

# **The Communication Used for the Community and the Inter-agencies Participation in the Integrated Management for Sustainable Conservation and Rehabilitation of the Coastal Resources: Case Studies of Malaysian and Thai Fishery Communities**

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## **ABSTRACT**

The study primarily attempted to 1) identify all the relevant Communication factors that were used and facilitated both within the Fishery Community themselves and also any relevant inter-agencies toward the conservation and rehabilitation of their natural coastal resources; also 2) identify all the Participatory Communication used among them; 3) synthesize the lesson for other similar Fishery Communities.

Data were gathered by using questionnaires in the 2 small fishery Communities which were selected purposively as the successful fishery communities under the sustainable framework indicators which was used as the selection criteria. Eighty one samples of Merang from MY fishery community in Trengganu State, and ninety three samples of Bangkhunsai from TH fishery community in Phetchaburi province. The qualitative techniques by means of individual interview, situational observation, and documentary study were used as the tools for data collection.

Results from those two fishery communities could be classified into 7 main categories; 1) According to demographic data, it was found that people in both communities have high school education in average. They earned their living on fishery and also lived in their communities for generations. Their average income per month was 5,000 baht; 2) It was also found that approximately 38.3 % of them were Fishery group membership. 3) Regarding their attitudes towards the natural coastal resources, it was found that they all wanted to develop their communities to be more modernized as well as maintain their career as the fisherman; 4) They had got media exposure through neighbor, coffee shop, TV, relatives, and Village chief, respectively.

It was found that the Malaysian mainly exposed to media via coffee shop, and within their own Fishery Group while the TH media exposing via the general shop, Village chief, and markets; 5) for the communication strategies, it was found that both communities used informal talk, group discussion, network, and horizontal participation, respectively; 6) for the communication type in MY community were network and participation through top-down pattern via leader, and regulations, while TH community were Group's regulation, participation, network, and committee; 7) for media used, telephone especially mobile phone, and the round table talk or discussion were mostly used in MY community while the Community tower was mainly used in TH community.

The results from the 2 communities revealed the main key factors led to the success story of these 2 fishery communities were Intra-personal communication which reflected their positive attitude, and commitment to their communities and also their natural coastal resources. This intra-personal communication also had positive relation to their communication strategies, communication type, and media used. The informal communication strategies were such as the informal talk, group discussion, network, and participation. The informal media used as their main tool for their interpersonal communication were which are telephone and roundtable talk. But for TH Community, the traditional local media the community tower, was still being used: The informal communication via the horizontal participatory network among their group's members, neighbors, and relatives under their own cultural context was the key communication strategy for their participatory activities to sustain, conserve, protect and rehabilitate successfully in their own natural coastal resources.

**Key words:** communication, community participation, the integrated management, coastal resources

## INTRODUCTION

### Statement of the problem

The diminishing fishery resources along the coastal area have increasingly added more pressure to the livelihood of fishermen all over Asia. Moreover, the population explosion of fishermen is one of the main factors in the overexploitation and deterioration of the coastal resources including Thailand and Malaysia which is now rapidly expanding its unbalanced resources between conservation, and rehabilitation.

In fact, communication is now increasingly required as one of the critical components that can determine the success or the failure in any level of development activity. Because it could be effective tool to link relevant data sources or any updated information needed. Effective Communication is a must to be one of the main tool to link, and facilitate more effective among all relevant inter-agencies especially among the fishermen themselves. So this comparative study aimed to focus, and analyze the communication used in the 2 small fishery communities in Malaysia and Thailand which widely accepted to

be quite successful in protecting and conserving their own natural coastal resources such as their dominant activities in their natural coastal resources: replanting mangroove forest, eco-tourism activities, socio-economic activities, etc. This case study aimed to contribute to any other coastal fishery community.

### **Specific objectives**

1) Identify the general communication potential used among the 2 fishery communities and the relevant inter-agencies.

2) Identify all the communication strategies used among the 2 fishery communities, and the relevant inter-agencies.

### **Related literature**

#### **1. The general driving forces of coastal depletion**

The driving forces occurred behind the devastating coastal resources depletion (Chua and White, 1988) :

- High rates of population growth;
- Poverty exacerbated by dwindling resources, degraded fisheries habitats and lack of alternative livelihood;
- Large-scale, quick-profit, commercial enterprises which degrade resources and conflict with interests of the local people;
- Lack of awareness about management for resource sustainability among local people and policy-makers;
- Lack of understanding of the economic contribution of coastal resources to society;
- Lack of serious government follow-up to support and enforce the conservation programs.

Such motivation has to be managed by participatory communication to let all relevant agencies especially the community to see the potentiality of long-term socio-economic benefits of coastal management.

#### **2. The need for integrated management**

The integrated management incorporates modern principles of planning and resources management, intensive information and communication bases under the interdisciplinary processes. It has proved to be an effective strategy in developing with conflicts arising from interactions of various uses of coastal areas because its main objective is at coordinated development and resources management under the broad context of community and inter-agencies participation involving all essential factors such as fishing, mining, shipping, defense, public health, and recreation. To accomplish all the above, the coordination requires the effective community and inter-agencies participatory communication.

#### **3. Sustainability**

Sustainable exploitation implies the wise use and careful management (conservation) of individual species and communities, together with the habitats and ecosystems on which they depend. Sustainability is the alternative to resource depletion caused by excessive exploitation for short-term profit. Exclusive use of a particular coastal resource unit for a single economic purpose is discouraged by the integrated management strategy which in favor of a balance of multiple use whereby economic and social benefits are maximized, conservation and development then become compatible with goals.

## **Sustainability indicators**

### **1) Human development indicators**

Indices to measure human development and the quality of human life are proposed by the UNDP covering basic human biophysical needs such as food, clothing, and shelter, etc. including activities that have an impact on the environment or other factors that perceived as benefits (e.g. recreation opportunities, biological diversity or aesthetics), cost or risks (e.g. environmental contamination or hazards).

### **2) Environmental indicators**

The National Union for the Conservation of Nature and Natural Resources (IUCN) has developed indicators for conserving life-support systems and biological diversity, ensuring the sustainable use of renewable resources, minimizing the depletion of non-renewable resources and keeping within the carrying capacity of supporting ecosystems.

### **3) Performance indicators**

There is a growing understanding that sustainability puts the emphasis on enhancing the capacity of groups, organizations, or societies to understand and solve the problems they face.

### **4) Interdependence indicators**

The Means indicators of the dynamic relationships, are interdependent especially between the human beings and the natural environment.

## **4. Related communication**

Sandoval (1978) studied communication in Fishermen Cooperatives, and found the following communication functions of the organization:

1) It provides the members an opportunity to voice out their problems;

2) It enables them to pinpoint and / or identify possible causes to problems;

3) It makes change agents aware of the members' problems;

4) It facilitates the identification of possible alternatives to the members' problems to meet their felt needs;

5) It enables the members and the change agents to deliberate on the advantages of alternatives;

6) It enables them to voice and facilitate the resolution of conflicting thoughts and ideas.

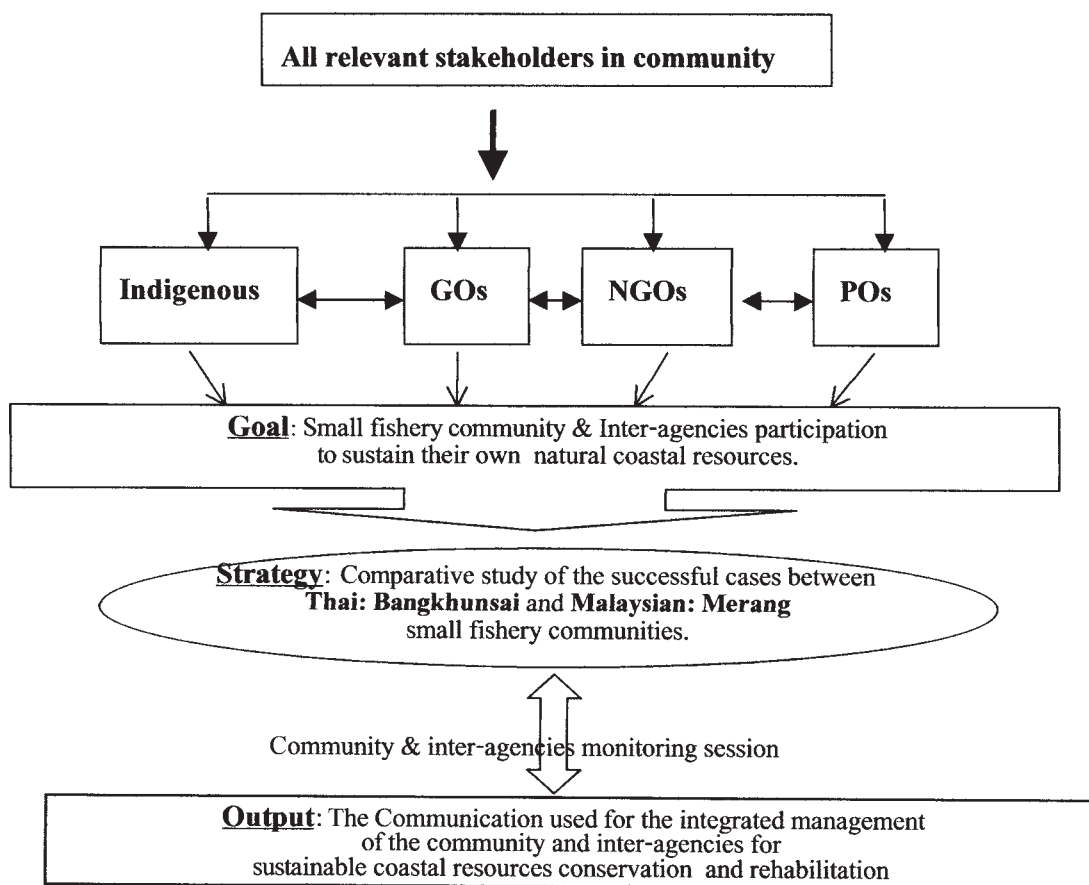
The above related literatures can be obviously seen that communication is commonly needed as one of the main facilitated tools that can effectively facilitate among any level of inter-agencies and also strengthen the empowerment of the community themselves.

## **Research methodology**

This comparative study used both quantitative and qualitative in both 2 purposive selected successful case studies: Merang - Malaysia and Bangkhunsai - Thailand. The analytical method was used under the seven main categories demographic data, group membership, media exposure, communication type used, etc. The interviewed questionnaire, together with observation, on The "Focus Group" among the community's key informants was the main data collection tool.

## **RESULTS**

The main summary findings of these 2 small successful fishery communities could be classified into 4 main categories as follows:



**Figure 1** The conceptual framework

1. **General demographic information** of the 2 small fisheries communities: Malaysian (Merang), and Thai (Bangkhunsai) were studied in some main factors such as education, career, hometown, average income, and Group's member situation as shown in Figure 2-6.

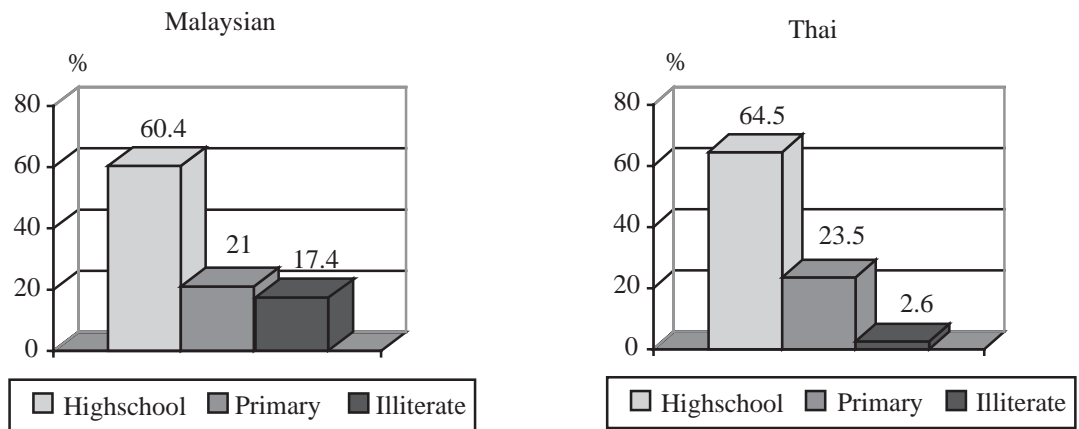
The result from Figure 2 shows that the average educational level of the 2 communities from 2 countries is very similar in that most of them finished high school level.

The result from Figure 3 shows that most of the members from both selected communities are mostly local people.

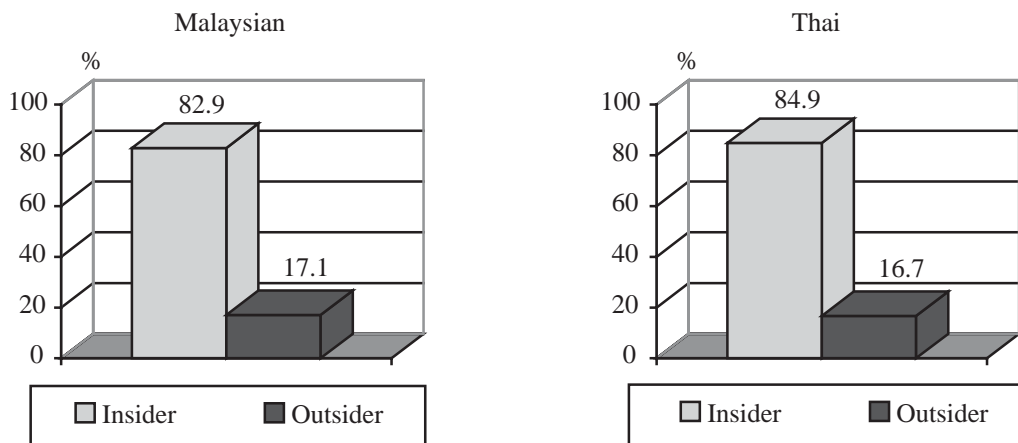
The result from Figure 4 shows that in MY fishery community, their main career was fishermen and others respectively the fishery community, their main career was also fishermen employee, salt making, and farmer respectively.

The result from Figure 5 shows that the average income of the two communities is similar: average income is 5,000 Bath, except in NY, the gap between the income is not so different compared to TH fishery community.

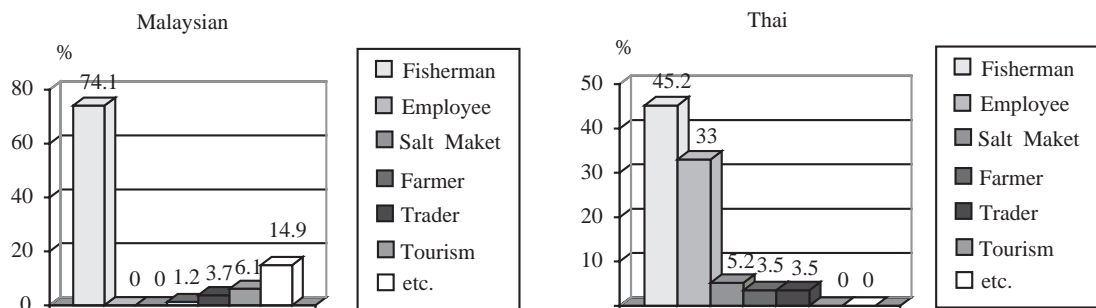
The result from Figure 6 shows that the group member's status of the 2 fisheries group in both coventries is similar which is about 30 percent



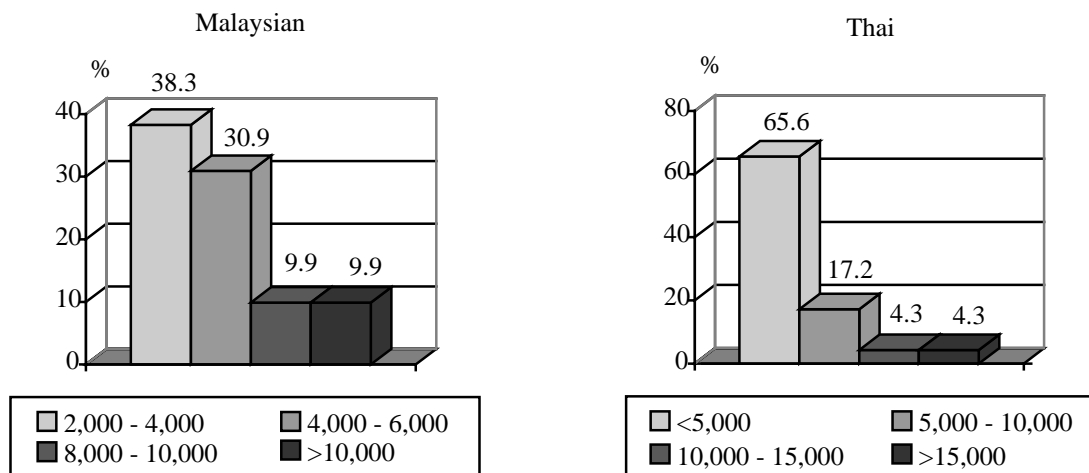
**Figure 2** Educational level of the 2 fisheries communities: MY & TH.



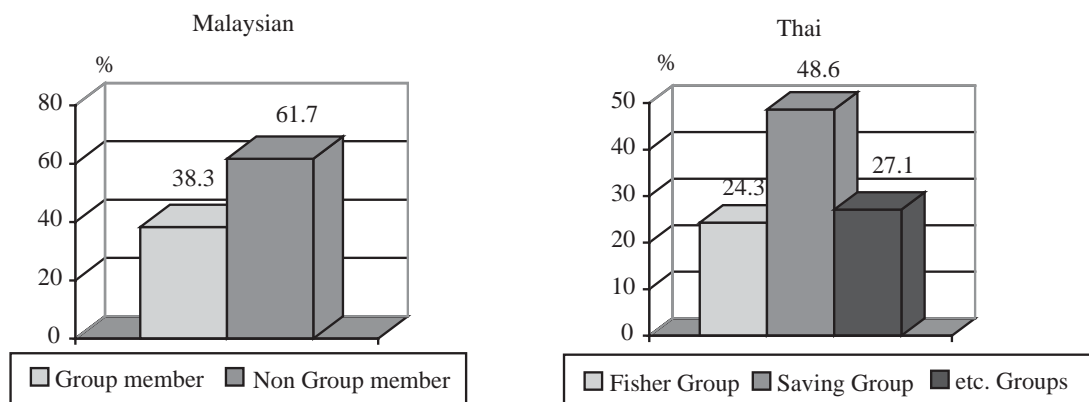
**Figure 3** Hometown of the 2 fisheries communities: MY & TH.



**Figure 4** Main careers of the 2 fisheries communities: MY & TH.



**Figure 5** Average income / month of the 2 fisheries communities: MY & TH.



**Figure 6** Group member's status of the 2 fisheries communities: MY & TH.

in average. But for TH fishery community, there are other types of groups status such as the saving group, the housewife group, etc.

**2. Attitude towards their natural coastal resources of the 2 small fisheries communities.** The attitude study focuses more on their own community, career, lifestyle, own natural coastal resources, and activities toward the aforementioned natural resources as shown in Figure 6.

The result from Figure 7 shows that the attitude of the 2 fishery communities is quite similar

but the issues are not quite the same as follows: in MY community, they are very proud of their community and would like to adopt some modernization into their community, and the most important is they are very proud of being a fisherman; compared to TH community, they are proud of their natural coastal resources, and would like to protect it by helping each other, and at the same time, they adopted the “self-reliance” strategy for their lifestyle.

### 3. General media exposure of the 2 small

**fisheries communities.** The general media exposure study focuses more on their daily life's media exposure, and also the places where they interact to each other as shown in Figure 8-9

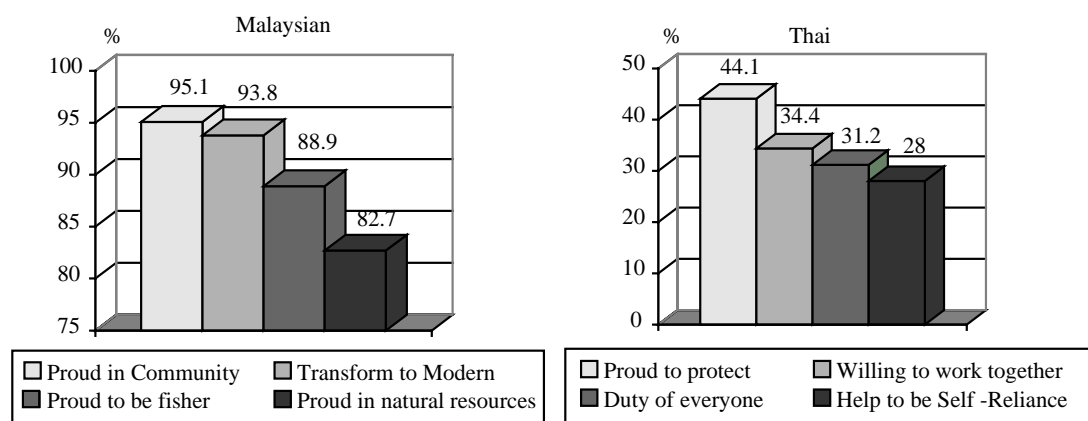
The result from Figure 8 shows not so much differences about the media exposed between the fishery communities: MY community exposed a lot through television, neighbors, and the coffee shop respectively. While TH community exposed through their neighbors, followed by the television, relatives, village head, and radio respectively.

The result from Figure 9 shows quite a bit difference between the two communities about the places they got information MY community got

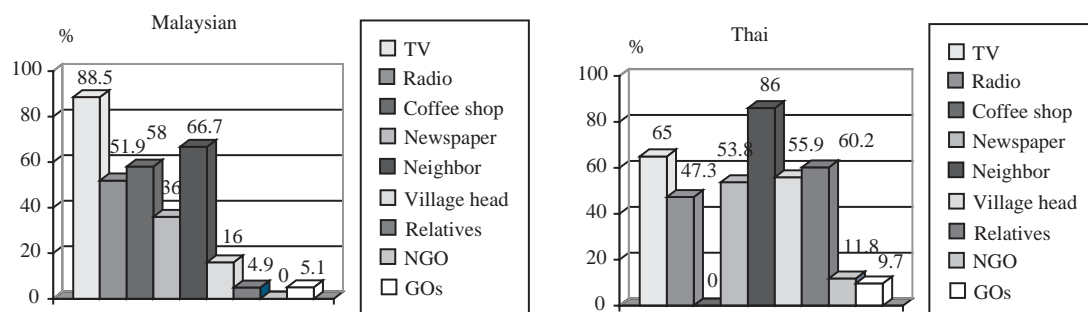
information through coffee shop, among their own fisher group, and their village hall. While to TH community, the village shop is the most popular place followed by the village hall, market, and temple.

**4. Communication strategies used in both of the 2 small fishery communities.** The focus of this study was more on the communication strategies, the communication type, and the media that the two communities used among the people in each community as shown in Figure 10-12

The result from Figure 10 shows that the communication strategies used between the two communities are similar. MY and TH communities



**Figure 7** Attitude toward the natural coastal resources of the 2 fisheries communities: MY.



**Figure 8** Media exposure of 2 the fisheries communities: MY & TH.

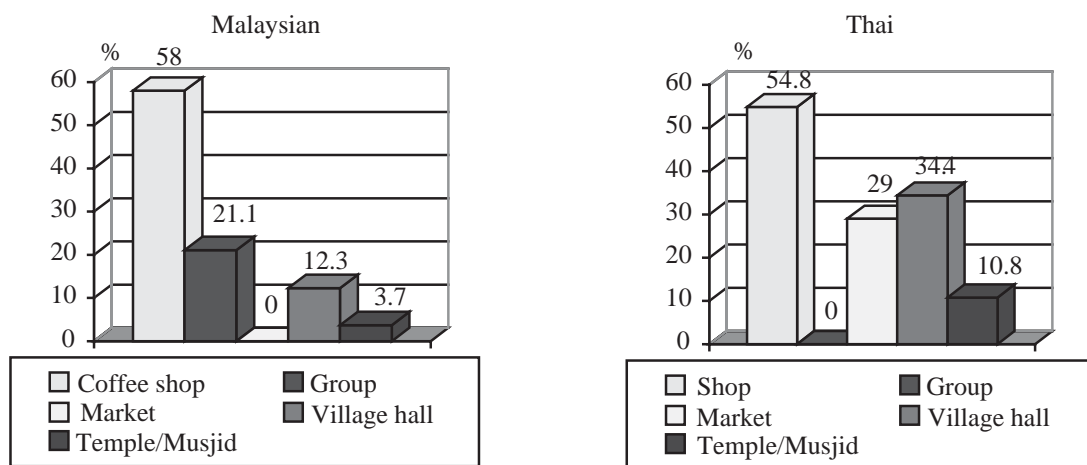


used informal talk, group discussion, network, participatory communication, and leader.

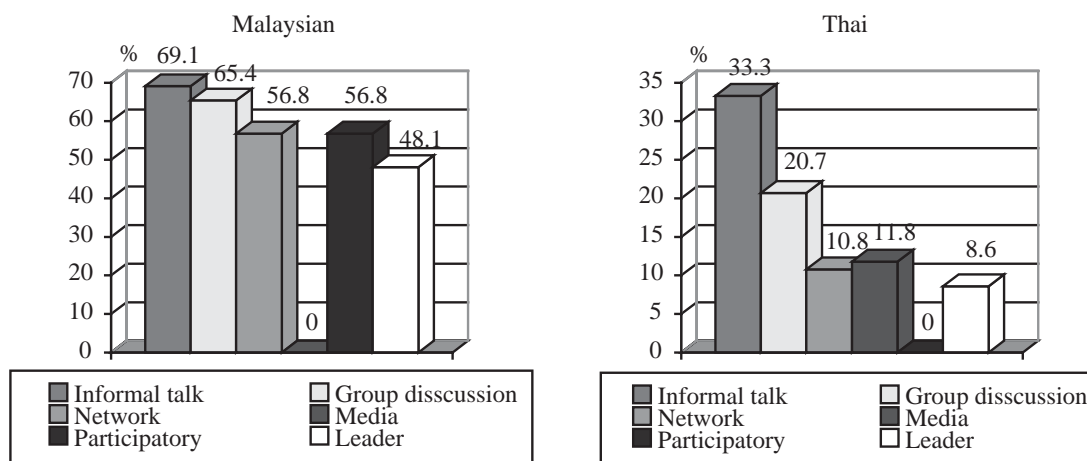
The result from Figure 11 shows a bit difference between the two communities: MY community used most network and leader as their communication type, followed by participatory, regulations, and committee. While TH community, used participatory as their communication type, followed by committee, network, regulation, and

their leader.

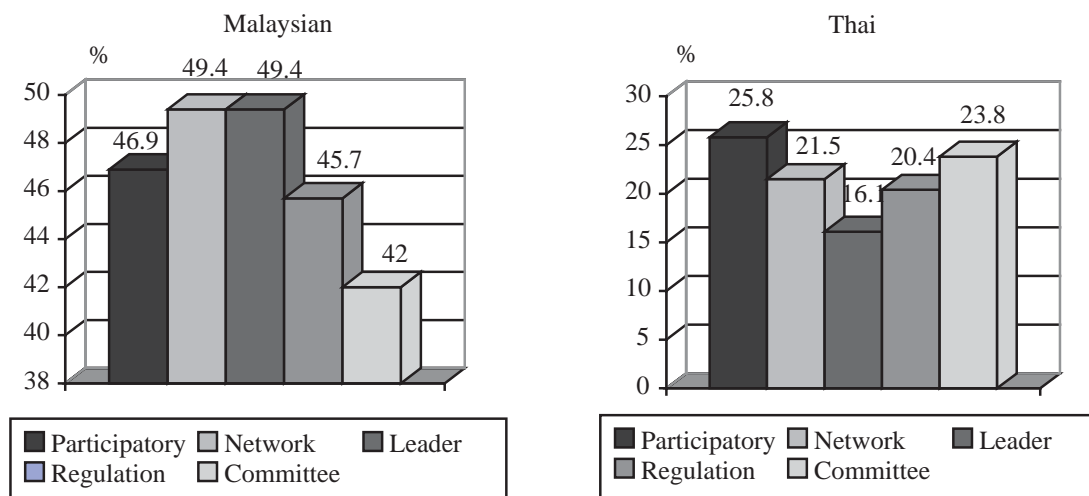
The result from Figure 12 shows quite difference between the two fishery communities: MY community found that the telephone especially the mobile phone, and the roundtable talk were most used as their media. While TH community, used the community media especially the community tower was their main media, followed by the study trip.



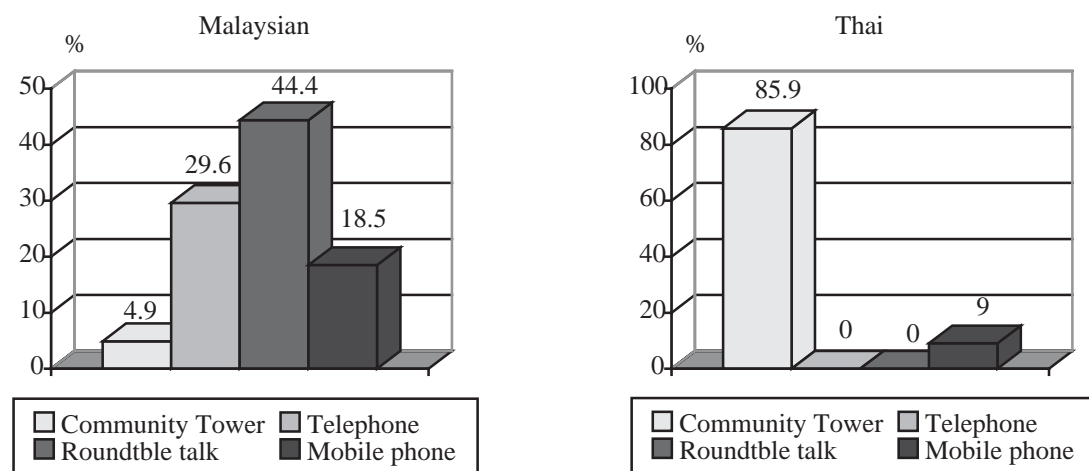
**Figure 9** Places to get information of 2 the fisheries communities: MY & TH.



**Figure 10** Communication strategies of the 2 fisheries communities: MY & TH.



**Figure 11** Communication type used between the 2 fisheries communities: MY & TH.

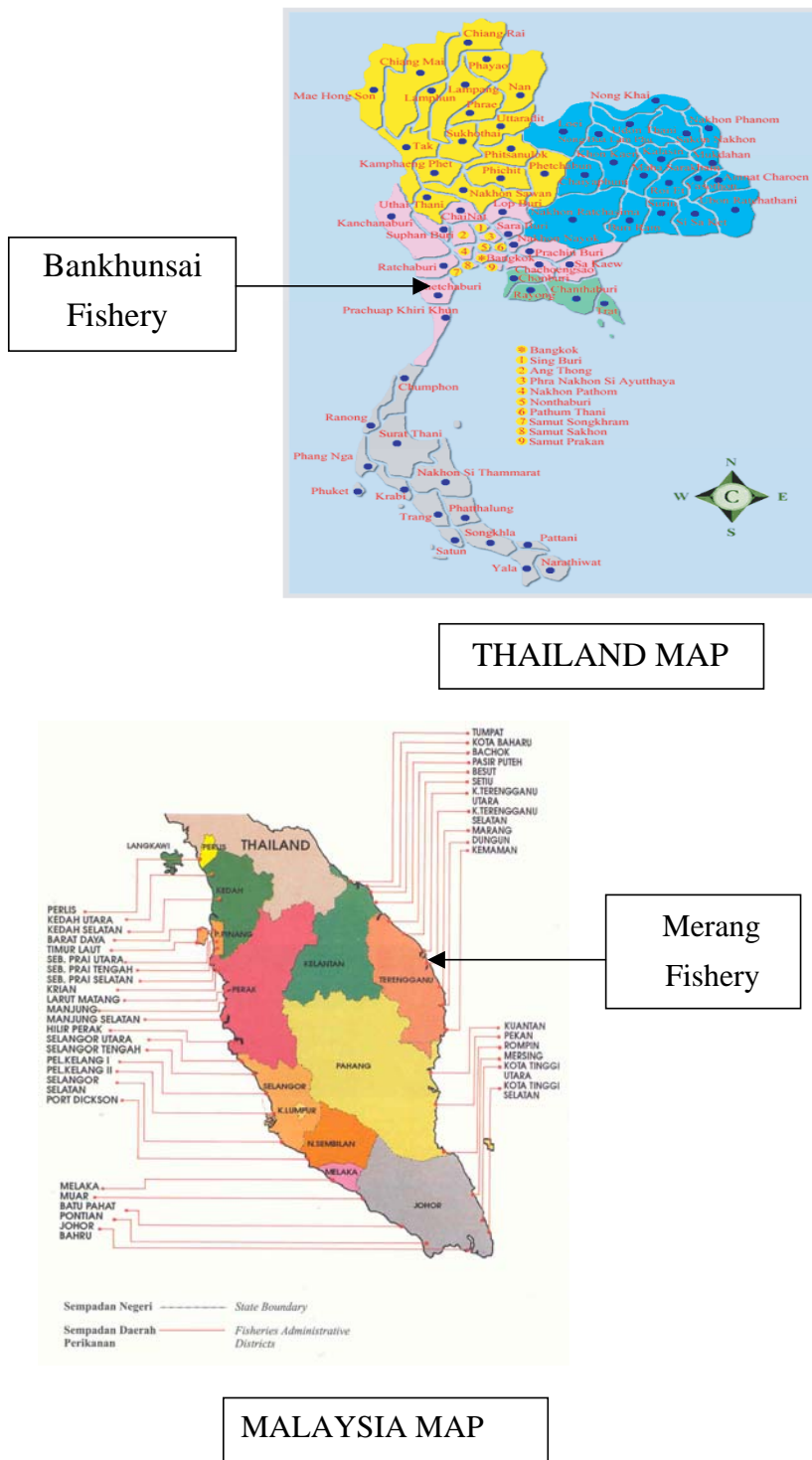


**Figure 12** Media used between the 2 fisheries communities: MY & TH.

## CONCLUSION AND RECOMMENDATION

The comparative study results of the 2 communities in Malaysia and Thailand were that both communities can successfully manage their own resources, all the inter-agencies also need to use

effective communication tool to empower all kinds of participation boost their capability in protection, conservation, and rehabilitation their own resources. The study was found that communication of these 2 small fishery communities was the Intra-personal communication which reflected their pride, their positive attitude, and commitment to their community



**Figure 13** Map of Thailand and Malaysia.

especially their own natural coastal resources. This Intra-personal communication had its positive relation to the communication strategies, the communication type, and the media that they used. The Informal communication based on the horizontal communication type is one of their main strategies such as the informal talk, roundtable group discussion, network, and participation both formal and informal such as participate as being committee, or as friends, etc. Also related to be the people media was the main tool for any type of communication, such as face to face communication, telephone communication, words of mouth, roundtable talk, Housewife Group, the Middleman Group which covered all of their daily life's activities especially in the coffee shop, and in their Fishery Group before and after fishing in the sea. But for TH community, the traditional local media still being used: people media, the group members, group committee, the village head, and also the community tower. The informal communication via the horizontal participatory network among their group members, neighbors, and relatives, is the key communication strategy for their effective participatory activities to sustain successfully in their own natural coastal resources conservation and protection including their peaceful life too.

The results of this comparative study has recommended some main points for further benefit as follows: 1) among media used, people media supported by the local community media and also the new media such as the mobile phone, and the short wave radio are the most important means leading to any further success not only their commitment and then sense of belonging, their leadership but also

leading to their effective participatory among them to conserve, to protect, and to rehabilitate their own natural coastal resources themselves 2) about regulations, and group, membership is quite heavy concerned to among the two communities; and 3) about their lifestyle, coffee shop is the lifestyle of the MY people compared to TH people the market is their lifestyle. This means that the lifestyle will also affect the communication system that they used too.

## LITERATURE CITED

- Carter. R.W.G. 1988. *Coastal Environments: An Introduction to the Physical, Ecological and Cultural Systems of Coastlines*. Academic Press, Harcourt Brace Jovanovich, Publishers.
- Clark. J.R. 1992. *Integrated Management of Coastal Zone*, Rome, Italy: FAO Fisheries Technical Paper 327.
- FAO. 1993. "Coastal Fishing Communities in Thailand Food and Agriculture Organization of the United Nations Socio-Economic Issues in Coastal Fisheries Management". *Proceedings of the IPFC Symposium: FAO Regional Office of Asia and the Pacific*, Bkk, Thailand. 23-26 November, 1993.
- FAO. 1996. "Community-Based Fisheries Management in Phang-Nga Bay, Thailand". *Proceedings of the National Workshop, FAO Regional Office of Asia and the Pacific*, Phuket, Thailand, 14-16 February, 1996.
- FAO. 1997. "Environment Aspects of Responsible Fisheries". *Proceedings of the APFIC Symposium*.

- FAO. 1998. *Integrated Coastal Area Management and Agriculture, Forestry, and Fisheries*. Rome, Italy:
- Heiko Seilert and S AO Fisheries Technical Paper 327, Rome, Italy.
- Department of Fisheries, Malaysia, Wisma Tani, 50628 *Kuala Lumpur: Annual Fisheries Statistics*.
- Department of Fisheries, Malaysia. 1996. *Tide of Change by LKIM*.
- Le kim Thoa and Nguyen Hoang Tri, 1999. *Community Participation in Mangrove Restoration and Conservation in Can Gio, Ho Chi Minh City, Vietnam*. Paper Presented in the Regional Seminar on “Enhancing Coastal Ecosystem Restoration for the 21<sup>st</sup> Century” 23-28 May, 1999, Thailand.
- Charnsnoh, P. 1999. *Promoting a Productive Coastal Marine Ecosystem Through Community Management: Yadfon Association's Experience in Trang, Thailand*. Paper Presented in the Regional Seminar on “Enhancing Coastal Ecosystem Restoration for the 21<sup>st</sup> Century” 23-28 May, 1999, Thailand.
- Sudara, S. 1999. *Lessons Gained From Community Involvement in Mangrove Rehabilitation*. Paper Presented in the Regional Seminar on “Enhancing Coastal Ecosystem Restoration for the 21<sup>st</sup> Century” 23-28 May, 1999, Thailand.