

Media Use and Information Needs of Urban Farmer: A case study of Bangkok Metropolitan Region, Thailand¹

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Abstract:

The paper presents results of a study on media use and information needs among farmers, using Bangkok Metropolitan Region as a case study. A sample size of 200 farmers was initially taken for the study and analyzed, Sample random sampling technique was use in this study and questionnaire was used to elicit information from respondents. Both descriptive and inferential statistics were used for data analysis. The result showed highest information needs in the area of agriculture innovation, farming technique and pest management. On the other hand, highest information that they got from media were Farming technique, pest management and pesticide's advertisement. The most used of media for agricultural information was print media got 3rd position after fellow internet and television. The result also shows that 93 % of respondents were solving their problem by the information through media and 85 % of respondents get agricultural information satisfaction from the media. 78 % of respondents had medium level of credibility to media and 20 % had high level of credibility to media. But the study showed that there is not enough Agricultural information available on media.

¹ Paper accepted for presentation at the international conference on "Communication/Culture and the Sustainable Development Goals (CCSDG): Challenges for a New Generation", Chiang Mai University, Thailand, December 17-21, 2015.

Key words: Media Use and Information needs, Urban farmer, Thailand.

INTRODUCTION

Urbanization brings major changes in demand for agricultural products, both from increases in urban populations and from changes in their diets and demands. This has brought and continues to bring major changes in how demands are met and with the farmers, corporations, companies, local and national economies who benefit and who lose out. It can also bring major challenges for urban and rural food security (David, 2010). On the other hand, media use and information needs evaluation a farmer may highlight an important media use and information need based on their need and interest. Nevertheless, the value of media use and information needs evaluation by engaging directly with farmers who are using information, should not be overlooked. A two-way process empowers farmers to share lessons and best practices related to their farm enterprise.

Urban farming is the practice of cultivating, growing, processing, and distributing fruits and vegetables on small plots in towns and cities, has become increasingly popular especially in Thailand in the past few years. Urban farming is also taking off in a big way in some big cities, including Bangkok. Although expanding agricultural production and distribution in rural communities is an important way to help families break the cycle of generational poverty, people living in cities also need support. Urban farming is a way for families to have healthy food and also save money. Sometimes, they may be able to supplement their incomes by selling surplus vegetables and fruit. Anyway, urban farming still have long way to go – Transferring new finding and technologies to urban farmers remain a promise strategy for increasing famers’

quality of life and agricultural productivity (Hassan, 2011). Then they can adopt new technologies and put them into use.

Media have proved to be a prominent key to dissemination of latest information to farmers. Improvements in agricultural systems have come about through tackling specific problems. For example, less farming technologies skill and poor information levels are barriers to improve agriculture in some developing countries such as Thailand. A combination of traditional practices, personal experience and trial-and-error approaches was the only one option left without access to information sources. This means there will only be slow improvement in agricultural practices among increasingly needy farmers. These barriers may be alleviated by employing media to provide an information bridge between agricultural experts and farmers.

The present study was aimed at determining urban farmers' media use and information needs, using Bangkok Metropolitan Region as a case study. A sample size of 200 farmers was initially taken for the study and analyzed, Sample random sampling technique was use for the sample selection and questionnaire was used to elicit information from farmers.

LITERATURE REVIEW AND THEORETICAL PERSPECTIVES

Investigation in farmers' media use and information needs has been deal with two categories. First, the farmers reliant on which media to seeking agricultural information and which agricultural in formation they finding from media. This approach has provided facts that famers' media use confides on how outdated or new an agricultural innovation going on and which channel that information were transferred to farmers.

Research on media choice has adopted two distinct theoretical frameworks to explain the choice of medium and content. The first approach focuses on individual factors—

individual preferences, needs, or psychological states—to predict media use behavior (Kim, 2014). Theoretical frameworks such as uses and gratifications (Katz E, 1974), economic models of program choice and mood management (Zillmann, 2000) have examined individual predispositions as determining factors of media choice. The second approach emphasizes the explanatory power of structural factors such as audience availability, access to or cost paid to media, and programming strategies in predicting media choice (Cooper, 1993).

The success of agricultural development programs in developing countries largely depends on the nature and extent of use of mass media in mobilization of people for development (Hassan, 2011). In North California, newsletters are the most important information source in the agricultural sector. Among the media, utilizing scientific conferences, computer and other new media are the least preferred; so, few of the farmers use them (Jenkins CNH, 1999). Arokoyo (2003) also mentioned that video, radio and television are the major sources of information for the farmers in Nigeria, and print media also have a specific situation in transferring agricultural information as well. Due to the vast use, the media are among the best educational and cultural instruments. Media is a particularly useful tool in making large number of people aware of new ideas and practices, or alerting them to sudden emergencies (Arokoyo, 2003). Even while the amount of detailed information that can be transmitted by mass media is limited, they can serve an important and valuable function in stimulating farmers' interest in new ideas. Once stimulated or made aware through mass media, farmers may seek additional information from neighbors, friends, extension workers or progressive farmers in the area (Behrens, 1984).

Different communication channels as observed by scholars are useful for good information preparation, such a channels in delivering information is a key, for farmers

(Sokoya, 2014). The use of media is of great importance because the knowledge of it will provide keys for understanding and predicting outcomes of communication process. It is common knowledge that the practical visual transfer of knowledge will give better understanding to farmers (Daudu, 2011). Understanding farmers' media use and information needs help in planning and designing appropriate policies, programs, and organizational innovations. This shows that available information should be delivered to farmers to give the best knowledge and understanding of practical examples.

The next category is farmers' information needs. Understanding farmers' information needs helps in planning and designing policies, organizational innovation and information. Information is means of transferring events for better awareness to add new meaning that could change events, lives or experiences, awareness and use of information produce knowledge (L.Low, 2000). The necessary information could be useful to farmer at different stages of farming such as harvesting, marketing and so on. Some scholars observed that farmers can get needed information through different channels; majorly through agricultural extension agents, folk tales, social networking, and interpersonal relationship with fellow farmers and relations, agricultural project administrators and mass media(Daudu, 2011; Oladeji, 2011).

Case (2002) suggests that an information need is the recognition that one's knowledge is inadequate to satisfy a goal, while Moore (N. Moore, 2002) describes an information need as the lack of appropriate information on which to base choices that could lead to benefits or services that may improve people's well-being. Some scholars describe an information need as an inadequate state, or an Anomalous State of Knowledge (ASK). Since the information needs of urban farmers in Kampala City are not known, there are no agricultural information services that specifically target these farmers (Belkin, 1982; Case, 2002). Based on Ozowa (1995) studied information needs of

small scale farmers in Africa. He found that the information needs of farmers revolve around the resolution of problems such as hazards, weed control, moisture insufficiency, soil fertility, farm credit, labor shortage and soil erosion. He lamented that agricultural information is not integrated with other development programs to address the numerous related problems that face farmers (Ozowa, 1995). They noted that the information provided was exclusively focused on policy makers, researchers, and those who manage policy decisions, with scant attention paid to the information needs of the targeted beneficiaries of the policy decisions, particularly farmers. He warned that non-provision of agricultural information to farmers is a key factor that has greatly limited agricultural development particularly in developing countries.

However, media use and information needs are very important for stakeholders to lay more emphasis on sustainable practice and also disseminate information to farmers and address their needs properly. For example, the media which farmer use to seeking agricultural information, May not necessary correspond with the farmers' agricultural information that farmer needs. There is a need to investigate differentiation for communication strategies in development to urban farmer outcome.

OBJECTIVE OF THE STUDY

The objectives of this study are specifically:

1. To investigate the media that farmer use for seeking agricultural information.
2. To determine information needs of farmer.

METHODOLOGY

This study was conducted in Bangkok, Nakhon Pathom, Pathum Thani, Nonthaburi, Samut Prakan and Samut Sakhon.

A sample size of 200 farmers was initially taken for the study and analyzed, Sample random sampling technique was use for the sample selection and questionnaire was used to elicit information from respondents. Both descriptive and inferential statistics were used for data analysis.

FINDINGS

The result as presented in table 1 shows that the respondents are categorized according to their age group and education. Most of respondents (63%) are male while only 74 (37%) respondents are female. The highest number of respondents (71) is in group 30-34. The second highest number of respondents (60) comes from age group 35-39, following by 24, 23 and 16 from group age 40-44, 25-29 and more than 45, respectively. The rest 6 respondents are from the age group less than 25 years. As regards to education, 100 (50%) respondents hold a bachelor degree, while 48 (24%) hold lower than a bachelor degree. 40 (20%) respondents hold master's degree and 12 (6%) hold higher than master degree. The implication of the results is that the respondents are relatively young adult people who are aspiring, active and energetic to learn the new technologies and absorb the new knowledge, taking the base line of education of bachelor degree.

Farmers always need agricultural information which they use various information sources such as television, radio, magazine, newspaper, internet, extension agents and book. Famers can access to information from any source. Their responses in this regard are shown in table 2. The data shown that internet (93%) was used as sources by most of all respondents fallowed by television, which was a source of agricultural information for 74% of the respondents. Book was mentioned as 61% of respondents as their information source. 52% of the respondents mentioned magazine as its information source. Radio and newspaper were reported by 41% and 39%

which the respondents used as their information sources, respectively. However, the extension agents were the second lowest among the information sources of the respondents followed by others information sources was mentioned as 15%. It is the evident from table 2 that the respondents used more than one source to meet their agricultural information needs. These results are in line with those researchers (Hassan, 2011; Muhannad 2006; Shahid Farooq, 2007) who found that print media, television, radio and extension agents were the sources of agricultural information. However, the results regarding internet are contradictory to those of a researcher (Hassan, 2011; Muhannad 2006; Shahid Farooq, 2007) who found that none of the respondents mentioned internet as their source of agricultural information.

Table 1: Demographic profile of farmers by sex, age and education level.

Characteristics	No.	%
Sex		
Male	126	63
Female	74	37
Total	200	100
Age		
Less than 25 years	6	3
25-29 years	23	11.5
30-34 years	71	35.5
35-39 years	60	30
40-44 years	24	12
More than 45 years	16	8
Education		
Lower than bachelor degree	48	24
Bachelor degree	100	50
Master degree	40	20
Higher than master degree	12	6
Total	200	100

Table 2: Farmers agricultural information sources.

Media	Respondents	
	No.	%
Television	148	74
Radio	82	41
Magazine	104	52
Newspaper	78	39
Internet	186	93
Extension agents	60	30
Book	122	61
Others (NGOs, fellow farmers, so on)	30	15

Table 3 indicates that the most information that respondents got from the media was farming technique (85%) followed by pest management and pesticide (74%). General information (63%) and marketing (59%) were mentioned as third and fourth information which respondents got from the media, respectively. On the other hand, agricultural product processing (54%) was mentioned as a second lowest among the information which respondent got from media, followed by others (2%). The indication is that while agricultural information was used for different purposes, the level of information use per activity varied. These responses agree with Helen (Helen, 2010) who observed that the information which the respondents used related to how to control crop diseases (48.2%), followed by Increased agricultural production (47.9%), Marketing (44%), and how to apply manure or fertilizers (43.1%) respectively.

Farmers need various types of information. The special information need as shown in table 4. The results show that 80% of respondents affirmed that agricultural innovation was the majority of information need. Farming technique was reported by 78% as its information needs, followed by 72% and 54% of pest management and marketing was mentioned, respectively. General information was reported as the second lowest of information needs and others (14%) as the lowest. The indication was that urban farmers' information needs were as varied as the variety of their farming enterprises, activities or tasks. The findings are in line with Helen (Helen, 2010) who

observed that Information needs and use among urban farmers in Kampala City in Uganda related to a variety of information such as markets and prices, improving farming practices, pest control, management as well as nutrition and fertilizers.

As Ozowa (1995) mentioned, no one can categorically claim to know all the information needs of urban farmers especially in an information dependent sector like agriculture where there are new and rather complex problems facing farmers every day. However, the findings of this study indicate that it may be possible to identify significant groups of urban farmers who share common information needs. Therefore, the dissemination of agricultural information should be based on the different urban farmers' enterprise groups and those groups information needs.

As Rokeach and DeFleur (1976) believed that media are the agents for transferring information from one system to audience based on their needs. They mentioned that media play important roles to attract people by providing necessary information for them and media help the social system as well. In this study when we asked respondents regarding the level of farming problem in which solving by media – the results show (Table 5) that the very strongly level of farming problem that solving by the media is 33%. This was followed by 30% as a rated of strongly and neutral level by the respondents. This is meant 93% of respondents were solving their farming problem with the information through the media. Whereas, 4% and 3% were considered as weak and nothing, respectively.

Table 3: Agricultural information which farmers got from media.

Types of Information	Respondents	
	No.	%
General Information	126	63
Marketing	118	59
Pest Management	148	74
Agricultural Product Processing	108	54
Farming Technique	170	85
Pesticide	148	74
Others	4	2

Table 4: Type of information needed by urban farmers.

Types of Information	Respondents	
	No.	%
General Information	100	50
Marketing	108	54
Agricultural Innovation	160	80
Pest Management	144	72
Farming Technique	156	78
Others	14	7

Table 5: Level of farming problem in which solving by media

Scale	No.	%
Very strongly	66	33
Strongly	60	30
Neutral	60	30
Weak	8	4
Very weak	0	0
Nothing	6	3

The respondents were asked to describe the level of the benefits they derived from using the agricultural information they obtained. Table 6 indicates that among the respondents there were 50% mentioned that they got satisfied from the media, followed by 35%, 13% and 2% of Highly satisfied, Moderately satisfied and Not satisfied level, respectively. Similarly, slightly over half of the respondents derived partial satisfaction (50.6%) as compared to 49.4% of the respondents who reported full satisfaction (Helen, 2010), but negate the findings of Akanda (2012) found that almost half of the respondents (46.9%) derived not much benefit from media (Akanda, 2012). The farmers were asked about the information credibility on media which are presented in table 7. The results clearly indicate that a large percentage of respondents (78%) mentioned that they have credibility on information on media, followed by very credibility (20%) and less credibility (2%). The finding was in line with Suresh (2011) mentioned that farmers' attitude towards searching for information via media that had credibility level (Suresh Chandra Babu, 2011). The respondents were asked to describe that is there enough agricultural

information available on media. The results showed in Table 8 reveals that 43% of respondents mentioned that there is not enough agricultural information available on media, followed by 35% mentioned that there is neutral agricultural information available on media. However, 22% mentioned that there is enough agricultural information available on media.

Table 6 : Level of the satisfaction in terms of getting agricultural information from media

Scale	No.	%
Highly satisfied	70	35
Satisfied	100	50
Moderately satisfied	26	13
Satisfied to some extent	0	0
Not satisfied	4	2
Highly not satisfied	0	0

Table 7 : Level of the credibility of Information from media

Scale	No.	%
Very credibility	40	20
Credibility	156	78
Less credibility	4	2
Unreliable	0	0

Table 8 : Level of Agricultural content on media

Scale	No.	%
Enough	44	22
Neutral	70	35
Not enough	86	43

DISCUSSION

The study provides an understanding on media use and information needs of urban farmer among the farmers who living along in Bangkok, Nakhon Pathom, Pathum Thani, Nonthaburi, Samut Prakan and Samut Sakhon.

Base on the results demonstrated, the result reveals that respondents actually used more than one source to meet their agricultural information needs. The data shown that internet (93%) was used as sources by most of farmers followed

by television 74%, Book 61%, magazine 52%, Radio and newspaper were reported by 41% and 39%, respectively. But the extension agents were the second lowest (15%) among the information sources of the farmers followed by others information sources (NGOs, follow farmers, etc.) was mentioned as 15%. One of the reasons that might contribute to this is that the frequency and quality of mass media that occur between urban farmer and mass media such as television, radio, magazine, newspaper, internet, extension agents and book, there is some exists between these groups enables the agricultural information sharing. Another reason might be the time flexibility of media such as radio and television can be high meaning that the time of receiving can be adjusted to the preferences of farmers. Mass media also can often be consulted whenever people choose, while the timing of radio and television broadcasting can, in principle, be tuned to the working schedule of farmers. In addition, print media such as book, magazine and newspaper offer the opportunity for farmers to store the message, and receive it again whenever they wish.

Furthermore, the data shown that 93% of respondents were solving their farming problem with the information through the media and 85% of respondents also acknowledged that media has been of satisfied to them in one way or the other (50% got satisfied and 35% got highly satisfied). In addition, the results clearly indicate that a large percentage of respondents (78%) mentioned that they have credibility on information on media.

That mean mass media always becomes the main providers of agricultural information due to the credibility, reliability and most of all mass media are trusted by urban farmer. Considering the relative percentages, it suggests that mass media have more potentials as a source of getting improved practices or innovations to farmers. This also means which the relative agricultural information needs what farmers

finding or seeking percentage of each source can solving farmers framing problem.

The study also shown that the most information that respondents got from the media was farming technique followed by pest management, pesticide, general information, marketing, agricultural product processing, respectively. On the other hand, the results also shown that most of respondents affirmed that agricultural innovation was the majority of information need, farming technique, pest management, marketing and general information, respectively. The indication was that urban farmers' information needs were as varied as the variety of their farming enterprises, activities or tasks. However, the findings of this study indicate that it may be possible to identify significant groups of urban farmers who share common information needs. Therefore, the dissemination of agricultural information should be based on the different urban farmers' enterprise groups and those groups' information needs.

However, respondents studies seem not receiving much agricultural information from media as the respondents mentioned there is not enough agricultural information on media when they were asked to describe that is there enough agricultural information available on media or not (43% mentioned that there is not enough, 35% mentioned that there is neutral and only 22% mentioned that there is enough agricultural information on media). This suggests that more agricultural information should be broadcast through mass media; it would increase adoption and utilization of farmers.

CONCLUSIONS

In an information era, information is a vital resource for all socio-economic activities and there have no such a field of human endeavor wherein information is not component. The results of the present study infer a clear fact that the farmers

in urban area especially in Bangkok metropolitan region area need a various types of information of farming and they use a various sources and media for access to agricultural information. Their highest information needs in the area of agriculture innovation, farming technique and pest management, respectively. On the other hand, highest information that they got from media were Farming technique, pest management and pesticide's advertisement. The most used of media for agricultural information was print media got 3rd position after followed internet and television. There clearly is most of respondents were solving their problem by the information through media and get Agricultural information satisfaction from the media. The information on media also was trusted by farmers at the level of credibility. But there is not enough Agricultural information available in media. So, there is a need for stakeholders to lay more emphasis on sustainable practice and also disseminate information to farmers and address their needs properly.

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