



INTEGRATED MANAGEMENT OF LAGOON ACTIVITIES IMOLA PROJECT II

REPORT ON

STUDY OF PROVINCIAL MESH SIZE REGULATIONS FOR STAKE TRAPS IN PHU LOC DISTRICT, THUA THIEN HUE PROVINCE

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Hue, March 2011



PEOPLE'S COMMITTEE OF THUA THIEN HUE PROVINCE





**A FINAL REPORT
ON
A STUDY OF PROVINCIAL MESH SIZE REGULATIONS
FOR STAKE TRAPS IN PHU LOC DISTRICT,
THUA THIEN HUE PROVINCE, VIETNAM**

For Integrated Management of Lagoon Activities (IMOLA) Project
of Thua Thien Hue Province (FAO, GCP/VIE/029/ITA)

by

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1. BACKGROUND

In preparation for the policy advocacy on mesh size regulations in Tam Giang, Cau Hai Lagoon in Thua Thien Hue Province, the IMOLA Project undertook a study on “increasing the mesh size of stake traps in Cau Hai Lagoon” by Nguyen Phong Hai (Nha Trang University, IMOLA consultant) and the Project technical staff namely Tran Chuoi and Le Quang Nhat Minh. The study was conducted in February 2008. The study mainly focused on the selectivity of fishing gears and concluded that the suitable mesh size should be 12 mm when considering the trade-off between economic, social, and conservation tradeoffs. The study did not describe the current status of mesh size use and feasibility of such change, the willingness of fishermen in changing the mesh size, and socio-economic impacts that could be caused by such change. Therefore, this survey is designed to answer those crucial questions which will be critical for policy makers to reconsider their mesh size policies.

1.1 IMPORTANCE OF MESH SIZE

A small mesh size can cause low selectivity of fishing gears. In such a case, the juvenile cannot escape from the net. Accordingly, this kind of net captures a wide range of species and juveniles of targeted ones, negatively impacting their natural life cycles.

A small mesh size can also cause obstruction of the water current inside and around the gear. This factor can reduce the water exchange in some areas of the lagoon and increase the sedimentation ratio leading to ecological problems such as low oxygen saturation, increment of concentration of organic pollutants and a general reduction of carrying capacity of the lagoon.

1.2 SURVEY OBJECTIVES

The survey has the following objectives:

1. To identify the current status of mesh size in the province in comparison with the current policy by the local authorities.
2. To explore local awareness on the regulation of mesh size in Thua Thien Hue Province.
3. To understand the intervention by local authorities in enforcement of $2a=18\text{mm}$ mesh size regulation.
4. To explore the financial capacity of stake trap users, household income, costs of replacement, and local people’s cooperation to understand feasibility of replacement with new mesh size.
5. To define the problems with policy making with regards to social-economic impacts.

1.3. POLICY BACKGROUND

The Provincial Decision No.4260/2005/QD-UBND, dated 19 December 2005, on issuance of provincial regulations on lagoon fishery management in Thua Thien Hue Province, attached with the Stature (*quy che*) on management and use of lagoon resources, states that “the minimum mesh size for stake trap is $2a=18\text{mm}$ after 01/01/2008, and for period of

01/01/2006-31/12/2007, it is 14 mm” and that “the government encourage fishermen to use bigger mesh size than $2a = 18\text{mm}$ ” (Article 30).

This regulation of mesh size $2a = 18\text{mm}$ is based on the regulated size in the Circular No. 02/2006/TT-BTS, dated 20 March 20 2006, regulating the minimum of mesh size for stake trap (đăng, đáy) nets for fresh water fishery as $2a=18\text{mm}$.

2. SURVEY METHODOLOGIES

The project conducted a questionnaire survey with 27 questions. Two IMOLA staffs, namely Nguyen Duy Ngoc and Pham Thi Kim Phung, were sent to the field for individual interview with local stake trap owners. The sample size was 122 interviewees (gears) with the confidence level of 95% and the confidence interval of 8. The sample size for each commune was determined so that it would be proportional to the number of gears in each commune. The survey was conducted for one month from 29th March to 13th April 2010 in eight lagoon communes in Phu Loc District (Vinh Hung, Vinh Giang, Vinh Hien, Loc Dien, Phu Loc Town, Loc Tri, Loc An, and Loc Binh).

Table 1 Sample size for the questionnaire survey

Commune Name	Total number (gears)	Proportion	Confidence level: 95% Confidence interval: 8 Sample size = 122	Sample size (gears)
Vinh Hung	35	6%		6
Vinh Giang	89	1%		17
Vinh Hien	138	24%		26
Loc Dien	122	21%		23
Phu Loc Town	58	10%		11
Loc Tri	88	15%		16
Loc Binh	115	20%		21
Loc An	10	2%		2
Total	569	100%		122

3. FINDINGS

3.1 Income and livelihoods status of stake trap households

The questionnaire survey covered 122 households with 726 persons including 401 people in working age, and 325 people in non-working age. Out of 726 samples, 468 people have income. On average, each stake trap household has 6 family members.

Total household income

Figure 1 shows that 76% interviewed households have monthly income of over 3 million VND, 16% have income ranging from 2-3 million VND, 6% have income from 1.5 -2 million VND, and 2% have income below 1.5 million VND per month.

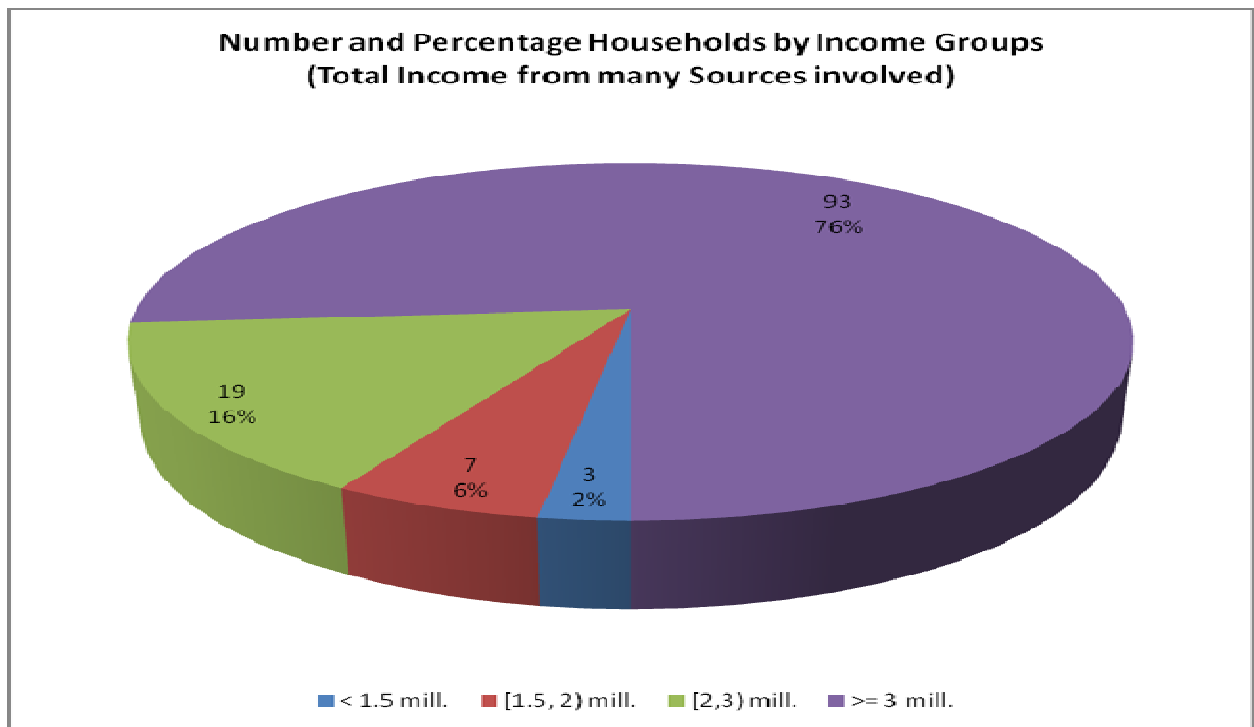


Figure 1 Monthly income of stake trap households in 2010

Household income from stake traps

Figure 2 shows that 12% and 8% of the surveyed households have the income of 1.00-1.49 million VN from stake traps in 2008 and 2009 respectively. The percentages of households with the income of 1.50-1.99 million VND were almost the same (14.7%) in 2008 and (15%) 2009. Year 2008 experienced the higher percentage of households with monthly income of 2.00-2.99million VND at 33.6% as compared to around 31% in 2009. For income range over 3 million per month, more households in 2009 attained this level at 41.8% than in 2008 at 36%.

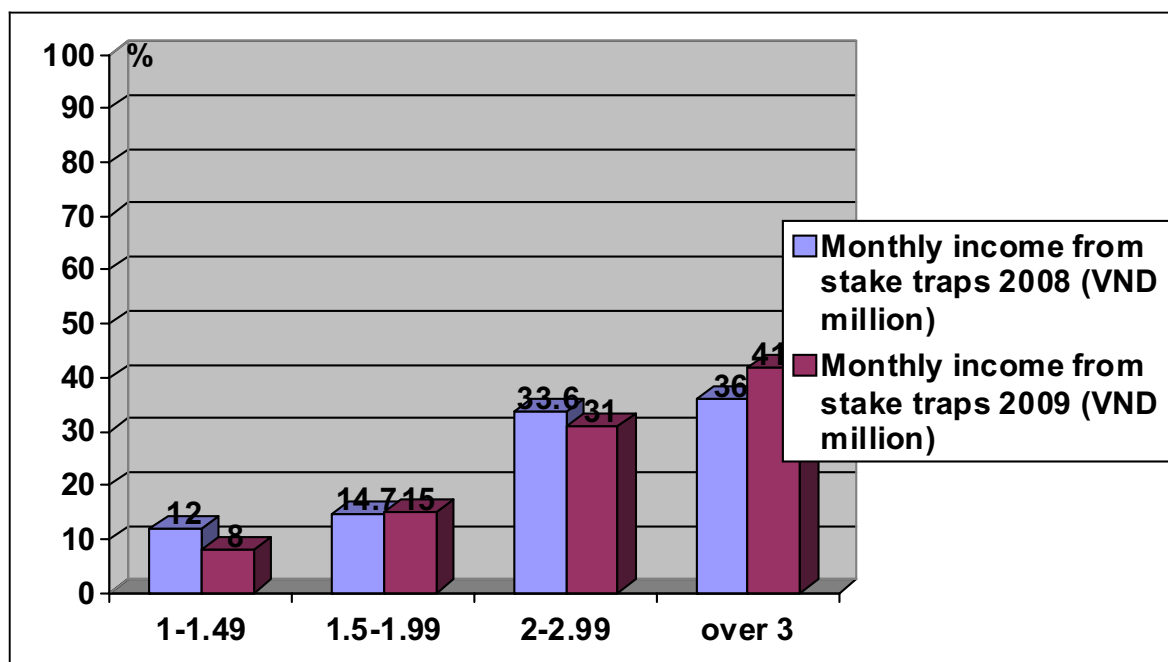


Figure 2 Comparison of monthly income from stake traps in 2008 and 2009

Table 2 Variation in monthly income from stake trap in 2009 by commune

Commune Name	1-1.49 million VND	1.5-1.99 million VND	2-2.99 million VND	Over 3 million VND
Vinh Hung	0%	0%	20%	80%
Vinh Giang	0%	0%	41.6%	59.4%
Vinh Hien	3.8%	3.8%	38.4%	54.4%
Loc Dien	0%	4.3 %	8.6 %	87.1%
Phu Loc Town	0%	0%	0%	100%
Loc Tri	6.25%	25%	6.25%	62.5%
Loc Binh	4,7%	4.7%	0%	90.6%
Loc An	0%	0%	0%	100%

Importance of stake traps as source of the livelihoods

Figure 3 reveals that 96% interviewed people said that stake trap was the most important source of their livelihoods while 4% said no.

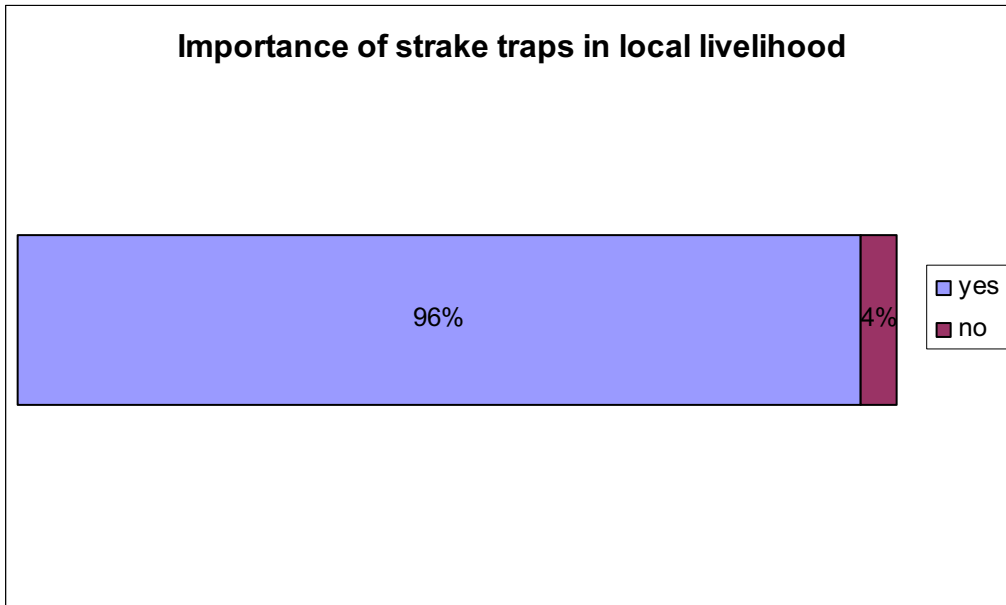


Figure 3 Importance of stake traps in local livelihood

Sources of livelihoods other than stake traps

Figure 4 indicates that the stake trap households have additional livelihood sources such as mobile gear (70%), fish culture (29%), and shrimp culture (26%). Some other people (34%) have additional livelihoods sources such as tailoring, brick making, retailer, or baby-sitting.

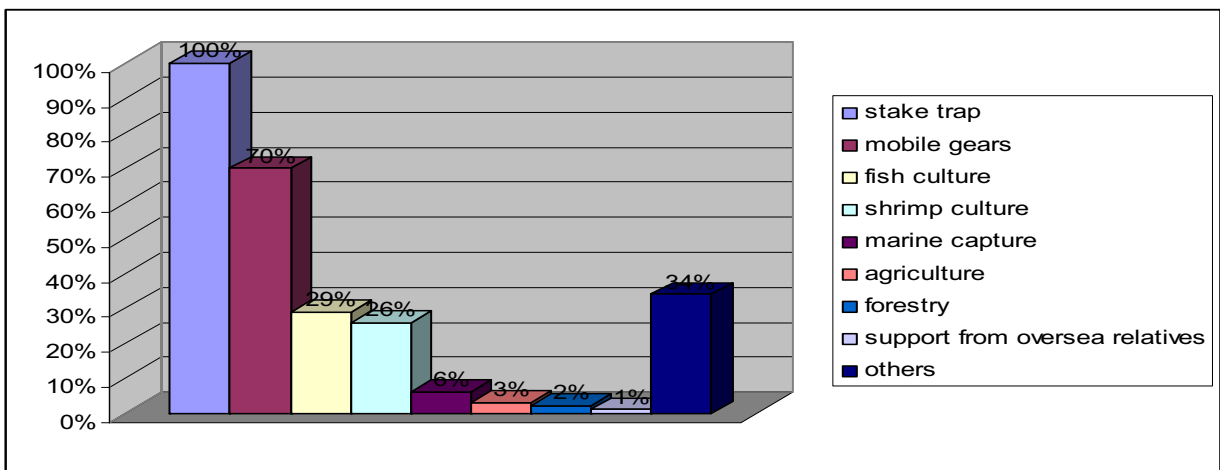


Figure 4 Stake trap in the structure of local livelihood

Notes:

- Mobile gears: *lu, bua, luoi keo, luoi loi, rap, nhay, xiec dien, cao luon*
- Other occupation: tailor, bricklayer, retailer, and support from children...

Intention of developing additional stake traps

Figure 5 shows the stake trap owners' intention to develop stake traps further. 95% said yes because they value stake trap as the main source of income and their traditional livelihood, while only 5% answered no because of labor shortage and high costs of operation.

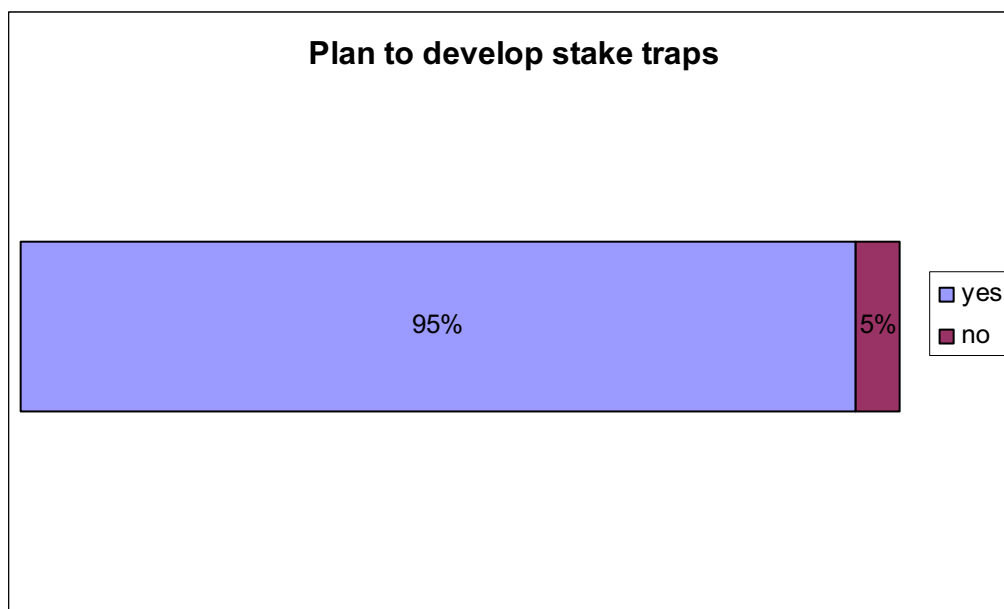


Figure 5 Local intension to develop stake traps

3.2 Current status of stake traps and their mesh replacement

A stake trap consists of wings and traps. The function of a wing is to lead fish to the trap where fish is captured. Mesh size used for stake traps affects the volume of capture and is therefore the main focus of this study.



Figure 6 *Stake traps in use in Cau Hai Lagoon*

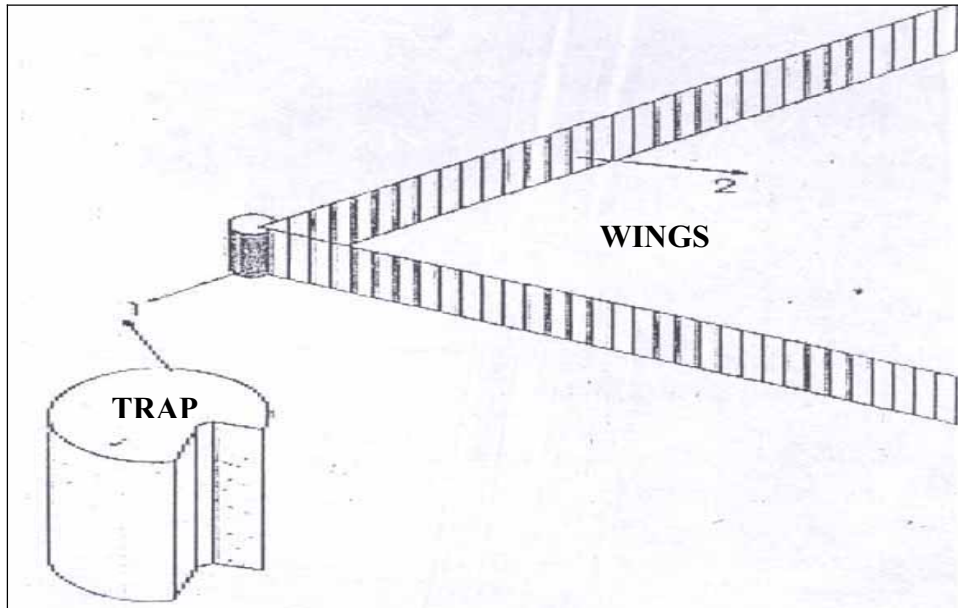


Figure 7 Sketch of stake trap at Cau Hai lagoon

Current mesh sizes in use

As 90% interviewees used the same mesh size for wings and traps, the “mesh size” mentioned in this survey should be regarded as the size used for both wings and traps. The mesh size in this study will be of 2a as otherwise noted.

Figure 8 indicates that the most dominant mesh size was $2a = 6\text{mm}$ (65%). 20% used $2a = 8\text{mm}$ mesh, and 4 mm mesh is still in use by few people (5%) while $2a = 18\text{mm}$ mesh as regulated in the Provincial policy was not found in reality.

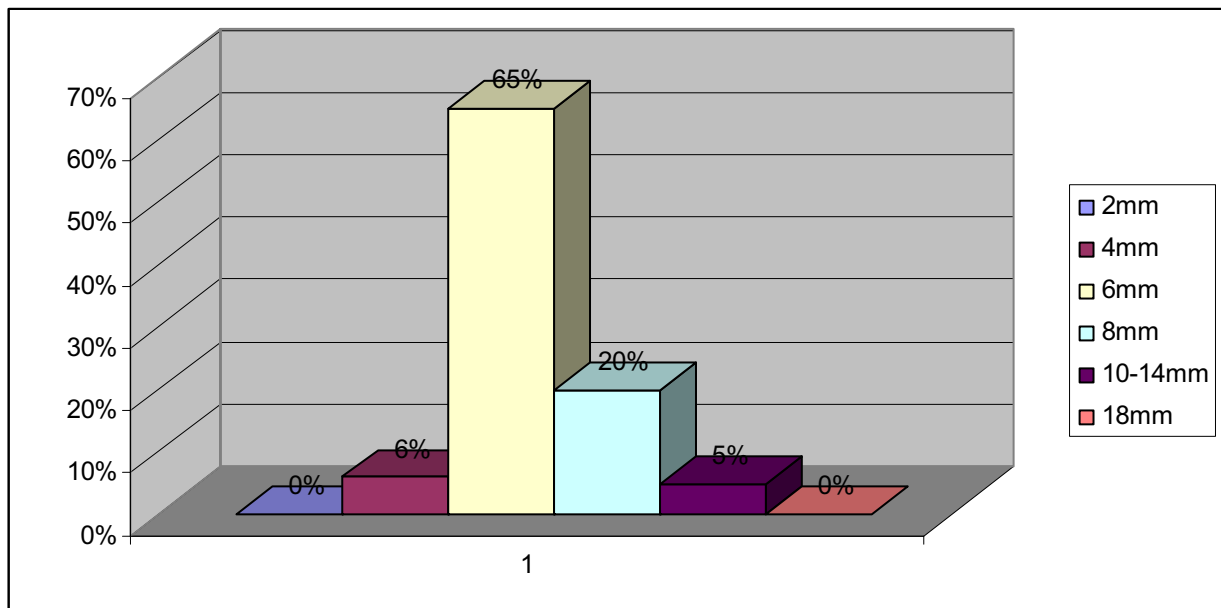


Figure 8 Current status of mesh sizes

Frequency of the net replacement

For nets above the water surface, Figure 9 shows that 12% interviewees replaced them after 6 months of use, 54% replaced them after 12 months, 22% and 12% replaced them after 24 and 36 months respectively.

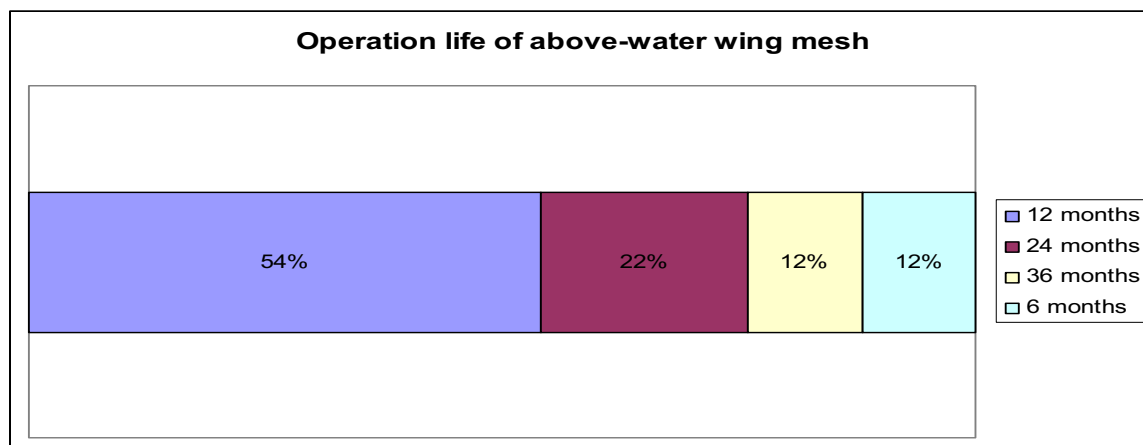


Figure 9 Operation life of above-water wing mesh

For nets in the water, Figure 10 shows only 3% interviewees said that they replaced them after 6 months of use, 15% replaced them after 12 months, 22% and 60% replaced them after 24 and 36 months respectively.

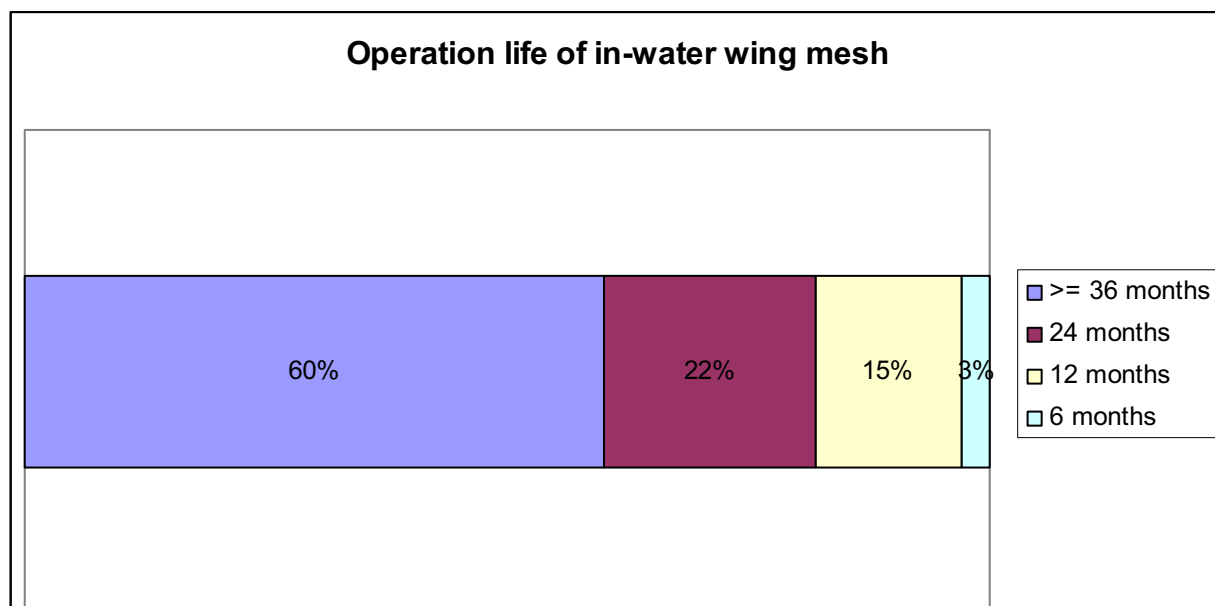


Figure 10 Operation life of in-water wing mesh

According to Figure 11, trap nets can be used at least for 12 months before replacement. Trap nets are used in a longer periods from 36 to 48 months by 40% of the gear owners. About 10%, 30%, and 20% of the gear owners mentioned frequencies of 12months, 24months, and 18months respectively.

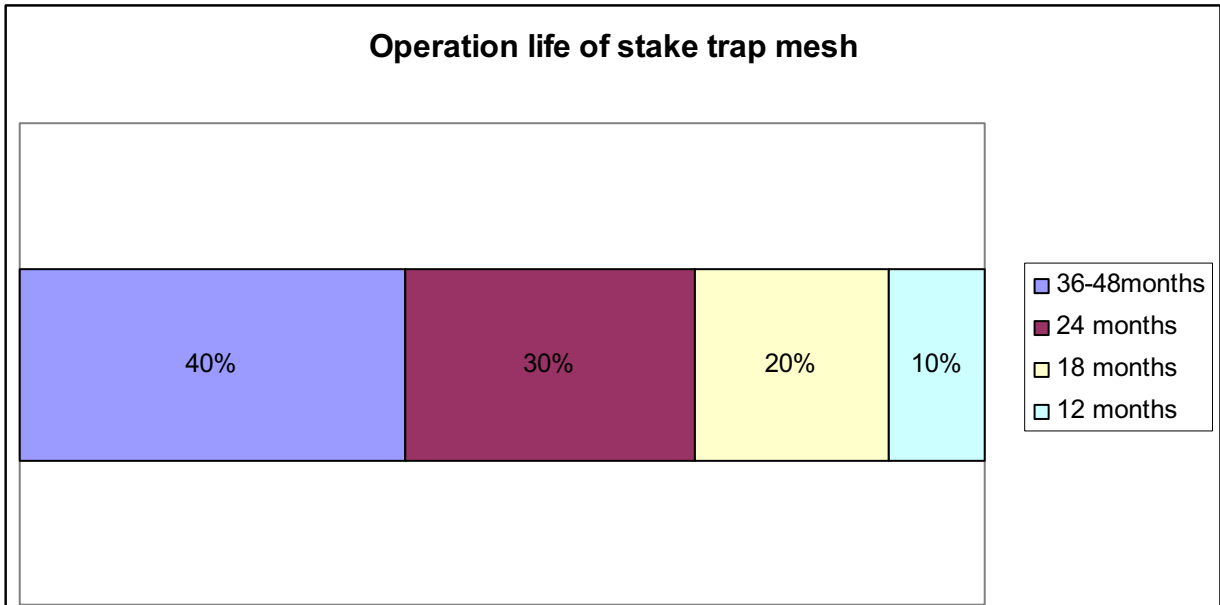


Figure 11 Operation life of stake trap mesh

Decision on mesh size for replacement

For the selection of mesh sizes, 67% of the gear owners said that they followed other people, 32% selected by themselves, and 1% followed manufacturers' instructions (Figure 12)

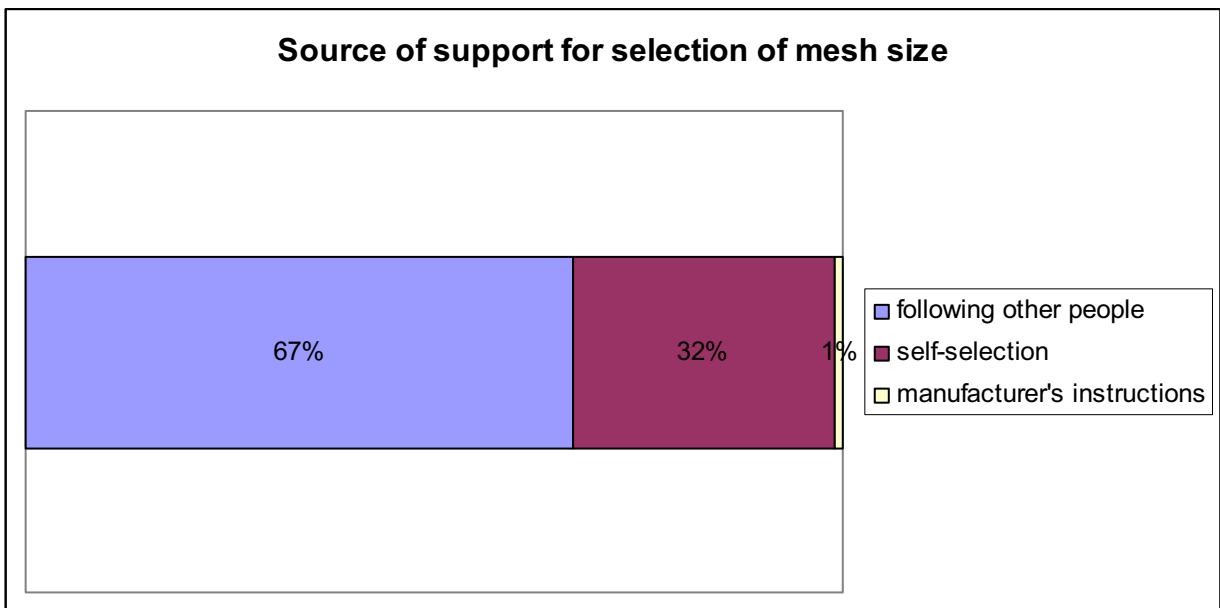


Figure 12 Source of support for selection of mesh size

The costs of net replacement

Figure 13 shows that the average length of wings ranged from 450m to 800m in Phu Loc District. The shortest wing was found in Vinh Hung Commune with the average length of 350m while Loc Dien Commune had the longest wing of about 800m. The total cost for

complete new installation of a stake trap varied from 30 million to 55 million for wing of length of 450m to 800m respectively. On the average, total costs for new installation for 1m of wing is about 66,000VND.

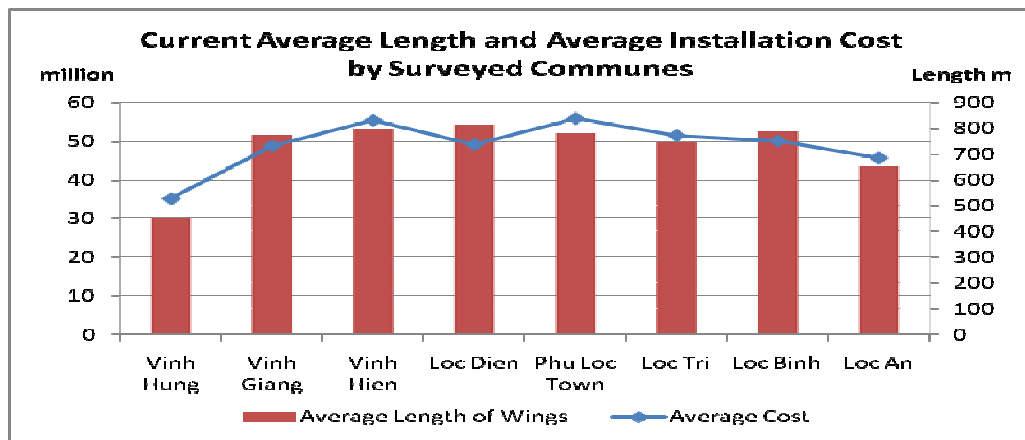


Figure 13 Average length of stake trap wings and total estimate cost of new installation

Suppliers of stake trap nets

Figure 14 shows that 55% of the gear owners bought their nets at Hang Be in Hue City, 43% bought them at their commune, and 2% bought them from district markets.

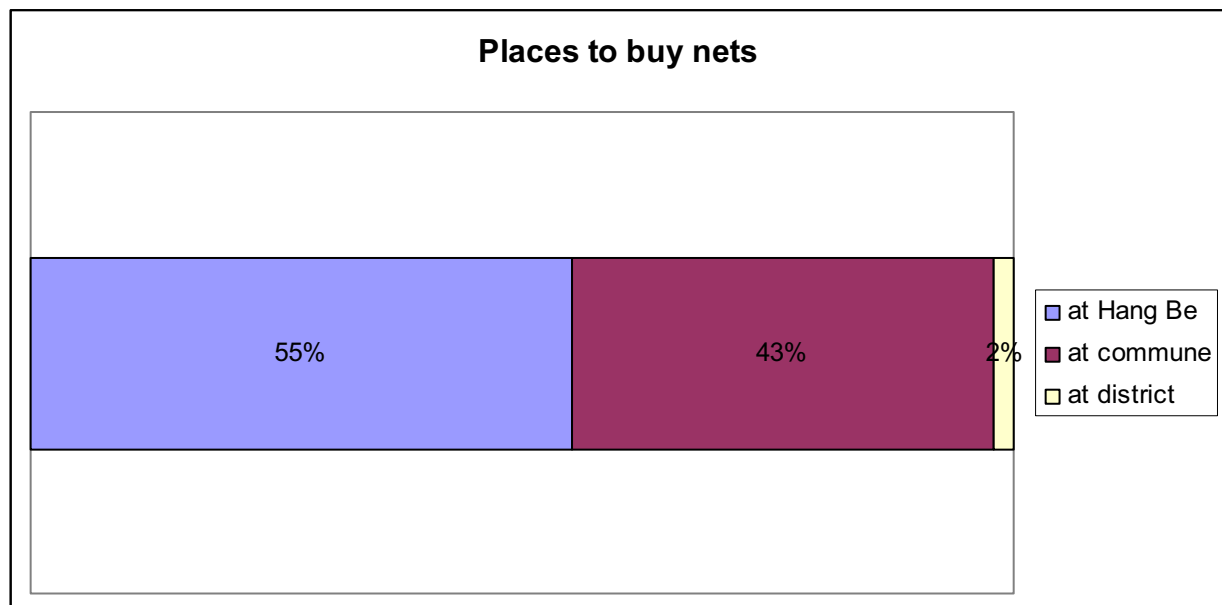


Figure 14 Places to buy nets

Fund sources for net purchase

Figure 15 indicates that 93% people said that they used their own money to replace. Some people said they borrowed from associations, or borrow from their relatives (7%) (Figure 13)

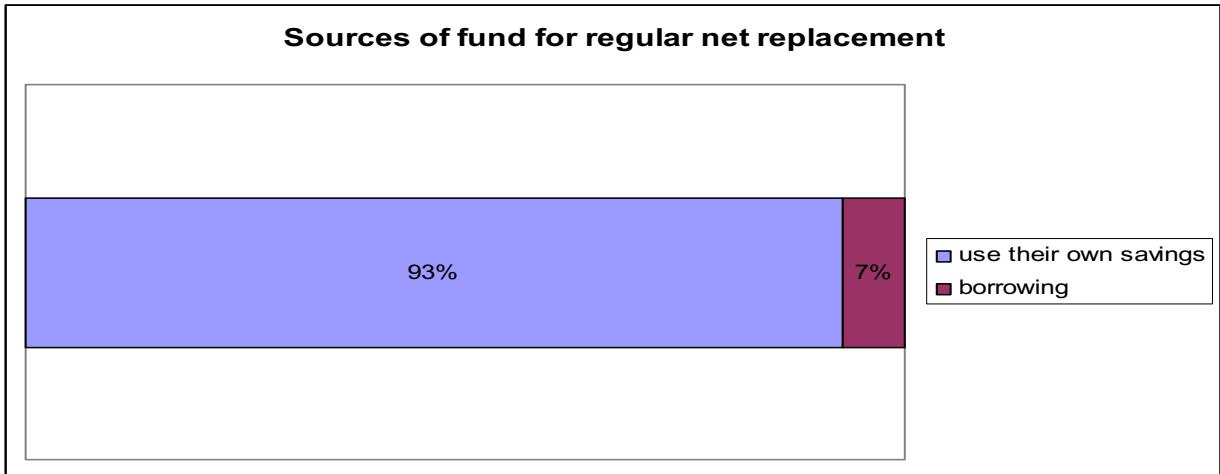


Figure 15 Sources of fund for regular net replacement

Main captured species by stake traps

As shown in Figure 16, three main dominant species captured in current stake traps were *Ca mom* (*Gerres spp.*) by 70% interviewees, *Tom dat* (*Metapenaeus ensis*) by 66%, and *Ca the* (*Oxyurichthys tentacularis*) by 40%.

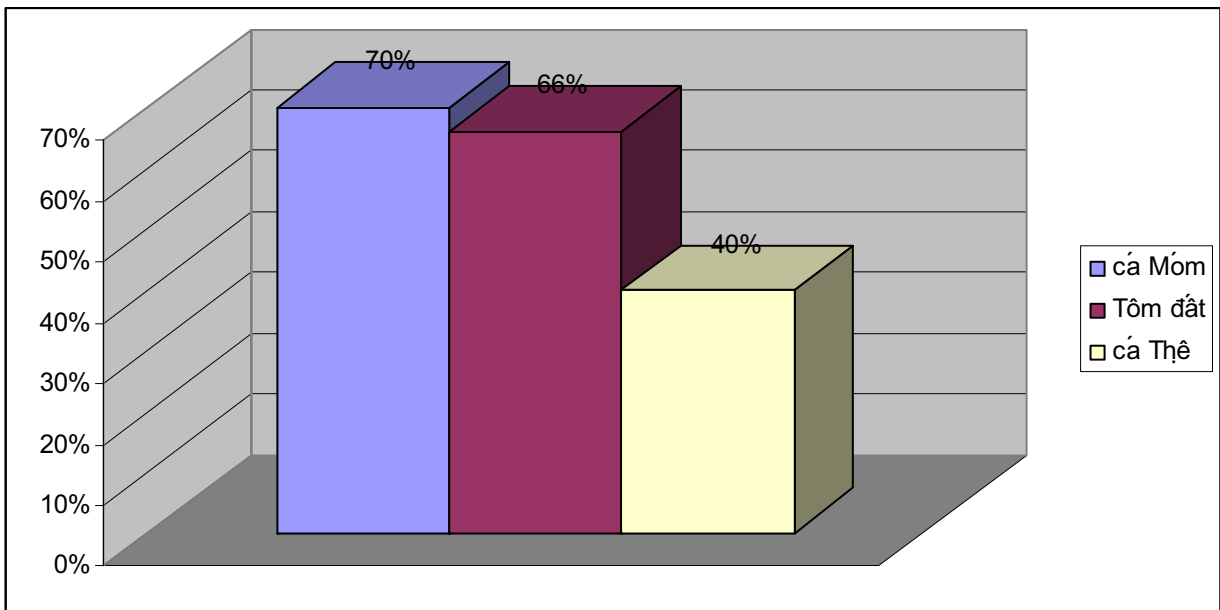


Figure 16 Three dominant captured species

3.3 Perspectives on legal mesh size and mesh size increase

Evaluation of current mesh sizes by stake trap owners

Figure 17 shows that the current mesh size was considered reasonable by 65%, big by 2%, and small by 43%.

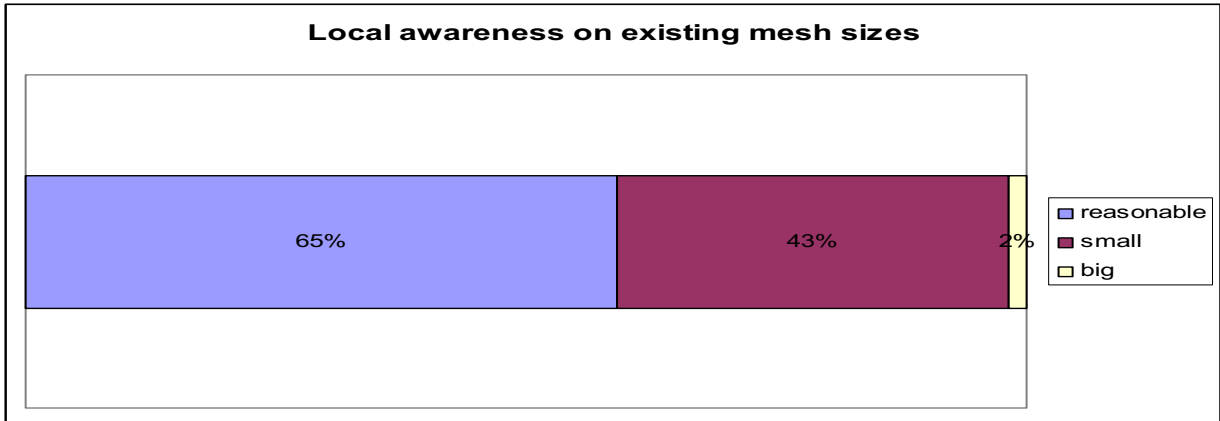


Figure 17 Local awareness on existing mesh sizes

Instruction by local authorities

Regarding the instruction from authorities, Figure 18 indicates that 75% said they received some instructions on mesh size from government while 25% said no (Figure 14).

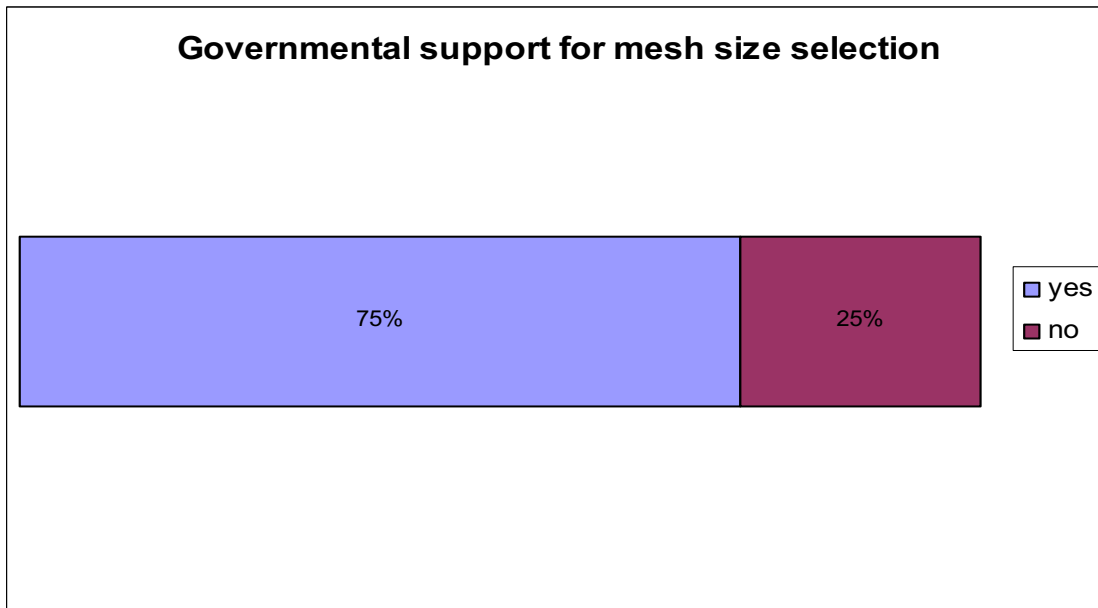


Figure 18 Support from government for mesh size change

Awareness on regulated mesh size by stake trap owners

According to Figure 19, in terms of understanding on the legal requirements for mesh size, only 30% of the interviewees said that 2a = 18mm was the legal size. 10% said that 2a = 4-14mm, and 60 % did not know the regulated mesh size.

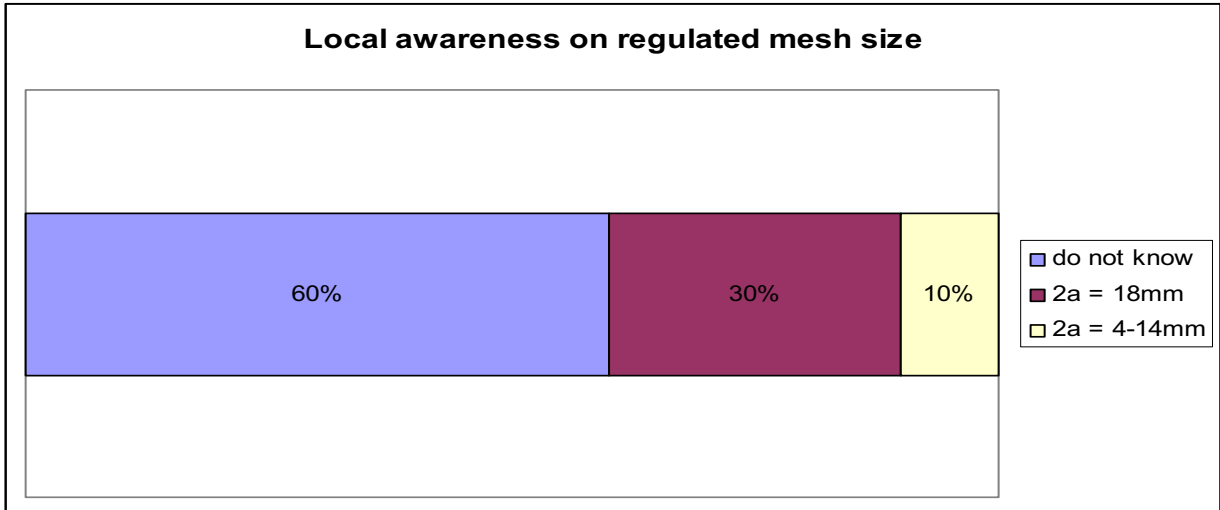


Figure 19 Local awareness on regulated mesh size

Readiness to change mesh size by stake trap owners

In response to the question “if the government requires you to use the bigger net mesh size than the one you currently use, what will you do,” 85% of the interviewees said that they would immediately change the mesh size while 15% answered that they would wait until they see how other households do first and how new mesh size would work (Figure 20).

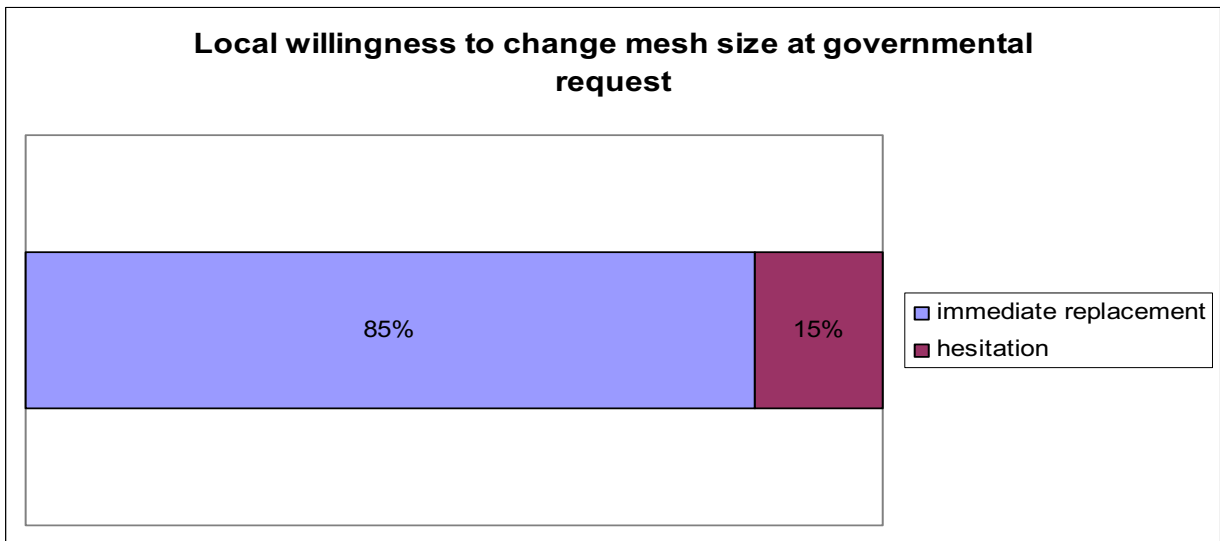


Figure 20 Local willingness to change mesh size at governmental request

Concerns for new mesh size application

Figure 21 reveals that 92% people were concerned about their financial capacities when required to change the current mesh size, 36% worried about decreased capture of species, and 14% wondered whether they can find bigger mesh size in markets.

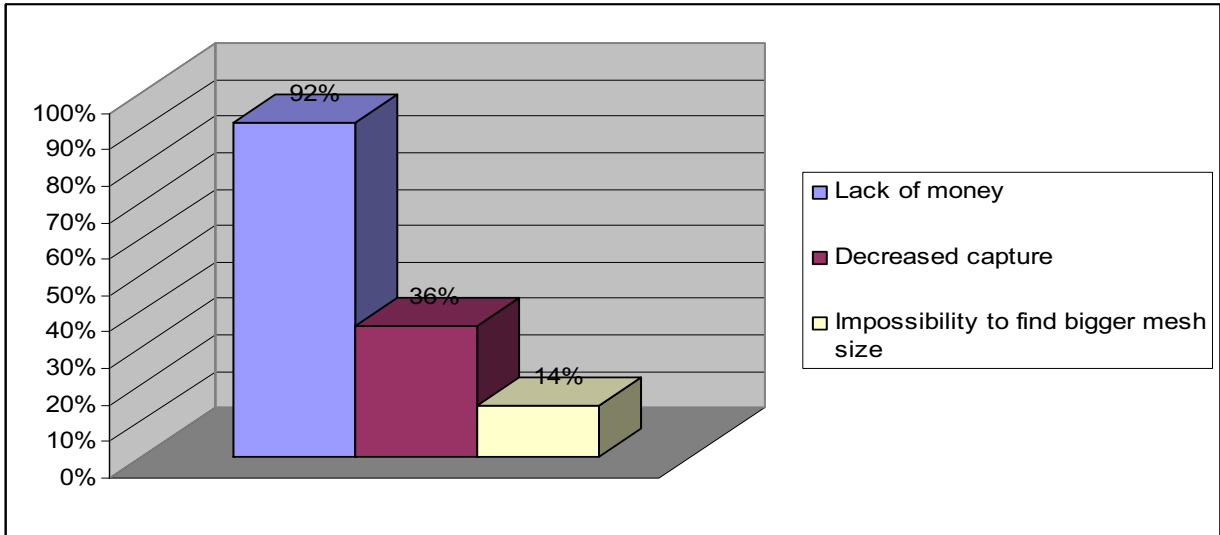


Figure 21 Local concerns on new mesh size replacement

Experience in using regulated mesh size

Figure 22 shows that 98% interviewees said they have not used the 18mm mesh size, only 1% said yes and 1% said the size was used before.

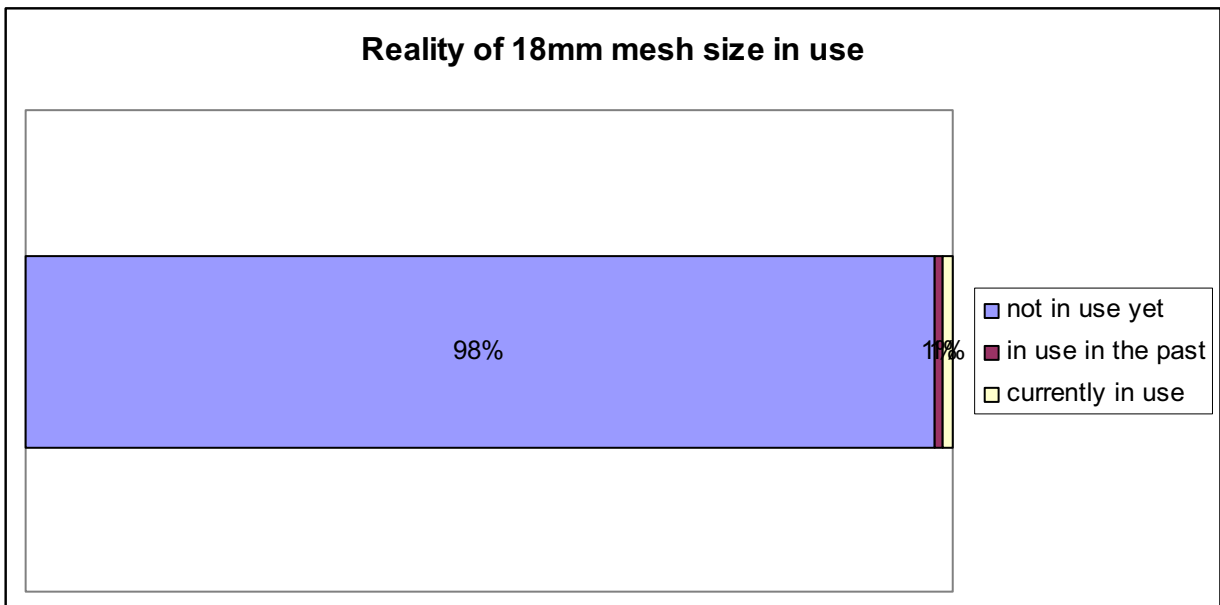


Figure 22 Reality of 18mm mesh size in use

Market availability of regulated mesh size

Figure 23 reveals that 15% said the 2a = 18mm regulated mesh size is easily found in the market. 25 % said it was difficult to find the regulated mesh size in the market. 60% said they did not know because they have not searched for this mesh size.

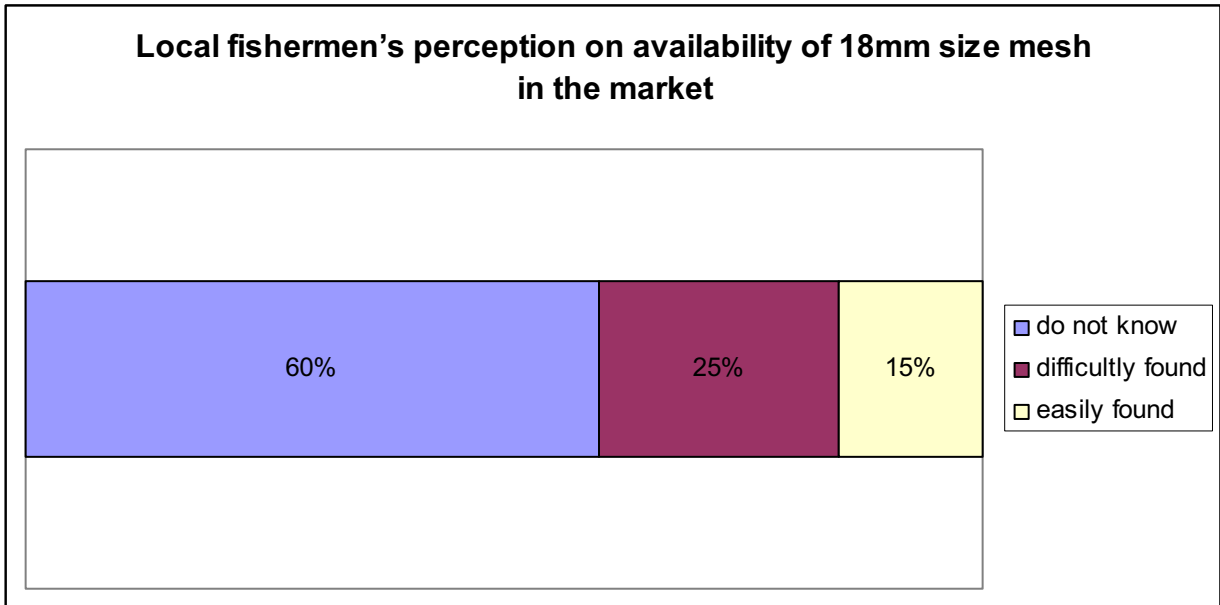


Figure 23 Local fishermen's perception on availability of 18mm size mesh in the market

4. DISCUSSIONS

4.1 Policy failure and low intervention from local authorities

It is important to know that, even when the policy exists, it fails to regulate the people's behavior. In the Provincial Decision No.4260/2005/QD-UBND dated 19 December 2005, it is stated that “the minimum mesh size for stake trap is 2a=18mm after 01/01/2008, this size for period of 01/01/2006-31/12/2007 is 14 mm” (article 30) and that “the government encourage fishermen to use bigger mesh size than 18mm...”. However, the reality in 2010 shows that majority of people use mesh size smaller than 2a= 18mm. In relation to the reasons why this happened, the talk with a competent leader of Sub-Department of Capture Fisheries and Resources Protection revealed that priorities are now given to alarming problems of destructive fishing practices such as electrical fishing gears, and lack of resources for other sectors, including mesh size control.

The survey indicates that instructions from local authorities for local people in selecting mesh size had no effects. Even some people said that they received instruction from local authorities, when they mentioned how they selected mesh size, they just provided three options: 1. they selected themselves, 2. they followed experiences by other people, 3. they followed instructions from the manufacturers. The fact that majority of people could not provide correct answers on the regulated mesh size can be interpreted as the lack of governmental actions on this matter.

Theoretically, for a policy like mesh size to be implemented, its contents should be informed for local people, then policy tools (subsidies, fines, incentives, patrolling...) can help enforcement of the policy, which has not been the case for stake trap mesh size.

In addition, the policy can also be implemented with awareness raising for local people on the importance of mesh size increase and with the opportunity for their involvement in the decision-making process. People should be given chances to voice their arguments, to be listened to, and to have their view considered by the authorities. The more people are involved in the decision, the more likely they accept its outcome, no matter whether the outcome is favorable for them or not.

2. The importance of stake trap on local livelihoods

The survey shows that stake trap is an important source of income for many households in Phu Loc District. Among another sources of income such as mobile gear, fish culture, shrimp culture, agriculture and forestry, 94% interviewees said that their most important livelihood is stake trap. In addition, the working people on stake trap are the bread winner for their families. Majority of local users of stake traps are planning to develop their stake traps in future. Number of people whose monthly income from stake trap is over 3 million VND has increased.

3. Feasibility of stake traps mesh changes

In terms of local support, this survey shows that people are willing to change their current mesh sizes into new ones when requested by local authorities. To the question “if the

government requires you to use the bigger net mesh size than the one you currently use, what will you do?" 85 % of the interviewees said that they would immediately change the mesh size.

Regarding financial capacity, 92% people were concerned about their financial capacities for net replacement. However, 93% people said that they use their own money to for regular replacement. The survey shows that majority of stake trap owners are not poor. 76% interviewed households have monthly income of over 3 million VND, 16% have income ranging from 2-3 million VND, 6% have income from 1.5 -2 million VND, and only 2% have income below 1.5 million VND per month. On average, each stake trap household has about 6 members. This means that month average income per head of majority (98%) exceeds 200.000VND (the national poverty standard by Decision No. 170/2005/QĐ-TTg by Prime Minister dated July 8, 2005 for the period 2006-2010 for rural areas).

The survey shows that complete replacement is costly, total new replacement costs range between 30-55 million VND for 450m wings to 800m wings. On the average, total costs for new installation for 1m of wing is about 66,000VND. However, wing nets (both above-water and submerged parts) were replaced regularly after at maximum 36-months. Trap net can be used in a longer duration up from 36 to 48 months. This suggests that a new regulation on complete replacement of bigger mesh size in 48 months would not be virtually no additional costs to the stake trap owners.

Regarding concerns about decreased capture of species, IMOLA conducted two surveys in selectivity of fishing gears. The survey dated February 2008 done in Cau Hai Lagoon concluded that 12mm mesh size is suitable because fishermen's losses would not be significantly affected and a significant number of juvenile fish and shrimp can be released from the net. The existence of such concerns about possible drop in capture highlights the need for IMOLA Project to share its survey findings with local fishermen.

Some concerns are given to the availability of bigger regulated mesh size nets in the market. IMOLA Project conducted a mesh size market survey at Hang Be Street, where fishermen can find a wide range of mesh sizes. The market survey done by IMOLA staff, Mr. Ngoc, on 26 November 2009 indicated that retailers can supply the market with any sizes of mesh when it is ordered. This suggests that a meeting among local fishermen, local authorizes, net retailer, and the net manufacturer to share information on availability of sizes of mesh in the market would be useful in resolving the issue.

To sum up, replacement of bigger mesh size has high feasibility. However, the regulation of new mesh size has high uncertainty of its socio-economic impacts on local people's livelihood. Therefore, careful piloting for bigger mesh size of stake straps is necessary before compulsory change. At the same time, time frame for the complete replacement should be at least 36 months to avoid additional costs for local fishermen.

5. CONCLUSIONS

1. Mesh size regulation 2a=18mm has not come into effect.
2. State trap is the most important source of income of local people and is likely develop in the future.
3. The involvement of local authorities for implementation of mesh size is weak.
4. Local awareness by stake trap users on regulation of 2a=18mm mesh size is low.
5. Majority of stake trap users are not poor when Vietnam's national standards for poverty are applied.
6. Replacement of mesh for a bigger mesh size is feasible in terms of willingness of local people, market availability of bigger mesh size. However, time frame is an important factor to be considered for complete replacement (preferably 36 months) to avoid additional costs for local fishermen.

6. POLICY RECOMMENDATIONS

1. IMOLA should present its survey and research results on the current status of mesh size in Thua Thien Hue to the Provincial PPC in an inception seminar with participation of key leaders of PPC, DARD, at the soonest time (preferably April 2011) to emphasize the necessity of policy re-formulation. The seminar should focus on:
 - Current status of mesh size in Thua Thien Hue lagoons
 - Local awareness on mesh size regulation and local authorities' intervention
 - Biological impacts
 - Livelihood impacts
 - Available policy options in relation to mesh size change of stake traps.

IMOLA survey results on selectivity should also be widely shared with local fishermen.

Proposed working schedule with DARD and PPC

<i>Time</i>	<i>Actions</i>
April 2011	- Inception workshop for key leaders of PPC and DARD, DONRE, District Authorities, Fishery Associations who are stakeholders in the process of policy formulation.
May-October 2011	- Provide estimates of socio-economic impacts of new mesh size on local stake trap users' income. - Assist the province in conducting public hearings with local stake trap users on mesh size. - Pilot new mesh size for stake traps in three communes, one in the North, one in the Middle, and one in the South of lagoons.
November 2011	- Finalize the results of the experiments and public hearing into documentation to submit to PPC for final approval.
December 2011	- PPC Revision and approval for new regulations on mesh size for lagoon stake traps.

2. Assisting DARD to formulate effective mechanisms for enforcement such as incentives and fines (punishments) for mesh size adoption by local stake trap users.
3. Assisting DARD to organize public hearings on mesh size with local stake trap users and involve them in the process of policy formulation.
4. IMOLA should offer support to the province by piloting awareness raising (organizing one or two training courses on mesh size for local stake trap users) for local fishermen on the importance of the mesh size

5. Making use of IMOLA's experiments: In spite of some shortcomings such as low representativeness of the samples, in the mesh size selectivity studies done in February 2008 and March-April 2010, they provided a good guidance for further experiments for a practical and feasible policy for mesh size of stake trap in Thua Thien Hue Province. The province should make use of the results of IMOLA's survey on selectivity of mesh size, stake trap status, and baseline survey on income, livelihood, and current use of net to review its policy on mesh size of stake traps. IMOLA may help by extensively sharing its results of study and experiment on selectivity of mesh size.
6. As stake trap is an important income source of local people, for a new policy, IMOLA should assist the province to conduct piloting to estimate of impacts of new mesh size on income of local people.
7. Local fishermen should be involved in policy formulation process and be understood on their willingness and their possible responses both positive and maybe negative towards the new regulation of bigger mesh size. Local authorities should be aware of time for new net replacement and allow preferably 03 years for the full replacement to avoid additional costs caused by change of new mesh size in an immediate manner.

7. REFERENCES

Government of Viet Nam. (2005a). *Decision No. 170/2005/QĐ-TTg by Prime Minister dated 8 July 2005 on poor indicators in the period 2006-2010.*

Government of Viet Nam. (2005b). *Governmental Decree No. 59/2005/ND-CP dated May 04 2005 “Conditions for working in some types of fisheries.”*

Ministry of Fisheries. (2006). *Instruction by Ministry of Fisheries No.02/2006/TT-BTS dated March 20 2005 “Instructions on implementation of Governmental Decree No. 59/2005/ND-CP dated May 04 2005 “Conditions for working in some types of fisheries.””*

Nguyen, P. H., Tran, C., & Le, Q. N. (2008). *Final Report on increasing the mesh sizes at trap of stake trap in Cau Hai Lagoon.* Hue: IMOLA Project.

Thua Thien Hue Province. (2005). *Provincial Decision No.4260/2005/QĐ-UBND dated 19 December 2005 on issuance of provincial regulations on lagoon fishery management in Thua Thien Hue Province.*

ANNEX 1 Survey questionnaire (Vietnamese Version)

BẢNG CÂU HỎI ĐIỀU TRA VỀ NÒ SÁO

Số ký hiệu xã:

Số ký hiệu trộ sáo (nếu có).....

Họ tên chủ nhân:

Thôn:

Xã:

Xin quý ông/bà vui lòng cung cấp các thông tin sau:

PHẦN I: HỘ GIA ĐÌNH VÀ THU NHẬP

Có bao nhiêu người trong gia đình ông/bà	Có thu nhập	Không thu nhập
1. Tổng số người	----- người	
2. đang độ tuổi lao động	----- người	----- người
3. chưa tới độ tuổi lao động	----- người	----- người
4. ngoài độ tuổi lao động	----- người	----- người

(ghi chú: độ tuổi lao động = 18-60 tuổi)

5. Những nguồn thu nhập của gia đình ông/bà gồm (có thể có nhiều chọn lựa):

- | | |
|--|---|
| <input type="checkbox"/> làm nò sáo | <input type="checkbox"/> nghề di động |
| <input type="checkbox"/> nuôi tôm | <input type="checkbox"/> đánh bắt ngư cụ cố định (ngoài nò sáo) |
| <input type="checkbox"/> đi biển | <input type="checkbox"/> nuôi cá |
| <input type="checkbox"/> lâm nghiệp | <input type="checkbox"/> trồng lúa |
| <input type="checkbox"/> hỗ trợ từ anh chị em ruột hoặc bà con | <input type="checkbox"/> nguồn khác (xin nêu rõ): |

6. Thu nhập hàng tháng của gia đình ông/bà (tổng cộng từ các nguồn):

- | | |
|---|---|
| <input type="checkbox"/> < 500.000 đồng | <input type="checkbox"/> 500.000-999,999 |
| <input type="checkbox"/> 1.000.000-1,499,999 | <input type="checkbox"/> 1.500.000-1, 999,999 |
| <input type="checkbox"/> 2.000.000-2, 999,999 | <input type="checkbox"/> >= 3.000.000 |

7. Nguồn mang lại thu nhập lớn nhất cho gia đình ông/bà là (một chọn lựa):

- | | |
|-------------------------------------|---|
| <input type="checkbox"/> làm nò sáo | <input type="checkbox"/> nghề di động |
| <input type="checkbox"/> nuôi tôm | <input type="checkbox"/> đánh bắt ngư cụ cố định (ngoài nò sáo) |

- | | |
|--|---|
| <input type="checkbox"/> đi biển | <input type="checkbox"/> nuôi cá |
| <input type="checkbox"/> lâm nghiệp | <input type="checkbox"/> trồng lúa |
| <input type="checkbox"/> hỗ trợ từ anh chị em ruột hoặc bà con | <input type="checkbox"/> nguồn khác (xin nêu rõ): |
-

8. Số tiền kiếm được hàng tháng từ nguồn thu quan trọng nhất nói trên là:

- | | |
|---|---|
| <input type="checkbox"/> < 500.000 đồng | <input type="checkbox"/> 500.000-999,999 |
| <input type="checkbox"/> 1.000.000-1,4999,999 | <input type="checkbox"/> 1.500.000-1, 999,999 |
| <input type="checkbox"/> 2.000.000-2, 999,999 | <input type="checkbox"/> >= 3.000.000 |

PHẦN II: NÒ SÁO

9. Có phải làm nò sáo mang lại thu nhập quan trọng nhất cho gia đình ông/bà không?

- có không

10. Trong năm 2009, thu nhập bình quân hằng tháng từ nò sáo của gia đình ông/bà là:

- | | |
|---|---|
| <input type="checkbox"/> < 500.000 đồng | <input type="checkbox"/> 500.000-999,999 |
| <input type="checkbox"/> 1.000.000-1,4999,999 | <input type="checkbox"/> 1.500.000-1, 999,999 |
| <input type="checkbox"/> 2.000.000-2, 999,999 | <input type="checkbox"/> >= 3.000.000 |

11. Trong năm 2008, thu nhập bình quân hằng tháng từ nò sáo của gia đình ông/bà là:

- | | |
|---|---|
| <input type="checkbox"/> < 500.000 đồng | <input type="checkbox"/> 500.000-999,999 |
| <input type="checkbox"/> 1.000.000-1,4999,999 | <input type="checkbox"/> 1.500.000-1, 999,999 |
| <input type="checkbox"/> 2.000.000-2, 999,999 | <input type="checkbox"/> >= 3.000.000 |

12. Ông/bà có dự định sẽ tiếp tục phát triển nò sáo của mình không?

- Có. Bởi vì
- Không. Bởi vì

13. 05 loài phổ biến nhất mà ông/bà thu được từ nò sáo?

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | |

14. Kích thước mắt lưới mà hiện tại ông/bà đang sử dụng là (2a)?

A. Phần cánh sáo: _____ mm

B. Phần đặt nò (giai): _____ mm

Cho biết cơ sở của lời khai (dành cho cán bộ phỏng vấn xác định)

Phỏng đoán của người khai phỏng đoán của người phỏng vấn
dùng thước đo

15. Sau khi dùng bao nhiêu tháng/năm thì ông/bà thay lưới mới một lần?

Thời gian	<input type="checkbox"/> 6 tháng	<input type="checkbox"/> 1 năm	<input type="checkbox"/> 2 năm	<input type="checkbox"/> 3 năm	Khác
<u>Phần cánh sáo:</u>					
Phần trên mặt nước					
<u>Phần cánh sáo:</u>					
Phần dưới mặt nước					
<u>Phần đặt nò (giai)</u>					

16. Ông/bà thường mua lưới ở đâu?

tại xã tại chợ huyện tại chợ Đông Ba, Huế

tại cửa hàng lưới đường Huỳnh Thúc Kháng Khác (xin nêu rõ):

17. Theo ông/bà, kích cỡ mắt lưới mà ông/bà đang sử dụng là:

to nhỏ phù hợp- cỡ 2a=.....

18. Việc lựa chọn kích cỡ mắt lưới là do:

Ông/bà tự quyết định Cơ quan Nhà nước hướng dẫn

Bà con/hộ hàng chỉ dẫn Ý kiến khác (xin nêu rõ):

19. Ông/bà có từng nhận được sự hướng dẫn của cán bộ Nhà nước về kích thước mắt lưới của nò sáo không?

Có Không

20. Chiều dài của nò sáo là : _____ m/cánh

Nếu chiều dài của hai cánh sáo khác nhau, ghi chú cánh dài hơn ở đây:.....

Số lớp lưới:

21. Toàn bộ chi phí cho mỗi lần thay mới một nò sáo là:

A. Phần cánh sáo:

Tổng chi: VND _____
 Chi phí vật liệu: VND _____
 Chi phí lao động: VND _____
 Các khoản chi khác (xin nêu rõ) VND _____

B. Phân đặt nò:

Tổng chi: VND _____
 Chi phí vật liệu: VND _____
 Chi phí lao động: VND _____
 Các khoản chi khác (xin nêu rõ) VND _____

22. Mỗi lần thay mới một nò sáo, ông/bà thường (có thể chọn nhiều cách):

- dùng tiền có sẵn để thay
- vay mượn từ người thân
- vay mượn từ bạn bè
- vay từ ngân hàng
- vay từ các hội (nêu rõ hội nào): _____
- sử dụng nguồn khác (xin nêu rõ): _____

23. Ông/bà có gặp phải khó khăn nào trong việc thay mới lưới không?

- Không
- Có. Cụ thể là:

24. Theo ông/bà, kích thước mắt lưới hiện tại (2a) theo quy định là:

A. Phân cánh sáo:

- 04mm 06mm 08mm 12mm 18mm
- kích cỡ khác (xin nêu rõ): _____ mm không nhớ nổi không biết

B. Phân điem đặt nò:

- 04mm 06mm 08mm 12mm 18mm
- kích cỡ khác (xin nêu rõ): _____ mm không nhớ nổi không biết

25. Ông/bà đã từng sử dụng lưới với kích cỡ 2a=18mm khi làm nò sáo chưa?

- Vẫn chưa Hiện đang sử dụng Trước đây có sử dụng (hiện tại không)

26. Theo ông/bà, lưới với kích cỡ $2a=18\text{mm}$ sử dụng trong nò sáo là:

- dễ tìm trên thị trường
 khó tìm trên thị trường
 không biết vì tôi chưa từng mua
 ý kiến khác (xin nêu rõ): _____

27. Nếu Nhà nước yêu cầu ông/bà sử dụng kích cỡ mắt lưới lớn hơn cỡ ông/bà đang sử dụng, ông/bà sẽ làm gì (có thể có nhiều chọn lựa)?

- Sẽ thay thế bằng mắt lưới lớn hơn ngay lập tức theo quy định của Nhà nước
 Sẽ gặp khó khăn vì không có tiền để thay thế
 Sẽ đợi các hộ khác thay thế trước xem tình hình như thế nào
 Số lượng tôm/cá thu từ nò sáo sẽ giảm đi
 Sợ không thể tìm ra loại lưới có kích thước lớn hơn để thay thế cho lưới cũ
 Những e ngại khác (xin nêu rõ):
-
-
-

Xin chân thành cảm ơn quý ông/bà đã cộng tác!

ANNEX 2

MẪU ĐIỀU TRA – LƯỚI ĐÁNH BẮT

1. Họ và tên:..... 2.Tên cửa hàng:.....
Địa chỉ:.....

2. Xin ông, bà vui lòng cho biết, trong cửa hàng ông(bà) có cỡ mắt lưới nào sau đây: (2A)
1ly [] 2ly [] 3ly [] 4ly [] 5ly [] 6ly [] 7ly [] 8ly [] 9ly []

10ly [] 11ly [] 12ly [] 13ly [] 14ly [] 15ly [] 16ly [] 17 ly []
18ly []

3. Xin ông, bà vui lòng cho biết chiều dài một tay (nghe) là bao nhiêu mét?

Lừ Trung Quốc:mét Ø cước bao nhiêu.....ly.
Lưới ba màng :.....mét Ø cước bao nhiêu.....ly
Lưới hai màng :.....mét Ø cước bao nhiêu.....ly
Lưới một màng :.....mét Ø cước bao nhiêu.....ly..
Lưới bùa :.....mét Ø cước bao nhiêu.....ly.
Lưới kéo :.....mét Ø cước bao nhiêu.....ly.
Lưới vét :.....mét Ø cước bao nhiêu.....ly
Lưới dạ :.....mét Ø cước bao nhiêu.....ly.

4. Xin ông, bà cho biết các loại lưới nào ông(bà) thường bán cho ngư dân khai thác ở đầm phá?.....
.....
.....

5. Ông/bà có biết số lượng khách hàng chủ yếu của ông bà đến từ xã, huyện.....
.....
.....

6. Xin ông/bà cho biết một số thông tin về một số loại lưới bán chạy nhất trong năm này: kích cỡ, nguồn gốc, đơn giá, chất liệu, đơn giá

Chủng loại lưới	Kích cỡ lưới (ly)	Nguồn gốc	Chất liệu Lưới Nilông, Lưới Polen, Lưới gát	Đơn giá (đ)	Độ bền khi ngâm trong nước (6 tháng, 1 năm, 2 năm...)	Bán nhiều nhất trong năm
Lừ Trung Quốc						
Lưới ba màng						

Lưới hai màng						
Lưới một màng						
Lưới bủa						
Lưới kéo						
Lưới vét						
Lưới dạ						

7. Nếu được đặt hàng với số lượng lớn, ông bà có thể cung ứng cho loại lưới (để đặt nò sáo) có kích thước mắt lưới như sau không:

- 14ly [] có không, lý do:

 15ly [] có không, lý do:

 16ly [] có không, lý do:

 17 ly[] có không, lý do:

 18ly[] có không, lý do:

8. Ông bà có gặp khó khăn gì trong việc nhập về và bán các loại lưới có kích thước như sau không

	14ly []	15ly []	16ly []	17 ly[]	18ly[]
Không gặp khó khăn gì					
Có gặp khó khăn (xin ông/bà nêu rõ: việc nhập hàng về, việc bán hàng, cất hàng,...)					

CẢM ƠN SỰ HỢP TÁC CỦA ÔNG/BÀ./.