



# Case Studies:

Mangrove Conservation Program in Klong Klone  
Sub-District

Private Mangrove Plantation in Yee San Sub-  
District Samut Songkram Province

## Group 3

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# Socio-Economic Impacts of an continuing increase in oil price

<p>Increase in demand for wood &amp; charcoal because of increase in oil prices</p>	<ul style="list-style-type: none"><li>- Increase in production of charcoal</li><li>- Increased need for wood for consumption and as raw material for charcoal production</li></ul>	<ul style="list-style-type: none"><li>- Increased income for charcoal producers</li><li>- increased income for wood selling</li></ul>
<p>Destruction of mangrove coastal habitat</p>	<ul style="list-style-type: none"><li>- Decrease of supply of mangrove-sourced goods because of depletion of habitat</li><li>- Decrease in green mussel price because of water pollution (windbreak,wave)</li><li>- Decrease in income from tourism and recreation</li></ul>	<ul style="list-style-type: none"><li>- Decrease in income for those selling these goods</li></ul>

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	<ul style="list-style-type: none"><li>- Increase in demand for area of mangrove-forest to improve water quality</li></ul>	<p>Decrease in income for green mussel farm</p>

# Goods and Services that should be analyzed for the impact assessment

## 1) Klong Klone Sub-District

Goods	Services
<ul style="list-style-type: none"><li data-bbox="105 771 283 820">📁 Fish</li><li data-bbox="105 860 493 909">📁 Blood cockle</li><li data-bbox="105 950 378 998">📁 Mussels</li><li data-bbox="105 1039 399 1088">📁 Mud crab</li></ul>	<ul style="list-style-type: none"><li data-bbox="1060 771 1459 820">❖ Eco-tourisms</li><li data-bbox="1060 860 1606 909">❖ research, education</li><li data-bbox="1060 950 1543 998">❖ water purification</li><li data-bbox="1060 1039 1627 1088">❖ nursery/feeding area</li><li data-bbox="1060 1128 1585 1274">❖ existence value of species/biodiversity</li></ul>

# Goods and Services that should be analyzed for the impact assessment

## 2) Yee San Sub-District

Goods	Services
<ul style="list-style-type: none"><li data-bbox="128 773 407 824">📦 Charcoal</li><li data-bbox="128 865 394 917">📦 firewood</li><li data-bbox="128 958 363 1010">📦 Shrimp</li></ul>	<ul style="list-style-type: none"><li data-bbox="1066 773 1619 824">❖ Nursery feeding area</li><li data-bbox="1066 865 1528 917">❖ water purification</li><li data-bbox="1066 958 1570 1089">❖ existence value of species/biodiversity</li></ul>

# What valuation techniques would you recommend to measure the value of the impacts?

IMPACT	Valuation Technique	Data Needed
<p>Increase in demand for wood &amp; charcoal because of increase in oil prices</p>	<p>📁 On site sale value for marketed goods using net price</p>	<ul style="list-style-type: none"> <li>📁 On site market price of each product</li> <li>📁 Quantities of product harvested, sold, used within household</li> </ul>
<p>☹ Destruction of mangrove coastal habitat (decrease in goods that can be gathered)</p>	<p>📁 Change in productivity (value of lost production for mangrove-sourced resources, fishery, and other uses)</p>	<ul style="list-style-type: none"> <li>📁 area and annual production of mangrove production area for wood and charcoal, as well as other available goods and services</li> <li>📁 Price of charcoal, price of wood, other goods and services (shrimp)</li> <li>📁 Costs involved in charcoal production/selling, costs involved in shrimp culture (inputs/feeds)</li> </ul>

# What valuation techniques would you recommend to measure the value of the impacts?

IMPACT	Valuation Technique	Data Needed
	<ul style="list-style-type: none"><li>📁 Travel Cost: amount of money and time spent by visitors to the site</li><li>📁 Cost of teaching at other locations</li><li>📁 Cost of undertaking research at other locations or through other techniques</li></ul>	<ul style="list-style-type: none"><li>📁 Amount of money and time spent of visitors to the site</li><li>📁 Socio economic variables</li><li>📁 Geographic origin</li><li>📁 Number of visitors/day</li></ul>

# Case Study 1 :

## Mangrove Conservation Program in Klong Klone

# RECOMENDATION

- Keeping stable the product price by selling product outside the village
- Conducting subsidize program so that the input price is low/ so that the buying price of middle men will be standardized/will not be very low
- Cleaning up program for water pollution during high tide
- Continuing public awareness program for mangrove protected area
- Promoting the eco-tourism program
- Promoting sea-food based product
- Land provision for mangrove plantation



# Case Study 2 : RECOMENDATION

- Implementing health program
- Using new technique for charcoal burning process (oven system)/ alternative technique
- Forming charcoal producer association to strengthen the market bargain
- Government support to reduce the production cost

# Thank You

(lets go to bangkok yey!! 😊 )