

# **CHANGES IN THE USE OF CANALSIDE BUILDINGS ON AMPHAWA CANAL, SAMUT SONGKHRAM PROVINCE : The Consequences of Conservation and Development project from 2001 to 2009.**

*Wannasilpa PEERAPAN, Ph.D.  
Faculty of Architecture, Chulalongkorn University  
Email: Wannasilpa.p@chula.ac.th*

## **ABSTRACT**

**T**his article is the result of the study on changes in the use of canalside buildings on Amphawa Canal, Samut Songkhram Province from 2001 to 2009, resulting from the continuous conservation and regeneration projects of Amphawa community since 2001. The study shows that there were altogether 351 building units, most of which were old houses dating back to the days when Amphawa was the center of waterborne traffic and trade of Samut Songkhram. Most of the building units served primarily residential purposes while the remainder served both residential and commercial purposes and quite a number were left unused. In 2009 clear changes in their uses were observed with the number of building units along the canal rising to 369. Most of them were renovated and repaired to accommodate tourism to function as restaurants, souvenir shops and places of accommodation for tourists; thus signaling a decline in the use of buildings for residential purposes. This shift result partly from the successful projects for conservation and regeneration of the Amphawa community with the involvement of the local community and administration within the framework of sustainable development and His majesty the King's sufficiency economy.

*Keywords : conservation / regeneration / Amphawa community*

## 1. INTRODUCTION

The main subject of this article is the result of the study on “The changes in the use of canalside buildings on Amphawa Canal, Samut Songkram Province in a period ranging from 2000 to 2009.” This is the subject of a study project on “The changes in land and buildings uses in Amphawa community, Samut Songkram Province: the consequences of a series of conservation and regeneration projects of Amphawa community.”

These conservation and regeneration projects of Amphawa community comprise projects and activities involving the active participation and continuing effort to preserve and revive the community. The projects demonstrate a collaboration between Amphawa Municipality, local residents and various organizations, especially the Faculty of Architecture, Chulalongkorn University which acts as a technical advisor while various other organizations provide financial support for the research study, P.R. campaign and the organization of several activities. These projects which started from 2001 have resulted in rapid changes and turned the community into a cultural tourism destination in today’s Thailand. These evident changes are physical, economic, social and cultural. The changes in building uses are most evident among the canalside buildings which form the center of cultural tourism in the area. This article will focus only on the changes in building uses along Amphawa Canal within the boundary of the Amphawa Municipality, Samut Songkram Province from 2001 to 2009.

## 2. BACKGROUND OF AMPHAWA CONSERVATION AND REGENERATION PROJECTS

Amphawa community or Amphawa Municipality is a water-based community with fruit plantations in its backdrop. Located in the central part of Amphawa District, Samut Songkram Province, 72 kilometer west of Bangkok, this community covers an area of 2.5 km<sup>2</sup>. It is one of the important sites of Thai cultural heritage and closely related to the advent of the Chakri dynasty. During the period when Ayudhaya was under Burmese sack, King Rama I came to take residence here. Amphawa is also the birthplace of King Rama II and two queens-- Somdejphra Amarintramataya, the Queen Consort of King Rama I and Somdejphra Srisuriyentramataya, the Queen Consort of the King Rama II. Located on a canal against a backdrop of fruit orchards, the community still remarkably preserves its cultural identity, featuring its traditional settlement pattern, its architectural uniqueness and religious sites as well as various places of historical and cultural values. Its surrounding areas abound with verdant fruit orchards criss-crossed by a network of canals, a perfect means of waterborne transport that still preserve remarkably its identity.

Formerly Amphawa community was the center of waterborne transport and one of the trading centers in the Meklong basin thanks to a network of waterborne transport; making it conveniently accessible for its surrounding areas. In the early seventies, the advent of a road network rapidly prevailed over the existing waterborne transport. In addition, several dams with reservoirs were built on the Upper Meklong River with their inevitable impacts on Amphawa’s ecosystem. Its once fertile natural resources were also seriously affected; bringing eventually the decline of the Amphawa community as a trade center. The once flourishing community slipped rapidly into doldrums. As a result, canalside houses closed themselves one after another. This spelled the end of its large floating market. Local people had to move out to find jobs. Many canalside houses were left to abandon. Nevertheless, Amphawa community has managed to retain remarkably its past identity as a water-based settlement.

In 2001 conservation and regeneration projects for the community were launched to develop eco-tourism of Amphawa community with the involvement of various organizations such as

The Faculty of Architecture, Chulalongkorn University, the Office of Natural Resources and Environmental Policy and Planning (OEPN), the Department of Industrial Promotion, Ministry of Industry, Chaipattana Foundation in close collaboration with Amphawa Municipality and local residents in a continuing manner (Table 1). The overriding concept to create a balance of the four key aspects of the community; namely physical, economic, social and cultural together with a political element, all based on sustainable development and His Majesty the King's sufficiency economy (Figure 5). Run-down houses were renovated and Amphawa Floating Market regenerated meanwhile the use of houses has been geared towards and activities associated with waterborne tourism etc. The continuing implementation has turned the Amphawa community into an important center of cultural tourism of Samut Songkhram Province and presentday Thailand.

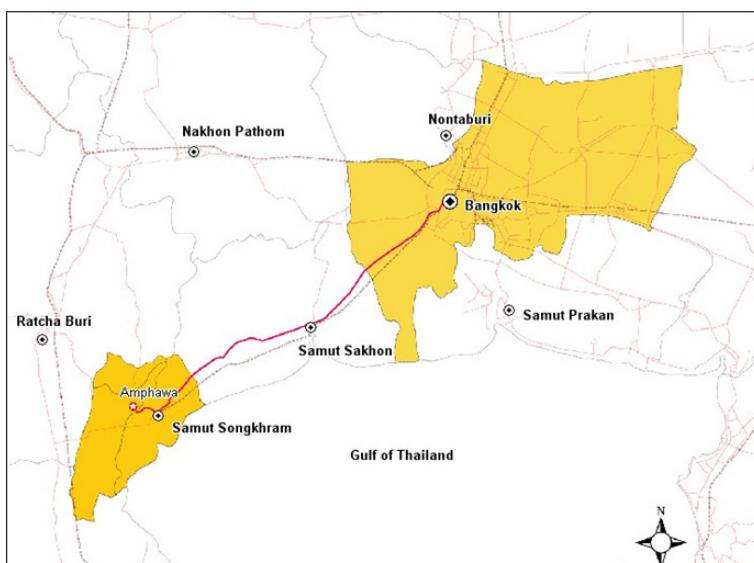


Figure 1: Location of the Amphawa community



Figure 2: Aerial photo of the Amphawa community in 2000  
Source: Royal Thai Survey Department



Figure 3: Life along Amphawa Canal in the past  
Source: Tour of the Amphawa community and surrounding areas in Samut Songkhram Province, p.10



Figure 4: Amphawa Canal in 2009

Table 1: Synopsis of the projects and key activities related to the conservation and regeneration of Amphawa water-based community from 2001 to the present day

Year	Project/activities	Ownership
2001-2002	Project to establish a master plan and an action plan for environmental conservation and development of western basin waterways	- Faculty of Architecture, C.U. - Office of Natural Resources and Environmental Policy and Planning (OEPP) - Amphawa Municipality
2002-2003	Pilot project for environmental conservation and development of Amphawa Canal.	- Faculty of Architecture, C.U. - OEPP - Amphawa Municipality
2002-2008	Architectural Student Volunteer Project	- Faculty of Architecture, C.U. - Amphawa Municipality
2003	Publication of "A Guide for tourism in Amphawa and its surrounding areas"	- Faculty of Architecture, C.U. - Amphawa Municipality
2003-2005	Thailand Cultural Environment Project	- Faculty of Architecture, C.U. - OEPP - Amphawa Municipality - Danish International Development Assistant (DANIDA)
2005	Action taken to launch the Amphawa evening floating market	- Amphawa Municipality
2005	Art Exhibition "The beautiful story of Amphawa"	- Faculty of Architecture, C.U. - Cultural Environment Artists Group
2005	4 <sup>th</sup> Thai top industrial and textile villages: the conservationist Princess of the Land	- Department of Industrial Promotion, Ministry of Industry
2006	"Amphawa Chaipattananurak" Project	- Chaipattana Foundation
2006	Publication of "The Cultural Heritage of the Amphawa Community"	- Faculty of Architecture, C.U. - Amphawa Municipality
2008	Application of Amphawa Conservation and Regeneration Projects for UNESCO Asia Pacific Heritage Award 2008 in which this project obtained an "Honorable Mention"	- Samut Songkhram Province - Faculty of Architecture, C.U. - Amphawa Municipality

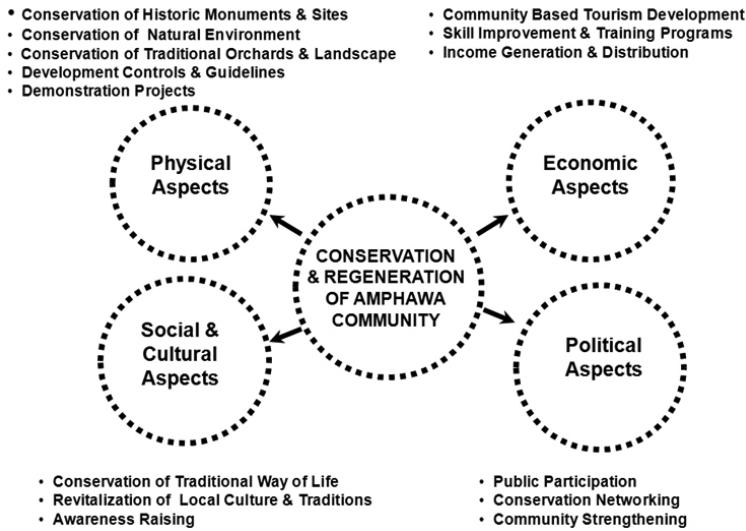


Figure 5: Key concept in the conservation and regeneration of the Amphawa community  
 Source: adapted from "Pilot Project for Environmental Conservation and Development Amphawa Canal," 2003, p.4-25

### 3. SCOPE OF THE STUDY

This study focuses on the changes in the use of buildings on Amphawa Canal which directly face the canal. They range from wooden row houses, traditional Thai houses to vernacular and contemporary buildings, all of which differ in architectural style, type of occupancy and use. The row houses are mostly subdivided into smaller units which are consider in this study as building units in much the same way as detached houses.

The data used in this study are secondary survey data collected by the Faculty of Architecture, Chulalongkorn University in 2001 which witnessed the beginning of Conservation and Regeneration Projects of the Amphawa Community when changes in the use of these building units did not yet occur as a result of the implementation of various projects. These data were compared with the primary data collected in a field survey conducted in 2009. In 2001, the use of these building units was limited to a few types while in 2009 their use is geared to cater for tourism with more specificity.

According to the classification of units based on the above – mentioned data, there were a total of 351 units on Amphawa Canal in the study area in 2001. This number increased to 369 in 2009.

### 4. STUDY RESULT

The changes in the use of building units on Amphawa Canal result from the continuing implementation of Conservation and Regeneration Projects of the Amphawa community. This started with a research study, dissemination of relevant documents, seminars and organization of various activities to raise awareness of conservation and to make P.R. campaign on tourism. Physical changes in the study area began to take in early 2004 with a demonstration project on building restoration and improvement, a sub project of "Thailand Cultural Environment Project" financed by Danish International Development Assistant

(DANIDA). Approximately 30 units as defined above were renovated but their uses remained basically the same. In August 2004 action was taken to revive Amphawa floating market and tourists began to trickle in the area. Likewise, changes in the use of building to cater for tourism-related activities began to take shape. Most of these changes were triggered by “The 4<sup>th</sup> Top Industrial and Textile Village Fair: The Conservationist Princess of the Land”, organized by the Department of Industrial Promotion, Ministry of Industry. This event featured a re-enactment of Amphawa Floating Market as it was in late 2005. Information about this market and its community was disseminated in the media, thus prompting an over larger number of tourists to the market. As a result, 2006 saw the most changes in the use of building units on Amphawa Canal.

#### 4.1 Uses of building units on Amphawa Canal in 2001

Based on the secondary data collected by the Faculty of Architecture, Chulalongkorn University, there were 351 units along Amphawa Canal in the study area in 2001. They were mostly old wooden houses, dating back to the time when Amphawa was the center of waterborne traffic as well as the commercial post of Samut Songkhran Province. The architecture of these buildings fall into the following four types:

- **Wooden row houses.** They account for most of the houses which are one-leveled with gabled or hipped roofs made of diamond-shaped cement tiles, carved tiles or corrugated sheets. They are mostly fitted with folding doors or two-paneled doors topped with ventilation grilles. Their walls are made of shingles vertically fastened with overlapping rims.
- **Traditional Thai houses.** These houses represent only a small percentage. They are tucked here and there among wooden row houses. They are one-leveled housed with gabled roofs made of diamond-shaped cement tiles and or carved or corrugated sheets. They are fitted with doors with folding hinged panels and wooden windows.
- **Vernacular houses.** These houses, small in number, are present here and there among row houses and traditional Thai houses. They are one- or two-leveled with gabled-roofs or lean-to. Their roofs are made of corrugated sheets.
- **Contemporary buildings.** These buildings, also small in number, cluster on the areas close to the mouth of the canal. They are 2-3 story buildings made of reinforced concrete and bricks with gable roofs or gable roofs with parapet.

A reinforced concrete walkway stretches along both sides of the canal with concrete steps leading down to the water. Some units have additional open-sided pavilions or a verandah overlooking the canal for relaxation or other purposes.



Figure 6: Typical wooden row houses



Figure 7: Typical traditional Thai houses



Figure 8: Typical vernacular houses



Figure 9: Typical contemporary buildings



Figure 10: The restored walkway along the canalside

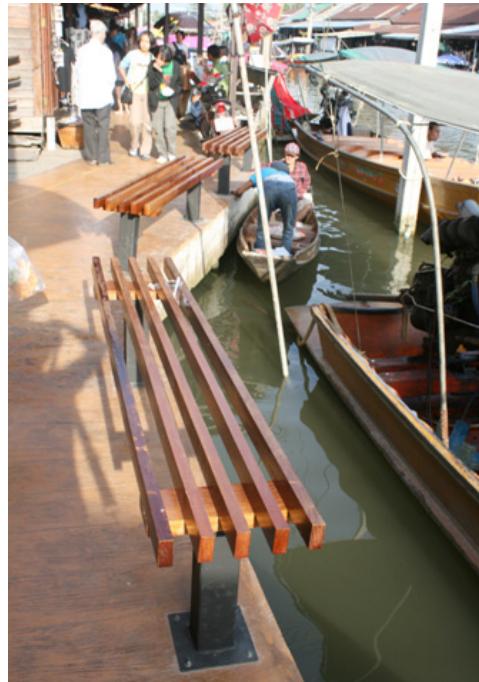


Figure 11: New seats for tourists on the walkway



Figure 12: The old walkway along the canalside

Among 351 building units in the study area, 202 units or 57.55% are residential while 89 units serve both residential and commercial purposes. Five units or 1.42% serve only commercial purposes whereas 55 units or 15.67% were left unused. (Table 2)

Units used for commercial and residential purposes are concentrated in the areas close to the mouth of the canal, where there is a foot bridges spanning the canal, that is, between Wat Amphawanjetiyaram and the market. Residential units are basically in the inner stretch of the canal while houses left unused are scattered all over (Figure 13)

Table 2: Distribution of respective uses of the building units on Amphawa Canal in 2001

Use of building units	unit	%
Residential	202	52.55
Commercial	5	1.42
Both residential and commercial	89	25.36
Vacant	55	15.67
total	351	100.00

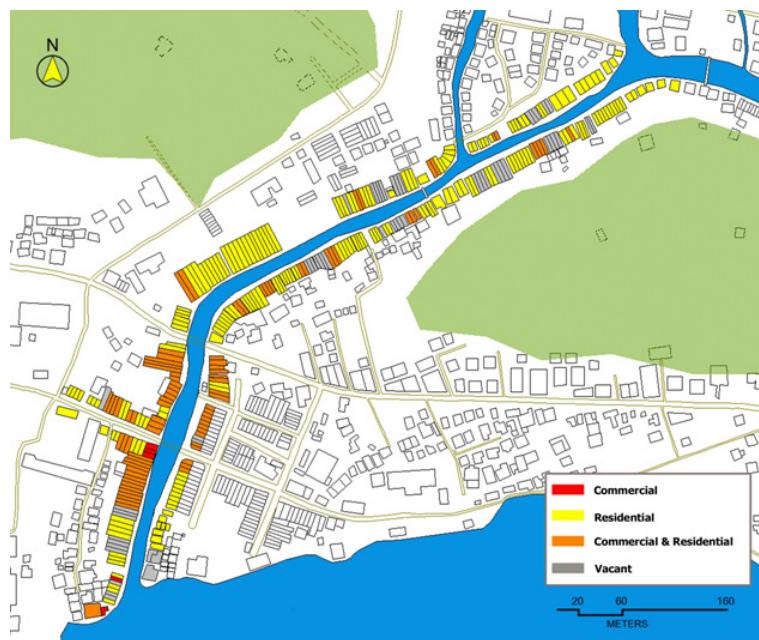


Figure 13: Uses of building units on Amphawa Canal in 2001  
 Source: survey conducted by the Faculty of Architecture, Chulalongkorn University

## 4.2 Uses of building units on Amphawa Canal in 2009

Based on a field survey in 2009, the number of building units has increased to 369. The eighteen additional units were built on vacant spaces between existing houses in harmony with the architectural of the latter. It was also noted that more than half of the old units had been renovated to cater for tourism-related activities. This is especially true with the run-down roofs made of corrugated sheets or diamond-shaped concrete tiles while retaining the original structural form and introducing new colors mostly in the earth tone. As such, the originality of a water-based community is well preserved. The architectural form of the canalside buildings still fall into four categories: wooden row houses, traditional Thai houses, vernacular houses and contemporary buildings in a proportion similar to that of 2001.

Most of the architectural changes are internal. The use of the interior space was redesigned with additional partitions, furniture, products and exhibition areas. The interior decorations are unmistakably reminiscent of yesteryear with old pieces of furniture and curios to create an ambience geared in tune with cultural tourism.



Figure 14: Changes in the use of building units from residential to homestay

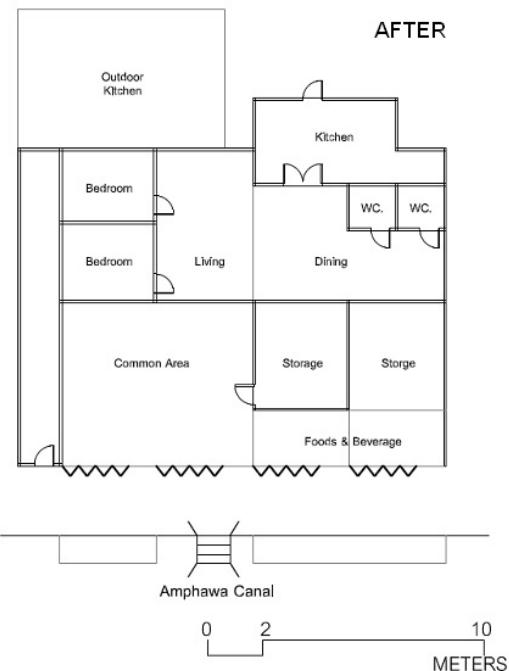
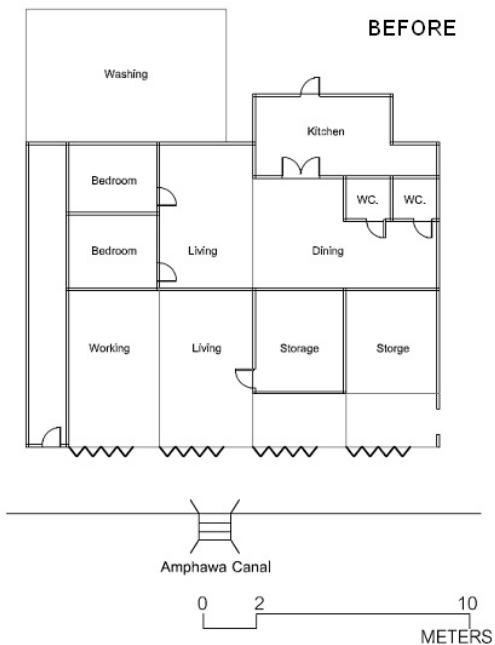
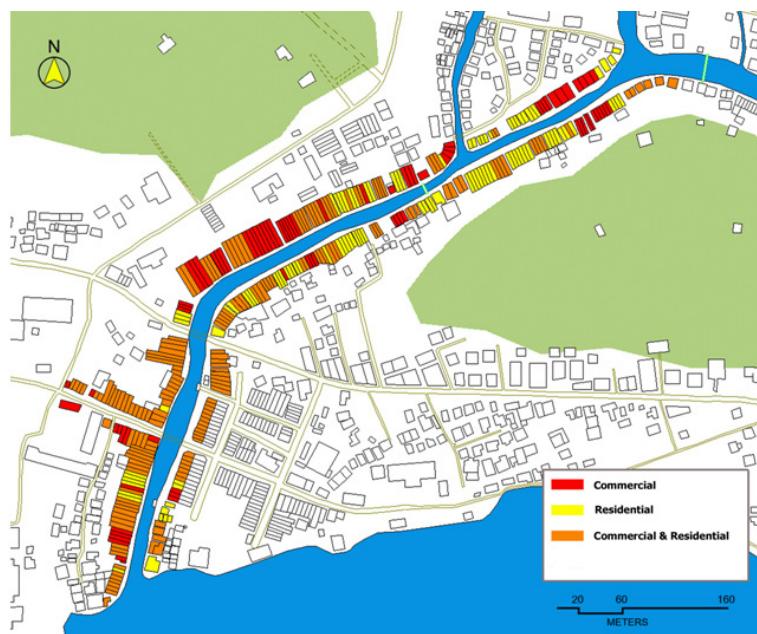


Figure 15: Changes in the use of building units from residential to food and beverage kiosk

Changes were observed as to the function of these houses in 2009 as against 2001. 185 units (50.14%) serve both residential and commercial purposes. The number of solely residential, once the highest, has dropped to 102 (27.64%) while the number of houses for commercial purposes has increased significantly to 82 (22.2%). There remains no units left unused in 2009 (Table 3)

**Table 3:** Uses of building units on Amphawa Canal in 2009.

Use of building units	No. of units	%
Residential	102	27.64
Commercial	82	22.22
Residential and commercial	185	50.14
Vacant	0	0.00
Total	369	100.00



**Figure 16:** Uses of building units on Amphawa Canal in 2009

Based on the Figure 16 showing the use of building units in 2009, there is an increase in the number of units used for commercial purposes and for both commercial and residential purposes spread further along the canal especially in the northern stretch of the canal as a result of the implementation of the project “Amphawa-chaipattananurak” which aims to develop the project zone and to organize eco-tourism-related activities under the Chaipattana Foundation. This project was launched in 2006 with the restoration of row houses on the canalside and the integration of buildings behind them which were donated by the Department of Industrial Promotion, Ministry of Industry.

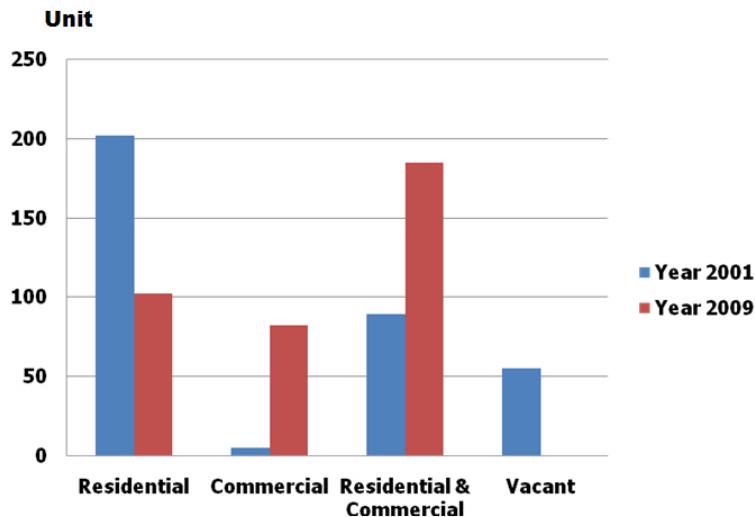


Figure 17: Comparative uses of building units on Amphawa Canal

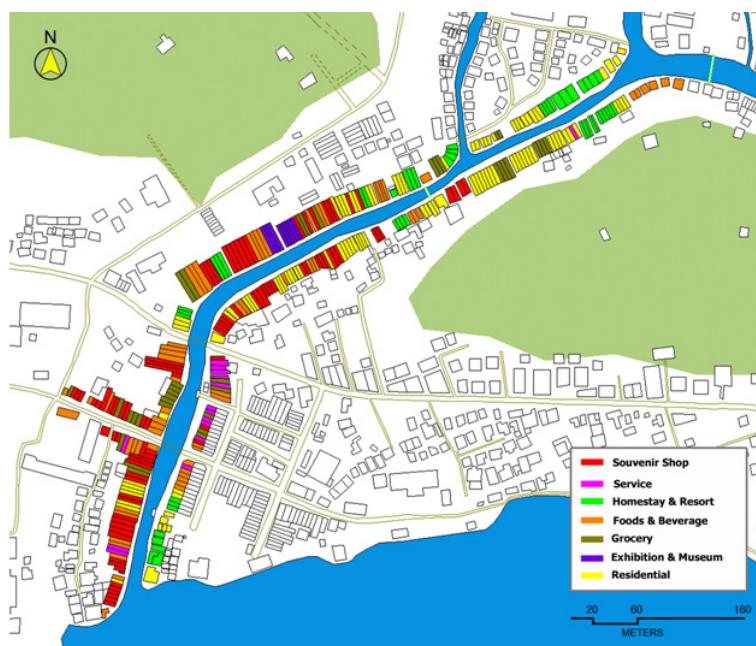


Figure 18: The detailed use of units on Amphawa Canal in 2009  
Source: Field survey

A more detailed study on the use of building units on Amphawa Canal in 2009 shows that they fall into two groups. One represents the conventional use of the people in the community while the other involved tourism-related use (Table 4). The former accounts for 41.77% which is mostly residential (27.64%). The remainder is retail shops (10.03%) and service providing units (4.07%). The latter, mainly catering for tourism-related activities, account for 58.22%, most of which are souvenir shops (24.93%), restaurants (17.34%) guest houses and home stay, and resort (13.55%), not to mention the use of units as museums and information centers (2.44%)

There is an obvious concentration of units according to the type of service provided. Units of general interest to the community are grouped around the end of the canal especially on its southern part while shops providing various services are concentrated around the market. Retail shops (groceries) on the contrary are scatter around on both sides of the canal.

Among units of interest for tourism, souvenir shops are grouped in three areas, namely around the northern part of the mouth of Amphawa Canal, adjoining the parking space of Wat Amphawanjetiyaram, the central part of the canal or its northern stretch under the Amphawa-chiapattananurak Project and the central part of the canal on its southern stretch opposite the Amphawa-Chaipattananurak Project. Units serving as guest houses and home stays are grouped on both sides of the other end of the canal and the southern part of the mouth of the canal. Restaurants are mostly located in the middle part of the canal on both sides while exhibition venues and information centers are grouped in the area under the Amphawa-Chaipattananurak Project (Figure 18)

Table 4: Detailed information about the use of houses on Amphawa Canal in 2009

Use of building units	No. of units	%
<b>Conventional use</b>		
- Residential	102	27.64
- Retail trade <sup>(1)</sup>	37	10.03
- Service provision <sup>(2)</sup>	15	4.07
<b>Total</b>	<b>154</b>	<b>41.73</b>
<b>Tourism-related use</b>		
- Restaurants	64	17.35
- Souvenir shops	92	24.93
- Guest houses/home stay	50	13.55
- Museums, exhibition venues and information centers	9	2.44
<b>Total</b>	<b>219</b>	<b>58.27</b>
<b>Grand total</b>	<b>369</b>	<b>100.00</b>

Note: <sup>(1)</sup> retail shops, grocery

<sup>(2)</sup> barber's shop; machine sewing service shops and game shops

## 5. CONCLUSION

The projects for the conservation and the regeneration of the community and the development of eco-tourism of Amphawa community have been implemented since 2001. This has brought about significant physical changes the most obvious of which are in the use of afore-mentioned units on Amphawa Canal. In 2001 the use of these units involves the residents of the community. Due to the economic downturn, 15.67% of these units were left unused. The remainder, mostly used for residence, was in bad repair. Most of the changes in the use of these units occurred between 2006 and 2008. The renovation made was designed to accommodate tourism while keeping the architectural identity of the water-based community. In terms of their uses, these units do serve their purposes; 58.22% of which are tourism-related, mostly in the form of souvenir shops, restaurants and accommodation

These changes result partly from the success of the projects for conservation and regeneration of Amphawa community which enjoy the collaboration of the local community and organizations. The project itself is based on the concept of sustainable development and the sufficiency economy of H.M. the King. As such, the project lends itself very well as a meaningful case study as well as a model for old communities suffering from the economic recession which is often the case both in Thailand and its neighbors.

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