampelan kelompok telah digunakan untuk memilih 181 orang pekerja pengembangan pertanian sebagai sampel kajian. Pembolehubah bersandar adalah strategi pencarian maklumat yang dikategorikan sebagai strategi pasif, aktif dan interaktif; pembolehubah bebas adalah keperluan maklumat, sumber maklumat, faktor yang berkaitan dengan individu dan faktor-faktor yang berkaitan dengan pertubuhan. Sementara itu, borang soal selidik berstruktur telah digunakan sebagai cara pengumpulan data. Data pula telah dianalisis menggunakan perisian *Statistical Package for Sains Social (Versi SPSS 16)* dan ujian Pearson khi kuasa dua digunakan bagi menentukan faktor-faktor yang mempengaruhi strategi pencarian maklumat digunakan oleh pekerja pengembangan pertanian.



Dapatan kajian menunjukkan bahawa pekerja pengembangan pertanian memerlukan maklumat perkhidmatan pengembangan pertanian, maklumat inovasi, dan maklumat peranan pengembangan pertanian. Hasil kajian juga menunjukkan bahawa sebahagian besar daripada pekerja pengembangan pertanian memerlukan maklumat inovasi. Selain itu, sebahagian besar daripada pekerja pengembangan pertanian menggunakan sumber antara perseorangan untuk mencari maklumat. Pekerja pengembangan pertanian menggunakan pelbagai jenis strategi iaitu aktif, pasif dan interaktif untuk mendapatkan maklumat. Dari segi jenis maklumat, sebahagian besar daripada pekerja pengembangan pertanian menggunakan strategi aktif untuk mencari maklumat pertanian berkaitan di dalam dan di luar agensi. Mereka juga menggunakan strategi interaktif untuk mendapatkan semua jenis maklumat, dengan bertanya terus kepada agensi.

Faktor-faktor yang mempengaruhi strategi pencarian maklumat yang digunakan oleh pekerja pengembangan pertanian menunjukkan jenis-jenis keperluan maklumat mempengaruhi strategi pencarian maklumat yang digunakan oleh pekerja pengembangan pertanian. Media cetak, media elektronik dan sumber mesyuarat saintifik mempengaruhi strategi pencarian maklumat yang digunakan oleh pekerja pengembangan pertanian untuk maklumat perkhidmatan pengembangan pertanian. Manakala untuk maklumat berkaitan dengan inovasi, media elektronik dan mesyuarat saintifik mempengaruhi strategi pencarian maklumat. Untuk maklumat berkaitan dengan peranan pengembangan pertanian, diketahui bahawa sumber

maklumat perseorangan, media cetak, media elektronik dan mesyuarat saintifik mempengaruhi strategi pencarian maklumat.

Dapatan kajian juga menunjukkan bahawa kajian lanjut perlu dilakukan dengan menggunakan dan merangkumi kawasan geografi yang lebih luas seperti wilayah lain di Indonesia yang mempunyai sifat geografi yang berbeza, serta sistem pertanian, adat dan tradisi yang berbeza. Ini adalah kerana satu gambaran lebih baik mengenai strategi pencarian maklumat yang digunakan oleh pekerja pengembangan pertanian akan diperolehi dengan melakukan kajian yang lebih luas.

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I certify that a Thesis Examination Committee has met on January 27<sup>th</sup> 2010 to conduct the final examination of Retno Wulandari on her thesis entitled "Information Need and Information Seeking Behaviour of Agricultural Extension Workers in Daerah Istimewa Yogyakarta, Indonesia" is in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A)106] 15 March 1998. The Committee recommends that the student be awarded the Master of Science.

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## DECLARATION

I declare that the thesis is my original work except for quotations and citations which have been duly acknowledge. I also declare that it has not been previously, and is not concurrently, submitted for any other degree at Universiti Putra Malaysia or at any other institution.

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**RETNO WULANDARI**

Date: 1 June 2010



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## LIST OF ABBREVIATIONS

GDP	= Gross national Product
FAO	= Food and Agriculture Organization
T & V	= Training and Visit
NFCEP	= National Food Crops Extension Project
AEW	= Agricultural Extension Worker
CMC	= Computer Mediated Communication
MOA	= Motivation, Opportunity and Ability
URT	= Uncertainty Reduction Theory
DIY	= Daerah Istimewa Yogyakarta
BAPEDA	= <i>Badan Perencanaan Daerah</i> (Institution of Regional Planning)
BPP	= <i>Balai Penyuluh Pertanian</i> (Rural Agricultural Centre)
SPSS	= Statistical Package for Social Science
AARD	= Agency of Agricultural Research and Development
SD	= Standard Deviation
SMS	= Short Message Service
MMS	= Multimedia Messaging Service
UPM	= Universiti Putra Malaysia

## CHAPTER I

### INTRODUCTION

#### Background of the Study

With approximately 205 million people, Indonesia constitutes one of the most populated countries in the world, and 70 percent of its population are residing in Java Island. Agriculture remains one of the leading sectors in Indonesia's economic development and it represent approximately 35% of the total GDP, with about 35 million people engaging in the agricultural sector. Agriculture has a dualistic structure, i.e. small farms operated by nearly 24 million small-scaled farmers covering about 142 million hectares, and large farms operated by about 2,000 estates which cover approximately 22 million hectares. The average farm size of small farmers varies from 0.3 to 0.7 hectare in Java, and these are approximately 1 to 3 hectares outside Java (Zakaria, 2003).

In the last ten years, the Government of Indonesia is moving towards decentralization. Some major steps have been taken to decentralize agricultural extension. In 1991, a joint decree between the Ministry of Agriculture and the Ministry of Home Affairs was released to expand the roles of district government and agricultural services to manage extension activities at the district level. Among the latest development in agricultural extension was the release of Law No. 22 on Autonomy Government





describing the responsibility and the authority of the central government, provincial government, as well as, district government, in implementing and in managing extension (Zakaria, 2003).

According to Sulaiman (2002), the implementation of decentralization policy in early 2001 resulted in several fundamental changes in the organizational structure and management of government institutions which dealt with agricultural innovation transfer. These changes have increased the ineffectiveness of extension organizations and personnel. The implementation of the decentralization policy has affected the number, position and the workplace of extension personnel, especially at the district level. In this decentralization era, the integration of extension functions among a variety of agencies at provincial, district and field levels, has weakened the roles and functions of extension (Sulaiman, 2002).

Majority of Indonesian farmers, especially small and poor farmers, do not have a bargaining power in marketing their produce. A strong top-down approach in the implementation of agricultural development, emphasizing on the achievement of physical project objectives, has resulted in farmer's dependency on government assistance, including agricultural innovation transfer (Sulaiman, 1998).

Success of agricultural development is determined by the ability of human resources in managing agricultural system using scientific method and new technology. Therefore, to improve the agricultural human resources,