

Training Workshop on Port Data Collection for Artisanal Fisheries in Suriname



Paramaribo, 19 – 21 October 2022

Preparation of this document

This report documents the delivery of a training workshop on port data collection for artisanal fisheries in Suriname. The workshop was delivered as part of the implementation of the 5-year action plan of the Fishery Improvement Program (FIP) on Corvina *Cynoscion virescens* and Acoupa weakfish *C. acoupa* driftnet and trawl fisheries in Suriname. The FIP is executed in close collaboration with the government of Suriname, and this training was primarily aimed at the fisheries data collectors employed by the Fisheries Department (FD) of the Ministry of Agriculture, Animal Husbandry and Fisheries (MAAHF-LVV). Technical staff of CeDePesca in Suriname (Mr. Tomas Willems and Ms. Alisha Pengel) delivered the training and prepared the current report.

Cover photograph ©T. Willems

Background

The methods for sample-based data collection in the artisanal fishery in Suriname were recently reviewed and updated with assistance from fisheries experts in FAO. The main aim of the revised methodology is to collect more accurate and detailed information of catch and effort in the artisanal fleet that can be used for (1) research and stock assessment purposes and (2) production of fisheries statistics to keep up with (inter)national reporting standards. Apart from landing and effort data, the protocol now includes the collection of socio-economic information. Data collection (sampling) also has to occur more strategically than before in order to calculate the yearly statistics for the artisanal fishery.

New data collection forms were designed for use in the field along with a new way of digitizing them (webform). In order to introduce the new protocol for artisanal fisheries data collection and train the data collectors of the FD in its use, a 3-day workshop was organized by the FIP team in collaboration with the FD.

The workshop took place from the 19th to the 21st of October 2022 and was attended by 88% (21 out of 24) of the data collectors of the FD.

Daily report

Day 1

The first day of the workshop focused on the importance of fisheries data collection, the calculation of fishery statistics, work method for data collection and the use of the new data collection forms.

Presentations/ activities included:

- The importance of fisheries data collection.
- The different types of fisheries data.
- The history of fisheries in Suriname and the different fishing gears and zones.
- How fishery statistics are calculated for the industrial fishery and for the artisanal fishery.
- Work method for data collection.
- Practice filling in the new data collection forms based on fictional landing examples.

Day 2

The second day of the workshop focused on the use of the new data collection forms and the webforms to digitize them, the legal rights and duties of data collectors of the FD, background on the issuing of fishing licenses and what to do when the field situation differs from the theoretical ideal.

Presentations/ activities included:

- Practice filling in the new data collection forms based on fictional landing examples.
- Accessing the webforms with a username and password.
- Background on how fishing licenses are issued and how to discern between a real and a false license (by staff of the licensing department).
- The legal rights and duties of a data collector of the FD.
- Working group and collective discussions about several known field situations and how to handle them (based on the data collection protocol).

Day 3

The third day of the workshop focused on fish identification, a recap of the work method for data collection and a recap of the past two days in the form of a live quiz.

Presentations/ activities included:

- Working group and collective discussions about the characteristics and names of about 40 species of fish commonly caught in the Surinamese artisanal fishery (several specimens of each species where available to look at, touch and identify using the new protocol).
- Work method for data collection.
- Live quiz.

Conclusion

The training workshop was well-attended and was well-received by the data collectors of the FD. During the workshop the FIP team received valuable feedback from the data collectors, which will be used to extend and improve the data collection forms and further refine the methodology. The new sample-based methodology will be piloted in November-December 2022 and will be fully implemented in January 2023.

ANNEXES


Annex A. New forms for sample-based data collection in coastal and inland fisheries

Annex B. Cheat-sheet to be used in conjunction with the forms

Annex C. Screenshots from web-based application for data entry

Annex D. Some pictures of the training

A. New forms for sample-based data collection in coastal and inland fisheries



AANVOER FORMULIER KUSTVISSERIJ (SK/SKB)

VOLGNUMMER	NAAM OPNEMER	DATUM OPNAME (DD/MM/JJJJ)	
NAAM VAARTUIG	REGISTRATIE NR. VAARTUIG	VERGUNNING TYPE	
		<input type="checkbox"/> SK-NJAWARIE <input type="checkbox"/> SK-DRIJF-OG <input type="checkbox"/> SK-LIJN <input type="checkbox"/> SK-DRIJF-COR <input type="checkbox"/> SK-DRIJF-GG <input type="checkbox"/> SK-B	
VERTREK PLAATS		AANLANDINGSPLAATS	
VISSERIJ ZONE			
Diepte zone/ Sectie			
	A	B	C
4			
3			
2			
1			
VERTREKDATUM	AANLANDINGSDATUM	VISSERIJ INSPANNING	TRIP NR.
		<input type="checkbox"/> Uren <input type="checkbox"/> Dagen	<input type="checkbox"/> Volledige trip <input type="checkbox"/> Broken trip
BOOT ACTIVITEIT			
_____ dagen op zee in de afgelopen 30 dagen.			
AANTAL VISSERS	VOEDSEL	BRANDSTOF	IJS
	Gekocht <input type="checkbox"/> SRD _____ <input type="checkbox"/> USD	Verbruikt <input type="checkbox"/> Liter <input type="checkbox"/> Diesel <input type="checkbox"/> Gallon <input type="checkbox"/> Unleaded	Gekocht <input type="checkbox"/> Teil _____ <input type="checkbox"/> m ³
		Eenheidsprijs <input type="checkbox"/> SRD <input type="checkbox"/> Liter _____ <input type="checkbox"/> USD / <input type="checkbox"/> Gallon	Eenheidsprijs <input type="checkbox"/> SRD <input type="checkbox"/> Teil _____ <input type="checkbox"/> USD / <input type="checkbox"/> m ³
OPMERKINGEN			

MINISTERIE VAN LANDBOUW, VEETEELT EN VISSERIJ
 DIRECTORAAT VISSERIJ

Cornelis Jongbawstraat 50, Paramaribo, Suriname
 +597 476-741 toestelnr: 42 & 47
 visserijstatistiek@gmail.com

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Data collection form for coastal fisheries page 1 out of 2. This page allows for the recording of information about the recording itself, vessel information, fishing zone, effort, socio-economic information and notes.

AANVOER FORMULIER KUSTVISSERIJ (SK/SKB)



AANGELANDE VANGST

ASFIS Code	Verwerking	Gewicht	Eenheidsprijs	ASFIS Code	Verwerking	Gewicht	Eenheidsprijs
		<input type="checkbox"/> kg <input type="checkbox"/> lbs	<input type="checkbox"/> SRD / <input type="checkbox"/> kg <input type="checkbox"/> USD / <input type="checkbox"/> lbs			<input type="checkbox"/> kg <input type="checkbox"/> lbs	<input type="checkbox"/> SRD / <input type="checkbox"/> kg <input type="checkbox"/> USD / <input type="checkbox"/> lbs

AANGELANDE VISBLAAS

ASFIS Code	Verwerking	Gewicht	Eenheidsprijs	ASFIS Code	Verwerking	Gewicht	Eenheidsprijs
		<input type="checkbox"/> kg <input type="checkbox"/> lbs	<input type="checkbox"/> SRD / <input type="checkbox"/> kg <input type="checkbox"/> USD / <input type="checkbox"/> lbs			<input type="checkbox"/> kg <input type="checkbox"/> lbs	<input type="checkbox"/> SRD / <input type="checkbox"/> kg <input type="checkbox"/> USD / <input type="checkbox"/> lbs
	<input type="checkbox"/> Nat <input type="checkbox"/> Droog				<input type="checkbox"/> Nat <input type="checkbox"/> Droog		
	<input type="checkbox"/> Nat <input type="checkbox"/> Droog				<input type="checkbox"/> Nat <input type="checkbox"/> Droog		
	<input type="checkbox"/> Nat <input type="checkbox"/> Droog				<input type="checkbox"/> Nat <input type="checkbox"/> Droog		

Data collection form for coastal fisheries page 2 out of 2. This page allows for the recording of the fish landing (species, processing, weight). The landing of fish bladder is recorded separately.

AANVOER FORMULIER BINNENWATERVISSERIJ (BV)



VOLGNUMMER		NAAM OPNEMER		DATUM OPNAME (DD/MM/JJJJ)	
NAAM VAARTUIG	REGISTRATIE NR. VAARTUIG	VERGUNNING TYPE			
		<input type="checkbox"/> BV-DRIJFNET <input type="checkbox"/> BV-KIEUWNET-SLEEPNET <input type="checkbox"/> BV-LIJN <input type="checkbox"/> BV-SPANNET <input type="checkbox"/> BV-ZEEGNET		<input type="checkbox"/> BV-FUIKNET-COMMEWIJNE <input type="checkbox"/> BV-FUIKNET-SARARMACCA <input type="checkbox"/> BV-FUIKNET-NICKERIE Fuik type <input type="radio"/> Vis <input type="radio"/> Garnalen <input type="radio"/> Jagi jagi	
VERTREK PLAATS			AANLANDINGSPLAATS		
VISSERIJ ZONE					
<input type="checkbox"/> Bigi Pan <input type="checkbox"/> Corantijn & Nickerie rivier		<input type="checkbox"/> Coppename & Saramacca rivier <input type="checkbox"/> Marowijne rivier		<input type="checkbox"/> Kust: zone _____ sectie _____ zone _____ sectie _____	
VERTREKDATUM		AANLANDINGSDATUM		VISSERIJ INSPANNING	
				_____ <input type="checkbox"/> Uren <input type="checkbox"/> Dagen	
BOOT ACTIVITEIT					
_____ dagen gevist de afgelopen 5 dagen.					
AANTAL VISSERS	VOEDSEL	BRANDSTOF		IJS	
	Gekocht <input type="checkbox"/> SRD _____ <input type="checkbox"/> USD	Verbruikt <input type="checkbox"/> Liter <input type="checkbox"/> Diesel _____ <input type="checkbox"/> Gallon <input type="checkbox"/> Unleaded		Gekocht <input type="checkbox"/> Teil _____ <input type="checkbox"/> m ³	
		Eenheidsprijs <input type="checkbox"/> SRD / <input type="checkbox"/> Liter _____ <input type="checkbox"/> USD / <input type="checkbox"/> Gallon		Eenheidsprijs <input type="checkbox"/> SRD / <input type="checkbox"/> Teil _____ <input type="checkbox"/> USD / <input type="checkbox"/> m ³	
OPMERKINGEN					

Data collection form for inland fisheries page 1 out of 2. This page allows for the recording of information about the recording itself, vessel information, fishing zone, effort, socio-economic information and notes.

AANVOER FORMULIER BINNENWATERVISSERIJ (BV)



AANGELANDE VANGST

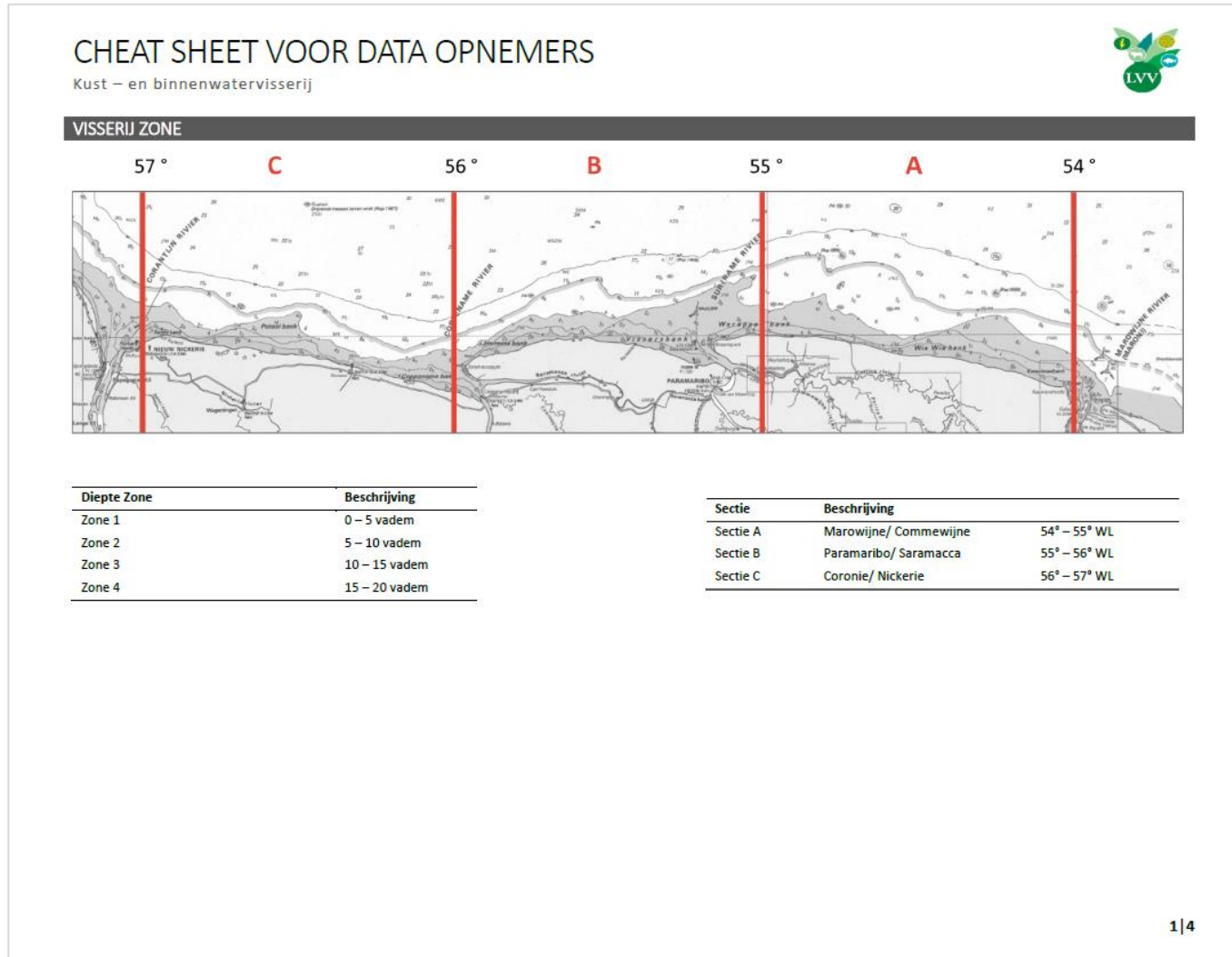
ASFIS Code	Verwerking	Gewicht	Eenheidsprijs	ASFIS Code	Verwerking	Gewicht	Eenheidsprijs
		<input type="checkbox"/> kg <input type="checkbox"/> lbs	<input type="checkbox"/> SRD / <input type="checkbox"/> kg <input type="checkbox"/> USD / <input type="checkbox"/> lbs			<input type="checkbox"/> kg <input type="checkbox"/> lbs	<input type="checkbox"/> SRD / <input type="checkbox"/> kg <input type="checkbox"/> USD / <input type="checkbox"/> lbs

AANGELANDE VISBLAAS

ASFIS Code	Verwerking	Gewicht	Eenheidsprijs	ASFIS Code	Verwerking	Gewicht	Eenheidsprijs
		<input type="checkbox"/> kg <input type="checkbox"/> lbs	<input type="checkbox"/> SRD / <input type="checkbox"/> kg <input type="checkbox"/> USD / <input type="checkbox"/> lbs			<input type="checkbox"/> kg <input type="checkbox"/> lbs	<input type="checkbox"/> SRD / <input type="checkbox"/> kg <input type="checkbox"/> USD / <input type="checkbox"/> lbs
	<input type="checkbox"/> Nat <input type="checkbox"/> Droog				<input type="checkbox"/> Nat <input type="checkbox"/> Droog		
	<input type="checkbox"/> Nat <input type="checkbox"/> Droog				<input type="checkbox"/> Nat <input type="checkbox"/> Droog		
	<input type="checkbox"/> Nat <input type="checkbox"/> Droog				<input type="checkbox"/> Nat <input type="checkbox"/> Droog		

Data collection form for inland fisheries page 2 out of 2. This page allows for the recording of the fish landing (species, processing, weight). The landing of fish bladder is recorded separately.

B. Cheat-sheets to be used in conjunction with the forms



Cheat sheet describing the depth zones and sections that describe the coastal fishing zones.

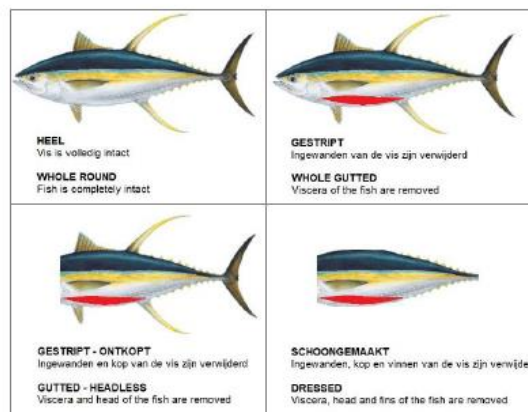
CHEAT SHEET VOOR DATA OPNEMERS

Kust – en binnenwatervisserij



VERWERKING

Verwerking	Code
Heel	WR
Gestript	WG
Gestript & Ontkopt	GH
Schoongemaakt	DR
Gezouten & Gedroogd	SD
Gerookt (warme vis)	SM
Eieren	EG
Vinnen	FI
Vleugels (rog)	WI



Cheat sheet listing and illustrating the relevant fish processing types. Each processing type is tied to a unique 2 letter code.

**CeDePesca**Centro Desarrollo y Pesca Sustentable
Centre for Development and Sustainable Fisheries

CHEAT SHEET VOOR DATA OPNEMERS

Kust – en binnenwatervisserij

**VISSOORT (ASFIS CODE)**

Vissoort	Code
aarder; prassie; kweriman	MGS
american harvestfish; silver pomfret	ERP
atlantic bumper	BUA
baracuda	BAR
big eye	PQR
bigtooth corvina/ trie	ISA
blue fish	BLU
botjie	BAX
botjie mix/onbekend	FLX
caitipa mojarra	DZR
carangidae mix/onbekend	CGX
castin leather jack; jumper	OLS
cavalli; zeezalm	CVJ
cobia; batjaw; cabio	CBA
katrina-kwikwi	999
kingfish	KGM
krobia	CIX
lompoel	TFB
lookdown	LNM
makka sriba	DUT
makreel	SSM
makreel-kingfish mix/onbekend	KGX
paoema	LOB
pataka	HWU
plata-ede-kwikwi; platkop kwikwi	LHC
pojo; moonfish	MOA
pompano mix/onbekend	POX
pompidoel; pompano	TCN
scamp	MKH
silver snapper; stonkoebi	LRJ
silverbelt; riemvis	LHT
snoek	ROB
soke-kwikwi; hei-ede-kwikwi	HSR
Sriba	HZH

	Vissoort	Code
Weakfish	swordspine snook	EPN
	tilapia	TLM
	trapoel	TAR
	zeevis mix/onbekend	MZZ
	zoetwatervis mix/onbekend	FRF
	bang bang; grey snapper	YNA
	bigeye kandra; bright eye kandra	YNM
	blaka tere witwitie; blacktail	WKB
	dagoetifi; bangamary	WKK
	kandratiki; seatrout; trout	YNV
	tonkin witwitie	YNS
	weakfish mix/onbekend; Ho!Su	WKX
	witwitie	YNJ
witwitie mix/onbekend	WKX	
Snappers	b-liner	RPU
	dog snapper	LJJ
	lane snapper	SNL
	mutton snapper	LJN
	red snapper	SNC
Croakers	snappers mix/onbekend	SNX
	black fly; blaka fre	KGB
	botervis; botro fisie	NBM
Groupers	koebie	LGQ
	krokus; zeekoebi; croaker	CKM
	gramorgoe; grauwmurg; jewfish	EET
Grunts	grouper mix/onbekend	BSX
	black snapper; black grunt	OTR
	green snapper	BRG
	grunts mix/onbekend	HWX
	milkfish; neertjie; anafolks; merki fisi	GEU
	Ansjovis, haring & sardien	ansjovis mix/onbekend
haring mix/onbekend		SAS
haringachtige; sardienachtige		
mix/onbekend		CLP
longfin herring		PNA
surinam anchovy		VCH
threadfin herring	THA	

	Vissoort	Code
Garnalen	bruine garnaal	PNU
	hopper	PNB
	redi bere	XHO
	roze garnaal	SOP
	sara sara; zeegarnalen mix/onbekend	PEN
Haaien	seabob	BOB
	witbere	NLC
	witte garnaal	PNT
	blacknoze shark	CCN
	blacktip shark	CCL
	brazilian waterbelly shark	RHL
	carcharhinus haai mix/onbekend	CWZ
	caribbean waterbelly shark	RHR
	hamerhaai mix/onbekend	SPY
	tiger shark	TIG
Roggen	waterbelly shark mix/onbekend	RHZ
	american stringray	RDA
	butterfly; butterfly	RGI
Krabben	longnoze stingray	RDU
	spari; tengiray mix/onbekend	STT
	krabu	UCC
Inktvis	srika	KLB
	zeekrab	KPS
	zeekrabben mix/onbekend	CRA
	inktvis	SOZ
	octopus mix/onbekend	OCT
	barbaman	BEB
	jarabaka; gillbacker	AWP
	kodokoe	AZS
	koema koema	CVE
	koepila; curas	AXP
kukwari	AWY	
Gladvis	pani	CVQ
	poes; thomas	NGZ
	twi twi	AWR
	zeegladvis mix/onbekend	CAX
	zoetwater gladvis	MXW

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Cheat sheet listing coastal and inland species and the corresponding ASFIS code.



CHEAT SHEET VOOR DATA OPNEMERS

Kust – en binnenwatervisserij

AANLANDINGSPLAATS

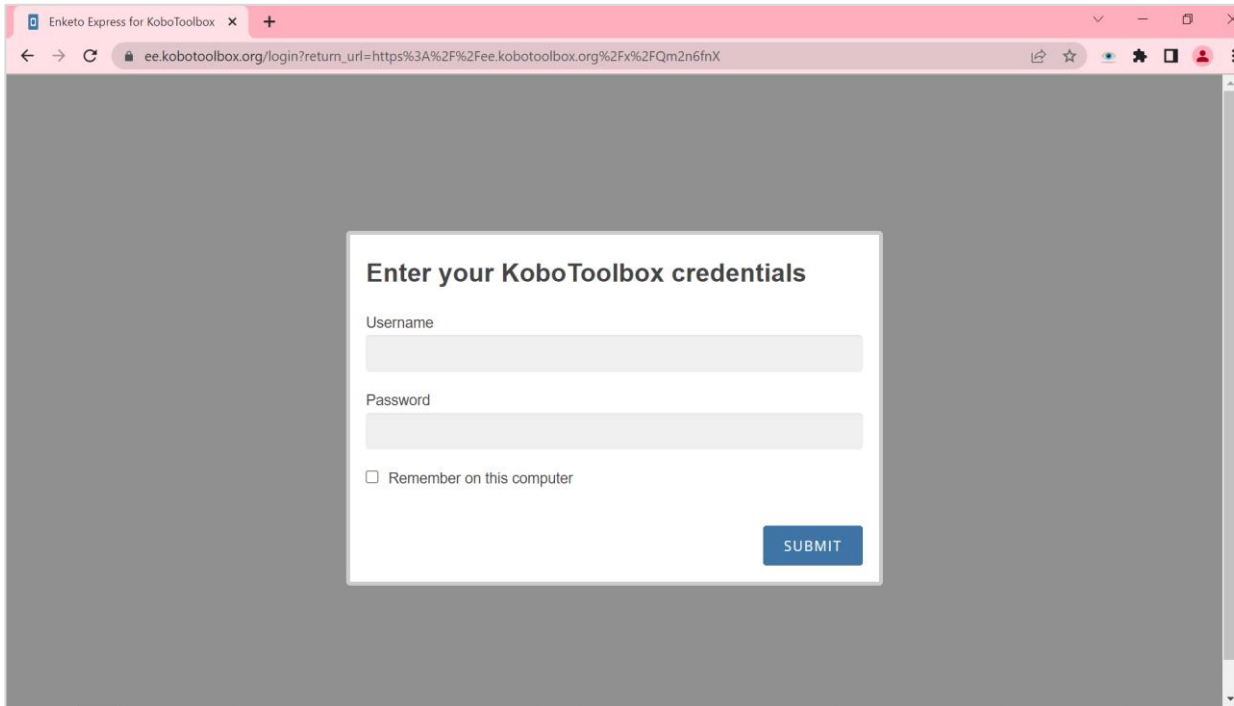
	Naam	Overige namen
Marowijne	Baana Ini	
	Dea steiger	
	Erowarte	
	Markt Albina	
	Papatam	
	Tapoekoe	
	Galibi	
	Baka sroisi sluis	
	Baka sroisi steiger	
	Braamspunt	
	GABS steiger	
	Glenn steiger	Habiboela Nw. A'dam
	Habiboela steiger	Habiboela Meerzorg
	Harold steiger	
	Hugo steiger	FRIPROCO
Commeuwijne	Johan en Margaretha Jude steiger	
	Kabel steiger	
	Kroonenburg	
	Lall steiger	
	Leliëndaal steiger	
	Lust en Rust steiger	
	Mariënborg steiger	
	Meerzorg steiger	Veerplein
	Montresor	
	Pomona	
	Rust en Werk	
	VCC	
	Zoelen steiger	Zoelen sluis
	Ansu Fisheries	
	Heiploeg Suriname	
	Carib Fisheries	Peperpot; Ramkisor

	Naam	Overige namen
Paramaribo	Azad steiger	Hazard; Azaad
	Baktawar steiger	Jhotish steiger; Ricky's steiger
	Bisoen steiger	
	Centrale markt	
	Clevia sluis	
	Darsan steiger	Anton Drachtenweg #202; naast Shadien; Karransteiger
	Doorsteek Sluis	Sluis Saramaccakanaal
	Gunny's park	Leonsberg
	JICA	
	Moenne steiger	Faizel Moenne
	Nene steiger	Waaldring
	Weg Naar Zee	
	CEVIHAS	
	SSC	Mister Ma
	SAIL	
Wanica	Laarwijk	
	Staatsolie	Dijkveld; Tout Lui Fautkanaal
	Parakreek	Houtzagerij Dwarka
	Deep Sea Atlantic	
	HolSu	
Saramacca	Marisa Fisheries	
	NISAD	
	Boskamp	
Coronlie	Huwelijkszorg	
	Burnside kanaal	Totness kanaal

	Naam	Overige namen
Nickerie	Boonacker sluis	Boonacker polder
	Clara sluis	
	Hakrinbank steiger	
	Hamptoncourt sluis	
	Henarpolder	Henarsluis
	Djakarta sluis	Waldecksluis
	Karan Anjar	
	Markt Nieuw-Nickerie	
	Oud abatoir	Oud slachthuis
	Paradise	Fredericiweg
	Raniesluis	Waterloo sluis; Fredericiweg
	Rawan steiger	Ramdien
	Ronald steiger	Ro steiger
	Roy steiger	Stichting South American; Ameerali
	Solom-Longmay	
Zeedijk		
Orbilo	VCN	

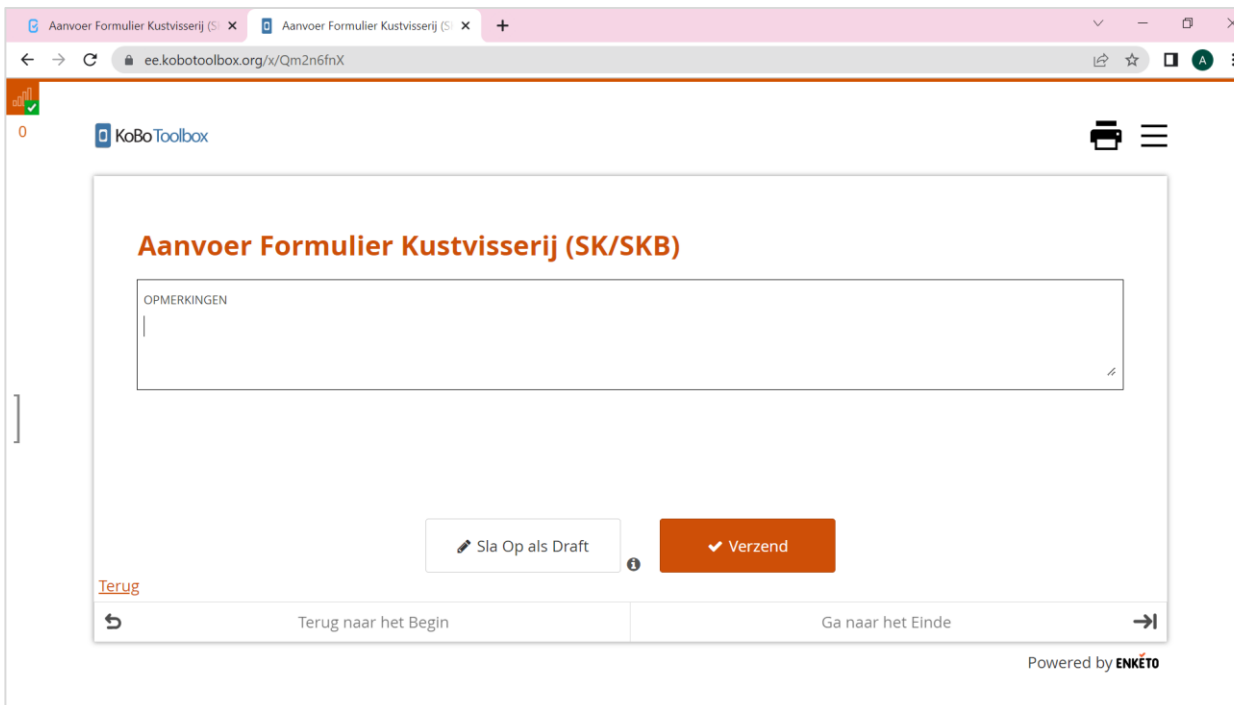
Cheat sheet listing the names of all the official landing sites in Suriname.

C. Screenshots from web-based application for data entry



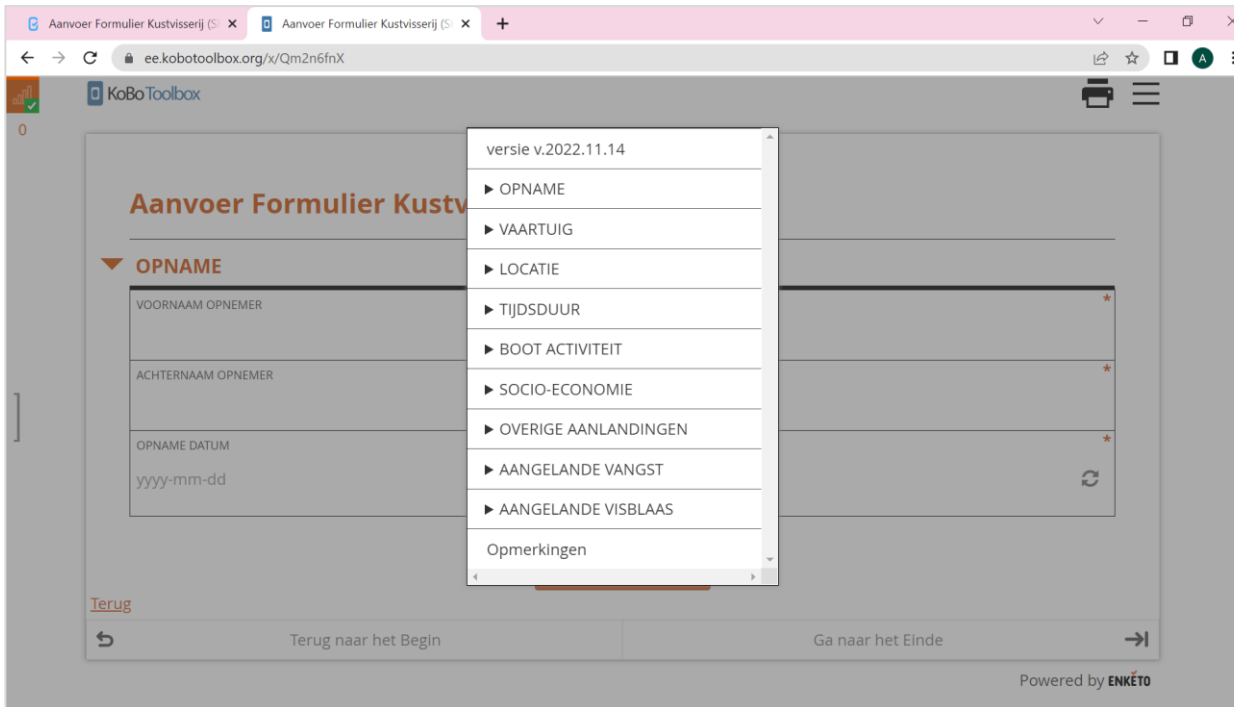
The screenshot shows a web browser window with the address bar displaying "ee.kobotoolbox.org/login?return_url=https%3A%2F%2Fee.kobotoolbox.org%2F%2Fxm2n6fnX". The main content area features a white login form titled "Enter your KoboToolbox credentials". The form includes a "Username" field, a "Password" field, a checkbox labeled "Remember on this computer", and a blue "SUBMIT" button.

Login prompt that appears when a user wants to access the webform.



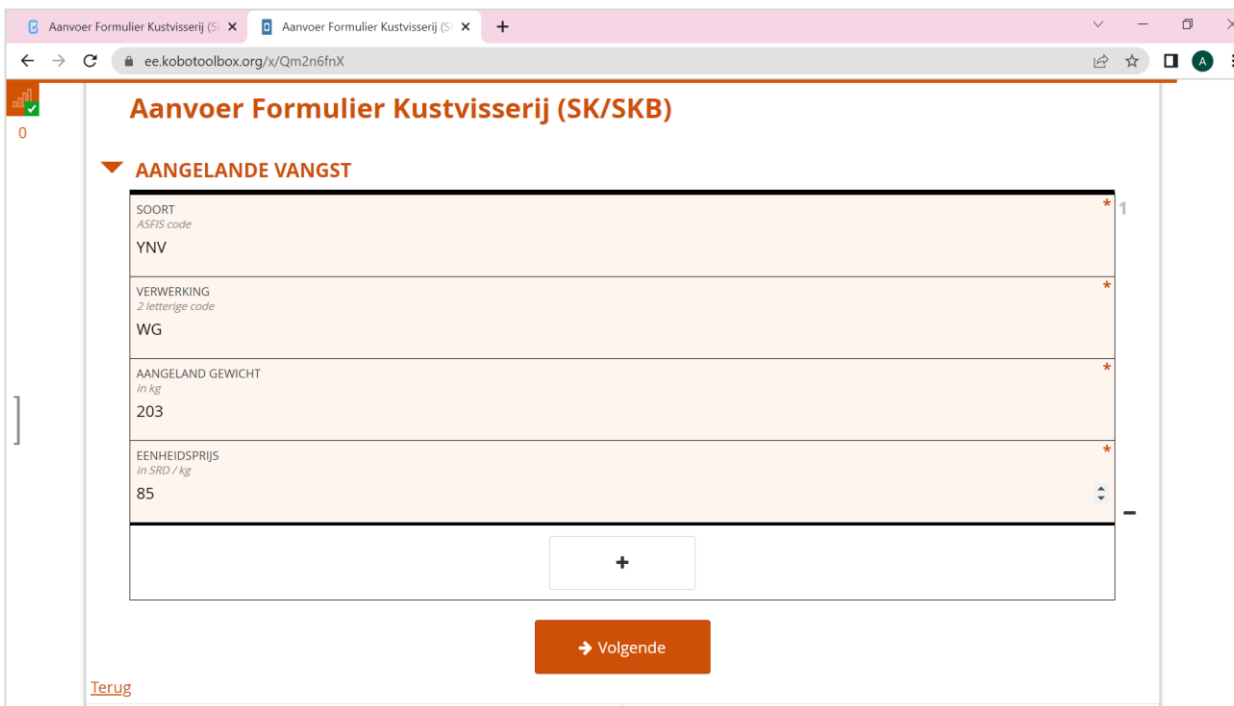
The screenshot shows the final page of a webform titled "Aanvoer Formulier Kustvisserij (SK/SKB)". The form includes a large text area labeled "OPMERKINGEN" (Remarks). Below the text area are two buttons: "Sla Op als Draft" (Save as Draft) and "Verzend" (Submit). At the bottom of the form, there are two navigation options: "Terug naar het Begin" (Go back to the beginning) and "Ga naar het Einde" (Go to the end). The page is powered by ENKÉTO.

Final page of the webform with the options to save the form as a draft or submit it.



A screenshot of a web browser displaying a form titled 'Aanvoer Formulier Kustvisserij'. A navigation menu is open, listing various sections of the form: OPNAME, VAARTUIG, LOCATIE, TIJDSDUUR, BOOT ACTIVITEIT, SOCIO-ECONOMIE, OVERIGE AANLANDINGEN, AANGELANDE VANGST, and AANGELANDE VISBLAAS. The background form shows the 'OPNAME' section with fields for 'VOORNAAM OPNEMER', 'ACHTERNAAM OPNEMER', and 'OPNAME DATUM' (formatted as yyyy-mm-dd). Navigation buttons 'Terug' and 'Ga naar het Einde' are visible at the bottom.

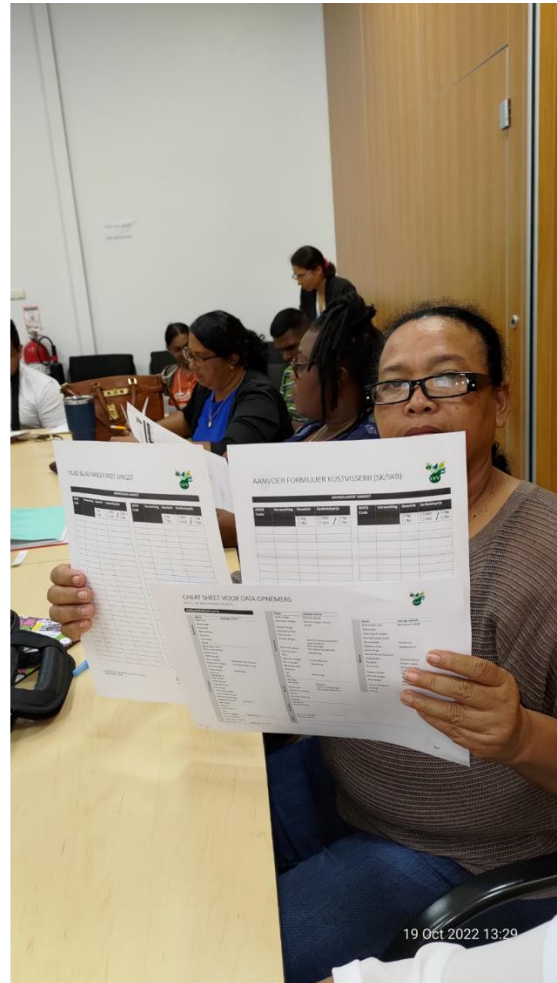
Menu showing an overview of all the sections in the webform. The menu can be used to navigate through the form.



A screenshot of the webform showing the 'AANGELANDE VANGST' section filled with data. The fields and their values are: SOORT (ASFIS code), YNV, VERWERKING (2 letterige code), WG, AANGELAND GEWICHT (in kg) with the value 203, and EENHEIDSPRIJS (in SRD / kg) with the value 85. A '+' button is located below the table, and a 'Volgende' button is at the bottom of the section.

Example of a filled in section in the webform.

D. Some pictures of the training



Top left: A group of participants identify and label fish during the fish identification exercise.

Middle left: Mr. Tomas Willems checks if groups have identified the fish species correctly and discusses the characteristics and various names of each species.

Bottom left: Participants listen en watch attentively to one of the presentations.

Right: One of the participants holds up the new data collection forms and the cheat sheet bundle.