

**STAKEHOLDERS' REACTIONS TO THE 'WHITEBOARD' TIMBER  
INFORMATION SYSTEM: INSIGHTS FOR LINKING SMALLHOLDER  
TREE FARMERS TO THE MARKET**

**MARIA ANABELLE D. GERONA, ROTACIO S. GRAVOSO;  
ARTURO E. PASA AND EDUARDO O. MANGAOANG**  
Visayas State University, Visca, Baybay, Leyte

**ABSTRACT**

Two whiteboards were installed at the office of the Community Environment and Natural Resources Office (CENRO) in Maasin City, Southern Leyte, as a tool for improving the flow of timber marketing information. The boards contain list of registered tree plantations, including their location and the estimated volume at harvest and list of buyers in the locality. Focus group discussions with timber dealers, agricultural technologists, and CENRO personnel indicated the potentials of the whiteboards for improving timber information flow. It established a link between farmers and buyers, and farmers are encouraged to register their trees so that their names would appear in the list. Buyers, on the other hand, are able to locate the farmers and the tree species they have available. According to the extension workers, the whiteboards made the monitoring of tree farms easy. Considering the utility of the information contained in the whiteboard, farmers suggested that each barangay be provided with the same list on bond paper. Alternative means suggested to improve dissemination of timber marketing information is through the local radio station, local cable television channel, newspapers, and through the extension workers.

**KEY WORDS:** *Timber marketing. Marketing information. Information flow. Tree farmers. Leyte*

## INTRODUCTION

As in other developing countries, there is widespread difficulty in timber marketing in the Philippines. This problem could be attributed to the lack of regular markets and *ad hoc* sales that give rise to lack of information about how to market timber (Harrison et al, 2001). In Leyte Island, Cedamon et al. (2007) observed that the lack of information about timber availability, quality, market outlets and fair prices creates problems for both tree growers and buyers: there is confusion about where to sell farm-grown timber and about the processes which to be followed in obtaining permits to harvest and transport timber.

To solve problems like this, experts have suggested the need for a marketing information system (MIS). According to Umali-Deininger (undated), market information keeps farmers and traders attuned to the demands and changing preferences of consumers, guiding farming, marketing, and investing. Market information encompasses timely and accurate prices, buyer contacts, distribution channels, buyer and producer trends, import regulations, competitor profiles, grade and standards specifications, postharvest handling advice, and storage and transport recommendations.

As a step to link smallholder tree farmers to the market, the ASEM/2003/052 *Improving Financial Returns of Smallholder Tree Farmers in the Philippines* pilot-tested the use of a 'Whiteboard' Timber Information System to disseminate timber information. Implemented in coordination with the Community Environment and Natural Resources Office (CENRO) in Maasin City, the system included two whiteboards installed in 2005 in front of CENRO office. The boards were designed as an information dissemination tool to whoever may be interested in timber marketing. One whiteboard contained information on registered tree farms in the various barangays

within Maasin City, and the other contained a list of buyers. Each board measures 4 feet by 8 feet (1.2 m x 2.4 m). One of the boards contained a list of about 160 registered tree plantations including the name of the owner, location of plantation, species planted and estimates of merchantable volume for some plantations.

This paper reports on the results of the evaluation of the Maasin CENRO whiteboards. Results are intended to be used in improving the timber marketing information flow between tree farmers and timber buyers. According to McKee et al. (2004), evaluation can greatly enhance the effectiveness of communication materials and tools to cater for the information needs of the intended recipients. Particularly, testing communication materials among members of the intended audience for comprehension, aesthetic appeal, cultural acceptability and related factors will enable decision makers to benefit to the full extent from the communication they have initiated.

## METHODOLOGY

This study was conducted to evaluate the utility of the whiteboard as a timber market information tool. Data were gathered through a series of focus group discussion (FGDs). The series consisted of three FGDs, one each for timber dealers, representatives from CENRO Maasin, extension agents<sup>1</sup> from the Maasin City Agricultural Office and tree farmers. These FGDs were conducted at the CENRO Office (where the whiteboards were displayed). This was done for the participants to immediately examine the boards when asked to comment on them.

---

<sup>1</sup> *The FGD with the extension agents focused on possibility of integrating timber market information into their extension activities.*

Each FGD consisted of eight to ten participants who were contacted by an officer of Maasin-CENRO. In the FGDs, participants were asked to make comments on the utility of the whiteboard and to suggest alternative ways to hasten information dissemination on timber. The FGDs lasted for about one-and-a-half hours.

Two secretaries recorded the proceedings of the discussion, one recording the discussions in a notebook and the other writing highlights of the discussion on a large Manila sheet placed in front of participants. Before concluding the FGD, the issues discussed and recorded by the secretaries were summarized, and highlights were recorded on Manila paper. In general, participants actively contributed ideas. The FGDs were terminated when the researchers noted that no new information was emerging from the discussions.

## EVALUATION RESULTS

### **Aesthetic appeal of the whiteboard**

FGD participants were asked to evaluate the whiteboard in terms of its aesthetic appeal, particularly on its visibility, attractiveness, readability and comprehensibility, and completeness of information provided. The main assessment points made are summarized in Table 1.

In terms of visibility, participants said that the boards are hidden from view. In fact, they said that they only got to notice the boards lately. Others said that they only noticed when a CENRO officer pointed it out. They stressed that to address this weakness, they suggested to put the boards where they can readily be seen, even the passers-by.

Attractiveness refers to the whiteboards' ability to attract and hold attention as an information delivery material. Participants declared that the whiteboard is noticeable from afar. It could catch attention because it is white and contains information about timber marketing that particularly concerns buyers because they need such information. The handwriting was neat and legible.

Table 1. Participants' assessment on the aesthetic appeal of the whiteboard

Criterion	Participants' assessment
Visibility of the board	Hidden from view
Attractiveness	Noticeable from afar Eye-catching Format is confusing
Readability	Handwriting size is too small; difficult to read especially those with visual impairment
Comprehensibility and completeness of information provided	Information is presented in English Information provided is lacking Names of farmers listed is not in alphabetical order Names of farmers in the list is not updated . Lot number is not given Does not provide any information on buyers

When participants were asked when they began to notice the whiteboard, the farmers group said that they noticed it just recently after a few visits at the CENRO office. The buyers said that they noticed it when they asked at the

CENRO office for information about where they can buy trees and the personnel referred them to the list of registered tree farmers on the whiteboard. Some participants, however, complained that the format is confusing.

As for the readability, participants said that the handwriting size is too small. They stressed that for farmers and buyers who already are visually impaired like them, the information provided on the whiteboards is not highly readable.

Participants also gave reactions in relation to the comprehensibility and completeness of the information provided on the whiteboards. In terms of comprehensibility, they said that the use of English makes the information difficult to understand. Thus, they recommended that the information already given be translated to Cebuano, the dialect of the local language of the people, to hasten understanding.

Participants also said that the effectiveness of the whiteboard has been limited by the following: 1) lack of lot number of the plantation for the buyers to easily locate them, 2) list is not alphabetically, and 3) lack of information on the buyers.

### **Usefulness of the whiteboard**

The participants were asked about the benefits they have observed after the whiteboard was set up. The main reactions are summarized in Table 2. They claimed that the whiteboard is an effective vehicle for information delivery.

Table 2. Assessment on the usefulness of the whiteboard

Perceived Usefulness	Description	Benefit Experienced By		
		Tree Farmers	Timber Dealers	CENRO Staff
The whiteboards served as medium for information delivery	Good vehicle for information delivery; it aids in locating tree plantations and buyers	+	+	+
Helpful in village officials' policing functions	Provides information on farmers with registered trees (those who are not in the list and cut trees may be cutting trees)	+	+	+
	Encourage other farmers to register their trees to avoid reprimanded	+		+
Ability to link tree farmers to market	Establishes link between farmers and buyers	+	+	+
	Buyers are able to locate the farmers and the tree species they have available		+	
Economic benefits	Fast-tracks the marketing of timber	+	+	+
	Minimize the use of middlemen	+	+	+
	Serves as guide to regulate prices of timber	+	+	+
Monitoring of tree farms	Monitoring of tree farms and species planted is maximized			+
	Facilitate data retrieval			+

Through it, buyers were able to locate where the tree plantations are, where the farmers are and the tree species available on the farms. Therefore, the whiteboard was able to establish a link between the farmers and buyers.

Participants also said that the whiteboard also help them in their policing functions in the barangay. According to a farmer who is also a barangay (village) official (locally known as barangay kagawad), the board provides them with information on who among the farmers in the communities registered their trees. This means that if a resident cuts trees and his name is not in this list, chances are he is cutting illegally', he said.

The whiteboards also encouraged other farmers to follow those who are already in the list. 'If time comes for us to harvest our trees and our names aren't in the list yet, our barangay officials will surely reprimand us. To avoid that, we had to register our tree farms', a farmer said. This comment has been corroborated by the report of CENRO officers who said that since the time of the inception of the boards, they have noticed a gradual increase in the number of farmers who registered their trees.

The FGD participants also reported that use of the whiteboards related to their ability to link farmers to the market. Accordingly, the list has provided buyers information as to from whom they could buy timber. On the part of the farmers, the list of buyers also guided them on who to approach when they were about to sell their timber.

Worth noting was the comment from the buyers. According to them, the whiteboards helped them detect whether or not the timber is legally sold. They said that they do not buy timber from farmers who are not in the list because it means that their trees have not been registered.



In terms of the economic benefits derived from setting up the whiteboards, the participants observed that the whiteboards are able to fast-track the marketing of timber because a link between the farmers and buyers has been established. Therefore, the use of middlemen who unnecessarily inflate prices of timber, has been avoided. According to them, this scheme has benefited the farmers most because they can command a higher price for their timber. The buyers also are able to negotiate for favorable deals with the farmers directly.

The CENRO personnel reported that the whiteboard has become especially useful to them for monitoring purposes and in providing technical assistance to farmers whenever needed.

Since the whiteboard provides a list of farmers with registered trees, the buyers claimed that they are able to compare prices of timber among farmers. This enabled them to get the best offer in the transactions they make. Thus, indirectly, as observed by the CENRO personnel, the whiteboard is able to serve as guide to regulate prices of timber.

An important comment from the CENRO personnel was that, with the whiteboards, they do not anymore have to search their database every time particular information is needed because basic information related to timber marketing is provided on the whiteboard. Before the whiteboard was installed, CENRO personnel still needed to search through the pages of their files for information about tree farmers in their jurisdiction whenever a buyer asked for information. When basic information related to timber marketing in the database was transferred to the whiteboards, locating the tree farmers became easy.

**Suggestions to improve the whiteboards**

Table 3 shows the participants' suggestions to improve the whiteboards as an information delivery tool. Foremost of their suggestions is to transfer the whiteboards to another location where people can readily see them. The font size must be increased to make the boards more readable from a distance. Also, they suggested that the format be simplified to avoid confusion.

Table 3. Suggestions to improve the whiteboard

Criterion	Suggestions
Visibility	Whiteboards should be transferred to another location where people can readily see them  Font size should be increased  Format should be simplified to avoid confusion
Comprehensibility and completeness of information provided	List should include buyers and their contact numbers. The list (of tree farmers) should be in alphabetical order.  Information on the boards should be updated regularly  Addresses (lot number) should be included for easy location of the farmers  Information provided should be in the local dialect  Information on tree farmers should include name, address, location of plantation, species, volume of harvest, number of trees and age of trees

As regards comprehensibility and completeness of information presented, participants suggested that the information be translated to Cebuano, the dialect of its intended audience. They also suggested that a listing of the buyers and their contact number be included in the whiteboard. All entries should be in alphabetical order and be updated regularly. Addresses and specifically the lot number should be included for easy location of farmers.

### **Suggested means to enhance information delivery on timber marketing**

Recognizing the importance of linking the farmers to buyers, the participants were also asked for suggestions about other ways that information delivery on timber marketing can be enhanced. The farmers suggested that radio could serve as potent medium to deliver timber marketing information. They claimed that most of them listen to radio.

When asked for stations where information related to timber can be broadcast, participants mentioned DYSL and DYDM<sup>2</sup>, which are based in the municipality of Sogod and Maasin City, respectively. The former is a government-radio station, while the latter is a private commercial radio station operated by the Diocese of Maasin.

Other suggestion is the use of local newspapers. However, farmers pointed out that in their case, being located in the rural areas, newspapers reach them so late. One farmer reported that he only gets to hold a newspaper when it is used as a wrapping material when they buy something from the market.

---

<sup>2</sup> *DY are the letter codes for radio stations in the Visayas; SL stands for Southern Leyte and DM means Diocese of Maasin.*

Some timber dealers suggested the use of local cable television. However, others in the group said that local cable television serves only the city. So, farmers can be reached with the information. Thus, they suggested that the information presented on the whiteboard be printed on paper and distributed to the various barangays regularly, which would be less expensive than the whiteboard. This way farmers and buyers will just go to their respective barangay halls when they need timber marketing information. CENRO personnel favored this suggestion because according to them, maintaining the whiteboard is tedious and time-consuming. They also suggested to hold a seminar to bring together farmers and buyers and discuss issues related to timber marketing. CENRO.

A more strategic means of disseminating timber information suggested by farmers are the extension agents. On their part, the extension agents agreed that information related to timber marketing can be a part of their extension activities. They said that the print outs of the list may be sent to them so they could post these on the bulletin boards in the each barangay. The ATs reported that each of them is assigned to cover about five to seven barangays. So, almost everyday, they are in the field.

However, the extension agents admitted that they lack technical know-how when it comes to issues on forestry in general and timber marketing in particular. So, they suggested that once this becomes a part of their functions, they be oriented first for them to gain proper understanding of the new task.

## IMPLICATIONS

Despite emphasis of marketing of farm products, less is done in linking smallholder tree growers to the market. The use of the whiteboard timber

information system has been an attempt to bridge this gap. In the Leyte Island context where resources are limited, the use of the low-cost media like the whiteboard was justifiable.

The findings of this study consistently underscore the fact that even the use of a low-cost information system can serve the purpose of improving the timber marketing information flow. In fact, beyond serving as a channel for timber information delivery, the whiteboards helped in the policing function of the villages and helped farmers avail of fair prices of their timber, and assisted the CENRO personnel in their monitoring function. Also, the whiteboards have served as an important monitoring system where farmers who have not registered their trees are encouraged to have their names also on the list for potential buyers to locate them easily, as experienced by the farmers who already have their names posted in the tree farmer whiteboard. To some extent, it is a status symbol for a farmer to have their name on the list with registered trees posted in the whiteboard.

Although the whiteboards could, in general, be judged as a potential medium for timber marketing information, other low-cost means for information dissemination warrant consideration. Respondents in this study have suggested a number of these strategies, indicating the need to use the multi-media approach to communication market information. Rogers (2004) explained that the use of multi-media approach to communication enables project implementers to reach a wider audience. According to him, when communication of information is confined only to a single medium like the interpersonal means of communication, chances are only farmers who are economically well-off, have attained higher education, and those accessible to transportation and communication could avail of the information.

One strategy worth exploring is to work with the extension workers. However, to prepare them for this job, there is a need for an orientation because for so long, extension workers as they have admitted, have not been performing tasks related to trees and forestry. Tapping the services of the ATs promises a lot of potentials for two reasons: agriculture and environment are inter-related, and government resources are dwindling.

Overall, this study reveals that putting up a low-cost timber market information system can be helpful in linking smallholder tree farmers to the buyers. It is, therefore, suggested similar systems be established in other areas of the country. The campaign for tree farming will surely be boosted if tree growers enjoy a fair market of their produce. An efficient market information system could help achieve this goal.

More studies maybe conducted to verify the findings of this study. In future studies, it is suggested that the most significant change (MSC) technique (Davies 1988; Dart 1999). The use of the MSC technique to find the impacts of a project like a market information system is deemed appropriate because, it can identify unexpected changes or impacts. As shown in the present study, the timber market information system has created a variety of effects.

### LITERATURE CITED

- CEDAMON, E., HARRISON, S. and HERBOHN, J.** 2007. Timber market information on Leyte Island, the Philippines. *Annals of Tropical Research* 29(3),61-72.

- CEDAMON, J., CEDAMON, E., HARRISON, S., GREBORIO, N. MANGAOANG, E. and HERBOHN , J.** 2007. Survey of timber entrepreneurs in Region 8 and Cebu, the Philippines: Preliminary findings. In: S. Harrison, A. Bosch, and J. Herbohn (Eds.), *Improving the triple bottom line returns from small-scale forestry: Proceedings of EUFRO 3.08 Conference* (pp.17-21 June 2007, Ormoc City: Philippines).
- DAVIES, R.** 1998. *Order and Diversity: Representing and assisting organizational learning in non-government aid organizations*. PhD Thesis, University of Wales – Swansea. Retrieved August 22, 2009 from: <http://www.mande.co.uk/thesis.htm>.
- DAVIES, R. and J. DART.** 2005. The most significant change' (MSC) technique: A guide to its use. Retrieved August 22, 2009 from [www.mande.co.uk/docs/MSCGuide.htm](http://www.mande.co.uk/docs/MSCGuide.htm).
- FOOD AND AGRICULTURE ORGANIZATION.** 2003. Marketing information systems for non-timber forest products. Retrieved on 15 August 2009 from [www.fao.org/docrep/005/ac692e/AC692E03.htm](http://www.fao.org/docrep/005/ac692e/AC692E03.htm)
- HARRISON, S., BAYNES, J., HERBOHN, J., MANGAOANG, E., and VANCLAY, J.** 2004. *Researching Incomplete Markets: a Strategy for Timber Market Research in Leyte*, Planning Workshop, ACIAR project ASEM/2003/052 – Improving financial returns to smallholder tree farmers in the Philippines, 15-17 Feb. 2004, Sabin Resort Hotel, Ormoc City, Leyte, Philippines.
- McKEE, N., BERTRAND, J., BECKER, B. and BECKER-BENTON, A.** 2004. *Strategic communication in HIV/AIDS epidemic*. Sage: Thousand Oaks.
- ROGERS, E.M.** 1995. *Diffusion of innovations*. Free Press, New York.
- UMALI-DEININGER, D.** (undated). *Linking small farmers to the market*. Retrieved on 15 August 2009 from [www.gtkp.com/uploads/public/documents/Themes/Linking Small Farmers to the Market.pdf](http://www.gtkp.com/uploads/public/documents/Themes/Linking%20Small%20Farmers%20to%20the%20Market.pdf)