

A Social and Behavioral Change Communication Toolkit

for Tawilis Conservation and Consumer Education | 2022

How can this Toolkit help you?

This Social and Behavioral Change Communication (SBCC) Toolkit can be used by individual, academic and organizational reference for planning, implementing, and evaluating campaigns to influence consumption of tawilis and encourage compliance for its conservation measures. This SBCC Toolkit is a component under a Tawilis Conservation and Consumer Education Program, supported by the Mohammed bin Zayed Species Conservation Fund.

This toolkit navigates you through the SBCC process, socio-ecological model for change concerning the endangered species, demographics and psychographics of the target audience, communications manual and a compendium of the digital/physical campaign materials. Useful links of are provided throughout this toolkit.

Table of Contents

About Taal Volcano Protected Landscape	1	4. Design 4.1 Channels	1. 1
About Sa Ngalan ng Lawa	1	4.1.1 Friends of CEPA	1
715001 00 11601011 116 20110	·	4.2 Campaign	1
Background	2	4.3 Knowledge Products	1
Challenges and Assumptions	3	5. Evaluate	2
		5.1 Analytics or Online Reach Monitoring	2
What is SBCC?	4	5.2 Project Reach	2
Socio-Ecological Model for Change	5		
1. Research	6	Recommendations	
1.1 Results	7		
1.1.1 Ground Experiences	8	References	
2. Target	9	Acknowledgements	
2.1 Demographics	10		
2.2 Psychographics	10		
3. Process	11		
3.1 Key Messages	12		
3.2 Call to Action	12		
3.3 Information Acess	13		

About Taal Volcano Protected Landcape

The lake region was established as Taal Volcano Island National Park in 1967 and reclassified as Taal Volcano Protected Landscape (TVPL) under the Republic Act 7586 or the National Integrated Protected Areas System (NIPAS) Act by virtue of Presidential Proclamation 923 issued in 1996. The protected area covers 62, 292.16 hectares spanning the freshwater lake, Taal Volcano Island, including the thirty-seven (37) tributaries from thirteen (13) municipalities and three (3) cities. The protected area extends to a portion of the Pansipit river that serves as the sole outlet of the lake to the Balayan Bay.

About Sa Ngalan ng Lawa

Sa Ngalan ng Lawa is an initiative that envisions to co-create communities in co-existence. Wherein communities are defined as both human and non-human life forms. Sa Ngalan ng Lawa aspires (1) to democratize conservation and its language and (2) to design ecoliteracy experiences. The initiative works on citizen science, social causes and ecoliteracy projects inside the protected area.

Background



Figure 1. Taal Volcano Protected Landscape (TVPL), Batangas, Philippines

Lake Taal is a rapidly developing protected area with a rising population and a decade volcano. Coiled with both natural and anthropogenic hazards, the protected area is classified as Extremely High Urgent for biodiversity conservation by the Biodiversity Management Bureau.

In 2018, International Union for Conservation of Nature (IUCN) classified *Sardinella tawilis*, a flagship endemic species of the protected area, as endangered [EN]. According to the report, escalation of status to red list was due to high exploitation rate, natural hazards such as volcanic eruption and Sulphur upwelling, water quality deterioration, and predation by invasive alien species.

The Protected Area Management Board (PAMB) of TVPL had set tawilis conservation measures including the implementation of the Tawilis Seasonal Closure. The closed season is an annual rest or ban on tawilis fishing from March 1- April 30 to give way for the spawning season of tawilis. The duration is based on research led by the National Fisheries Research and Development Institute (NFRDI).

Learn more about the Tawilis:

Challenges and Assumptions

The first two years of implementing the Tawilis Seasonal Closure has been a challenge as inertia from affected tawilis-specific fisherfolk and tawilis-serving hospitality businesses were felt from the ground. Awareness gaps on tawilis and the protected area conservation add to the challenges of implementing conservation measures.

Conservation-related messages have not reached or targeted regular tawilis consumers. Regular and potential consumers in both local community and tourism consciously and/or unconsciously violate the closure as they can't relate or fully comprehend the species conservation status and its positive implications. Consumption drivers include food security, cultural and spiritual concerns, and culinary tourism experience.

The following are assumptions about the challenges of tawilis conservation implementation:



Confusion lies on the policy that makes the consumption of tawilis illegal only within March- April The conservation status of tawilis as endangered was not perceived as a fact by many locals



Food insecurity of tawilis-dependent households Lack of public offices support on food aid and alternative livelihood



Untargeted communication campaigns; underutilized channels Lack of knowledge products for communication and consumer education

What is Social and Behavioral Change Communications?

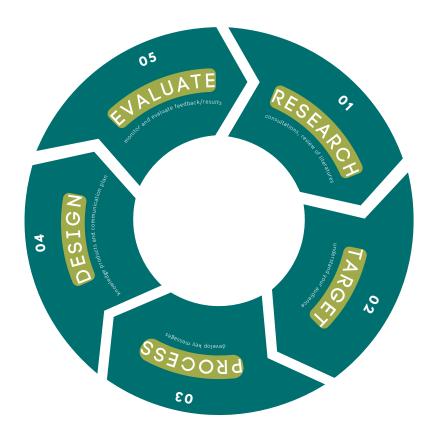


Figure 2. The SBCC Process for Tawilis Conservation and Consumer Education

Social and Behavior Change Communication (SBCC) is a process of interactively communicating with individuals, stakeholders and communities as part of a program of information dissemination, motivation, problem solving and planning. (Center of SBCC, 2022)

This SBCC approach applies a Socio-Ecological Model (SEM) adapted from USAID Wildlife Asia that recognizes the relationship between people and their environment to identify leverage points to influence individual and/or community behaviors and perceptions.

SBCC applications include reduction of demand for wildlife products or promote desired conservation behaviors.

For additional information see:

Learning Package on SBCC

Socio-Ecological Model for Change



Figure 3. Socio-Ecological Model for Change Diagram for Tawilis and Protected Area Conservation

Circles

SELF tawilis-specific fisherfolk, local consumers

influence in the interpersonal level which includes family, friends/neighborhood and immediate community leaders

influence in the socio-political level such as women's groups, religious bulletins and food tourism industry participants, and/ or barangay and civil society organizations (fisherfolk-farmers)

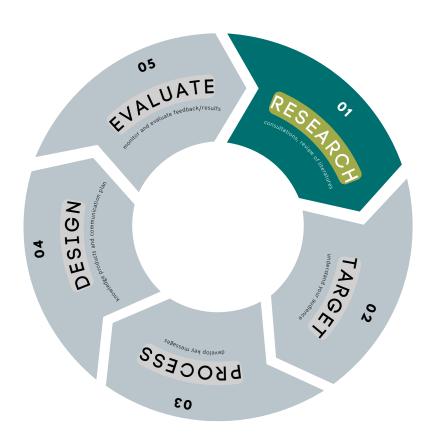
ENABLING

local policies, socio-economic determinants,
technology (social media), education,
natural landscape

Note: The farther the circle is from the Self, the more indirect the influence is.

Also, socio-ecological model for change should be reviewed every five (5) years as influences vary through time.

1. Research



Research will help to achieve communication objectives and connect to sectoral groups and stakeholders. Research will also define the extent of influence to an existing behavior.

A review of existing and recent tawilis research from academic institutions was conducted. Also, consultations with tawilis-specific fisherfolk and interviews with key opinion leaders were conducted within 7 municipalities inside the TVPL. The team drafted a rapid assessment of socioeconomic impact of tawilis conservation measures to the fisherfolk community which identified awareness gaps and challenges concerning tawilis conservation measures.

See details of the household survey results:

Rapid Assessment on Tawilis-specific fisherfolk 2022

1.1 Results



Figure 4. Awareness on Tawilis Seasonal Closure

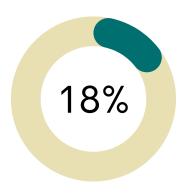


Figure 5. Awareness on Tawilis Reserve Areas

Survey from seventy (70) households in seven (7) different municipalities inside the protected area shows 68% of the participants are aware of the seasonal closure and 71% are compliant of the temporary tawilis-fishing ban. Awareness on the tawilis reserve areas (TRA) scores lowest among the communities at 18% of the participants.

Unaware and not fully aware criteria include non-compliance to the seasonal closure, confusion or unsurety of the exact months of the seasonal closure, unable to name TRA locations and unaware of the reasons behind the conservation measures.

Beliefs and perceptions also surrounding tawilis were captured by the survey and interviews. Main reasons for non-compliance on tawilis seasonal closure among surveyed fisherfolk communities are mainly for food and household income security. Only around 6% of non-compliance is for the community experience of the *pukot*, an illegal fishing activity.

Limitations: Participants can pose themselves as compliant of the seasonal closure even if they're not as they can be defensive or just exercising their right against self-incrimination. To maintain integrity of the survey and make the conversation a safe space even for the illegal fishing community, the surveyor was accompanied by a local fisherfolk leader and the survey did not collect their identifying personal data.

1.1.1 Ground Experiences

Participation in Suro and Pukot

"Mahirap ang pagkita ng pera, pa-ekstra-ekstra lang", "Walang ibang hanap buhay noon"

Some interviewed pukot-practicing communities view the activity as socially acceptable (Agoncillo, San Nicolas, Laurel). Those who have stopped the practice have shifted to aquaculture-related livelihood. Lack of local livelihood opportunities is the main reason for participating in the activity. There are also participants that don't perceive its unsustainable effects to the lake fisheries.

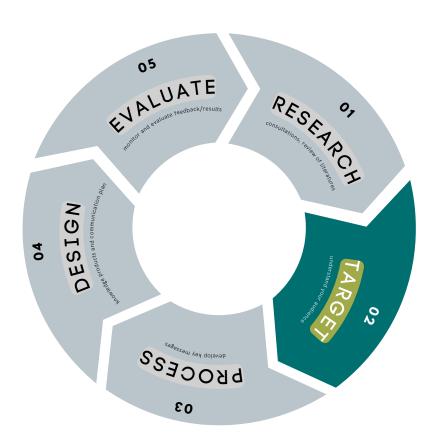
Alternative Livelihood

Challenges in providing livelihood that isnt' lake-based will be organic participation, viability of the temporary livelihood and lack of capacity/initiative to innovate. When asked about ideas for an alternative, there would be no response for new ideas or the fisherfolk suggest to address illegal fishing activities. Some with diversified income from farms help to mitigate the impact of the seasonal closure such as in Cuenca and Alitagtag.

Call for Aid

Majority of the affected fisherfolk call for aid either in terms of food and finance to cover living expenses from the impact of the impact loss of the seasonal closure. On average, income loss due to the 2-month rest can amount to Php 20, 747. The alternative fishing nets (for tilapia and bangus) act more like an aid to increase income from other species but presence of illegal fishing structures and operations of pukot result in lower catch rate.

2. Target



Identify and understand target audience(s). Specify who are these stakeholders and describe their community situation, stake and potential roles in the conservation scene.

Identify audience concerns. Are they directly affected? Is influencing community behavior crucial for conservation? What are their set of beliefs and values concerning the species and their environment? What is their media behavior?

Results from the survey can draw the demographics and psychographics which can guide your process of developing key messages and choosing communication channels.

2.1 Demographics





basic education filipino literate



average of five household members



Php 5,000 - 15,000 monthly income range

The campaign will target local fisherfolk community and tawilis consumers.

2.2 Psychographics

In denial of tawilis endangered conservation status "hindi naman mauubos ang tawilis sa lawa"

Awareness gaps on evidence-based tawilis conservation measures "talaga namang may buwan ng pahinga, mali laang ang pinatupad nila"

Consumes tawilis in a regular basis, as a staple protein-source "araw-araw naman naming kinakain yan"

Agit about the seasonal closure and demands for social justice from IUUF operators and calls for aid "ba't kaming maliliit lang ang kaya ng batas, ba't yung mga malalaki; hindi"

3. Process



Process data collected from reviews of research and interviews. Identify awareness gaps from the survey and start to develop key messages to bust myths and misinformations.

The rapid assessment of socio-economic impact of tawilis conservation measures to fisherfolk community showed some recurring themes, awareness gaps/ held beliefs, and calls for action which will be developed into key messages.

3.1 Key Messages

Developing the key messages from the survey/study results includes statements or facts such as 'Whys' and call to action. See Rapid Assessment on Tawilis-specific fisherfolk 2022 (<u>Key Messages tab</u>)

Developing the "Whys" or the benefits from the desired behavior will give the target audience:

Participating in the annual rest (not fishing/eating) of tawilis will promote tawilis rebound Participating in the tawilis seasonal closure is part of responsible tourism

Developing the consequences of not participating of the target audience:

Losing tawilis is losing a natural heritage, affecting local pride Eating or fishing tawilis during the closed season is a risk and illegal Communicating the benefits strongly more than the consequences (penalty/risks) is more effective

3.2 Call to Action

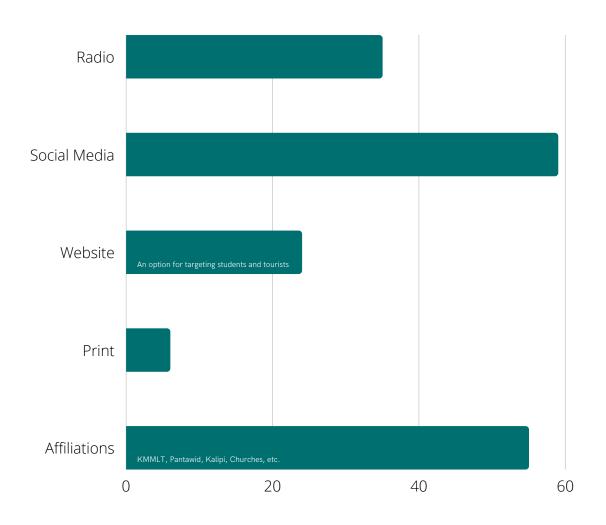
Do not eat or fish tawilis from March- April annually

Tawilis conservation is more than the 2-month closed season

Protecting the fisherfolk from the income loss and impacts of IUUFs

3.3 Information Access

The survey on tawilis-specific fisherfolk also covered their media access and how they get lake or conservation-related information which can guide the design of the campaign and what kinds of pubmat are the most strategic to produce.

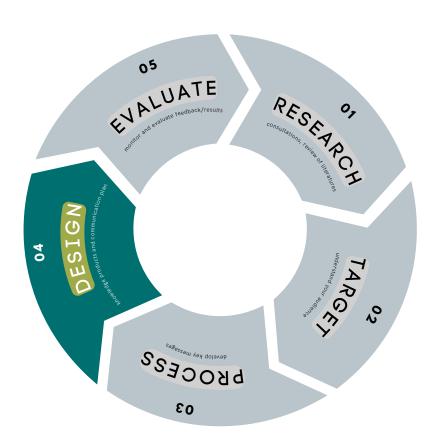


Facebook and Messenger Groups Best for Ad placements

A sole public office that produces a Tagalog pamphlet for the tawilis seasonal closure. Also, only one office that implements a campaign with a communication plan document

Oral transfer of information from peers or local associations and religious affiliations is a viable communication channel and an avenue for a pamphlet distribution

4. Design



Design (or co-design) a communication plan for the key messages to reach the target audience. In this stage, knowledge products, contents will be developed and communicated on selected platforms. A content calendar can be developed for an online campaign. Posts can be scheduled and automatically posted throughout the project or campaign timeline.

4.1 Channels

These channels reach and engage target audiences:

Interpersonal Communication

- √ 1-on-1, small focus groups
- Social media (Facebook, Instagram, etc.),
- ☐ Digital media (SMS)
- Traditional media (TV, radio), mass media print (newspaper, magazine), out-of-home (billboards, tarpaulins, sidewalk ads, etc.)

Community Mobilization

- Social business organization
- Religious institutions
- Civil society organizations or community groups
- ✓ Academic insitutions
- Crowdsourcing (petition and pledge website)

Social Marketing & Advocacy

These initiatives changes laws, policies, regulations through the interventions of:

- Government decision makers, policymakers
- Private sector decision makers, NGOs

 \checkmark These channels were the recent project campaign reached or had efforts with

4.1 .1 Friends of CEPA

A growing map of Communication, Education and Public Awareness (CEPA) hyper-local stakeholders/partners which can be tapped or synch for tawilis conservation education reaching existing and potential consumers.

Institution, Group, Platform	email address	page links		
Protected Area Management Office - TVPL	pasu_tvpl@yahoo.com	<u>Facebook</u>		
National Fisheries Research and Development Institute	sardinellatawilis@gmail.com	<u>Facebook</u>		
Batangas State University- DevComm Society	benedict.medina@g.batstate-u.edu.ph benedictmedina@gmail.com	<u>Facebook</u> , radio		
Archdiocese of Lipa	virtuealproductions@gmail.com	Facebook, <u>radio</u>		
Sagip Lake Taal	canuzorabin@gmail.com	<u>Facebook</u>		
Philippine Daily Inquirer	maricarpcinco@yahoo.com	Facebook, webpage		
Batangas Tourism and Culutral Affairs	richbatangas@gmail.com info@richbatangasph.com	Facebook, webpage		
These institutions has associated platforms to widen the reach of the tawilis campaign and other conservation concerns				

4.2 Campaign



Figure 4. TawiLess Sticker Badge

What is TawiLess?

TawiLess is a play on the words *tawilis* and *less*. TawiLess is a friendly reminder to the general public that the tawilis is still an endangered species and conservation measures thereof are still in place.

Social and Behavior Change Communication (SBCC) approach guided the design process of TawiLess and implemented the campaign in the local language (Filipino, Tagalog) in text, visual and audio contents through accessible social media platforms.

Note: Campaign title and themecan be rebranded every year

4.3 Knowledge Products

Knowledge products can be audio-visual, infographics, information, education and communication (IEC) materials in print that can help in delivering key messages, addressing awareness gaps and promoting a desired behavior / call to action.



Figure 5. A sample set of a carousel post uploaded in Facebook and Instagram

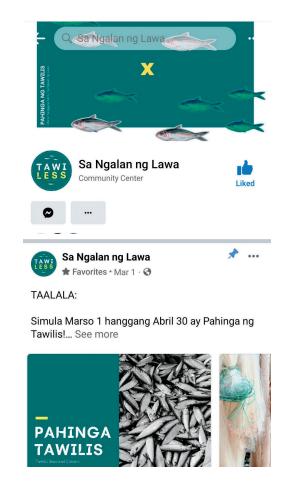


Figure 6. Sa Ngalan ng Lawa Facebook page

4.3 Knowledge Products



Figure 7. A commemorative tote bag for the TawiLess campaign

Digital knowledge products can be communicated through a coordinated network of social media platforms and micro-influencers. Setting up an advertisement can generate reach and engagement within a specific geographical and some sectoral communities.

Ad keywords for TawiLess: lake Taal, Taal volcano, tawilis, tourism, Tagaytay, foodie, restaurant, environment, nature,

To reach those who are offline, prints such as pamphlets, tarpaulins and apparels can still be effective to deliver messages in the community and its affiliation circles.

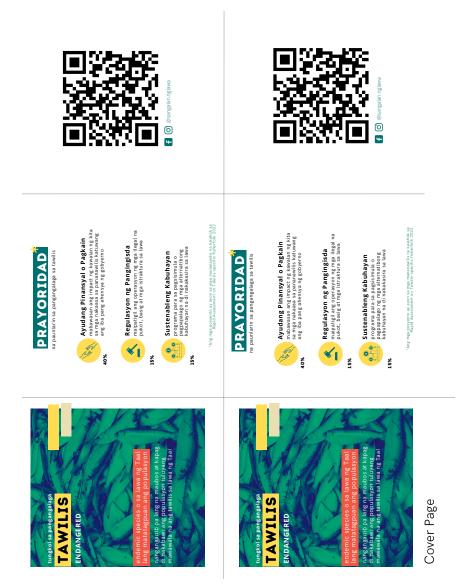
See details of the knowledge products:

- Reference for a Content Calendar
- Linktree for Online Platforms

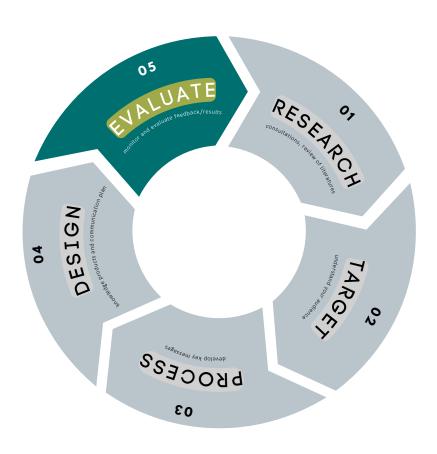
4.3 Knowledge Products



Printable Pamphlet Link (pdf or png file)



5. Evaluate



After executing the communication plan, monitoring and evaluation ensures that objectives of the campaign are delivered and reviewed for redesigning and learning of the implementers.

Evaluation can be done through observable/measurable changes in behavior such as lower number of violators, zero tawilis in public markets, etc. Behavior determinants such as beliefs, perception, knowledge gaps should also be monitored and shifts in these areas can take years of work.

Some questions to reflect on:

- What activities can be done online and which activities are better face-to-face?
- Are key findings or messages translated to accessible language of the audience?
- How many reach or impressions can we maximize given the campaign/project budget?
- What are the general response of the people?
- What will be the metrics the project will be using?

5.1 Analytics or Online Reach Monitoring

People Reached Engagements Link Visits 38,000 21,100 440

(i) Instagram

People Reached Engagements Link Visits

15,000 106 10

Impressions

41,998

Total number of online reach can be a measure of intermmediate output/ outcome of the campaign

People Reached Engagements Link Visits

79,998
21,206
450

Quantitative Methods

pros: can represent target audience effectively, quickly done with social media analytics

cons: time-consuming and costly for face-to-face, might need experts in research methodology, sampling and data analysis

Qualitative Methods

pros: collect rich insights from audience, receive feedback of the work's feel, effect and impressions

cons: FGDs need triangulation, recruitment of participant can be tedious, responses can be filtered

TawiLess Campaign only measured up to the intermmediate outcome as SBCC impact can be measured at 4-5th year of implementation

5.2 Project Reach

Tawilis Conservation Awareness and Policy Consultation Laurel, Batangas	60
Survey Participants for Rapid Assessment on Tawilis-specific Fisherfolk Laurel, Agoncillo, Sta. Teresita, Alitagtag, Cuenca, Lipa, Mataasnakahoy, Batangas	75
Volunteer Orientations and Discussions iVolunteer Philippines online platform	10
RISE Program Batangas State University	44
Physical Knowledge Products:	
Pamphlet (reflect no. of pieces printed)	2,000
Tote Bag (reflect no. of pieces printed x 80 as estimated reach of tote bag in 2 months)	4,000
Project or campaign reach through physical or face-to-face set up and experienced longer time of engagement can be monitored separately as these audiences can have a more in-depth understanding of the SBCC objectives	6,189

Recommendations

- Synch or synergize tawilis conservation campaign to CEPA strategies
- Cover stories or good practices on alternative livelihood and tawilis seasonal closure-related aid or support
- Create education materials incorporating tawilis conervation measures which can be used in local schools in the protected area
- Intentionally create partnerships with academic institutions up to the basic education in communicating tawilis conservation. Most especially pioneer integration of local conservation measures in basic education curriculum
- Map other social services and explore possibilities of linking affected tawilis-specific fisherfolk into the existing crisis-support programs
- Explore partnership with provincial government information office, tourism and cultural affairs to gain wider support for the cultural icon and natural heritage- tawilis
- A new campaign can be planned and executed each year targeting other demographics such as food and tourism stakeholders

REFERENCES

References

Department of Environment and Natural Resources - Biodiversity Management Bureau (DENR- BMB). Taal Volcano and Biodiversity. June 2022 https://bmb.gov.ph/index.php/resources/news-and-events/95-taal-volcano-andbiodiversity

Hata, H., Santos, M., Di Dario, F., Munroe, T.A., Torres, F., Quilang, J.P. 2018. Sardinella tawilis (errata version published in 2019). The IUCN Red List of Threatened Species 2018: e.T98836352A143839946. http://dx.doi.org/10.2305/IUCN.UK.20182.RLTS.T98836352A98886655.en

Centre for Social and Behaviour Change Communications. 'What is SBCC?'. 2021 https://www.centreforsbcc.org/what-is-sbcc/

USAID Wildlife Asia. Social and Behavior Change Communication (SBCC) Demand Reduction Guidebook. November 2019 https://www.fhi360.org/resource/social-and-behavior-change-communication-sbcc-demand-reduction-guidebook

Status of Taal Lake Fishery Resources with Emphasis on the Endemic Freshwater Sardine, Sardinella tawilis (Herre, 1927) Maria Theresa M. Mutia1,*, Myla C. Muyot1,, Francisco B. Torres Jr.1, Charice M. Faminialagao1

Abundance and distribution of Sardinella tawilis (Herre, 1927) larvae in Lake Taal, Philippines Maria Theresa M. Mutia*1, Ma. Lourdes D. Merilles1, Myla C. Muyot1, Benjie D. Tordecilla1 1National Fisheries Research and Development Institute-N

Mesh size selectivity of surface and mid-water gillnet for catching freshwater sardines "Sardinella tawilis" (Herre, 1927) in Taal Lake, Philippines Elmer B. Alba*1, Marnelli C. Rubia1, Marco A. Perez1 1Fishing Technology Section (FTS)-National Fisheries Research and Development Institute (NFRDI), 101 Corporate Bldg., Mother Ignacia Avenue, South Triangle, Quezon City.

Acknowledgements

Jord Earving A. Gadingan | Baby Jane Catapang | Gab Rosario | Mariko Nakamura | Vie Mendoza | Frances Rain | Shayra Sukol Aliiyah Llorin | Aldrin Maristela | Rabin Canuzo | Marilou Fernando | John Michael Punzalan | KMMLT

TVPL - Office of the Protected Area Superintendent | National Fisheries Research and Development Institute |

Batangas State University | iVolunteer Philippines | IdeaWild | Canva | Y4N



