# Agriculture Census 2021 

## SURVEY IDENTIFICATION INFORMATION QUESTIONNAIRE DESCRIPTION

COOK ISLANDS AGRICULTURE CENSUS 2021
No sub-sections, No rosters, Questions: 5, Static texts: 2.
SECTION 1 - HOUSEHOLD COMPOSITION
No sub-sections, Rosters: 1, Questions: 11, Static texts: 1, Variables: 4.

SECTION 2: CROP PRODUCTION ACTIVITY OF THE HOUSEHOLD
No sub-sections, Rosters: 8, Questions: 117, Variables: 14.
SECTION 3: LIVESTOCK AND POULTRY(INCLUDES DUCKS)
No sub-sections, Rosters: 6, Questions: 52, Variables: 5.
SECTION 4- LAND OPERATED BY THE HOUSEHOLD DURING THE LAST 12 MONTHS No sub-sections, Rosters: 1, Questions: 38, Static texts: 2, Variables: 11.

SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS No sub-sections, Rosters: 10, Questions: 118, Static texts: 1, Variables: 12.

SECTION 6: NON-HOUSEHOLD LABOUR INPUT
No sub-sections, Rosters: 2, Questions: 20.
SECTION 7- HOUSEHOLD INCOME AND LOANS/GRANTS FOR AGRICULTURAL PURPOSES
No sub-sections, No rosters, Questions: 7.

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING
Sub-sections: 3, Rosters: 10, Questions: 70.
END PAGE
No sub-sections, No rosters, Questions: 2.
APPENDIX A — VALIDATION CONDITIONS AND MESSAGES
APPENDIX B — INSTRUCTIONS
APPENDIX C — CATEGORIES
APPENDIX D — VARIABLES
LEGEND

SURVEY IDENTIFICATION INFORMATION QUESTIONNAIRE DESCRIPTION

## Basic information

Title Agriculture Census 2021

STATIC TEXT
MINISTRY OF AGRICULTURE AND STATISTICS OFFICE

static text

## Household Schedule

| Enter the Island | Single－select | Is 7 and |
| :---: | :---: | :---: |
|  | 01 〇 Rarotonga |  |
|  | 02 〇 Aitutaki |  |
|  | $03 \bigcirc$ Mangaia |  |
|  | 04 O Atiu |  |
|  | $05 \bigcirc$ Mauke |  |
|  | $06 \bigcirc$ Mitiaro |  |
|  | 07 O Palmerston |  |
|  | 08 〇 Pukapuka |  |
|  | 09 O Nassau |  |
|  | 10 O Manihiki |  |
|  | 11 〇 Rakahanga |  |
|  | 12 O Penrhyn |  |


| Enter the District | Kiikii-Tupapa-Maraerenga Takuvaine Tutakimoa-Teotue Avatiu-Ruatonga Nikao-Panama Ruaau Akaoa Murienua Titikaveka Ngatangiia Matavera Amuri-Ureia Arutanga Vaipae-Avanui Tautu Mangaia | District |
| :---: | :---: | :---: |
| Enumeration Area | TEXT | Area |
| Household Number | NUMERIC: INTEGER | HH_Number |
| Date of the enmueration | DATE: CURRENT TIME | Intstart |

SECTION 1 －HOUSEHOLD COMPOSITION

E IsSectionAnswered（Cov）

| Agriculture or Fishing Questions |  | AgFish |
| :---: | :---: | :---: |
| S101：Full Name of the Household member | LST | S101 |
| Please enter the name of the household head first followed by other $h$ ousehold members |  |  |

SECTION 1 －HOUSEHOLD COMPOSITION
Roster：HOUSEHOLD＿DETAILS
generated by list question S101

 household

01 ○ Self
s101a．Count（x＝＞x．S102＝＝1）＜ 2
You can have only one household head
s101a．Count（ $x=>x$ ．$s 102==2$ ）＜ 2
there should be only 1 spouse in the household
s101a．Count（x＝＞x．S102＝6）＜＝ 2
there should only two parents in the household
！（＠rowcode＝＝ 1 \＆\＆self $!=1$ ）
Please enter the household head first
02 ○ Spouse
$03 \bigcirc$ Son／Daughter
04 O Daughter－in－law／Son－in－law
05 〇 Grand Child
06 〇 Parent
07 ○ In－laws
08 O Other Relative
09 〇 Not－related

| S103－Sex | single－select <br> 01 ○ Male <br> 02 〇 Female | S103 |
| :---: | :---: | :---: |
| S104－Date of Birth | TEXT | S104 | enter 9999 if year not known

V1 Int32．Parse（self．split（＇／＇）［0］）＝＝ 99 ？true ：Int32．Par se（self．Split（＇／＇）$[0])$ ．InRange $(1,31)$
M1 Not a valid Date of Birth Day，Please verify
V2 Int32．Parse（self．Sp7it（＇／＇）［1］）＝＝99 ？true ：Int32．Par se（self．Split（＇／＇）［1］）．InRange（1，12）
M2 Not a valid Date of Birth Month，Please verify
V3 Int32．Parse（se7f．split（＇／＇）［2］）＝＝9999 ？true ：Int32．P arse（self．Split（＇／＇）［2］）．InRange（1900，2021）
M3 Not a valid Date of Birth Year，Please verify

| VARIABLE | LONG | s104＿Day |
| :---: | :---: | :---: |
| Int32．Parse（S104．Sp1it（＇／＇）［0］） |  |  |
| VARIABLE | LONG | S104＿Month |
| Int32．Parse（S104．Sp1it（＇／＇）［1］） |  |  |
| VARIABLE | LONG | s104＿Year |
| Int32．Parse（S104．Split（＇／＇）［2］） |  |  |

// If the date of birth is complete, check validity of $t$ he date (IsAnswered(S104_Day) \&\& IsAnswered(S104_Month)
\&\& IsAnswered(S104_Year)) ? (S104_Year != 9999) ? (S104_
Month != 99) ?

And 1977 other symbols [1]

## S106- Age in completed years

V1 self >= 0 \& self <= 100
M1 Age should be between 0 to 100 years
V2 (s102==3 \&\& (s101a.Count ( $x=>x . S 102==1 \& \&(x . s 106-s 106<=1$ 5))==0)) || S102 !=3

M2 Child of household head should be at least 16 years younger than hous ehold head age
V3 // If the date of birth is complete, check validity of $t$ he date (IsAnswered(S104_Day) \&\& IsAnswered(S104_Month) \&\& IsAnswered(S104_Year)) ? (S104_Year != 9999) ? (S104_ Month ! = 99) ? And 1902 other symbols [1]
M3 Entered Age of is not consistent with DOB! Computed age is \%Q1_4_Ag e\%

NUMERIC: INTEGER s106
-

S107- What is your marital status
E $\mathrm{S} 106>=15$
V1 self $==1| |(s e 1 f>1 \& \& s 106>=16)$
M1 household member to young to be married, widow or separated/divorc ed
V2 (S102 == 2 \&\& self. InList(2,3)) || S102.InList(1,3,4,5,6 , $7,8,9$ )
M2 Marital status of spouse should be de-facto or married

## S108- What main activity did you do last week?

E $\mathrm{S} 106>=15$
V1 (self ==8 \&\& (S106 < 5 || s106 > 60)) || self.InList(1, $2,3,4,5,6,7,9)$
M1 Too young / old should be used only for household members under 50 r over 60

|  | Producing goods/services for family consumption Voluntary / Community Work Domestic Duties <br> Student Retired/ Too old <br> Unemployed |  |
| :---: | :---: | :---: |
| S109- What is the extent of engagement in main activity? $\text { E S106 >= } 15 \& \& ~ S 108<8$ | SINGLE-SELECT Full-Time <br> 02 Part-Time <br> 03 None | s109 |
| S110: What is the average number of hours/ week did you work on the holding? <br> E S106 >= 15 <br> V1 self >= 0 \& self < 70 <br> M1 hours worked on the holding should be greater 1, if the household me mber hasn't worked on the holding please insert 0 | NUMERIC: INTEGER <br> SPECIAL VALUES <br> 00 does not work on the holding | S110 |
| S111- Are you an agriculture holder? <br> E S106 >= 15 \&\& AgFish. Contains(1) | SINGLE-SELECT <br> 01 ○ Yes <br> 02 No | S111 |

## STATIC TEXT

E s101a.Count $(x=>$ IsAnswered $(x . s 111))==s 101 a . C o u n t(x=>x . S 106>=15) \& \& s 101 a \cdot \operatorname{count}(x=>x . S 111==1)!=1$
V1 s101a.Count ( $x=>x$. $\mathrm{s} 111==1$ ) $==1$

M1 There should be 1 agriculture holder in the household

E IsSectionAnswered（Cov）\＆\＆AgFish．Contains（1）

| S201－Did your Household grow and／or harvest garden crop（s），Coconut trees， pawpaw trees or any other crop during last 12 months？ | $\begin{aligned} & \text { single-Select } \\ & 01 \text { 〇 Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ | s201 |
| :---: | :---: | :---: |
| S202－Did your Household have more than 64 M2（8Mx8M）land under crops／garden crops， Coconut trees，pawpaw trees or any other crop during last 12 months？ | $\begin{aligned} & \text { single-Select } \\ & 01 \text { 〇 Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ | s202 |
| s201＝＝ 1 |  |  |
| S203－Did your Household sell／export any crop produce，fruits，vegetables or other agricultural produce during the last 12 months？ | $\begin{aligned} & \text { single-Select } \\ & 01 \text { 〇 Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ | s203 |
| S202＝＝ 1 |  |  |
| S204－What do you consider as the purpose of your crop production？ $\mathrm{s} 202=1$ |  | S204 |
| S204－Others，please specify | text | S204＿others |
| s204＞ 3 | －．．．．．．．．．．．．．． | ．．．．．．．．．． |
| S205－If the household is engaged in commercial farming，did the proceed from sale of crops in the last 12 months exceed NZ\＄1000？ | $\begin{aligned} & \text { single-Select } \\ & 01 \text { 〇 Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ | S205 |
| s204＝＝ 2 ｜｜s204＝＝ 3 |  |  |
| S206a－Did the household own／operate Bee keeping for honey production during last 12 month？ | $\begin{aligned} & \text { SINGLE-SELECT } \\ & 01 \text { 〇 Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ | s206a |
| S206a（i）－how many hives do you have？ | NUMERIC：INTEGER | s206ai |
| Note：this should be the number of bee hives on the day of the intervie w $\begin{aligned} & \text { s206a }=1 \\ & \text { self }>=0 \& \text { self }<=100 \end{aligned}$ <br> the number of bee hives entered is out of range |  | －－－－ |
| S206a（ii）－How much honey was harvested during last 12 months（in Litres）？ | NUMERIC：INTEGER | s206aii |
| $\begin{aligned} & \text { s206a }==1 \\ & \text { self }>=0 \& \text { self }<=2000 \end{aligned}$ <br> Quantity sold should be greater or equal to 0 litres |  |  |


| S206b- Did the household own / operate any hydroponic crop production during last 12 months? | $\begin{aligned} & \text { Single-Select } \\ & 01 \text { 〇 Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ |  |
| :---: | :---: | :---: |
| S206b(i)- What is the Capacity of the hydroponics operation $\text { E } \mathrm{s} 206 \mathrm{~b}==1$ | single-select <br> $01 \bigcirc$ Acres <br> 02 ○ Square meters | s206bi |
| S206b(i) - What is the capacity of the hydroponic operation in acres? $\begin{aligned} & \text { I Whole Acres Enter } 0 \text { here if area is less than an acre } \\ & \text { E } \text { S206bi }==1 \\ & \text { V1 } \text { self }>=0 \text { \&\& self }<=4 \\ & \text { M1 } \end{aligned}$ | NUMERIC: INTEGER | hydro_acres |
| S206b(i)- Capacity in fraction of an Acre (x/y) <br> I Enter " 0 " if area is whole number (i.e.,no fraction) <br> E S206bi == 1 <br> V1 \$ChkFraction <br> M1 Not a valid fraction! <br> V2 self == "0" ? IsAnswered(hydro_acres) \& \& hydro_acres != 0 : true <br> M2 can't have no area! | TEXT | hydro_acresf |
| VARIABLE <br> (string.Compare(hydro_acresf,"0") != 0) ? hydro_acres + (Double.Parse(hydro_acresf.split('/')[0]) / Double.Parse (hydro_acresf.Split('/')[1])) : hydro_acres | DOUBLE | hydro_acres1 |
| S206b(i)- What is the capacity of the hydroponics operation in square meters? ```E S206bi == 2 V1 self >= 0 & self <= 1000``` M1 Total area enter is out of range | NUMERIC: INTEGER | hydro_squ |
| S206b(iii)- What Crops did you grow and harvest during from the hydroponics operation during the last week? $\text { E } \mathrm{s} 206 \mathrm{~b}==1$ | multi-SELECT $01 \quad \square$ Lettuce $02 \quad \square$ Pepper(Capsicum) $03 \quad \square$ Cucumber $04 \quad \square$ Herbs $05 \quad \square$ Tomato $06 \square$ Others, specify | s206biii |
| S206(ii)- What was the quantity of lettuce plants grown or harvested during the last week? <br> E S206b == 1 \&\& s206biii.Contains(1) <br> V1 self >=1 \& self <= 1400 <br> M1 the amount entered is out of the range | NUMERIC: INTEGER | s206ii_Lettuce |
| S206(ii)- What was the quantity of Pepper(Capsicum) grown or harvested during the last week in kilograms? $\text { E s206b == } 1 \text { \&\& s206biii.Contains(2) }$ $\text { V1 self }>=1 \& \text { self }<=1400$ <br> M1 the amount entered is out of the range | NUMERI: INTEGER | s206ii_Pepper |


| S206(ii)- What was the quantity of Cucumber plants grown or harvested during the last week in kilograms? | NUMERIC: INTEGER | s206ii_Cucumber |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { E s206b }==1 \& \& \text { s206biii. Contains (3) } \\ & \text { V1 self }>0 \text { \& self }<=1400 \\ & \text { M1 the number entered is out of range } \end{aligned}$ |  |  |
| S206(ii)- What was the quantity of Herbs (plants) grown or harvested during the last week ? ```E S206b == 1 && S206biii.Contains(4)``` V1 self > 1 \& self <= 1400 M1 the number entered is out of range | NUMERIC: INTEGER | s206ii_Herbs |
| S206(ii)- What was the quantity of Tomato grown or harvested during the last week in kilograms? <br> E S206b == 1 \&\& S206biii.Contains(5) <br> V1 self > 1 \& self <= 1400 <br> M1 the number entered is out of range | NUMERIC: INTEGER | s206ii_Tomato |
| S206b(iii)- Please specify any other crops planted and harvested from the hyrdoponics operation <br> E s206b == 1 \& s206biii. Contains(6) | LST | s20biii_specify |
| SECTION 2: CROP PRODUCTION ACTIVITY OF THE HOUSEHOLD Roster: OTHER HYDROPONIC PLANTS generated by list question s20biii_specify |  | Hydro |
| S206b(iii)- What was the total quantity of \%rostertitle\% grown or harvested during the last week? <br> E S206b == $1 \&$ s206biii. Contains(6) | SINGLE-SELECT <br> 01 Kilograms <br> 02 Plants | Qty_other_hydro |
| S206b(iii)- What was the total quantity \%rostertitle\% plants grown or harvested during the last week in kilograms ? <br> E Qty_other_hydro==1 <br> V1 self > 1 \& self <= 1400 <br> M1 the number entered is out of range | NUMERIC: INTEGER | s206ii_Otherkg |
| S206b(iii)- What was the total quantity \%rostertitle\% plants grown or harvested from the hydroponics operation during the last week? <br> E Qty_other_hydro==2 <br> V1 self > 1 \& self <= 1400 <br> M1 the number entered is out of range | NUMERIC: INTEGER | s206ii_Otherplants |
| VARIABLE <br> Hydro.Sum(X=>x.S206ii_Otherkg) | DOUBLE | s206ii_Otherkg_Total |
| VARIABLE <br> Hydro.Sum(x=>x.S206ii_Otherplants) | DOUBLE | s206ii_Otherplants_Total |
| S206c- Did the household own / operate floriculture for commercial purposes during last 12 months? | single-select <br> 01 O Yes <br> 02 No | s206c |



S206c(i)- What was the total quantity of \%rostertitle\% plants sold during last 12 months?

E S206c ==1 \& s206c_type_fplants.Contains(8)
self >= $1 \& \operatorname{self}<=2000$
Quantity sold is out of range

NUMERIC: INTEGER S206c_maire

S206c(ii)- What was the total quantity of Maire Leis sold during last 12 months (each)

S206c ==1 \& s206c_type_flow.Contains(1)
self >= 1 \& self <= 2600
Quantity sold is out of range

## NUMERIC: INTEGER

-     -         -             -                 -                     -                         -                             -                                 -                                     -                                         -                                             -                                                 -                                                     -                                                         -                                                             -                                                                 -                                                                     -                                                                         -                                                                             -                                                                                 -                                                                                     -                                                                                         -                                                                                             -                                                                                                 -                                                                                                     -                                                                                                         -                                                                                                             -                                                                                                                 -                                                                                                                     -                                                                                                                         -                                                                                                                             - 

$01 \square$ Maire Leis
$02 \square$ Tiare Maori flowers
$03 \square$ Tiare Maori leis
$04 \square$ Gardenia flowers
$05 \square$ Ginger/Heliconia Bouquets
$06 \square$ Others, specify
$99 \square$ None of the above

S206c(ii)- What was the total quantity of Taire
Maori flowers sold during last 12 months (bags)

## NUMERIC: INTEGER

s206c_tmaorib

E S206c ==1 \& S206c_type_flow. Contains(2)
self >= $1 \&$ self <= 2600
Quantity sold is out of range
S206c(ii)- What was the total quantity of Taire
Maori leis sold during last 12 months (each)
s206c ==1 \& s206c_type_flow.Contains(3)
self >= 1 \& self <= 2600
Quantity sold is out of range
S206c(ii)- What was the total quantity of Gardenia flowers sold during last 12 months (bags)

S206c ==1 \& s206c_type_flow.Contains(4)
self >= 1 \& self <= 2600
Quantity sold is out of range

## S206c(ii)- What was the total quantity of

Ginger/Heliconia Bouquets sold during last 12 months (bags)

E S206c ==1 \& S206c_type_flow.Contains(5)
V1 self >= 1 \& self <= 2600
M1 Quantity sold is out of range

S206c(ii)- Please list the other flowers sold during last 12 months?

E S206c ==1 \& S206c_type_flow.Contains(6)
$\qquad$

| S206c(ii)- what is the quantity of \%rostertitle\% | SINGLE-SELECT |
| :--- | :--- |
| flowers sold in last 12 months? |  |
| s206c_type_flow. contains(6) | 01 Bags |
| S206c(ii)- What was the total quantity of <br> \%rostertitle\% flowers sold during last 12 <br> months (in bags) | NUMERIC: INTEGER |
| s206c_otherflower==1 <br> se1f >= 1 \& self <= 2600 <br> Quantity sold is out of range |  |


S206d- What type of value added products do s206d_type

## you or household engage in?

E $\mathrm{S} 206 \mathrm{~d}==1$

| 01 | $\square$ | Powdered Products |
| :--- | :--- | :--- |
| 02 | $\square$ | Chips |
| 03 | $\square$ | Chutney |
| 04 | $\square$ | Turmeric Paste |
| 05 | $\square$ | Ginger Paste |
| 06 | $\square$ | Jam |
| 07 | $\square$ | Coconut Products |
| 08 | $\square$ | Others, please specify |

S206d(i) What type of powdered products did the household sell in the last one week?

E s206d $==1$ \& s206d_type.Contains(1)

MULTI-SELECT
powder_product_type
$01 \square$ Moringa
$02 \square$ Starch
$03 \square$ Turmeric
04Other Specify

S206d(i)- Provide average quantity of Moringa Powedered Product (in zip lock bag) sold in last one week?

E S206d ==1 \& S206d_type.Contains(1) \& powder_product_type . Contains (1)
self >= 1 \& self <= 50
M1 Quantity sold is out of range




E Chutney_type.Contains(3)



SECTION 2: CROP PRODUCTION ACTIVITY OF THE HOUSEHOLD
Roster: OTHER JAMS
generated by list question s206di_otherjam

| S206d(i)- Provide average quantity of any |
| :--- | :--- | :--- |
| \%rostertitle\% jams sold (small bottle) sold in |
| last one week? |



## SECTION 2: CROP PRODUCTION ACTIVITY OF THE HOUSEHOLD

Roster: OTHER VALUE ADD PRODUCTS
generated by list question s206di_othervalue
OTHERVALUEADD
S206d(i)- What was the average quantity of \%rostertitle\% you sold in last one week?

E s206d_type.Contains(8)

| MULTI-SELECT | s206divaddedqty |  |
| :--- | :--- | :--- |
| 01 | $\square$ small bottle |  |
| 02 | $\square$ large bottle |  |
| 03 | $\square$ Zip Lock bag |  |



S206e(ii)- Provide average quantity of Coconut Sauce ( 600 ml bottle) sold in last one week?

E cooked_type.Contains(2)
V1 self >= 0 \& self <= 50
M1 Quantity entered is out of the range

S206e(ii)- What type of pudding did the household sell in the last one week?

E
E cooked_type.Contains(3)
MULTI-SELECT
pudding_type
$01 \square$ Chestnut Pudding (kanaka)
$02 \square$ Banana Pudding (Poke Meika)
$03 \square$ Pawpaw Pudding (Poke nita)
$04 \square$ Cassava Pudding (Maniota)

| S206e(ii)- Provide average quantity of Chestnut | NUMERIC: INTEGER |
| :--- | :--- | pudding- Kanaka (in single bars) in last one week?

E pudding_type.Contains(1)
V1 self >= 1 \& self <= 50
M1 Quantity entered is out of the range
S206e(ii)- Provide average quantity of Banana pudding- Poke Meika (small container) in last one week?

E pudding_type.Contains(2)
self $>=1 \&$ self $<=50$
Quantity entered is out of the range

S206e(ii)- Provide average quantity of Banana pudding- Poke Meika (large container) in last one week?

E pudding_type.Contains(2)
V1 self >= 1 \& self <= 50
M1 Quantity entered is out of the range

S206e(ii)- Provide average quantity of PuddingPoke nita (plate) sold in last one week?

E pudding_type.Contains(3)
V1 self $>=1 \&$ self $<=50$
M1 Quantity entered is out of the range

S206e(ii)- Provide average quantity of Cassava pudding - Maniota(single bars) sold in last one week?

E pudding_type.Contains(4)
V1 self $>=1 \&$ self $<=50$
M1 Quantity entered is out of the range

S206d(i)- What type of cooked food did the household sell in the last one week?

E cooked_type.Contains(4)

E cooked_Root.Contains(2)
V1 self >= 1 \& self $<=50$
M1 Quantity should be greater than or equal to 1

NUMERIC: INTEGER s206eii_manibars
$\qquad$

| multi-Select | cooked_Root |
| :---: | :---: |
| $01 \square$ Taro |  |
| $02 \square$ Maniota |  |
| $03 \square$ Kumara |  |
| $04 \square$ Banana |  |
| $05 \square$ Tarua |  |
| NUMERIC: INTEGER | S206eii_Maniplate |


NUMERIC: INTEGER
s206eii_bananapudds
$\qquad$

## NUMERIC: INTEGER

s206eii_bananapudd1

NUMERIC: INTEGER s206eii_puddingplate



SECTION 2: CROP PRODUCTION ACTIVITY OF THE HOUSEHOLD
Roster: OTHER COOKED FOODS
generated by list question s206ei i_othercooked
Other_cooked

| Q206e(ii) - What unit was \%rostertitle\% sold as? | ```SINGLE-SELECT 01``` <br> ```Small ContainerNone ``` <br> ```Large Container \[ 03 \] ``` <br> ```Plate ``` | Q206eiicooked_unit |
| :---: | :---: | :---: |
| S206e(ii)- Provide average quantity of \%rostertitle\% sold in last one week? <br> se1f >= $1 \& \operatorname{self}<=50$ <br> Quantity entered is out of the range | NUMERIC: INTEGER | s206eiicooked |
| VARIABLE <br> Other_cooked.Sum(x=>x.s206eiicooked) | DOUBLE | S206eiicooked_Total |


| S206e(iii)- where did you sell? | multi-Select | s206eiii |
| :---: | :---: | :---: |
| E S206e == 1 | $01 \square$ Roadside $02 \square$ To Shops $03 \square$ Market $04 \quad \square$ |  |
| S206e(iii)- Others, specify | LST | s206eiii_others |
| E S206eiii. Contains(4) |  |  |

E IsSectionAnswered(Cov) \&\& AgFish.Contains(1)

| S301- Does your Household have any livestock or poultry (including ducks) during the last 12 months? | SINGLE-SELECT <br> 01 O Yes <br> 02 O No | s301 |
| :---: | :---: | :---: |
| S302- What was the type of operation during last 12 months? $s 301==1$ | SINGLE-SELECT Commercial <br> 02 Semi-subsistence <br> 03 Subsistence | s302 |
| S303-What kind of Livestock does your household keep during the last 12 months? s301 ==1 | mULTI-SELECT $01 \quad \square$ Pigs $02 \square$ Goats $03 \square$ Cattle $04 \square$ Chicken $05 \square$ Ducks $06 \square$ Horses |  |
| What types of Pigs are kept? <br> s301 ==1 \& s303_1ivestock.Contains(1) | ```MULT-SELECT``` <br> ```Weaners \\ 02 ``` <br> ```Growers \\ 03 ``` <br> ```Boars \\ 04 ``` <br> ```Sows \\ 05 ``` <br> ```Piglets ``` | s303_pigs_kept |

SECTION 3: LIVESTOCK AND POULTRY(INCLUDES DUCKS)
Roster: TYPE OF PIGS KEPT
generated by multi-select question s303_pigs_kept Pig_type

| S3032-Number kept | NUMERIC: INTEGER | 53032 |
| :---: | :---: | :---: |
| I on the day of the enumeration <br> V1 self >=0 \&\& self <= 50 <br> 1 the number of livestock kept is out of the range |  |  |
| S3033-Rearing System used $\text { E S3032 >= } 1$ |  | 53033 |
| S3034- Number slaughtered and consumed during last 12 months | NUMERIC: INTEGER | 53034 |

S303_pigs_kept.Contains(1) || S303_pigs_kept.Contains(2)
|| s303_pigs_kept.Contains(3) || s303_pigs_kept.Contains (4)

V1 self >=0 \&\& self <= 50
M1 total number entered is outside the range

01 O Yes
02 ○ No

SINGLE-SELECT S302
1 O Commercial
2 O Semi-subsistence
3 〇 Subsistence
s303_1ivestock
S303-What kind of Livestock does your household keep during the last 12 months?

E $\mathrm{S} 301==1$
$\square$ Pigs
$\square$ Goats
$\square$ Cattle
$\square$ Chicken
$\square$ Ducks
Horses

Multi-select
s303_pigs_kept
$\square$ Weaners
$\square$ Growers
$\square$ Boars $\square$ Sows $\square$ Piglets


SECTION 3: LIVESTOCK AND POULTRY(INCLUDES DUCKS)

## Roster: TYPE OF CATTLES KEPT

generated by multi-select question s304_cattle_kept
Cattle_type

| S3042-Number kept | NUMERIC: INTEGER | S3042 |
| :---: | :---: | :---: |
| on the day of the enumeration self >=0 \&\& self <= 70 <br> the number of livestock kept is out of the range |  | - |
| S3043-Rearing System used | MULTI-SELECT | S3043 |
|  | $01 \square$ Free Range |  |
| S3042 >= 1 | $02 \square$ Tied on Rope |  |
|  | $03 \square$ Enclosed on own land |  |
|  | ```04 \square Enclosed on another households land``` |  |



SECTION 3: LIVESTOCK AND POULTRY(INCLUDES DUCKS)

## Roster: TYPE OF GOATS KEPT

generated by multi-select question s305_goat_kept

## S3052-Number kept

I on the day of the enumeration
V1 self >=0 \&\& self <= 500
M1 the number of livestock kept is out of the range



SECTION 3: LIVESTOCK AND POULTRY(INCLUDES DUCKS)
Roster: TYPE OF CHICKEN KEPT
generated by multi-select question s307_chicken_kept
Chicken_type


E $5302<3$
V1 self >=0 \&\& self <= 200
M1 Number of livestock kept is out of range


SECTION 3: LIVESTOCK AND POULTRY(INCLUDES DUCKS)
Roster: TYPE OF DUCKS KEPT
generated by multi-select question s308_ducks_kept Ducks_type
$\left.\begin{array}{l|l}\hline \text { S3082-Number kept } & \text { nUMERIC: INTEGER } \\ \text { I on the day of the enumeration } \\ \text { V1 self >=0 \&\& self }<=50\end{array}\right)$

| S3087- Number sold alive during last 12 months | NUMERIC: INTEGER | s3087 |
| :---: | :---: | :---: |
| E S302 < 3 |  |  |
| V1 self >=0 \&\& self <= 50 |  |  |
| M1 Number of livestock kept is out of range |  |  |
| VARIABLE $((s 3086>0) ?(s 3086):(0))+((s 3087>0) ?(s 3087):(0))$ | LONG | Duckssold |
| S3088- Number gifted alive during last 12 months | NUMERIC: INTEGER | 53088 |
| V1 self >=0 \&\& self <= 50 |  |  |
| M1 Number of livestock kept is out of range |  |  |
| S3089- What is the total revenue from the sale? | NUMERIC: DECIMAL | 53089 |
| S302 <= 2 \& (s3086 >0 \|| s3087 >0) |  |  |
| v1 self.InRange((ducks[@rowcode].minprice * Duckssold), (du cks[@rowcode].maxprice * Duckssold)) |  |  |
| M1 Revenue is outside the expected range for number of ducks sold (\%Du cksSold\%) |  |  |

## SECTION 4- LAND OPERATED BY THE HOUSEHOLD DURING THE LAST 12 MONTHS

E IsSectionAnswered(Cov) \&\& AgFish.Contains(1)

S402- How many parcel did the household
self $>=0$

[^0]SECTION 4- LAND OPERATED BY THE HOUSEHOLD DURING THE LAST 12 MONTHS
Roster: PARCEL_DETAILS
generated by numeric question 5402
S4_Parce1_details

| S403- Location of the Parcel | SINGLE-SELECT ```01 O Within village (same Island) 0 2 \bigcirc \text { Outside village (same Island)} 03 \bigcirc Outer Island``` | S403 |
| :---: | :---: | :---: |
| S403 (a)- Location of the Parcel | SINGLE-SELECT | S403a |
| $\mathrm{E} S 403=3$ | 02 O Aitutaki <br> 03 $\bigcirc$ Atiu <br> 04 $\bigcirc$ Mangaia <br> 05 $\bigcirc$ Mauke <br> 06 $\bigcirc$ Mitiaro <br> 07 $\bigcirc$ Manihiki <br> 08 $\bigcirc$ Palmerston <br> 09 $\bigcirc$ Penrhyn <br> 10 $\bigcirc$ Pukapuka <br> 11 $\bigcirc$ Nassau <br> 12 $\bigcirc$ Rakahanga |  |
| S404- Total area of the Parcel | SINGLE-SELECT <br> 01 Acres <br> 02 square meters |  |
| S404a - Total Parcel Area in acres | NUMERIC: INTEGER | S404a |
| I Whole Acres Enter 0 here if area is less than an acre $\begin{aligned} & \text { E } \operatorname{s404}==1 \\ & 1 \text { self }>=0 \& \& \text { self }<=20 \end{aligned}$ <br> area should be between 0 and 20 acres | --------------------- | - • |
| S404b - Fraction of an Acre (x/y) | TEXT | S404b |
| I Enter "0" if area is whole number (i.e.,no fraction) |  |  |

S404 == 1
\$ChkFraction
Not a valid fraction!
self == "0" ? IsAnswered(s404a) \&\& s404a != 0 : true
Parcel \%rostertitle\% can't have no area!

## VARIABLE

(string.Compare(S404b,"0") != 0) ? S404a + (Double.Parse
(S404b.Sp1it('/')[0]) / Double.Parse(S404b.Sp1it('/')[1]
)) : S404a


| S410a_tree - Fraction of an Acre (x/y) | TEXT | s410a_tree |
| :---: | :---: | :---: |
| Enter "0" if area is whole number (i.e.,no fraction) S404 == 1 \& Landcate. Contains(1) <br> \$ChkFraction <br> Not a valid fraction! | -.................. | ............ |
| ```VARIABLE (string.Compare(s410a_tree,"0") != 0) ? s410a + (Doub7e. Parse(S410a_tree.Split('/')[0]) / Double.Parse(S410a_tre e.Split('/')[1])) : s410a``` | DOUBLE | S410a_dec |
| S410 (b) - Land area under Tree Crops (in square meters) ```S404 == 2 & Landcate.Contains(1) self >= 0``` <br> area should be greater than 0 square meters | NUMERIC: INTEGER -------- - - | s410b |
| S411 (a) - Land area under Root Crops (in acres) <br> Whole Acres Enter 0 here if area is less than an acre $\begin{aligned} & \text { S404 }==1 \text { \& Landcate.Contains(2) } \\ & \text { self >= } \end{aligned}$ <br> Area should be greater than or equal to 0 | NUMERIC: INTEGER - ------- - - | S411a |
| S411a_root - Fraction of an Acre ( $\mathrm{x} / \mathrm{y}$ ) <br> Enter " 0 " if area is whole number (i.e.,no fraction) S404 == 1 \& Landcate. Contains(2) <br> \$ChkFraction <br> Not a valid fraction! | TEXT -.................. | S411a_root ............ |
| ```VARIABLE (string.Compare(s411a_root,"0") != 0) ? s411a + (Doub7e. Parse(S411a_root.Split('/')[0]) / Double.Parse(S411a_roo t.Split('/')[1])) : S411a``` | DOUBLE | S411a_dec |
| S411 (b)- Land area under Root Crops (in square meters) ```S404 == 2 & Landcate.Contains(2) self >= 0``` <br> Area should be greater than or equal to 0 | NUMERIC: INTEGER | S411b |
| S412 (a) - Land area under Temporary crops (other than root crops) in acres <br> Whole Acres Enter 0 here if area is less than an acre $\text { S404 == } 1 \text { \& Landcate.Contains(3) }$ $\text { self }>=0$ <br> Area should be greater than or equal to 0 | NUMERIC: INTEGER | s412a |
| S412a_tem - Fraction of an Acre (x/y) <br> Enter " 0 " if area is whole number (i.e.,no fraction) S404 == 1 \& Landcate. Contains(3) <br> \$ChkFraction <br> Not a valid fraction! | TEXT | s412a_temp |
| VARIABLE <br> (string.Compare(s412a_temp,"0") != 0) ? s412a + (Double. Parse(S412a_temp.Split('/')[0]) / Double.Parse(S412a_tem p.split('/')[1])) : s412a | DOUBLE | S412a_dec |




V1 \$ChkFraction
M1 Not a valid fraction!

| VARIABLE | DOUBLE |
| :--- | :--- |

(string.Compare(S416a_pou1,"0") != 0) ? s416a + (Doub1e. Parse(S416a_poul.Split('/')[0]) / Double.Parse(S416a_pou 1.Split('/')[1])) : s416a

| S416 (b) - Land area under Livestock and/or | NUMERIC: INTEGER |
| :--- | :--- |

Poultry in square meters
S404 == 2 \& Landcate.Contains(7)
V1 self >= 0
M1 Area should be greater than or equal to 0

| S417 (a)- Land area under other non- |  |
| :--- | :--- |
| NUMERIC: INTEGER |  | agricultural uses in acres

I Whole Acres Enter 0 here if area is less than an acre
E $5404=1$ \& Landcate. Contains(8)
V1 self >= 0
M1 Area should be greater than or equal to 0

| S417a_agri - Fraction of an Acre (x/y) | TEXT | s417a_agri |
| :---: | :---: | :---: |

E $\mathrm{S} 404=1$ \& Landcate. Contains(8)
V1 \$ChkFraction
M1 Not a valid fraction!
VARIABLE
(string.Compare(S417a_agri,"0") $!=0$ ) ? S417a + (Double.
Parse(S417a_agri.Split('/')[0]) / Double.Parse(S417a_agr

Parse(S417a_agri.Split('/')[0]) / Double.Parse(S417a_agr i.split('/')[1])) : s417a


# SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS 

E IsSectionAnswered(Cov) \&\& AgFish.Contains(1) \&\& \$CropHH

## SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS <br> Roster: CROP PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS generated by numeric question s402

| S511- Did the household planted and/or harvested on this parcel during the last 12 months? | SINGLE-SELECT <br> 01 O Yes <br> 02 O No | Crop1 |
| :---: | :---: | :---: |
| S512- Name of the crop planted and or harvested during the last 12 months Crop1 $==1$ | MULT-SELECT $001 \quad \square$ Abiu (Eggfruit ) $002 \square$ Apple Star $003 \square$ Avocado $004 \square$ Banana, cavendish $005 \square$ Banana, cooking (Plantain ) $006 \square$ Banana, ducasse $007 \square$ Banana, fei (Utu ) $008 \square$ Banana, ladyfinger $009 \square$ Barbados cherry (Acerola, $010 \square$ West Indian Cherry ) $011 \quad \square$ Bean, climbing (Pole beans ) $012 \square$ Bean, snake $013 \square$ Bean, winged (Four-cornered $014 \square$ Bean ) $015 \square$ Bean, yardlong (Cowpea) $016 \square$ Bitter Melon (Balsam bear ) And 109 other symbols [3] | S512 |
| S512_OTHER - Specify | LST | S512_OTHER |
| s512.Contains(999) |  |  |

SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS / CROP PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS
Roster: CROP PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS
generated by multi-select question S 512

| S514- Method of planting used | $\begin{aligned} & \text { single-select } \\ & 01 \bigcirc \text { Single Row } \\ & 02 \bigcirc \\ & 02 \\ & 03 \\ & 03 \\ & 04 \\ & 04 \\ & \text { Mixed Crop } \\ & \text { Scattered } \end{aligned}$ | 5514 |
| :---: | :---: | :---: |
| S514- Crop estimation method | single-Select <br> 01 O Area under crop <br> 02 number of trees | estimation_method |

S515- what the total crop area?
E estimation_method == 1

SINGLE-SELECT
01 ○ Acres
02 O Square Meters

| S515 (a) - what is total area under the crop (in | NUMERIC: INTEGER |
| :--- | :--- |
| acres)? |  |
| I Whole Acres Enter 0 here if area is less than an acre |  |
| E S515 $=1$ \&\& estimation_method $==1$ |  |
| 1 self >= 0 \& self <= 20 |  |


| S515a_under - Fraction of an Acre (x/y) | TEXT | S515a_under |
| :---: | :---: | :---: |
| Enter "0" if area is whole number (i.e.,no fraction) |  |  |

S515 == 1 \&\& estimation_method == 1
V1 \$ChkFraction
M1 Not a valid fraction!
V2 self == "0" ? IsAnswered(S515a) \&\& S515a != 0 : true
M2 Parcel \%rostertitle\% can't have no area!

|  |  |
| :--- | :--- |
| VARIABLE | DOUBLE |

(string.Compare(S515a_under,"0") !=0) ? S515a + (Doub7e
.Parse(S515a_under.Split('/')[0]) / Double.Parse(S515a_u
nder.split('/')[1])) : S515a
DOUBLE
S515a_dec

## STATIC TEXT

E $\mathrm{S} 515=1$
FOR TESTING: Acres as decimal - \%S515a_dec\%
S515 (b)- what is total area under the crop (in square meters)?

NUMERIC: INTEGER
S515b

E S515 == 2 \&\& estimation_method == 1
self > 0 \& self <= 50000
area enter is out of range
S516- what was the number of trees or plants grown or harvested?

NUMERIC: INTEGER
S516

Estimation_method == 2
V1 self > 0
M1 the number of trees/plants grown or harvested should be greater than 0

S517- what is average age of the trees planted?
NUMERIC: INTEGER

I the age should be enter in the number of years. if less than 1 year ente ro
V1 self >= 0
M1 age of plants entered is out of range
S518- type of seed/plant material used

## S5110- What is the main method of irrigation used

SINGLE-SELECT
$01 \bigcirc$ traditional
02 ○ improved

SINGLE-SELECT
01 O Drip tape irrigation
02 O Sprinkler irrigation
03 O Irrigation Water Pump
04 O Water Tank
${ }_{0} 05$ Rain fed
${ }_{06} \mathrm{O}$ Others




SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS
Roster: OTHER INORGANIC FERTILIZERS
generated by list question S 5216 a
Inorganic
S5216(b)-Please specify the total quantity of \%rostertitle\% fertilizer used?

S522.Contains(16)

S5216(b)- Please specify the total quantity of \%rostertitle\% fertilizer used in kilograms?

E $5216 q t y==1$
V1 self>=0 \& self <= 6000
M1 Quantity entered is out of range
S5216(b)- Please specify the total quantity of \%rostertitle\% fertilizer used in litres?

S5216qty==2
V1 self>=0 \& self <= 6000
M1 Quantity entered is out of range

|  |  |  |
| :--- | :--- | :---: |
| VARIABLE | DOUBLE | S5216c_kg_Tota1 |
| Inorganic.Sum(x=>x.S5216c_kg) |  |  |



SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS
Roster: OTHER ORGANIC FERTILIZERS
generated by list question S5220a
Organic
S5220(b)- Please specify the total quantity of \%rostertitle\% fertilizer used

E S5218.Contains(4)
S5220(b)- Please specify the total quantity of \%rostertitle\% fertilizer used in kilograms?
s5220c_qty==1
V1 self>=0 \& self <= 6000
M1 Quantity entered is out of range
S5220(b)- Please specify the total quantity of \%rostertitle\% fertilizer used in litres?

E S5220c_qty==2
V1 self>=0 \& self <= 6000
M1 Quantity entered is out of range

| VARIABLE |  |  |
| :--- | :--- | :---: |
| Organic.Sum( $\mathrm{X}=>\times$.S5220c_kg) | DOUBLE | S5220c_kg_Tota1 |


self>=0 \& self <= 100
Quantity entered is out of range



SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS
Roster: CHEMICALS
generated by list question S 5316 a
Chemicals

| S5316(c)- Total quantity of \%rostertitle\% used | single-SELECT |
| :--- | :--- |
| 01 O Kilograms |  |
| 02 Litres |  |

in kilograms?
E S5316c_qty==1
self>=0 \& self <= 100
M1 Quantity entered is out of range

| S5316(c)- Total quantity of \%rostertitle\% used | NUMERIC: DECIMAL |
| :--- | :--- |

in litres?
S5316c_qty==2
V1 self>=0 \& self <= 100
M1 Quantity entered is out of range

| VARIABLE <br> Chemica1s.Sum( $\left.x=>x . S 5316 c \_k g\right)$ | DOUBLE | S5316c_kg_Tota1 |
| :--- | :--- | :---: |
| VARIABLE <br> Chemica1s.Sum(x=>x.S5316c_1trs) | DOUBLE | S5316c_7trs_Tota1 |




SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS
Roster: OTHER SEEDS
generated by list question S5401_seedsname
Seeds

| S5401- Total quantity of \%rostertitle\% | NUMERIC: INTEGER |
| :--- | :--- | imported (in grams)?

E seedtype.Contains(9)
V1 self >= 1 \& self <= 10000
M1 Quantity entered is out of range

| VARIABLE | DOUBLE |
| :--- | :--- |
| Seeds. Sum(x=>x.S5401_Qty) | MULTI-SELECT |
| S5401- Which Country did the household <br> import the seeds from? | $01 \square$ Australia |
| E s5401.contains(1) | $02 \square$ New Zealand |
|  | $03 \square$ Fiji |
|  | $04 \square$ Tahiti |
|  | $05 \square$ Others, specify |


| S5401- Please specify Other Countries | LIST |
| :--- | :--- | :--- |

E S5401_seedImported.Contains(5)

| S5402- Which of the following tissue cultured | MULTI-SELECT |
| :--- | :--- |

food crop plants did the household import?
E S5401.Contains(2)

| 01 | $\square$ | Breadfruit |
| :--- | :--- | :--- |
| 02 | $\square$ | Sweet Potato/kumara |
| 03 | $\square$ | Taro |
| 04 | $\square$ | Others, please specify |

S5402- What was the total quantity of tissue cultured breadfruit plants the household imported?

E tfoodcrop_type.Contains(1)
V1 self >= 1 \& self <= 500
M1 Quantity entered is out of range

| NUMERIC: INTEGER- - - --- - - - | T_bread |
| :---: | :---: |
|  | - - . |



S5403- Please list any other Tissue Cultured ornamental / flower Plants imported?

E tflowers_type.Contains(3)

SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS
Roster: OTHER TISSUE CULTURED FLOWERS
generated by list question S5403_tf1owername
TissueCultureFlower
S5403- What was the total quantity of \%rostertitle\% Plants Imported?

E tflowers_type.Contains(3)
V1 self >= 1 \& self <= 500
M1
Quantity entered is out of range

| VARIABLE <br> TissueCultureFlower.Sum(x=>x.S5403_TflowerQty) | DOUBLE | S5403_TflowerQty_Total |
| :--- | :--- | ---: |
| S5403- Which Country did the household | muLti-SELECT | S5403_Imported |
| Import tissue culture ornamental/flower plants | $01 \square$ Australia |  |
| from? | $02 \square$ New Zealand |  |
| s5401.Contains(3) | $03 \square$ Fiji |  |
|  | $04 \square$ Tahiti |  |
| S5403- Please specify Other Countries | 05 Others, specify |  |

E S5403_Imported.Contains(5)

| S5404- Which of the following nursery food | мulti-SELECT $\quad$ foodcrop_type |
| :--- | :--- |

crop plants did the household import?

E S5401.Contains(4)
$01 \quad \square$ Citrus
$02 \square$ Rambutan
$03 \square$ Logan
$04 \square$ Lychee
$05 \quad \square$ Others, specify

| S5404- What was the total quantity of Citrus | NUMERIC: INTEGER | S5404_citrus |
| :--- | :--- | :--- |

## NUMERIC: INTEGER

E foodcrop_type.Contains(1)
V1 self >= $1 \& \operatorname{self}<=500$
M1 Quantity entered is out of range
S5404- What was the total quantity of $\quad$ NUMERIC: INTEGER S5404_ram

Rambutan plants imported?
E foodcrop_type.Contains(2)
V1 self >= 1 \& self <= 500
M1 Quantity entered is out of range
S5404- What was the total quantity of Logan plants imported?

E foodcrop_type.Contains(3)
V1 self >= 1 \& self <= 500
M1 Quantity entered is out of range
NUMERIC: INTEGER S5403_TflowerQty
$\qquad$

LSt


UMERIC: INTEGER
S5404_ram


## NUMERIC: INTEGER

S5404_1ogan
-

| S5404- What was the total quantity of Lychee <br> plants imported? | NUMERIC: INTEGER |
| :--- | :--- |
| E foodcrop_type. Contains(4) |  |
| V1 self >= 1 \& self <= 500 |  |
| M1 Quantity entered is out of range | S5404_1ychee |
|  | S5404- Please list any other food crop plants |
| imported? |  |
| E foodcrop_type.contains(5) |  |

SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS
Roster: OTHWE IMPORTED FOOD CROPS
generated by list question S5404_foodother
FoodImport

| S5404- Quantity of \%rostertitle\% Crop Imported? | NUMERIC: INTEGER | S5404_nfoodQty |
| :---: | :---: | :---: |
| E foodcrop_type.Contains(5) <br> V1 self >= 1 \& self <= 500 <br> 11 Quantity should be greater or equal to 1 |  |  |
| VARIABLE <br> FoodImport.Sum(x=>x.S5404_nfoodQty) | DOUBLE | S5404_nfoodQty_Tota1 |
| S5404- Which Country did you Import from? <br> E S5401.Contains(4) |  | S5404_Imported |
| S5404- Please specify Other Countries <br> E S5404_Imported.Contains(5) | LIST | S5404_Othercountry |
| S5405- Which of the following ornamental/flower plants did the household import? | MULTI-SELECT Orchid <br> 02 Anthurium | flowers_type |
| E S5401.Contains(5) |  |  |
| S5405- What was the total quantity of orchid | NUMERIC: INTEGER | S5405_orchids | plants imported?

E flowers_type.Contains(1)
V1 self >= 1 \& se1f <= 500
M1 Quantity entered is out of range
S5405- What was the total quantity of $\quad$ NUMERIC: INTEGER S5405_anth

Anthurium plants imported?
E flowers_type.Contains(2)
V1 self >= 1 \& self <= 500
M1
Quantity entered is out of range


SECTION 5: CROPS PLANTED AND/OR HARVESTED DURING THE LAST 12 MONTHS
Roster: OTHER ORNAMENTAL PLANTS
generated by list question S5405_f1owername
Ornamenta1


SECTION 6: NON-HOUSEHOLD LABOUR INPUT

E IsSectionAnswered(Cov) \&\& AgFish.Contains(1)


SECTION 6: NON-HOUSEHOLD LABOUR INPUT
Roster: LABOUR INFORMATION- FOREIGN
generated by numeric question s602b_foreign
E S601a. Contains(2)

$\left.\begin{array}{l|ll}\hline \begin{array}{l}\text { S606- Was there any free/subsidized house } \\ \text { provided to foreign labour? }\end{array} & \begin{array}{l}\text { SINGLE-SELECT } \\ 01 ~ \bigcirc ~ Y e s ~ \\ 02 ~ O ~ N o ~\end{array} & \text { s606f }\end{array}\right]$ s607f

SECTION 6: NON-HOUSEHOLD LABOUR INPUT
Roster: LABOUR INFORMATION - LOCAL
generated by numeric question 5602 b _1oca1
E S601a.Contains(1)

| S602- What is the age of local labour? | NUMERIC: InTEGER | 5602 |
| :---: | :---: | :---: |
| self >= 15 \& self $<=70$ |  |  |
| Age is out of range |  |  |
| S603- What is the sex of the local labour | Single-Select | s603 |
|  | 01 O Male |  |
|  | 02 O Female |  |
| S604- How many hours does the local labour worked during the month? | NUMERIC: InTEGER | S604 |
| self >= 1 \& self <= 300 <br> the number of hours worked is out of range |  |  |
| S605- Was there any cash payment made to the local labour? | SINGLE-SELECT | s605a |
|  | $01 \bigcirc$ Yes |  |
|  | 02 O No |  |
| S605(b)- What was the amount paid in (NZ\$) to | NUMERIC: DECIMAL | s605b | the local labour?

s605a == 1
self.InRange( $(8$ * s604), ( 50 * s604))
total payment entered is out of range

S606- Was there any free/ subsidized house provided to the local labour?
S607- Was there any free meals provided to local labour?

S608- Was there any other benefits provided to the local labour?

## SECTION 7- HOUSEHOLD INCOME AND LOANS/GRANTS FOR

 AGRICULTURAL PURPOSESE IsSectionAnswered(Cov) \&\& AgFish.Contains(1)

| S701- What was the proportion of your household's total income (in cash / kind) | single-Select | s701 |
| :---: | :---: | :---: |
|  | 01 O None |  |
| usually derived from agricultural activities during last 12 months. | $02 \bigcirc$ About 1/4 |  |
|  | $03 \bigcirc$ About 1/3 |  |
| Note that "in kind" means agricultural products that were received at $n$ o cost and consumed by the household during last 12 months or may $b$ e wages received in terms of agricultural products by any memb And 54 other symbols [1] | $04 \bigcirc$ About 1/2 |  |
|  | $05 \bigcirc$ About 3/4 |  |
|  | 06 O All |  |
| S702- Did you obtain or receive any loan and/or grant for your households' agricultural activities? | SINGLE-SELECT | 5702 |
|  | $01 \bigcirc$ Yes |  |
|  | 02 O |  |
| S703- What was the main source of the loan and/or grant that you used for your household agricultural activities? | single-Select | s703 |
|  | 01 O Bank of the Cook Islands (BCI) |  |
|  | 02 O Other Commerical Bank (ANZ |  |
| s702 == 1 | or BSP) |  |
|  | $04 \bigcirc$ Other Sources (e.g. relatives, farmers association etc) |  |
| S704- What was the purpose of the loan and/or grant that you used for your household agricultural activities? | multi-SELECT | s704 |
|  | $\begin{aligned} & 01 \text { Hand Tools (e.g. shovel, spade, } \\ & \text { machete, garden fork) } \end{aligned}$ |  |
|  | $02 \square$ Vehicles |  |
| s702 $==1$ | ```03 \square Small Machinery/equipment (knapsack, mist blowers) 04``` <br> ```Chemicals ``` |  |
|  | $05 \square$ Seeds |  |
|  | $06 \square$ Irrigation Materials |  |
|  | $07 \square$ Fertilizer |  |
|  | $08 \square$ Labour |  |
|  | $09 \square$ Others, Specify |  |
| S704- Specify other purposes | TEXT | s704_others |
| s702 == 1 \& s704.Contains(9) | ........... | ............. |
| S705- What future support does the household require to assist with your agriculture project? | SINGLE-SELECT Tractor Services Water Tank Agriculture equipment - rotary, knapsack, sprayer <br> Technical Advice <br> Research <br> 06 Other - please specify | s705_future |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| S705(b)- Please Specify the other support s705_future $==6$ | TEXT | s705b |
|  | ...................................................... |  |

## SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING

E IsSectionAnswered(Cov) \&\& AgFish. Contains(2)

S801-Which of the following activities did you or your household engage in during the last 12 months?

I Read out the answer options and select Yes or No for each option Note : Reef and lagoon harvesting: includes shell and other seafood collectio n, eg: rori, trochus, paua, rimu, crab...etc Pearls: incl And 70 other symbols [2]
V1 self.Missing.Length $==0$
M1 Please answer Yes or No for all the options

MULTI-SELECT: YES/NO Agriculture_fishing
$01 \square / \square$ Capture Fishing / Seafood products harvesting
02 $\square /$ Pearls and Pearl Farming

03Aquaculture

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING
FISHING / SEAFOOD PRODUCT HARVESTING
fishing_seafood_harvesting
E Agriculture_fishing.Yes.Contains(1)

S802 - Where does your household engage in fishing / seafood product harvesting?

V1 self.Missing.Length==0
M1 Must answer Yes or No for each option
$\qquad$
S802.a - Do you fish on any Fish Aggregating Devices (FADs)?

I Note: FADs are anchored around the island, and is made up of anchor block, rope lines, floats and aggregate such as coconut fronds (kikau) o rbamboo.
E fish_seafood_place.Yes.Contains(3)

S802.a.i - Name the two FADs you fish on the most.

I Read out the answer options if the respondent is not sure. Select only t he two options given.
E fishing_fads==1

MULTI-SELECT
$01 \square$ Rarotonga-Arorangi-Edgewater-Shallow
$02 \square$ Rarotonga-Nikao-SeawallShallow (Met Office)
$03 \square$ Rarotonga-Avarua-Avarua Harbour-Shallow
$04 \square$ Rarotonga-Arorangi-Arorangi Primary School-Shallow
$05 \square$ Rarotonga-Ngatangiia-AvanaDeep
$06 \square$
$\square$ Rarotonga-Nikao-PanamaDeep
$07 \square$ Rarotonga-Arorangi-TheRarotongan-Deep
08Rarotonga-Arorangi-Edgewater-Deep
$09 \square$ Rarotonga-Avarua-Kiikii-Deep
10Rarotonga-Titikaveka-TikiokiDeep
$11 \square$ Rarotonga-Titikaveka-QRShallow
$\square$ Rarotonga-Tupapa-TupiShallow
$3 \square$ Aitutaki-Maina-Deep
$4 \square$ Aitutaki-Motikitiu-Deep
$5 \square$ Aitutaki-Airport-Deep
16Aitutaki-Atua Tane-Deep

And 22 other symbols [4]

S802.b - What methods did your household use for fishing/seafood product harvesting in the last 12 months?

I Select all that apply


S802.d - In which months would you go fishing more?

Select all Months that apply
MULTI-SELECT
$01 \quad \square$ January
$02 \square$ February
$03 \square$ March
$04 \square$ April
$05 \square$ May
$06 \square$ June
$07 \square$ July
$08 \square$ August
$09 \square$ September
$10 \square$ October
$11 \square$ November
$12 \square$ December

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING / FISHING / SEAFOOD PRODUCT HARVESTING
Roster: MONTHS FISH MORE
generated by multi-select question months_fishing_more mons_fishmore_roster S802.e - Please give the reasons why you fish more during \%mons_fishmore_roster\%.


MULTI-SELECT
months_fishing_1east
S802.f - Which months would you go fishing the least?

I Select all Months that apply
F !(months_fishing_more.ContainsAny(@optioncode,1-12))
$\square$ January
$\square$ February
$\square$ March
$\square$ April
$\square$ May
$\square$ June
$\square$ July
$\square$ August
$\square$ September
$\square$ October
$\square$ November
$\square$ December

| S802.g - Please give the reasons why you fish less during \%mons_fishleast_roster\%. | multi-Select reason_fleast_months$01 \quad \square$ Timing of the tides clash with$02 \square$other activities <br> Seasonal worker - employment <br> commenced$03 \square$Not the season for catching <br> target species$04 \square$Time of year with bad <br> weather/conditions$05 \quad \square$ Market declines$97 \quad \square$ Other, please specify |
| :---: | :---: |
| S802.gn - Please specify other reason. <br> reason_fleast_months.Contains(97) | TEXT other_reason_fless |
| S802.h - What is the average number of hours that you would spend on each fishing trip in the last 12 months? | NUMERIC: INTEGER average_hours_fishing |
| S802.i - What is your MAIN purpose for fishing? | Only for home consumption Mainly for home consumption and some for sale Mainly for sale and some for home consumption <br> Only for sale Other (specify) |
| S802.i.n - Please specify other purpose <br> fishing_main_purpose==97 | text <br> other_fish_purpose |
| S802.j - Name the top 5 target species that you fished for in the last 12 months. | LITT top5_species |

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING / FISHING / SEAFOOD PRODUCT HARVESTING
Roster: TOP 5 FISHING SPECIES
generated by list question top5_species
fishing_species
S802.j.i - Select which months you go fishing for \%fishing_species\%

I Select all months that apply

| multi-SELECT | months_each_species |
| :---: | :---: |
| $01 \square$ January |  |
| $02 \square$ February |  |
| $03 \square$ March |  |
| $04 \square$ April |  |
| $05 \square$ May |  |
| $06 \square$ June |  |
| $07 \square$ July |  |
| $08 \square$ August |  |
| $09 \square$ September |  |
| $10 \square$ October |  |
| $11 \square$ November |  |
| $\square$ December |  |


| S802.j.ii - What is the MAIN fishing method that you or your household use to catch \%fishing_species\%? | Gill and other net fishing Vertical long lining Drop lining Hook and line Trolling Deep bottom fishing Speargun Collecting/gleaning shellfish <br> and invertebrates Flying fishing (maroro) Harpoon Traditional fish traps Other, please name |
| :---: | :---: |
| S802.j.iii - How much \%fishing_species\% did you catch on average per fishing trip? | NUMERIC: INTEGER average_catch |
| I Give the answer in kilograms (kg). |  |
| S802.j.iv - What proportion of \%fishing_species\% did your household sell? | All sold About 1/4 About 1/3 About 1/2 About 3/4 O All Consumed, none sold |
| S802.j.v - What processing state is your \%fishing_species\% mainly sold at? <br> prop_fish_sold.InList(1,2,3,4,5) | Gilled and gutted Gilled and gutted and tailed Whole gutted only Fish, partial, fillet / loin / truck Headed and gutted Shellfish or invertebrate meat /gonad etc only Whole Smoked Other |
| S802.j.vi - What storage state is your \%fishing_species\% mainly sold in? <br> prop_fish_sold.InList $(1,2,3,4,5)$ | Fresh Frozen Dried/dry salted Pickled/preserved <br> 05 Other |

S802.j.vii - Which top 2 islands is your
\%fishing_species\% sold in?
I Select only the top 2 Islands.
E prop_fish_sold.InList(1,2,3,4,5)
MULTI-SELECT: ORDERED
$01 \quad \square$ Aitutaki
$02 \square$ Atiu
03
04
04
$\square$ Mangaia $\quad$ Manihiki $\quad$ island_catch_sold

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING / FISHING / SEAFOOD PRODUCT HARVESTING / TOP 5 FISHING SPECIES
Roster: TOP 2 ISLANDS
generated by multi-select question island_catch_sold
top2_islands

## S802.j.viii - What MAIN market in

 \%top2_islands\% is your catch sold to?market_catch_sold
1 〇 Village/town market
single-select
$01 \bigcirc$ Village/town market
$02 \bigcirc$ Roadside

$03 \bigcirc$| Service industry e.g. |
| :--- |
| restaurant, café, hotel |


$04 \bigcirc$| Retail sector -e.g. shop, |
| :--- |
| supermarket (on home island) |


$05 \bigcirc$| Fish broker/wholesaler (on |
| :--- |
| selling to other markets e.g. |
| hotels, shops) |


$06 \bigcirc$| Sell from home (advertised |
| :--- |
| online...eg. facebook |
| community pages) |

07 Other

O Roadside
Service industry e.g. restaurant, cafe, hotel supermarket (on home island) selling to ortwh marker hotels, shops) online...eg. facebook
community pages) 07 O Other

| S802.j.ix - What proportion of \%fishing_species\% did you sell in \%top2_islands\% in the last 12 months? | $\begin{aligned} & \text { single-select } \\ & 00 \\ & 0 \\ & 01 \\ & 0 \\ & 0 \\ & 02 \\ & \text { O } \end{aligned} \text { About } 1 / 4$ |  |
| :---: | :---: | :---: |
| S803 - In the last 12 months, how many MALE members of your household were normally engaged in fishing/seafood product harvesting? | NUMERIC: INTEGER | male_members_fishing |
| Note: "normally" means the household members that are expected to go fishing. E.g. not a one-off. |  |  |

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING / FISHING / SEAFOOD PRODUCT HARVESTING

S803.a - What was \%male_members\%'s main fishing activity in the last 12 months?

SINGLE-SELECT male_activities
01 〇 Lagoon fishing
02 O Fishing Outside the reef
$03 \bigcirc$ Gleaning or Harvesting
04 O Processing
05 〇 Selling

S804 - In the last 12 months, how many FEMALE members of your household were normally engaged in fishing/seafood product harvesting?

I Note: "normally" means the household members that are expected to go fishing. E.g. not a one-off.

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING / FISHING / SEAFOOD PRODUCT HARVESTING
Roster: FEMALE MEMBERS
generated by numeric question female_members_fishing female_members
S804.a - What was \%female_members\%'s main fishing activity in the last 12 months?

## SINGLE-SELECT

female_activities

| 01 | $\bigcirc$ | Lagoon fishing |
| :--- | :--- | :--- |
| 02 | $\bigcirc$ | Fishing Outside the reef |
| 03 | $\bigcirc$ | Gleaning or Harvesting |
| 04 | $\bigcirc$ | Processing |
| 05 | $\bigcirc$ | Selling |


| S805-Please select from the following list of equipment for fishing and/or seafood product harvesting activities your household used in the last 12 months <br> Read out each answer option and select all that apply. |  | fishing_equipment |
| :---: | :---: | :---: |
| S805.n - Any other equipment not listed earlier? | $\begin{aligned} & \text { SINGLE-SELECT } \\ & 01 \bigcirc \text { Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ | other_fishing_equip |
| S805.n.i - Please specify other equipment other_fishing_equip==1 | LST $\qquad$ | specify_fish_equip |

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING / FISHING / SEAFOOD PRODUCT HARVESTING
Roster: EQUIPMENT USED
generated by multi-select question fishing_equipment
equipment_used

S805.a - Is this \%equipment_used\% owned by the household, or was it hired, borrowed or shared?

## SINGLE-SELECT

$01 \bigcirc$ Owned
02 Hired or Rented
$03 \bigcirc$ Borrowed
$04 \bigcirc$ Shared

S805.b - How many \%equipment_used\%s does
other_fish_equip

S805.a.i - Is this \%other_fish_equip\% owned by the household, or was it hired, borrowed or shared?
SINGLE-SELECT other_equip_status
nen
S805.b.i - How many \%other_fish_equip\%s does $\quad$ NUMERIC: INTEGER other_equip_owned your household own?

E other_equip_status==1

S806-Did Covid19 influence your household's fishing activities in the last 12 months?
$\qquad$
S806.a - How did Covid19 influence your household's fishing activities?

I Read out the answer options
covid_effect==1
S806.n - Please specify ways your household's
fishing activities were influenced by Covid-19.
E reason_covid_effect==97

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING
PEARLS AND PEARL FARMING
pearls_farming
E Agriculture_fishing.Yes.Contains(2)

| S807-How many farm areas does your household currently operate? | NUMERIC: INTEGER | farm_areas |
| :---: | :---: | :---: |
| S808-How many Farm Lines does your household own on the Farm? | NUMERIC: INTEGER | farm_7ines |
| Give an estimate if the respondent is not sure |  |  |
| S809-Does your household collect spat? | $\begin{aligned} & \text { SINGLE-SELECT } \\ & 01 \bigcirc \text { Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ | collect_spat |


| S809.a - How many spat collectors do you have in the water? | NUMERIC: Integer | spat_collector |
| :---: | :---: | :---: |
| I Type in "0" if none. Give an estimate if the respondent is not sure. <br> E collect_spat == 1 |  |  |
| S809.b - How often do you put spat collectors in the water? <br> E collect_spat == 1 | single-select Seasonally Annually All year round <br> 04 Certain months <br> 97 〇 <br> O Other (specify) | spat_collection |
| S809.n - Please specify other times | text | other_spat_col1 |
| E spat_collection==97 |  |  |
| S809.d - Which are the certain months that you put spat collectors in the water? <br> E spat_collection==4 | ```None ``` |  |
| S810-Which farmed shells do you currently have in the water? | ```multi-SElECt 01 \square Seeded Shells 02``` <br> ```Virgin Shells ``` | farmed_she11s |
| S810.a - How many seeded shells do you currently have in the water? | NUMERIC: INTEGER | seeded_shells |
| ```E farmed_shel1s.contains(1) V1 seeded_she11s <= 150000 M1 Please double check your answer. Number seems too high.``` |  |  |
| S810.b - How many virgin shells do you currently have in the water? | NUMERIC: INTEGER | virgin_shells |
| E farmed_shel1s.contains(2) |  |  |
| S811-Please select from the following list of equipment/facilities for the pearl farming activities your household used in the last 12 months. <br> I Read out each answer option and select all that apply. |  | pear1_farm_equip |


| S811.n - Any other equipment/facilities not listed earlier? | SINGLE-SELECT <br> 01 O Yes <br> 02 O No | other_pearlfarm_equip |
| :---: | :---: | :---: |
| S811.n.i - Please list the other pearl farm equipment. <br> other_pear1farm_equip==1 | LST | other_pearlf_equip |
| SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING / PEARLS AND PEARL FARMING <br> Roster: PEARL FARM EQUIPMENT <br> generated by multi-select question pear1_farm_equip |  | pear1_equipment |
| S811.a - How many times a week do you use the \%pearl_equipment\%? | NUMERIC: INTEGER | times_equip_used |
| S811.b - Is this \%pearl_equipment\% owned, hired, borrowed or shared by your household? | ```SINGLE-SELECT 01 O Owned 0 2 ~ O ~ H i r e d ~ o r ~ R e n t e d 03 O Borrowed 04 O Shared``` | pear1_equip_status |

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING / PEARLS AND PEARL FARMING
Roster: OTHER PEARL FARM EQUIPMENT
generated by list question other_pear1f_equip
other_pearlf_roster

| S811.n.ii - How many times a week do you use the \%other_pearlf_roster\%? | NUMERIC: INTEGER | times_oequip_used |
| :---: | :---: | :---: |
| S811.n.iii - Is this \%other_pearlf_roster\% owned, hired, borrowed or shared by your household? | ```SINGLE-SELECT 01 O Owned 02 \bigcirc Hired or Rented 03 \bigcirc Borrowed 04``` <br> ```Shared ``` | pear1_oequip_status |
| S812 - How many shells do you intend to have seeded in the pearl farm over the next 3 years? | NUMERIC: INTEGER | she11s_3years |
| S813 - How many shells do you intend to have seeded in the pearl farm over the next 5 years? | NUMERIC: INTEGER | she11s_5years |
| S814-What is the proportion of your household total income (in cash/in kind) usually derived from Pearl farming in the last 12 months? | $\begin{aligned} & \text { SINGLE-SELECT } \\ & 01 \\ & 01 \\ & 02 \\ & 02 \\ & \text { O } \\ & 03 \\ & 0 \end{aligned} \text { About } 1 / 4 \text { About } 1 / 30$ | hh_income |
| S815-Did your household take out any loan or receive a grant for pearl farming in the last 5 years? | ```single-Select 01 \bigcirc Yes, loan only 0 2 ~ \bigcirc ~ Y e s , ~ g r a n t ~ o n l y ~ 0 3 \bigcirc ~ Y e s , ~ b o t h ~ l o a n ~ a n d ~ g r a n t 0 4 ~ O ~ N o``` | loan_last_5years |


| S815.a - What was the source of the loan/grant that you used for your household pearl farm in the last 5 years? | multi-Select | loan_source |
| :---: | :---: | :---: |
|  |  |  |
| E loan_last_5years.InList(1,2,3) |  |  |
| S816-What value added and/or byproducts are derived from your household's pearl farming activities(other than black pearls that are sold as pieces or parcels)? |  | value_added_pear1 |
| S817.n - Please specify other value added activities or byproducts. | text | other_value_added |
| value_added_pearl.contains(97) |  |  |

SECTION 8: FISHERIES, AQUACULTURE AND PEARL FARMING
AQUACULTURE
aquaculture
E Agriculture_fishing.Yes.Contains(3)

| S818-Where is your aquaculture located (site)? | single-Select <br> $01 \bigcirc$ Land Based Inland Waters <br> 03 Coastal Waters | aquaculture_location |
| :---: | :---: | :---: |
| S819 - What type of water was used in carrying out your aquaculture? | single-Select Fresh Water Brackish Water <br> 03 Seawater | water_type |
| S820 - What type of aquatic organisms were cultivated? <br> Select all that apply. | MULTT-SELECT $01 \quad \square$ Freshwater fish $02 \quad \square$ Marine fish $03 \quad \square$ Crustaceans $04 \quad \square$ Molluscs $05 \quad \square$ Aquatic plants $97 \quad \square$ Others | organisms_aqua |
| S820.n - Please specify the other organisms. organisms_aqua.Contains(97) | TEXT | other_organisms |



END PAGE

| Press below when survey is completed | DATE: CURRENT TIME | enumeration_end |
| :---: | :---: | :---: |
| Click to record the household GPS location | GPS | HHGPS |
|  | $\bar{N}$ |  |
|  |  |  |
|  | - | - |

[1] S106: S106-Age in completed years
Validation Condition:
self >= 0 \& self <= 100
Validation Message: Age should be between 0 to 100 years
Validation Condition:
$(S 102==3 \& \&(S 101 a$. Count $(x=>x . S 102==1 \& \&(x . S 106-S 106<=15))==0))$
||
S102 !=3
Validation Message: Child of household head should be at least 16 years younger than household head age Validation Condition:

```
// If the date of birth is complete, check validity of the date
(IsAnswered(S104_Day) && IsAnswered(S104_Month) && IsAnswered(S104_Year)) ?
    (S104 Year != 9999) ?
        (S\overline{104 Month != 99) ?}
            (S\overline{104_Day != 99) ?}
                    // DOB is complete, check using all data
                    (IsDate(S104 Year,S104 Month,S104 Day)) ?
                    // Check ag}e as of the date of interview
                    self == INTSTART.FullYearsSince(new DateTime((int) S104_Year, (int) S104_Month, (int) S104_Day))
                    :
                    true // DOB is not valid, Accept here because it has been checked in DOB_Year
                :
                    // Day is Don't Know, check against month and year
                    (S104_Month == INTSTART.Value.Month) ? // check if the interview happens on the same month as DOB
Month
                    S104_Month.InList (1,3,5,7, 8,10,12) ?
                    // Assume Birth day is between 1 - 31
                    self.InRange(INTSTART.FullYearsSince (new DateTime((int) S104 Year,(int)
S104_Month,31)),INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int) S104_Month,1)))
                    :
                    S104 Month != 2 ?
                            sel`f.InRange(INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int)
S104_Month,30)),INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int) S10\overline{4}_Month,1)))
                    self.InRange(INTSTART.FullYearsSince(new DateTime((int) S104 Year,(int)
S104_Month,28)),INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int) S10\overline{4}_Month,1)))
            :
                // Interview happened on a different DOB Month, Age == computed Age
                self == INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int) S104_Month,15))
            :
                // Month is Don't Know, assume Birth date is within yyyy/1/1 to yyyy/12/31
                self.InRange(INTSTART.FullYearsSince (new DateTime((int)
S104_Year,12,31)),INTSTART.FullYearsSince(new DateTime((int) S104_Year,1,1)))
    :
        true // accept if year is Don't Know
:
    true // User has already been warned about DOB not being complete
```

Validation Message: Entered Age of is not consistent with DOB! Computed age is \%Q1_4_Age\%
[1] S701: S701- What was the proportion of your household's total income (in cash / kind) usually derived from agricultural activities during last 12 months.
Note that "in kind" means agricultural products that were received at no cost and consumed by the household during last 12 months or may be wages received in terms of agricultural products by any member employed in own household other household's holding
[2] Agriculture_fishing: S801-Which of the following activities did you or your household engage in during the last 12 months? Read out the answer options and select Yes or No for each option Note: Reef and lagoon harvesting: includes shell and other seafood collection, eg: rori, trochus, paua, rimu, crab...etc Pearls: include Pearl farming, retail, wholesale and artisan/craft of pearls...etc

## APPENDIX C - CATEGORIES

[1] Categories_AG_Districts
Categories: 1: Kiikii-Tupapa-Maraerenga, 2 :Takuvaine, 3 :Tutakimoa-Teotue, 4 :Avatiu-Ruatonga, 5 : Nikao-Panama, 6: Ruaau, 7 : Akaoa, 8 : Muri enua, 9 :Titikaveka, 10 : Ngatangiia, 11: Matavera, 12 :Amuri-Ureia, 13:Arutanga, 14:Vaipae-Avanui, 15 :Tautu, 16:Mangaia, 17:Atiu, 18: Mauk e, 20: Mitiaro, 21: Northern Group, 22 : Northern Group, 23: Northern Group, 24: Northern Group, 25: Northern Group, 26 : Northern Group
[2] S5301: S5301- Which of the following chemicals did you or the household apply on the crops grown during last 12 months?
Categories: 1: Glyphosate (Round-up, Sting, G360, Proclaim), 2 : Paraquat (Gramoxone, Agriquat), 3 : Fluazifob-p-butyl (Fusilade), 4 :Imidacloprid (Cyrus, Velcloprid, Confidor), 5:Abamectin (Avid, Abamectin, Vertex), 6: Permethrin + pirimiphos-methyl (Attack, Ambush), 7 : Mineral oil (DC Tro n, Conqueror oil, Sunspray oil), 8:Neem Kernel Oil (Naturally neem, NeemAQ), 9: Bacillus thuringiensis var. kurstaki (Dipel, Delfin), 10:Metalde hyde (Blitzem, Metarex) (Snail bait), 11: Brodifacoum (Talon rat bait), 12 : Copper Hydroxide (Copperstar, Kocide, Kocide Opti, BlueShield), 13 : M ancozeb (Mancozeb, Manzate, Dithane M-45, Penncozeb), 14 : Chlorothalonil + Thiophanate methyl (Taratek), 15 : Chlorothalonil (Bravo, Chrolot ek), 16: Any other not specified above, 99 : None of the above
[3] S512: S512- Name of the crop planted and or harvested during the last 12 months
Categories: 1: Abiu (Eggfruit), 2 : Apple Star, 3:Avocado, 4:Banana, cavendish, 5:Banana, cooking (Plantain ), 6: Banana, ducasse, 7:Banana, f ei (Utu ), 8 : Banana, ladyfinger, 9 : Barbados cherry (Acerola, West Indian Cherry ), 10: Basil, 11: Bean, climbing (Pole beans ), 12 : Bean, snake, 1 3: Bean, winged (Four-cornered bean ), 14: Bean, yardlong (Cowpea), 15: Bele (Rukau viti ), 16: Bitter Melon (Balsam bear ), 17: Breadfruit, 18: Broccoli, 19:Cabbage, 20: Capsicum, 21:Cauliflower, 22 : Chestnut, 23 : Chilli, birdseye (Tabasco), 24 : Chilli, habanero (Bongo), 25 : Chilli, jalape no, 26: Chinese Cabbage, 27: Chive, 28: Choko, 29: Citrus, grapefruit, 30 : Citrus, kumquat, 31 : Citrus, lemon, 32 : Citrus, lime, 33 : Citrus, mandar in, 34 : Citrus, orange (Anani matavera), 35 : Citrus, pummelo, 36 : Citrus, satsuma, 37 : Citrus, tangerine, 38 : Cocoa, 39 : Coffee, 40 : Coriander, 41 :Corn, 42 : Courgette (Zucchini, Marrow ), 43 : Cucumber, 44 : Custard Apple (African pride, cherimoya ), 45 : Dill, 46: Dragonfruit, 47 : Drinking Nu $\mathrm{t}(\mathrm{Nu}, \mathrm{Niu}), 48$ : Durian, 49 : Eggplant, 50 : Giant Swamp Taro (Puraka ), 51 : Ginger, 52 : Granadilla (Maratini ), 53 : Guava, 54 : Herbs (mix), 55 : Hog Plum (Spondias), 56 :Jackfruit, 57 : Kale, 58 : Kumara (Sweet potato ), 59 : Lemongrass (Ti Varani ), 60 : Lettuce, 61: Long Kong (Langsat), 62 : Long an, 63 : Loquat (Ko'ata), 64 : Lychee (Litchi ), 65 : Malayapple, 66:Mango, 67:Mangosteen, purple (Sweet ), 68:Mangosteen, yellow (Astringent ), 69: Maniota (Cassava ), 70 : Melon, honeydew, 71: Melon, rock (Cantaloupe), 72 : Melon, water, 73 : Mint, 74 : Nono (Noni ), 75: Okra, 76: Parsley, 77 : Passionfruit, purple, 78: Passionfruit, yellow, 79 : Pawpaw, pink lady, 80 : Pawpaw, solo sunrise, 81 : Pawpaw, solo waimanalo, 82 : Pili nut (Can arium ), 83 : Pineapple, champarka, 84 : Pineapple, MD2, 85 : Pineapple, ripley queen, 86 : Pineapple, smooth cayenne, 87 : Pomegranate (Remuna ), 88 : Pumpkin, butternut, 89: Pumpkin, crown, 90 : Pumpkin, local, 91 : Radish, 92 : Rambutan, 93 : Rollinia, 94 : Rosemary, 95 : Rukau, taro, 96 : Ruk au, tarua, 97 : Sapodilla, 98 : Sapote, pink (Mamey ), 99 : Sapote, ross, 100 : Sapote, white, 101:Silk Squash (Luffa), 102 : Silverbeet (Swiss chard), 103:Snowpeas, 104:Soursop (Guanabana ), 105:Spinach, 106:Spring Onion, 107: Starfruit (Carambola ), 108:Surinam cherry, 109:Sweetsop ( Naponapo, Tapotapo ), 110:Tamarind, 111:Taro, 112 :Tarua, 113:Tawa (Pometia ), 114 :Tomato , cherry, 115:Tomato, fresh, 116:Turmeric (R enga ), 117 : Vanilla, 118: Watercress, 119: Yam bean (Jicama ), 120: Yam, apirika (African yam ), 121: Yam, etene, 122 : Yam, pacific (Pacific yam ), 123:Yam, parai, 124:Yam, toka, 999: Other Specify
[4] two_fads: S802.a.i - Name the two FADs you fish on the most.
Categories: 1: Rarotonga-Arorangi-Edgewater-Shallow, 2 : Rarotonga-Nikao-Seawall-Shallow (Met Office), 3 : Rarotonga-Avarua-Avarua Harbour -Shallow, 4 : Rarotonga-Arorangi-Arorangi Primary School-Shallow, 5: Rarotonga-Ngatangiia-Avana-Deep, 6:Rarotonga-Nikao-Panama-Deep, 7: Rarotonga-Arorangi-TheRarotongan-Deep, 8: Rarotonga-Arorangi-Edgewater-Deep, 9:Rarotonga-Avarua-Kiikii-Deep, 10:Rarotonga-Titikaveka-Tikioki-Deep, 11: Rarotonga-Titikaveka-QR-Shallow, 12 : Rarotonga-Tupapa-Tupi-Shallow, 13:Aitutaki-Maina-Deep, 14 : Aitutaki-Motikitiu-Deep, 1 5:Aitutaki-Airport-Deep, 16:Aitutaki-Atua Tane-Deep, 17:Aitutaki-Maunga Pu-Deep, 18:Aitutaki-Amuri-Shallow, 19:Aitutaki-Mangere-Shallow, 20: Aitutaki-Pacific Resort-Shallow, 21: Aitutaki-Maunga Pu-Shallow, 22 : Mangaia-Makuru-Shallow, 23:Mangaia-Avarua Harbour-Shallow, 24 : At iu-Vaipiki-Shallow, 25:Atiu-Taunga Roro Point-Deep, 26: Mauke-Totu Tai-Shallow, 27: Mitiaro-Au o Mutu-Deep, 28: Palmerston-Three Tree-Shall ow, 29: Palmerston-Palmerston Point-Shallow, 30:Palmerston-Kira-Deep, 31: Palmerston-Big Stone-Deep, 32 : Pukapuka-FAD One-Shallow, 33 : Pukapuka-FAD Two-Shallow, 34 : Nassau-FAD One-Shallow (Western side of the Island), 35 : Manihiki-Murihiti-Deep, 36 : Manihiki-Avanui-Deep, 3 7: Rakahanga-Pahonu-Deep, 38: Rakahanga-Ninavo

## APPENDIX D — VARIABLES

[1] Q1_4_Age:
// If the date of birth is complete, check validity of the date (IsAnswered(S104_Day) \&\& IsAnswered(S104_Month) \&\& IsAnswered(S104_Year)) ? (S104_Year != 9999) ? (S104_Month != 99) ? (S104_Day != 99) ? // DOB is complete, check using all data
(IsDate(S104_Year,S104 Month,S104 Day)) ? // Check age as of the date of interview INTSTART.FullYearsSince(new DateTime((int) S104_Year, (int) S104_Month,(int) S104_Day)).ToString() : "" // DOB is not valid, Accept here because it has been checked in B4_Year : // Day is Don't Know, check against month and year (S104_Month == INTSTART.Value.Month) ? // check if the interview happens on the same month as DOB Month (S104_Month.InList $(1,3,5,7,8,10,12)$ ) ? // Assume Birth day is between 1 - 31 INTSTART.FulIYearsSince(new DateTime((int) S104_Year,(int) S104_Month,31)).ToString() + " - " + INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int) S104_Month,1)).ToString() : (S104_Month != 2) ? INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int) S104_Month,30)).ToString() + " - " + INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int) S104_Month, 1)).ToString() : INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int) S104_Month,28)).ToString() + " - " + INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int) S104_Month,1)).ToString() : // Interview happened on a different DOB Month, Age == computed Age INTSTART.FullYearsSince(new DateTime((int) S104_Year,(int)
S104_Month,15)).ToString() :// Month is Don't Know, assume Birth date is within yyyy/1/1 to yyyy/12/31 INTSTART.FullYearsSince(new DateTime((int) S104_Year,12,31)).ToString() + " - " + INTSTART.FullYearsSince(new DateTime((int) S104_Year,1,1)).ToString() : "" // accept if year is Don't Know : "" // User has already been warned about DOB not being complete
[2] LandUseAcres:
(S410a_dec>0?S410a_dec:0) + (S411a_dec>0?S411a_dec:0) + (S412a_dec>0?S412a_dec:0) + (S413a_dec>0?S413a_dec:0) + (S414a_dec>0? S414a_dec:0) + (S415a_dec>0?S415a_dec:0) + (S416a_dec>0?S416a_dec:0) + (S417a_dec>0?S417a_dec:0)

## Legend and structure of information in this file


" $I$ " - Question instruction
"E" - Enabling condition
"V1" - Validation condition №1
"M1" - Message for validation №1
" F " - Filter in Categorical questions

## Breadcrumbs



01 Ward Livestock Officer
02 Village Livestock Officer
99 Other (specify)


List items


[^0]:    the number of the parcel shold be greater than or equal to 0

