

Six-Level Redevelopment Project for Traditional Fishing Villages

Social Return on Investment (SROI) Evaluation Report



By Hsin-Yen Peng

Soil and Water Conservation Bureau,
Council of Agriculture, Executive Yuan



Cover design by Bo-Ren Chang

(The principal investigator and executor of this project)

-  This hexagon means the different part brands in our aquaculture industry.
-  Triangle means connection the different part brands with each other to fulfill Six-grade industry in aquaculture .
-  The plus maens One-grade industry + Two-grade industry + Three-grade industry = Six-grade industry = One-grade industry x Two-grade industry x Three-grade industry.

The three picture combine become a Six-grade industry complete situation. Will support the aquaculture industry upgrade and stronger.

They can help aquaculture industry product improvement 、 improve labor force 、 machining integraion 、 Sale supporting 、 industry upgrade 、 cross-industry alliance at last this system will support the area progress .



Table of Contents

| | |
|--|------------|
| Chapter 1 Project description..... | 1 |
| Section 1 Project background..... | 1 |
| Section 2 Project scope..... | 2 |
| Chapter 2 SROI Framework | 8 |
| Section 1 Analytical Framework..... | 8 |
| Section 2 Limitations of the Study | 10 |
| Chapter 3 Social Impact Analysis | 15 |
| Section 1 Stakeholder..... | 15 |
| Section 2 Inputs and Outputs | 25 |
| Section 3 Assessing the Outcomes..... | 27 |
| Chapter 4 SROI Calculation..... | 118 |
| Section 1 Present Value of Outcome Impact | 118 |
| Section 2 Sensitivity Analysis..... | 122 |
| Chapter 5 Conclusion and Recommendations..... | 125 |
| References..... | 134 |

| | | |
|-------------------|---|------------|
| Appendix 1 | Stakeholder Engagement Interview Outline and Questionnaire | 136 |
| Appendix 2 | Stakeholder Inputs | 139 |
| Appendix 3 | Chain of events..... | 141 |
| Appendix 4 | Impact Map | 149 |

List of Tables

| | | |
|-----------------|---|------------|
| Table 1 | Limitations of the Study | 10 |
| Table 2 | Related meeting minutes | 15 |
| Table 3 | List of Stakeholders | 16 |
| Table 4 | Master table of stakeholder engagement..... | 20 |
| Table 6 | Total Inputs and Outputs..... | 25 |
| Table 7 | Chain of events and summary of principal investigator | 30 |
| Table 9 | Chain of events and summary of collaborating fish farms | 65 |
| Table 10 | Chain of events and summary of employees of Milkfisherhome Café | 73 |
| Table 11 | Chain of events and summary of the local fishermen's association | 89 |
| Table 12 | Chain of events and summary of consumers of Milkfisherhome Café | 96 |
| Table 13 | Chain of events and summary of event participants | 99 |
| Table 14 | Chain of events and summary of the SWCB..... | 105 |
| Table 15 | Adjusting Factor | 112 |

| | | |
|-----------------|---|------------|
| Table 16 | Summary of Influencing Factors in Each Outcome..... | 115 |
| Table 17 | Table of Impact | 118 |
| Table 18 | Calculations for SROI adjustment..... | 123 |
| Table 19 | Proportion of Outcome Benefits Enjoyed by Each Stakeholder Group | 128 |
| Table 20 | Breakdown of benefits by aspect..... | 130 |

List of Figures

| | |
|--|------------|
| Figure 1 Schematic Diagram of the Six-Level Redevelopment Project for Traditional Fishing Villages... | 6 |
| Figure 2 Brand building flowchart of Bo-Ren Chang..... | 7 |
| Figure 3 Proportion of Benefits Enjoyed by Each Stakeholder Group | 129 |

Chapter 1 Project description

Section 1 Project background

The principal investigator and executor of this project is Bo-Ren Chang. His family operates a fish farm: Terminalia Garden in Mituo, Kaohsiung, and he is learning the profession of aquaculture. This is when he gained a profound understanding that the main issue with the aquaculture industry in Mituo, Kaohsiung, Taiwan, is the lack of young workers. Students in related departments also lack a practice site and thus cannot accumulate practical experience. As a result, 90% of students do not go into the aquaculture industry after graduation (Lin C.-C., 2007). That is why the principal investigator built the Fisher Team and played the role of professional trainer for the aquaculture industry, allowing students of the Department of Aquaculture to become interns at Terminalia Garden. The students are paid intern salaries and members become formal employees after graduation. Furthermore, the principal investigator also felt that the industries in Mituo are too homogeneous. If the youth do not get into the aquaculture industry, they need to leave their hometown and seek work elsewhere. This caused large outflows of the young population in Mituo, leaving only the elderly. For this reason, the principal investigator worked hard to create different possibilities for the aquaculture industry, including opening a café, dining table for the fish farm, and fish farm experience activities, hoping to provide employment opportunities for the youth that do not want to get into the aquaculture industry but still want to work in their hometown. He hopes that the youth can have good development opportunities in the upstream and downstream of the industrial chain, and stay in the fishing village. The social impact of the project is displayed in the talent cultivated for the aquaculture industry. The use of ecological aquaculture methods allow for the production of good aquaculture products, raise the price for fishermen to have higher profits, and allow them to reduce production volume, which further improves the work efficiency of the aquaculture industry. The diverse industries created in fishing villages allow young students and women seeking re-employment to take care of

both their studies and families, learning new skills, such as communication ability and coffee brewing techniques, for the youth to regain a sense of attachment to the land as well as a sense of belonging.

Section 2 Project scope

This report assesses the social impact of the Six-Level Redevelopment Project for Traditional Fishing Villages, for which application was made by Bo-Ren Chang to be part of the Rural-Young Project founded by the Soil and Water Conservation Bureau (SWCB), Council of Agriculture. The name of the project is Six-Level Redevelopment Project for Traditional Fishing Villages. Its principal investigator and executor is Bo-Ren Chang.

This report evaluated the project's input and activity period from March 1, 2017 to July 31, 2019 (period of the SWCB's grant subsidy project). For the assessment period, the Six-Level Redevelopment Project for Traditional Fishing Villages consisted of four major activities:

1. Train Fisher Team members: To cultivate the younger generation of talent for the aquaculture industry, one of the focuses of this project is to establish the Fisher Team and personally trained members, providing intern salaries to students and teaching them knowledge of aquaculture through practice. Furthermore, knowledge of ecological aquaculture methods is passed on to students to produce better aquatic products that are friendly to the environment, which will raise the price for fishermen and allow them to make bigger profits, reduce production volume, and further improve the work efficiency of the aquaculture industry. On one hand, the youth can understand their interests and career plans through complete training courses, saving them time exploring in the future. On the other hand, they can learn ecological aquaculture methods to produce higher quality aquatic products that are friendly to the environment. Fish farmers in Mituo face the issue of aging, the industry lacks high-quality youth, and this has resulted in many fish

farms being deserted or unable to reach normal productivity. Therefore, the principal investigator introduced members that completed training to become interns at qualified fish farms. If they perform well during their internship, they can become formal employees of the fish farm after graduation. This way fish farmers have young workers with professional knowledge, while the youth have a workplace in which to utilize their expertise.



2. Established Milkfisherhome Café: To allow more young people to enter the aquaculture industry in Mituo and have other employment opportunities, principal investigator established Milkfisherhome Café No. 1 and No. 2, which was then the first café in Mituo, Kaohsiung. Milkfisherhome Café No. 1 is a café with an ocean view that features Mituo port and a relaxed and leisurely atmosphere. Milkfisherhome Café No. 2 was then jointly established with the Mituo Fishermen's Association. It is positioned differently than Milkfisherhome Milkfisherhome Café No. 1 and focuses on promoting the local aquatic products of Mituo. The store clerks are trained as product salespeople. In the process of interacting with consumers, they explain Mituo's local culture and industry features. In the future, Milkfisherhome Milkfisherhome Café No. 2 has the potential to become an important location for in-depth tours.



3. Established a limited liability production cooperative: Principal investigator has promoted the concept of friendly fish farms through different channels, and is working together with certain local channels (such as high-end French restaurants and department stores in urban areas). He established a limited liability production cooperative in 2019, and further invited primary producers who are willing to take responsibility for their products to join the cooperative as suppliers, expanding the market using the concept of a common brand. Products that join the limited liability production system are classified based on quality and have different purchase prices. This encourages producers to continue improving their product quality and gain reasonable profits, avoiding the tragedy of relying on nature and having wholesalers determine the prices (Chen, 2007), creating a virtuous cycle and slowly improving the industry environment (Lin T.-W. , 2006). The direct choice of consumers results in the difference in sales revenue between high quality producers and general producers. When the Fisher Team that he trained intends to start its own business, it does not need to worry about sales issues.



4. Organize food and fish education events: Principal investigator combined fisheries with tourism (Chang, 2012), established Cool Coast Camping Campsite, Milkfisherhome Café No. 1, Milkfisherhome Café No. 2, and organized events to promote food and fish education, as well as sell aquatic products. He worked with local restaurants to make the food products a part of dishes, so that more consumers will understand how to use the aquatic products and the difference from typical aquaculture products.



Six-Level Redevelopment Project for Traditional Fishing Villages

Primary industry
Fish farms produce friendly aquatic products

Secondary industry
Fishery product processing increases the value of fishery products

Tertiary industry
Fish farm dining table camping activities

Talent cultivation for different level industries in fishing villages

Figure 1 Schematic Diagram of the Six-Level Redevelopment Project for Traditional Fishing Villages

|  |  |  |  |  |
|--|---|---|---|---|
| 2007 Established Terminalia Garden (Assisted his father in creating a self-owned brand for fishery products) | 2013 Established the Fisher Team (trains young students in aquaculture technologies through practical operation, suspended recruitment in 2015, and restarted recruitment due to the SWCB's project in 2017) | 2017 Established Cool Coast Camping Campsite (Site for organizing food and fish education and fish farm dining table activities, a base that searches for local highlights and makes connections with the industrial chain, and the first campsite to be established in Mituo) | 2018 Established Milkfisherhome Café (Hires locals to sell coffee and aquatic products, a base that connects industry, tourism, and cultural promotion functions, and the first café in Mituo) | 2019 Established a responsible production platform (A sales platform that aims to integrate producers through a producer self-guarantee mechanism) |

Figure 2 Brand building flowchart of Bo-Ren Chang

Chapter 2 SROI Framework

Section 1 Analytical Framework

In this report, we have followed “A Guide to Social Return on Investment” (2012 edition; hereinafter referred to as the “SROI Guide”) published by the British government, as the basis of our analytical framework. Based on the actual data from interviews with the stakeholders during the assessment period, the changes and impacts that occurred for the stakeholders in that time served as the basis for evaluation of the project’s social impact.

We carried out each step of the research analysis in accordance with the description and framework design of the SROI Guide:



1. Establish a scope for the report and list the stakeholders.
2. Through stakeholder engagement, list the impacts and changes that the project has brought about for them.
3. Design indicators to identify whether the impacts and changes have indeed occurred; after engaging with stakeholders again, select the appropriate financial proxy to measure impact and changes.
4. Adjust the value of impact and changes through four adjusting factors.
5. Calculate the net present value of impact using the discount rate, and then calculate the SROI ratio.
6. Confirm the results of the assessment and the SROI ratio with the stakeholders again, and then disclose the final results in the report.

Section 2 Limitations of the Study

The study is carried out based on the framework of the seven SROI principles. Related research limitations and response methods are described below:

Table 1 Limitations of the Study

| Principle | Limitations of the Study | Potential Risks for the Study | Response Method |
|-------------------------|---|--|---|
| I. Involve stakeholders | <p>There are many types of stakeholders, some of whom cannot be contacted or engaged with:</p> <p>1. Experience activities and food and fish education courses are mainly one-time activities. They are not continuous and contact is difficult in practice, so questionnaires or interviews with most participants cannot be obtained.</p> | SROI ratio overestimation or underestimation | <ol style="list-style-type: none">1. For experience activities and food and fish education courses, only those with questionnaires or interview records are included in the scope of assessment in order to comply with principles.2. Limited Liability Production Cooperative members inquired stakeholders through different methods (telephone or questionnaire), and inquired the stakeholder's peers in the industry or conducted observations of members of the local fishing crew.3. According to the guide, we adjusted the influencing factors which is obviously low to 10% and 30% respectively in the sensitivity analysis to test the results. |

| | | | |
|--|--|--|--|
| | <p>2. The limited liability production cooperative began assisting members with sales in 2019. Due to the confidentiality of business cooperation and revenue, it is difficult to engage stakeholders.</p> <p>3. The influencing factors of this study rely heavily on the feedback from stakeholders. According to our experience, even if we explained the meaning of the four influencing factors to stakeholders during the interview, it is still difficult for them to fully understand.</p> | | |
|--|--|--|--|

| | | | |
|-----------------------------------|---|--|--|
| II. Understand what changes | <p>A small number of stakeholders cannot clearly express the impact or changes they have experienced: The fishermen's association provides loans, industry guidance, and marketing and promotion on behalf of the local government. The changes are mostly intangible and cannot be concretely described.</p> | SROI ratio overestimation or underestimation | <p>Using the literature as an aid, discuss with experts and scholars, and ask peers of the stakeholders in the industry regarding what they have observed. During the evaluating process, investigator confirmed with the stakeholders, so that opinions can be concentrated</p> |
| III. Value the things that matter | <p>Some stakeholders were unable to value the things that matter at first: Collaborating fish farms are mainly in traditional fishing villages with fishermen at ages 60 and above, and are less willing to disclose their financial information, so it is hard for us to directly obtain information in</p> | SROI ratio overestimation or underestimation | <p>We first verified outcomes with individual fish farmers through interviews, and then we asked professional fisherman to estimate their revenue based on the type of fish and increase in farming area; the increase in profit is obtained after deducting cost per unit area.</p> |

| | | | |
|-----------------------------------|---|--|---|
| | the increase in revenue of fish farms when the Fisher Team joined. | | |
| IV. Only include what is material | <ul style="list-style-type: none"> 1. There are many types of stakeholders 2. Stakeholders believe that all outcomes are important. 3. Stakeholders believe that the value of important outcomes was low, contrary to general belief | SROI ratio overestimation or underestimation | <ol style="list-style-type: none"> 1. List direct and indirect stakeholders. After engaging with stakeholders, it was found that the impact in indirect stakeholders is minor. Therefore, only the direct stakeholders with significant impact are included. 2. Realize stakeholders' extent of changes (before and after the project) and discuss with stakeholders, professional fisher engaging in aquaculture, the representative form SWCB and scholars, then finding the significant and important outcomes by chain of events. |
| V. Do not over-claim | A small number of stakeholders have a large statistical population, but only a small percentage of them can be engaged: Experience activities | SROI ratio underestimation | <ol style="list-style-type: none"> 1. Only include the number of people who have been engaged; do not extrapolate figures to include the total population. the outcome value and adjusting factors are all calculated as a weighted average which can integrated extreme value. |

| | | | |
|------------------------|--|--|--|
| | and food and fish education courses are mainly one-time activities. They are not continuous and contact is difficult in practice, so questionnaires or interviews with most participants cannot be obtained. | | 2. Attempt to extrapolate figures to include the total population of consumers of Milkfisherhome Café and event participant in sensitive analysis, further examine the result of the SROI. |
| VI. Be transparent | The information within the complete impact map of the report may not be clear due to layout restrictions. | N/A | Openly explain the outcomes as well as the calculation and derivation processes in the report.,and display complete impact map in appendix. |
| VII. Verify the result | Due to time constraints, not all of the stakeholders in the study are invited to participate in the verification of results. | SROI ratio overestimation or underestimation | Sample representatives of each type of stakeholder to verify the results; use the literature as an aid to discuss with experts and scholars. |

Chapter 3 Social Impact Analysis

Section 1 Stakeholder

I. Stakeholder Identification

We sequentially identified the stakeholders impacted by each activity of the four major activities executed by the project. With the assistance from project investigator and holding four stakeholder meetings on site, as well as two meetings to consult and discuss with experts and scholars (the 4 experts include a talent cultivation expert, agriculture and fisheries expert, marketing expert, and social impact analysis expert), we verified the scope of major stakeholders.

Table 2 Related meeting minutes

| Meeting time | Meeting participants |
|-----------------|--|
| March 27, 2018 | Bo-Ren Chang/Fisher Team Member/Fish Farmer/SWCB |
| May 28, 2018 | Bo-Ren Chang/Fisher Team Member/SWCB |
| August 01, 2018 | Four experts and scholars/Bo-Ren Chang/SWCB |
| March 15, 2019 | Bo-Ren Chang/SWCB |
| May 24, 2019 | Four experts and scholars/Bo-Ren Chang/SWCB |
| July 06, 2019 | Bo-Ren Chang/Fisher Team Member/café employee/Director at the local fishermen's association/SWCB |



Table 3 List of Stakeholders

| Activity | Description | Stakeholder Identification |
|--|---|---|
| Training Fisher Team members | Utilizing funds of the SWCB, Bo-Ren Chang recruited Fisher Team members again, and members learned aquaculture methods and related knowledge and techniques at collaborating fish farms. Local fishermen's associations provide a portion of funding and guidance resources to make the training more complete. | Bo-Ren Chang Fisher Team Collaborating fish farms SWCB Local fishermen's association |
| Established Milkfisherhome Café | Jointly operated by Bo-Ren Chang and the local fishermen's association, utilizing funds from the SWCB, hires local students from Mituo, Kaohsiung or people seeking re-employment; employees learn how to brew coffee and sell aquatic products, and allow consumers to enjoy the best products. | Bo-Ren Chang Employees of Milkfisherhome Café Consumers of Milkfisherhome Café SWCB Local fishermen's association |
| Established a limited liability production | Bo-Ren Chang established a limited liability production cooperative to encourage producers to continue improving their product quality and gain reasonable profits. Works together with | Bo-Ren Chang Member of the Responsible Production Cooperative |

| | | |
|---|--|---|
| cooperative | restaurants or processing plants to process aquatic products a second time and increase the variety of products sold at the cooperative. | Restaurant/Food processing company |
| Organize food and fish education events | Utilizing funds of the SWCB, Bo-Ren Chang holds aquaculture experience activities and food and fish education activities. Participants are students in aquaculture related departments, elementary school and junior high school students, teachers, and the general public. | Bo-Ren Chang Event participant SWCB |

II. Identifying Stakeholders

Stakeholders with non-material impact were excluded based on the goals of this project and the principles of materiality and to not over-claim social impact assessments. An appropriate number of samples were taken from the stakeholders that were included to administer the questionnaire or conduct face-to-face interviews. A questionnaire survey was conducted for café consumers and participants of fish eating education activities, while face-to-face interviews were conducted with all other stakeholders to verify outcomes.

We adopted a rolling approach to stakeholder identification. When the project first began, we focused on the project contents of the implementation team to verify the most direct stakeholders. We then identified other stakeholders that we originally did not think of through our understanding of the principal investigator, descriptions given by each batch of interviews, and the research experience and observations of scholars in related fields. We maintained flexibility in this process to discover and include potential stakeholders into the scope of engagement.

According to the information gaining from various engagement stages, stakeholders are divided into three levels: the project executor, the direct stakeholders and indirect stakeholders.

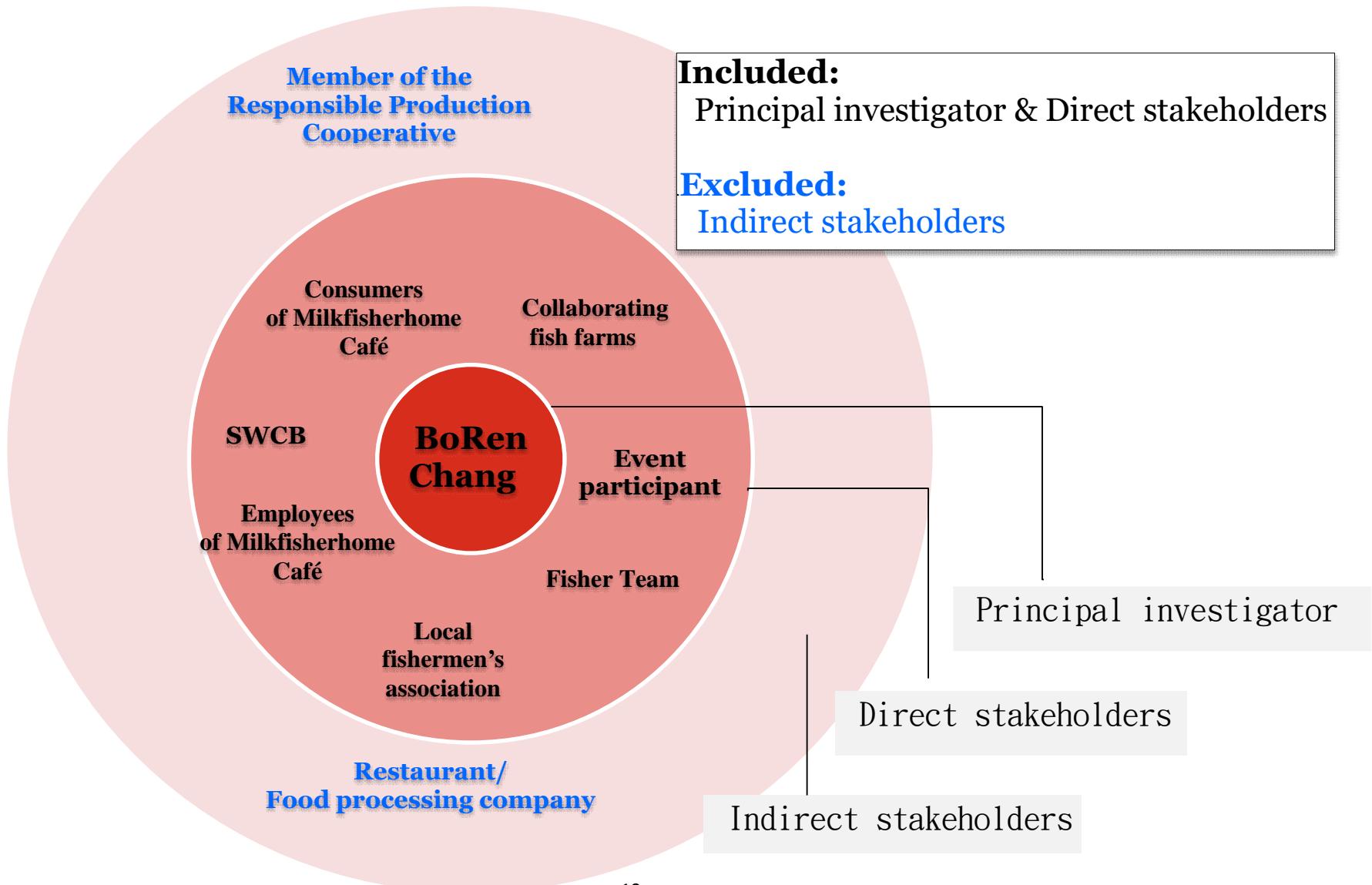


Table 4 Master table of stakeholder engagement

| No. | Stakeholder | Description | Included or not | Supplementary description |
|-----|----------------------------------|---|-----------------|---|
| 1 | Principal investigator | Bo-Ren Chang is the Principal investigator & Project executor | included | |
| 2 | Fisher Team | Fisher Team members learned aquaculture methods and related knowledge and techniques at fish farms. | included | |
| 3 | Collaborating fish farms | Fisher Team members become interns or employees of collaborating fish farms | included | |
| 4 | Employees of Milkfisherhome Café | Local students from Mituo, Kaohsiung or people seeking re-employment work at Milkfisherhome Café; employees learn how to brew coffee and sell aquatic products. | included | |
| 5 | Local fishermen's association | Provides the land and building of Milkfisherhome Café, jointly operates the café with Bo-Ren Chang, and provides financing and industry guidance measures. | included | |
| 6 | Consumers of Milkfisherhome Café | Enjoy coffee and purchase aquatic products at Milkfisherhome Café. | included | Due to the large number of consumers that are mostly one-time consumers, contact is difficult in practice, so the number of people engaged is relatively low. With consideration to the principle of Do |

| | | | | |
|----|--|---|----------|---|
| | | | | Not Over-claim, only those that questionnaires were collected from are calculated in the outcome. |
| 7 | Event participant | Aquaculture experience activities and food and fish education activities are held. Participants are students in aquaculture related departments, elementary school and junior high school students, teachers, and the general public. | included | Experience activities and food and fish education courses are one-time activities. They are not continuous and contact is difficult in practice, so the number of people engaged is relatively low. With consideration to the principle of Do Not Over-claim, only those that questionnaires were collected from are calculated in the outcome. |
| 8 | SWCB | Provides project funding and related guidance measures. | included | |
| 9 | Member of the Responsible Production Cooperative | Encourages producers to continue improving their product quality and gain reasonable profits. | excluded | Began assisting with sales in 2019. The current amount is not very high and it is difficult to engage stakeholders due to business relationships. Therefore, Bo-Ren Chang excluded it from consideration after discussion with experts and scholars. |
| 10 | Restaurant/Food processing | Works together with restaurants or processing plants to process aquatic products a second time. | excluded | The two parties only have a business relationship, and the |

| | | | | |
|--|---------|--|--|---|
| | company | | | amount of fish used is not very large. After interview, the businesses indicated that the change is insignificant. Therefore, Bo-Ren Chang excluded it from consideration after discussion with experts and scholars. |
|--|---------|--|--|---|

III. Number of stakeholders engaged

(I) Engagement Phase

Engagement with stakeholders was divided into two phases, namely interviews, outcome verification, and outcome validation. We conducted the first phase of interviews face-to-face, and then designed different questions based on the results of the preliminary interviews to conduct the second phase, which is outcome verification. Stakeholders were asked if they had the outcome to fully understand the changes and impact they had experienced. Finally, outcomes were validated via discussion with the stakeholders, the literature, and experts and scholars, to confirm that the results were not biased and reflect the actual situation.

(II) Number of People Engaged

Due to the large number of consumers of Milkfisherhome Café and participants of fish eating education activities, it is hard to conduct face-to-face interviews, so we conducted a questionnaire survey. Face-to-face interviews were conducted with all other stakeholders for outcome verification. Because most of stakeholder groups are very small, and also to avoid

sampling errors, except for consumers of Milkfisherhome Café and event participants, we interviewed the principal investigator, fisher team member, collaborating fish farms, local fishermen's association and SWCB to 100%. The number of stakeholders engaged is shown in the table below:

| Stakeholder | Total population/ Unit | Number of people interviewed in phase 1 | Number of people administered questionnaires and outcome verification in phase 2 | Number of People Engaged |
|----------------------------------|-----------------------------------|--|---|---|
| Principal investigator | 1 | 1 | 1 | 1 |
| Fisher Team | 10 | 10 | 10 | 10 |
| Collaborating fish farms | 4 | 4 | 4 | 4 |
| Employees of Milkfisherhome Café | 6 | 6 | 6 | 6 |
| Local fishermen's association | 1 | 1 | 1 | 1 |
| Consumers of | 3008 | --- | 38 | 38 |

| Stakeholder | Total population/ Unit | Number of people interviewed in phase 1 | Number of people administered questionnaires and outcome verification in phase 2 | Number of People Engaged |
|------------------------|-----------------------------------|--|---|---|
| Milkfisherhome Café | | | | |
| Event participant | 396 | --- | 14 | 14 |
| SWCB | 1 | 1 | 1 | 1 |

Section 2 Inputs and Outputs

With regard to the inputs and outputs identified by principal investigator during the project assessment period, due to the large number of consumers of Milkfisherhome Café and participants of food & fish education activities and its difficulties to conduct face-to-face interviews, so we conducted a questionnaire survey. Face-to-face interviews were conducted with all other stakeholders for outcome verification. The number of stakeholders engaged is shown in the table below:

Table 6 Total Inputs and Outputs

| Stakeholder | Inputs | | Outputs |
|------------------------|---------------|---------------|--|
| | Items | Amount | |
| Principal investigator | Funds | 2,586,792 | <ul style="list-style-type: none">• Organized 16 events• Organized 4 food and fish education speeches in elementary schools and junior high schools• Held 2 entrepreneurship forums and speeches• Established 3 work teams (trained 10 members of the Fisher Team)• 5 brand established• Established 2 training sites• Established 2 cross-domain models |
| Fisher Team | Time | 0 | <ul style="list-style-type: none">• Assisted 7 nearby fish farms with aging workers to activate 31 ha of fish farms |

| Stakeholder | Inputs | | Outputs |
|----------------------------------|---------------|---------------|--|
| | Items | Amount | |
| | | | <ul style="list-style-type: none"> Assisted collaborating fish farms in increasing 6 ha of aquaculture area Assisted 1 overseas aquaculture technology transfer and investment project |
| Collaborating fish farms | Funds/Site | 3,117,759 | <ul style="list-style-type: none"> Increased 6 ha of aquaculture area |
| Employees of Milkfisherhome Café | Time | 0 | <ul style="list-style-type: none"> Completed 1 commercial coffee brewing technique training course and café operation model Completed 1 salespeople training course |
| Local fishermen's association | Funds/Site | 400,000 | <ul style="list-style-type: none"> One renovation of a deserted activity center One product sales location One building of the fishermen's association's image Development of diverse products Trained 2 people |
| Consumers of Milkfisherhome Café | Funds/Time | 9,719 | <ul style="list-style-type: none"> Consumers of Milkfisherhome Café: 3,008 people |
| Event participant | Funds/Time | 10,750 | <ul style="list-style-type: none"> Participated in a total of 22 food and fish education events |
| SWCB | Funds | 2,000,000 | <ul style="list-style-type: none"> One demonstration site featuring youth innovation |

Section 3 Assessing the Outcomes

I. Chain of events

Through the engagement process described above, we have gained a better understanding of the changes to stakeholders. We employ the "chain of events" approach to explain the causal relationship between inputs, outputs and outcomes. After we have identified the chain of reasoning with respect to the series of changes that the stakeholders have experienced, we define them as the resulting outcomes from stakeholders' perspectives, and either include or exclude them based on the seven principles of SROI.

Therefore, whether an outcome is included or excluded is based on whether the change experienced by the stakeholder is concrete and material. We thus used the following four methods to verify outcomes: (1) Subjective description directly from stakeholders: Stakeholders independently determine if the outcome occurred (2) Objective indicators of behavioral changes: The stakeholder is able to independently list or chooses two or more objective indicators, and the behavior can be observed by a bystander; (3) The opinions of experts and scholars in related fields; (4) Reference the seven SROI principles.

This project conduct a first-phase interview and confirm the results in the second phase with a face-to-face manner. We ask all stakeholders whether they have the outcomes (The consumers of Milkfisherhome coffee and the event participant are engaged by questionnaires). In the first interview we obtained stakeholders' description for change and transform it into objective indicators (it may include qualitative description or quantitative description). After that, we used these objective indicators to confirm outcomes with stakeholders. The second interview are conducted in three steps. Firstly, we invited stakeholders to list their changes in various behaviours in an open way. If the stakeholders directly respond "YES" and provide subjective proof (including subjective qualitative descriptions or subjective quantitative change descriptions), we will record the results provided by the stakeholders in the chain of event. Secondly, if some stakeholders cannot clearly

express the results, we provided some objective indicators for reference. We defined that choosing more than one objective indicators is the proof of experiencing change because only choosing one probably is caused by a random behaviour preference, so we adopted stricter way. Thirdly, we observed the stakeholders' behaviour change from the perspective of the observer and professional judgment, and finally determined whether the result occurred. If we have concerns about the outcomes, we interview experts and scholars and search for some literature, which can evidence that changes are made. In addition, we also ask stakeholders about the amount of change before and after the program with Likert scales. Likert scale was created by psychologist Rensis Likert, and is often used in questionnaires. It is the most widely used scale which can help respondents to give back thoughts or feeling in social psychology, psychology, and management behavior surveys. Therefore, we take the average of 3 points (total points are 5) as the baseline. We define the outcomes are important and significant if the stakeholders choose over 3 points.

We understand that certain groups may experience different outcomes depending on their age, income or some other factors. If we judge that these differences are likely to be significant, we should split it into subgroups. In this project, we conducted two-stage interviews. The first one is to realize the change, and the second one in to confirm the outcomes. We ask all stakeholders if they really have the results happen and realize their change and background information. During the interview, we learned that some stakeholders are from different growth backgrounds. For example, 9 members of the fisher team were young male students aged 18-24. They were all students from the aquaculture department and working in aquaculture Industry, and another one is a 26-year-old man who has been working in the industry for 2-3 years. However, they experience the same significant change. As for the employees of Milkfisherhome coffee, 5 of them are female locals, and another one is a male from other county. He work in Milkfisherhome coffee since he like working conditions and slow-pace live. After conducting an interview in depth and confirming the outcomes many times, we found that they don't

experience different changes. According to the results of interviews, the amount of change don't have significant difference, either. The consumers of Milkfisherhome coffee and the event participant are engaged by questionnaires. All other stakeholders were interviewed and confirmed results in a face-to-face manner. Therefore, the plan doesn't split stakeholders into subgroups.

It is necessary to explain that even though we set several objective indicators, we first let stakeholders list the changes to their behavior during the interview, and only provided indicators as reference when they were unable to express their changes. At the end, we verified whether the outcome occurred.

(I) Principal investigator (Bo-Ren Chang)

Bo-Ren Chang is the initiator and training provider of the plan. This plan is Bo-Ren Chang 's passion for his hometown and self-actualization. Therefore, he was included in the evaluation. He has no other partners and team members, so the number of the stakeholder groups is only one. In addition to “increased personal income”, “increase self-actualization” is the most important result. To evidence his outcomes, , we search the relevant literatures.

Kang-Wei Lin's study(2017) found the following:

The significance of returning is on its returning value. The returnees, through their diligent hardworking in the villages, have promoted the communities and also reached their self-actualization. This is not something they could accomplish in the cities, where the value is determined by social pressure and their boss.

Therefore, by comparing the literature and the feedback from stakeholder, we can reasonably explain the results.

Table 7 Chain of events and summary of principal investigator

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|-----------------------------|---|---|---|--|
| Increase self-actualization | 1. Dedicated to placemaking and resolving issues in his hometown → Discovered social issues of Mituo (outflow of human resources, incomplete ecosystem of the aquaculture industry) → Began to think about solutions for these issues → Established the Fisher Team to provide fish farms with human resources and promote new production methods, so that Bo-Ren Chang | 1. Subjective description directly from stakeholders: Hopes that more young people will be willing to devote their efforts to this land, and also create different channels for young people to make money, thus realizing their ideals for | 1. The principal investigator grew up in a fishing village, but only got into aquaculture in his hometown 9 years ago. The brand Terminalia Garden operated by his family during this period of time increased its revenue considerably, but he is fully aware of industry difficulties. He loves Mituo, Kaohsiung and hopes that even more young people will be willing to stay and work | The stakeholder provided feedback that it significantly increased his self-actualization. Changes in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|---|---|
| | <p>can focus on what he specializes in, that is, marketing and promotion. → Established Milkfisherhome Café to diversify local industries → Established the responsible production system to provide producers of good products with an additional distribution channel → Increase self-actualization</p> <p>2. Discovered social issues of Mituo (outflow of human resources,</p> | <p>the future of their hometown.</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Ideals can be described in the process of training members - Expectations for future talent of the fishing village can be realized in | <p>in different industries of a fishing village. He thus established the Fisher Team, Milkfisherhome Café, and a responsible production platform to create more opportunities. Besides hoping that more young people will be willing to devote their efforts to this land, he has created different channels for young people to make money, thus realizing his ideal for the future of his hometown.</p> | included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|---|---|
| | <p>incomplete ecosystem of the aquaculture industry) → Began to think about solutions for these issues → Established the Fisher Team to provide fish farms with human resources and promote new production methods, so that Bo-Ren Chang can focus on what he specializes in, that is, marketing and promotion. → Established Milkfisherhome Café to diversify local industries</p> | <p>the process of training members</p> <ul style="list-style-type: none"> - Future talent for the fishing village is trained through the Fisher Team, showing love for Mituo | <p>2. He is realizing his expectations for future talent of the aquaculture industry by training Fisher Team members. He is training his own lecturing abilities and promoting his ideals through different activities.</p> | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|-----------------------------|---|
| | <p>→ Established the responsible production system to provide producers of good products with an additional distribution channel → Promoted responsible production system → Assisted primary producers with the sale of agriculture and fishery products/Assisted Fisher Team members in finding a clearer direction for sales/Let consumers know the source of products → Provided a</p> | | | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|-------------------------|---|---|--|---|
| | <p>more transparent production, sales, and purchase platform → Increase self-actualization</p> <p>3. Assisted in organizing 11 food&fish education events → Trained lecturing ability through seminars → Improved lecturing ability → Promoted his ideals → Increase self-actualization</p> | | | |
| Improves the ability to | Discovered social issues of Mituo (outflow of | 1. Subjective description | 1. Due to the relatively high age of people in the | The stakeholders provided |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--|--|---|---|---|
| communicate with children and young people | human resources, incomplete ecosystem of the aquaculture industry) →Began to think about solutions for these issues →When promoting food and fish education in junior high schools, Bo-Ren Chang used adult methods to give speeches →Children fell asleep and did not learn the concepts that Bo-Ren Chang wanted to communicate→ Bo-Ren Chang learned how to communicate with children, and the number | directly from stakeholders: Gained better communication ability and the ratio of people sleeping in class significantly decreased. 2. Able to independently list or has at least two of the objective changes below: - More energetic expression | aquaculture industry, principal investigator was used to communicating with older people from the beginning. He began practicing communicating with children and young people because the Fisher Team needed to communicate with the younger generation when promoting fish eating education at schools. In the process of assisting young people in learning | feedback that it significantly improved his communication ability. Changes in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|--|---|
| | <p>children who fell asleep decreased by about 1/3→</p> <p>Improved ability to communicate with children and young people</p> | <p>methods during communication</p> <ul style="list-style-type: none"> - Uses phrases or popular things among children or young people to express his opinion during communication - Ratio of sleepy young listeners in the process of giving a speech - Higher frequency of young listeners | <p>aquaculture, principal investigator spent a lot of time communicating with students in the Fisher Team due to age difference and different operating techniques, which is when he learned the language of young people and reduced miscommunication.</p> <ol style="list-style-type: none"> 2. He trained his lecturing abilities through different activities and seminars. 3. Changing according to the audience, he learned how to communicate | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|---------------------------|--|---|---|---|
| | | speaking or asking questions after the speech | with elementary school and junior high school students. He practiced how to pass on knowledge to different age groups; this significantly lowered the ratio of people sleeping in class, and in the best case less than five people fell asleep in class. | |
| Increased personal income | 1. Established the Fisher Team→Increased the number of Fisher Team members→Increased the aquaculture area→ | 1. Subjective description directly from stakeholders: - Operating revenue of | 1. Established the first campsite and first café in Mituo, attracting tourists and increasing local consumption. | The stakeholder provided feedback that it significantly increased his income. Changes |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|---|---|
| | <p>Increased personal income</p> <p>2. Established Milkfisherhome Café</p> <p>3. Attracted tourists to Mituo→Increased local consumption→Increased personal income</p> | <p>Terminalia Garden increased</p> <ul style="list-style-type: none"> - Operating revenue of Cool Coast Camping Campsite increased - Operating revenue of Milkfisherhome Café increased - Increased the number of consumers visiting the township | <p>2. The responsible production platform assists in the sales of agriculture and aquaculture products, and allows consumers to know that the source of products is trustworthy, so that they will become long-term buyers of aquatic products, leading to increased profits.</p> <p>3. The Fisher Team increases the manpower of fish farms and expands the farming area. Milkfisherhome</p> | <p>in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus included.</p> |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|----------------------------------|---|---|--|---|
| | | | Café No. 1 and No. 2 attract many consumers to Mituo. Most consumers recognize the hardship of ecological aquaculture and environmental efforts introduced to them at the café and make purchases, which increased income. | |
| Improves problem-solving ability | Discovered social issues of Mituo (outflow of human resources, incomplete ecosystem of the aquaculture industry)→ Began to think about solutions for these issues | 1. Subjective description directly from stakeholders: Many difficulties (funding, regulatory | Principal investigator encountered many difficulties in the process of starting different businesses due to the different fields, such as regulatory restrictions on | The stakeholder provided feedback that it significantly improved his problem-solving ability. Changes |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|---|---|---|
| | <p>→Established the Fisher Team to provide fish farms with human resources and promote new production methods, so that Bo-Ren Chang can focus on what he specializes in, that is, marketing and promotion.</p> <p>→Established Milkfisherhome Café to diversify local industries</p> <p>→Many problems need to be solved to open a store and break even, such as purchasing land, coffee brewing technique, cost calculation, and commercialization of the</p> | <p>restrictions, etc.) were encountered when starting the business, and this improved his problem-solving ability and allowed him to formulate solutions.</p> <p>2. Able to independently list or has at least two of the</p> | <p>land purchase to change the land category into one on which a café can be established. Every time he encountered difficulties, he would consult a government department, and he also hired a true café manager to teach him key processes. This is how he resolved many difficulties and became acquainted with many people and government officials, found solutions to difficulties,</p> | <p>in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus included.</p> |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|--|---|---|
| | <p>fishery→Bo-Ren Chang did everything he could to solve the problems he encountered (such as studying the law and seeking the help of others)</p> <p>→Improves problem-solving ability</p> | <p>objective changes below:</p> <ul style="list-style-type: none"> - Compared with before, my attitude towards problems is more active - Compared with before, I believe that all problems can be solved with the right method or people - Compared with before, I am | <p>significantly improved his problem-solving ability, and motivated him to pass on his knowledge to other people who want to become entrepreneurs.</p> | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|---|-----------------------------|---|
| | | <p>more able to use existing resources to solve problems</p> <ul style="list-style-type: none"> - Compared with before, I better know how to seek external aid to solve problems - Compared with before, I am better able to grasp the core of problems and concentrate | | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------------------|---|---|--|--|
| | | resources to solve problems | | |
| Poorer family relations (negative) | Discovered social issues of Mituo (outflow of human resources, incomplete ecosystem of the aquaculture industry)→ Began to think about solutions for these issues →Established the Fisher Team to provide fish farms with human resources and promote new production methods, so that Bo-Ren Chang can focus on what he specializes in, that is, marketing and promotion.→ | 1. Subjective description directly from stakeholders: He fought with family because he insisted on his own ideals, and finally left his family business and became independent. 2. Able to independently | Principal investigator's family was originally in the aquaculture industry, and his family wanted him to focus on their core business and stop trying things that he was unfamiliar with (such as establishing Milkfisherhome Café and a limited liability company). He fought with family because he insisted on his own ideals, and finally left his | The stakeholder provided feedback that his family relations deteriorated. Changes in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|---|---|---|
| | Established Milkfisherhome Café to diversify local industries→Established the responsible production system to provide producers of good products with an additional distribution channel→His family wants Bo-Ren Chang to focus on the family business and not make high-risk attempts→Bo-Ren Chang finally left his family business and started his own business→Poorer family relations | <p>list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Frequency of arguments with family increased - Number of conversations with family decreased - Complements between family members decreased | family business and became independent. | included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|-----------------------------------|--|---|---|---|
| | | - Frequency of family trips decreased | | |
| Poorer physical health (negative) | Discovered social issues of Mituo (outflow of human resources, incomplete ecosystem of the aquaculture industry)→ Began to think about solutions for these issues →Established the Fisher Team to provide fish farms with human resources and promote new production methods, so that Bo-Ren Chang can focus on what he specializes in, that is, | 1. Subjective description directly from stakeholders: His immune system deteriorated due to holding too many positions and being too tired, so he becomes sick more easily and takes longer to recover. | Principal investigator's immune system deteriorated due to holding too many positions and being too tired, so he becomes sick more easily and takes longer to recover. During the assessment period, he had acute liver disease, became unconscious, and was hospitalized for one week. | The stakeholder provided feedback that his physical health deteriorated. Changes in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was determined to be |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|--|-----------------------------|---|
| | <p>marketing and promotion.→ Established Milkfisherhome Café to diversify local industries→Established the responsible production system to provide producers of good products with an additional distribution channel→His family wants Bo-Ren Chang to focus on the family business and not make high-risk attempts→ Too busy with work, too tired→Often gets sick→ Poorer physical health</p> | <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Compared with before, my immune system is poorer and I more easily get sick - Compared with before, it takes | | material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|--|-----------------------------|---|
| | | <p>longer for me to recover</p> <ul style="list-style-type: none"> - Compared with before, I often feel tired - Compared with before, it is harder for me to concentrate | | |

(II) Fisher Team member

For fisher team, in addition to increasing personal incomes, the most important outcomes are “Clarify career plans” and “improved professional skills in aquaculture”. To evidence these results, we reviewed the relevant literatures and find that the highest effectiveness of social work practice is employability (HUANG, 2019). Moreover, studies have found that positive internship experience does help young people clarify employment directions and enhance employability (Jan, 2016).

Besides, according to Hui-Fang Hung's research, the aquaculturists who have 10-20 years farming experiences generally have higher survival rate of cobia and efficient productivity of farming than the one having less experiences (Hung, 2008). In other words, accumulating practical experience through implementation is very crucial in Aquaculture fisheries. Therefore, we could understand and explain why fisher team members considered "Clarify career plans" and "improved professional skills in aquaculture" as the most valuable outcomes by referring to above literatures. In addition, to avoid double counting, we give an explanation of the difference between the outcome "improved self-identity and validation" and "improved professional skills in aquaculture". In fact, the former one is refer to an internal status of mind, and the latter one is related to external learning of technique. Based on a research focusing on the young, it found that young people's self-identification is strongly correlated to five elements: autonomy, purpose of life, positive relationship with others, purpose of life, and self-acceptance (Liao, 2009). Fisher team members deal with a lot of challenge during the training, which make them enhance their confidence and feel have more control over their life. Hence, they improved their self-identity and validation. However, improved professional skills in aquaculture is an outcome focus on external skills, which must be accumulate through practical operation. Therefore, these two outcomes are different.

Table 8 Chain of events and summary of Fisher Team members

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|--|---|
| Clarify career plans | Received Fisher Team training to work at a fish farm→Gained practical experience→ | 1. Subjective description directly from | Students in the Fisher Team gained practical experience at the | Stakeholders provided feedback that it |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|--|---|
| | Encountered practical issues or needs→Actively learned professional knowledge and skills in aquaculture→Gained professional knowledge and skills in aquaculture→Became more determined to enter the aquaculture industry after → graduation/Became more determined to start a business in the aquaculture industry after graduation→Clarify career plans | stakeholders: After working at Bo-Ren Chang's fish farm, I know what professional knowledge and skills are needed in practice, what fishermen need in practice. The member showed creativity and determination to get into the fishery industry after graduation and decided to start a | principal investigator's fish farm. Practical issues are encountered during work, and students actively learn professional knowledge on aquaculture, increasing their professional knowledge and skills in aquaculture. After working at principal investigator's fish farm, the student learned what professional knowledge and skills are needed in practice, and what | changed behavior. Changes in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|---|---|---|
| | | <p>business. The member has begun to save money to start the business.</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Became clearer whether or not he/she is interested in the aquaculture industry - Became more confident in work | <p>fishermen need in practice. The student showed creativity and determination to get into the fishery industry after graduation. Other students also diligently learned from the teacher after class and decided to start a business.</p> <p>Students either begun to save money to start a business, or learned that they did not want to go into the industry in the future.</p> | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|---------------------------|---|--|--|---|
| | | <ul style="list-style-type: none"> - Gained greater passion for work - Became more determined to enter the aquaculture industry after graduation - Became more determined to establish a fish farm after graduation | | |
| Increased personal income | 1. Received Fisher Team training to work at a fish farm →Gained practical experience | 1. Subjective description | Most students became interns at the fish farm while they were still in | Stakeholders provided feedback that it |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|---|---|
| | <p>→ Encountered practical issues or needs → Actively learned professional knowledge and skills in aquaculture → Gained professional knowledge and skills in aquaculture → Employed by Bo-Ren Chang and other fish farmers → Increased personal income</p> <p>2. Received Fisher Team training to work at a fish farm → Obtained connections and resources → Obtained his own aquaculture business → Increased personal income</p> | <p>directly from stakeholders:</p> <ul style="list-style-type: none"> - Obtain living expenses - Able to independently pay tuition | <p>school. Work hours include weekdays and summer and winter vacation. Principal investigator and collaborating fish farms all paid students salaries, so the internships increased students' income and enabled them to pay living expenses or tuition, increasing their economic independence. Some students had saved NT\$1 million even</p> | <p>increased their income. Based on the SROI principle of materiality, the outcome was determined to be material and thus included.</p> |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|---------------------------------|---|--|---|---|
| | | | before graduation to start their own business after graduation. | |
| Improved interpersonal relation | Received Fisher Team training to work at a fish farm →Gained practical experience →Encountered practical issues or needs→Actively learned professional knowledge and skills in aquaculture→Engaged in discussion, exchange, and consultation with teachers, students, and workers in the aquaculture industry→ Increased opportunities for | 1. Subjective description directly from stakeholders: Some problems required discussion with teachers in school and were resolved when they returned. This increased opportunities for exchange and | 1.After working at Principal investigator's fish farm, students knew what professional knowledge and skills are needed in practice, would ask teachers questions at school, or teachers would discuss how they were doing, increasing opportunities for | Stakeholders provided feedback that it improved interpersonal relations. Changes in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|--|---|---|
| | <p>interactions with teachers, students, and workers in the aquaculture industry→</p> <p>Improved interpersonal relations</p> | <p>discussion between Fisher Team members, other students, teachers, and aquaculture related businesses, improving interpersonal relations.</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> | <p>positive interactions with students.</p> <p>2. During their internship at the fish farm, unexpected problems would often occur and students needed to ask principal investigator or other members of the Fisher Team. Some problems required discussion with teachers in school and were resolved when they returned. This</p> | determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|---|--|---|
| | | <ul style="list-style-type: none"> - This increased opportunities to chat with teachers, students, other members, and aquaculture related businesses - This increased opportunities to discuss aquaculture knowledge with teachers, students, other members, and aquaculture related businesses | <p>increased opportunities for exchange and discussion between Fisher Team members and other students and teachers, improving interpersonal relations.</p> | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|--|-----------------------------|---|
| | | <ul style="list-style-type: none"> - This increased the depth of discussions aquaculture knowledge with teachers, students, other members, and aquaculture related businesses - Felt positive recognition from teachers, students, other members, and aquaculture related businesses | | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|---------------------------------------|--|---|--|--|
| Improved self-identity and validation | Received Fisher Team training to work at a fish farm→Gained practical experience→ Encountered practical issues or needs→Actively learned professional knowledge and skills in aquaculture→Required to have a greater sense of responsibility at work→Solved problems encountered in aquaculture work→Solved problems and completed work→ Improved self-identity and validation | <p>1. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Increased validation of abilities - Decreased self-denial - Felt that he/she gained more professional skills | After working at principal investigator's fish farm, students knew what professional knowledge and skills are needed in practice, what fishermen need in practice, and actively learned professional knowledge of aquaculture to resolve technical issues encountered at work. Students successfully completed work after solving the problems, and gained a greater | Changes in behavior judged based on objective indicators. Based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|---|--|---|--|--|
| | | <ul style="list-style-type: none"> - Felt capable of completing work - Felt capable of solving problems | sense of responsibility, confidence, and sense of achievement. | |
| Improved professional skills in aquaculture | <p>Received Fisher Team training to work at a fish farm→Gained practical experience→</p> <p>Encountered practical issues or needs→Actively learned professional knowledge and skills in aquaculture→Continued to learn the latest aquaculture technology→Improved professional skills in aquaculture</p> | <p>1. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Increased knowledge on aquaculture | <p>Students in the Fisher Team gained practical experience at the fish farm of principal investigator. Practical issues are encountered during work, and students actively learn professional knowledge on aquaculture, increasing their</p> | Changes in behavior judged based on objective indicators. Based on the SROI principle of materiality, the outcome was determined to be material and thus |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--|---|---|---|---|
| | | <ul style="list-style-type: none"> - Improved aquaculture skills - Compared with before, production of aquatic products increased - Compared with before, the quality of aquatic products improved | professional knowledge and skills in aquaculture. | included. |
| Sense of achievement from successfully | Received Fisher Team training to work at a fish farm→Obtained connections and resources→ Obtained his own aquaculture | 1. Able to independently list or has at least two | During the internship process at a fish farm, the work schedule fits well with interns' | Changes in behavior judged based on objective |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|--|--|--|
| starting a business | business→Sense of achievement from successfully starting a business | <p>of the objective changes below:</p> <ul style="list-style-type: none"> - Ideals can be described or practiced in the process of starting a business - Completed life goals in the process of starting a business - I feel what I am doing is very meaningful and only a few people | <p>lifestyles and allowed them to give full play to their expertise. The salaries they made were higher than the salaries elsewhere, and they were able to start their own business with the assistance of principal investigator, giving them the sense of achievement from starting their own business. They felt that work was challenging and they needed to be fully devoted to</p> | indicators. Based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|---------------------------|---|--|---|--|
| | | <p>are able to do the same</p> <ul style="list-style-type: none"> - I feel that my work is challenging and I am fully devoted | maintain this sense of achievement. | |
| Caused fatigue (negative) | The nature of work requires a large amount of labor→Long hours under the sun→Causes fatigue | <p>1. Subjective description directly from stakeholders:</p> <p>Most of the work in a fish farm is physical labor under the sun, so the physical discomfort it causes is the only negative effect.</p> | During the internship in the Fisher Team, interns worked at a fish farm outdoors every day, and were under the scorching sun during the summer cleaning the pond and feeding fish. Students responded that the internship at a fish farm was harder compared to | Stakeholders provided feedback that the intensive physical labor caused discomfort. Changes in behavior match objective indicators, and based on the |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|---|---|---|
| | | <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Often feels back pain and soreness - Feels tired and does not have the strength to do other things - Requires long hours of physical labor | other work opportunities and was physically taxing. | SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|---|-----------------------------|---|
| | | <ul style="list-style-type: none"> - Requires long hours under the sun | | |

(III) Collaborating fish farms

At present, the one of biggest challenge for Taiwan's cultured fisheries is the aging population (Chang, 2012), which lead to low productivity. Meanwhile, the poor industry prospects make young people are unwilling to work in this industry. Therefore, it is reasonable that hiring fisher team members with professional aquaculture skills will increase the productivity of aging aquaculturist.

Table 9 Chain of events and summary of collaborating fish farms

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--------------------------------|---|---|---|--|
| Increased income of fish farms | Worked together with the Fisher Team→Accepted Fisher Team members to work at their own fish farm→Observed the work ability and attitude of Fisher Team members→Found suitable Fisher Team members→Allowed Fisher Team members to continue working→Increased | 1. Able to independently list or has at least two of the objective changes below: - Production increased due to the increase in aquaculture area | Students in the Fisher Team gained practical experience at the fish farm of principal investigator, and intern at collaborating fish farms. Fish farm owners gained extra manpower, more fish to sell, and a larger aquaculture area. | The area of fish farming changed based on objective indicators. Based on the SROI principle of materiality, the outcome was determined to be |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--------------------------|--|--|---|--|
| | fish farm workers→Increased supply of feed that can be sold/Increased aquaculture area →Increased income of fish farms | -Sales increased due to the increased production -Due to the increase in professional workers, production and survival rates increased, which increased sales | | material and thus included. |
| Reduced production costs | 1. Worked together with the Fisher Team→Accepted Fisher Team members to work at their own fish farm→ Observed the work ability and attitude of Fisher Team | 1. Able to independently list or has at least two of the objective changes below: | 1. Students in the Fisher Team gained practical experience at the fish farm of principal investigator, and intern at collaborating fish | Matched objective indicators, and based on the SROI principle of materiality, the outcome was determined to be |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|--|---|
| | <p>members→Found suitable Fisher Team members→</p> <p>Allowed Fisher Team members to continue working →Provided full-time work to interns after Fisher Team members graduated→Gained young professional talent to help share their workload→</p> <p>Improved the regular labor cost structure→Reduced production costs</p> | <ul style="list-style-type: none"> - Reduced the number of graduates hired - Reduced personnel expenses - Increased work efficiency - Reduced the workload of original employees - Reduced the time and effort searching for suitable employees - The joining of young | <p>farms. Fish farm owners observe the work ability and attitude of interns to find suitable interns that may continue to serve as interns or become formal employees,</p> <p>providing them with young professional talent to help share their workload. Due to their experience in the Fisher Team, the interns have better abilities than regular</p> | material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|--|---|---|
| | <p>2. Worked together with the Fisher Team→Accepted Fisher Team members to work at their own fish farm→ Observed the work ability and attitude of Fisher Team members→Found suitable Fisher Team members→ Allowed Fisher Team members to continue working →Fisher Team members did not continue to work at the fish farm where they were an</p> | <p>professionals who know how to repair a waterwheel reduced the frequency it needed to be repaired</p> <ul style="list-style-type: none"> - Due to the lower frequency of waterwheel repairs, repair expenses also decreased | <p>graduates, which reduces personnel expenses.</p> <p>2. Students in the Fisher Team gained practical experience at the fish farm of principal investigator, and intern at collaborating fish farms. Fish farm owners gain manpower with practical experience and related knowledge, who can</p> | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|--|---|
| | <p>intern after graduation→</p> <p>Returned to work at Bo-Ren Chang' s fish farm→</p> <p>Improved the regular labor cost structure→Reduced production costs</p> <p>3. Worked together with the Fisher Team→Accepted Fisher Team members to work at their own fish farm→</p> <p>Observed the work ability and attitude of Fisher Team members→Found suitable</p> | | <p>also help repair the waterwheel and reduce the fish farm's repair expenses.</p> | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|-----------------------------|---|
| | <p>Fisher Team members→</p> <p>Allowed Fisher Team members to continue working</p> <p>→Fisher Team members provide manpower to repair the waterwheels of fish farms</p> <p>→Reduced fish farm waterwheel repair expenses→</p> <p>Reduced production costs</p> <p>4. Worked together with the Fisher Team→Accepted Fisher Team members to work at their own fish farm→</p> | | | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|-----------------------------|---|
| | <p>Observed the work ability and attitude of Fisher Team members→Found suitable Fisher Team members→ Allowed Fisher Team members to continue working →Fisher Team members assist in cleaning the fish farm' s environment (weeding, etc.)→Fish farmers do not need to hire additional workers for weeding→Fish farmers do not need to</p> | | | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|-----------------------------|---|
| | purchase herbicide→Reduced production costs | | | |

(IV) Employees of Milkfisherhome Café

The most valuable outcome in this stakeholder group is “improved interpersonal relations” and “gained a sense of achievement”. According to Yi-Hsien Wang’s study, emotional communication can effectively improve interpersonal relationships, interpersonal trust, and reduce relationship conflicts (Wang, 2004). In Milkfisherhome Café, the goal is not to make big moneys. Instead, the goal is to advocate Mituo’s local culture and strengthen local identity. Therefore, the employees of Milkfisherhome Café can do their job in a more creative way and share their passion with each other and customers, which can reasonably evidence the outcomes of “improved interpersonal relations”. In addition, gaining positive feedback from customers and co-workers can greatly enhance a sense of achievement (Bai, 2012).

Table 10 Chain of events and summary of employees of Milkfisherhome Café

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|---------------------------|---|---|--|---|
| Increased personal income | Go to work at Milkfisherhome Café→ Gained a salary→ Increased personal income | 1. Subjective description directly from stakeholders: <ul style="list-style-type: none"> - Obtain living expenses - Able to independently pay tuition | 1. Women who get married, have children, and return to Mituo without a full-time job so they can take care of their family work part | Stakeholders provided feedback that it increased their income. Based on the SROI principle of materiality, the outcome was determined to be |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|---|--|---|
| | | | <p>time at Milkfisherhome Café No. 1 or No.</p> <p>2. Besides flexible work hours, they also gain additional income to help with family expenses.</p> <p>2. Students studying in Mituo work part time at the cafés after school to pay for their tuition and living expenses.</p> <p>3. Young people living in areas</p> | material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--------------------------------|--|--|---|---|
| | | | around Mituo who want a more relaxed job with flexible hours become full-time baristas at Milkfisherhome Café No. 1, learning coffee brewing techniques and earning a living. | |
| Gain a sense of accomplishment | Go to work at Milkfisherhome Café→ Learned professional coffee brewing techniques→Actually brewed coffee for | 1. Subjective description directly from stakeholders: Besides learning how to brew coffee and gaining praise from customers, | While working at Milkfisherhome Café, besides learning how to brew coffee and gaining the praise of my customers, I also | Stakeholders provided feedback that he/she gained a sense of achievement due to praise. Changes in behavior match |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|---|---|
| | <p>customers to taste→</p> <p>Customers praised the coffee for its good taste</p> <p>→Gain a sense of accomplishment</p> | <p>I also brought my professional coffee brewing techniques home and to school to share with family and friends, where I gained a sense of achievement from that praise.</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Felt pleased that my efforts paid off - Felt pleased and feel that I am able to | <p>brought my professional coffee brewing techniques home and to school to share with family and friends, where I gained a sense of achievement from the recognition of family and the teacher.</p> | <p>objective indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus included.</p> |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|-----------------------------|---|--|--|--|
| | | <p>complete more than what I can imagine</p> <ul style="list-style-type: none"> - Felt pleased and feel capable of taking on even more challenging tasks | | |
| Gain a brief spiritual rest | <p>Go to work at Milkfisherhome Café→</p> <p>Housewives are under great pressure→</p> <p>Working at the café allows workers to temporarily get away from their original daily</p> | <p>1. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - I briefly forget my worries in life - I felt very relaxed - I begin to think about happy things | <p>While working at Milkfisherhome Café, full-time mothers can take a brief break from the pressure of caring for their children 24 hours a day; it re-energizes them before they face the cumbersome chores waiting for them at home.</p> | <p>Changes in thought judged based on objective indicators. Based on the SROI principle of materiality, the outcome was determined to be material and thus included.</p> |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|---|--|
| | life situations→Gain a brief spiritual rest | | | |
| Improve self-identity | Go to work at Milkfisherhome Café→ Assisted in industry promotion and promoted local foods→Introduced the food production process and place of production to customers →Increased identification with the community→Improve self-identity | <p>1. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - I believe that my hometown is a place worth visiting, and I am willing to bring my friends here. - I am willing to share stories about my hometown with others, and I feel a sense of | Besides brewing coffee at Milkfisherhome Café, employees also need to introduce the aquatic products that are sold there, so they need to better understand the ecological aquaculture process, and also need to introduce consumers to fun things to do and good food to eat in Mituo. | Changes in behavior judged based on objective indicators. Based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------------|---|--|---|---|
| | | <p>pride when talking about my hometown.</p> <ul style="list-style-type: none"> - I have a sense of purpose for my hometown and am willing dedicate my efforts to making it better. | <p>To enrich their introductions, employees also need to learn about the history and culture of Mituo and aquaculture techniques, which let them understand the beauty of their hometown. Employees are willing to let more people learn about their hometown and hope to make their hometown better.</p> | |
| Improve communication skills | Go to work at Milkfisherhome Café→ Assisted in industry | 1. Subjective description directly from stakeholders: Gain | Besides brewing coffee at Milkfisherhome Café, | Stakeholders provided feedback that it improved their |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|--|---|
| | <p>promotion and promoted local foods→Introduced the food production process and place of production to customers →Trained eloquence and communication ability→ Learned how to talk to others and find topics to talk about→Customers make purchases or provide positive feedback→Improve communication skills</p> | <p>better communication ability through introductions to consumers</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Gain better communication ability - Able to more clearly express opinions, and communicate opinions with others - Shorter time communicating with others compared with | <p>employees also need to introduce the aquatic products that are sold there, so they need to better understand the ecological aquaculture process to introduce it to consumers. Besides gaining better communication ability, employees are also able to clearly communicate their opinions with consumers.</p> | <p>communication skills. Changes in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus included.</p> |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|----------------------------------|---|---|---|---|
| | | the past and able to more easily reach an agreement | | |
| Improved interpersonal relations | Go to work at Milkfisherhome Café→ Have a second expertise or interest (photography) → Learned about common interests while having a conversation with customers→ Exchange techniques and experience→ Expands social network → Improved interpersonal relations | <p>1. Subjective description directly from stakeholders: Besides being acquainted with many new friends, friends that originally were not familiar now have more things to talk about, and the frequency of conversations increased.</p> <p>2. Able to independently list or has at least two</p> | While working at the café, many customers were neighbors and students that employees were not familiar with. Through the conversation and product sales process, employees shared their work experience and the way food is cooked. Some employees further participated in regional organizations | Stakeholders provided feedback that it improved interpersonal relations. Changes in behavior match objective indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|--|--|--|
| | | <p>of the objective changes below:</p> <ul style="list-style-type: none"> - Became acquainted with new friends - Higher frequency of conversations with existing friends - Increased participation in social events | and became acquainted with even more locals, improving their interpersonal relations. | |
| Improved aesthetics | Go to work at Milkfisherhome Café → Have a second expertise or interest (photography) → Bo-Ren Chang is | 1. Subjective description directly from stakeholders: The beauty of a fishing village can compose | While working at Milkfisherhome Café, the beauty of a fishing village can compose completely different | Stakeholders provided feedback that it changed behavior. Changes in behavior match objective |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|--|--|
| | willing to let employees try different things to attract customers→ Attempt different layouts and display methods in the café→Practice composition→Improved view finding ability when taking photos→ Improved aesthetics | <p>completely different views at different times and with different scenery, leading to the development of aesthetic abilities.</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - I am more able to understand the composition when admiring photos | <p>views at different times and with different scenery, leading to the development of aesthetic abilities.</p> <p>Photos are not only used for promotion of the café, but also attract couples to take their wedding photos here. This aesthetic ability cannot be gained through any course or anywhere else. The worker indicated that the outcome will become</p> | indicators, and based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------------------|--|--|---|---|
| | | <ul style="list-style-type: none"> - I am able to find different views to take photos - I have become more perceptive when it comes to aesthetics - Compared to before, I am more willing to choose designer products | a lifetime asset. | |
| Improved entrepreneurial abilities | 1. Go to work at Milkfisherhome Café → Witnessed Bo-Ren Chang attempt different things, promote aquatic products, and expand | 1. Subjective description directly from stakeholders: Employees of Milkfisherhome Café stated that they hold | While working at Milkfisherhome Café, employees learned the skills needed to manage a store, including source of funding, personnel | Changes in behavior judged based on objective indicators. Based on the SROI principle of materiality, the outcome was |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|---|---|
| | <p>channels → Witnessed Bo-Ren Chang's courage in attempting something new → Felt capable of solving problems → Improved entrepreneurial abilities</p> <p>2. Go to work at Milkfisherhome Café → Learned sales methods → Discuss the business situation each week and proposed strategies to gain the favor of</p> | <p>sales meetings every week to discuss marketing strategies to increase revenue, and that this helped improve their individual entrepreneurial abilities.</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Understands industry and | <p>management, and logistics. This experience will reduce trial and error when they start their own businesses in the future, and gives them a better understanding of market demand and consumer preferences, making them willing to attempt different solutions to the issues they encounter. The employees indicated that this ability is not easy to obtain when working in other</p> | determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|--|---|
| | <p>customers and increase sales→ Adjust strategies based on customer feedback and revenue→ Continued to attempt different business methods in Milkfisherhome Café→ Improved entrepreneurial abilities</p> | <p>market demand and where to find opportunities.</p> <ul style="list-style-type: none"> - Improve problem-solving ability - Willing to attempt and create new possibilities (technologies, methods) - Improve networking ability - Improve team leadership - Increase tolerance for setbacks or failure | <p>places, and was only possible because Bo-Ren Chang gives them more room for learning and opportunities to practice business administration.</p> | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|---|-----------------------------|---|
| | | | | |

(V) Local fishermen's association

The most important outcome for local fishermen's association is "improved relationships between local residents and the fishermen's association". The local fishermen's association is a special organization in Taiwan. It has a policy mission that serving the fishermen and promoting local prosperity. After the fishermen earn money, they will deposit their money into the fishermen's association. It can be said that the survival of fishermen's association is strongly associated to the number and economic status of local fishermen. However, fishing villages are now declining, which has indirectly caused the decline of fishing association and the pressure of survival, and made the fishing clubs to have less resources to strengthen their relationship with fishermen. Therefore, improving relationships between local residents and the fishermen's association is considered as a significant change here. To evidence these results, we reviewed the relevant literatures and have the findings below.

Sing-Hwa Hu's study(2014) found the following:

The system of Taiwan fishermen's associations derived from Japanese ruled period. In the past century, Taiwan fishermen's associations have played the very important role in fishery developments of Taiwan. After War II, Taiwan fishermen's associations not only served as a communication bridge between government and fishermen, but offered various services on fishing and living necessities for fishermen. With environmental change, most of Taiwan fishermen's associations faced financial troubles and function recession, the number of Taiwan fishermen's associations had been merged from 95 units in 1950s to 1 national association (the National Fishermen's Association, Taiwan, ROC) with 39 area associations. In the future, the National Fishermen's Association should create more new

fishery economics to increase financial support, also need to improve the service quality to fulfill fishermen's needs.

Nowadays, the fishermen have a high degree of freedom, but the fishermen's associations have not been able to adjust and improve in time (Hu, 2014). As a result, many fishermen's associations face survival challenge, and their services cannot meet the needs of fishermen. After comparing the literatures, we judge that the results of the local fishermen's associations are reasonable and can be explained.

Table 11 Chain of events and summary of the local fishermen's association

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--|--|---|---|--|
| Improved relationships between local residents and the fishermen's association | Bo-Ren Chang gained the fishermen's association's recognition for his enthusiasm and identity as a local→After Milkfisherhome Café No. 1 began to operate smoothly, he worked with | 1. Subjective description directly from stakeholders: Milkfisherhome Café No. 2 has become a place where locals gather and socialize, and it also increased their | The café jointly opened with principal investigator is among the few cafés of Mituo, and gives fishermen the opportunity to directly sell their products. The site is also used to organize fish eating education or cultural promotion | Changes in behavior judged based on objective indicators. Based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|---|--|---|
| | <p>the fishermen's association in establishing Milkfisherhome Café No. 2→Milkfisherhome Café No. 2 became a demonstration site with features of Mituo→ Milkfisherhome Café No. 2 became a site for communication and exchange between local fishermen and the fishermen's association→ Fishermen can discuss</p> | <p>identification with the fishermen's association.</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Local residents more frequently visited the fishermen's association - Local residents spend more time | <p>events, and make even more people willing to participate in events organized by the fishermen's association. The director of the fishermen's association said that he will always remember what principal investigator said to him: Milkfish is an important ecological aquaculture industry in Mituo, Kaohsiung, but people all believe that milkfish are produced</p> | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|--|---|---|
| | their recent catch, exchange techniques, and talk about weather and life at Milkfisherhome Café No. 2→Improved relationships between local residents and the fishermen's association | <p>at the fishermen's association</p> <ul style="list-style-type: none"> - The number of participants in events organized by the fishermen's association increased - Reduced the time and effort spent on promotion before organizing events | <p>in Tainan, and it will require stronger identification and connection between residents and the industry to change this stereotype.</p> <p>From then on the fishermen's association and principal investigator organized annual milkfish events for Mituo residents to recognize the industry and also improve relations between the fishermen's association and local residents</p> | |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--|---|--|---|--|
| | | | (Cheng, 2007). | |
| Increase connection between tourists and Mituo | Bo-Ren Chang gained the fishermen's association's recognition for his enthusiasm and identity as a local→After Milkfisherhome Café No. 1 began to operate smoothly, he worked with the fishermen's association in establishing Milkfisherhome Café No. 2→Milkfisherhome Café No. 2 became a | <p>1. Subjective description directly from stakeholders: Not many tourists visited Mituo in the past, but Milkfisherhome Café No. 1 and No. 2 have attracted over 3,000 customers, so far.</p> <p>2. Able to independently list or</p> | Opening a specialty café with principal investigator has attracted more tourists to Mituo, and has opened a new channel for direct sales of aquatic products other than selling to wholesalers. | Changes in behavior judged based on objective indicators. Based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|---|--|---|--|---|
| | demonstration site with features of Mituo→Many tourists came for the relaxed atmosphere→ Increased connection between tourists and Mituo | has at least two of the objective changes below: <ul style="list-style-type: none">- The number of tourist each year increased- More people are asking about the fishermen's association (via phone, Internet) | | |
| Made more young people willing to stay in the fishing village | Bo-Ren Chang gained the fishermen's association's recognition for his enthusiasm and identity as a local→After | 1. Subjective description directly from stakeholders: Milkfisherhome Café No. 2 working | Principal investigator's efforts in Mituo have increased the number of locals staying to work in their | Changes in behavior judged based on objective indicators. Based on the SROI principle of |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|--|---|
| | Milkfisherhome Café No. 1 began to operate smoothly, he worked with the fishermen's association in establishing Milkfisherhome Café No. 2→Milkfisherhome Café No. 2 became a demonstration site with features of Mituo→A site is available for fisheries education and training/Attracted young fishermen to exchange their practical experience and life experiences→ Strengthened the | with principal investigator's Fisher Team gives local youth something to look forward to in their hometown, and further makes them willing to stay and work there. 2. Able to independently list or has at least two of the objective changes below: - The average age of farmers and | hometown. More young people are opening savings accounts at the fishermen's association, the local bank. More young people are willing to stay in Mituo and work in the aquaculture industry due to their training in the Fisher Team, which lowered the age of fishermen and increased the number of workers in fisheries, allowing the fishermen's association | materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|-------------------------------|---|
| | <p>relationships between young local fishermen and their enthusiasm for fisheries→Cultivated young talent for fisheries →Made more young people willing to stay in the fishing village</p> | <p>fishermen in Mituo decreased</p> <ul style="list-style-type: none"> - The population working in agriculture and fisheries in Mituo increased - The number of savings accounts opened by young people in Mituo increased | <p>to continue operating.</p> | |

(VI) Consumers of Milkfisherhome Café



Table 12 Chain of events and summary of consumers of Milkfisherhome Café

| Defined outcome | Verification of Outcome Indicators | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|----------------------|--|---|---|---|
| Brief spiritual rest | Consumers come to Milkfisherhome café to drink coffee → The café | 1. Respondents that selected at least two items in the questionnaire: | There is no minimum charge when I go to the café, and the workers there are | Changes in thought judged based on objective indicators. Based on the SROI |

| Defined outcome | Verification of Outcome Indicators | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--|--|---|---|--|
| | faces the ocean → Enjoy some leisure time → Brief spiritual rest | <ul style="list-style-type: none"> - I briefly forget my worries in life - I felt very relaxed - I begin to think about happy things - I am willing to patiently wait for a cup of coffee | locals who introduce and share interesting people, events, and things, letting people gain brief spiritual rest and forget about their worries in life. | principle of materiality, the outcome was determined to be material and thus included. With consideration to the principle of Do Not Over-claim, only those that questionnaires were collected from are calculated in the outcome. |
| Improved family or interpersonal relations | Consumers come to Milkfisherhome café to drink coffee → Learned coffee brewing | 1. Respondents that selected at least two items in the questionnaire: | During visits to the café with family and friends, whether to buy things or experience an event, besides getting | Changes in behavior judged based on objective indicators. Based on the SROI principle of |

| Defined outcome | Verification of Outcome Indicators | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|--|--|---|
| | <p>techniques, took photos, and engaged in exchanges with employees at Miklfisherhome café → Found people with the same interests or preferences→Expands social network→ Improved interpersonal relations</p> | <ul style="list-style-type: none"> - Became acquainted with new friends - Higher frequency of conversations with friends and family members - Increased participation in social events or family activities | <p>to know new friends, it also increases the topics of conversation with family and friends (ecological aquaculture or coffee tasting). If a friend asks me out again, I am willing to visit the café to chat, improving interpersonal relations.</p> | materiality, the outcome was determined to be material and thus included. With consideration to the principle of Do Not Over-claim, only those that questionnaires were collected from are calculated in the outcome. |

(VII) Event participant

For event participant, the most important outcome is “raise awareness of responsible consumption”. According to Chin-Hua Chen&Yao-Cheng Tsai’s research, moral philosophy and environmental awareness have strong positive correlation with green purchasing (Chin-Hua Chen&Yao-Cheng Tsai, 2012). It means that when consumers obtain more information, they can judge the added value of the product and then choose the one more suitable for their moral conscience. Therefore, the event participants understand the differences between ecological farming and traditional farming through food-fish education and thus they are willing to pay higher price for ecological farming products.

Table 13 Chain of events and summary of event participants

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--|---|--|---|--|
| Increased understanding of fishing village culture | Participated in food and fish education courses→Gained a better understanding of fishing villages and new knowledge of the industry→Became interested in learning | 1. Respondents that selected at least two items in the questionnaire: - Changed my stereotype of fishing villages | 100% of stakeholders responded that this outcome occurred | Changes in thought judged based on the questionnaire. Based on the SROI principle of materiality, the outcome was determined to be material and thus |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|-----------------------------|---|
| | about fishing village culture→Became more fond of fishing village culture→Increased understanding of fishing village culture | <ul style="list-style-type: none"> - I gained a better understanding of the lifestyle and customs of fishing villages - I better understand the habit of traditional fishing villages to go with nature and cherish things - I feel that fishing village culture is special and uniquely charming | | included. With consideration to the principle of Do Not Over-claim, only those that questionnaires were collected from are calculated in the outcome. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|---|--|---|
| | | <ul style="list-style-type: none"> - I feel that fishing village culture is an important part of Taiwan's traditional culture and we should try to preserve it | | |
| Clarify career plans | <p>Participated in food and fish education courses→Experienced the work and environment in the aquaculture industry through →participation in events organized by Bo-Ren Chang, learning about possible →opportunities and difficulties in advance→Considered whether the work is what I</p> | <p>1. Respondents that selected at least two items in the questionnaire:</p> <ul style="list-style-type: none"> - Became clearer whether or not he/she is interested in the aquaculture industry | <p>100% of stakeholders responded that this outcome occurred</p> | <p>Changes in thought judged based on the questionnaire. Based on the SROI principle of materiality, the outcome was determined to be material and thus included. With consideration to the principle of Do Not</p> |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--------------------------------|--|---|--|---|
| | want, whether it matches my goals→Clarify career plans | <ul style="list-style-type: none"> - Became more confident in work - Gained greater passion for work - Became more determined to enter the aquaculture industry after graduation - Became more determined to establish a fish farm after graduation | | Over-claim, only those that questionnaires were collected from are calculated in the outcome. |
| Raise awareness of responsible | Participated in food and fish education courses→Gained a | 1. Respondents that selected at least two | 100% of stakeholders responded that this | Changes in thought judged based on the |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|--|-----------------------------|---|
| consumption | better understanding of fishing culture and the connection between fisheries and life → Gained a better understanding of local fisheries and knows to choose local fish species that are produced in abundance → Knows which aquaculture method produces higher quality aquatic products, and will support products from eco-friendly aquaculture methods → Raise awareness of responsible consumption | items in the questionnaire: <ul style="list-style-type: none"> - I care more about the impact of each purchase on the environment and society - I am willing to choose eco-friendly products that are a little bit more expensive - When I am buying a product, I am | outcome occurred | questionnaire. Based on the SROI principle of materiality, the outcome was determined to be material and thus included. With consideration to the principle of Do Not Over-claim, only those that questionnaires were collected from are calculated in the outcome. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|------------------------|--|-----------------------------|---|
| | | <p>more concerned about how it was produced and where it was produced</p> <ul style="list-style-type: none"> - I believe that consumption behavior can slowly change the industry, and allow producers to gain reasonable profits | | |

(VIII) SWCB

For SWCB, the most important outcome is “attract other young people to return to rural villages”. To evidence this result, we search for relevant study.

According to Yu-Ting Chen ‘s study (2013),

The old aged agricultural structure has been a serious problem in Taiwan. According to the government statistics, the willingness of the family farm members aged below 45 to take over family farm business is very low. This evidence indicates the shorthand of new and young farm labors into the agriculture in the coming future. As a result, how to attract young generation into agriculture has been one of the important policy issues in Taiwan.

SWCB is a public sector unit devoted to rural regeneration and empowering young people. Because of this project, Mituo retained some local young people and brought some non-local young people here, which reasonably explain the biggest source of value of SWCB.

Table 14 Chain of events and summary of the SWCB

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|----------------------------|--|---|---------------------------------|--|
| Increased effectiveness in | Supports the Six-Level Redevelopment Project | 1. Subjective description directly from | The SWCB supports the Six-Level | Stakeholders provided feedback |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|---|---|---|---|
| promoting policies | for Traditional Fishing Villages→Uses the Six-Level Redevelopment Project for Traditional Fishing Villages as an exemplary case of revitalizing local industries→Accumulates successful cases of revitalizing local industries→Policy demonstration and promotion effects | <p>stakeholders: Principal investigator's name recognition increased for his efforts in the fishing village, and it also increased the SWCB's media exposure, adding a successful example of fishing village redevelopment and creating a demonstration site to promote SWCB policies.</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> | <p>Redevelopment Project for Traditional Fishing Villages, and promotes Mituo, Kaohsiung, as an exemplary case of innovation in fisheries. Accumulating success stories in fishing village redevelopment has become a way for the SWCB to promote and demonstrate its policies. Thus this project serves to increase the effectiveness of policy promotion. The efforts</p> | <p>that the efforts of Bo-Ren Chang led to higher name recognition of the SWCB and matches objective indicators. Based on the SROI principle of materiality, the outcome was determined to be material and thus included.</p> |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--|--|--|--|--|
| | | <ul style="list-style-type: none"> - The number of applications received by the SWCB from young applicants increased - The SWCB's media exposure increased | of the youth in the fishing village were noticed by the media, increasing the SWCB's media exposure. | |
| Reduced fees for renting the youth entrepreneurship base | Supports the Six-Level Redevelopment Project for Traditional Fishing Villages→Becomes a placemaking base→The SWCB can directly borrow the site for introduction→There is no need to rent other venues→Reduced fees | 1. Subjective description directly from stakeholders: The SWCB needs a placemaking demonstration site, and now it can directly use sites of principal | The SWCB organizes over 30 meetings, exchange events, and education and training courses around Taiwan every year for youth related projects. This originally took time and money to find suitable venues, but | Changes in behavior judged based on objective indicators. Based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|--|--|---|--|---|
| | for renting the youth entrepreneurship base | <p>investigator in its introductions.</p> <p>2. Able to independently list or has at least two of the objective changes below:</p> <ul style="list-style-type: none"> - Not needing to rent venues reduces expenses - Saved time and effort searching for suitable venues | now with the sites established by local youth, organizing events and courses at the sites can save time and money. | |
| Attract other young people to return to rural villages | Supports the Six-Level Redevelopment Project for Traditional Fishing | The number of young people who stayed in the fishing village due of this | The SWCB supported the Six-Level Redevelopment | Attract other young people to return to rural villages is the |

| Defined outcome | Chain of events | Verification of Outcome Indicators | Stakeholder feedback | Reason for inclusion in report/exclusion |
|------------------------|--|---|---|---|
| | Villages→Bo-Ren Chang began to recruit Fisher Team members again→Fisher Team members clarified career plans and developed employment abilities→Fisher Team members decided to enter the aquaculture industry in Mituo after graduation→Attracted other young people to return to the fishing village | project. | Project for Traditional Fishing Villages and learned about the actual situation of fishing village redevelopment through principal investigator. One of the most important outcomes is that 10 young people decided to stay in Mituo and devoted to aquaculture industry. | ultimate goal of the SWCB. Based on the SROI principle of materiality, the outcome was determined to be material and thus included. |

Briefly summarize the most important changes of various stakeholder groups. In general, principal investigator gain more income. Meanwhile, he tried to use this project to solve the social and industrial problems of his hometown, so he increase self-actualization a lot. The fisher team members get economic income because of this plan, find a career they

want to develop for a life time, and also improve aquaculture skills from training. As for employees of Milkfisherhome Café, they have a significant enhance in interpersonal relations and sense of accomplishment. The collaborating fish farms, who obtained young and professional labour, can increased aquaculture area and then increased income of fish farms. From the perspective of local fishermen's association, they made more young people willing to stay in the fishing village, which is crucial to its survival in the long-term. Consumers of Milkfisherhome Café, honestly, their value is not very high since they can find other good coffee shop easily. Finally, for SWCB, attracting other young people to return to rural villages is the main outcomes since SWCB's mission is to revitalizing traditional rural and fishing villages, which can only be achieved by young people's creativity and commitment.

II. Financial Proxies and Adjusting Factors

For financial proxies, we used the cost method and proxy analogical method to determine the value of outcomes. We then engaged stakeholders to verify the value of outcomes. Here, we used three methods to value the outcomes, which are value & cost method, proxy analogical method and willing to pay method. For the results that related to real currency like income or cost, we use value & cost method since there is already a mature accountant system in the world. Therefore, we just follow this exiting accountant rules. As for the results related to social values, likes increased confidence or interpersonal relationships, we use the proxy analogical method. The proxy analogical method is to find other buyable things on the market that can achieve the same results. Therefore, according to the life experience and growth background of different stakeholders, we asked him what the value of the results feel like and then listed different pricing options for the stakeholders. Finally, for the principal investigator, we considered that other two methods mentioned above cannot do a proper valuation since he actually doing a losing business and it cannot be explained by common sense. Therefore, we think that using willing to pay is closer to his psychological motivation.

The reason for selecting the value & cost method or proxy analogical method is because principal investigator and certain stakeholders stated that the two methods were closer to the life experiences of more stakeholders, so it was easier for them to imagine. Therefore, according to the life experience and growth background of different stakeholders, we asked him what the value of the results feel like and then listed different pricing options for the stakeholders. Based on the experience of stakeholders and the principle of Do Not Over-claim, we decided to use the cost method or proxy analogical method. After engagement, we found that more than 60% stakeholders choose the same financial proxy. However, to avoid bias caused by specific stakeholders and also consider the other 40% of the opinions, we use the weighted average method to reflect the value of each outcome in stakeholders' minds

The adjusting factors are divided into four categories, described below:

Table 15 Adjusting Factor

| Adjusting Factor | Description |
|-------------------------|---|
| Deadweight | This refers to the percent likelihood of changes and outcomes occurring regardless of the implementation of a project; in short, it is the chance of the outcomes happening even if the project had not taken place. The deadweight for this project is based on the responses of the stakeholders in interviews and questionnaires, which are calculated as a weighted average. |
| Displacement | This refers to the proportion to which the outcome of the project only came about because problems were transferred to other places. There are no obvious issues of problem transference in this project; thus it is proposed that this factor be discussed in the sensitivity analysis and not included in the calculation of outcomes. |
| Attribution | This refers to the proportion of changes and outcomes brought about by this project that were the result of the contributions from other factors; in short, it is the chance that one cannot claim credit for the occurrence of the outcome. The attribution for this project is based on the responses of the stakeholders in interviews and questionnaires, which are calculated as a weighted average. |

| Adjusting Factor | Description |
|-------------------------|--|
| Drop-off | This refers to the rate at which the effects of the outcome diminish over time; in short, it is the rate at which benefits of the outcome decrease year by year. The drop-off for this project is based on the responses of the stakeholders in interviews and questionnaires, which are calculated as a weighted average. |

II. Impact Factors in Relation to Stakeholders and Outcomes

We mainly designed influencing factors in the second phase of stakeholder engagement for outcome verification. We personally interviewed most stakeholders, and used a questionnaire for one-time stakeholders (consumers of Milkfisherhome Café and event participants) that were harder to reach to verify the ratio of influencing factors among different stakeholders.

Deadweight: The deadweight of outcomes in principal investigator and consumers of Milkfisherhome Café was relatively high because Bo-Ren Chang has been involved in the promotion of six-level industries of fishing villages for a long period of time, while it is likely for consumers to visit different places. Hence, the two stakeholders have relatively high deadweight. The SWCB has had many successful cases of subsidizing the youth to remain in rural villages, so the ratio of the increase in the effectiveness of policy promotion is relatively low, and deadweight is thus set at 90%. The deadweight of improved relationships between local residents and the fishermen's association is 0% because Bo-Ren Chang is currently the only young person willing to return to Mituo, Kaohsiung and help establish different channels to redevelop the fishing village's economy. He is also the only person working with the fishermen's association in establishing the first café there. It is hard for the general public to have the opportunity to establish a connection between the fishermen's

association and local community, so channels for obtaining information on fishing village redevelopment issues are relatively inaccessible. Therefore, this project is unique to stakeholders.

Displacement: Stakeholders gave feedback that the results obtained from the project will not affect other outcomes or have any crowding out effect. Therefore, a judgement that there is no significant displacement factor in the project was made. In addition, SWCB, the main sponsor of the project, also explained that due to the uniqueness of the project, it will not cause crowding out effect on other proposals. However, considering principle of Do Not Over-claim, "Displacement" is included in sensitivity analysis.

Attribution: Employees of the Milkfisherhome Café stated that the principal investigator gives them an extremely high level of freedom, and that they could not obtain the same outcomes working elsewhere. The outcomes were mainly improved skills or personal traits, so the attribution is relatively low. Other stakeholders reported with certainty that, other than Bo-Ren Chang's project and events, there were few other opportunities that contributed to their outcomes in the same time period, so attribution was low, even 0%, for other stakeholders. Due to the large number of factors other than the fishermen's association that made more young people willing to stay in the fishing village, attribution was set at 90% after discussions with the director of the fishermen's association.

Drop-off: Most stakeholders reported that outcomes were mainly improved skills or personal traits, and the effect will not drop-off, even after a long period of time. Hence, the drop-off of outcomes is relatively low. The only outcome with high drop-off (90% or higher) was brief spiritual rest, which disappeared after relaxation time passed.

In summary, the principal investigator's fishing village redevelopment plan was unique to most stakeholders and had a relatively deep impact. The proportion of influencing factors for various stakeholders is as follows:

Table 16 Summary of Influencing Factors in Each Outcome

| Stakeholder | Outcomes | Deadweight | Attribution | Drop-off |
|--------------------------|--|------------|-------------|----------|
| Principal investigator | Increase self-actualization | 75% | 50% | 10% |
| | Improves the ability to communicate with children and young people | 25% | 25% | 10% |
| | Increased income | 75% | 50% | 0% |
| | Improves problem-solving ability | 25% | 50% | 10% |
| | Poorer family relations (negative) | 25% | 25% | 50% |
| | Poorer physical health (negative) | 25% | 25% | 70% |
| Fisher Team | Clarify career plans | 38% | 38% | 10% |
| | Increased income | 50% | 0% | 0% |
| | Improved interpersonal relations | 7% | 7% | 26% |
| | Improved self-identity and validation | 20% | 28% | 15% |
| | Improved professional skills in aquaculture | 30% | 40% | 4% |
| | Sense of achievement from successfully starting a business | 50% | 50% | 10% |
| | Caused fatigue (negative) | 50% | 0% | 0% |
| Collaborating fish farms | Increased income of fish farms | 25% | 25% | 0% |
| | Reduced production costs | 25% | 25% | 0% |

| Stakeholder | Outcomes | Deadweight | Attribution | Drop-off |
|---------------------------------------|---|-------------------|--------------------|-----------------|
| Employees of Milfisherhome Café | Increased personal income | 90% | 0% | 0% |
| | Gain a sense of accomplishment | 25% | 0% | 20% |
| | Gain a brief spiritual rest | 50% | 50% | 100% |
| | Improve self-identity | 50% | 10% | 20% |
| | Improve communication skills | 50% | 10% | 20% |
| | Improved interpersonal relations | 30% | 10% | 20% |
| | Improved aesthetics | 20% | 10% | 10% |
| | Improved entrepreneurial abilities | 10% | 10% | 20% |
| Local fishermen's association | Improved relationships between local residents and the fishermen's association | 0% | 20% | 20% |
| | Increase connection between tourists and Mituo | 50% | 20% | 20% |
| | Made more young people willing to stay in the fishing village | 10% | 90% | 0% |
| Consumers of Milfisherhome Café | Brief spiritual rest | 80% | 50% | 90% |
| | Improved family or interpersonal relations | 80% | 50% | 50% |
| Event participant | Increased understanding of fishing village | 20% | 10% | 10% |

| Stakeholder | Outcomes | Deadweight | Attribution | Drop-off |
|--------------------|--|-------------------|--------------------|-----------------|
| | culture | | | |
| | Clarify career plans | 50% | 20% | 20% |
| | Raise awareness of responsible consumption | 10% | 10% | 25% |
| SWCB | Increased effectiveness in promoting policies | 90% | 50% | 20% |
| | Reduced fees for renting the youth entrepreneurship base | 66% | 75% | 0% |
| | Revisions to policy directions | 25% | 75% | 0% |

Chapter 4 SROI Calculation

Section 1 Present Value of Outcome Impact

Table 17 Table of Impact

| Stakeholder | | Outcomes | Percentage Change | Duration | Valuation of outcome (NT\$) | Value of Outcome | | | | | | | | | |
|------------------------|--------------------------|--|-------------------|----------|-----------------------------|---------------------------|-----------------------|----------|---------|--------|-----------|--|--|--|--|
| Name | Number of People Engaged | | | | | Discount rate (%) | 1.047% ^[1] | | | | | | | | |
| | | | | | | Year 1 (post-activity) | Year 2 | Year 3 | Year 4 | Year 5 | Total | | | | |
| Principal investigator | 1 | Increase self-actualization | 100% | 4 | 1,000,000 | 125,000 | 112,500 | 101,250 | 91,125 | 0 | 429,875 | | | | |
| | | Improves the ability to communicate with children and young people | 100% | 4 | 20,000 | 11,250 | 10,125 | 9,113 | 8,201 | 0 | 38,689 | | | | |
| | | Increased income | 100% | 1 | 4,179,843 | 522,480 | 0 | 0 | 0 | 0 | 522,480 | | | | |
| | | Improves problem-solving ability | 100% | 4 | 32,000 | 12,000 | 10,800 | 9,720 | 8,748 | 0 | 41,268 | | | | |
| | | Poorer family relations (negative) | 100% | 2 | (150,000) | (84,375) | (42,188) | 0 | 0 | 0 | (126,563) | | | | |
| | | Poorer physical health (negative) | 100% | 4 | (240,000) | (135,000) | (40,500) | (12,150) | (3,645) | 0 | (191,295) | | | | |
| Fisher Team | 10 | Clarify career plans | 100% | 2 | 272,352 | 1,046,921 | 942,229 | 0 | 0 | 0 | 1,989,150 | | | | |
| | | Increased income | 100% | 1 | 378,373 | 1,891,864 | 0 | 0 | 0 | 0 | 1,891,864 | | | | |
| | | Improved interpersonal relations | 100% | 2 | 19,200 | 166,061 | 122,885 | 0 | 0 | 0 | 288,946 | | | | |

| Stakeholder | | Outcomes | Percentage Change | Duration | Valuation of outcome (NT\$) | Value of Outcome | | | | | | | | | |
|----------------------------------|--------------------------|--|-------------------|----------|-----------------------------|---------------------------|-----------------------|-----------|-----------|--------|-----------|--|--|--|--|
| Name | Number of People Engaged | | | | | Discount rate (%) | 1.047% ^[1] | | | | | | | | |
| | | | | | | Year 1 (post-activity) | Year 2 | Year 3 | Year 4 | Year 5 | Total | | | | |
| | | Improved self-identity and validation | 100% | 2 | 29,000 | 168,200 | 142,970 | 0 | 0 | 0 | 311,170 | | | | |
| | | Improved professional skills in aquaculture | 100% | 4 | 272,352 | 1,143,878 | 1,098,123 | 1,054,198 | 1,012,030 | 0 | 4,308,230 | | | | |
| | | Sense of achievement from successfully starting a business | 10% | 4 | 32,000 | 8,000 | 7,200 | 6,480 | 5,832 | 0 | 27,512 | | | | |
| | | Caused fatigue (negative) | 10% | 1 | (42,000) | (21,000) | 0 | 0 | 0 | 0 | (21,000) | | | | |
| Collaborating fish farms | 4 | Increased income of fish farms | 100% | 1 | 624,000 | 1,404,000 | 0 | 0 | 0 | 0 | 1,404,000 | | | | |
| | | Reduced production costs | 100% | 1 | 308,435 | 693,978 | 0 | 0 | 0 | 0 | 693,978 | | | | |
| Employees of Milkfisherhome Café | 6 | Increased personal income | 100% | 1 | 79,457 | 47,674 | 0 | 0 | 0 | 0 | 47,674 | | | | |
| | | Gain a sense of accomplishment | 100% | 1 | 50,000 | 225,000 | 0 | 0 | 0 | 0 | 225,000 | | | | |
| | | Gain a brief spiritual rest | 17% | 1 | 67,200 | 16,793 | 0 | 0 | 0 | 0 | 16,793 | | | | |
| | | Improve self-identity | 100% | 2 | 4,800 | 12,960 | 10,368 | 0 | 0 | 0 | 23,328 | | | | |
| | | Improve communication skills | 100% | 2 | 4,500 | 12,150 | 9,720 | 0 | 0 | 0 | 21,870 | | | | |
| | | Improved interpersonal relations | 100% | 2 | 180,000 | 113,400 | 90,720 | 0 | 0 | 0 | 204,120 | | | | |
| | | Improved aesthetics | 17% | 4 | 100,000 | 71,971 | 64,774 | 58,297 | 52,467 | 0 | 247,509 | | | | |

| Stakeholder | | Outcomes | Percentage Change | Duration | Valuation of outcome (NT\$) | Value of Outcome | | | | | | | | | |
|----------------------------------|--------------------------|--|-------------------|----------|-----------------------------|---------------------------|-----------------------|--------|--------|--------|---------|--|--|--|--|
| Name | Number of People Engaged | | | | | Discount rate (%) | 1.047% ^[1] | | | | | | | | |
| | | | | | | Year 1 (post-activity) | Year 2 | Year 3 | Year 4 | Year 5 | Total | | | | |
| | | Improved entrepreneurial abilities | 100% | 2 | 3,500 | 17,010 | 13,608 | 0 | 0 | 0 | 30,618 | | | | |
| Local fishermen's association | 1 | Improved relationships between local residents and the fishermen's association | 100% | 1 | 300,000 | 240,000 | 0 | 0 | 0 | 0 | 240,000 | | | | |
| | | Increased connection between tourists and Mituo | 100% | 1 | 200,000 | 80,000 | 0 | 0 | 0 | 0 | 80,000 | | | | |
| | | Made more young people willing to stay in the fishing village | 100% | 1 | 800,000 | 72,000 | 0 | 0 | 0 | 0 | 72,000 | | | | |
| Consumers of Milkfisherhome Café | 38 | Brief relaxation | 79% | 1 | 225 | 675 | 0 | 0 | 0 | 0 | 675 | | | | |
| | | Improved interpersonal relations | 45% | 1 | 157 | 268 | 0 | 0 | 0 | 0 | 268 | | | | |
| Event participant | 14 | Increased understanding of fishing village culture | 100% | 2 | 1,245 | 12,550 | 11,295 | 0 | 0 | 0 | 23,844 | | | | |
| | | Clarify career plans | 100% | 1 | 2,172 | 12,164 | 0 | 0 | 0 | 0 | 12,164 | | | | |
| | | Raise awareness of responsible consumption | 100% | 2 | 1,345 | 15,252 | 11,439 | 0 | 0 | 0 | 26,692 | | | | |
| SWCB | 1 | Policy demonstration and promotion effects | 100% | 3 | 2,672,500 | 133,625 | 106,900 | 85,520 | 0 | 0 | 326,045 | | | | |
| | | Reduced fees for renting the youth entrepreneurship base | 100% | 3 | 1,000,000 | 85,000 | 85,000 | 85,000 | 0 | 0 | 255,000 | | | | |

| Stakeholder | | Outcomes | Percentage Change | Duration | Valuation of outcome (NT\$) | Value of Outcome | | | | | | | | | | |
|---|--------------------------|--|-------------------|----------|-----------------------------|-------------------|-----------------------|-----------|-----------|---|------------|---------------------------|--|--|--|--|
| Name | Number of People Engaged | | | | | Discount rate (%) | 1.047% ^[1] | | | | | Year 1 (post-activity) | | | | |
| | | | | | | Year 1 | | | | | | | | | | |
| | | Attracted other young people to return to rural villages | 100% | 3 | 4,200,000 | 787,500 | 787,500 | 787,500 | 0 | 0 | 2,362,500 | | | | | |
| Present value by year | | | | | | 8,816,938 | 3,482,170 | 2,117,711 | 1,126,821 | 0 | 15,543,641 | | | | | |
| PV | | | | | | | | | | | | \$15,543,641 | | | | |
| Total inputs | | | | | | | | | | | | \$8,125,020 | | | | |
| Net present value (PV - total input) | | | | | | | | | | | | \$7,418,621 | | | | |
| Social return on investment (SROI) | | | | | | | | | | | | 1.91 | | | | |

[1] The discount rate used in this report is the three-year fixed interest rate for deposits offered by Chunghwa Post, as of January 2018.

Section 2 Sensitivity Analysis

Since the calculation of SROI takes qualitative and narrative information, which is not quantified, and assigns monetary value to it, there is a great deal of assumption and estimation involved. The SROI standards require that each analysis report include a sensitivity analysis and disclose relevant information, to ensure that the results are objective and verifiable.

The questionnaire response rate of event participants and consumers of Milkfisherhome Café was extremely low (3.5% and 1.3%, respectively). This report only uses the questionnaires that were collected in calculations, which may cause the value of outcomes to be underestimated. Hence, we attempt to calculate the SROI rate based on projections of all event participants and consumers of Milkfisherhome Café. In addition, we add 10% to or subtract 10% from the original result of the SROI calculation, and adjust the four factors to 10% and 30% if they originally fell below 10% for any of the outcomes.

After confirming the changes of the stakeholders through the subjective and objective judgment methods in the chain of event, we continued to have in-depth discussions with the stakeholders on the probability of the outcome and the depth of changes and inquire whether they have similar experience. If they say Yes, we can ask them how long the last change can last. After that, we ask stakeholders to use a reasonable scale to analyze the low, middle, and high possibility of occurring the same changes giving without this project. We then use professional judgement to convert their answer into possibility. For example: high possibility is between 75% to 100%, medium is between 40% to 70%, and low is between 0 to 35%. However, Milkfisherhome coffee consumers and event participants used questionnaires to inquire outcomes, so they directly calculated the weighted average of the questionnaires results.

Even we have made a lot of efforts to explain influencing factors to our stakeholders during the interview, according

to our experience, it is still difficult for them to fully understand. To solve this problem, we adjusted the influencing factors which is obviously low to 10% and 30% respectively in the sensitivity analysis to test the results.

For project investigator, we think that he would have a great chance to give back to his hometown and achieve the same results even without this plan. Therefore, we adjust the deadweight to higher percentage. Besides, even project investigator said that some outcomes are very intense and can remain for a long time, to avoid over-claim, we also adjust the drop-off to a higher percentage

In addition, since the biggest outcome in this project is “improve professional skills in aquaculture” for fisher team, we use the other financial proxy (Average annual salary of interns) as financial proxy. The reason is that intern may have the similar effects on improving professional aquaculture skills.

Finally, like we mentioned before, the influencing factors of this study rely heavily on the feedback from stakeholders. According to our experience, even if we explained the meaning of the four influencing factors to stakeholders during the interview, it is still difficult for them to fully understand. Therefore, we adjusted the influencing factors which is obviously low to 10% and 30% respectively in the sensitivity analysis to test the results.

To sum up, we determined the range of the SROI sensitivity analysis for this project to be between 1.34 and 2.13.

Table 18 Calculations for SROI adjustment

| Adjustment | Details | SROI |
|------------------------------------|-----------------------|------|
| Social return on investment (SROI) | Increased by 10% | 2.10 |
| Social return on investment (SROI) | Decreased by 10% | 1.72 |
| Deadweight | < 10% adjusted to 10% | 1.91 |

| | | |
|------------------------|--|------|
| Deadweight | < 10% adjusted to 30% | 1.90 |
| Attribution | < 10% adjusted to 10% | 1.89 |
| Attribution | < 10% adjusted to 30% | 1.83 |
| Drop-off | < 10% adjusted to 10% | 1.84 |
| Drop-off | < 10% adjusted to 30% | 1.66 |
| Displacement | 0% adjusted to 10% | 1.72 |
| Displacement | 0% adjusted to 30% | 1.34 |
| Number of stakeholders | Stakeholders are extrapolated to their total statistical population (Event participants and consumers of Milkfisherhome Café) | 2.13 |
| Deadweight | The outcome of project investigator (Bo-Ren Chang) < 50% adjusted to 50% | 1.92 |
| Drop-off | The Project investigator (Bo-Ren Chang) < 30% adjusted to 30% | 1.90 |
| Financial proxy | Use one-year intern as the financial proxy of fisher team's most important outcome "improve professional skills in aquaculture". | 1.91 |

Chapter 5 Conclusion and Recommendations

I. Improve Stakeholder Contact

Event participant: In the process of tracking stakeholders, food and fish education events are mostly one-time events and participants come from different schools or areas, so they could not be tracked. Hence, we could not accurately measure their impact of outcomes and benefits among stakeholders. We recommend that the project implementer compile a list of participants, select fixed schools to work with to make food and fish education more in-depth, and systematically organize food and fish education related events and seminars for the long term. We also recommend adjusting the contents and design of events based on feedback from participants. Through a preliminary sign-up form asking participants why they want to attend the events and a dedicated participant group, the project implementer can continue to keep in touch with event participants.

Members of the Responsible Production Cooperative and restaurants/food processing companies: Cooperation began in early 2019 and current sales revenue is not high, so there are not any significant outcomes as of yet. We recommend establishing a complete database on related sales channels and companies, testing market reaction and collecting feedback from companies, which will benefit subsequent promotion of ecological aquaculture.

Principal investigator organized Fisher Team training and made efforts to develop different industries to realize his ideal, but members of executive team are only Bo-Ren Chang and his family. When his family has a negative reaction and cannot contribute, it will result in a highly negative outcome. We recommend that he search for partners with the same ideals to quickly complete targets and save time.

II. Verify if cost inputs are sustainable

The Six-Level Redevelopment Project for Traditional Fishing Villages is mainly funded by the SWCB and Mr. Bo-Ren Chang. However, the SWCB only provides a one-time subsidy that will end after 2019. Bo-Ren Chang, the principal investigator, should verify whether he still has sufficient funding for Fisher Team training and food and fish education promotion work without government subsidies.

III. Total Outcome Benefit Analysis

(I) Stakeholder Analysis

1. Principal investigator: From Bo-Ren Chang's perspective, the most significant outcome is increased income and self-actualization. The purpose of this project is to train the younger generation to go into old industries and communities. From Bo-Ren Chang's perspective, the outcome also verifies that he achieved self-actualization.
2. Fisher Team member: After training and internship, Fisher Team members had the most significant outcomes among stakeholders, in which the most significant outcomes were improved professional skills in aquaculture and increased income. Since Fisher Team members are mainly students and the underprivileged, the professional skills and income from the internship became the basis for paying daily living expenses.
3. Collaborating fish farms: The project is currently working with four fish farms, and the main outcome is reduced labor costs and increased income. Since Fisher Team members have related knowledge and have received practical training, they can be high quality, young workers for fish farms, and indirectly resolve the age gap issue in the industry, creating a new impact on the industry.
4. Employees of Milkfisherhome Café: Milkfisherhome Café has six employees, five of which are locals and one from a nearby township. The main outcomes are improved skills and personal traits. Even though the benefits

account for a relatively even percentage of all outcomes, there is not much drop-off in the outcomes, which will give stakeholders a different life experience, and indirectly make locals more willing to stay and work in their hometown.

5. Local fishermen's association: The fishermen's association is a local government agency. Its main outcomes are increased connections with other places, opportunities for the youth to return to their hometown, allowing the local economy to continue to operate, and increased profitability. The fishermen's association began investing in numerous large infrastructure projects in 2019, hoping to guide the youth into different industries in Mituo through the efforts of the principal investigator, and creating opportunities to change the fishing village.
6. Consumers of Milkfisherhome Café: Most consumers are one-time consumers, and outcomes are brief spiritual rest and improved relationships with family and friends. We recommend that principal investigator strengthen the connection with consumers and gather information on their consumption habits, preferences, and communities, using connections to communicate the purpose of local industries.
7. Event participant: The events are mainly food and fish education and fish farm experience events, and outcomes include better understanding of fishing village culture, clearer career plans, and raised awareness of responsible consumption. However, most events are one-time events and outcomes are not as significant. We recommend that the principal investigator build strong connections with event participants, gather information on participants' favorite types of events, preferences, and communities, using connections to communicate the values of ecological aquaculture.
8. SWCB: Principal investigator implementing the plan in Mituo, Kaohsiung to develop the local fishing village community provides the SWCB with an exemplary case of innovation in rural villages for others to use as

reference. It also provides the benefit of promoting the rural village innovation policy. The SWCB also takes into consideration the importance of social impact, and used social impact as the main evaluation standard for application forms and review standards for youth investment projects in rural villages in 2019. The SWCB hopes that sharing successful examples and methods of thinking when it comes to social impact will help more young people find the right way to resolve issues in rural villages.

The benefits to the various stakeholders are as follows:

Table 19 Proportion of Outcome Benefits Enjoyed by Each Stakeholder Group

| Stakeholder | Total outcomes (undiscounted) | Outcome Percentage |
|----------------------------------|----------------------------------|--------------------|
| Principal investigator | 714,455 | 4.51% |
| Fisher Team | 8,795,872 | 55.58% |
| Collaborating fish farms | 2,097,978 | 13.26% |
| Employees of Milkfisherhome Café | 816,912 | 5.18% |
| Local fishermen's association | 392,000 | 2.48% |
| Consumers of Milkfisherhome Café | 944 | 0.01% |
| Event participant | 62,700 | 0.40% |

| Stakeholder | Total outcomes (undiscounted) | Outcome Percentage |
|--------------------|--|-------------------------------|
| SWCB | 2,943,545 | 18.60% |
| Total | 15,824,406 | 100% |

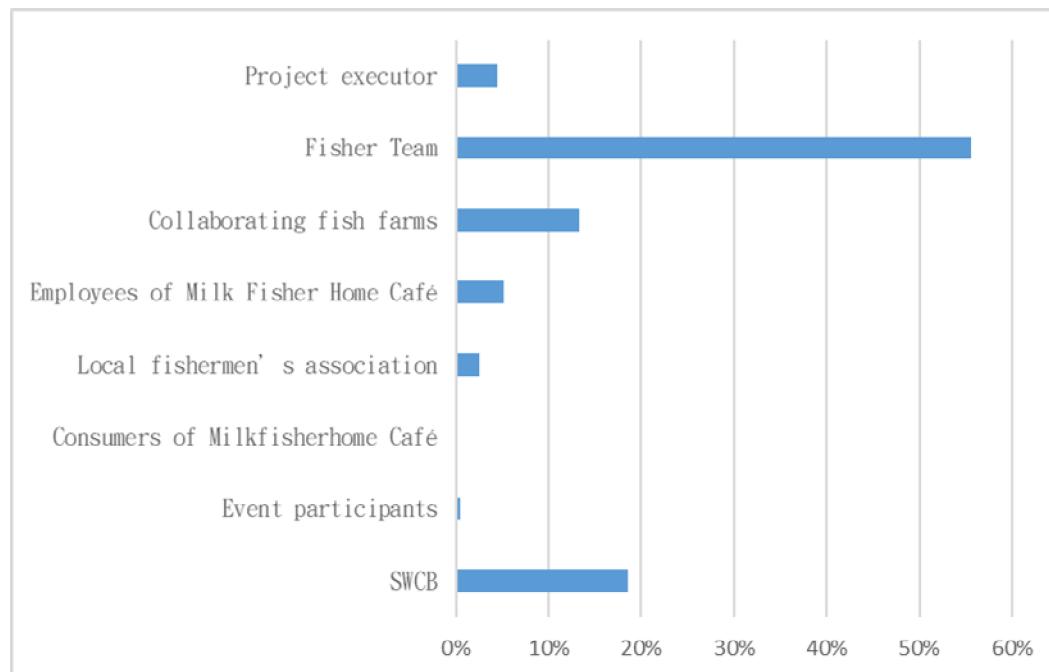


Figure 3 Proportion of Benefits Enjoyed by Each Stakeholder Group

(II) Analysis of economic and social benefits

We further examined the outcomes of each type of stakeholder, and used the types of outcomes as the basis of analysis, examining the social and economic benefits and their percentage. Calculation results show that project outcomes in economic aspects is 30%, and other 70% is in social aspects. It reveals that the social impact of Six-Level Redevelopment Project for Traditional Fishing Villages mainly demonstrates in “aquaculture personnel training”, which further promotes industry chain of aquaculture and establishes a new“business model.” Detailed information is provided below:

Table 20 Breakdown of benefits by aspect

| Stakeholder | Outcomes | Economy | | Society | |
|------------------------|--|----------------|------------|----------------|------------|
| | | Outcome amount | Percentage | Outcome amount | Percentage |
| Principal investigator | Increase self-actualization | | | 429,875 | 2.72% |
| | Improves the ability to communicate with children and young people | | | 38,689 | 0.24% |
| | Increased income | 522,480 | 3.30% | | |
| | Improves problem-solving ability | | | 41,268 | 0.26% |
| | Poorer family relations (negative) | | | -126,563 | -0.80% |
| | Poorer physical health (negative) | | | -191,295 | -1.21% |
| Fisher Team | Clarify career plans | | | 1,989,150 | 12.57% |
| | Increased income | 1,891,864 | 11.96% | | |
| | Improved interpersonal relations | | | 288,946 | 1.83% |

| | | | | | |
|----------------------------------|--|-----------|-------|----------------|---------------|
| | Improved self-identity and validation | | | 311,170 | 1.97% |
| | Improved professional skills in aquaculture | | | 4,308,230 | 27.23% |
| | Sense of achievement from successfully starting a business | | | 27,512 | 0.17% |
| | Caused fatigue (negative) | | | -21,000 | -0.13% |
| Collaborating fish farms | Increased personal income | 1,404,000 | 8.87% | | |
| | Reduced production costs | 693,978 | 4.39% | | |
| Employees of Milkfisherhome Café | Increased personal income | 47,674 | 0.30% | | |
| | Gain a sense of accomplishment | | | 225,000 | 1.42% |
| | Gain a brief spiritual rest | | | 16,793 | 0.11% |
| | Improve self-identity | | | 23,328 | 0.15% |
| | Improve communication skills | | | 21,870 | 0.14% |
| | Improved interpersonal relations | | | 204,120 | 1.29% |
| | Improved aesthetics | | | 247,509 | 1.56% |
| | Improved entrepreneurial abilities | | | 30,618 | 0.19% |
| Local fishermen's association | Improved relationships between local residents and the fishermen's association | | | 240,000 | 1.52% |
| | Increased connection between tourists and Mituo | | | 80,000 | 0.51% |
| | Made more young people willing to stay in the fishing village | | | 72,000 | 0.45% |
| | Brief relaxation | | | 675 | 0.00% |

| | | | | | |
|----------------------------------|--|-----------|--------|------------|--------|
| Consumers of Milkfisherhome Café | Improved interpersonal relations | | | 268 | 0.00% |
| Event participant | Increased understanding of fishing village culture | | | 23,844 | 0.15% |
| | Clarify career plans | | | 12,164 | 0.08% |
| | Raise awareness of responsible consumption | | | 26,692 | 0.17% |
| SWCB | Policy demonstration and promotion effects | | | 326,045 | 2.06% |
| | Reduced fees for renting the youth entrepreneurship base | 255,000 | 1.61% | | |
| | Attracted other young people to return to rural villages | | | 2,362,500 | 14.93% |
| Total/Percentage | | 8,274,301 | 30.43% | 11,009,403 | 69.57% |

Overall, the implementation of this project is closely aligned with its goals, which is supported by evaluation results. The principal investigator, Bo-Ren Chang, has high control over project implementation, and most information is fully documented. However, there is relatively little information on the outcomes of food and fish education event participants and consumers. We recommend maintaining long-term observation records to test market reaction, and benefit the implementation of fishing village six-level industry activities.

Project investigator fulfilled his commitment to his hometown, and prioritizes local talent training and new business models, completing the social network of locals while creating new momentum for social innovation. We hope that the principal investigator will reexamine the changes brought by the events through this social impact assessment, and continue

to direct his efforts to the most valuable parts, while making improvements to the parts that are the furthest away from expectations. This will make the promotion of six-level industries smoother, and allow more locals to identify with their hometown, so that they will return to work together for their hometown.



References

- Bai, Y.-z. (2012). *A Study on the Impact of Climate and Educational Training on Women's Police Work in Sub-stations and Stations*.
- Chang, C.-M. (2012). *Study on Feasibility of Transferring Traditional Farms to Leisure Fishery*. Kaohsiung.
- Chen, C.-h. (2007). *A case study on the Entrepreneurial Operation and Regenerative Strategy of Taiwan's Grouper Aquaculture Industry*. Kaohsiung.
- Cheng, W.-J. (2007). *Study on the Management Transformation of Fisheries Organization in the Toucheng Township of Yilan County*. Yilan.
- Chin-Hua Chen&Yao-Cheng Tsai. (2012, 6 1). Moral Philosophy, Environmental Awareness and Green Purchasing: Extensive Application of Sports Facilities. *Journal of Physical Education and Leisure*, Ling Tung University, pp. P65 - 79.
- Hu, S.-H. (2014, 3). Change and Development of Taiwan Fishermen's Associations. *Category of Taiwan History Studies*, pp. P.4–19.
- HUANG, T. (2019). *A Study of Exploration among Part-time Work Experience, Practicum and Employment Intentions on Social Work Student*.
- Hung, H.-F. (2008). *The Feasibility of Economic Assessment for the Management of Marine Cage Aquaculture in Taiwan*.
- Liao, H.-W. (2009). *The Relationship between Self-identification, Self-defined Memory and Psychological Well-being of Young Adults in Early Adulthood*.
- Lin, C.-C. (2007). *A Study on Aquaculture Education in Taiwan*. New Taipei.
- Lin, K.-W. (2017). *After Returnees Return, Innovation and Practice of Local Identity*. Yunlin: National Yunlin University of Science and Technology.
- Lin, T.-W. (2006). *Strategies on the overcoming of the main problems of Taiwan aquaculture industry and suggestions for the industry's further development*. Pingtung.
- Liu, Y.-C. (2014, 4 1). Exploring Undergraduates' Needs for Career Information: A Qualitative Approach. *Library and Information Science*, pp. P82 - 86+89.
- Wang, Y.-H. (2004). *The Effects Of Interpersonal Reaction On The Interpersonal Relationship, Interpersonal Trust, Interpersonal Conflict and Cooperation Satisfaction*.

- Nicholls, J., E. Lawlor, E. Neitzert, and T. Goodspeed., A Guide to Social Return on Investment., Cabinet Office,U.K., 2009, updated in 2012 (<http://www.socialvalueuk.org/resources/sroi-guide/>)

Appendix 1 Stakeholder Engagement Interview Outline and Questionnaire

➤ Interview Outline

1. When did you first come in contact with Bo-Ren Chang? What was the occasion?
2. Why did you want to join the organization or participate in the event organized by Bo-Ren Chang?
3. Since joining the organization or participating in the event organized by Bo-Ren Chang, have you personally experienced any changes or influences (such as in your thoughts, behaviors, moods, or attitudes toward life in general) or in the people and things around you (such as your friends, family, and communities)? Examples: Increased income, increased confidence, improved interpersonal relations, etc.
4. Which of the above changes do you think are more important?
5. How long have these changes lasted? Or how long do you think these changes will last?
6. If you hadn't joined the organization or participated in the event organized by Bo-Ren Chang, do you think the chances are high of the aforementioned changes happening?
7. Have there been any negative influences or emotions since joining the organization or participating in the events organized by Bo-Ren Chang?
8. Do you have any other thoughts or suggestions regarding the organization or the events organized by Bo-Ren Chang?

➤ Questionnaire

| | |
|---|---|
| Taking the outcome of “improved understanding of fishing village culture” as an example, we inquired about each outcome using the following logic | |
| Basic information | 1. What is your current identity? <input type="checkbox"/> Student <input type="checkbox"/> Teacher <input type="checkbox"/> Other _____ |
| Outcome Validation | 2. After experiencing the event, did you become more interested in and gain a better understanding of fishing village culture? |

| | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other _____ | | | | | | | | | | | | | | | |
|---|--|----------------------|-----------------------|----------------------|---|--|--|----------------------|--|--|--|--|--|-------------|--|--|
| Outcome Indicators | <p>3. What changes did this event bring to your “understanding of fishing village culture”? (Choose one or more answers)</p> <p><input type="checkbox"/>My impression of fishing villages became worse and I do not want to visit again</p> <p><input type="checkbox"/>Changed my stereotype of fishing villages</p> <p><input type="checkbox"/>I gained a better understanding of the lifestyle and customs of fishing villages</p> <p><input type="checkbox"/>I better understand the habit of traditional fishing villages to go with nature and cherish things</p> <p><input type="checkbox"/>I feel that fishing village culture is special and uniquely charming</p> <p><input type="checkbox"/>I feel that fishing village culture is an important part of Taiwan's traditional culture and we should try to preserve it</p> <p><input type="checkbox"/>Others_____</p> | | | | | | | | | | | | | | | |
| Importance of changes and price willing to pay | <table border="1"> <thead> <tr> <th>Outcomes</th> <th>Ranking by importance</th> <th>Price willing to pay</th> </tr> </thead> <tbody> <tr> <td>Better understanding of fishing village culture</td> <td></td> <td></td> </tr> <tr> <td>Clarify career plans</td> <td></td> <td></td> </tr> <tr> <td>Raise awareness of responsible consumption</td> <td></td> <td></td> </tr> <tr> <td>Others_____</td> <td></td> <td></td> </tr> </tbody> </table> | Outcomes | Ranking by importance | Price willing to pay | Better understanding of fishing village culture | | | Clarify career plans | | | Raise awareness of responsible consumption | | | Others_____ | | |
| Outcomes | Ranking by importance | Price willing to pay | | | | | | | | | | | | | | |
| Better understanding of fishing village culture | | | | | | | | | | | | | | | | |
| Clarify career plans | | | | | | | | | | | | | | | | |
| Raise awareness of responsible consumption | | | | | | | | | | | | | | | | |
| Others_____ | | | | | | | | | | | | | | | | |

| | |
|----------------|---|
| Duration | 4. How long do you think the effects of “better understanding of fishing village culture” from the food and fish education event will last? |
| Drop-off | 5. If the change can last for more than one year, will the degree of this effect decrease year by year? |
| Deadweight | 6. If you had not participated in the food and fish education event of Bo-Ren Chang, how likely do you think that you would have had the opportunity to experience the same level of change through other channels or means? |
| Attribution | 7. Besides participating in the food and fish education event, were there other channels or methods that also helped you gain the change of “better understanding of fishing village culture”? What is the degree of contribution of Bo-Ren Chang’s food and fish education event to this change? |
| Other outcomes | 8. Have you experienced any changes or impact not mentioned above? Please specify |

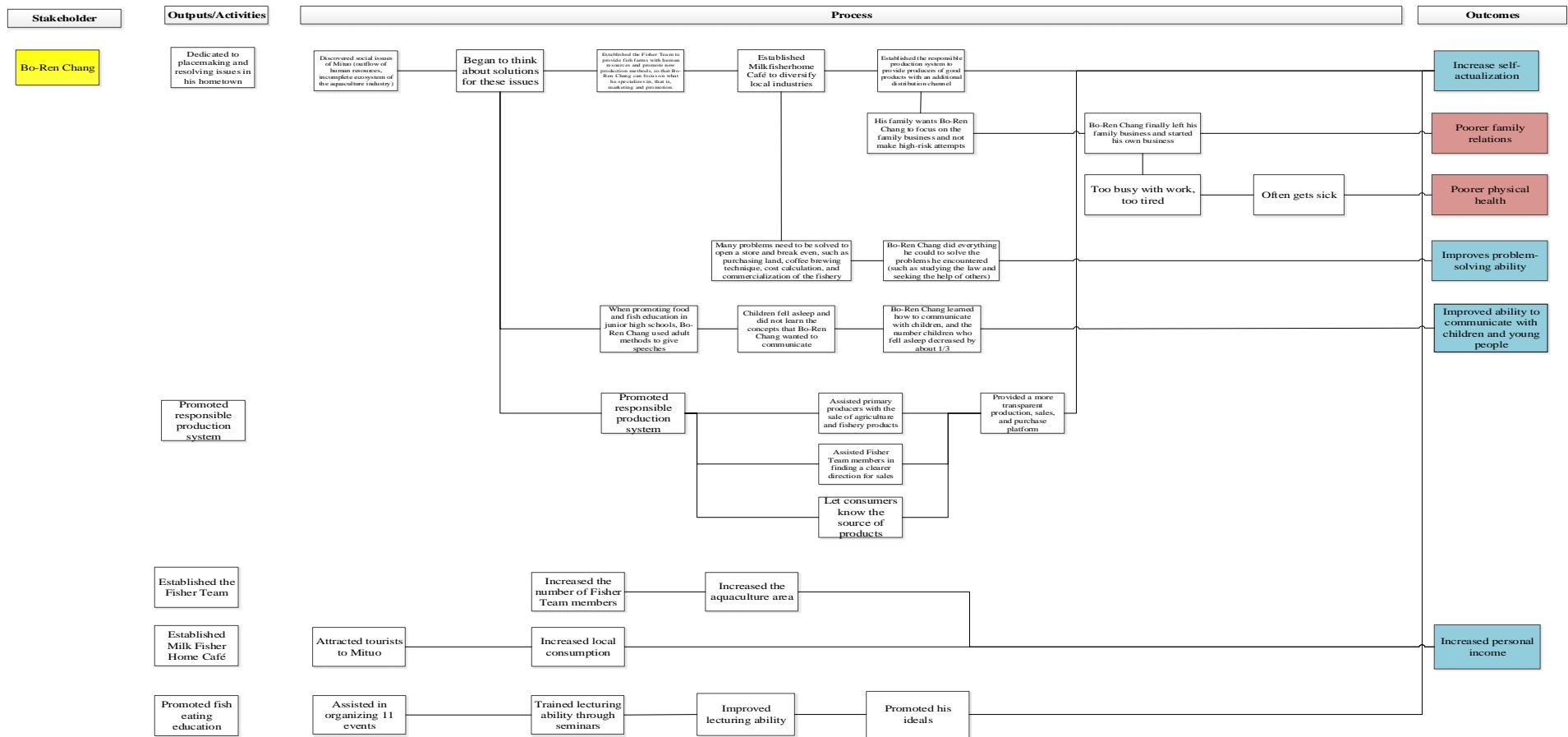
Appendix 2 Stakeholder Inputs

| Stakeholder | | Inputs | | Description | Source |
|----------------------------------|-----|------------|-----------|---|---|
| | | Items | Amount | | |
| Principal investigator | N/A | Funds | 2,586,792 | Make significant investment in the purchase of equipment, land, and salaries during the training of Fisher Team members | Interview results |
| Fisher Team member | N/A | Time | 0 | Cost of time invested in the Fisher Team | Provided by the RunAway team |
| Collaborating fish farms | N/A | Funds/Site | 3,117,759 | Collaborating fish farms need to pay the salaries of Fisher Team members | The principal investigator summarized the salaries paid by collaborating fish farms |
| Employees of Milkfisherhome Café | N/A | Time | 0 | Cost of time invested by employees of Milkfisherhome Café | Provided by the principal investigator |
| Local fishermen's association | N/A | Funds/Site | 400,000 | Fees for preparing the site before it was used for Milkfisherhome Café No. 2 | Provided by the director of Mituo Fishermen's Association |
| Consumers of Milkfisherhome Café | N/A | Funds/Time | 9,719 | Consumption amount in the store | Questionnaire results |

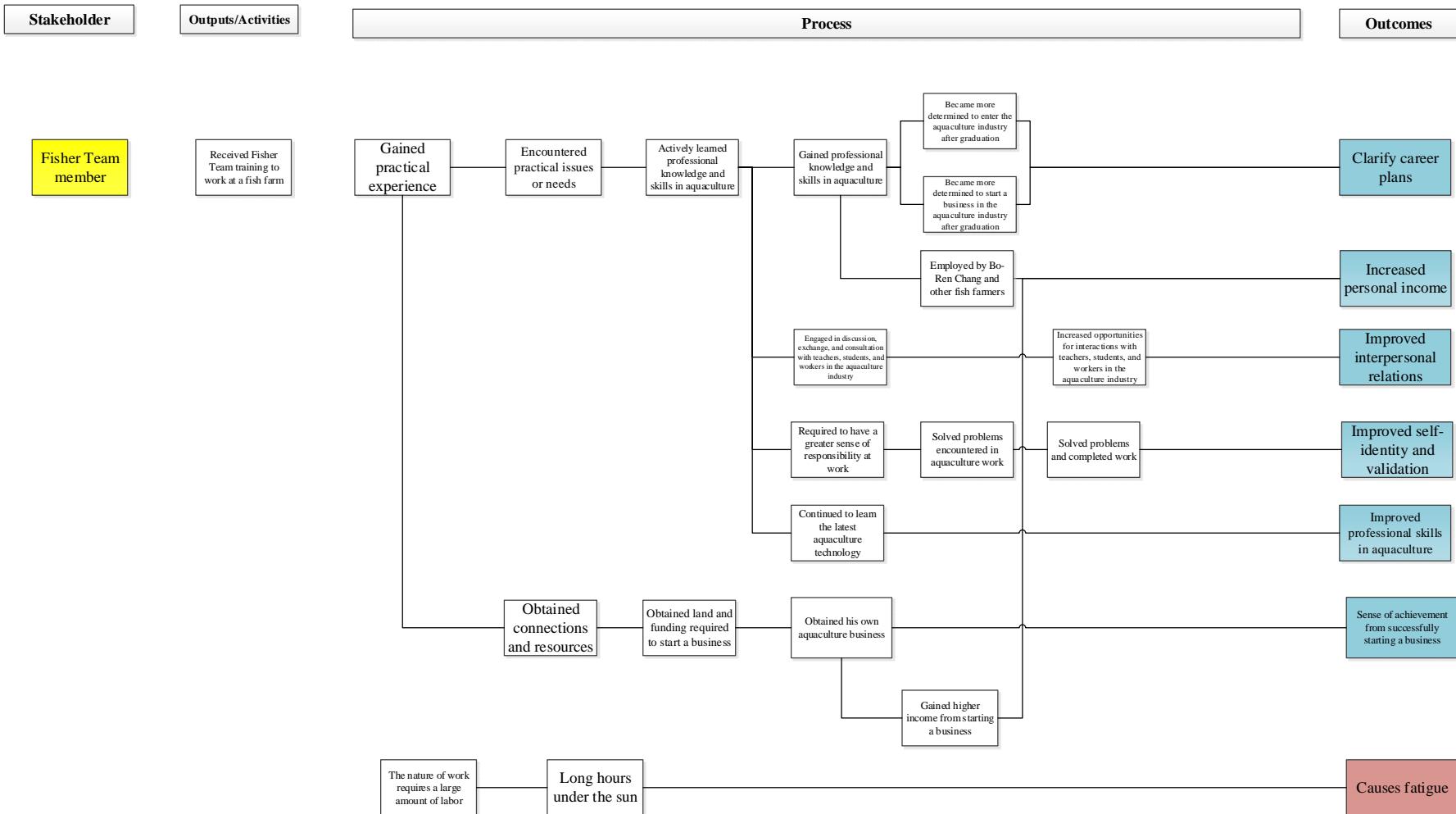
| Event participant | Aquaculture department students | Funds/Time | 10,750 | Expenses participating in events | Provided by the principal investigator |
|-------------------|---------------------------------|---------------------|------------------|--|---|
| SWCB | N/A | Funds | 2,000,000 | The SWCB subsidized the principal investigator for 2.5 years | Subsidy amount approved by the SWCB project |
| - | | Total Inputs | 8,125,020 | - | - |

Appendix 3 Chain of events

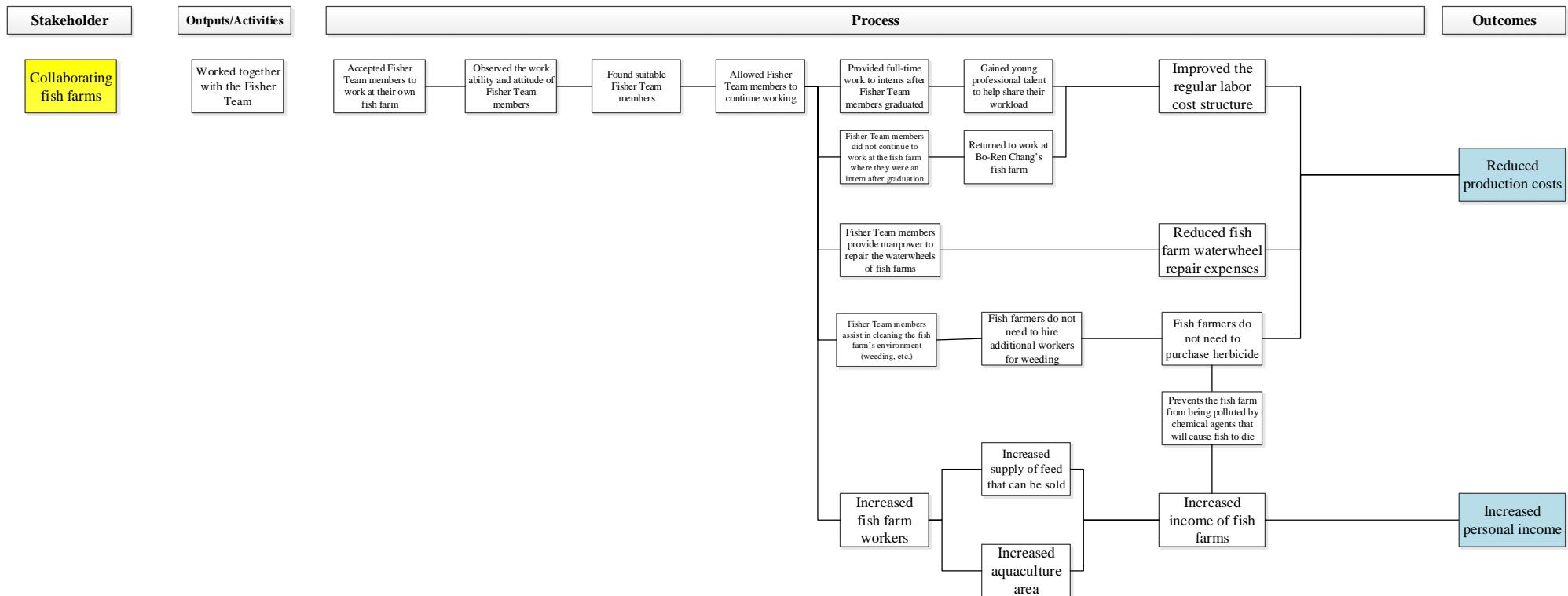
(I) Principal investigator



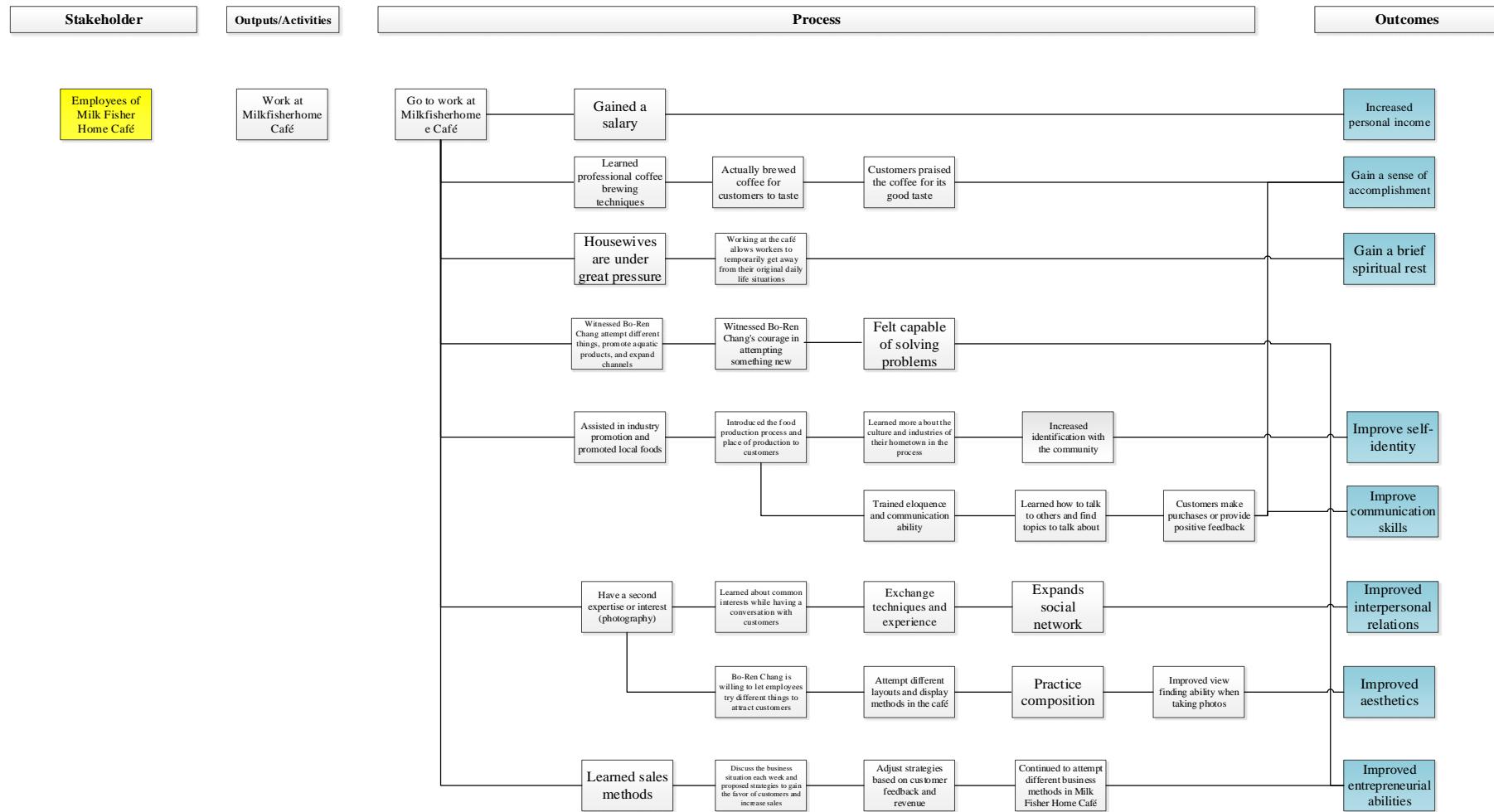
(II) Fisher Team member



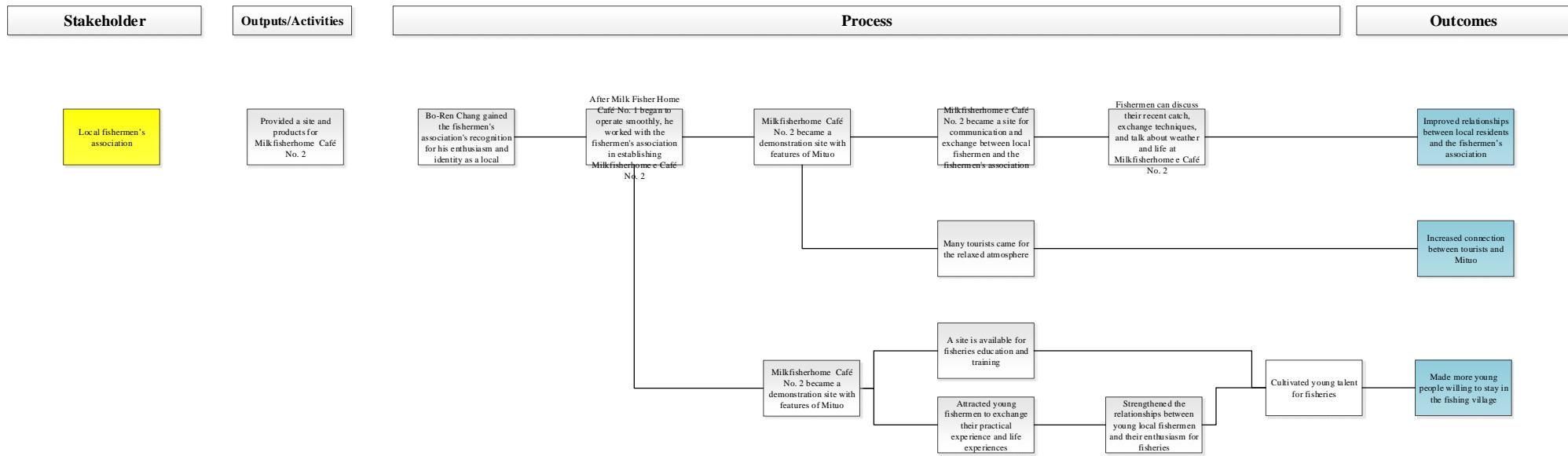
(III) Collaborating fish farms



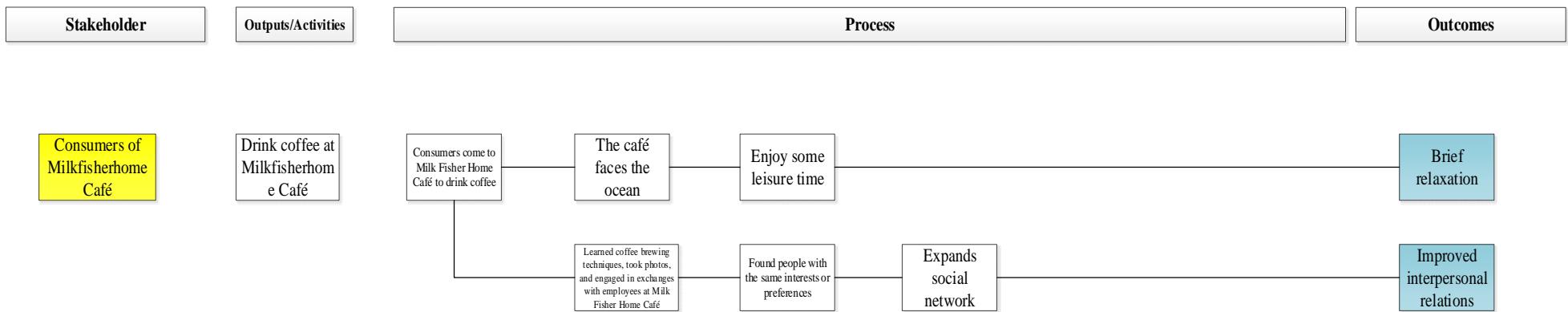
(IV) Employees of Milkfisherhome Café



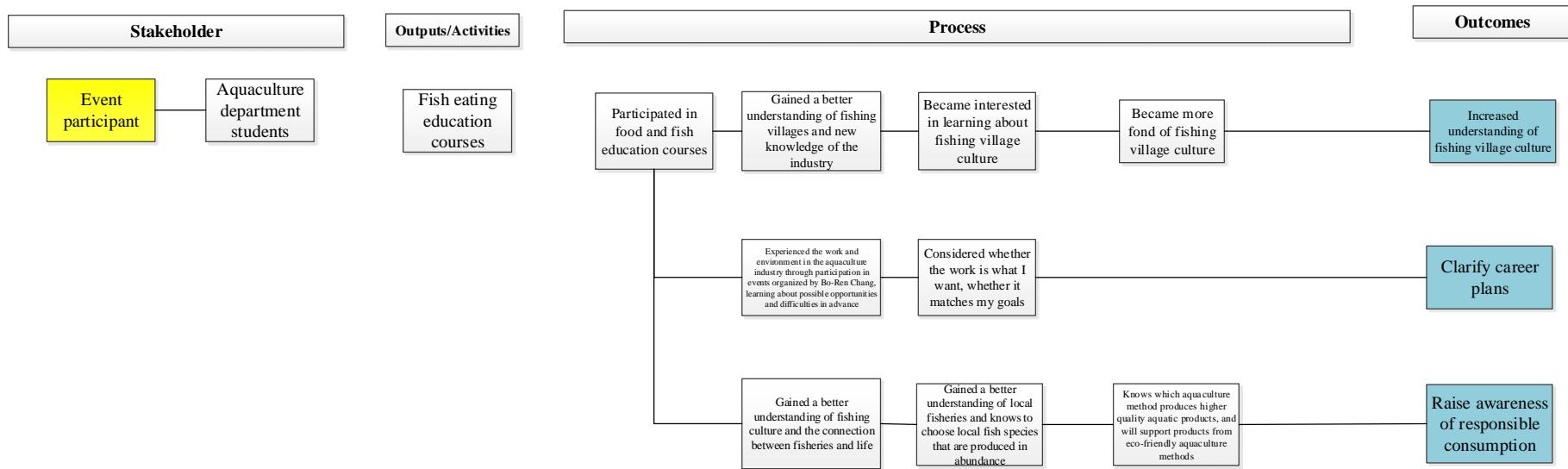
(V) Local fishermen's association



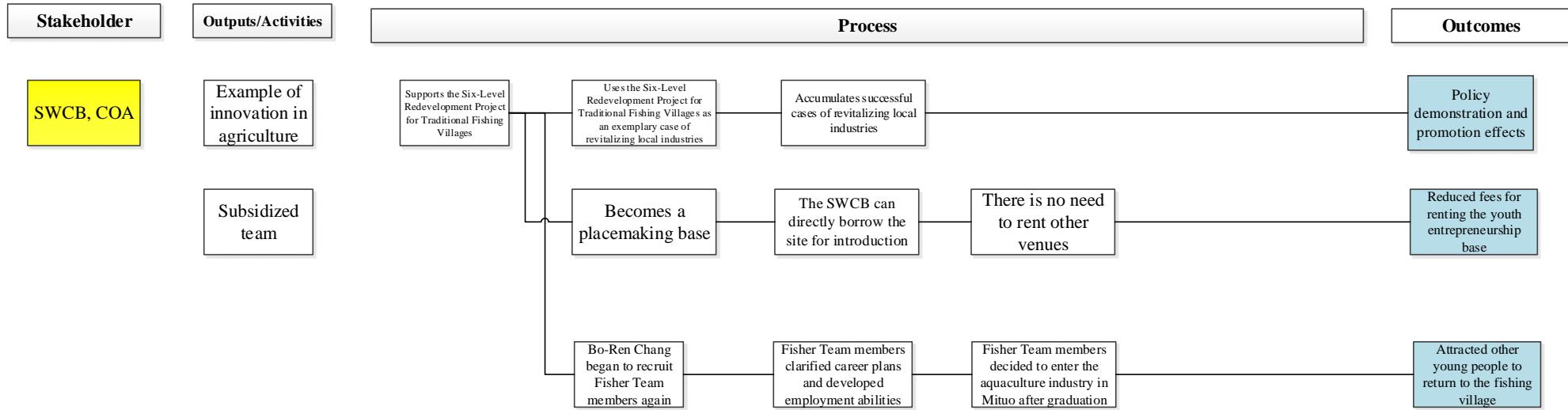
(VI) Consumers of Milkfisherhome Café



(VII) Event participant



(VIII) SWCB



Appendix 4 Impact Map

SROI+10% 2.10
SROI-10% 1.72