

IPSN Location Survey (2018/2019)

Why collect this data?

For IPSN to answer bigger national, regional or ocean basin scale questions related to the use of seagrass meadows for gleaning and other fisheries activities we need detailed location information covering all sites sampled. This data needs to be comparable between locations to allow us to quantitatively examine the socio-economic, ecological and environmental characteristics. For example, we expect to have locations within IPSN ranging from large developed cities to small fishing communities. As there will be many interacting factors influencing the fisheries, information is needed on all characteristics that can be readily assessed. This survey and check list sets out these data requirements.

Your location

The selection of your location is key to the IPSN study. If you already have good knowledge of a suitable location, that meets the criteria outlined below, we suggest you use it. If you do not yet have a location in mind, we recommend you visit potential areas before making a selection. If needed, please consult with the IPSN team to help you choose the location.

Within IPSN a location is defined as a 500-2000m coastal stretch with extensive seagrass meadows and an adjacent human settlement (ranging from a small rural village to a large city). At least some of the seagrass areas should be accessible by foot: having intertidal or shallow subtidal (wading depth) sections. The location could be one of many types of geographical area, such as an entire bay, a proportion of a bay, a section of a lagoon, or a section of straight, exposed coastline.

Ideally there should be some marine resource collection activities from seagrass meadows at the location (fish, invertebrates, etc.). If you believe no individuals collect marine resources from the seagrass meadows, try to confirm this with local key informants (e.g. local leaders, fishers, marine managers, etc.). If there is no seagrass-associated resource collection, the location can still be included in the IPSN survey.

In order to complete the location survey you may need to meet with long-term residents of the location, visit a local source of statistics (e.g. the local major's office) or do local visits (see steps 1 and 2 below). This task may take a period of months before surveys begin to gather all the required location information.

* Required

1. Email address *

Check list

2. After you have selected the location, you need to complete the following five steps before conducting any field activities: *

Check all that apply.

1. Meet with any recognised (formal or informal) community leaders (for example, a village head, mayor, etc.) to explain the goal of the project, what type of surveys you will do, and when the surveys will be done.
2. Meet with leaders of local fishing organizations and explain the goal of the project, what type of surveys you will do, and when the surveys will be done. [Note: 1 and 2 above can also represent key informants who may be able to help with the location survey data.]
3. Get the required permission(s) to conduct the ecological surveys in the area (could be formal and/or informal permissions)
4. Get the required permission(s) to interview local fisherfolk and gleaners at the location.
5. Carefully assess any risks involved with conducting the ecological and fisheries landings surveys, and make a written plan on how to avoid risks (danger or harm) to you or anyone else. [Note: risks to human health can be nature-related (for example, strong tides, poisonous or otherwise dangerous animals, dehydration) or human-related (theft, robbery, abuse, etc.). Risks can also involve individuals, groups or organizations who may try to prevent you from conducting the study.]

Description of location and survey team

3. Name of location/village/town *

4. Region *

5. Country *

6. Location code: give your location a short code that includes the name and country abbreviation e.g. SwanseaUK or PajeZanzibar. *

7. Have you confirmed with indopacificseagrassnetwork@gmail.com that this is a unique code

Mark only one oval.

- Yes
- No

8. GPS coordinates: taken next to the sea in a central position along the coastline of your location *

9. From your GPS coordinate position take four digital photographs a out to sea, b left along the coast c right along the coast and d inland. Name these according to your location code e.g:a. SwanseaUKsea b.SwanseaUKbeachleft c.SwanseaUKbeachright d.SwanseaUKinland *

Check all that apply.

- Out to sea
 Beach left
 Beach Right
 Inland

10. Upload photos

Files submitted:

11. Which of the following best describes your location *

Mark only one oval.

- Village
 Town
 City
 Unpopulated area
 Other: _____

12. How far in Km (by road) is it to a bigger town or city? *

13. How many people live in the nearest bigger town or city? *

14. List the members of your research team (full names) *

15. Upload a photo of your team with the photo named according to your location code (e.g: SwanseaUKteam)

Files submitted:

16. What are the local climatic conditions?
Please follow additional guidelines for collecting online data about your site *

17. What is the tidal pattern at your site? *

Mark only one oval.

- Two low tides each day (both the same height)
- Two low tides each day (one smaller than the other)
- One low tide each day

18. What is the tidal range at your site (in m)?

Socio-economic context and infrastructure

19. Approximately how many people live in your location? *

20. What is the current population density in the area (individuals per square kilometre)? *

21. Approximately how many people lived in your location in 2010? *

22. Is there local/public transport available (e.g. bus/taxi/minibus/bike) at your location and if so, how regular is this? *

Mark only one oval.

- No public transport
- On demand
- Hourly
- Daily
- Weekly
- Less than weekly
- Other: _____

23. What proportion of households have electricity? *

Mark only one oval.

- <25%
- 25-50%
- 50-75%
- >75%

24. For how many hours does the location have power each day? **Mark only one oval.*

- <6 hours
- 6-12 hours
- 12-18 hours
- 18-24 hours

25. How frequently does power fail (blackouts)? **Mark only one oval.*

- Daily
- Weekly
- Monthly
- Occasionally
- Rarely/Never

26. Do the fish markets, fish traders and/or fish mongers use fridges or freezers to store seafood? **Mark only one oval.*

- All
- Most
- Some
- None

27. Do households use fridges or freezers to store food? **Mark only one oval.*

- Yes
- No
- some

28. If fridges/freezers are not available, how is seafood stored at the location? *

29. Is a mobile phone network available? **Mark only one oval.*

- Everywhere
- Most places
- Some places
- None

30. Approximately what proportion of people have a mobile phone? *

Mark only one oval.

- <25%
- 25-50%
- 50-75%
- >75%

31. Is internet access available to individuals? *

Mark only one oval.

- To all
- To most
- To some
- To none

32. How do people access the internet at this location? (If needed, choose several) *

Check all that apply.

- Own computer
- Smartphone
- Internet cafe
- Other: _____

33. Where does the fresh water supply come from? *

Check all that apply.

- Public wells
- Private wells
- Piped water
- Truck delivery
- Other: _____

34. Is there enough fresh water for everyone at the location? *

Mark only one oval.

- Always
- Most of the time
- Sometimes
- Never

35. Is fresh water supply interrupted (stopped)? *

Mark only one oval.

- Daily
- Weely
- Monthly
- Occasionally
- Never

36. What types of school are present? (Check all relevant) *

Check all that apply.

- Pre-school (up to 5 years)
- Primary (5-12 years)
- Secondary (12-16 years)
- Higher (16-18 years)
- Adult learning (>18 years)

37. Until what age do people here generally study in school? *

Mark only one oval.

- <12 years
- 12-14 years
- 14-16 years
- 16-18 years

38. What proportion of children attend university? *

Mark only one oval.

- <5%
- 5-25%
- 25-50%
- 50-75%
- >75%

39. Is there a health clinic or a hospital at your location? *

Mark only one oval.

- Yes
- No

40. Is there an ambulance service at your location? *

Mark only one oval.

- Yes
- No

41. Is there aquaculture/mariculture present in your location? Please describe *

42. What sort of agriculture takes place in your location? Please describe *

Environmental health

43. Is there a sewage removal system at your location? *

Mark only one oval.

- All households connected
- Most households connected
- Some households connected
- None

44. Is there sewage treatment at your location? *

Mark only one oval.

- Yes
- No

45. How is sewage treated (e.g. municipal treatment (what level), septic tanks, compost toilets etc)? *

46. Is there waste (household refuse/garbage) collection at your location? *

Mark only one oval.

- None
- Daily
- Weekly
- Monthly
- Other: _____

47. Are there recycling facilities for plastic available at your location? *

Mark only one oval.

- Yes
- No

48. Does freshwater flow into the sea at your location? (Select all relevant) **Check all that apply.*

- Major river
- Small river
- Small stream
- Storm drains
- Other: _____

49. Does the beach have areas of green algal mats? **Mark only one oval.*

- Whole beach
- Many patches
- Some patches (<5)
- None

50. Is the coast eroding at your site? **Mark only one oval.*

- Rapidly (>1m per year)
- A little (<1m per year)
- No erosion

51. How has the coastline changed in the last ten years? *

52. Since 2008 has the coastline been further developed with hotels, marinas or other major constructions? **Mark only one oval.*

- A little (<2 developments)
- Some (2-10 developments)
- Lots (>10 developments)

53. What maritime infrastructure is present at your location? (Choose all those relevant) **Check all that apply.*

- Industrial port
- Small harbour
- Pier/jetty
- Boat moorings
- Sea defence
- Other: _____

Tourism

54. Is tourism important to the economy of your location? *

Mark only one oval.

- Yes
 No
 Somehow

55. What type of tourism is present? (e.g. ecotourism, small scale, large scale, high end etc)
Name all types *

56. What tourist activities occur at your location? (e.g. watersports, treks, guided walks etc)
Please describe *

57. What percentage of the coastline at your location is covered by hotels or buildings? *

Mark only one oval.

- <5%
 5-25%
 25-50%
 50-75%
 >75%

58. What percentage of these hotels or buildings have more than 2 floors? *

Mark only one oval.

- <5%
 5-25%
 25-50%
 50-75%
 >75%

59. What percentage of total population benefits from the tourism and how?

60. Who benefits most (men, women, children) and in what way?

Nature conservation

61. Are there any marine conservation initiatives at your location? (Choose all relevant) *

Check all that apply.

- Marine conservation zones/protected areas
- No-take areas
- Seagrass replanting (restoration)
- Mangrove replanting (restoration)
- Coral reef monitoring
- Seagrass monitoring
- Environmental education
- Beach cleans
- Designated boat anchoring zones
- Other: _____

62. Are there any laws or rules at local or national level that prohibit damage to seagrass? (if yes, please name and describe the legislation) *

63. Are these (seagrass) laws enforced and effective? *

Mark only one oval.

- Yes
- No
- Don't know
- To some extent
- Other: _____

64. Are there any laws or rules at local or national level that prohibit damage to mangrove? (if yes, please name and describe the legislation) *

65. Are these (mangrove) laws enforced and effective? *

Mark only one oval.

- Yes
- No
- Don't know

66. Are there any laws or rules at local or national level that prohibit damage to coral reefs? (if yes, please name and describe the legislation) *

67. Are these (coral reef) laws enforced and effective?

Mark only one oval.

- Yes
- No
- Don't know

Habitat status

68. Has the total area of seagrass changed at your location in the past ten years? *

Mark only one oval.

- Stayed the same
- Decreased
- Increased
- Unknown

69. Has the seagrass abundance (density/shoot count) within meadows changed at your location in the past ten years? *

Mark only one oval.

- Stayed the same
- Decreased
- Increased
- Unknown

70. Has the amount of algae in the seagrass at your location changed in the past ten years? *

Mark only one oval.

- Stayed the same
- Decreased
- Increased
- Unknown

Fisheries

71. **Has the number of fish in the seagrass at your location changed in the past ten years? ***

Mark only one oval.

- Decreased
 Stayed the same
 Increased
 Unknown

72. **Has the number of invertebrates (like gastropods, sea cucumbers, bivalves) in the seagrass at your location changed in the past ten years? ***

Mark only one oval.

- Decreased
 Stayed the same
 Increased
 Unknown

73. **Has the distribution of mangrove changed at your location in the past ten years? ***

Mark only one oval.

- Decreased
 Stayed the same
 Increased

74. **How many people at your location regularly glean (more than one time each month)? ***

75. **How many people at your location regularly fish with nets (more than one time each month)? ***

76. **How many people at your location regularly fish with traps one time each month)?**

77. **Are static gear types used (e.g. fish fences)? If so what type of gear and approximately how many instalments are present across the location? ***

78. **Is there a fishery registration system in place? If so, how many people are registered fishers with the local fisheries department or government? ***

79. Where do local people go to fish? *

Mark only one oval.

- Habitats within the location
- Habitats outside of the location
- Both

80. Do people travel from other places to fish and glean here? *

Mark only one oval.

- Many outside fishers/gleaners (>20 each month)
- Some outside fishers/gleaners (<20 each month)
- Few outside fishers/gleaners (<5 each month)
- No outsiders fish/glean here

81. Where do these visiting fishers come from? (choose all that apply) *

Check all that apply.

- This island
- This region
- This country
- Overseas (where)
- Other: _____

82. Are there any fishery restrictions at your location? (choose all that apply) *

Check all that apply.

- Gear-type restrictions
- Mesh size restrictions
- Closed seasons
- Minimum sizes (of collected animals)
- Licence to fish
- Licence to glean
- Traditional agreements
- Other: _____

83. Do fishers follow the fishery restrictions? (choose one) *

Mark only one oval.

- All do
- Most do
- Some do
- None do

84. Has the abundance of fish landed at your location changed in the past ten years? *

Mark only one oval.

- Decreased
- Stayed the same
- Increased

85. **Has the size (length) of fish landed at your location changed in the past ten years? ***

Mark only one oval.

- Decreased
 Stayed the same
 Increased

86. **Have the species of fish landed at your location changed in the past ten years? ***

Mark only one oval.

- More species
 Fewer species
 Different species caught now
 No change

87. **Has the abundance of invertebrates (e.g. gastropods, Sea cucumbers, bivalves) landed at your location changed since 2008? ***

Mark only one oval.

- Decreased
 Stayed the same
 Increased

88. **Has the size of invertebrates (e.g. gastropods, sea cucumbers, bivalves) landed at your location changed in the past ten years?**

Mark only one oval.

- Decreased
 Stayede the same
 Increased

89. **Have the species of invertebrates (e.g. gastropods, sea cucumbers, bivalves) landed at your location changed in the past ten years?**

Mark only one oval.

- More species
 Fewer species
 Different species landed now
 No change

Thank you for your input!

90. **Is there any other information that you would like to add about your Location, that might be relevant to IPSN.**

A copy of your responses will be emailed to the address you provided

