

**D** SOCIO-ECONOMIC  
ADDITIONAL SURVEY

## Appendix D.1

The sample of 635 represents 4% of the statistical population or households found in the study area. Households become the statistical population as the target respondents are heads of households. In order to derive to the required sample size, the following procedural steps or technique is adopted:

- a) To estimate the number of population living within the 5 km study area. The latter covers several *mukims* of the South West District of Penang. The study area covers eight (8) *mukims* – with each either fully or partially circumscribed within the study area. The status of coverage is identified and determined by overlaying the map of the study area on the mukim map of the South West District. *Mukims* which are fully covered within the study area are Mukim 7, Mukim 8, Mukim 9 and Mukim 11 whilst those partially covered within the study area are Mukim I, Mukim J, Mukim 10 and Mukim 12 (Table D-1).

Table D-1: Population size of *mukims* in the study area, 2010

Local Authority Area/ <i>Mukim</i> South West Penang	Population 2010	Status within Study Area
Mukim I (Pulau Betong)	1,333	Partial
Mukim J (Dataran Ginting)	1,102	Partial
Mukim 7 (Bukit Ginting)	1,462	Full
Mukim 8 (Bukit Pasir Panjang)	1,182	Full
Mukim 9 (Bukit Gemuruh)	14,925	Full
Mukim 10 (Bukit Relau)	2,673	Partial
Mukim 11 (Teluk Kumbar)	15,711	Full
Mukim 12 (Bayan Lepas)	122,654	Partial
<b>Total</b>	<b>161,045</b>	

- b) Population counts were then made based on the 2010 Population Census (Table D-1) by summing up the population of the full *mukims* and the estimates of the rest partially covered *mukims* based on the size of the area of partiality, with the assumption that the population is equally distributed within the *mukim* unless it is known that the area is not populated such as the area that covers the Penang International Airport and the industrial area of the Free Trade Zone of Mukim 12.
- c) The final estimate of the size of population living in the study area came up to 62,250 persons (Table D-2). This figure was then converted to number of households i.e. the statistical population as our target samples or respondents are heads of households.

Table D-2: Estimated population size of the study area by *mukim*, 2010

<b>Local Authority Area/<i>Mukim</i> South West Penang</b>	<b>Population 2010</b>	<b>Status within Study Area</b>	<b>Estimated Population Size</b>
Mukim I (Pulau Betong)	1,333	Partial	600
Mukim J (Dataran Ginting)	1,102	Partial	500
Mukim 7 (Bukit Ginting)	1,462	Full	1,462
Mukim 8 (Bukit Pasir Panjang)	1,182	Full	1,185
Mukim 9 (Bukit Gemuruh)	14,925	Full	14,925
Mukim 10 (Bukit Relau)	2,673	Partial	1,067
Mukim 11 (Teluk Kumbar)	15,711	Full	15,711
Mukim 12 (Bayan Lepas)	122,654	Partial	26,800
<b>Total</b>	<b>161,045</b>		<b>62,250</b>

- d) An average household size of 3.9 persons per household, which is the average household size of the study district, was utilised giving rise to a total of 15,961 households ( $62,250/3.9 = 15,961$  households).
- e) Statistically it has been stated that the larger is the statistical population (in this case households) or nearing infinity the lower can the samples be derived from the conventional permissible sample of 10%. In this case a 4% sampling frame is chosen which gives us 638 samples but was rounded up to 635.

**ADDENDUM  
(DRAFT REPORT)  
REV.1  
FOR INTERNAL USE ONLY**

**SOCIO-ECONOMIC STUDY OF FISHING COMMUNITIES IN THE PROPOSED  
PENANG SOUTH RECLAMATION (PSR) IN SOUTH PENANG ISLAND**

**A Resurvey of the Fishermen's Perceptions and Attitude  
Post Stakeholders' Engagements**

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## **Addendum Report (Second Survey)**

### **1.0 INTRODUCTION**

The socio-economic survey for the DEIA study was conducted in the middle to late January 2016. Concurrently other forms of public engagement namely Focus Group Discussion and informal conversation with the population of the study area were planned and arranged for, which ran through to March in order to fit into the schedules of the target groups comprising fishermen and the general public. These studies, particularly the social survey, were conducted based on the current level of knowledge and information that the locals knew about at the time of the study. Apparently, the level of information and knowledge of the proposed project i.e. the Penang South Reclamation (hereafter referred to as “PSR”) project was seemingly low. This was mainly due to the late dissemination of information to the public.

Chronologically, the proposed PSR project was first announced by the State government on 12 June 2015 at Penang Town Hall during a public engagement to discuss reclamation issues. Since then various engagements were held to brief and discuss reclamation and fishermen issues with the various personnel/officials and related agencies. Only on 18 January 2016, the first public engagement was held involving the chairman of the various JKKK of the affected villages in South Penang Island, seemingly more or less coinciding with the social survey conducted for the current Detailed Environmental Impact Assessment (DEIA) Study. Another briefing and discussion was held for the fishermen in the area about a week later on 24 January 2016 which saw the attendance of 300 fishermen from the affected fishing villages. Both briefings were held at Tabung Haji Hotel with the former officiated by the ADUN of Batu Maung and the latter by the Penang Chief Minister.

It was only on 4<sup>th</sup> March 2016 that SRS Consortium Sdn. Bhd. (or the Project-Delivery-Partner, known hereafter as “PDP”) first started direct stakeholder engagements with the fishermen of the affected villages namely Kampung Permatang Damar Laut, Kampung Permatang Tepi Laut, Kampung Sungai Batu, Kampung Teluk Kumbar and Kampung Gertak Sanggul including their respective component villages. Altogether 43 engagements were conducted from March to May involving a total of 677 fisherman participants i.e. 71% of a total of 953 local fishermen in the affected villages. The breakdown comprised 10 engagements in March involving 207 fishermen, 9 in April involving 255 participants and 24 in May drawing 215 participants. The detail of the breakdown according to villages is given in *Appendix 1*.

## 1.1 Aim of the Study

The outcome of the series of engagement carried out as mentioned in the preceding section, saw the seemingly better understanding amongst the fishermen of the need of the proposed PSR project and the numerous benefits that it will accrue, thus the feel that the fishermen were more open and less hostile. It is with the aim of finding out this state of affair that the current study, a social resurvey of the fishermen, was carried out at the various fishing villages covered in the first survey, with some adjustments made to fit in and justify the need of the survey as mentioned in *Section 2.0*.

As this study is not part of the DEIA study, its submission is made as an addendum to the DEIA study report to project some insights into the locals' stand regarding the proposed project after becoming more informed about it through the stakeholder engagements carried out by the PDP staff.

## 2.0 METHODOLOGY

To facilitate and to fulfill the aim of the second survey, two strategies were adopted. First, the number of samples i.e. 200 altogether was to be retained with adjustments made to fit into the need of the second survey. Second, several earlier fishing villages i.e. those in the outlying area i.e. not fronting the proposed reclaimed area, were dropped from the second survey. Thus the study area for the fishing communities studied only refer to the fishing villages found along the southern coast fronting the proposed reclaimed islands.

The rationale for the new distribution is to retain the initial distribution – adjustments are to be made by either retaining or adding the necessary samples for certain fishing villages within the number of samples not counted for the outlying villages i.e. 55 altogether from Kampung Teluk Tempoyak, Kampung Bakar Kapur and Kampung Pulau Betong. The latter villages were removed in the second survey since they were not covered in the stakeholder engagements by SRS Consortium staff. However, a new fishing village, a component village of Kampung Teluk Kumbar, which was not covered in the earlier survey, was incorporated. The final distribution of the fishermen respondents in the second survey is given in *Table 1*. *Table 2* shows the distribution of the number of fishermen and fishing boats in the fishing villages in the study area.

The survey was not specifically directed to the earlier respondents but was carried out randomly, as in the earlier or first survey. Hence the chances of the earlier respondents to be recaptured in the second survey were not impossible. The survey was carried out at the end of June 2016 after most of the stakeholder engagements by the SRS Consortium staff had been delivered in May. *Figure 1* shows snapshots of the survey being carried out by the enumerators.

**Table 1** Distribution of the new sampled fishing villages and their respective number of respondents

Sampled Fishing Villages	No. of Respondents	
	Initial Survey	Resurvey
Kampung Teluk Tempoyak	25	0
Kampung Permatang Damar Laut	20	20
Kampung Permatang Tepi Laut	10	20
Kampung Binjai	10	10
Kampung Sungai Batu	35	46
Kampung Teluk Kumbar	40	40
Kampung Gertak Sanggul	15	24
Kampung Bakar Kapur	10	0
Kampung Pulau Betong	20	0
Kampung Pasir Belanda	4	4
Kampung Gemuruh	2	2
Kampung Nelayan	9	9
Kampung Bagan	0	25
<b>Total</b>	<b>200</b>	<b>200</b>

**Table 2** Distribution of the number of fishermen and fishing boats in the study area

Villages	No. of Fishermen	No. of Fishing Boats
Kampung Permatang Damar Laut	110	
Kampung Permatang Tepi Laut	113	85
Kampung Binjai	101	
Kampung Sungai Batu	183	105
Kampung Teluk Kumbar	234	131
Kampung Pasir Belanda	33	77
Kampung Gertak Sanggul	182	
<b>Total</b>	<b>953</b>	<b>395</b>

Source: Ketua Unit Nelayan Kawasan





**Figure 1** Snapshots of the questionnaire survey being carried out

## 2.1 Respondents' Status at the Time of the Survey

As this is a resurvey, it would be useful to note the respondents' status as to whether or not they had been surveyed earlier for the DEIA study and whether or not they had been involved in the stakeholder engagements with the PDP. Analysis of the survey showed that 81% of the respondents had earlier been surveyed for the DEIA study and 68% had followed the stakeholder engagements (Table 3).

**Table 3** Respondents' status at the time of the second survey

Background	No.	%
Had been previously interviewed for DEIA	162	81.0
Had received briefing from Project-Delivery-Partner (PDP)	136	68.0
<b>No. of briefing attended by respondents</b>		
Once	32	16.0
Twice	39	19.5
Thrice	32	16.0
4 times	25	12.5
5 times	8	4.0
<b>Total</b>	<b>136</b>	<b>68.0</b>

Source: Field data, June 2016

Accordingly, the number of the stakeholder engagements that the respondents went through varies from being engaged once to as many as five times. The repeated engagements undertaken by some of the respondents could be due to interest in knowing more or for some; they had to be around (administratively) when it involved their respective fishermen unit area. The latter especially refers to the fishermen unit heads and deputy heads.

### 3.0 PROFILE OF THE RESPONDENTS

At the onset, it would be useful to find out whether or not the respondents' background of the current study is similar to that of the initial study for the DEIA study. Strictly speaking, their background should be similar or if not only differ slightly due to the inclusion of more Chinese respondents (from the newly incorporated study village of Kampung Bagan) within the target study area and the exclusion of the three outlying fishing villages.

#### 3.1 Demographic Background

Table 4 shows the respondents' demographic background in terms of ethnicity and age for the two studies. Accordingly, there is an increase in the number of Chinese respondents simply because the increase in number for the respondents in Kampung Gertak Sanggul which is a known Chinese fishing village in south Penang and the inclusion of Kampung Bagan which has a substantial number of Chinese fishermen residing in it and were captured in the survey.

**Table 4** Respondents' demographic background

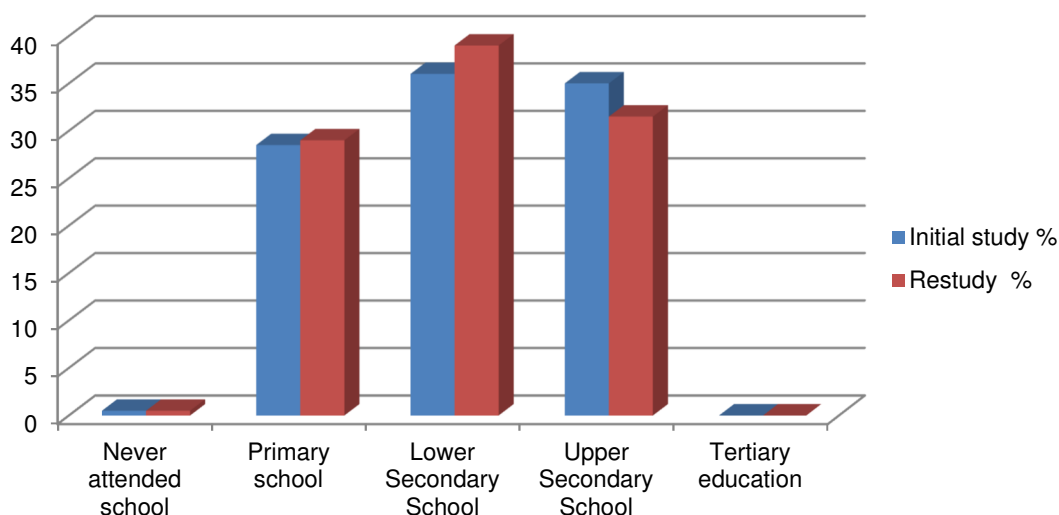
Demographic Characteristic	Initial Study		Restudy	
	No.	%	No.	%
<b>Ethnicity</b>				
Malay	161	80.5	143	71.5
Chinese	39	19.5	57	28.5
<b>Total</b>	<b>200</b>	<b>100.0</b>	<b>200</b>	<b>100.0</b>
<b>Age Groups – Years</b>				
Below 30	19	9.5	11	5.5
30-39	48	24.0	29	14.5
40-49	57	28.5	43	21.5
50-59	55	27.5	69	34.5
60-69	20	10.0	47	23.5
70 +	1	0.5	1	0.5
<b>Total</b>	<b>200</b>	<b>100.0</b>	<b>200</b>	<b>100.0</b>
<b>Median age</b>	<b>45.3 years</b>		<b>53.0 years</b>	

Source: Field data, January and June 2016

The median age of the respondents for the two surveys varies with the median age for the second survey is found to be older by approximately 8 years from 45.3 years for the initial survey to 53 years for the second survey. This is because the component of those respondents aged 50 years and above is higher in the second survey comprising 58.5% compared to 38% in the initial survey. One probable reason could be traced from the contribution made by the Chinese respondents who happen to be relatively older in age.

### 3.2 Social/Educational Background

A comparative study of the result of the surveys on educational background of the respondents from the respective surveys shows that they are almost identical. Approximately 70% had at least Lower Secondary School education or about one-third having upper secondary education (slightly more for the initial study) with none being tertiary educated (*Figure 2*).



**Figure 2** Respondents' educational background

### 3.3 Economic Background

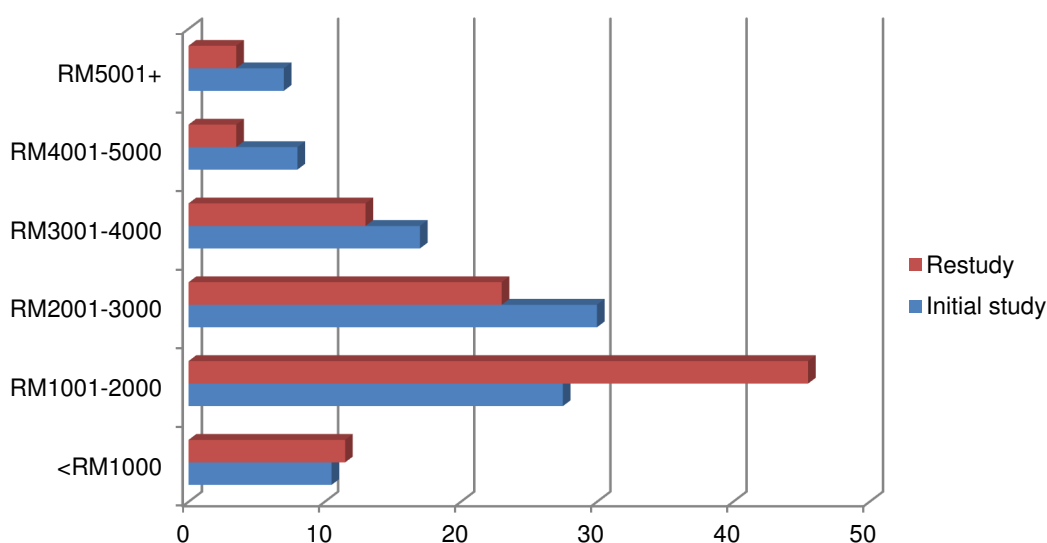
The economic background here refers to the income distribution of the respondents. Being fishermen, the respondents derived their income mainly from their fishing activities especially when 85.5% of them did not have secondary occupation. *Table 5* shows the distribution of their monthly personal and household income, the latter being imputed by finding the mean of the sum total of the monthly income from respondents' main income, side income and income earned by other working household members.

As can be seen from the table, the respondents' mean monthly income appear to be slightly lower than the initial study by RM52 from RM1,578 to RM1, 526. This is expected to be so since they did not comprise the same respondents and were of different age structure. This feature is also reflected in the mean household income when it is lower than the initial study by RM402.00. As income from other working household members is the main contributor to the household income, the percentage of households having other members working is found to be relatively low in the second survey i.e. comprising 36% only compared to the initial study with 49.5%. *Figure 3* shows the comparative household income distribution of the respondents for the two different studies.

**Table 5** Distribution of the respondents' monthly personal and household income

Income	Initial Study		Restudy	
	No.	%	No.	%
<b>Main Income</b>				
RM1,000 and below	42	21.0	35	17.5
RM1,001 – 2,000	130	65.0	154	77.0
RM2,001 – 3,000	28	14.0	11	5.5
RM3,001 – 4,000	-	-	-	-
RM4,001 – 5,000	-	-	-	-
RM5,001+	-	-	-	-
<b>Total</b>	<b>200</b>	<b>100.0</b>	<b>200</b>	<b>100.0</b>
<b>Mean</b>	<b>RM1,578.00</b>		<b>RM1,526.00</b>	
<b>Household income</b>				
< RM1,000	21	10.5	23	11.5
RM1,001 – 2,000	55	27.5	91	45.5
RM2,001 – 3,000	60	30.0	46	23.0
RM3,001 – 4,000	34	17.0	26	13.0
RM4,001 – 5,000	16	8.0	7	3.5
RM5,001+	14	7.0	7	3.5
<b>Total</b>	<b>200</b>	<b>100.0</b>	<b>200</b>	<b>100.0</b>
<b>Mean Household Income</b>	<b>RM2,710.00</b>		<b>RM2,308.00</b>	

Source: Field data, January and June 2016



**Figure 3** Comparative household income distribution of the fishermen respondents for the two different studies

Nevertheless, based on the recent Finding of Household Income Survey of Malaysia 2012 published by the Department of Statistics, Malaysia, which categorised the mean monthly household income for three income groups of the top 20%, the middle 40% and the lowest 40% as being RM12,159; RM4,573 and RM1,847 respectively; and the respective equivalent incomes for the urban dwellers were RM13,654, RM5,294 and RM2,235, it can be concluded that the majority of the population in the study area belongs to the lower 40% income group. The situation is similar for both the initial study and the second survey.

#### 4.0 SURVEY RESULTS ON OPINIONS AND PERCEPTIONS

The findings above tried to establish the respondents in the two surveys are similar in their socio-economic background. One would expect that being similar they would share similar ideas and responses to any changes brought to the area. Apparently this is not so, as shown by our findings. Their current life chances and their perceived future life chances may have influenced their views and perceptions on matters that may affect their social and economic life.

##### 4.1 Level of Project Awareness

With respect to their knowledge of the proposed reclamation project, it was found that for both studies the percentage of the respondents who were aware about it is unanimous. All the fishermen knew about it but the sources of their knowledge seemed to differ between the two surveys. Those who were aware about it in the initial study mainly knew from the mass media, village head and other villagers or neighbours (*Table 6*). In the restudy, the sources of knowledge seem to be more varied with the majority i.e. slightly more than half knew from other fishermen or from their Fishermen Association. More than one-tenth knew from the PDP, a source peculiar to the restudy (*Table 6*). The latter could probably be due to the more active and progressive actions taken by the PDP in disseminating the knowledge and engaging in stakeholders' meetings and initiatives of get-to-know more about the proposed project.

**Table 6** Awareness and knowledge about the proposed project

Awareness and Knowledge		Initial Study	Restudy
Awareness	Knew about the project	100.0	100.0
	Did not know	-	-
	Not sure	-	-
	<b>Total</b>	100.0	100.0
Source of knowledge	Mass media	28.0	6.5
	Village head and <i>Penghulu</i>	20.0	7.5
	Household member	4.5	4.5
	Other villagers/neighbours	35.0	16.5
	Politician	-	0.5
	Fishermen/Fishermen Association	12.5	51.5
	SRS Consortium	-	13.0
	<b>Total</b>	<b>100.0</b>	<b>100.0</b>

Source: Field data, January and June 2016

## 4.2 Perceptions Towards the Impacts of the Proposed Project

### 4.2.1 Perception of Socio-economic Impacts

*Table 7* shows the respondents' perceived socio-economic advantages and disadvantages brought about by the proposed project. The perception during the restudy seemed to have been low for both the socio-economic advantages and the disadvantages. In the initial study the fishermen perceived that the proposed project would not bring much advantage to the area as shown by the relatively low score in percentages of the kind of advantages listed except for employment opportunities for the locals, improvement of basic amenities and increased value of land or property. Instead they perceived that all the disadvantages would befall them i.e. loss of employment, loss of source of income and shrinkage of fishing ground as they foresee themselves to be directly impacted.

**Table 7** Ratings of perceived socio-economic advantages and disadvantages brought about by the proposed project (% saying yes)

Perception	Initial Study	Restudy
<b>Advantages:</b>		
Employment opportunities to own household members	37.5	40.6
Employment opportunities to local population	67.5	45.0
Improvement of basic amenities	66.0	56.0
Increased value of land / property	70.5	70.0
Increased standard of living	42.0	37.5
Increased business opportunities	48.5	36.0
Increased opportunity for property ownership	7.0	3.0
Increased international trade	16.5	27.5
<b>Disadvantages:</b>		
Loss of employment	100.0	44.5
Loss of source of income	100.0	73.5
Shrinkage of fishing ground	100.0	100.0
Displaced	26.0	20.0
Loss of property	26.0	18.5
Marginalization of existing population	33.5	38.0

Source: Field data, January and June 2016

### 4.2.2 Perception of Impacts on Health and Safety

*Table 8* shows how the respondents perceived the impacts of the project on their health and safety. As can be seen, in the initial study the respondents were seen to be moderately to strongly certain that most of the possible impacts on health and safety listed would befall them. Impacts such as increase in water and noise pollution as well as increased accidents with small fishing boats were rated fairly strongly.

**Table 8** Ratings of perception of impacts on health and safety brought about by the proposed project (% saying yes)

Characteristic	Initial Study	Restudy
Increased traffic congestion	55.5	28.5
Increased accident with small fishing boats	73.0	18.5
Increased noise pollution	85.8	15.0
Increased air pollution	74.2	99.0
Increased water pollution	100.0	99.0
Hazardous to people	51.0	17.0
Disturb peace / tranquillity	53.2	54.5
Increased communicable diseases	25.0	3.0

Source: Field data, January and June 2016

The perception of the impacts on health and safety in the second survey seemed to be mellower when only impacts of increased water and air pollution were rated strongly by the respondents. Increased accident with small fishing boats was no longer seen as a threat. The latter could be due to the explanation or assurance given during the stakeholder engagement that the routes of the dredgers, tug boats and barges would be well demarcated, marked and illuminated thus avoiding untoward mishap.

#### 4.2.3 Perception of Impacts on Aesthetics and Culture

An analysis of the perception of impacts on aesthetics and culture revealed that the respondents in the initial study were fairly sure about the impacts of the development on the aesthetics and culture of the area. This was deduced when more than 70% of the respondents perceived that the project would affect the seascape of the area, the beauty of the landscape, water quality, and tranquillity of the area (*Table 9*). However, the proposed project was not perceived as a threat to culture. Nevertheless, the resurvey saw an inclination of stronger perception for change in aesthetic impacts

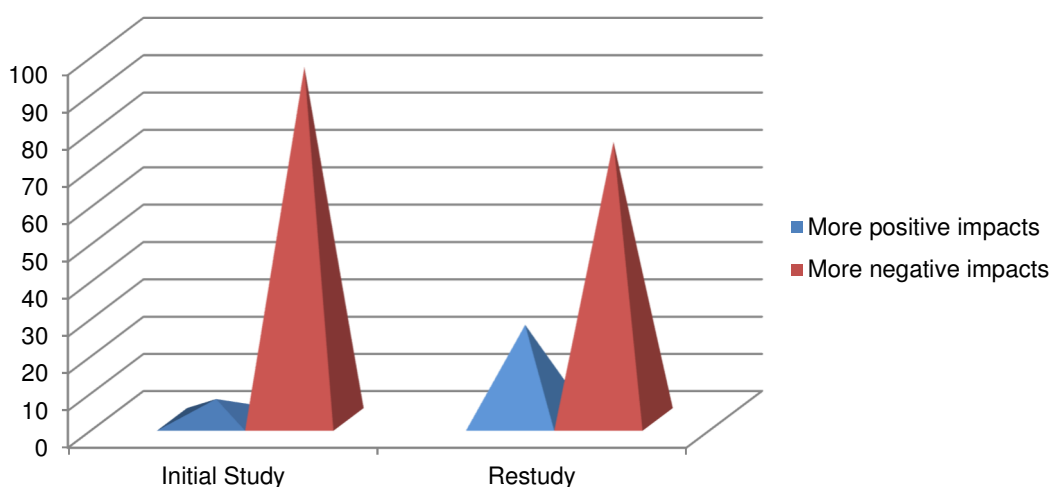
**Table 9** Ratings of perception of impacts on aesthetics and culture brought about by the proposed project (% saying yes)

Perception	Initial Study	Restudy
Affect landform of the area	95.0	100.0
Affect beauty of landscape/seascape	93.5	97.0
Affect air quality	48.4	97.5
Affect water quality	72.9	93.5
Affect tranquillity of the area	95.0	73.0
Affect community integration	17.5	36.0
Affect local tradition	45.0	21.5
Affect historical places	16.5	20.5
Affect place of worship	12.0	0.0
Affect important buildings	13.0	0.5

Source: Field data, January and June 2016

#### 4.2.4 Analysis of Project Acceptability

The initial study saw the fishermen were almost consensus (94.5%) in their opinion that the proposed project would bring about more disadvantages than advantages to the local area, when they were asked how they would assess the overall impacts of the proposed project to their social environment (*Figure 4*). Their opinion or perception was based on the current knowledge that they had about the proposed project, which was not much except that there was plan to reclaim the front inshore seas and turn it into three islands for future development.



Source: Field data, January and June 2016

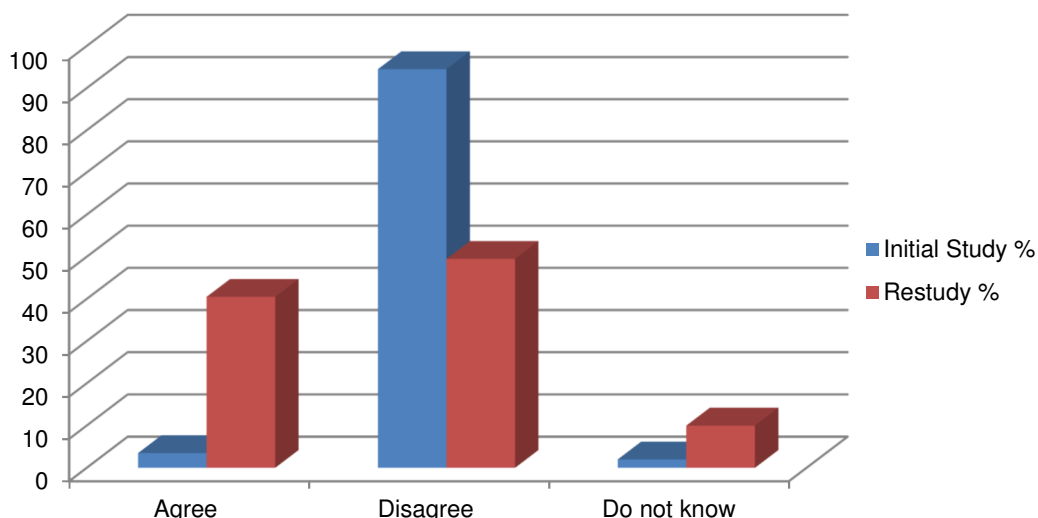
**Figure 4** Respondents' perceived overall impacts

It was realised, at this juncture, that the locals were not well informed and hence efforts were made by the PDP to engage them in briefings and get-to-know-the-project sessions. The stakeholder engagement sessions were carried as early as in late February but were most actively pursuit from March to May 2016 (as reflected in *Appendix 1*).

It was then decided that some feedbacks were needed to assess whether or not the locals were getting more informed, hence the need for a restudy as iterated in the aim of the study above. Analysis of the data gathered from the restudy showed that there was a 20% upward shift in the respondents' perceived overall impacts of the project bringing more positive than negative impacts i.e. from 5.5% in the initial study to 25.5% in the restudy (*Figure 5*). Correspondingly the percentage saying it would bring more negative impacts dropped from 94.5 to 74.5%.

With one-quarter of the fishermen having positive perception towards the overall impacts of the proposed project, one would expect it would reflect the level of acceptability among the fishermen too. Nevertheless, the survey data revealed a substantial increase in the acceptability level of the fishermen towards the project which was not 25.5 but 40.5% instead (*Figure 5*). The extra 15 percentage points could come from none other than the group who perceived more negative impacts would occur, may be to them as of now and the near future, but which at the same time may prove to be positive to others, hence, the choice to support the proposed project.





Source: Field data, January and June 2016

**Figure 5** Respondents' level of acceptability of the proposed project

Likewise, although approximately three-quarters of the fishermen felt the proposed project will bring about more negative impacts only 49.5% disagreed to its implementation. The latter saw a decrease of 45 percentage points from 94.5% who disagreed in the initial study. One possible reason for this lower rejection and subsequently higher support given could be due to the fishermen being more informed after taking part in the stakeholder engagements which could result in them being more open-minded and able to give consideration about the proposed project from various perspectives. Nevertheless, the percentage of those who abstained or not sure whether or not to support or reject the proposed project rose from 2 to 10%, meaning the percentage of those who were in doubt also increased by 8 percentage points.

*Table 10* shows the reasons given by the fishermen for their support or lack of support towards the proposed project. Three main reasons for agreeing stood out, i.e. if appropriate compensation is given, if new house or settlement is given and for some others due to age factor and saw the project as providing employment opportunities for the younger generation. However, approximately one-tenth agreed with multiple conditions reflecting earlier reasons for agreeing.

The major contentions of the 49.5% fishermen who disagreed revolve around their main daily work of toiling the sea. For one, the proposed reclaimed area is considered as their important fish and prawn landing area and with it being reclaimed will reduce their fishing area resulting in loss of income and other impacts on marine water and resources.

**Table 10** Reasons for degree of acceptability regarding the proposed project

	<b>Reasons</b>	<b>Restudy</b>
<b>For Agreeing (n=81):</b>	If appropriate compensation is given	42.0
	Age factor/employment opportunities for future generation	13.6
	If given new house/settlement	27.2
	Numerous future benefits were highlighted	4.9
	If TOL land given freehold status	2.5
	Agree with conditions:	
	- New resettlement for fishermen by the coast not necessarily on the new island	
	- Appropriate compensation	
	- Jobs to be given priority to local labour/fishermen sons	9.9
	- Agreement to be discussed between the two parties	
	<b>Total</b>	<b>100.0</b>
<b>For Disagreeing (n=99)</b>	Important fish and prawn area for inshore fishermen	42.4
	Loss of livelihood	15.2
	Shrinkage of fishing ground/sea area	14.1
	Problem of marine water pollution and mud	8.1
	Not beneficial to fishermen	9.1
	Disturb marine ecosystem and life	9.1
	Affect inshore fishermen's future and costs	2.0
		<b>Total</b>

Source: Field data, June 2016

The respondents were also asked if they have other views on the proposed reclamation project in South Penang. *Table 11* summarises their views. Apparently they or slightly more than one-third did not reject development but were concerned with the project's location which would cover their fishing ground hence affecting the marine resources and depletion of their income for not being able to reap the prawn and the fish that they used to catch in the area. For that they seek compensation and that locals should be given priority in employment as well as provide proper housing.

Whilst other views could be categorised as having positive undertones there are still others that commented on the running of the stakeholder engagements. The latter commented that the briefings given were more into informing about the benefits of the project and not so much on the shortcomings which was felt to be imbalanced. Also, there were others who thought putting ballot boxes at their respective Fishermen Unit centre would facilitate voting from all the fishermen in the area in order to get a solid idea of the level of acceptability of the project, in general and of the area, in particular.

**Table 11** Other views regarding the proposed reclamation project

<b>Views</b>	<b>Restudy</b>
Do not reject development but the location is not suitable, affecting fishermen's income and marine resources	35.0
Appropriate compensation, job opportunities to locals and housing for fishermen	28.5
To locate elsewhere or reclaim one island first and see how beneficial it is	7.5
Good for the future, future generation will have good public transport facilities	8.5
Up to state government to develop for the good of the economy and future	5.0
More benefits were highlighted but not disadvantages, should be balance	7.0
Provide a ballot box at each Fishermen Unit for all fishermen to vote for or against the proposed project	5.0
Immediate implementation of the project to see the outcome or progress	3.5
<b>Total</b>	<b>100.0</b>

Source: Field data, June 2016

Finally, the fishermen were asked what type of development they would desire most. Almost half i.e. 44% preferred to remain as where they are now but with improved quality of life and development of the fishing communities (*Table 12*). For those (14.5%) who feared that their settlement would be taken over by private developer (the case in point being Kampung Permatang Tepi Laut), seek assurance that it would not materialise. With another 9% wishing that the marine resources were not disturbed and they be left pursuing their fishing activities and remaining 24.5% who responded were akin to see and reap the benefits if not for themselves for their sons, family members or the future generations. The last 8% seemed to have no idea what kind of development that they need most.

**Table 12** Perceived type of development most desired by the fishermen

<b>Views</b>	<b>Restudy</b>
Retain the present situation with improved quality of life or development for the fisher folks	44.0
Ensure that fishing settlement not to be taken over by private developer	14.5
Development, progress and benefits to fishermen and providing settlement as projected by the proposed project	13.0
Future generation to get benefit and enjoy improvement in public transport	7.5
Do not disturb marine ecosystem and fishermen	9.0
To turn into tourists area and upgrade each of the fishing village	2.0
Employment opportunities to future generation and build low-cost or affordable housing for fishing communities	2.0
Do not know	8.0
<b>Total</b>	<b>100.0</b>

Source: Field data, June 2016

## 5.0 SUMMARY AND CONCLUSION

Whilst the social profile of the fishermen remains similar for the two studies i.e. the initial study for the DEIA report and the restudy after they had taken part in stakeholder engagements conducted by the SRS Consortium Sdn. Bhd. or the Project-Delivery-Partner, their perceptions towards the respective impacts of the project differ slightly with less severe perceptions coming from the respondents in the second survey who had gone through the stakeholder engagement sessions with the PDP staff. However, the latter i.e. the less severe perception of the impacts seemed to influence the overall perception of the combined impacts of the proposed project.

The initial study saw the fishermen were almost consensus (94.5%) in their opinion that the proposed project would bring about more disadvantages than advantages to the local area, when they were asked how would they assessed the overall impacts of the proposed project to their social environment. However, in the restudy the percentage saying it would bring more negative impacts dropped from 94.5 to 74.5% with a corresponding increase in those saying it would bring more positive impacts from 5.5 to 25.5%.

Although only one-quarter of the fishermen having positive perception towards the overall impacts of the proposed project, the resurvey data revealed that 40.5% agreed to its implementation. The extra 15 percentage points could come from none other than the group who perceived more negative impacts would occur, may be to them as of now and the near future, but which at the same time may prove to be positive to others, hence, the choice to support the proposed project.

Likewise, although approximately three-quarters of the fishermen felt the proposed project will bring about more negative impacts only 49.5% disagreed to its implementation. The latter saw a decrease of 45 percentage points from 94.5% who disagreed in the initial study. One possible reason for this lower rejection and subsequently higher support given could be due to the fishermen being more informed after taking part in the stakeholder engagements which could result in them being more open-minded and able to give consideration about the proposed project from a wider perspective.

Their main reasons for support seemed conditional i.e. if appropriate compensation and housing or settlement, are given. Their main contention is that the proposed project area covers their main prawn and fishing area for inshore fishermen and the subsequent shrinkage of fishing ground and loss in income and livelihood.

The restudy shows that whilst the fishermen group remains the main group with high rejection level towards the idea of the proposed project, the percentage of those who rejected seem to decrease to almost half from the percentage established in the initial study and a subsequent increase in support i.e. almost a ten-fold increase from 3.5 to 40.5%. Based on statistics alone it is apparent that the stakeholder engagements do play a role in exposing and informing the target group to make them more informed, enabling them to make independent decision or decisions.

## Appendix 1

List of stakeholders' engagement conducted by SRS Consortium from March-May 2016

No.	Date	Venue	Target Group	Attendance
1	5-Mar-16	PPSN	Fishermen	3
2	5-Mar-16	PPSN	Fishermen	13
3	10-Mar-16	Teluk Kumbar, Elyana Café	Fishermen	21
4	10-Mar-16	Unit Nelayan Permatang Tepi Laut	Fishermen	18
5	16-Mar-16	Gertak Sanggul	Fishermen	24
6	17-Mar-16	Gertak Sanggul	Fishermen	19
7	17-Mar-16	Teluk Kumbar	Fishermen	42
8	18-Mar-16	Sungai Batu	Fishermen	17
9	23-Mar-16	Dewan JKkk Teluk Kumbar	Fishermen	13
10	25-Mar-16	Dewan Masjid Makbul, Teluk Kumbar	Fishermen	37
11	1-Apr-16	Dewan JKkk Gertak Sanggul	Fishermen	15
12	3-Apr-16	Teluk Kumbar	Fishermen	25
13	12-Apr-16	Dewan JKkk Gertak Sanggul	Fishermen	22
14	13-Apr-16	Elyana Café, Teluk Kumbar	Fishermen	14
15	17-Apr-16	Dewan Unit Nelayan, Permatang Tepi Laut	Fishermen	100
16	20-Apr-16	Sungai Batu	Fishermen	11
17	22-Apr-16	Teluk Kumbar	Fishermen	47
18	25-Apr-16	Sungai Batu	Fishermen	15
19	25-Apr-16	Permatang Tepi Laut	Fishermen	6
20	5-May-16	PPSN	Fishermen	14
21	5-May-16	Dewan JKkk Gertak Sanggul	Fishermen	18
22	5-May-16	PPSN	Fishermen	9
23	6-May-16	Elyana Café, Teluk Kumbar	Fishermen	22
24	13-May-16	PPSN, Permatang Damar Laut	Fishermen	8
25	14-May-16	Teluk Kumbar	Fishermen	5
26	16-May-16	PPSN	Fishermen	1
27	19-May-16	Café Norsiah, Sungai Batu	Fishermen	9
28	19-May-16	Sungai Batu	Fishermen	7
29	20-May-16	Teluk Kumbar	Fishermen	24
30	21-May-16	Masjid Jamek Kampung Binjai	Fishermen	13
31	22-May-16	Sungai Batu	Fishermen	6
32	23-May-16	Teluk Kumbar	Fishermen	6
33	23-May-16	PPSN	Fishermen	1
34	24-May-16	Dewan JKkk Gertak Sanggul	Fishermen	7
35	24-May-16	PPSN	Fishermen	4

Socio-economic Study of Fishing Communities in the Proposed  
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<b>No.</b>	<b>Date</b>	<b>Venue</b>	<b>Target Group</b>	<b>Attendance</b>
36	25-May-16	PPSN	Fishermen	5
37	25-May-16	Sungai Batu	Fishermen	3
38	26-May-16	PPSN	Fishermen	5
39	27-May-16	PPSN	Fishermen	17
40	27-May-16	Sungai Batu	Fishermen	7
41	30-May-16	PPSN	Fishermen	5
42	30-May-16	Dewan Unit Nelayan Permatang Tepi Laut	Fishermen	14
43	31-May-16	PPSN	Fishermen	5
			<b>Total</b>	<b>677</b>







8. **KOS TETAP** tangkapan **NELAYAN** (jika milik atau dipertanggung jawab kpd anda sendiri)

<i>Item</i>	<i>Unit</i>	<i>Harga (RM/bulan)</i>	<i>Komen</i>
Ansuran Bot			
Ansuran Enjin			
Jaring			
Lesen			

9. **KOS BERUBAH/OPERASI** tangkapan **NELAYAN**

<i>Item</i>	<i>Unit</i>	<i>Harga (RM/trip)</i>	<i>Komen</i>
Bot (jika sewa)			
Enjin (jika sewa)			
Peyelenggaraan Enjin			
Penyelenggaraan Pukat			
Diesel			
Petrol			
Minyak 2T			
Buruh/pekerja			
Makanan			
Ice/air batu			
Lain-2 nyatakan.....			

10. Insentif, subsidi, kebajikan dan sokongan yang diterima daripada pelbagai badan dan agensi (nelayan dan awak-awak)

<i>Jenis</i>	<i>Nilai (RM)</i>	<i>Komen dan Penilaian</i>
Elaun bulanan: 1. Pemilik 2. Awak-awak		
Subsidi petrol (berdasarkan kapasiti enjin)		
Subsidi diesel		

(berdasarkan kapasiti enjin)		
Subsidi tangkapan		
Koperasi (Persatuan Nelayan)		
Takaful		
Pinjaman vessel dan enjin		
Program sosial dan kebajikan Nyatakan.....		

### **PROFIL PENTERNAKAN IKAN DALAM SANGKAR**

- Nombor permit Sistem Kultur Laut (SKL): .....
- Lokasi penternakan
  - .....
  - .....
  - .....
- Profil penternakan ikan dalam sangkar.

<i>Item</i>	<i>Spesis 1</i>	<i>Spesis 2</i>	<i>Spesis 3</i>
1. Asuhan (nursery)			
Bilangan sangkar			
Saiz sangkar (m <sup>2</sup> )			
Kadar kepadatan ikan (ind./m <sup>2</sup> )			
2. Pembesaran (Grow out)			
Bilangan sangkar			
Saiz sangkar (m <sup>2</sup> )			
Kadar kepadatan ikan (ind./m <sup>2</sup> )			

4. Jangkamasa semusim penternakan ikan mengikut spesies

<i>Sangkar spesies ikan</i>	<i>Tempoh masa ternakan (bulan)</i>	<i>Komen</i>

5. Jumlah pengeluaran penternakan sangkar setahun (2015)

<i>Spesies</i>	<i>Pasaran</i>	<i>Bilangan sangkar</i>	<i>Saiz Pasaran (gram/ekor)</i>	<i>Jumlah Berat Ikan yang dijual</i>	<i>Harga ikan (RM/kg)</i>	<i>Jumlah pengeluaran (RM/tahun)</i>

6. **PELABURAN TETAP** Penternak ikan

<i>Item</i>	<i>Unit</i>	<i>Harga (RM/unit)</i>	<i>Komen</i>
Kotak simpanan ikan			
Kenderaan			
Bot			
Sangkar			
Tong			
Lampu & elektrik sistem			
Generator			
Pam			
Lain-lain (nyatakan.....)			

7. **KOS TETAP** penternakan ikan dalam sangkar

<i>Item</i>	<i>Unit (bilangan)</i>	<i>Harga @Nilai (RM/sebulan)</i>	<i>Komen</i>
Lesen			
Jaring			
Insurans			
Ansuran pinjaman aset			
Pekerja			
Lain-lain (nyatakan.....)			

8. **KOS BERUBAH/OPERASI** penternakan ikan dalam sangkar

<i>Item</i>	<i>Unit</i>	<i>Kos (RM/unit)</i>	<i>Komen</i>
<b>Benih ikan (cm):</b>			
1.			
2.			
3.			
<b>Makanan ikan (kg/day)</b>			
1. Ikan baja Kadar pemberian makanan kepada ikan/ hari: ..... kg			
2. campuran ikan baja dan bahan lain (nyatakan:.....) Kadar campuran (per kg): (..... Ikan baja: ..... Grobest) Kadar pemberian makanan kepada ikan/ hari: ..... kg			
3. Makanan rumusan (pallet) Jenama:..... Kadar pemberian makanan kepada ikan/ hari: ..... kg			
Vitamin & perubatan Jenama:..... Dos: ..... Kekerapan: .....			
Minyak (petrol/diesel)			

Buruh/pekerja			
Makanan pekerja			
Penyelenggaraan jaring			
Penyelenggaraan petak sangkar			
Lain-lain (nyatakan.....)			

9. Insentif, subsidi, kebajikan dan sokongan yang diterima daripada pelbagai badan dan agensi

<i>Jenis</i>	<i>Nilai (RM)</i>	<i>Komen dan Penilaian</i>
Elaun bulanan		
Subsidi petrol		
Subsidi diesel		
Subsidi Pengeluaran/ sangkar		
Koperasi (Persatuan Nelayan)		
Takaful		
Pinjaman untuk bina premis/ladang ternakan		
Program social dan kebajikan Nyatakan.....		
Lain-lain (nyatakan.....)		

10. Tempoh matang ternakan

<i>Item</i>	<i>Spesies</i>		
	<i>1</i>	<i>2</i>	<i>3</i>
Saiz tuaian ikan (kg/fish)			
Tawaran harga pasaran (RM/kg)			
Hasil Pengeluaran ternakan (tan/tahun)			

11. Profil kesihatan ternakan ikan

- Penyakit: .....
- Jenis ikan yang dijangkiti: .....
- Kaedah rawatan: .....

## **PROFIL PENGELUARAN BENIH UDANG**

- Nama Syarikat: .....
- Lokasi penternakan:
  - .....
  - .....
- Profil pengeluaran benih udang.

<i>Item</i>	<i>Spesis 1</i>	<i>Spesis 2</i>
1. PL & naupli		
Bilangan tangki		
Saiz tangki (m <sup>2</sup> )		
Kadar kepadatan udang (ind./m <sup>2</sup> )		
2. Induk		
Bilangan tangki		
Saiz tangki (m <sup>2</sup> )		
Kadar kepadatan udang (ind./m <sup>2</sup> )		
3. Tangki artemia		
4. Tangki plankton		
5. Reservoir tank		

4. Jangkamasa pengeluaran benih dan induk udang

<i>Udang</i>	<i>Tempoh masa ternakan (bulan)</i>	<i>Komen</i>
Naupli		
PL		
Induk		

5. Jumlah pengeluaran benih dan induk udang setahun (2015)

Udang	Pasaran	Saiz Pasaran	Bilangan benih/induk (bil./tahun)	Harga benih/ induk udang (RM)	Jumlah pengeluaran (RM/tahun)
Naupli					
PL					
Induk					

6. **PELABURAN TETAP** pengeluaran benih udang

Item	Unit	Harga (RM/unit)	Komen
Tangki pengeluaran			
Tangki artemia			
Tangki plankton			
Reservoir tank			
Kenderaan			
Generator			
Pam			
Lain-lain (nyatakan.....)			

7. **KOS TETAP** pengeluaran benih udang

Item	Unit	Harga @Nilai (RM/sebulan)	Komen
Lesen			
Pekerja			
Sewa tapak hatchery			
Sewa kenderaan (lori)			
Ansuran pinjaman aset			
Lain-lain (nyatakan.....)			

8. **KOS BERUBAH/OPERASI** penternakan ikan dalam sangkar

Item	Unit	Kos (RM/unit)	Komen
Makanan udang (kg/day)			
1. Artemia Kadar pemberian makanan kepada udang/ hari: ..... kg			
2. Plankton Kadar pemberian makanan kepada udang/ hari: ..... kg			
3. Makanan rumusan (pallet) Jenama:..... Kadar pemberian makanan kepada ikan/ hari: ..... kg			
Vitamin & perubatan Jenama:..... Dos: ..... Kekerapan: .....			
Air			
Elektrik			
Lain-lain (nyatakan.....)			

9. Insentif, subsidi, kebajikan dan sokongan yang diterima daripada pelbagai badan dan agensi

Jenis	Nilai (RM)	Komen dan Penilaian
Subsidi Pengeluaran		
Takaful		
Pinjaman untuk bina premis		
Program social dan kebajikan Nyatakan.....		
Lain-lain (nyatakan.....)		



3. Kadar jualan ikan mengikut musim

Musim	Bulan-bulan terlibat	Bilangan jualan/bulan

4. **PELABURAN TETAP** Peniaga ikan

Item	Unit	Harga (RM/unit)	Komen
Premis			
Kotak simpanan ikan			
Kenderaan			
Peti sejuk			
Lain-lain (nyatakan.....)			

5. **KOS TETAP** Peniaga ikan

Item	Unit	Harga (RM/unit)	Komen
Sewa Premis			
Insurans			
Kenderaan			
Gaji pekerja tetap			

6. **KOS BERUBAH/OPERASI** Peniaga ikan

Item	Unit	Harga (RM/bulan)	Komen
Utiliti			
Cukai			
Buruh/pekerja kontrak			
Ice/air batu			
Lain-lain (nyatakan.....)			

**PENGENDALI BOT SEWA**

1. Nama pengkalan nelayan: .....

2. Operasi:

Item	Hari Bekerja	Hari Minggu
Kadar sewa (per jam@hari@pemancing)		
1. Sampan tidak berenjin		
2. Bot enjin sangkut		
3. Bot enjin dalam		
Bilangan bot beroperasi:		
1. Sampan tidak berenjin		
2. Bot enjin sangkut		
3. Bot enjin dalam		
Bilangan pemancing/bot		
1. Sampan tidak berenjin		
2. Bot enjin sangkut		
3. Bot enjin dalam		
Bilangan joran/ pemancing		

3. Lokasi memancing.....

.....

4. Jenis-jenis umpan yang digunakan dan harga (RM)

.....

5. Jenis-jenis ikan yang biasa ditangkap

.....

.....

.....

6. Purata tangkapan

a. kg/bot .....

b. kg/pemancing .....

7. Purata bilangan pemancing (minggu@bulan@tahun)

<i>Item</i>	<i>Hari Bekerja</i>	<i>Hari Minggu</i>
Jantina		
Lelaki		
Perempuan		
Umur		
<12 tahun		
<18 tahun		
<40 tahun		
>40 tahun		
Bangsa		
Melayu		
China		
India		
Lain-lain		
Asal		
Penduduk tempatan		
Luar kawasan		

8. **PELABURAN TETAP** Pengusahaan bot

<i>Item</i>	<i>Unit</i>	<i>Harga (RM/unit)</i>	<i>Komen</i>
Bot			
Enjin			
Lesen			

9. **KOS TETAP** Pengusaha bot

<i>Item</i>	<i>Unit</i>	<i>Harga (RM/bulan)</i>	<i>Komen</i>
Ansuran Bot			
Ansuran Enjin			
Jaket keselamatan			
Tong simpanan barang			
Tong simpanan ikan			
Lain-lain (nyatakan.....)			

10. **KOS BERUBAH/OPERASI** Pengusaha bot

<i>Item</i>	<i>Unit</i>	<i>Harga (RM/trip)</i>	<i>Komen</i>
Bot (jika sewa)			
Enjin (jika sewa)			
Peyelenggaraan Enjin			
Penyelenggaraan bot			
Diesel			
Petrol			
Lain-lain (nyatakan.....)			

**BAHAGIAN III:**

a) Adakah projek ini akan menimbulkan **isu alam sekitar** kepada anda?

\*Sangat tidak bersetuju 1      2      3      4      5 sangat bersetuju

Bil.	Jenis kesan Alam Sekitar	Tahap kepuasan (1-----5)	Peratusan kesan (%)	Anggaran kos terlibat RM/sekali
1.	Kehilangan kawasan penangkapan ikan			
2.	Perubahan dalam amalan dan peralatan penangkapan ikan			
3.	Perubahan dalam jenis dan kualiti tangkapan			
4.	Peningkatan persaingan di kawasan penangkapan lain			
5.	Menghadkan laluan bot			
6.	Pemendapan lumpur/tanah			
7.	Kehilangan habitat hidupan laut			
8.	Kehilangan kawasan rekreasi memancing			
9.	Kehilangan nilai estetik			

b) Cadangan penambah-baikkan bagi mengurangkan bebanan/kesan

\*Sangat tidak bersetuju 1      2      3      4      5 sangat bersetuju

Bil.	Cadangan	Tahap kepuasan (1-----5)
1.	Bantuan menaiktaraf peralatan penangkapan ikan dan kapasiti enjin	
2.	Menaiktaraf pengkalan perikanan sedia ada	
3.	Pembinaan pengkalan nelayan baru di pulau yang ditebusguna	
4.	Menaiktaraf bot sebagai bot pelancongan dan mendapatkan lesen	
5.	Mendapatkan latihan bagi membawa pelancong.	
6.	Memperuntukan tanah yang ditebusguna kepada persatuan nelayan untuk tujuan ekonomi	
7.	Meletakkan tukun tiruan di kawasan yang bersesuaian	
8.	Menyediakan kemudahan pinjaman dan latihan teknikal untuk menceburi bidang keusahawanan	
9.	.....	



## KAJIAN PENILAIAN EKONOMI PERIKANAN REKREASI DI SEPANJANG PESISIRAN PANTAI SELATAN PULAU PINANG

Soal selidik ini disediakan untuk mengumpul **maklumat kajian penilaian ekonomi** ke atas perikanan rekreasi di pesisiran pantai selatan Pulau Pinang. Penyertaan anda dalam bancian ini adalah penting untuk memastikan anda, keluarga dan masyarakat setempat tidak mengalami kesukaran akibat dari projek ini. Semua maklumat yang dibekalkan adalah sulit dan tidak akan dihebahkan tanpa kebenaran. Terima kasih atas kerjasama yang diberikan.

Nama penemuduga:					
Di mana bancian dilakukan					
Jenis Pegunjung ditemuduga					
Alamat Pengunjung / Pemancing					
Tarikh:		Masa mula:		Masa tamat:	
<b>A: PERSEPSI PERIKANAN REKREASI</b>					

A1. Berapa kali anda berkunjung ke pesisir pantai di selatan Pulau Pinang untuk berekreasi\* dalam setahun?

Tahun	Bilangan kali
2014	
2015	

\*Berekreasi termasuk berseronok di pesisir pantai, memancing dan menangkap hasil laut

A2. Jangka masa perjalanan dari rumah anda ke tapak rekreasi ini (tidak termasuk masa berhenti):  
\_\_\_ jam

A3. Berapa jarak daripada rumah anda ke tapak rekreasi ? \_\_\_\_\_ km

A4. Berapa lama anda dijangka berada di tapak rekreasi ini? \_\_\_ jam

A5. Bagaimanakah anda datang ke tapak rekreasi ini?

Kereta/van	
Motorsikal	
Teksi	
Bas Pelancongan	
Bas Sekolah	
Lain-lain (nyatakan.....)	

A6. Tujuan anda datang ke tapak rekreasi ini?

Menikmati keindahan pantai dan laut	
Memancing/menjala	
Bersiar-siar menaiki bot di sepanjang pesisiran pantai	
Lain-lain (nyatakan.....)	

A7. Bilangan ahli keluarga/ rakan yang dibawa bersama semasa lawatan ini

<i>Ahli di bawah tanggungan anda semasa lawatan</i>	<i>Bilangan</i>
Ahli keluarga	
Rakan	

A8. Perbelanjaan yang anda tanggung semasa kunjungan ke tapak rekreasi ini

<i>Perbelanjaan seluruh trip (pergi balik)</i>	<i>Nilai (RM) bagi anda saja</i>
Persediaan untuk kunjungan termasuk semasa perjalanan (makanan sarapan pagi, snek, dll)	
Pengangkutan (sewa kereta atau servis kereta, tambang bas)	
Pengangkutan (minyak)	
Pengangkutan (tol)	
Penginapan	
Makanan ketika di tapak rekreasi ini	
Umpun pancing (cacing, umpun-umpun, ikan, udang, sotong, dll-nyatakan.....)	
Lain-lain (nyatakan.....)	

A9. Peralatan penangkapan ikan yang digunakan

<i>Peralatan penangkapan ikan</i>	<i>Bilangan</i>	<i>RM/unit</i>
Joran		
Gewang (umpan tiruan)		
Jala		
Binto		
Lain-lain (nyatakan.....)		

A10. Perkhidmatan perikanan rekreasi yang digunakan (sewa)

<i>Peralatan</i>	<i>Unit</i>	<i>Kos (RM)</i>
Bot		
Jaring/jala/binto		
Joran		
Lain-lain (nyatakan.....)		

A11. Jenis umpan yang digunakan dan harga

<i>Jenis umpan</i>	<i>Kuantiti (unit....)</i>	<i>Harga (RM/unit)</i>
Cacing		
Umpun-umpun		
Ikan		

Udang		
Sotong		
Lain-lain (nyatakan.....)		

A12. Lokasi memancing/ menjala

- a. ....
- b. ....
- c. ....

A13. Masa memancing

<i>Hari</i>	<i>Waktu</i>		
	<i>Pagi</i>	<i>Petang</i>	<i>Malam</i>
Hari bekerja			
Hujung minggu/ cuti umum			

A14. Hasil tangkapan yang diperolehi/ trip? ....

<i>Jenis tangkapan (spesis)</i>	<i>Berat tangkapan (kg/trip)</i>	<i>Pasaran (di mana jika dijual)</i>	<i>Harga (RM/kg)</i>	<i>Nilaian (RM/trip)</i>

A15. Jika anda tidak berkunjung ke tapak rekreasi ini, di mana tempat kunjungan rekreasi alternatif.....

A16. Jangka masa perjalanan dari rumah anda ke tapak rekreasi alternatif ini (tidak termasuk masa berhenti): \_\_\_\_\_ jam

A17. Berapa lama anda lazim berada di tapak rekreasi alternatif ini ? \_\_\_\_ jam

A18. Berapa jarak daripada rumah anda ke tapak rekreasi alternatif ini ? \_\_\_\_\_ km

**A19. SOALAN MENGENAI NILAI KEPUASAN PERKHIDMATAN PERIKANAN REKREASI DITERIMA DI PESISIRAN PANTAI SELATAN PULAU PINANG**

Sepanjang pesisiran pantai di selatan Pulau Pinang merupakan tapak kunjungan berekreasi kepada penduduk sekeliling dan pelawat samada untuk memancing di tepi pantai, menaiki bot, berkelah, bersiar-siar dan menikmati keindahan pantai dan menjalankan aktiviti-aktiviti rekreasi yang lain. Tapak rekreasi ini banyak menyumbang kepada kepuasan pengunjung yang boleh mewujudkan kesegaran minda dan fisika mereka.

Untuk memastikan mutu perkhidmatan perikanan rekreasi ini dapat dikekalkan, tambahan bajet pengurusan pesisiran pantai selatan Pulau Pinang amat diperlukan. Satu usaha mewujudkan Dana Konservasi dicadangkan untuk melaksanakan langkah-langkah konservasi yang relevan. Dana ini akan dikelolakan oleh Persatuan Alam Sekitar yang di peretujui oleh kerajaan. Di antara kegunaan dana ini termasuklah pemantauan terhadap salah guna aktiviti perikanan rekreasi seperti menuba atau mengebom ikan, serta memastikan kualiti air laut sentiasa bersih dan tidak disekat oleh sampah dan rintangan lain. Oleh yang demikian, adakah anda sanggup membuat sumbangan kepada Tabung Konservasi ini yang boleh mengekalkan peluang berekreasi anda?

- i. Ya                      ii. Tidak

a) Bagi mengetahui nilai kepuasan daripada kunjungan ke tapak rekreasi **sedia ada** ini, berapakah sumbangan yang dirasakan munasabah dan berpatutan (**RM/tahun**)?

<i>Kesanggupan menyumbang RM/tahun</i>	<i>Sila tanda ( ✓ )</i>
Lain-lain iaitu +RM....	
+RM20.00	
+RM15.00	
+RM10.00	
+ RM7.50	
+ RM5	
+ RM4	
+ RM3	
+ RM2	
+ RM1	

**B.PERSEPSI MENGENAI KESAN TERHADAP CADANGAN PENEBUSGUNAAN TANAH LAUT DI SELATAN PULAU PINANG**

B1. Cadangan projek penebusgunaan tanah laut di selatan Pulau Pinang berkemungkinan mengurangkan peluang pemancing/ penjala menjalankan aktiviti memancing/ menjala. Ia berpotensi mengurangkan bilangan dan kualiti tangkapan sumber perikanan serta menjejaskan kepuasan memancing di kawasan pesisiran pantai ini. Adakah akan berlaku perubahan kunjungan anda ke tapak-tapak rekreasi ini?

<i>Semasa</i>	<i>Perubahan Kunjungan?</i>	<i>Berapa kali bertambah vs berkurangan dalam setahun?</i>
Pembinaan Projek (2-3 tahun)	Bertambah vs Berkurangan	
Projek berjalan selepas pembinaan (lepas 3 tahun)	Bertambah vs Berkurangan	

B2. Adakah projek ini akan menimbulkan isu alam sekitar kepada anda?

*\*Sangat tidak bersetuju 1 2 3 4 5 sangat bersetuju*

<i>Bil</i>	<i>Jenis kesan Alam Sekitar</i>	<i>Tahap kepuasan (1-----5)</i>	<i>Peratusan kesan (%)</i>	<i>Penerangan lanjut</i>
1.	Kehilangan kawasan rekreasi memancing			
2.	Perubahan dalam jenis dan kualiti tangkapan			
3.	Menghadkan laluan bot ke tempat rekreasi memancing di laut			
4.	Pemendapan lumpur/ tanah			
5.	Kehilangan habitat hidupan laut			
6.	Kehilangan nilai astetik			

**C. LATARBELAKANG RESPONDEN**

C1. Umur responden \_\_\_\_\_ tahun

C2. Sila rekodkan jantina responden:

Lelaki	1
Perempuan	2

C3. Sila rekodkan bangsa atau kerakyatan responden:

Melayu	1
Cina	2
India	3
Peribumi	4
Lain bangsa Malaysia (nyatakan.....)	5
Warganegara asing (nyatakan.....)	6

C4. Asal

- Jika penduduk tempatan dari mana .....
- Jika dari luar kawasan dari mana.....

C5. Apakah tahap pendidikan tertinggi yang anda perolehi? (Bulatkan satu jawapan)

Tidak Pernah Bersekolah	1
Sekolah Rendah	2
Sekolah Menengah (Tingkatan 3)	3
Tingkatan 5	4
Tingkatan Enam	5
Sijil/ Diploma	6
Ijazah	7
Ijazah Sarjana Masters atau PhD	8
Lain2 nyatakan.....	9

C6. Berapakah jumlah pendapatan bulanan isirumah anda?

Pendapatan Bulanan	RM/ bulan
< RM500	
RM501-1,000	
RM1,001-2,000	
RM2001-3,500	
RM3,501-5,000	
RM5,001-7,500	
RM7,501-10,000	
>RM10,000	

C7. Lain-lain komen yang berkaitan Tapak rekreasi

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