

# Community Participation in Architectural Design and Planning as a method for Heritage Site Conservation and Development

## Case Study Nong Kud Ting, Bungkan Province, Thailand

Kitapatr Dhabhalabutr\*

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### Abstract

Nong Kud Ting is a large natural wetland which is located at Bungkan Province. The wetland has an area of 6,535 Acre and high biodiversity habitat of over hundred wild life species. However, the life-sustaining basin has been being under threat by the growth of urban area, manifested in the shape of large-scale rice farms, build up area and animal hunt in the Ramsar site. Hence, Nong Kud Ting was registered to the World Heritage Ramsar Site since 2011, the similar year of Bungkan has official appointed to the latest Province in Thailand. The Ramsar convention intensifies deep and violent conflict between three concerned agencies particularly; First is an international organization and government agencies. Second, the Local Administration Organizations and the third stakeholders are the 3 local communities. The research project of “Community Participation in Architectural Design and Planning as a method for Heritage Site Conservation and Development” was conducted as a tool to solving the stakeholder’s conflict and creating balance solution between Ramsar ecosystem conservation and community development.

The research objectives aim to determine rules for appropriate overall preservation and development of the heritage site that complied with the Ramsar convention as well as the demand of stakeholders with public participatory process. Secondly, to construct the walk way and public space to be the tangible buffer zone that prevented invasion to the Ramsar site. Thirdly, to promote participation between three agencies to solve conflict by reducing the conflict and build community consensus. The research applied “Ladder of Participation (PAR)” purposed by Arnstein (1969) as theoretical framework by mixed scale of the ladders including; consultation, partnership and lastly delegated power. At the end of project, the research achieved a master plan of land used around Nong Kud Ting and the architectural design of recreation area and natural trail.

The research found that participation in architectural design and planning is a practical method for the Ramsar Site Conservation and Development. The key factor of project successful

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\* Urban and Regional Planning Program, Faculty of Architecture, Khon Kaen University, Khon Kaen, Thailand, 40002  
Corresponding author E-mail : kitapatr@kku.ac.th or kitapatr@hotmail.com\*

was stakeholder's inclusiveness at the beginning to the last stage of operation. Particular, partnership concept in form of joint committees shaped trustworthy between stakeholders and share their sense of ownership for long term project responsibility.

**Keywords:** Community Participation, Heritage Site Conservation and Development, Nong Kud Ting

## INTRODUCTION AND SIGNIFICANCE OF THE RESEARCH PROJECT

Nong Kud Ting is a large natural wetland with an area of 6,535 Acre locating just 5 kilometres far from Bungkan Province city centre. According to the survey of WWF Thailand in 2008 (World Wide Fund Thailand, 2008), Nong Kud Ting's ecosystem has high bio diversity of 250 water animal species which including 20 rare fish species only found at this swamp, 200 classes of wild plants and habitat to the 40 native birds species as well as numerous migratory birds. Hence, Nong Kud Ting is registered to the No.12 Ramsar Site in Thailand since the 2<sup>nd</sup> February 2008 (Orapan Nabangchang et al, 2016). However, the life-sustaining basin is under threat, manifested in the shape of large-scale rice farms, build up areas and hunt in the Ramzar site and adjacent communities, approximately 2,200 Acre (<http://chm-thai.onep.go.th/ramsarsite60/project/12/>). The Ramsar site is challenged by the growth of urban area because the area is directly connected to the Bungkan Municipality. Once Bungkan is officially promote to the latest Province, no.77, in Thailand since 2011, many mega government and private investment projects on infrastructure are continuously developed and resulted in the high level of immigration to Bungkan urban area. The Municipality covers an area only 1 Square Kilometres and the north site of the Municipality is blocked by the Khong River. The urban area of Municipality cannot contain new migrants and the development projects therefore expansion of built up areas and urban amenities has extend, via highway no.222, to Nong Kud Ting Ramsar Site and now turns this area to a new residential, government offices and education institution of the city (Dhabhalabutr, 2017).

The Ramsar convention intensifies deep and violent conflict between concerned agencies particularly; 1) International organization and government agencies (Ramsar and Provincial Offices for Natural Resources and Environment of Bungkan Province), 2) Local administration office (Non Sombun Sub district Administration Organization), and 3) Three local communities (Non Sombun, Bung Kan and Kog Kong). While international and government agencies demanded on the local administration to enforce the law to local people who against the convention, for example; wide life hunting, rice farming, and invasion of built up area, but the communities have been maintain their livelihood in Nong Kud Ting prior the protection measures announce for long time. Local administration officers hesitate to charges residents because it lead to violent between people who living in the same communities and maintain political power of those officers in the future election.

Non Sombun Sub District Administration Organization involved the Urban and Regional Planning Program, Khon Kaen University conducting intervention for those conflict. Due to the field survey data, the researcher purposes a research project of “Community Participation in Architectural Design and Planning as a method for Heritage Site Conservation and Development” as a tool to solve the stakeholder’s conflict and to create balance solution between Ramsar ecosystem conservation and community development. The pilot area of the research project is selected from some locations that situated at Non Sombun Sub District Administration and a local temple. This research project applied Participation model “Ladder of Participation by Sherries Arnstein (1969)” as the research framework. The project conducts research process and resulted in research outcome at 2 scales; city and community. At the city scale, the project targets to purpose the model scheme for Land Used Plan around Nong Kud Ting Ramsar Site. At the community scale, the project designs recreation area and natural trail as physical buffer to define a clear boundaries of Nong Kud Ting Ramsar Site from surrounding communities and vicinity; case study Nong Kud Ting in the area of Non Sombun Sub-district Administration Organization.



**Figure 1.** (Top Right and Left) the physical environment of the land donated by a temple  
 (Bottom Left and Right) the land donated by Non Sombun Sub-district Administration  
 (Dhabhalabutr, 2017)

## II. RESEARCH FRAMEWORK: PARTICIPATION (PAR)

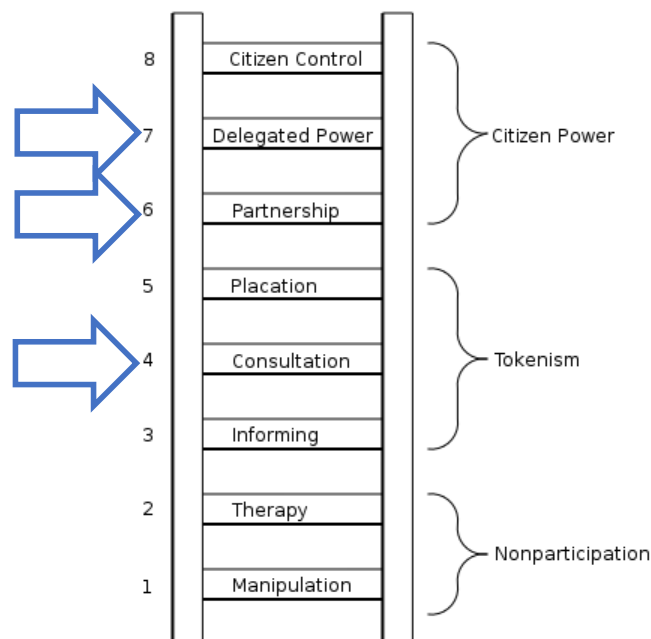
Ladder of Participation purposed by Arnstein (1969: 216) (see Figure 2) views citizen participation as a term for citizen power. Thus, the concept of ‘scale of PAR’ defines as the redistribution of power from government to citizen with eight rungs from manipulation to citizen control. Ladder of Participation is selected to this research because it is a research framework that agreeable to the research objectives. Specially, the objective number 3 which is lessen the community conflict and searching for the opportunity to enhance stakeholders’s co-operation. However, the agonistic and antagonistic planning theory are also participation planning but a central and normative premise of agonistic and antagonistic planning theories is that conflict is a productive force. According to Pløger (2004: 87), he states that conflict can be such a productive force, “The system must make strife a productive force”. It is clearly found that the agonistic and antagonistic planning theories focus on conflict as key approach of develop public participation. Furthermore, the German planning scientist Dietrich Fürst speaks of a “dilemma between the need for consensus in planning and the growing conflict intensity of fragmented societies” (Fürst, 2018: 1717). However, this research do not emphasis on the conflict, rather this research avoid the community conflict. Researcher searches for some positive sharing issues between stakeholder and promote it to build community participation and community consensus.

Therefore, agonism doesn’t fit to this research objectives and that is the main reason why the researcher not applies agonism planning theory. Importantly, the Ladder of Participation theory by Sherris Arnstein has continuously revised and applied from the past to current, please look at the link for the most update paper on Ladder of Participation: Building “A Ladder of Citizen participation”: Sherry Arnstein, Citizen Participation, and Model Cities. June 2019. Journal of the American Planning Association 85(5):1-14. DOI:10.1080/01944363.2019.1612267).

This research project applied mix scale of the ladder to dealing with the customized context of Nong Kud Ting location, stakeholders and the confliction. Three suggested scale of participations for solving the problem of Ramsar Site Conservation and Development based on the degree of government willingness in carrying out communities participation, beginning with consultation, partnership and lastly delegated power.

- Consultation is the fundamental rung of the ladder that consists of a two-ways flow of information from officials (Ramsar Site Convention and Government regulations on Nong Kud Ting wetland) to the communities or stakeholders of their rights, responsibilities and options with allowance for feedback or negotiation from citizen (5).
- Partnership is the middle rung on the ladder. Stakeholders and planner agree to share planning and decision-making responsibilities about development project involving community participation through such structure as joints policy committees, planning committees, survey committee and eventually other informal mechanisms for solving conflicts.

- Delegate power is the highest rung on the ladder of stakeholders participation proposed for Nong Kud Ting Ramsar Site. Stakeholders have a majority of seats or genuine powers on formal and informal decision-making bodies, ex. appointed committee, over a project. Stakeholders are expected to initiate their own improvements, possibility solutions with the assistance of outside organizations such as WWF, Khon Kaen University, or other allies. Importantly, they demonstrating actual control of the project implementation and influencing the processes and outcomes of the development project (Samuel, 1986).



**Figure 2.** A ladder of Citizen Participation (Arnstein, Sherry. R, 1969: 216)

### III. CITY SCALE PROJECT; THE MASTER PLAN OF LAND USED AROUND NONG KUD TING RAMSAR SITE

#### Project Objectives

The master plan of land used around Nong Kud Ting Ramsar Site' was aimed to determine rules for appropriate overall preservation and development of Nong Kud Ting that complied with the Ramsar convention as well as the demand of stakeholders with public participatory process. It was primarily expected to form the local board of committee and to expand to province level.

#### The Research Process of the City Level Project

1) Introduction of the project to concerned stakeholders in province level, communities, and concern organizations such as World Wide Fund Thailand and The Office of Bungkan Natural



Resources and Environment to create the network with local communities. Next to collect information (two-ways communication) from stakeholders such as problem, demands and future projects over the Ramsar Site (see Figure 3).

2) PAR in Fieldwork and survey at the Ramsar site and field trip data collection such as interview, site and document survey for evaluating the situation of wetland.

3) PAR in seminar and brainstorming with stakeholders, participating in laying framework of “Master Plan of Land Used around Nong Kud Ting Ramsar Site”, and forming local board of committee to monitor a master plan implementation at target area.



**Figure 3.** The Participation process of the research (Dhabhalabutr, 2017)

The Result of the City Level Project

It resulted in the forming of the working committee (Figure 4 Left) for a master plan of land used around Nong Kud Ting that composed of representatives from Office of Natural Resources and Environment of Bungkan, World Wide Fund Thailand, Non Sombun Sub-district administration organization, representative of three communities, and informal community leaders such as an abbot, local wisdom elites and the leaders of agriculture, farmer and fishery groups. The committee was to process the project of formulating the model scheme of land used around Nong Kud Ting,

to determine clear framework of the plan and methodology, by publicizing and campaign to urge the implementation of the utility plan.

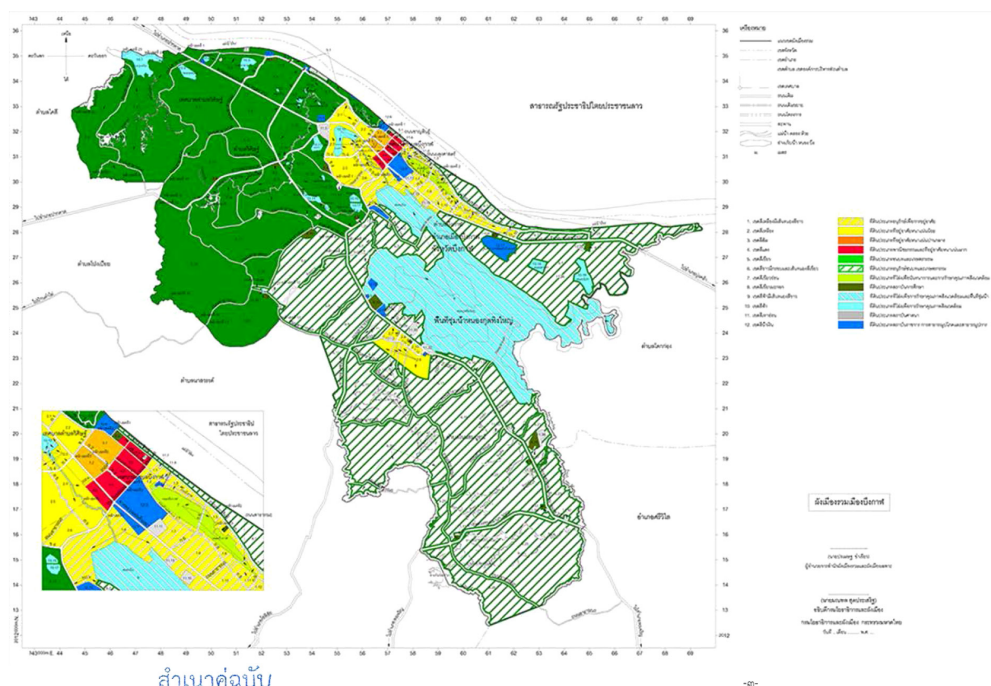


Figure 4. (Left) The land used master plan of Nong Kud Ting Ramsar Site (Right) The official of notification on appointment of Nong Kud Ting committee. (Dhabhalabutr, 2017)

#### IV. COMMUNITY SCALE PROJECT; THE PROJECT DESIGNS RECREATION AREA AND NATURAL TRAIL OF NONG KUD TING

##### Project Objectives

- 1) To construct the route connecting between Nong Kud Ting and Sri Muang Kunnatham Temple to be the tangible buffer zone that prevented future invasion to wet land area. (see Figure 5)
- 2) To be the pilot area as an example for Nong Kud Ting to create balance between Ramsar convention and community development.
- 3) To promote participation between stakeholders in the area and organizing pilot project such as Sub-district administration organization, communities, temple, and province.



Figure 5. Site of the Project (Dhabhalabutr, 2017)

##### The Research Process

1) Identify stakeholders and invite them to participate in the project. The project includes stakeholders by setting up many sub-committee such as as joints collecting data committees, survey committee, planning committees. These joint committee consist of different agencies working together to ensure that everyone has include in the process. Moreover, the appointment of committee (see Figure 4) is essential require to promote higher and formal engagement level from stakeholders.

2) PAR in Survey around Nong Kud Ting by focusing on the area of Non Somboon Sub-district Administration Organization to collecting data, receive opinions (Consultation) and comments (see Figure 6). The process of collecting data offered data's accessibility and transparent to stakeholders. To promote inclusive stakeholder, stakeholder participated in PAR architectural



design and planning process from the first step-final step. At the first step, they attended brainstorming activity and created a design and planning program such as function, orientation, and area requirement. At the middle stage, they discussed and criticed on the archtiectural design as a important part of architectural design development process. At the final stage, stakeholder hold the power of decide by vote on their preference solutions. The decision process is transparent to every stakeholders because they willing to raise up their hand in front of others's eyes.

4) Last but not the lease, stakeholders summarized the design solutions and forwarded the design to propose for annual fiscal year budget from concerned provincial organizations.



Figure 6. Participation Process in Architectural Design and Planning (Dhabhalabutr, 2017)

#### The Result of the Pilot Project in Community Level

It resulted in specific planning of the natural trail and recreation area, architectural design, and project proposal to request for budget from provincial organizations. (see Figure 7)

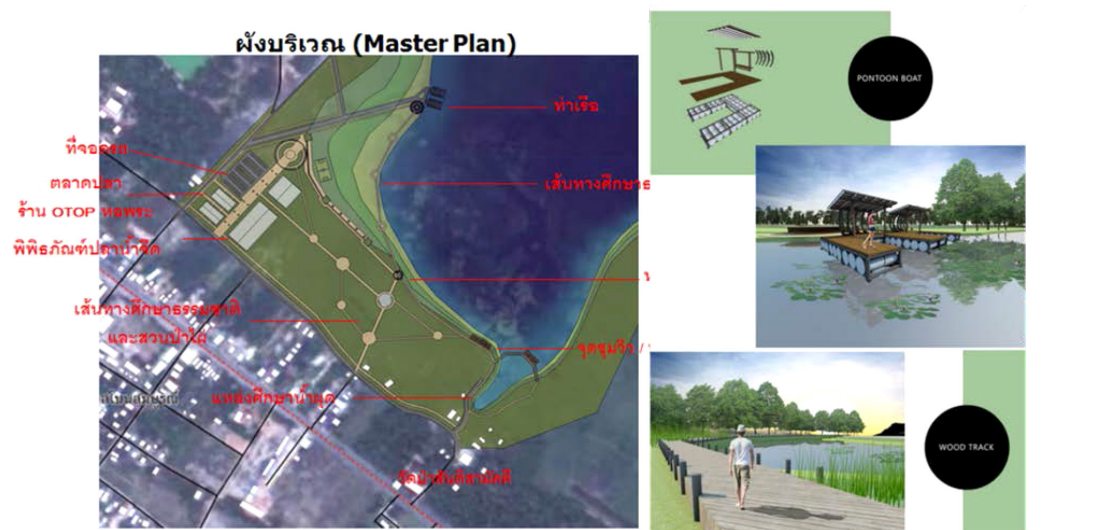


Figure 7. Site plan (Zone A in Figure 5) and Natural Trail (Zone B in Figure 5) (Dhabhalabutr, 2017)

## V. CONCLUSION AND RECOMMENDATIONS

The case study of 'Nong Kud Ting' Ramsar Site presents the physical evident of research outcome that participation in architectural design and planning is a practical method for the heritage site conservation and development. The land used master plan of the wetland and the design of recreation area and natural trail of Nong Kud Ting created buffer zone to define a clear boundaries of the Ramsar Site from neighbourhood communities as well as solving the conflicts among stakeholders. Three scales of ladder of citizen participation, consultation-partnership- delegate power, introduced by Sherry R. Arnstein (1969) are applied as research method to achieve the research objectives. The key factor of project successful is stakeholders' inclusiveness at the first to the last step of operations. Partnership concept in form of joint committees shaped trustworthy between stakeholders and share their sense of ownership for long term project responsibility.

For recommendations, researcher purposes some measures in driving the plans and project gained to concrete implementation as follows:

1) Establishment of a committee/advisory board of provincial Ramsar site development to carry on, monitoring and evaluating the master plan and project. The committee or advisory board, consisted of experts-provincial administrative-representative of communities, should put the master plan and a project in Bungkan provincial strategic plan or agenda to ensure these projects will implement in near future. Next, advisory board should assign Nong Kud Ting appointed committee to follow up and regularly report the result of the operation. Moreover, the follow up and evaluation process will help to develop skills, knowledge, ability, and potentiality of communities and staff of concerned organizations.

2) In pushing the master land used plans and a project into concrete practice and determining other rules in the future, Bungkan province and appointment of Nong Kud Ting committee must manage additional database for Ramsar site development, for example, database on natural resource in the area; database on land ownership, database on culturally valuable structures; database on building and land used; and database on potentiality of area for future development.

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