

The Future We Want

Taking Action in Ban Talae Nok for the Community, the Environment and Climate Change

By Nathan J. Bennett, Alin Kadfak & Philip Dearden



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Citation: Bennett, N. J., Kadfak, A. & Dearden, P. (2014). The Future We Want: Taking Action in Ban Talae Nok for the Community, the Environment and Climate Change. Victoria, BC: Marine Protected Areas Research Group, University of Victoria. 22 p.

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Marine Protected Areas Research Group

The Marine Protected Areas Research Group (MPARG) focuses on all aspects of the establishment and management of marine protected areas within the context of integrated coastal management. We believe that interaction amongst committed individuals from different backgrounds and perspectives provides an enriched environment for advancing knowledge regarding MPAs. The group undertakes research on all aspects of MPAs, ranging from institutional assessments and social surveys through to basic bio-geographical studies on marine and coastal ecosystems. Active research programs have been or are currently underway in Canada and throughout much of the developing world including Southeast Asia, Africa, and Latin America. For more information on the Marine Protected Areas Research Group, please visit <http://mparg.geog.uvic.ca/> or contact Dr. Philip Dearden at pdearden@office.geog.uvic.ca

Project IMPAACT

The Andaman Bioregion of Thailand is one of the most abundant and diverse marine ecosystems in the world and is home to 18 marine protected areas. The region is a center of tropical marine biodiversity, but the reefs and other key ecosystems are deteriorating due to a wide range of pressures. The year 2010 witnessed the most severe coral reef bleaching ever and climate change will have an increasing impact on marine ecosystems in the future. At the same time there are many communities that are dependent upon marine and coastal resources for their livelihoods. These dependencies range from traditional and commercial fishing activities through to more recent dependence on coastal tourism. These activities will also see significant changes as coastal ecosystems change. The goal of Project IMPAACT is to provide further understanding of likely climate-change induced changes in coastal ecosystems and communities and suggest interventions that can increase the resilience of ecosystem conservation and the adaptive capacity of livelihood dependent communities in the future. The IMPAACT acronym stands for Improving Marine Protected Areas on the Andaman Coast of Thailand. IMPAACT is a project of the [Marine Protected Areas Research Group](#) at the University of Victoria, Canada. For more information about Project IMPAACT or this publication please visit <http://projectimpaact.asia> or contact Nathan Bennett via <http://nathanbennett.ca> or nathan.bennett@ubc.ca

Acknowledgements:

Support for this project was provided by the Marine Protected Areas Research Group, University of Victoria, the Social Science and Human Research Council (SSHRC) of Canada, and the Bay of Bengal Large Marine Ecosystem Project (www.bobleme.org). Project partners include the Thai Department of Fisheries, the Phuket Marine Biological Centre of the Department of Marine and Coastal Resources, Department of National Parks, Wildlife and Plant Conservation, the Centre for Biodiversity in Peninsular Thailand at the Prince of Songkla University, and the Department of Conservation in the Faculty of Forestry at Kasetsart University. Additional in kind and logistical support for scenario planning was provided by Andaman Discoveries, the Northern Andaman Community Tourism Network and Mangrove Action Project. The lead author was supported by scholarships from SSHRC and the Trudeau Foundation.

Table of Contents

INTRODUCTION.....	5
THE BROADER CONTEXT: COMMUNITIES AND CHANGE	5
THE COMMUNITY CONTEXT: BAN TALAE NOK.....	5
PLANNED ADAPTATION THROUGH SCENARIO PLANNING	5
THE SCENARIO PLANNING WORKSHOP	6
WHAT IS SCENARIO PLANNING?.....	6
WHO PARTICIPATED IN THE WORKSHOP?	6
WHO FACILITATED AND SUPPORTED THE WORKSHOP?	6
WORKSHOP ACTIVITIES AND RESULTS	8
RESULTS 1: DEFINING THE SYSTEM.....	8
RESULTS 2: CHANGES AND CONTROLLABILITY.....	9
DISCUSSION: CLIMATE CHANGE.....	10
RESULTS 3: DRAWING FUTURE SCENARIOS	11
<i>Key Points on Desired Future Scenario for the Community.....</i>	<i>15</i>
RESULTS 4: COFFEE PARLIAMENT	16
RESULTS 5: VOTING ON ADAPTATIONS	17
<i>Actions to Adapt and Achieve Desired Outcomes for the Community and Livelihoods.....</i>	<i>17</i>
<i>Actions to Adapt and Achieve Desired Outcomes for the Environment.....</i>	<i>18</i>
<i>Actions to Adapt to Climate Change.....</i>	<i>19</i>
CONCLUSION.....	20
REFERENCES.....	21
<i>Key Scenario Planning References.....</i>	<i>21</i>
<i>Additional Project IMPAACT Publications.....</i>	<i>21</i>

Introduction

The Broader Context: Communities and Change

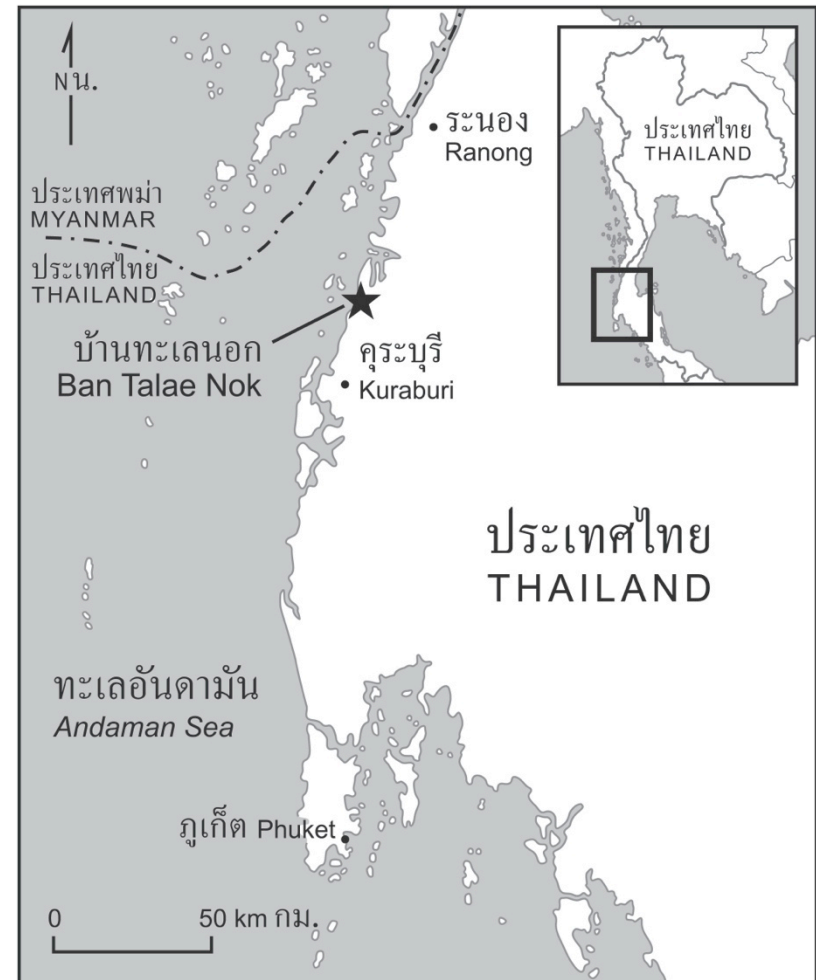
Coastal fishing communities everywhere in the world are experiencing significant environmental and social changes. In many places, the health and productivity of the marine environment is threatened by overfishing, coastal development, and pollution. Fisheries are often in decline. The climate is changing – bringing rising sea levels, warmer temperatures, changing seasons and rainfall patterns, and more severe storms. These environmental changes bring about changes in livelihoods, quality of life and customs. Communities are also subject to the whims of global economies, national politics and demographics. Broader environmental, political and economic changes can also lead to new policies and programs that impact communities. Change is constant. Whatever the root cause of change, communities have no choice but to adapt. The manner in which adaptation occurs can be proactive or reactive and results can be beneficial or detrimental.

The Community Context: Ban Talae Nok

There are more than 600 fishing villages on the Andaman coast of Thailand. Located on the northern Andaman coast in Ranong province, Ban Talae Nok is a small coastal community that relies primarily on fishing, agriculture and tourism. In 2013, the community had a population of 240 people of Thai Muslim heritage. Similar to coastal communities elsewhere in the world, Ban Talae Nok has changed drastically over the last few decades. Southeast Asia, Thailand and the Andaman region have also transformed rapidly. Some of these changes have been good, some neutral and others negative.

Planned Adaptation through Scenario Planning

This report presents the results of a community-based scenario planning workshop that occurred in Ban Talae Nok in July 2013. Scenario planning is a facilitated community development process that was used to: investigate the types of social and environmental changes that are being experienced in Ban Talae Nok from the perspective of local community members, to explore the hopes and dreams of local community members for the future of their community and the local environment, and to propose and prioritize actions that will help the community to adapt to the changes that are occurring.



The Scenario Planning Workshop

What is Scenario Planning?

Scenario planning is a group visioning process that is used to explore solutions to a central issue or question. The central question of this workshop was: *“How can coastal communities achieve good outcomes for community development and the environment in a changing climate?”* There were four stages in the scenario planning workshop:

- Stage 1 – Identifying the problem and purpose of scenario planning
- Stage 2 – Describing the system and types of change
- Stage 3 – Generating possible future scenarios
- Stage 4 – Proposing and prioritizing adaptations

Each stage of the scenario planning workshop was guided by a series of key questions and different activities were used to facilitate the discussion and produce results. These stages are explained in more detail on the following page. The remainder of this report will present results from the discussions and activities.

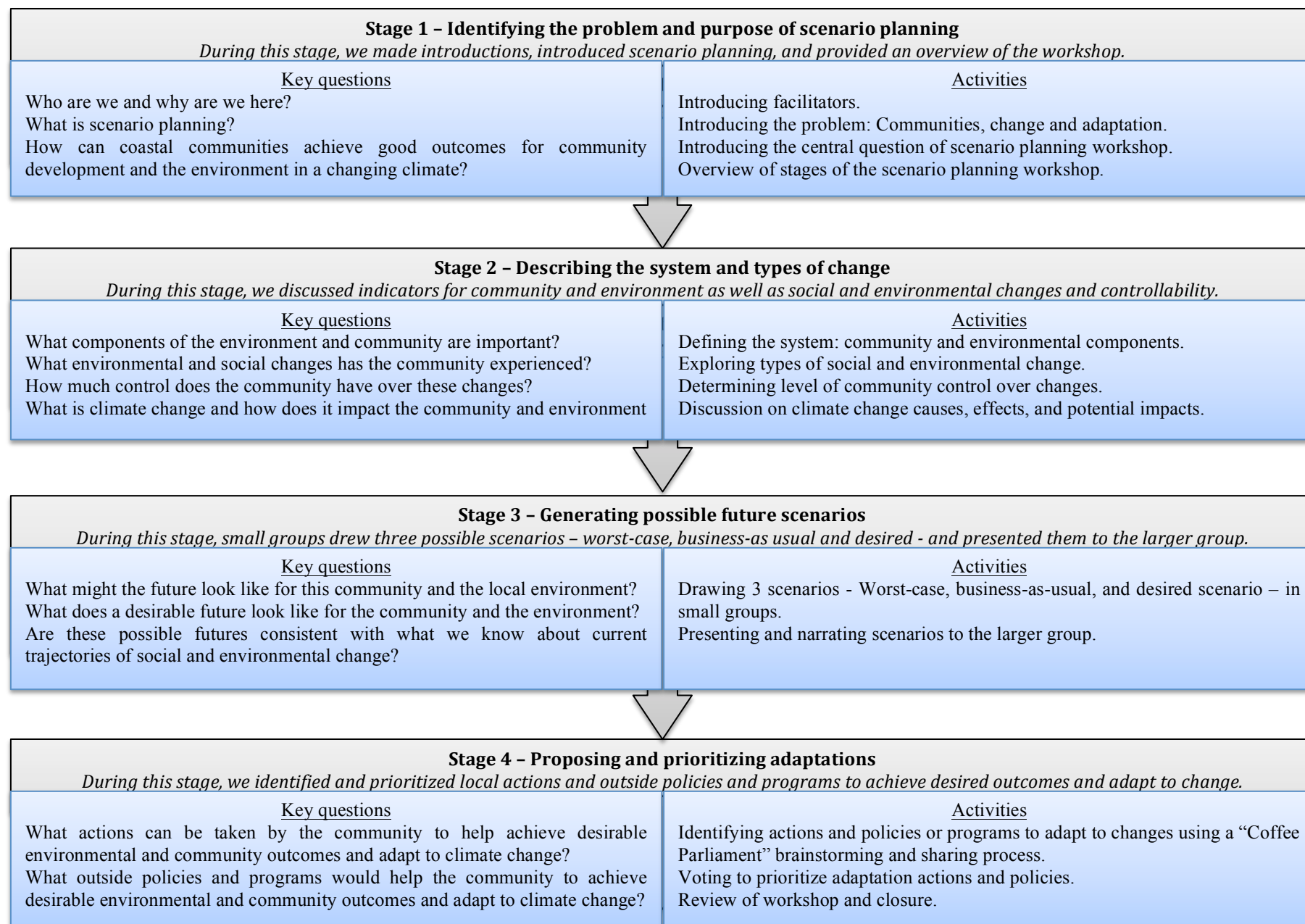


Who Participated in the Workshop?

The workshop took place over 2 days in July 2013 in the school cafeteria of Ban Talae Nok. There were 30 people from the community who participated, including 8 males and 22 females. Males had an average age of 39 and females had an average age of 36. The youngest participant was 14 and the oldest participant was 69.

Who Facilitated and Supported the Workshop?

The workshop was organized and led by Dr Nathan Bennett (Khun Nate) from the University of Victoria (Canada) and a group of Thai facilitators including Alin Kadfak (P'Alin), Piyawich Budhagesorn (P'Mai) and Panjai Sparks (P'Pom). The project was part of Project IMPAACT, which was supported financially through a research grant from the Bay of Bengal Large Marine Ecosystem Project. Additional logistical support was provided by Mangrove Action Project, Andaman Discoveries, and the Northern Andaman Community Tourism Network. Several additional attendees from these organizations attended the workshop.



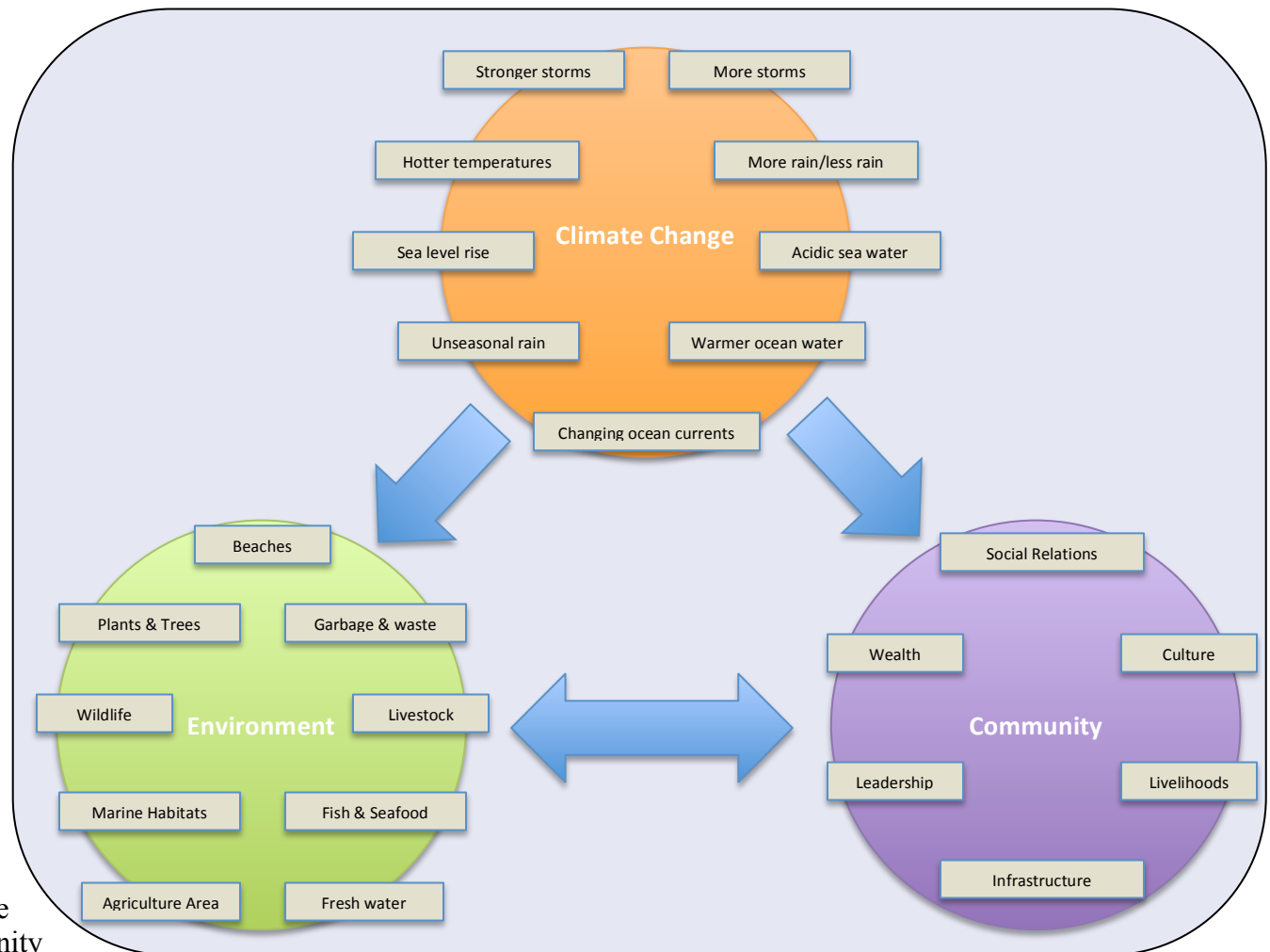
Workshop Activities and Results

Results 1: Defining the System

The central question of the scenario planning workshop was “How can coastal communities achieve good outcomes for community development and the environment in a changing climate?” To develop indicators for environment and community, we asked workshop participants two questions:

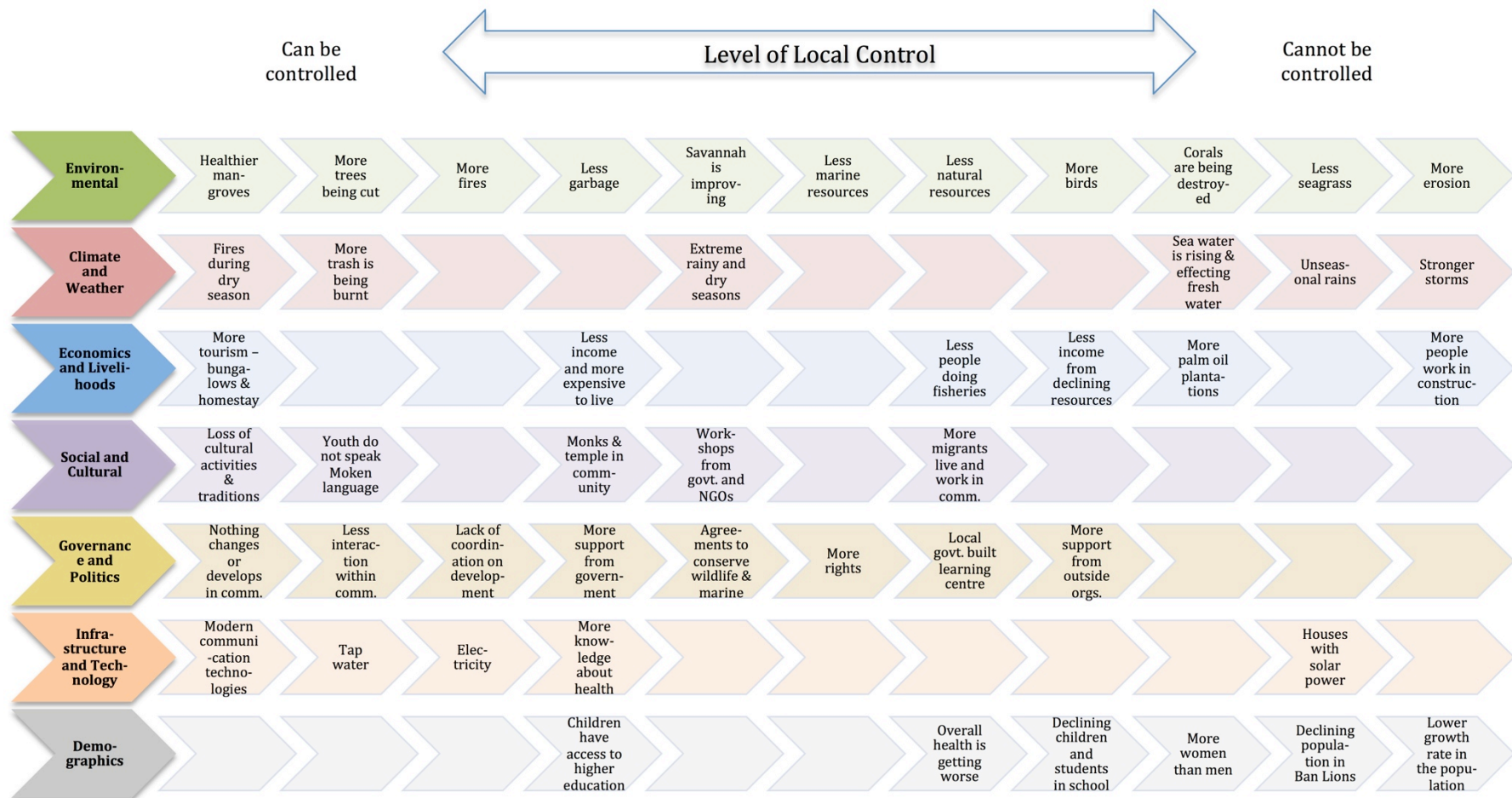
1. What makes this community liveable?
2. What parts of the environment are important to the community?

Answers to these questions were written on cards and pasted on two big circles on the wall representing “Community” and “Environment”. For the remainder of the workshop, these components served as reference points for achieving good community development and environmental outcomes. We also briefly discussed how the environment and the community influenced the other sphere. Later in the workshop, we also added the effects of “Climate Change” to a third circle on the wall and discussed how climate change impacts both the environment and the community.



Results 2: Changes and Controllability

The facilitators split the workshop participants into four groups and asked each group to brainstorm changes that have been or are being experienced by the community. Seven categories of change were provided to stimulate group discussions: environment, climate and weather, economics and livelihoods, social and cultural, governance and politics, infrastructure and technology, and demographics. The participants in each group wrote the changes on different colored cards representing the categories of change. The facilitators then collected the cards and shared them with the participants. As the facilitators read each change aloud, workshop participants were asked whether they thought the change could be controlled by the community or not. Groups of two participants discussed each change and voted “yes, it can be controlled” or “no, it cannot be controlled”. Facilitators estimated the average and cards were placed on a continuum on a big chart of changes as below.



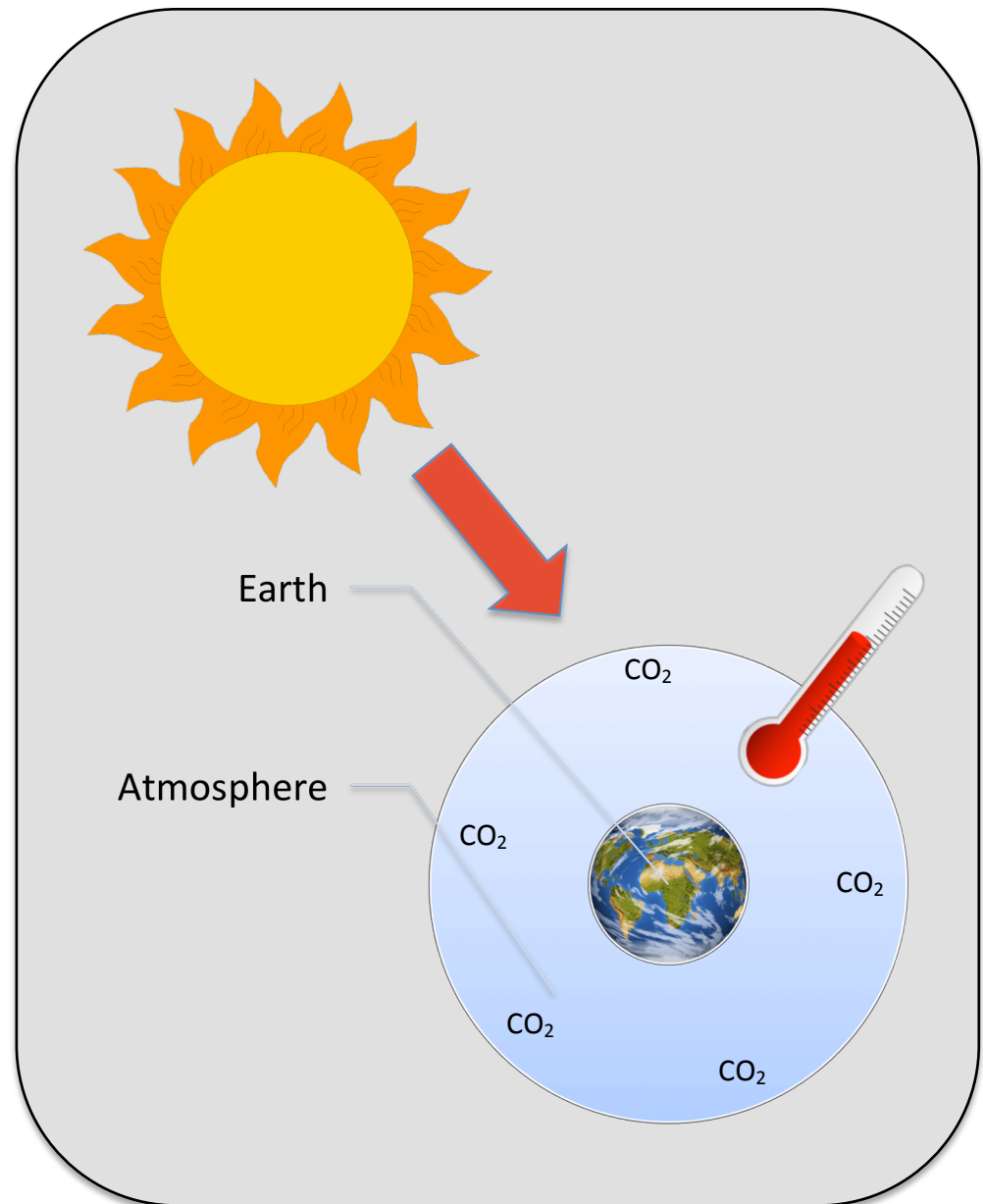
Discussion: Climate Change

After the discussions of social and environmental change, the workshop facilitators gave a brief lesson on climate change. The main points that we discussed were:

1. The earth is surrounded by an atmosphere.
2. Energy from the sun heats the earth's atmosphere.
3. Humans are adding more CO₂ and particles to the atmosphere through burning fossil fuels and removing forest cover.
4. Heat is trapped by Carbon Dioxide (CO₂) and other particles in the atmosphere.
5. This is causing a global warming of the atmosphere which has the following effects:
 - a. Warmer temperatures
 - b. Warming oceans
 - c. More and stronger storms
 - d. Changing ocean currents
 - e. Sea level rise
 - f. Unseasonal rains
 - g. More acidic sea water
 - h. More or less rain

We added these effects to the "Climate Change" circle as shown on page 8 and discussed how these changes can impact communities, livelihoods, and the environment.

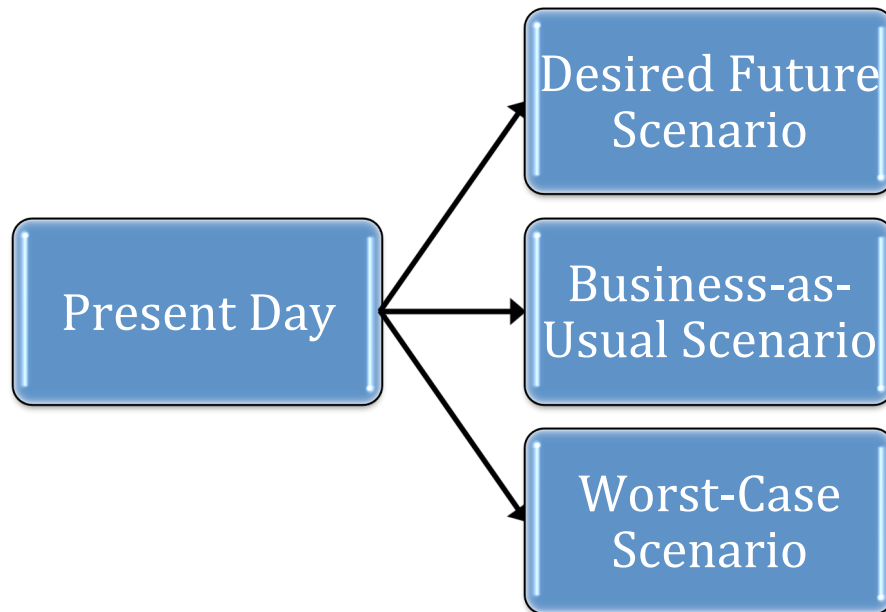
The group acknowledged that they had seen these changes that we identified during the lesson on climate change. When asked whether there were any additional climate related changes that they wanted to add to the chart of changes (p. 9), the workshop participants said that they did not want to add anything as they felt that they had already identified the climatic changes that they were experiencing.



Results 3: Drawing Future Scenarios

A group drawing exercise was used to explore possible scenarios for the community and for the local environment. The workshop participants were split into three groups – 1 group of men and 2 groups of women. Each group was asked to draw three scenarios – a worst-case scenario, a business-as-usual scenario, and a desired future scenario.

While the groups were drawing the scenarios, facilitators asked questions to ensure that the scenarios were plausible based on the changes that we had discussed previously and that they considered the different components of the community and the environment as well as climate change.



Afterwards, each group selected several presenters to tell everyone about the scenarios that they had drawn. We were running out of time so groups only presented the worst-case and desired future scenario. As the presenters told the story of each scenario, facilitators documented the narrative and the main points. These are shown on the following pages.





First Group of Women

Worst-Case Scenario

“There are strong storms and the sea and community is full of garbage. People cut down the trees. There are shrimp farms, which put their polluted water into the sea. The people in the community do not have jobs. Some of them are drinking. There is gossip, people are talking bad stories about other people. There is sickness. The trees are falling down because of big storms. All the mangroves are gone because people have cut them. There is cow manure on the road.”

Desired Future Scenario

“In the bright future, Ban Talae Nok will become a great community, the number 1 of the other communities. We save the forests. We have tourists come to visit the community in big buses. Everybody in the community smiles. There is no problem. Tourists come from Canada. Everyone in the community has good health. The community is full of trees. There is a savings bank in the community and a cooperative. All the products in the cooperative are from the community. Marine resources – fish, crab, shrimp – are good. We use the longtail boat for fishing. We have jellyfish to catch – there are a lot in the sea. There is a road around the community. When you are sick, you can go to health care center. We have a big deep water pier in the community.”



Group of Men

Worst-Case Scenario

“This is the intersection from the main road. On the road, we only have buffalo poo from the beginning to the end of the road. There is no more school, it has only buffalo. On the mountain, there are mudslides...There is a pig farm in the community. There are shrimp farms all around the community. The way to the mosque is full of garbage. The mosque has no people going to pray....There are so many factories that let out bad smoke and pollution. The forest has been destroyed by fire. There is a golf course, which is full of poo as well. There are goats and cows and it is full of animals. The mangroves are all cut down. The way to the community is connected to the sea, which has bad water and dead fish because of the water from the shrimp farm. The life around the shrimp farm is all dead. On the beach, there is only poo – buffalo, cow. There are no tourists. And there are only big boats in the sea. When we go fishing, we catch only garbage. There is karaoke, 7-11 and Thai whiskey bar on the beach and a dancer bar. The national park is controlling everything. The trawlers take all of our fish nets. More areas of land are owned by outsiders. We cannot control it. The outside rich people do what they want. We cannot control them.”

Desired Future Scenario

“The front road from the community is full of trees. If we have lots of trees then we will have lots of tourists. We have a beautiful clean school full of students. It is high quality. We have a stadium full of chairs for watching football. There are no landslides because the mountains are full of trees. The water pipeline to the community is perfect. The people in the community love each other, we care for each other. We have small little roads to the shrimp farm and have trails for people who want to have knowledge of the forest and the mangroves. The trail is 1km. The area is full of mangroves and full of crabs and shells. We have the lines to mark and protect the forest. We have a beautiful mosque and a lot of people go to pray. We separate between the mountain and the mangrove area. We have the land marked for saving the forest area and for saving the mangrove area. We have a way to run away from the tsunami, an evacuation route. The evacuation route connects from the community and the mangroves – two ways to run away. In the future, we will not have poo on the road. There will be electricity. We have a community supermarket managed by people in the community and things are made by people in the community. We will put about 24,000 per year into the community savings account. We have a standard health care center so that we do not need to go to the hospital. We have a sports field. There is a deep water pier. There is a damn filled with fresh water and connected to the whole community. We can sell fresh water and fuel to the big boats at the pier. The boats can park at the pier – any boat can come and park in the community. We want to say “Bye-bye to the trawlers and to the national park”. We do not need the national park to protect our resources.”



Second Group of Women

Worst-Case Scenario

“There is bad pollution. There is fire. The women in the community are so sad and hopeless. There is no healthcare and the healthcare women get fired, there is no doctor. The houses are in bad condition. There is no grass to feed the buffalo. The people are hungry because there is no food. People do not have blankets. The mountain does not have any trees. There is garbage and no fish in the sea. There is dead fish because in the sea there is only bad water. The sun is old too.”

Desired Future Scenario

“We have a hospital and a gas station. There is a 20 star hotel. There is a factory for separating the garbage. We will build it far from the community next to the mountain. Everything is run by people in the community. We have big boats, banana boats, and longtail boats to travel to the mangrove trails. The people are going to pray in a beautiful new mosque. People dress in Muslim clothes. The school is full of students. There are 10,000L water tanks for the community. We have a factory to change water from salt to freshwater and then to run in a system to the community. There is a fish factory to make a fish can and a 7-11. Everything is owned by the community. Talae Nok will be rich people. We have a lot of speed boats and less longtail boats. There are tourists and they can spend time on the beach without garbage. We have rice fields in the community, we do not need to buy rice. We have electricity. There is land the whole way through the community. We still have buffalo and goats. We have college in the community that teaches the people to live the sufficiency economy like the king’s speech. We grow our own vegetables. We do not have a bank – only collect the money in our wallets.”

Key Points on the Desired Future Scenario for the Community and the Environment

<i>The desired community...</i>	<i>The desired environment...</i>
<p>...is managed by people in the community, not by outsiders</p> <p>...has a road from another part of the beach to the community</p> <p>...has a high quality, clean and big school with a big sports field</p> <p>...there are more students in the school</p> <p>...has a college</p> <p>...has a co-operative supermarket store selling OTOP products and locally made products</p> <p>...has a community savings fund</p> <p>...includes a deep sea pier with a Sala (4 columns and roof) for cargo</p> <p>...has a good water management system and clean tap water</p> <p>...has a good electricity system</p> <p>...has a garbage and waste separation project and building</p> <p>...more people go to the mosque</p> <p>...there is harmony and caring within the community</p> <p>...people do not gossip</p> <p>...people have good health</p> <p>...there are no drugs in the community.</p> <p>...has no party areas or places such as Karaoke</p> <p>...more people are employed in the community, there is less unemployment</p> <p>...people follow the King's self sufficiency theory and grow gardens</p> <p>...more people do fisheries in the sea</p> <p>...has many long tail boats</p> <p>...catch more jellyfish during the season</p> <p>...has a community run seafood processing factory</p> <p>...more tourists and study trips come to the community</p> <p>...has homestays and eco-tourism</p> <p>...there is more tourist infrastructure, such as hotels and stores</p> <p>...has tourism activities developed in the sea area and speedboats</p> <p>...the businesses are run and owned by the people of Ban Talae Nok</p> <p>...has good evacuation routes for tsunamis</p>	<p>...there are lots of fish, crabs and shrimp in the sea</p> <p>...the mangrove areas are full of crabs and shells</p> <p>...has healthy marine habitats with a great diversity of species</p> <p>...there are no trawlers coming nearby the community</p> <p>...has more and healthier mangroves</p> <p>...contains no shrimp farms near the community, no polluted water</p> <p>...has beautiful beaches with less erosion</p> <p>...has more pine trees out on the beach to protect from erosion</p> <p>...is a clean community with no garbage</p> <p>...the road is not covered with cow and buffalo dung</p> <p>...boasts more trees and beautiful healthy forests on the hills</p> <p>...has marked areas for the forest, mangroves, agriculture and the community</p> <p>...both the forests and the mangrove areas are managed by the community</p> <p>...the agriculture area has healthy grass fields</p> <p>...has less problems with natural disasters - such as storms and landslides</p> <p>...contains no factories that produce pollution within the nearby area</p> <p>...there is no National Park – people in the community manage the natural resources by themselves</p> <p>...trawlers are not used in the area</p> <p>...the land area is owned by local people</p>

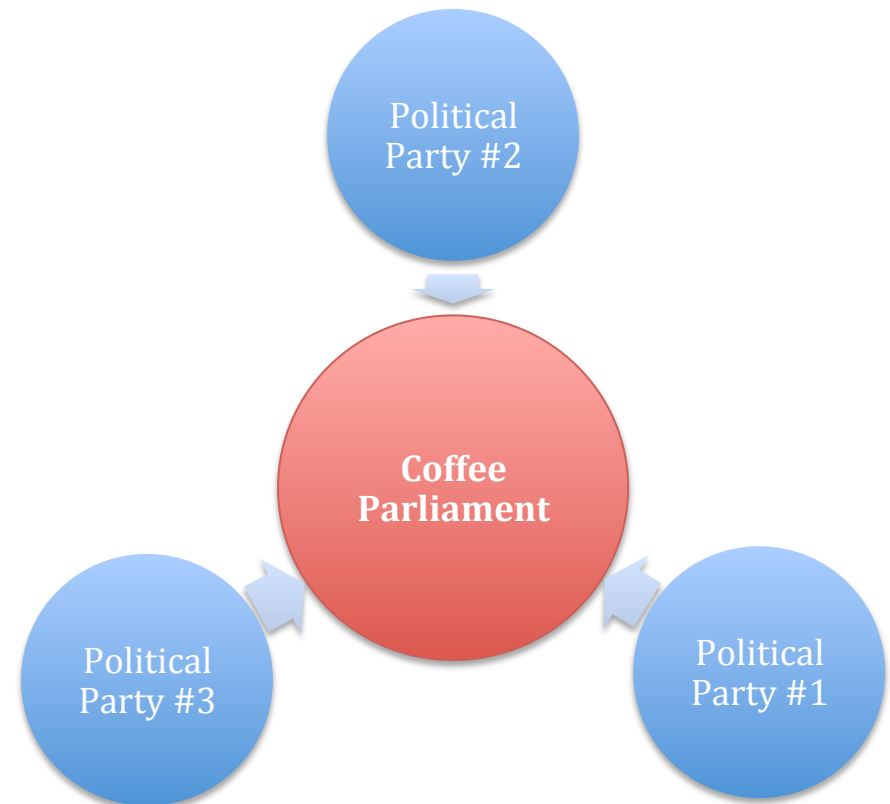
Results 4: Coffee Parliament

In the final stage of the workshop, we aimed to identify and prioritize local community actions and policies or programs from outside the community that would help to achieve the desired future scenarios while adapting to the changes that are occurring.

To do this, we used an activity that we called “Coffee Parliament”. We named the activity after the groups of mostly elderly men who drink coffee and discuss politics in the morning on street corners and in cafes all over Thailand. For this activity, we split workshop participants into 3 groups - which we called different “political parties”. During three rounds of discussion, each group was asked to reflect on *actions created by the community* and *policies or programs supported from outside the community* to:

1. adapt and achieve desired outcomes for the environment;
2. adapt and achieve desired outcomes for the community and livelihoods; and,
3. to adapt to climate change.

After each round of discussion, each “political party” sent a representative forward to the central “coffee parliament” to propose solutions that had been discussed in their group. A facilitator moderated the discussion while coffee was served. All proposals that were discussed during the coffee parliament were written down on chart paper.



Results 5: Voting on Adaptations

To prioritize adaptations, all workshop participants were given 6 stickers each and asked to vote on any of the solutions identified in the “Coffee Parliament”. Prior to voting, we reviewed with the participants the proposed *actions created by the community* and *policies or programs supported from outside the community* for each of the three categories: environment, community and climate change. The proposals are listed below along with the number of votes (stickers) that each received.



Actions to Adapt and Achieve Desired Outcomes for the Community and Livelihoods

<i>Actions created by the community</i>	<i>Policies and programs supported from outside</i>
Creating an efficient water system by choosing a new and better committee for the management (15)	Create a mangrove study walk-way with financial support from outside government organizations and NGOs (16)
Processing seafood for household consumption and to sell what is left (8)	Having more lights for the road from the beginning to the end (13)
Planting more Nipa palms to be used as raw materials for different products by collecting Nipa seeds and plant them 2 times a year (4)	Getting a new governmental fund or budget for the community tap water system (4)
Keeping the mangroves in good condition through the cooperative planning of people in the community (3)	Building a health park (4)
Keeping the road clean by having proper fences for the cattle (2)	Creating biogas systems from cow and buffalo dung (1)
Studying and learning about other plant species that can grow within the rubber plantations (2)	Setting up youth training programs
Developing the youth by setting the parents as role models (1)	Holding treatment programs for the youth who are doing drugs
Having more social activities within the community (1)	
Developing new livelihoods	
Making deserts and selling them within and outside the community	
Making crystal decorations for women’s headscarves	
Making matts from Pandanus leaves	
Encouraging people in the community to keep an eye on everything	
Organizing the logistics of the livestock with cooperation of everyone in the village	
Making compost from household waste to fertilize the plantations	

Actions to Adapt and Achieve Desired Outcomes for the Environment

<i>Actions created by the community</i>	<i>Policies and programs supported from outside</i>
Building a walkway in the mangrove for studying (18)	Building more artificial coral reefs (17)
Keeping the animals in their proper places (6)	Developing a garbage management system (2)
Setting clear regulations regarding the raising of animals (6)	Planting pine trees along the beach to protect community from erosion (1)
Keeping the water clean by not releasing pollution and garbage into the canals (3)	Developing a biogas system from cow and buffalo dung
Having students and people in the community collecting garbage for recycling (3)	
Encouraging youth to throw garbage in proper places for separation and recycling processes (2)	
Finding ways to keep the shrimp farms as far as possible from the community (2)	
Planting mangroves (2)	
Setting regulations to manage the community forest (2)	
Keeping out the fish poisoning and bombs (2)	
Having a campaign to stop fishing during the “egg laying period” for the fish in order to increase the overall amount of marine life (1)	
Conserving the mangroves areas	
Setting a clear separation between the forest and people’s houses and land	
Making fertilizers from household waste such as vegies, fruits, and left overs from food	





Actions to Adapt to Climate Change

<i>Actions created by the community</i>	<i>Policies and programs supported from outside</i>
Finding other occupations to substitute for fisheries – which is getting more difficult through the changing of currents and stronger storms (6)	Building water reservoirs to keep water for the dry season (3)
Reducing the usage of plastic (4)	Making bio-fertilizers from leaves – Need someone to teach the community how (2)
The community needs to stop throwing garbage into the canals to reduce acid in the sea (1)	Creating more artificial coral reefs to increase the amount of crabs and fish (1)
Reduce the usage of toilet paper and use water instead (1)	Shrimp farms should have proper water treatment systems
Planting more mangroves to protect from erosion and reduce deforestation	Not allowing the numbers of shrimp farms to increase
Finding new ways of adapting to changing weather such as putting plastic “hats” over the rubber tapping	Not letting the factories to release polluted water into the canals and rivers as well as pollution into the sea
Reducing the usage of vehicles to stop global warming	
Not building houses by the beach to avoid the risk of storms	

Conclusion

This report provides an overview of the results of a community-based scenario planning workshop that was held in Ban Talae Nok, Ranong, Thailand in July 2013. Through the workshop we asked 30 community participants “How can Ban Talae Nok achieve good outcomes for community development and the environment in a changing climate?” The different stages of the scenario planning process:

1. Identified components of the community and of the environment that were important to participants;
2. Investigated the types of social and environmental changes that are being experienced by the community;
3. Discussed the causes and effects of climate change and how climate change impacts communities and the environment;
4. Explored worst-case, business-as-usual and desired future scenarios for the local community and the environment; and,
5. Identified and prioritized potential actions by the local community and policy and program supports from outside organizations or agencies to adapt and achieve the desired community and environmental outcomes and to adapt to climate change.

Coastal communities everywhere will always experience different types of social and cultural, economic and livelihoods, demographic, political and governance, infrastructure and technology, environmental and climatic changes. Adapting to these constant changes can be challenging but it also provides communities with an opportunity to identify and achieve desired future social and environmental outcomes.



This scenario planning process has helped to identify proactive actions that can be taken by the community and policies and processes from outside the community that could facilitate community adaptation.

Community participants told us that they enjoyed the scenario planning process and that it was useful. Of course, taking action to achieve the desired future will be much harder work than this workshop. It will require solidarity and strong leadership in the community. There are also many additional ideas, dreams and actions that were not discussed during the stages of scenario planning process. We encourage the leaders of Ban Talae Nok to continue holding community meetings to define their desired future community and environment and identify actions to achieve the desired future scenario and to adapt to climate change.



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- Bennett, N., Dearden, P., & Peredo, A.M. (2014). [Vulnerability to multiple stressors in coastal communities: A study of the Andaman Coast of Thailand](#) *Clim. Dev.*
- Bennett, N. J. & Dearden, P. (2014). [Why local people do not support conservation: Community perceptions of marine protected area livelihood impacts, governance and management in Thailand](#). *Marine Policy*, 44, 107-116.
- Bennett, N. & Dearden, P. (2013). [A Picture of Change: Using Photovoice to Explore Social and Environmental Change in Coastal Communities on the Andaman Coast of Thailand](#). *Local Environment: The International Journal of Justice and Sustainability*. 18(9), 983-1001.
- Bennett, N. (2013). [The capacity to adapt, conserve and thrive?: marine protected area communities and social-ecological change in coastal Thailand](#). Dissertation. University of Victoria.
- Bennett, N. & Dearden, P. (2012). [From Outcomes to Inputs: What is Required to Achieve the Ecological and Socio-Economic Potential of Marine Protected Areas?](#) (Working Paper). Victoria, Canada: Marine Protected Areas Research Group/University of Victoria. 38 p.
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- Bennett, N. & Dearden, P. (2012). [A Picture of Koh Phrathong: An Exploration of Change in the Environment and in Communities on the Andaman Coast of Thailand](#) (in Thai and English – Translated by Alin Kadfak). Report prepared for Project IMPAACT, Marine Protected Areas Research Group, University of Victoria. 82 pages.
- Panjarat, S. & Bennett, N. (2012). [Responses of Fishers to a 25-year Seasonal Closed Measure on the Andaman Coast of Thailand](#). Report prepared for Project IMPAACT and the Marine Protected Areas Research Group, University of Victoria. 21 pages.



Dedicated to the visionary youth leaders of Ban Talae Nok