Asian Social Science; Vol. 8, No. 12; 2012
ISSN 1911-2017 E-ISSN 1911-2025
Published by Canadian Center of Science and Education

The Credibility of Television in Disseminating Agricultural Information to Farmers in Malaysia

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Received: May 18, 2012 Accepted: June 15, 2012 Online Published: September 20, 2012

doi:10.5539/ass.v8n12p133 URL: http://dx.doi.org/10.5539/ass.v8n12p133

The research is financed by Research University Grant Scheme (Scheme 2) sponsored by Universiti Putra Malaysia.

Abstract

Agriculture and television are two different things that can be combined in many ways. Television has been utilized to further intensify agricultural development in Malaysia. This study attempts to discover the credibility of television when disseminating agricultural information to Malaysian farmers. A total of 400 farmers from four states in Malaysia were chosen as the respondents in this study. It was found that farmers view television as a credible source for disseminating clear and understandable agricultural information. In addition, it was considered credible due to its ability to provide up-to-date, unbiased and factual agricultural information. However, television is seen as less credible in terms of providing information at the right time, and is unable to provide all the necessary information.

Keywords: television, credibility, agricultural development, farmers' development, flow of information

1. Introduction

This paper attempts to explore the credibility of television in terms of disseminating agricultural programmes to its target audience – farmers. Through this study, it is expected that aspects of credibility that should be taken into serious consideration will be identified, while a number of recommendations and suggestions are highlighted to further enhance the credibility of television in disseminating agricultural information.

1.1 Agriculture in Malaysia

Since Malaysia gained its independence, agriculture in the country has continuously flourished. In each Malaysian Plan (MP), agriculture has been used as an effective tool to combat poverty and enhance communities' socioeconomic levels. In the Ninth Malaysia Plan (9MP), for example, agriculture was placed third in terms of income generation for the country. In addition, the government has put their focus on New Agriculture, which will include large-scale commercial farming, the involvement of modern technology, the production of high quality and value-added products, the potential of biotechnology, harmonious unity between information and communications technology (ICT), and the involvement of entrepreneurial farmers and a skilled workforce.

A total of 20% of the land in Malaysia has been declared agricultural land. A big portion of this is being planted with industrial crops such as palm oil, rubber, tobacco and pepper. In addition, 16% of agricultural land in Malaysia is planted with rice, fruits, vegetables and coconuts. Agriculture in Malaysia is grouped into two areas: the estate sub-sector (40.5 ha and above of land) and the smallholder sub-sector (1.45 ha land, usually owned by an individual) (DOA, 2009). Malaysia has launched a number of high-impact agricultural projects, such as

Agropolitan, Zone Industrial Aquaculture (ZIA) and contract farming schemes, which are projected to further increase agricultural productivity and aid in safeguarding the food security of the nation. Within the scope of the agricultural industry, commodity agriculture such as palm oil and rubber have been steadily contributing towards the nation's income due to increasing demand from both local and international markets. Moreover, the stable and increasing prices of both commodities have greatly assisted in increasing the nation's income.

Notably, agriculture has been an effective problem solver for employment issues in Malaysia. In 2004, for example, there were 1,232,839 farmers in Malaysia, of which 36% came from smallholding farmers, followed by paddy farmers (26%). In addition, during the same period, there were more than 90,000 registered fishermen. Nonetheless, this industry is facing inadequate backup from the younger generation; the DOA (2009) has stated that 45% of farmers in Malaysia are aged over 55, while Hassan et al. (2010), Shaffril et al (2011) and Samah et al. (2011) have proven that the average age of farmers in Malaysia exceeds 40 years old. It is likely that the main reason why agriculture in Malaysia is still considered an unattractive job among young people is due to their negative attitude towards it (Norsida, 2008 and Samah et al., 2010).

1.2 Television in Malaysia and Agricultural Television Programmes

In Malaysia, television services began in 1963, with TV1 as the first channel. Six years later a second channel, known as TV2, was established. Both channels were operated from the historic building of Angkasapuri, and the building is still in use today. Both TV1 and TV2 are operated by a government agency known as Radio Television Malaysia (RTM). The evolution of the media in Malaysia was hastened by the establishment of the first private television channel, namely TV3, in 1984. TV3 is owned by Media Prima, a leading media company in Malaysia. Subsequently, the success of TV3 stimulated Media Prima to establish three more television channels, namely 8TV (2004), NTV7 (2005) and TV9 (2006).

Television has been widely used by the agricultural agencies, particularly for their extension programme. The power of disseminating information by television is undeniable. Moreover, the low social and economic cost of programmes aired on television means that they can be heard and seen by millions of farmers across the country. Since early 1970, concerned parties such as RTM have exploited television to disseminate agricultural information to local farmers, and the medium became even more attractive after the development of colour television. Although important roles are played by RTM, however, contributions of other channels, such as TV3 and NTV7, cannot be denied. In addition, related agricultural parties have started to collaborate with television stations to produce quality and factual agricultural programmes. Programmes such as *Agro Xplorasi* for example, are collaborations between the DOA and TV3. There have been a number of other well-known agricultural programmes over the years; for instance, *Agro Asian, Agro Asean, Seed, Erajaya, Fajar Bakti* and *Sinar Pembangunan*. Currently, the success of such programmes is sustained by the production of new programmes such as *Agro Tech, Agro Journal, Our Earth, Panorama, Flowers* and *Slices Herbs*. Certainly, the aim of such programmes is to disseminate and share information, and thus educate the community – particularly farmers – in relation to agriculture.

Agricultural productivity can be doubtlessly augmented by relevant, reliable and useful information and knowledge. Indeed, information and knowledge are crucial for farmers, who need both for their intellectual development. Farmers who take a conservative approach towards traditional farming methods require information that remunerates their level of reasoning and eventually exposes them to new ideas. In addition, relevant information is vital in assisting farmers' decision-making processes and consequently, having such information will aid them to cope with their daily routine. According to Irivwieri (2007), there are four types of information that are typically needed by farmers: technical and scientific information, commercial information, social and cultural information and legal information while Elizabeth (2007) and Okwu and Umoru (2009) have emphasized that farmers basically need information germane to weather, soil management, access to credit, farm management, improved seedlings, fertilizer and insecticides, animal health, future market prices, land tenure, child immunization, and vaccination for animals. This information must be made readily available, and television can play a huge part in this.

1.3 Television Credibility in Malaysia

Credibility can be simply understood as "believable". For instance, credible leaders can be understood as believable leaders, and credible information can be understood as believable information (Fogg et al. 2001). Two aspects are highlighted in constructing credibility; one is trustworthiness, and another is expertise. Within the context of these two aspects, sources which are truthful and unbiased are typically trusted and perceived as credible by the receiver. Similarly, sources from knowledgeable, skilful and competent people are also considered credible (Fogg et al. 2001; Opara, 2008 and Obidike, 2011).

A number of factors contribute towards developing the credibility of television. Fogg et al. (2001), for instance, highlighted a number of crucial aspects for creating high credibility, and these can certainly be applied to agricultural television programming. First, the programmes aired must be easy to understand. Simple and effective presentation can ease the process of receiving the information, while avoiding scientific words and jargon are expected to assist viewers. In addition, experts and professionals must be incorporated into the programmes, since they are able to minimize the risk of pitfalls which could undermine the programme. Trustworthiness is credibility dynamic, since trustworthy and unbiased information is typically valued by viewers. Tailoring other people experiences within the program can enhance the credibility where normally to convey live experience of other people will construct the element of trustworthiness and eventually it leads to perceived credibility towards the programmes among the viewers. In addition, Fogg et al. (2001) suggest that it is crucial to avoid any overtly commercial elements when airing programmes. Consequently, too many commercials will create a negative response among viewers.

In a study conducted by Dangi et al. (2004), it was found that farmers have acknowledged television as one of most credible sources of information which allows them to acquire novel skills and knowledge. Opara (2008) highlights the credibility of interpersonal sources such as extension agents, family members and colleagues in delivering agricultural information; however, while farmers do have a high reliance on such sources, television is still regarded as relevant to them, particularly based on the fact that the content being aired can be seen, heard and easily understood. Correspondingly, Hassan et al. (2011) discovered that family members, friends, television and newspapers are among the most preferred and trusted sources of information among rural dwellers, due to the fact that such sources can be easily and frequently accessed.

2. Methodology

A total of 400 respondents were randomly selected for this study. Each of these took part in a survey which was in the form of a structured questionnaire. The respondents were selected through simple random sampling, and represented four states in Malaysia, namely Kedah (100 respondents), Pahang (100 respondents), Negeri Sembilan (100 respondents) and Selangor (100 respondents). The selected respondents were farmers who lived within an area or location in which agricultural projects have been carried out. The answers in the questionnaire were based on a five-point Likert scale, with questions pertaining to the 1) importance of information [from less important (1) to extremely important (5)]; 2) frequency of viewing agricultural programmes [from never (1) to very often (5)] and 3) the credibility of television with respect to disseminating agricultural television programmes [from 1 (strongly disagree (1) to strongly agree (5)]. Only four agricultural programmes were included in this study, namely *Agro Tech, Agro Journal, Our Earth* and *Agro Xplorasi,* mainly because these were the only programmes that were being actively aired on television during the data collection process. A number of experienced and trained enumerators were hired to conduct the data collection process. Data were analyzed using SPSS, and relevant analyses were employed.

3. Results

3.1 Respondents' Background

Of the 400 respondents, the majority were male, and aged 46 to 50, while 17.5% were below 30 years of age. The mean of 47.71 years of age depicts that the majority of respondents are "senior" farmers, and this is in line with the existing situation in Malaysia, since the majority of local studies have proved that "senior" farmers dominate the agricultural industry (Hassan et al., 2010 and Shaffril et al., 2011). Less than a quarter of the respondents possessed six or more children. Based on the data obtained, the respondents have an average of 19.96 years' experience in agriculture and, remarkably, 18.8% have more than 31 years' experience. Notwithstanding, some of the respondents (25.1%) were also identified as "junior" farmers, based on their one to five years' experience. It is likely that some of them still practise traditional agriculture, based on the fact that they do not rely on any machinery to run their agricultural activities. Nonetheless, a total of 34.8% rely wholly on machinery, while another 38.8% rely on the use of some machinery. Significantly, more respondents possess SPM/SPMV (SPM/SPMV Refers to Malaysia Higher/Vocational Education Certificate) certificates (32.8%) compared to those with non-formal education (1.3%). The majority of the respondents earned between RM500 to RM1000 (RM refers to Ringgit Malaysia which is the currency for Malaysia) per month (roughly between USD 165 to USD 333) (37.7%). A total of 60.3% were members of an agriculture organization or association. In addition, more than one-third (38.8%) have jobs other than agriculture.

3.2 The Importance of Agriculture Information

Table 1 illustrates the importance of seven types of information, according to the respondents. Drawing on the data depicted, issues related to safety and weather are two of the most important forms of information, while fish

and dairy are considered least important according to the respondents. Safety information within this study is considered as safety from pests, diseases and natural disasters. It is not surprising that information pertaining to safety is regarded as the most important, as neglecting such information could result in huge losses of investment.

Table 1. Importance of agricultural information

	Less Important (1)	2	3	4	Extremely important (5)	Mean
Type of information						
Safety	1.0	1.8	4.7	21.0	71.5	4.60
Weather	2.8	3.0	7.5	25.3	61.5	4.40
Crops	4.3	2.0	6.5	31.0	56.3	4.33
Marketing	13.0	8.0	16.0	26.0	37.0	3.66
Livestock	48.3	8.0	11.8	18.3	13.8	2.41
Fish	53.3	6.2	12.3	15.2	13.0	2.29
Dairy	58.5	7.8	11.0	13.8	9.0	2.07

Information on weather is also incredibly important. Weather information, particularly with respect to the short- and moderate-term, will assist farmers in planning suitable periods and durations in which to conduct their work. Local research carried out by Kwan et al. (2011), Tanggang (2007), Subramaniam (2011) and Wan Azli (2010) indicated that weather patterns in Malaysia are unstable, and providing weather-related information to farmers is seen as an essential step.

3.3 Pattern of Viewing on Agriculture Television Program

Based on the analysis performed, Agro Tech was found to record the highest mean score in terms popularity, and thus reflected that majority of the interviewees rely on this programme to gain their agricultural information. *Agro Journal* was the second most-viewed agricultural programme, followed by *Our Earth* and *Agro Xplorasi* (Table 2).

Table 2. Viewing frequency of the agricultural programmes aired on television

Name of agricultural programme	Never(1)	Rarely(2)	Sometimes(3)	Often(4)	Very often(5)	Mean
Agro Tech	1.3	22.1	36.7	35.2	4.8	3.20
Agro Journal	14.1	27.1	33.4	23.6	1.8	2.72
Our Earth	51.0	21.9	16.3	10.1	0.8	1.88
Agro Xplorasi	66.1	13.1	12.1	8.3	0.5	1.64

In terms of viewing time, the majority preferred to watch programmes between 6.00 pm to 12.00 pm, which is unsurprising as most of the programmes are aired between these periods. In addition, the majority of the farmers have completed their daily routines on the farm by this point, and are already at home. More than two-thirds of the interviewees view the agricultural programmes for more than 30 minutes a week, revealing that they view more than one agricultural programme a week. The mean score recorded for viewing time was 35 minutes (Table 3).

Table 3. Viewing time and duration with respect to agricultural programmes aired on television

Factors	Frequency	Percentage	Mean
Viewing time			
7.00 am – 12.00 pm	10	2.5	
12.00 pm – 6.00 pm	30	7.5	
6.00 pm – 12 am	358	90.0	
Viewing duration (minutes)			35.0
<30	127	32.6	
≥30	269	67.4	

3.4 Credibility of Television

As depicted in Table 4, according to the interviewees, television is most credible source for providing clear and understandable agricultural information, but does not deliver agricultural programmes at the right time. In

addition, it should be taken into serious consideration that the interviewees see television as less credible than other sources based on the fact that agricultural programmes are unable to cover all the necessary aspects. Notwithstanding, the interviewees agreed that television has high credibility in terms of airing up-to-date, unbiased and factual agricultural programmes.

Table 4. Credibility of television in terms of agricultural programmes

Statements	Strongly disagree (1)	Disagree (2)	Somewhat agree (3)	Agree (4)	Strongly agree (5)	Mean
Content aired on agricultural television programmes is clear and understandable	-	2.0	14.1	48.0	35.9	4.18
Content aired on agricultural television programmes is up-to-date	0.3	3.8	16.1	42.7	37.2	4.13
Content aired on agricultural television programmes is unbiased	1.0	4.0	15.6	49.2	30.2	4.04
Content aired on agricultural television programmes is factual	-	2.3	15.1	59.3	23.4	4.04
Content aired on agricultural television programmes is exact	-	2.0	19.6	54.8	23.6	4.00
Content aired on agricultural television programmes covers all necessary aspects	0.5	9.3	25.1	38.7	26.4	3.81
Content aired on agricultural television programmes is aired at the right time	1.0	14.8	26.4	35.7	22.1	3.63

4. Discussion

From the results of this study, it can be seen that television is the most credible source for delivering agricultural information which is clear, understandable and up-to-date. There are a number of reasons that can be attributed to this: first, a simple explanation of new agricultural products, techniques and issues will aid farmers in understanding them. A number of effective methods have been applied by these programmes to deliver simple explanations that are direct and to the point, use local language, and avoid scientific words. As stressed by Irivwieri (2007), farmers will face problems in processing information if it involves too many scientific ideas and jargon. Additionally, hiring an experienced presenter to host the programme can assist in delivering simple explanations, as in the case of programmes such as *Agro Journal* and *Agro Xplorasi*.

Comparatively, television is considered less credible in terms of delivering agricultural information at the right time, and it is seen as being unable to provide all of the agricultural information needed. Based on the data revealed, it can be concluded that the majority of the interviewees view these television programmes between 6.00 pm and 12.00 pm. Nonetheless, they argued that the information is not aired at the right time. Typically, farmers expressed their desire to view the programmes at night, and this is probably why they consider television to be less credible in terms of providing agricultural information at the right time. Drawing on a study by Hassan et al. (2010), generally, farmers in Malaysia prefer agriculture programmes to be aired in the evening (between 5.00 pm and 7.00 pm), nonetheless, it should be taken into account that the number of viewers of television agricultural programmes drastically increase when such programmes are aired during primetime (between 9.00 pm and 10.00 pm), hence highlighting the suitability of airing the programmes at this time.

It is unsurprising that programmes such as *Agro Tech* and *Agro Journal* are watched most by the farmers. These programmes probably have a higher level of credibility in terms of delivering agricultural information that is clear and understandable, up-to-date, unbiased and factual. Typically, *Agro Tech* conveys information related to new and updated technologies, products and techniques. Comparatively, *Agro Journal* emphasizes recent issues that are relevant to the local agricultural industry (Hassan et al., 2010). Both of these programmes are aired in the local language, which assists the local farmers in receiving and understanding the information. Another possible reason why farmers choose to watch both programmes is that RTM is very well known for its efforts to air the best television programmes for the agricultural community. This has been the case since the 1970s, when a number of famous and well-known programmes such *Agro Asian, Fajar Harapan, Usahajaya, Fajar di Bumi*

Permata and *Erajaya* were watched by millions of viewers (Hassan et al., 2009). A programme produced by leading television channel TV3 (*Agro-Xplorasi*), was less preferred by farmers, probably due to the channel's strong links with entertainment-based programmes, rather than those with an agricultural focus.

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