

# **The Collaboration of Landscape Education and Academic Services: Case Study of Chulalongkorn University, Thailand**

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## **Abstract**

*The main target of the School of Landscape Architecture, Chulalongkorn University is managing the program of study to the best knowledge intentionally and successfully, as well as participating in our society for better environment. Academic services come in as an important supportive role to strengthen the teaching and learning process. Handling academic service assignments associated with social aspects is also a vital and simultaneous benefit of an opportunity to approach and raise an awareness and recognition of landscape architecture profession more widely to general public.*

*This paper is to share experiences of more than ten years in Academic Service Center, aiming to draw an attention to the advantage of an integration of teaching and learning system with academic services in research, study programs, as well as management strategies in dealing with multidisciplinary participants.*

## **1. Introduction**

Chulalongkorn University, Thailand's first institution for higher education, was founded in 1917 by King Rama VI with an initiative of his father's, King Rama V. The university thus derived its name "Chulalongkorn" from King Rama V's other name in honor to the royals. Today, Chulalongkorn University offers academic excellence and is regarded as one of the most prestigious universities in Thailand.

When Chulalongkorn University was originally established ninety four years ago, there were only four faculties to start with. Those were Faculty of Arts and Sciences, Faculty of Public Administration, Faculty of Engineering and Faculty of Medicine. Sixteen years later in 1933, architecture study was initiated only as a course in the Faculty of Engineering. Not until another ten years later in 1943, the Faculty of Architecture finally became an independent establishment.

Since then, the Faculty of Architecture, Chulalongkorn University has gradually developed and expanded from straightforward undergraduate curriculum in architecture only in the early days to a nearly complete circle of built and environmental design for undergraduate as well as postgraduate study at present. Currently, the faculty consists of six departments which are Department of Architecture, Interior Architecture, Landscape Architecture, Urban and Regional Planning, Housing and Industrial Design. In addition, the faculty has also recently offered two international programs as four-year undergraduate modules. One is in Design and Architecture known in short as INDA, and another program in Communication Design known as CommDe. The postgraduate study comprises five programs for master's degrees and two programs for doctorate degrees. The annual admission accepts 210 undergraduates and 80 graduates for Thai syllabus while the number of students accepted for the international programs is 130. Presently, approximately 104 lecturers are on full-time basis at the faculty.

As a distinguished institution, the faculty has been entrusted by the government sectors to take on a number of their projects continually over a decade ago. This initiated the notion for the faculty to officially set up a center to provide academic services with expertise in specific fields to any organization requiring research or study issues.

On 1st of December in 1998, the Academic Service Center of the Faculty of Architecture, Chulalongkorn University was therefore established with the cooperation among internal faculty members, members from other faculties and universities, as well as some external organizations. The scope of the service was drawn to cover the area of built environment and other related disciplines which beneficially give an opportunity for the team to encounter, and familiarize with multidisciplinary practice and expertise.

## **2. Definition**

An academic service is defined as a commissioned assignment for proficient performance in research, program development, feasibility studies, supervisions, seminars, workshops and career-oriented-education or training programs.

## **3. Objectives**

Academic services provided by the Center are as follow:-

1. Research and Academic Services. The Center conducts basic research to provide data to support a plan for organizational development and applied research to provide guidelines for problem solving or future project development and advisory service.

The Center provides services for study and consultation in the field of regional planning, city planning, urban planning, housing, landscape architecture, architecture, interior architecture, built environment, industrial design, and other related areas to meet the needs of various agencies, featuring both specialized and multidisciplinary study conducted by its own faculty members and researchers and their counterparts from other faculties and research institutes in the University such as the Faculty of Engineering, the Faculty of Law, the Faculty of Political Science, Environmental Research Institute, Social Research Institute, etc.

2. Training and Seminars Service. The Center organizes tailor-made training courses and seminars to fulfill the needs of various agencies in the public and private sectors as well as business enterprises by providing knowledge and expertise to their personal by competent faculty members and outside experts.

3. Conference and Seminar Organization. The Center organizes conferences at faculty, national and international levels both on its own and in collaboration with other institutions of organizations abroad, which are part of its network of academic cooperation. Conference topics invariably reflect on aspects of prime importance in various disciplines related to instruction underway at faculty and university levels in order to introduce constructive conceptual guidelines on matters of prime concern as occasions arise.

4. Continuing Education. The Center teaches diverse programs conducted by the Center itself or through multidisciplinary programs related to architecture to disseminate new knowledge to entrepreneurs so that they can adjust their knowledge and enrich new experiences as well as refresher courses and basic knowledge to the interested public.

5. Consultancy. The Center serves as a consultant for various agencies regarding project development plans, drawing up project development requirements, model contests, recruitment of consultants for project design. It also provides advice and cooperation in project monitoring and evaluation.

#### **4. Benefits**

The variety of projects gives us the opportunity to practice in many specialized topics with multidisciplinary specialists such as regional planner, city and urban planner, architect, environmental engineer, horticulturist, archeologist, historian, economist, attorney, marketing researcher and forester.

The initial benefit in research comes in the form of obtaining new knowledge and collection of data and information for the institution. As for lecturers, working on these projects will help endorse their academic status. The faculty also benefits financial fractions from each commission. Nevertheless, the most important benefit of all is the possibility to reach out and be able to raise the understanding and recognition of landscape architecture profession to the public when dealing with societal or communal projects

Each and every project carried out by Academic Service Center does benefit somebody one way or another which could be categorized as follow:-

Students: Undergraduates and graduates are usually assigned as apprentices to undertake supporting process such as data collecting, site surveying and questionnaire conducting. Occasionally, they are involved in a process of public participation, as well as participate in projects with multidisciplinary team comprising engineer, ecologist, forester, marketing and economist. These are excellent experiences of which ones cannot find in classrooms alone. The students can therefore apply what they learn with their course work or thesis and furthermore with their future career.

Faculty: As it is imperative for full time lecturers to contribute half of their working hours either in research or academic services, it is valuable and constructive direction to be part of a team. Lecturers, who are engaged in academic service projects, benefit not only work experience but also an endorsement and an advancement of their academic statuses. Their projects can be presented at professional conference or symposium, either at national or international level. Academic services are even more beneficial for inexperienced young

lecturers whom would be supervised closely by their peer. The benefit also comes in as additional earnings for them.

**Institute** The faculty becomes a center of database, a center of excellence, a pioneer in new knowledge and leader in new concept and movement. It is also an opportunity to publicize the proficient work of the school. Financially, the faculty receives a percentage from the funding of each project.

**General Public** Many social issues are in need of urgent attention. Therefore, by academic service studies and investigations, most of the problems solved promptly and successfully.

## 5. The Management

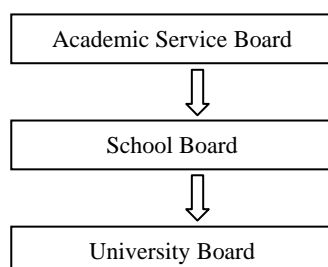
Roles of Academic Service Board and the model of management in school and university level.

### Academic Service Board

- 2 years term
- 6 persons; (dean or assigned deputy dean as president, director of Academic Services and other 4 members)
- Set up policy, year plan, financial plan
- official representative on behalf of its faculty in business interactions, negotiations, and management of issues pertaining to legal conditions and terms of agreement

### Commission Project starts and finished:

- Approval of project and budget plan
- Acknowledge outcomes and financial report



### 5.1. University policy and support

1. We should use university logo and title.
2. University attorney will review all contracts and legal documents.
3. University rector signs all contracts or gives liberty to assigned dean.
4. All projects and all financial plans need to be approved by university board.
5. Outcomes and benefits of all complete projects have to be reported to university board.

### 5.2. School Policy and Support

Policy and support is officially appeared in the management plan, these are some relevant items,

1. Support in process of bidding and submitting of proposal
2. Support of staff; financial staff, secretary
3. Support of facilities; space and basic equipments
4. School will provide loan for project leader to use during process of bidding or submitting of proposal
5. It is an agreement in job requirement for full time lecturers to contribute half of their working hours either to research or academic services. The accomplishment is a part of personal evaluation.
6. Scope of work is focus on research, guideline and consultancy, not to be involved in construction drawings or bidding documents.
7. When projects are complete, school will be assisted, motivated and financially supported in publishing paper in journal and presenting paper in either local or international conferences.
8. Financial agreements are as follow:-
  - 8.1. 15 percent of total budget will go to the school, of which 10 percent will be fixed for supporting facilities and another 5 percent will go to teaching, learning, and student activities.
  - 8.2. Not more than 30 percent of total budget is limited for professional fee.
  - 8.3. If in any case the expense exceeded the budget planned, that certain amount should be adjusted out of professional fee.
  - 8.4. If in any case the expense is less than budget planned, budget which is left will go to the school.

## 6. Funding Source and Project Acquisition

Each year our Academic Services Center conducts more than 20 research and consultancy projects. The duration of project ranges from 4 months to 18 months. Our target customers are government and private agencies, state enterprises, as well as general public. The services range from “cultural” to “greening” within area of urban, natural, cultural and historical heritage sites.

Project acquisition and project grants are from the following procedures:-

1. Assignment or/and agreement
2. Bidding

Both procedures are submitted with technical and financial proposal, Center resume of previous works and personal resume of team.

Scope of services for public and private organizations are:

- Planning, master plan, specific plan, site plan and landscape design
- Management plan
- Renovation plan
- Research and Development
- Field survey and study
- Planning index, planning standard and design guidelines, handbook
- Seminar and workshop

### Our clients: Government organizations and state enterprises (partial list)

- The Thailand Research Fund
- Office of the National Economic and Social Advisory Council
- The Electricity Generating Authority of Thailand
- Expressway and Rapid Transit Authority of Thailand
- Office of Tourism Development
- National Economic and Social Development Board
- National Housing Authority
- Ministry of Natural Resources and Environment
  - Department of National Park, Wildlife and Plant Conservation
  - Department of Policy and Planning
  - Department of Natural Resources and Environmental
- Ministry of Transport
  - Department of Highways
  - Department of Rural Roads
- Ministry of Industry

- Department of Primary Industries and Mines
- Department of Industrial Promotion
- Bangkok Metropolitan Administrator
  - Department of Public Work
  - Department of City Planning

### Our clients: Private enterprises and other organizations (partial list)

- The Crown Property of Bureau
- The Association of Siamese Architects under the Royal Patronage of His Majesty the King (ASA)
- The Thai Red Cross Society
- Tourism Authority of Thailand
- Government Housing Bank
- PTT Public Company Limited
- Honda R&D Southeast Asia Company Limited
- Sony Ericson Mobile Communication International AB

### Our clients: International organization (partial list)

- Danish International Development Agency (DANIDA)
- United Nations Environment Program (UNEP)

## 7. Samples of Projects

Ranging of projects are in area of urban, cultural, natural and historical heritage sites. These are some projects that scopes are related to landscape planning and landscape architectural design.

### 7.1. Samples of 4 Projects With Scope in Emergency Issue and Social Need

In December 2004, southern part of Thailand was hit by Tsunami for the first time in history. This was regarded as the worst national disaster we have ever encountered. Consequently and inevitably came projects to serve the emergency need. Our Academic Service Center was a team leader and was assigned to work on a number of projects in association with other 4 universities. School of Landscape Architecture took the responsibilities of the following selected projects of which students and lecturers benefit greatly from their involvement and time spent on National Parks affected area. The lesson learned comprising from planning and design in a sensitive area of National Parks, field work, data collecting, site inventory and site analysis. Works were under supervision of research assistants and lecturers.

#### 7.1.1. Guidelines for Spatial Development in Coastal Tsunami Affected Area. *Funding Source:*

Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment

*Research Duration:* 6 months (March 2005-September 2005)

Objectives:

1. To determine guidelines for landuse planning in environmental sensitive area by applying academic principle together with people participation process and involving all stakeholders.
2. To determine spatial measures to mitigate impact on lives and properties from possible future tsunami.
3. For the locals to have practical guidelines for spatial development and measures for mitigation.

**7.1.2. Recovery Plan for National Parks Affected by Tsunami in 6 Provinces.** *Funding Source:* National Park, Wildlife and Plant Conservation Department, Ministry of Natural Resources and Environment

*Research Duration:* 6 months (March 2005-September 2005)

Objectives:

1. To complete detailed design following to prior concept both in physical planning and documentation.
2. To complete construction drawing in part of landscape architecture, architecture, facilities system, and engineering in order to proceed the tender process.
3. To design signage system and interpretation system.
4. To complete specification and cost estimation including bill of quantity and all necessary documents for bidding process.



**Figure 1. Recovery Plan for National Parks in 6 Provinces Affected by Tsunami.**

**International Project related to Tsunami affected site are;**

**7.1.3. Study and Master Plan Design for Tsunami Hazardous Villages, Banda Aceh, Indonesia.** *Funding Source:* United Nations Environment Program (UNEP)

*Research Duration:* 5 months (December 2006-April 2007)

Objectives: According to serious damages by Tsunami Hazardous in Aceh, Indonesia, the United Nations therefore immediately helped as an emergency case. The Indonesian government has requested for helps from the United Nations particularly in terms of academic and professional services in order to acquire safe buildings and safe area for normal living. The United Nations has contacted the experts from center of Excellence for Building and Environment Technology, Faculty of Architecture and requested for academic and professional services to the Indonesian government. Through the coordination with the Indonesian government (Ministry of Natural Resources and Environment), local unit of Banda Aceh, and the United Nations teams, the center of Excellence for Building and Environment Technology provides technical advice, community design, and planning services emphasizing on energy saving and environmental preservation aiming to be an example in design and development integrating community activities and natural system. The scopes of work are;

1. Community design and planning.
2. Design regulations for building development, environment, facilities, landscape, financial plan, and development plan.
3. To design a building and its details for construction including site inspection as a pilot project.

4. Technical advisory services for building design, energy, environment, and ecosystem.



**Figure 2. Study and Master Plan Design for Tsunami Hazardous Villages, Banda Aceh, Indonesia.**

## 7.2. Sample of 5 Projects With Scope in Waterfront Development

Canals are a unique characteristic in our history, culture, natural topography, water management and transportation. Sadly they have been declined continuously by ignorant or irresponsible individuals. We have been engaged in a number of waterfront projects to revitalize the environment as follow:-

**7.2.1. Study of Embankment Construction along Rivers, Canals and Waterways.** *Funding Source:* Office of Natural Resources and Environmental Policy and Planning

*Research Duration:* 8 months (April 2002 - May 2002)

*Objectives:* Preparing guideline for proper rivers, canals and waterways embankment construction in relation to their specific surroundings, ecosystem, local culture and livelihood.

**7.2.2. Pilot Project for Environmental Improvement Revitalize and Renovation: Dan Canal, Bang Khun Thian Canal, Sanam Chai Canal.** *Funding Source:* Chomthong District Office

*Research Duration:* 7 months (August 2002 - February 2003)

*Objectives:* To raise the knowledge and awareness for local people so as to participate in the formulation of guidelines and implementations to conserve, revitalize and develop the environment along the canal.

### 7.2.3. Enhancing Local Group Potential in Preserving Environment of River and Canal.

*Funding Source:* Office of Natural Resources and Environmental Policy and Planning

*Research Duration:* 8 months (April 2003-December 2003)

*Objectives:*

1. Enhance knowledge and understanding for local government officers, guideline and patterns of water embankment which is appropriated for specific environment, ecosystem, natural resources, livelihood, and local culture.
2. Preparing guideline for selecting and applying proper waterway embankment concerning locality and specific environment.

**7.2.4. Study and Formulation of a Master Plan and an Action Plan for Conservation and Development of the Environment along Rivers and Canals in the Eastern Region of Thailand.** *Funding Source:* Office of Natural Resources and Environmental Policy and Planning

*Research Duration:* 9 months (December 2003-September 2004)

*Objectives:*

1. To determine framework and strategy for conservation and development of rivers in the Eastern Region.
2. To revitalize and develop rivers environment in the Eastern Region by considering ecosystem and local livelihood aiming for a better quality of life and sustainable use.

**7.2.5. Open Space Development along Important Canals in Bangkok.** *Funding Source:* Department of City Planning, Bangkok Metropolitan Administrator

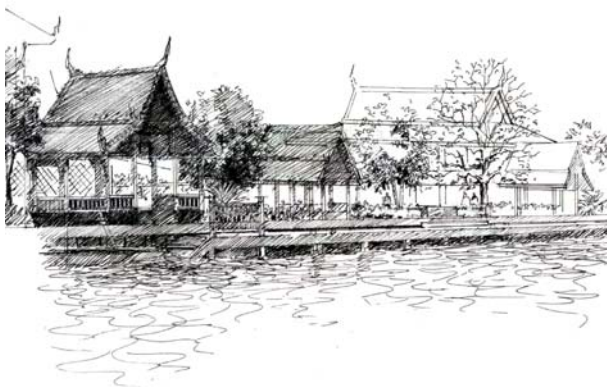
*Research Duration:* 12 months (June 2004-May 2005)

*Objectives:*

1. To create framework for developing open space along important canals in order to improve landscape, promote tourism and canal transportation.



2. To create plan for developing open space along important canals.
3. To propose conceptual plan and design guidelines in order to develop or improve open space along target canal which is an appropriate site for development.
4. To sort out possibility in developing the chosen site.
5. To create action plan in order to promote public participation.
6. To be data for landuse planning and district development plan.



**Figure 3. Pilot Project for Environmental Improvement Revitalize and Renovation.**



**Figure 4. Open Space Development along Important Canals in Bangkok.**

### **7.3. Sample of 3 Projects With Scope in Cultural Landscape and Environmental Conservation**

Amphawa District is one of many agricultural communities along canals. It is situated in Samut Songkhram province in Central Region of Thailand. Since Amphawa has long been a canalside community with floating market feature, it is definitely a popular tourist attraction. Although tourism is desirable for community's economy, it also brings undesirable aspects such as alterations and conversions of original

charming architecture for more commercial purposes which have not been properly planned and controlled.

Our Academic Service Center has been working on projects for Amphawa District continuously for more than 8 years. Amphawa has been our external classroom, workshop, laboratory, meeting rooms, etc. The team lecturers and students, local and affiliated alike, preliminary involved in site surveying, interviewing the locals, collecting their opinions or suggestions, including public hearing and public participation, as well as absorbing local philosophy community knowledge. The team also learned about Cultural Heritage, Environmental Conservation, Canal Ecology and Waterfront Development.

Our Academic Service Center is quite proud to be a pioneer in developing successfully an understanding and awareness of rural communities such as Amphawa to the public. As we carried out the projects with an intense communication with the locals all through the process. Amphawa is a good sample for "bottom up" planning method.

The learning process is in association with Thai Association of Landscape Architects (TALA) and Danish International Development Agency (DANIDA).

**7.3.1. Pilot Project for Environmental Conservation and Development of Amphawa Canal.** *Funding Source:* Amphawa Municipality Office

*Research Duration:* 7 months (March 2002 - September 2002)

*Objectives:* To raise local acknowledgement, awareness, and participation in determining and implementing conservation measures for the canal and its environment-natural ecology, local culture and traditional way of life that shape local identity.

**7.3.2. Thailand Cultural Environment Project: Amphawa Canal Community.** *Funding Source:* Danish International Development Agency (DANIDA)

*Research Duration:* 19 months (October 2003-April 2005)

*Objectives:* To support the initiation of cultural environment conservation system which is based on inventory, mapping, researching, awareness and conservation planning.

**7.3.3. Building Renovation for Amphawa Information Center.** *Funding Source:* Amphawa Municipality Office

*Research Duration:* 6 months (January 2006-June 2006)

**Objectives:** To renovate existing building into Amphawa Information Center. For exhibit Amphawa information i.e. history, cultural heritage, tourist attractions.



**Figure 5. Pilot Project for Environmental Conservation and Development of Amphawa Canal.**



**Figure 6. Thailand Cultural Environment Project: Amphawa Canal Community.**



**Figure 7. Thailand Cultural Environment Project: Amphawa Canal Community.**

## **8. Prospect of Excellence**

Through years of diverse experience, worthy lessons have been learned greatly at our Academic Service Center. Furthermore, we are hoping to take following steps to improve our service to the excellence by:-

1. Managing our center and a project with more business mind, not with academic or civil servant mind. In doing so, each project will be processed more efficiently from human resource to financial management.
2. Conducting advisory and peer review for new researchers seriously and properly.
3. Controlling the quality of each project to the best, not to tarnish the university's reputation.
4. Collaborating academic services with more involvement from students for greater mutual benefits.
5. Introducing advance filing system to record all research and projects accomplished for future references.
6. Cooperating more, for wider social care and concern, with other organizations such as;
  - 6.1. Professional organization with policy to participate in social services; Architect Council of Thailand (ACT), Association of Siamese Architects (ASA), Thai Association of Landscape Architects (TALA)
  - 6.2. Non profit organization; Wildlife Conservation Society



- 6.3. International organization; United Nation Organization, SEAMEO Regional Center for Archaeology and Fine Arts (SPAFA)

## **9. Conclusion**

Academic services in collaboration with higher education has proved to be beneficial to all as described in this paper. At the Faculty of Architecture, Chulalongkorn University, our Academic Service Center has been established as a part of our educational system since 1998. Through 13 years, our center has accomplished and implemented more than 300 projects. Currently we are handling various 15 projects.

At our center we determine to activate a hub for data, information and new knowledge for the institute, to create opportunities for faculty members and researchers to utilize their knowledge and expertise, and additionally to integrate real projects into student's coursework of which they can cooperate and develop activities learned in their study and future career.

In summary, Academic services plays a particularly important role to strengthen the teaching and learning. It is such an advantage to education that apart from our center at the Faculty of Architecture, almost all faculties at Chulalongkorn University also established their own services in association with each individual diverse and relevant interests.

## **10. References**

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