



# 2023 TOP 100 GOOD PRACTICE STORY

**Title:** Community upstream-forest management for sustainable protection and maintenance of the main tourism resource base

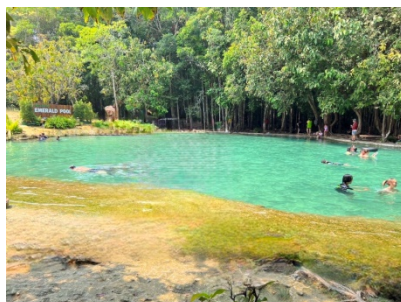
**Destination, Country:** Khlong Thom, Krabi Province, Thailand

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**In the category:**  Destination Management  Environment & Climate  Thriving Communities  
 Nature & Scenery  Culture & Tradition  Business & Marketing

**The Story in a picture:**

Water is regarded as the main resource very important for tourism in Khlong Thom. If the origin of water source is negatively affected, the amount of water may lower or it may affect water quality which attracts tourists, resulting in negative effects on tourism and economy in the community.



**Summary:**

Khlong Thom is an area with abundant natural resource and environment, especially water resource which is the main important tourism resource. The important tourist attractions of Khlong Thom are such as saline hot spring, emerald pool, and hot spring waterfall etc. These attractions attract a lot of Thai and foreign tourists and are helpful in stimulating much growth of local economy.

However, the area is affected by an invasion problem of the upstream forest which is the main water resource of the tourism sector. If this problem is prolonged, the amount of water will be affected and eventually result in water shortage in the future. The effect may be on the water quality of the saline hot spring which contains minerals suitable for medicine or health in Klong Thom. Then local tourism, income, and the economy will be affected as well.

With the problem of the upstream forest invasion, the limitations in personnel and budget of the Department of National Parks, Wildlife and Plant Conservation (Khao Pra – Bang Khram Wildlife Sanctuary) make it more difficult to solve the problem and protect the upstream forest. As a result, the public and private sectors are aware of the upstream forest value and the effect of deforestation. They aggregate to work collaboratively with the local government organizations to build mechanisms for protecting, restoring, and maintaining the resource to be sustainable.



## Good Practice Story:

### Destination description

*Brief background of the destination.*

Khlong Thom is located in Krabi Province in the southern region of Thailand. Khlong Thom is a famous tourism town in the south with many important tourism attractions such as Maya Bay, Nang Bay, Railay Beach, Lanta Island, Phi Phi Island, Emerald Pool, saline hot spring, hot spring waterfall, and other important attractions to attract a lot of tourists to Krabi Province.

Khlong Thom is an area plentiful with natural resources and environment, especially water resources as the main important resource for the tourism sector. The landscape of Khlong Thom is near the Andaman Sea with assimilation between seawater and freshwater so its area can draw many domestic and foreign tourists. For example, a hot spring waterfall contains water with a higher temperature than water in other areas in Thailand whereas the Emerald Pool is a natural water source with beautiful emerald colors in the middle of a nature trail full of rare plant species. In addition, the saline hot spring contains a mixture of sea and freshwater springing up naturally with important properties for healing human diseases. Therefore, Khlong Thom is regarded as one of the important tourist attractions as a highlight of Thailand.

### Issues faced

*Problems/issues solved with the Good Practice Story.*

Khlong Thom has faced an invasion problem of the upstream forest which is an origin of a natural resource very important for the community and tourism. It is found that the forest is changed into agricultural areas for planting rubbers and oil palms. Two big invasions of the upstream forest were found. Big trees were cut off, and the upstream forest was changed into agricultural areas. It was found that there were 13 plots of oil palm and rubber plantation, covering an area of 800,000 square meter with later additional areas found in 49,600 square meters in the village Moo 1. The damage was assessed at 41,170,331.80 baht.

The challenge in managing the invasion problem of the upstream forest is the difficulty to inspect invasion because a physical change in the areas is unclear. In other words, change is in land use from forest areas into agricultural areas where some plants can be grown without cutting the existing plants so the area conditions do not change much. As a result, the inspection needs to be performed by using aerial photography so a lot of budgets are needed for the inspection. In addition, as the areas are very large, it is necessary to assign many officers for surveillance. Department of National Parks, Wildlife and Plant Conservation (Khao Pra – Bang Khram Wildlife Sanctuary) does not have sufficient budgets and personnel for dealing with the problem of the upstream forest invasion in Khlong Thom. If this problem is not solved, it will lead to a problem of water shortage with effects on the community and tourism in the long term.

### Methods, steps, and tools applied

*Implementation of the Good Practice Story.*

According to the limitation of personnel and budget to deal with the problem of the upstream forest invasion, the local people, the private sector, and the local government organizations aggregate and participate in the protection of the upstream forest areas by developing mechanisms according to the principle of Corrective and Preventive Actions as shown in Figure 1.

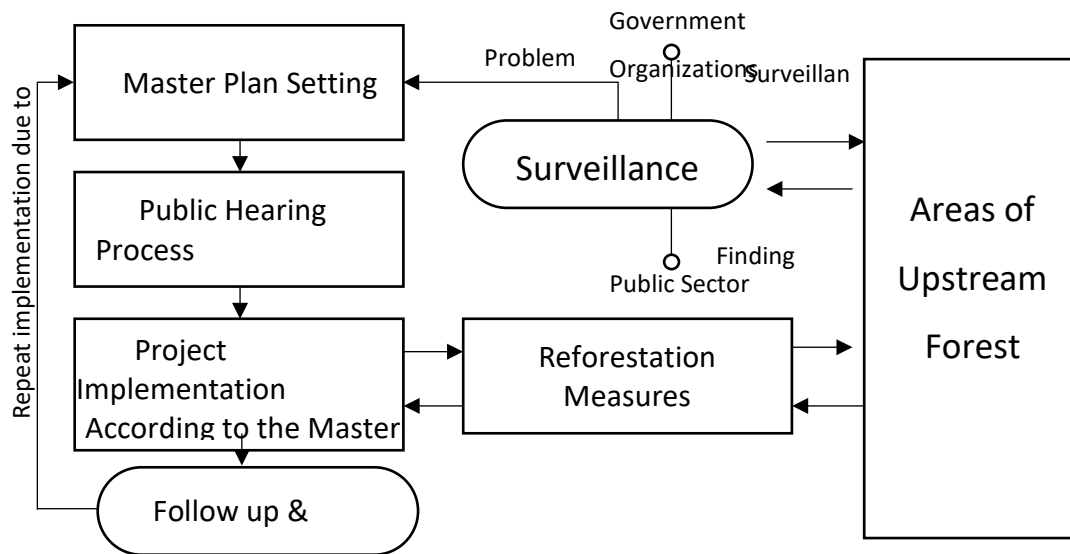


Figure 1. Procedure for managing the problem according to the principle of Corrective and Preventive Actions

1. Surveillance is the step to integrate the surveillance network including the government organizations, the local government organizations, and the public sectors for monitoring invasion to the upstream forest areas.

2. When finding a problem, the surveillance network will notify or report it to relevant organizations in conservation, restoration, and remedy of the upstream forest areas in order to be an initiator to prepare projects for the restoration of the upstream forest in a concrete way through projects of the relevant organizations.

3. Problem report is a step to report/submit the surveillance details about the forest invasion to the affiliate organization to include the details in preparing the master plan as the origin for project management in the restoration of the upstream forest.

4. Master plan setting is the step in which relevant organizations set and prepare master plans for determining goals, budgets, indicators, responsible people, and methods for follow-up and evaluation.

5. Project implementation is the step in which the organizations prepare and implement projects according to the objectives for problem management and restoration in a concrete form by determining clear standards for restoring the upstream forest.

6. Restoration measures are implemented in the targeted areas i.e., the upstream forest areas under collaboration among participants in the local surveillance network.

7. Follow-up and evaluation is the process implemented by the organizations that are the project owners. The follow-up and evaluation are divided into 2 parts. The first part is on the targeted areas which are followed up by the surveillance network to evaluate their project performance. The second part is on the project evaluation. If the results of the project evaluation show that the areas cannot be restored or compensated for arising damages, these matters are included in the projects in the master plan for implementation in the next fiscal year. This process spends 1 year setting the budget at 500,000 baht.

Note: Budget and period of implementation are based on the 4-year Local Development Plan B.E. 2566 – 2567 (2023 – 2024) of Khlong Thom Nuea Subdistrict Administrative Organization.

## Key success factors

*Critical elements that led to successfully solving the issues.*

In management the problem of upstream forest invasion at Khlong Thom District, Krabi Province, the success factors are as follows.

4.1 Collaborative mechanism among the government organizations, the local administrative organization, and the public sector. This mechanism generates effective management and apparent achievement in terms of principles and practice. It also raises awareness of conservation of the upstream forest which is a very important resource of local people, and it is a channel for prohibiting repetitive invasion.

4.2 Support of organization with authorities in supervising natural resources and environment. This is an important factor for preventing, prohibiting, and restoring problems.

4.3 Creation of awareness in the community and surrounding areas. This factor is most important because it strengthens the community to protect the upstream forest; it creates knowledge, understanding, and awareness of preserving and cherishing natural resources and the environment in the areas.

## Lessons learned

*Challenges faced while implementing the Good Practice and their solutions.*

Due to the challenge in the shortage of personnel and budget of the Department of National Parks, Wildlife and Plant Conservation (Khao Pra – Bang Khram Wildlife Sanctuary) in managing the invasion of the upstream forest, this problem cannot be solved in short term and long term if local people do not cherish, not have a sense of ownership in the natural resources, and not participate in natural resource management. This may cause a huge budget for the country as well.

Therefore, to lay fundamental in the protection and maintenance of important natural resources, the public sector and the private sector aggregate to collaboratively manage the problem of the upstream forest invasion with the local government organizations and the Department of National Parks, Wildlife and Plant Conservation (Khao Pra – Bang Khram Wildlife Sanctuary) in setting the surveillance network, arranging activities for forest restoration, and preparing guidelines for protection and maintenance of natural resources to be sustainable. Moreover, one important thing is to communicate and raise awareness of people to perceive the value of the upstream forest and the benefits for everyone if they give collaboration in sustainably protecting and maintaining the upstream forest.

The stakeholders can be classified into local people in Khlong Thom District, tourists, Khlong Thom Nuea Subdistrict Administrative Organization, subdistrict chiefs, village chiefs, officers of Khao Pra – Bang Khram Wildlife Sanctuary, 20 officers of Operation Base for Protection and Preservation of the Low Plains of Khao Nor Chu Chi, and Khlong Thom District Police Station.

## Achievements and Results

*Direct and indirect results of the Good Practice.*

Forest restoration and reforestation were piloted by responsible organizations. Royal Forest Department arranged 5 pilot projects for forest restoration in Khlong Thom forest areas, and the areas of 179,200 square meter were restored and reforested. The pilot projects for forest reforestation were implemented during 2010 – 2011 to replace the damaged areas of over 800,000 square meters from invasion in 2008 – 2009. Due to the limited budget, the projects were implemented from the allocated annual budget. At present, Royal Forest Department is responsible for piloting reforestation while Khlong Thom Nuea Subdistrict Administrative Organization considers the problem in setting the project plans and performs reforestation as well.

Regarding the quantitative and qualitative data of the Royal Forest Department, the Department implemented 5 projects for the restoration of the upstream forest as described below.

1. Project for reforestation and maintenance of Pracha Asa Forest in Khlong Tom District (Phru Din Na Subdistrict, Khlong Tom District, Krabi Province) could reforest 28,800 square meters.

2. Project for reforestation and maintenance of Pracha Asa Forest in Khlong Tom District (Khlong Thom Tai Subdistrict, Khlong Tom District, Krabi Province) could reforest 72,000 square meters.

3. Project for reforestation and maintenance of Pracha Asa Forest in Khlong Tom District (Khlong Phon Subdistrict, Khlong Tom District, Krabi Province) could reforest 12,800 square meters.

4. Project for reforestation and maintenance of Pracha Asa Forest in Khlong Tom District (Phru Din Na Subdistrict, Khlong Tom District, Krabi Province) could reforest 12,800 square meters.

5. Project for the establishment of a National Reserve Restoration Unit for Khao Chong Siat Forest, Khao Klom Forest, and Khao Chong Bang Lieng 1 in Krabi Province (Phe La Subdistrict, Khlong Tom District, Krabi Province) could reforest 52,800 square meters.

The areas of the restored forests were estimated at 179,200 square meters.

### Tips for other destinations

*Suggestion for other destinations wishing to implement the same or a similar solution.*

1. Mechanism is developed for encouraging participation and collaboration among the government organization, local administrative organizations, and the public sector. This mechanism allows effective management and apparent achievement in terms of principles and practice.

2. Awareness is raised for cherishing and maintaining the upstream forest which is an important asset and resource of local people by inhibiting repetitive invasion.

3. Preparation is on guidelines, agreements, and regulations accepted by local people for protecting and maintaining natural resources in the areas.

4. Benefit creation and distribution to all local people.

### Recognitions and Additional references

*Recognitions and awards the Good Practice received and supporting evidence.*

1. Website about properties of the saline hot spring :

<https://amatayawellness.com/%E0%B8%9B%E0%B8%A3%E0%B8%B0%E0%B9%82%E0%B8%A2%E0%B8%8A%E0%B8%99%E0%B9%8C%E0%B8%88%E0%B8%B2%E0%B8%81%E0%B8%99%E0%B9%89%E0%B8%B3%E0%B8%9E%E0%B8%B8%E0%B8%A3%E0%B9%89%E0%B8%AD%E0%B8%99%E0%B9%80%E0%B8%84/>

2. Website about participatory activities of Khlong Thom District Administrative Organization :

<https://khlongthomnuea.go.th/public/list/data/index/menu/1559>

3. Database on reforestation projects of Royal Forest Department :

[https://forestinfo.forest.go.th/fGov\\_detail.aspx?id=3017](https://forestinfo.forest.go.th/fGov_detail.aspx?id=3017)