Survey Solutions

SHARES Community Questionnaire

SURVEY IDENTIFICATION INFORMATION
QUESTIONNAIRE DESCRIPTION

COVER /// A. IDENTIFICATION
No sub-sections, No rosters, Questions: 8, Static texts: 3.

B. INFORMED CONSENT AND RESPONDENT ROSTER
No sub-sections, Rosters: 1, Questions: 7, Static texts: 2.

C1-C5. POPULATION, SCHOOLS, CLINICS, ELECTRICITY, MOBILE NETWORK AND ADMINISTRATION
Sub-sections: 5, No rosters, Questions: 58, Static texts: 2, Variables: 1.

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION
Sub-sections: 10, No rosters, Questions: 42.

D1. CROP CULTIVATION
Sub-sections: 3, No rosters, Questions: 30.

D2. WAGES
No sub-sections, No rosters, Questions: 12.

D3. AGRICULTURAL MIGRANTS
Sub-sections: 4, No rosters, Questions: 50.

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY
Sub-sections: 15, No rosters, Questions: 75.

F. LAND OWNERSHIP
Sub-sections: 2, Rosters: 1, Questions: 32.

G. CREDIT
No sub-sections, Rosters: 1, Questions: 10.

H. NON-FARM BUSINESS INVENTORY
No sub-sections, Rosters: 1, Questions: 5.

I. FARMER ASSOCIATIONS
No sub-sections, Rosters: 1, Questions: 5.

J. DEVELOPMENT PROJECTS
No sub-sections, Rosters: 2, Questions: 16.

K. CLIMATE CHANGE
No sub-sections, Rosters: 1, Questions: 28.

L. CONFLICT
No sub-sections, No rosters, Questions: 9.

END THE INTERVIEW
No sub-sections, No rosters, Questions: 1, Static texts: 1.

APPENDIX A — VALIDATION CONDITIONS AND MESSAGES

APPENDIX B — OPTIONS

APPENDIX C — VARIABLES

LEGEND

SURVEY IDENTIFICATION INFORMATION QUESTIONNAIRE DESCRIPTION

Basic information

Title SHARES Community Questionnaire

COVER /// A. IDENTIFICATION

STATIC TEXT

Shan Agriculture and Rural Enterprise Survey (SHARES), COMMUNITY, May 2018

STATIC TEXT

Center for Economics and Social Development (CESD)
International Food Policy Research Institute
Michigan State University

a101. Enter township code

SINGLE-SELECT a101

- 01
- 02
- 05
- 06
- 08
- 09
- 11
- 12
- 13
- 14

a102. Enumeration Area (EA) SHARES code

NUMERIC: INTEGER a102

E1 `self.InRange(0,999) && ( (a101==14 && (self.InRange(1,16)|| self.InRange(71,77)))|| (a101==1 && self.InRange(17,20)) || (a101==2 && self.InRange(21,32)) || (a101==5 && self.InRange(89,96)) || (a101==6` And 260 other symbols [1]

M1 This code does not correspond to an EA in the selected township.

a103. Please enter the code of this village tract or ward

NUMERIC: INTEGER a103

I This is the 3-digit code for the village tract or ward, ex: 427, 550,etc....

E1 `self.InRange(0,999)`

M1 This code cannot have more than three digits

a104. Please enter the village name(s)

TEXT a104

I If two villages in this EA, please separate by a comma (,)

a105. What is the gps location?

GPS a105

N

W

A

a106. Does this enumeration area...

SINGLE-SELECT a106

- 01 Form part of a village that includes other enumeration areas
- 02 Cover more than one village
- 03 Have boundaries that coincide exactly with the village boundaries

Date and time of interview start	DATE: CURRENT TIME `start`

STATIC TEXT

End time will be recorded at the end of the interview.

a107. Enter your enumerator code: I This is your personal identifier. Example: 010, 020, 030,.., 100, 110, 120 , etc.	TEXT `a107`

B. INFORMED CONSENT AND RESPONDENT ROSTER

STATIC TEXT

My name is [name of enumerator] and I would like to interview you for a survey that is being conducted by researchers from the Center for Economics and Social Development (CESD), Michigan State University and the International Food Policy Research Institute. This survey aims to provide researchers with a detailed understanding of rural livelihoods in Shan State and carry out analyses to assist policy makers in identifying policies to promote welfare in Myanmar. The researchers are visiting villages in four different townships and your village was seleted randomly for participation. The interview will take up to 2 hours to complete. You have the right to not participate or stop the interview at any time. Please note, however, that we value your participation. Be assured that the information you give will be held in the strictest confidence. If you have questions or concerns about your role and rights as a research participant, or if you would like to receive more information about this study, you may contact, anonymously if you wish, Ko Zaw Min Naing of the Center for Economics and Social Development at 09 971 615 016.

b100. Do you agree to participate in the interview? E1 `self==1` M1 If respondents do not consent, you should stop the interview now.	SINGLE-SELECT `b100` 01 ○ Yes 02 ○ No
b101. Enter respondent names (maximum 6):	LIST `b101`

`B_Respondents`

	SINGLE-SELECT `b102` 01 ○ 02 ○

	SINGLE-SELECT b103 01 ○ 02 ○ 03 ○ 04 ○ 05 ○ 06 ○ 07 ○ 08 ○ 09 ○ 10 ○ 11 ○ 12 ○ 13 ○ 14 ○ 15 ○ 16 ○ And 1 other symbols [1]
	TEXT b103s

STATIC TEXT

Before we start the interview, I would like to take the contact details of one of the participants. This would allow us to follow up if there are further questions about the data we collected.

b104. Who is willing to be our contact person?	SINGLE-SELECT: LINKED b104
b105. Please tell us your phone number	TEXT b105

C1-C5. POPULATION, SCHOOLS, CLINICS, ELECTRICITY, MOBILE NETWORK AND ADMINISTRATION

C1-C5. POPULATION, SCHOOLS, CLINICS, ELECTRICITY, MOBILE NETWORK AND ADMINISTRATION

C1 POPULATION

c101. In what year was this village formed? E1 $year M1 Please answer YYYY format, 9996 for before living memory, or 9997 fo r don't know	NUMERIC: INTEGER c101 SPECIAL VALUES 9996 Before living memory or more tha n 100 years ago
c102a How many registered households are there in this village currently?	NUMERIC: INTEGER c102a

c103a How many households in the village out of %c102a% are currently involved in farming?

NUMERIC: INTEGER c103a

E1 self<=c102a

M1 Number of farm households cannot be more than number of households in village

c102b How many registered households were there in this village in 2015?

NUMERIC: INTEGER c102b

c103b How many households in the village out of %c102b% were involved in farming in 2015?

NUMERIC: INTEGER c103b

E1 self<=c102b

M1 Number of farm households cannot be more than number of households in village

c102c How many registered households were there in this village in 2012?

NUMERIC: INTEGER c102c

E1 $hh

M1 Check your number and confirm !!!!

c103c How many households in the village out of %c102c% were involved in farming in 2012?

NUMERIC: INTEGER c103c

E1 self<=c102c

M1 Number of farm households cannot be more than number of households in village

c102d How many registered households were there in this village in 2007?

NUMERIC: INTEGER c102d

E1 $hh

M1 Check your number and confirm !!!!

c103d. How many households in the village out of %c102d% were involved in farming in 2007?

NUMERIC: INTEGER c103d

E1 self<=c102d

M1 Number of farm households cannot be more than number of households in village

c104. Why did the number of households in this village increase rapidly between 2007 and 2017?

MULTI-SELECT c104

E c102a >= (c102d * 1.3)

- 01 ☐ Natural population growth
- 02 ☐ Division of extended households into smaller units
- 03 ☐ Refugees from other parts of Shan settled here
- 04 ☐ Migrants from Dry Zone moved here
- 99 ☐ Other (specify)

c104s. Specify other reason...

TEXT c104s

E c104.Contains(99)

c105. Which ethnic groups live in this village?

MULTI-SELECT c105

01 ☐ Shan
02 ☐ Pa'O
03 ☐ Burmese
04 ☐ Danu
05 ☐ Taungyoe
06 ☐ Kayan (Karenni)
07 ☐ Innthar
08 ☐ Lahu
09 ☐ Akha
10 ☐ Palaung (Ta'ang)
11 ☐ Kayin
12 ☐ Wa
13 ☐ Kokang
14 ☐ Chinese
15 ☐ Tamil/other South Asian
16 ☐ Mixed

And 3 other symbols [2]

c105s. Specify other ethnicity

E c105.Contains(99)

TEXT c105s

c106a. Among the %c102a% registered households currently living in this village, how many are Shan?

E c105.Contains(1)

NUMERIC: INTEGER c106a

c106b. Among the %c102a% registered households currently living in this village, how many are Pa'O?

E c105.Contains(2)

NUMERIC: INTEGER c106b

c106c. Among the %c102a% registered households currently living in this village, how many are Burmese?

E c105.Contains(3)

NUMERIC: INTEGER c106c

c106d. Among the %c102a% registered households currently living in this village, how many are Danu?

E c105.Contains(4)

NUMERIC: INTEGER c106d

c106e. Among the %c102a% registered households currently living in this village, how many are Taungyoe?

E c105.Contains(5)

NUMERIC: INTEGER c106e

c106f. Among the %c102a% registered households currently living in this village, how many are Kayan (Kayanni)?

E c105.Contains(6)

NUMERIC: INTEGER c106f

c106g. Among the %c102a% registered households currently living in this village, how many are Innthar? E c105.Contains(7)	NUMERIC: INTEGER c106g
c106h. Among the %c102a% registered households currently living in this village, how many are Lahu? E c105.Contains(8)	NUMERIC: INTEGER c106h
c106i. Among the %c102a% registered households currently living in this village, how many are Akha? E c105.Contains(9)	NUMERIC: INTEGER c106i
c106j. Among the %c102a% registered households currently living in this village, how many are Palaung (Ta'ang)? E c105.Contains(10)	NUMERIC: INTEGER c106j
c106k. Among the %c102a% registered households currently living in this village, how many are Kayin? E c105.Contains(11)	NUMERIC: INTEGER c106k
c106l. Among the %c102a% registered households currently living in this village, how many are Wa? E c105.Contains(12)	NUMERIC: INTEGER c106l
c106m. Among the %c102a% registered households currently living in this village, how many are Kokang? E c105.Contains(13)	NUMERIC: INTEGER c106m
c106n. Among the %c102a% registered households currently living in this village, how many are of Chinese ethnicity? E c105.Contains(14)	NUMERIC: INTEGER c106n
c106o. Among the %c102a% registered households currently living in this village, how many are Tamil/Other South Asian? E c105.Contains(15)	NUMERIC: INTEGER c106o
c106p. Among the %c102a% registered households currently living in this village, how many are of mixed ethnicity? E c105.Contains(16)	NUMERIC: INTEGER c106p
c106q. Among the %c102a% registered households currently living in this village, how many are Yinn? E c105.Contains(17)	NUMERIC: INTEGER c106q

c106r. Among the %c102a% registered households currently living in this village, how many are Li Sue?

NUMERIC: INTEGER c106r

E c105.Contains(18)

c106s. Among the %c102a% registered households currently living in this village, how many are of other ethnicity?

NUMERIC: INTEGER c106s

E c105.Contains(99)

VARIABLE

(c106a.HasValue? c106a:0)+ (c106b.HasValue? c106b:0)+ (c106c.HasValue? c106c:0)+ (c106d.HasValue? c106d:0)+ (c106e.HasValue? c106e:0)+ (c106f.HasValue? c106f:0)+ (c106g.HasValue? c106g:0)+ (c10

And 332 other symbols [1]

DOUBLE c107

STATIC TEXT

Total is %c107%, respondent said there were %c102a% registered hh in village

STATIC TEXT

E c107!=0 && (0.80>c107/c102a || c107/c102a>1.20)

********** *ERROR* ********** *TOTAL NUMBER OF HOUSEHOLDS OF DIFFERENT ETHNICITIES DIFFERENT THAN NUMBER OF REGISTERED HOUSHOLDS!!! PLEASE CHECK* **********

C1-C5. POPULATION, SCHOOLS, CLINICS, ELECTRICITY, MOBILE NETWORK AND ADMINISTRATION

C2 SCHOOLS

c201. What kind of school is the village served by?

SINGLE-SELECT c201

- 01 ○ Primary
- 02 ○ Post-primary
- 03 ○ Middle school
- 04 ○ High school
- 05 ○ Not served by any school

c202a. In which year did the primary school first open?

NUMERIC: INTEGER c202a

E c201==1

E1 $year

M1 Please answer in YYYY format or 9997 for do not know

c202b. In which year did the post-primary school first open?

NUMERIC: INTEGER c202b

E c201==2

E1 $year

M1 Please answer in YYYY format or 9997 for do not know

c202c. In which year did the middle school first open?

NUMERIC: INTEGER c202c

E c201==3

E1 $year

M1 Please answer in YYYY format or 9997 for do not know

c202d. In which year did the high school first open?

NUMERIC: INTEGER c202d

E c201==4
E1 $year
M1 Please answer in YYYY format or 9997 for do not know

c203. How long does it usually take children from this village to reach the nearest primary school?

TEXT c203

I Please answer in HH:MM format
E c201==5

c204. How long does it usually take children from this village to reach the nearest upper high school?

TEXT c204

I Please answer in HH:MM format
E (c201!=3 && c201!=4)

c205. How many students from this village have graduated from university in the past 5 years

NUMERIC: INTEGER c205

C1-C5. POPULATION, SCHOOLS, CLINICS, ELECTRICITY, MOBILE NETWORK AND ADMINISTRATION

C3 CLINICS

c301. Is the village served by a clinic?

SINGLE-SELECT c301

01 ○ Yes
02 ○ No

c302. How far is the nearest clinic (miles)?

TEXT c302

I Please put the values in miles and furlong MM:0F
E c301==2

c303. In which year did the clinic first open?

NUMERIC: INTEGER c303

E c301==1
E1 $year
M1 Please answer in YYYY format or 9997 for do not know

c304. Is the village served by a rural health center / sub rural health center?

SINGLE-SELECT c304

01 ○ Yes
02 ○ No

c305. In which year did the rural health center / sub rural health center first open?

NUMERIC: INTEGER c305

E c304==1
E1 $year
M1 Please answer in YYYY format or 9997 for do not know

c306. Is there a maternity room at rural health center / sub rural health center?

SINGLE-SELECT c306

E c304==1

01 ○ Yes
02 ○ No

c307. In which year did the maternity room first open?

NUMERIC: INTEGER c307

E c306==1
E1 $year
M1 Please answer in YYYY format or 9997 for do not know

C1-C5. POPULATION, SCHOOLS, CLINICS, ELECTRICITY, MOBILE NETWORK AND ADMINISTRATION

C4 ELECTRICITY AND MOBILE NETWORK

c401. Does the village have an electricity connection?

SINGLE-SELECT c401
01 ○ Yes
02 ○ No

c402. How is the electricity connection to the village supplied?

E c401==1

MULTI-SELECT c402
01 ☐ Through a transformer provided by the government
02 ☐ Through a transformer purchased by the community
03 ☐ Through a transformer owned by a private individual
99 ☐ Other (specify)

c402s. Please specify other electricity provider

E c402.Contains(99)

TEXT c402s

c403. In which year did the village receive its electricity connection? (dnk = 9997)

NUMERIC: INTEGER c403

E c401==1
E1 $year
M1 Please answer with four-digit number or 9997 for do not know

c404. Among the %c102a% registered households in this village, how many have access to mains electricity? (dnk = 9997)

NUMERIC: INTEGER c404

E c401==1
E1 self<=c102a
M1 Higher than current households in village, Check your answer!!!

c405. During the past 7 days, on how many days did the village experience powercuts?

NUMERIC: INTEGER c405

E c401==1
E1 self<=7
M1 ERROR - cannot be more than 7 days in one week

c406. During the past 7 days, when the village experienced power cuts how long did these last for on average?

TEXT c406

I Please answer in HH:MM format
E c405>=1

c407. Is there mobile phone access in this village?

SINGLE-SELECT c407
01 ○ Yes
02 ○ No

c408. In what year did this village first receive access to mobile internet(e.g. facebook)?

NUMERIC: INTEGER c408

E c407==1
E1 self.InRange(1900,2018) || self==9993 || self==9997
M1 Please check again...

SPECIAL VALUES
9993 [9993] - The Internet has not been applicable.
9997 [9997] - Don't know

c409. Which providers does this village have access to?

F c407==1

MULTI-SELECT c409
01 ☐ MPT
02 ☐ Telenor
03 ☐ Oredoo
04 ☐ MEC (CDMA/WCDMA)
05 ☐ MyTel

C1-C5. POPULATION, SCHOOLS, CLINICS, ELECTRICITY, MOBILE NETWORK AND ADMINISTRATION

C5 ADMINISTRATION

c500. Which organization controls the administration of this village?

TEXT c500

I 9997 = "don't know"

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION

C6 ACCESS TO VILLAGE

c601. What is the primary mode of access to the village?

SINGLE-SELECT c601
01 ○ Road
02 ○ Waterway
03 ○ Railway
99 ○ Other (Specify)

c601s. Specify the other primary mode of access to the village

TEXT c601s

E c601==99

c602. Is there a paved road leading to this village?

SINGLE-SELECT c602
01 ○ Yes
02 ○ No

c603. In what year did the village receive a paved road?

NUMERIC: INTEGER c603

I 9997 = 'Don't know'; 9996 = 'since before village was established'
E c602==1
E1 $year
M1 Please answer with a four-digit number or 9997 for do not know

c604. How far is the nearest paved road (miles)?

TEXT c604

I Please put the values in miles and furlong MM:0F
E c602==2

c605. Is this village accessible by car in the dry season?	SINGLE-SELECT c605 01 ○ Yes 02 ○ No
c606. Is this village accessible by car in the wet season?	SINGLE-SELECT c606 01 ○ Yes 02 ○ No

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION

C7 ACCESS TO URBAN CENTERS

c700. What is the name of the nearest town?	TEXT c700

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION / C7 ACCESS TO URBAN CENTERS

NEAREST TOWN

c701. How far is [%c700%] located (miles)? E1 $mile M1 More than 50 miles? Please check.	NUMERIC: DECIMAL c701
c702. Most common mode of transport for people to reach %c700%	SINGLE-SELECT c702 01 ○ Motorcycle 02 ○ Ox cart 03 ○ Trawelerji 04 ○ Boat 05 ○ Bus 06 ○ Car 07 ○ Bicycle 08 ○ Truck 99 ○ Other (specify)
c702s. Specify (if answered 99) E c702==99	TEXT c702s
c703a. How long does a one way journey to %c700% using %c702% take in the dry season? I Please answer in HH:MM format	TEXT c703a
c703b. How long does a one way journey to %c700% using %c702% take in the wet season? I Please answer in HH:MM format	TEXT c703b
c704. What was the most common mode of transport for people to reach %c700% 5 years ago?	SINGLE-SELECT c704 01 ○ Motorcycle 02 ○ Ox cart 03 ○ Trawelerji 04 ○ Boat 05 ○ Bus 06 ○ Car 07 ○ Bicycle 08 ○ Truck 99 ○ Other (specify)

c704s. Specify other... E c704==99	TEXT c704s
c705a. How long did a one way journey to %c700% using %c704% take in the dry season 5 years ago? I Please answer in HH:MM format	TEXT c705a
c705b. How long did a one way journey to %c700% using %c704% take in the wet season 5 years ago? I Please answer in HH:MM format	TEXT c705b

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION

C8 MARKETS

c801. Is there a temporary market in the village?	SINGLE-SELECT c801 01 ○ Yes 02 ○ No
c802. What is the distance to the nearest temporary market? (in miles) E c801==2	NUMERIC: DECIMAL c802 SPECIAL VALUES 9998 [9998] - Not Applicable
c803. How often is the temporary market organized? E c801==1	SINGLE-SELECT c803 01 ○ Every five days 02 ○ Every month 99 ○ Other (specify)
c803s. Specify frequency of market E c803==99	TEXT c803s
c804. Is there a permanent market in the village?	SINGLE-SELECT c804 01 ○ Yes 02 ○ No
c805. What is the distance to the nearest permanent market (in miles)? I Please put the values in miles and furlong MM:0F E c804==2	TEXT c805

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION

C9 IRRIGATION

c901. Is the village served by any irrigation originating from streams or springs?	SINGLE-SELECT c901 01 ○ Yes 02 ○ No

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION / C9 IRRIGATION

SURFACE WATER IRRIGATION FROM STREAM, SPRING, OR POND

E c901==1

c902. How many households currently have access to irrigation water originating from a stream, spring or pond?

NUMERIC: INTEGER c902

E1 self<=c102a

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village

c903. How many households had access to irrigation water originating from a stream, spring or pond 5 years ago?

NUMERIC: INTEGER c903

E1 self<=c103c

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village in 2012

c904. Is the village within the catchment area of a dam irrigation scheme?

SINGLE-SELECT c904

01 ○ Yes

02 ○ No

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION / C9 IRRIGATION

DAM IRRIGATION

E c904==1

c905. In what year did the village first receive water from the dam irrigation scheme?

NUMERIC: INTEGER c905

E1 $year

M1 Please enter a four-digit year YYYY or 9997 for "do not know"

c906. How many households currently have access to water from the dam?

NUMERIC: INTEGER c906

E1 self<=c102a

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village

c907. How many households had access to water from the dam 5 years ago?

NUMERIC: INTEGER c907

E1 self<=c103c

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village in 2012

c908. Is the village within the catchment area of any river water pumping scheme?

SINGLE-SELECT c908

01 ○ Yes

02 ○ No

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION / C9 IRRIGATION

RIVER WATER PUMPING SCHEME

E c908==1

c909. In what year did the village first receive water from the pumping scheme?

NUMERIC: INTEGER c909

E1 $year

M1 Please enter a four-digit year YYYY or 9997 for "do not know"

c910. How many households currently have access to water from the pumping scheme?

NUMERIC: INTEGER c910

E1 self<c102a

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village

c911. How many households had access to water from the pumping scheme 5 years ago?

NUMERIC: INTEGER c911

E1 self<=c103c

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village in 2012

c912. Is the village served by any privately or community operated irrigation tubewells?

SINGLE-SELECT c912

01 ○ Yes

02 ○ No

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION / C9 IRRIGATION

PRIVATE & COMMUNITY OPERATED TUBEWELL IRRIGATION

E c912==1

c913. In what year did the village first receive water from privately or community operated irrigation tubewells?

NUMERIC: INTEGER c913

E1 $year

M1 correction: Please enter a valid year in YYYY format, or 9997 for do not know

c914. How many households currently have access to water from the privately or community operated irrigation tubewells?

NUMERIC: INTEGER c914

E1 self<=c102a

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village

c915. How many households had access to water from the private or community operated irrigation tubewell 5 years ago?

NUMERIC: INTEGER c915

E1 self<=c103c

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village in 2012

c916. Is the village served by any publically operated irrigation tubewells?

SINGLE-SELECT c916

01 ○ Yes

02 ○ No

C6-9. VILLAGE ACCESSIBILITY, MARKETS & IRRIGATION / C9 IRRIGATION

PUBLIC TUBEWELL IRRIGATION

E c916==1

c917. In what year did the village first receive water from the public irrigation tubewell?

NUMERIC: INTEGER c917

E1 $year

M1 Please enter a four-digit year YYYY or 9997 for "do not know"

c918. How many households currently have access to water from the public irrigation tubewell?

NUMERIC: INTEGER c918

E1 self<c102a

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village

c919. How many households had access to water from the public irrigation tubewell 5 years ago?

NUMERIC: INTEGER c919

E1 self<c103c

M1 HIGH VALUE- CHECK AGAIN!!! Number of HH with access to irrigation more than number of farm HH in village in 2012

D1. CROP CULTIVATION

D1. CROP CULTIVATION

MAIZE CULTIVATION

d101a. Did any household in this village grow maize in 2017?

SINGLE-SELECT d101a

01 ○ Yes

02 ○ No

d101b. How many HH grew maize in 2017?

NUMERIC: INTEGER d101b

E d101a==1

E1 self<=c102a

M1 Cannot be more than the number of registered households in that yea r. Please check.

d101c. Among %d101b% households who grew maize in 2017, how many intercropped with pigeon pea?

NUMERIC: INTEGER d101c

E d101a==1

E1 self<=d101b

M1 CHECK AGAIN!!! Number of HH greater than number of maize growing HH

d101d. What was the average (most common) area of maize cultivated by maize farming households in this village in 2017? [acres]

NUMERIC: DECIMAL d101d

E d101a==1

d101e. Among %d101b% households who grew maize in 2017, how many did land preparation for maize with a tractor?

NUMERIC: INTEGER d101e

E d101a==1

E1 self<=d101b

M1 CHECK AGAIN!!! Number of HH greater than number of maize growing HH

d101f. Among %d101b% households who grew maize in 2017, how many threshed maize with a mechanical thresher?

NUMERIC: INTEGER d101f

E d101a==1

E1 self<=d101b

M1 CHECK AGAIN!!! Number of HH greater than number of maize growing HH

d102a. Did any household in this village grow maize in 2012?

SINGLE-SELECT d102a

01 ○ Yes
02 ○ No

d102b. How many HH grew maize in 2012?

NUMERIC: INTEGER d102b

E d102a==1
E1 self<=c102c
M1 Cannot be more than the number of registered households in 2012. Pl ease check.

d102c. Among %d102b% households who grew maize in 2012, how many intercropped with pigeon pea?

NUMERIC: INTEGER d102c

E d102a==1

d102d. What was the average (most common) area of maize cultivated by maize farming households in this village in 2012? [acres]

NUMERIC: DECIMAL d102d

E d102a==1

d102e. Among %d102b% households who grew maize in 2012, how many did land preparation for maize with a tractor?

NUMERIC: INTEGER d102e

E d102a==1
E1 self<=d102b
M1 CHECK AGAIN!!! Number of HH greater than number of maize growing HH

d102f. Among %d102b% households who grew maize in 2012, how many threshed maize with a mechanical thresher?

NUMERIC: INTEGER d102f

E d102a==1
E1 self<=d102b
M1 CHECK AGAIN!!! Number of HH greater than number of maize growing HH

d103a. Did any household in this village grow maize in 2007?

SINGLE-SELECT d103a

01 ○ Yes
02 ○ No

d103b. How many HH grew maize in 2007?

NUMERIC: INTEGER d103b

E d103a==1
E1 self<=c102d
M1 Cannot be more than number of registered HH in that year

d103c. Among %d103b% households who grew maize in 2007, how many intercropped with pigeon pea?

NUMERIC: INTEGER d103c

E d103a==1
E1 self<=d103b
M1 CHECK AGAIN!!! Number of HH greater than number of maize growing HH

d103d. What was the average (most common) area of maize cultivated by maize farming households in this village in 2007? [acres]

NUMERIC: DECIMAL d103d

E d103a==1
E1 $under10k
M1 Land area over 10000 acres unlikely. Please check.

d103e. Among %d103b% households who grew maize in 2007, how many did land preparation for maize with a tractor?

NUMERIC: INTEGER d103e

E d103a==1
E1 self<=d103b
M1 CHECK AGAIN!!! Number of HH greater than number of maize growing HH

d103f. Among %d103b% households who grew maize in 2007, how many threshed maize with a mechanical thresher?

NUMERIC: INTEGER d103f

E d103a==1
E1 self<=d103b
M1 CHECK AGAIN!!! Number of HH greater than number of maize growing HH

D1. CROP CULTIVATION

PIGEONPEA CULTIVATION

d104a. Did any household in this village monocrop pigeonpea in 2017?

SINGLE-SELECT d104a
01 ○ Yes
02 ○ No

d104b. How many households monocropped pigeonpea in 2017?

NUMERIC: INTEGER d104b

I 9997 = 'don't' know'
E d104a==1
E1 self<=c102a
M1 Cannot be more than the number of registered households in that yea r. Please check.

d104c. What was the average (most common) area of monocropped pigeon pea cultivated by pigeon pea farming households in this village in 2017? [acres]

NUMERIC: DECIMAL d104c

E d104a==1
E1 $under100k
M1 Land area over 100000 acres unlikely. Please check.

d104d. Did any household in this village monocrop pigeonpea in 2012?

SINGLE-SELECT d104d
01 ○ Yes
02 ○ No

d104e. How many HH monocropped pigeonpea in 2012?

NUMERIC: INTEGER d104e

I 9997 = 'don't know'
E d104d==1
E1 self<=c102c
M1 Cannot be more than the number of registered households in 2012. Pl ease check.

d104f. What was the average (most common) area of monocropped pigeon pea cultivated by pigeon pea farming households in this village in 2012? [acres]

NUMERIC: DECIMAL d104f

E d104d==1
E1 $under100k
M1 Land area over 100000 acres unlikely. Please check.

d104g. Did any household in this village monocrop pigeonpea in 2007?

SINGLE-SELECT d104g

01 ○ Yes
02 ○ No

d104h. How many households monocropped grew pigeonpea in 2007?

NUMERIC: INTEGER d104h

I 9997 = 'don't know'
E d104g==1
E1 self<=c102d
M1 Cannot be more than the number of registered households 5 years ago. Please check.

d104i. What was the average (most common) area of monocropped pigeon pea cultivated by pigeon pea farming households in this village in 2007? [acres]

NUMERIC: DECIMAL d104i

E d104g==1
E1 $under100k
M1 Land area over 100000 acres unlikely. Please check.

D1. CROP CULTIVATION

DRAFT ANIMALS

d105a How many households owned draft animals in 2017?

NUMERIC: INTEGER d105a

E1 self<=c102a
M1 Cannot be more than the number of registered households in 2017. Please check.

d105b How many households owned draft animals in 2012?

NUMERIC: INTEGER d105b

E1 self<=c102c
M1 Cannot be more than the number of registered households in 2012. Please check.

d105c How many households owned draft animals in 2007?

NUMERIC: INTEGER d105c

E1 self<=c102d
M1 Cannot be more than the number of registered households in 2007. Please check.

D2. WAGES

d201ma. What was the average daily wage for MALE agricultural workers harvesting the main monsoon crop in 2017? (in Kyat)

NUMERIC: INTEGER d201ma

E1 $v100_to_10k
M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat.

d201fa. What was the average daily wage for FEMALE agricultural workers harvesting the main monsoon crop in 2017? (in Kyat)

NUMERIC: INTEGER d201fa

E1 $v100_to_10k
M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat.

d202ma. What was the average daily wage for MALE agricultural workers in dry season 2017? (in Kyat)

NUMERIC: INTEGER d202ma

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

d202fa. What was the average daily wage for FEMALE agricultural workers in dry season 2017? (in Kyat)

NUMERIC: INTEGER d202fa

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

d203mb What was the average daily wage for MALE agricultural workers harvesting the main monsoon crop in 2015? (in Kyat)

NUMERIC: INTEGER d203mb

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

d203fb. What was the average daily wage for FEMALE agricultural workers harvesting the main monsoon crop in 2015? (in Kyat)

NUMERIC: INTEGER d203fb

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

d204mb. What was the average daily wage for MALE agricultural workers in dry season 2015? (in Kyat)

NUMERIC: INTEGER d204mb

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

d204fb. What was the average daily wage for FEMALE agricultural workers in dry season 2015? (in Kyat)

NUMERIC: INTEGER d204fb

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

d205mc. What was the average daily wage for MALE agricultural workers harvesting the main monsoon crop in 2012? (in Kyat)

NUMERIC: INTEGER d205mc

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

d205fc. What was the average daily wage for FEMALE agricultural workers harvesting the main monsoon crop in 2012? (in Kyat)

NUMERIC: INTEGER d205fc

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

d206mc. What was the average daily wage for MALE agricultural workers in dry season 2012? (in Kyat)

NUMERIC: INTEGER d206mc

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

d206fc. What was the average daily wage for FEMALE agricultural workers in dry season 2012? (in Kyat)

NUMERIC: INTEGER d206fc

E1 $v100_to_10k

M1 Check your daily wage; it is less than 100 kyat or more than 10000 Kyat .

D3. AGRICULTURAL MIGRANTS

d301a. Were there any migrant agricultural workers hired in this village in 2017?

SINGLE-SELECT d301a

01 ○ Yes

02 ○ No

d302a. What share of these workers were female in 2017?

NUMERIC: INTEGER d302a

E d301a==1

E1 $percent

M1 Please express in percentage term

d301b. Were there any migrant agricultural workers hired in this village in 2012?

SINGLE-SELECT d301b

01 ○ Yes

02 ○ No

d302b. What share of these workers were female in 2012?

NUMERIC: INTEGER d302b

E d301b==1

E1 $percent

M1 Please express in percentage term

d301c. Were there any migrant agricultural workers hired in this village in 2007?

SINGLE-SELECT d301c

01 ○ Yes

02 ○ No

d302c. What share of these workers were female in 2007?

NUMERIC: INTEGER d302c

E d301c==1

E1 $percent

M1 Please express in percentage term

D3. AGRICULTURAL MIGRANTS

CROP AND ACTIVITIES WITH MOST MIGRANT WORKERS

E d301a==1|d301b==1|d301c==1

d303a. Among the main crops in the village, for which crop were most migrant workers hired in 2017?

E d301a==1

MULTI-SELECT d303a

001 ☐ Monsoon Paddy
002 ☐ Pre / Post- Monsoon Paddy
003 ☐ Maize
004 ☐ Pigeon Pea
005 ☐ Groundnut
006 ☐ Sesame
007 ☐ Sunflower
008 ☐ Niger
009 ☐ Soy Bean
010 ☐ Green Gram
011 ☐ Black Gram
012 ☐ Chick Pea
013 ☐ Lab Lab
199 ☐ Other bean
014 ☐ Wheat
015 ☐ Sorghum

And 40 other symbols [3]

d303as. Specify for which other crop most migrant workers are hired

E d303a.Contains(99)

TEXT d303as

.....

d304a. For which activity for that crop(s) did you hire most migrant workers in 2017?

E d301a==1

SINGLE-SELECT d304a

01 ○ Land preparation
02 ○ Planting
03 ○ Fertilizer application
04 ○ Applying herbicides/pesticides/foliar
05 ○ Weeding
06 ○ Harvesting
07 ○ Threshing
08 ○ Drying/sorting
99 ○ Other (specify)

d304as. Specify other activity for which most migrant workers were hired in 2017

E d304a==99

TEXT d304as

.....

d303b. Among the main crops in the village, for which crop were most migrant workers hired in 2012?

E d301b==1

MULTI-SELECT d303b

001 ☐ Monsoon Paddy
002 ☐ Pre / Post- Monsoon Paddy
003 ☐ Maize
004 ☐ Pigeon Pea
005 ☐ Groundnut
006 ☐ Sesame
007 ☐ Sunflower
008 ☐ Niger
009 ☐ Soy Bean
010 ☐ Green Gram
011 ☐ Black Gram
012 ☐ Chick Pea
013 ☐ Lab Lab
199 ☐ Other bean
014 ☐ Wheat
015 ☐ Sorghum

And 40 other symbols [4]

d303bs. Specify for which other crop most migrant workers are hired

E d303b.Contains(99)

TEXT d303bs

.....

d304b. For which activity for that crop(s) did you hire most migrant workers in 2012?

E d301b==1

SINGLE-SELECT d304b

01 ○ Land preparation
02 ○ Planting
03 ○ Fertilizer application
04 ○ Applying herbicides/pesticides/foliar
05 ○ Weeding
06 ○ Harvesting
07 ○ Threshing
08 ○ Drying/sorting
99 ○ Other(specify)

d304bs. Specify other activity for which most migrant workers were hired in 2012

E d304b==99

TEXT d304bs

.....

d303c. Among the main crops in the village, for which crop were most migrant workers hired in 2007?

E d301c==1

MULTI-SELECT d303c

001 ☐ Monsoon Paddy
002 ☐ Pre / Post- Monsoon Paddy
003 ☐ Maize
004 ☐ Pigeon Pea
005 ☐ Groundnut
006 ☐ Sesame
007 ☐ Sunflower
008 ☐ Niger
009 ☐ Soy Bean
010 ☐ Green Gram
011 ☐ Black Gram
012 ☐ Chick Pea
013 ☐ Lab Lab
199 ☐ Other bean
014 ☐ Wheat
015 ☐ Sorghum

And 40 other symbols [5]

d303cs. Specify for which other crop most migrant workers are hired

E d303c.Contains(99)

TEXT d303cs

d304c. For which activity for that crop(s) did you hire most migrant workers in 2007?

E d301c==1

SINGLE-SELECT d304c

01 ○ Land preparation
02 ○ Planting
03 ○ Fertilizer application
04 ○ Applying herbicides/pesticides/foliar
05 ○ Weeding
06 ○ Harvesting
07 ○ Threshing
08 ○ Drying/sorting
99 ○ Other(specify)

d304cs. Specify other activity for which most migrant workers were hired in 2007

E d304c==99

TEXT d304cs

D3. AGRICULTURAL MIGRANTS

SHARE OF MIGRANT WORKERS

E d301a==1|d301b==1|d301c==1

d305ma. Among all men hired for agricultural work in this village, on average which % were migrant workers in 2017?

E d301a==1 & d302a<100
E1 $percent
M1 Please express in percentage term

NUMERIC: INTEGER d305ma

d305fa. Among all women hired for agricultural work in this village, on average which % were migrant workers in 2017?

NUMERIC: INTEGER d305fa

E d301a==1 & d302a>0
E1 $percent
M1 Please express in percentage term

d305mb. Among all men hired for agricultural work in this village, on average which % were migrant workers in 2012?

NUMERIC: INTEGER d305mb

E d301b==1 & d302b<100
E1 $percent
M1 Please express in percentage term

d305fb. Among all women hired for agricultural work in this village, on average which % were migrant workers in 2012?

NUMERIC: INTEGER d305fb

E d301b==1 & d302b>0
E1 $percent
M1 Please express in percentage term

d305mc. Among all men hired for agricultural work in this village, on average which % were migrant workers in 2007?

NUMERIC: INTEGER d305mc

E d301c==1 & d302c<100
E1 $percent
M1 Please express in percentage term

d305fc. Among all women hired for agricultural work in this village, on average which % were migrant workers in 2007?

NUMERIC: INTEGER d305fc

E d301c==1 & d302c>0
E1 $percent
M1 Please express in percentage term

D3. AGRICULTURAL MIGRANTS

MODE OF HIRING AND ORIGIN OF MIGRANT WORKERS

E d301a==1|d301b==1|d301c==1

d306a. How did the majority of farmers hire agricultural migrant workers in 2017?

MULTI-SELECT d306a

E d301a==1

01 ☐ Farmer contacts laborers directly
02 ☐ Farmer hires through a labor broker
03 ☐ Mix of direct hire & labor broker

d307a. Where did these migrant workers typically come from in 2017? (allow max. 3 options)

E d301a==1

MULTI-SELECT d307a

- 01 ☐ Kachin
- 02 ☐ Shan
- 03 ☐ Sagaing
- 04 ☐ Magwe
- 05 ☐ Ayeyarwady
- 06 ☐ Bago
- 07 ☐ Kayin/Karen
- 08 ☐ Mon/Tanintharyi
- 09 ☐ Chin/Rakhine
- 10 ☐ Kayan
- 99 ☐ Other(specify)

d307as. Please specify other...

E d307a.Contains(99)

TEXT d307as

.....

d308a. What ethnicities did these migrants typically have in 2017?

E d301a==1

MULTI-SELECT d308a

- 01 ☐ Shan
- 02 ☐ Pa'O
- 03 ☐ Burmese
- 04 ☐ Danu
- 05 ☐ Taungyoe
- 06 ☐ Kayan (Karenni)
- 07 ☐ Innthar
- 08 ☐ Lahu
- 09 ☐ Akha
- 10 ☐ Palaung (Ta'ang)
- 11 ☐ Kayin
- 12 ☐ Wa
- 13 ☐ Kokang
- 14 ☐ Chinese
- 15 ☐ Tamil/other South Asian
- 16 ☐ Mixed

And 3 other symbols [6]

d309a. How long do these migrant workers typically stay in the village?

E d301a==1

MULTI-SELECT d309a

- 01 ☐ A few days or weeks
- 02 ☐ A few months
- 03 ☐ A year or longer

d306b. How did the majority of farmers hire agricultural migrant workers in 2012?

E d301b==1

MULTI-SELECT d306b

- 01 ☐ Farmer contacts laborers directly
- 02 ☐ Farmer hires through a labor broker
- 03 ☐ Mix of direct hire & labor broker

d307b. Where did these migrant workers typically come from in 2012? (allow max. 3 options)

E d301b==1

MULTI-SELECT d307b

- 01 ☐ Kachin
- 02 ☐ Shan
- 03 ☐ Sagaing
- 04 ☐ Magwe
- 05 ☐ Ayeyarwady
- 06 ☐ Bago
- 07 ☐ Kayin/Karen
- 08 ☐ Mon/Tanintharyi
- 09 ☐ Chin/Rakhine
- 10 ☐ Kayah
- 99 ☐ Other(specify)

d307bs. Please specify other...

E d307b.Contains(99)

TEXT d307bs

.....

d308b. What ethnicities did these migrants typically have in 2012?

E d301b==1

MULTI-SELECT d308b

- 01 ☐ Shan
- 02 ☐ Pa'O
- 03 ☐ Burmese
- 04 ☐ Danu
- 05 ☐ Taungyoe
- 06 ☐ Kayan (Karenni)
- 07 ☐ Innthar
- 08 ☐ Lahu
- 09 ☐ Akha
- 10 ☐ Palaung (Ta'ang)
- 11 ☐ Kayin
- 12 ☐ Wa
- 13 ☐ Kokang
- 14 ☐ Chinese
- 15 ☐ Tamil/other South Asian
- 16 ☐ Mixed

And 3 other symbols [7]

d309b. How long did these migrant workers typically stay in the village in 2012?

E d301b==1

MULTI-SELECT d309b

- 01 ☐ A few days or weeks
- 02 ☐ A few months
- 03 ☐ A year or longer

d306c. How did the majority of farmers hire agricultural migrant workers in 2007?

E d301c==1

MULTI-SELECT d306c

- 01 ☐ Farmer contacts laborers directly
- 02 ☐ Farmer hires through a labor broker
- 03 ☐ Mix of direct hire & labor broker

d307c. Where did these migrant workers typically come from in 2007? (allow max. 3 options)

E d301c==1

MULTI-SELECT d307c

- 01 ☐ Kachin
- 02 ☐ Shan
- 03 ☐ Sagaing
- 04 ☐ Magwe
- 05 ☐ Ayeyarwady
- 06 ☐ Bago
- 07 ☐ Kayin/Karen
- 08 ☐ Mon/Tanintharyi
- 09 ☐ Chin/Rakhine
- 99 ☐ Other(specify)

d308c. What ethnicities did these migrants typically have in 2007?

E d301c==1

MULTI-SELECT d308c

- 01 ☐ Shan
- 02 ☐ Pa'O
- 03 ☐ Burmese
- 04 ☐ Danu
- 05 ☐ Taungyoe
- 06 ☐ Kayan (Karenni)
- 07 ☐ Innthar
- 08 ☐ Lahu
- 09 ☐ Akha
- 10 ☐ Palaung (Ta'ang)
- 11 ☐ Kayin
- 12 ☐ Wa
- 13 ☐ Kokang
- 14 ☐ Chinese
- 15 ☐ Tamil/other South Asian
- 16 ☐ Mixed

And 3 other symbols [8]

d309c. How long did these migrant workers typically stay in the village in 2007?

E d301c==1

SINGLE-SELECT d309c

- 01 ○ A few days or weeks
- 02 ○ A few months
- 03 ○ A year or longer

D3. AGRICULTURAL MIGRANTS

WAGES FOR MIGRANT WORKERS

E d301a==1|d301b==1|d301c==1

d310ma. Did the daily wage of male migrant workers differ from the daily wage of non-migrant workers for %d304a% in that crop(s) in 2017?

E d301a==1

SINGLE-SELECT d310ma

- 01 ○ Yes
- 02 ○ No
- 98 ○ Not applicable

d311ma. What was the daily wage for a male migrant worker for %d304a% in that crop(s) in 2017?

E d310ma==1

NUMERIC: INTEGER d311ma

d310fa. Did the daily wage of female migrant workers differ from the daily wage of non-migrant workers for %d304a% in that crop(s) in 2017?

E d301a==1 && d302a>0

SINGLE-SELECT d310fa

01 ○ Yes
02 ○ No
98 ○ Not applicable

d311fa. What was the daily wage for a female migrant worker for %d304a% in that crop(s) in 2017?

E d310fa==1

NUMERIC: INTEGER d311fa

d310mb. Did the daily wage of male migrant workers differ from the daily wage of non-migrant workers for %d304b% in that crop(s) in 2012?

E d301b==1

SINGLE-SELECT d310mb

01 ○ Yes
02 ○ No
98 ○ Not applicable

d311mb. What was the daily wage for a male migrant worker for %d304b% in that crop(s) in 2012?

E d310mb==1

NUMERIC: INTEGER d311mb

d310fb. Did the daily wage of female migrant workers differ from the daily wage of non-migrant workers for %d304b% in that crop(s) in 2012?

E d301b==1 && d302b>0

SINGLE-SELECT d310fb

01 ○ Yes
02 ○ No
98 ○ Not applicable

d311fb. What was the daily wage for a female migrant worker for %d304b% in that crop(s) in 2012?

E d310fb==1

NUMERIC: INTEGER d311fb

d310mc. Did the daily wage of male migrant workers differ from the daily wage of non-migrant workers for %d304c% in that crop(s) in 2007?

E d301c==1

SINGLE-SELECT d310mc

01 ○ Yes
02 ○ No
98 ○ Not applicable

d311mc. What was the daily wage for a male migrant worker for %d304c% in that crop(s) in 2007?

E d310mc==1

NUMERIC: INTEGER d311mc

d310fc. Did the daily wage of female migrant workers differ from the daily wage of non-migrant workers for %d304c% in that crop(s) in 2007?

E d301c==1 && d302c>0

SINGLE-SELECT d310fc

01 ○ Yes
02 ○ No
98 ○ Not applicable

d311fc. What was the daily wage for a female migrant worker for %d304c% in that crop(s) in 2007?

E d310fc==1

NUMERIC: INTEGER d311fc

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

e101. Have there been any operating rice mill in the village during the past ten years?

SINGLE-SELECT e101

01 ○ Yes
02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

RICE MILL IN VILLAGE

E e101==1

e102a. How many rice mills are there currently in the village?

NUMERIC: INTEGER e102a

E1 (self<=c102a & self>=0)||self==9997
M1 Your value is higher than number of Household, Check again!!!!

e102b. How many rice mills were there in the village in 2012?

NUMERIC: INTEGER e102b

E1 self<=c102c ||self==9997
M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e102c. How many rice mills were there in the village in 2007?

NUMERIC: INTEGER e102c

E1 self<=c102d ||self==9997
M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e103. In which year did a rice mill first begin operating in this village?

NUMERIC: INTEGER e103

I Please use YYYY format, or 9997 for "don't know"

e201. Has there been any operating Oil mill in the village during the past ten years?

SINGLE-SELECT e201

01 ○ Yes
02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

OIL MILL IN VILLAGE

E e201==1

e202a. How many oil mills are there currently in the village?

NUMERIC: INTEGER e202a

E1 (self<=c102a & self>=0)||self==9997
M1 Your value is higher than number of Household, Check again!!!!

e202b. How many oil mills were there in the village in 2012?

NUMERIC: INTEGER e202b

E1 self<=c102c ||self==9997
M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e202c. How many oil mills were there in the village in 2007?

NUMERIC: INTEGER e202c

E1 self<=c102d ||self==9997
M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e203. In which year did an oil Mill first begin operating in this village?

I Please use YYYY format, or 9997 for "don't know"

NUMERIC: INTEGER e203

e301. Have there been any households with maize threshers for hire in the village during the past ten years?

SINGLE-SELECT e301

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

HOUSEHOLDS WITH MAIZE THRESHERS FOR HIRE

E e301==1

e302a. How many households with maize threshers for hire are there currently in the village?

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

NUMERIC: INTEGER e302a

e302b. How many households with maize threshers for hire were there in the village in 2012?

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

NUMERIC: INTEGER e302b

e302c. How many households with maize threshers for hire were there in the village in 2007?

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

NUMERIC: INTEGER e302c

e303. In which year did Households with maize threshers for hire first begin operating in this village?

I Please use YYYY format, or 9997 for "don't know"

NUMERIC: INTEGER e303

e401. Have there been any households with paddy/pulses threshers for hire in the village during the past ten years?

SINGLE-SELECT e401

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

HOUSEHOLDS WITH PADDY/PULSES THRESHERS

E e401==1

e402a. How many households with paddy/pulses threshers for hire are there currently in the village?

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

NUMERIC: INTEGER e402a

e402b. How many households with paddy/pulses threshers for hire were there in the village in 2012?

NUMERIC: INTEGER e402b

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e402c. How many households with paddy/pulses threshers for hire were there in the village in 2007?

NUMERIC: INTEGER e402c

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e403. In which year did Households with paddy/pulses threshers for hire first begin operating in this village?

NUMERIC: INTEGER e403

I Please use YYYY format, or 9997 for "don't know"

e501. Have there been any households with two wheel tractors for hire in the village during the past ten years?

SINGLE-SELECT e501

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

HOUSEHOLDS WITH TWO WHEEL TRACTOR

E e501==1

e502a. How many households with two wheel tractor for hire are there currently in the village?

NUMERIC: INTEGER e502a

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

e502b. How many households with two wheel tractor for hire were there in the village in 2012?

NUMERIC: INTEGER e502b

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e502c. How many households with two wheel tractor for hire were there in the village in 2007?

NUMERIC: INTEGER e502c

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e503. In which year did Households with two wheel tractor for hire first begin operating in this village?

NUMERIC: INTEGER e503

I Please use YYYY format, or 9997 for "don't know"

e601. Have there been any households with four wheel tractors for hire in the village during the past ten years?

SINGLE-SELECT e601

01 ○ Yes

02 ○ No

HOUSEHOLDS WITH FOUR WHEEL TRACTOR

E e601==1

e602a. How many households with four wheel tractor for hire are there currently in the village? E1 (self<=c102a & self>=0)||self==9997 M1 Your value is higher than number of Household, Check again!!!!	NUMERIC: INTEGER e602a
e602b. How many households with four wheel tractor for hire were there in the village in 2012? E1 self<=c102c ||self==9997 M1 Your value is higher than number of household 5 year ago, Check agai n!!!	NUMERIC: INTEGER e602b
e602c. How many households with four wheel tractor for hire were there in the village in 2007? E1 self<=c102d ||self==9997 M1 Your value is higher than number of household 10 year ago, Check aga in!!!	NUMERIC: INTEGER e602c
e603. In which year did households with four wheel tractor for hire first begin operating in this village? I Please use YYYY format, or 9997 for "don't know"	NUMERIC: INTEGER e603
e701. Have there been any households with combine harvesters for hire in the village during the past ten years?	SINGLE-SELECT e701 01 ○ Yes 02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

HOUSEHOLDS WITH COMBINE HARVESTERS

E e701==1

e702a. How many households with combine harvesters for hire are there currently in the village? E1 (self<=c102a & self>=0)||self==9997 M1 Your value is higher than number of Household, Check again!!!!	NUMERIC: INTEGER e702a
e702b. How many households with combine harvesters for hire were there in the village in 2012? E1 self<=c102c ||self==9997 M1 Your value is higher than number of household 5 year ago, Check agai n!!!	NUMERIC: INTEGER e702b
e702c. How many households with combine harvesters for hire were there in the village in 2007? E1 self<=c102d ||self==9997 M1 Your value is higher than number of household 10 year ago, Check aga in!!!	NUMERIC: INTEGER e702c

e703. In which year did households with combine harvesters for hire first begin operating in this village?

I Please use YYYY format, or 9997 for "don't know"

NUMERIC: INTEGER e703

e801. Have there been any households with trawlerj for hire in the village during the past ten years?

SINGLE-SELECT e801

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

HOUSEHOLDS WITH TRAWLERJI

E e801==1

e802a. How many of Households with trawlerji for hire are there currently in the village?

E1 (self<=c102a & self>=0) || self==9997

M1 Your value is higher than number of Household, Check again!!!!

NUMERIC: INTEGER e802a

e802b. How many households with trawlerji for hire were there in the village in 2012?

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

NUMERIC: INTEGER e802b

e802c. How many households with trawlerji for hire were there in the village in 2007?

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

NUMERIC: INTEGER e802c

e803. In which year did Households with trawlerji for hire first begin operating in this village?

I Please use YYYY format, or 9997 for "don't know"

NUMERIC: INTEGER e803

e901. Have there been any households with offering truck transport services in the village during the past ten years?

SINGLE-SELECT e901

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

HOUSEHOLDS OFFERING TRUCK TRANSPORT SERVICES

E e901==1

e902a. How many households offering truck transport services for hire are there currently in the village?

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

NUMERIC: INTEGER e902a

e902b. How many households offering truck transport services for hire were there in the village in 2012?

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

NUMERIC: INTEGER e902b

e902c. How many households offering truck transport services for hire were there in the village in 2007?

NUMERIC: INTEGER e902c

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e903. In which year did households offering truck transport services first begin operating in this village?

NUMERIC: INTEGER e903

I Please use YYYY format, or 9997 for "don't know"

e1001. Has there been any tree nursery in the village during the past ten years?

SINGLE-SELECT e1001

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

TREE NURSERY

E e1001==1

e1002a. How many tree nurseries are there currently in the village?

NUMERIC: INTEGER e1002a

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

e1002b. How many tree nurseries were there in the village in 2012?

NUMERIC: INTEGER e1002b

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e1002c. How many tree nurseries were there in the village in 2007?

NUMERIC: INTEGER e1002c

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e1003. In which year did a tree nursery first begin operating in this village?

NUMERIC: INTEGER e1003

I Please use YYYY format, or 9997 for "don't know"

e1101. Has there been any fish farm in the village during the past ten years?

SINGLE-SELECT e1101

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

FISH FARM

E e1101==1

e1102a. How many fish farms are there currently in the village?

NUMERIC: INTEGER e1102a

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

e1102b. How many fish farms were there in the village in 2012?

NUMERIC: INTEGER e1102b

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e1102c. How many fish farms were there in the village in 2007?

NUMERIC: INTEGER e1102c

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e1103. In which year did a fish farm first begin operating in this village?

NUMERIC: INTEGER e1103

I Please use YYYY format, or 9997 for "don't know"

e1201. Has there been any commercial melon farm in the village during the past ten years?

SINGLE-SELECT e1201

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

COMMERCIAL MELON FARM

E e1201==1

e1202a How many commercial melon farms are there currently in the village?

NUMERIC: INTEGER e1202a

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

e1202b. How many commercial melon farms were there in the village in 2012?

NUMERIC: INTEGER e1202b

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e1202c. How many commercial melon farm were there in the village in 2007?

NUMERIC: INTEGER e1202c

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e1203. In which year did a commercial melon farm first begin operating in this village?

NUMERIC: INTEGER e1203

I Please use YYYY format, or 9997 for "don't know"

e1301. Has there been any agricultural inputs shop in the village during the past ten years?

SINGLE-SELECT e1301

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

AGRICULTURAL INPUTS SHOP

E e1301==1

e1302a. How many agricultural inputs shop are there currently in the village?

NUMERIC: INTEGER e1302a

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

e1302b. How many agricultural inputs shops were there in the village in 2012?

NUMERIC: INTEGER e1302b

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e1302c. How many agricultural inputs shop were there in the village in 2007?

NUMERIC: INTEGER e1302c

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e1303. In which year did an agricultural input shop first begin operating in this village?

NUMERIC: INTEGER e1303

I Please use YYYY format, or 9997 for "don't know"

e1401. Has there been any sugar cane processing in the village during the past ten years?

SINGLE-SELECT e1401

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

SUGAR CANE PROCESSING

E e1401==1

e1402a. How many sugar cane processing are there currently in the village?

NUMERIC: INTEGER e1402a

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

e1402b. How many of Sugar cane processing were there in the village in 2012?

NUMERIC: INTEGER e1402b

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e1402c. How many sugar cane processing were there in the village in 2007?

NUMERIC: INTEGER e1402c

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e1403. In which year did sugar cane processing first begin operating in this village?

NUMERIC: INTEGER e1403

I Please use YYYY format, or 9997 for "don't know"

e1501. Have there been any tea processing companies in the village during the past ten years?

SINGLE-SELECT e1501

01 ○ Yes

02 ○ No

E. VILLAGE LEVEL AGRICULTURAL BUSINESS INVENTORY

TEA PROCESSING

E e1501==1

e1502a. How many tea processing companies are there currently in the village?

NUMERIC: INTEGER e1502a

E1 (self<=c102a & self>=0)||self==9997

M1 Your value is higher than number of Household, Check again!!!!

e1502b. How many tea processing companies were there in the village in 2012?

NUMERIC: INTEGER e1502b

E1 self<=c102c ||self==9997

M1 Your value is higher than number of household 5 year ago, Check agai n!!!

e1502c. How many tea processing companies were there in the village in 2007?

NUMERIC: INTEGER e1502c

E1 self<=c102d ||self==9997

M1 Your value is higher than number of household 10 year ago, Check aga in!!!

e1503. In which year did tea processing first begin operating in this village?

NUMERIC: INTEGER e1503

I Please use YYYY format, or 9997 for "don't know"

F. LAND OWNERSHIP

F. LAND OWNERSHIP

COMMON PROPERTY & SHIFTING CULTIVATION

f101a. Does the village have access to any forest land?

SINGLE-SELECT f101a

01 ○ Yes

02 ○ No

f102a. What is the area of forest land that the village has access to?

NUMERIC: DECIMAL f102a

E f101a==1

E1 $under100k

M1 Value higher than 100000 not likely. Check your answer!

f102au. What is the unit of forest land?

SINGLE-SELECT f102au

E f101a==1

01 ○ Acres

02 ○ Miles

03 ○ Square miles

f101b. Did the village have access to any forest land in 2007?

SINGLE-SELECT f101b

01 ○ Yes

02 ○ No

f102b. What was the area of forest land that the village had access to in 2007?

NUMERIC: DECIMAL f102b

E f101b==1

f102bu. What is the unit of forest land in 2007?

E f101b==1

SINGLE-SELECT f102bu

01 ○ Acres
02 ○ Miles
03 ○ Square miles

f103a. Is there any communal grazing land in the village?

SINGLE-SELECT f103a

01 ○ Yes
02 ○ No

f104a. What is the area of communal grazing land in the village?

E f103a==1
E1 $under100k
M1 Value higher than 100000 not likely. Check your answer!

NUMERIC: DECIMAL f104a

f104au. What is the unit of communal grazing land?

E f103a==1

SINGLE-SELECT f104au

01 ○ Acres
02 ○ Miles
03 ○ Square miles

f103b. Was there any communal grazing land in the village in 2007?

SINGLE-SELECT f103b

01 ○ Yes
02 ○ No

f104b. What was the area of communal grazing land in the village in 2007 (in acres)?

E f103b==1

NUMERIC: DECIMAL f104b

f104bu. What is the unit of communal grazing land in 2007?

E f103b==1

SINGLE-SELECT f104bu

01 ○ Acres
02 ○ Miles
03 ○ Square miles

f105. Has there ever been any shifting cultivation in this village?

SINGLE-SELECT f105

01 ○ Yes
02 ○ No

f106a. Is there any land in the village currently farmed under shifting cultivation?

E f105==1

SINGLE-SELECT f106a

01 ○ Yes
02 ○ No

f107.When did shifting cultivation end?

E f105==1 && f106a==2
E1 $year
M1 Enter YYYY, or 9997 for 'don't know'

NUMERIC: INTEGER f107

f108a. How many households in the village practice shifting cultivation?

E f106a==1

NUMERIC: INTEGER f108a

f109a. What is the area of land in this village currently farmed under shifting cultivation by households?

E f106a==1
E1 $under10k
M1 Value higher than 10000 not likely. Check your answer!

NUMERIC: DECIMAL f109a

f109au. What is the unit of land under shifting cultivation?

E f106a==1

SINGLE-SELECT f109au

01 ○ Acres
02 ○ Miles
03 ○ Square miles

f106b. Did any household practice shifting cultivation in 2007?

E f107>2006

SINGLE-SELECT f106b

01 ○ Yes
02 ○ No

f108b. How many households practiced shifting cultivation in 2007?

E f106b==1

NUMERIC: INTEGER f108b

f109b. What was the area of land in this village farmed under shifting cultivation in 2007?

E f106b==1

NUMERIC: DECIMAL f109b

f109bu. What is the unit of land under shifting cultivation?

E f106b==1

SINGLE-SELECT f109bu

01 ○ Acres
02 ○ Miles
03 ○ Square miles

F. LAND OWNERSHIP

LAND CONFISCATION

f201. Has any land ever been confiscated from members of this community?

SINGLE-SELECT f201

01 ○ Yes
02 ○ No

f202. Is it ok for us to ask you a few questions about what happened?

E f201 == 1

SINGLE-SELECT f202

01 ○ Yes
02 ○ No

f203. On how many occasions has this happened?

E f201==1 & f202==1

NUMERIC: INTEGER f203

F. LAND OWNERSHIP / LAND CONFISCATION

Roster: F_LANDCONFISCATION

generated by numeric question f203

F2_LandConfiscation

E f202==1

f204. In which year did this happen?

I Pleas use YYYY format, or 9997 for "don't know"

NUMERIC: INTEGER f204

f205. How many households were affected?

NUMERIC: INTEGER f205

f206. What area of land was confiscated?(In Acre)

NUMERIC: DECIMAL f206

f207. Who confiscated the land?

SINGLE-SELECT f207

- 01 ○ Myanmar Army
- 02 ○ Government Department
- 03 ○ Ethnic Armed Organization
- 04 ○ Militia
- 05 ○ Company
- 06 ○ Private Individual
- 99 ○ Other(Specify)

f207s. Please specify the other who confiscated the land

E `f207 == 99`

TEXT f207s

f208. What was done with the land that was confiscated?

MULTI-SELECT f208

- 01 ☐ Used for military base
- 02 ☐ Used to build road/ dam/ other public infrastructure
- 03 ☐ Used for tree plantation
- 04 ☐ Used for agriculture (other than plantation)
- 05 ☐ Used for mining project
- 06 ☐ Used to build factory/other commercial building
- 07 ☐ Left fallow/ not used
- 08 ☐ Resold to new owner/s
- 09 ☐ Leased back to original owner/s
- 10 ☐ Leased out to new tenant/s
- 99 ☐ Other (Specify)

f208s. Please specify other what was done with the confiscated land

E `f208.Contains(99)`

TEXT f208s

G. CREDIT

g101. Did households in the village ever take credit from any of the following?

MULTI-SELECT: YES/NO g101

- 01 ☐ / ☐ Myanmar Agricultural Development Bank (MADB)
- 02 ☐ / ☐ Private banks
- 03 ☐ / ☐ Cooperatives (through Ministry of Cooperatives)
- 04 ☐ / ☐ Mya Sein Nyaung
- 05 ☐ / ☐ Microfinance institutions/ NGOs
- 06 ☐ / ☐ Village revolving fund
- 07 ☐ / ☐ Agriculture produce traders (pwesar/pweyone)
- 08 ☐ / ☐ Gold shop/pawn shop
- 09 ☐ / ☐ Private moneylenders
- 10 ☐ / ☐ Friends / Relatives
- 99 ☐ / ☐ Other (specify)

g101s. Please specify other source of credit

E `g101.Yes.Contains(99)`

TEXT g101s

G. CREDIT

Roster: ROSTER OF FINANCIAL INSTITUTIONS

generated by multi-select question g101 — G_Credit1

g102. Do households take credit from %rostertitle% in 2017? — SINGLE-SELECT — g102

01 ○ Yes
02 ○ No

g103. What interest rate (%) did someone in the community pay for a 6 month duration MMK 100,000 cash loan without collateral from [%rostertitle%] in 2017? — NUMERIC: DECIMAL — g103

E g102==1 && @rowcode!=1
E1 $percent
M1 Please enter a percentage with at most one decimal place

SPECIAL VALUES
9997 [9997] - Don't know
9998 [9998] - Not applicable

g103u. Time period for interest rate — SINGLE-SELECT — g103u

E g102==1 && @rowcode!=1 & g103!=0 & g103!=9997

01 ○ Per Month
02 ○ Per Year
99 ○ Other

g103us. Please specify other... — TEXT — g103us

E g103u==99

g104. Did households take credit from %rostertitle% in 2012? — SINGLE-SELECT — g104

01 ○ Yes
02 ○ No

g105. What interest (%) rate might someone expect to pay for a six month duration MMK 100,000 cash loan without collateral from [%rostertitle%] in 2012? — NUMERIC: DECIMAL — g105

E g104==1 && @rowcode!=1
E1 $percent
M1 Please enter a percentage with at most one percentage point

SPECIAL VALUES
9997 [9997] - Don't know

g105u. Time period for interest rate (%) — SINGLE-SELECT — g105u

E IsAnswered(g105) && g105!=0 && g105!=9997

01 ○ Per Month
02 ○ Per Year

g106. In what year did households in this village first access credit from %G_Credit1%? — NUMERIC: INTEGER — g106

I Please answer in YYYY format, 9997 = don't know, 9996 = more than 1 00 years ago or before living memory
E @rowcode == 1 || @rowcode == 2 ||@rowcode == 3 ||@rowcod e == 4 ||@rowcode == 5 ||@rowcode == 6 ||@rowcode == 7

H. NON-FARM BUSINESS INVENTORY

H. NON-FARM BUSINESS INVENTORY

Roster: NON-FARM BUSINESS INVENTORY

generated by fixed list — H_NFarmBus

01 Village shop
02 Electronic shop
03 Hardware Shop

04 Paddy trader (wholesaler)
05 Maize/grain trader (wholesaler)
06 Vegetables/fruits trader (wholesaler)
07 Timber/bamboo seller
08 Charcoal/Firewood seller
09 Vegetable retailer
10 Tea shop
11 Betel nut stall
12 Prepared food stall (noodles/bbq/snacks)
13 Restaurant/bar
14 Bus/minibus/car taxi service
15 Motorcycle taxi service
16 Horse cart / bullock cart taxi service
17 Carpenter / mason
18 Thatcher / mat making
19 Weaver / spinning
20 Metal worker (blacksmith / tinsmith)
21 Other handicraft production
22 Ceremony decoration / music service
23 Hairdresser / beauty saloon
24 Construction business owner
25 Mechanic
26 Rice retailer
27 Petrol Station (with pump)
28 Petrol Station (without pump)

h101. Was there any %rostertitle% in the village in the past 10y?

SINGLE-SELECT h101
01 ○ Yes
02 ○ No

h102a. How many %rostertitle% are currently in this village?

E h101==1
E1 self<100
M1 The number is too high. Please check again.

NUMERIC: INTEGER h102a

h102b. How many %rostertitle% were there in this village in 2012?

E h101==1
E1 self<100
M1 The number is too high. Please check again.

NUMERIC: INTEGER h102b

h102c. How many %rostertitle% were there in this village in 2007?

E h101==1
E1 self<100
M1 The number is too high. Please check again.

NUMERIC: INTEGER h102c

h103. Are these %rostertitle% mainly operated by men, women, or both?

E h101==1 && h102a>0

SINGLE-SELECT h103
01 ○ Men
02 ○ Women
03 ○ Both

I. FARMER ASSOCIATIONS

i101. Are there any farmer organizations operating in this village?

SINGLE-SELECT i101

01 ○ Yes
02 ○ No

i102. Which types of farmer organization are operating in the village?

E i101==1

MULTI-SELECT i102

01 ☐ Central Cooperative Society (CCS)
02 ☐ NGO farmer group
03 ☐ Myanmar Farmer Association (MFA)
04 ☐ Agriculture and Farmers' Federation (AFFM)
05 ☐ Sector organizations (rice federation, livestock federation, etc.,)
99 ☐ Other

I. FARMER ASSOCIATIONS

Roster: FARMER ASSOCIATION ROSTER

generated by multi-select question i102 I_FarmAssoc

i102s. Specify other type of farmer organization

E @rowcode==6

TEXT i102s

i103. When was %rostertitle% established?

E1 $year
M1 Please enter a YYYY year, orr 9997 for does not know

NUMERIC: INTEGER i103

i104. How many farmers are members of [%rostertitle%]?

NUMERIC: INTEGER i104

J. DEVELOPMENT PROJECTS

j101g. Did any government project take place in this village in the past 10 years?

SINGLE-SELECT j101g

01 ○ Yes
02 ○ No

j102g. Please list all government projects that took place in the village in the last 10 years (project name)

E j101g==1

LIST j102g

J. DEVELOPMENT PROJECTS

Roster: J. GOVERNMENT PROJECTS ROSTER

generated by list question j102g J_gproject

E j101g==1

j103g. Who was the implementing agency of the project - %J_gproject%?	TEXT j103g
j104g. What was the focus of this project - %J_gproject%?	MULTI-SELECT j104g 01 ☐ Agriculture - crop production 02 ☐ Agriculture - livestock rearing 03 ☐ Aquaculture 04 ☐ Livelihoods improvement 05 ☐ Sanitation 06 ☐ Water 07 ☐ Health and nutrition 08 ☐ Education 09 ☐ Roads 10 ☐ Electricity 11 ☐ Training and capacity building 99 ☐ Other (Specify)
j104gs. Please specify focus of project E j104g.Contains(99)	TEXT j104gs
j105g. In which year did the project - %J_gproject% start? I Please answer in YYYY format or 9997 for do not know	NUMERIC: INTEGER j105g
j106g. Is the project - %J_gproject% still running?	SINGLE-SELECT j106g 01 ○ Yes 02 ○ No
j107g. In which year did the project - %J_gproject% end? E j106g==2 E1 $year M1 Please answer in YYYY format or 9997 for do not know	NUMERIC: INTEGER j107g
j101n. Did any NGO project had activities in this village in the past 10 years?	SINGLE-SELECT j101n 01 ○ Yes 02 ○ No
j102n. Please list all NGO projects that took place in the village in the last 10 years (project name) E j101n==1	LIST j102n

J. DEVELOPMENT PROJECTS

Roster: J. NGO PROJECTS ROSTER

generated by list question j102n J_nproject

E j101n==1

j103n. Who was the implementing agency of the project - %J_nproject%?	TEXT j103n

j104n. What was the focus of this project - %J_nproject%?

MULTI-SELECT j104n

- 01 ☐ Agriculture - crop production
- 02 ☐ Agriculture - livestock rearing
- 03 ☐ Aquaculture
- 04 ☐ Livelihoods improvement
- 05 ☐ Sanitation
- 06 ☐ Water
- 07 ☐ Health and nutrition
- 08 ☐ Education
- 09 ☐ Roads
- 10 ☐ Electricity
- 11 ☐ Training and capacity building
- 99 ☐ Other (Specify)

j104ns. Please specify focus of project

E `j104n.Contains(99)`

TEXT j104ns

.....

j105n. In which year did the project - %J_nproject% start?

I Please answer in YYYY format or 9997 for do not know

NUMERIC: INTEGER j105n

- -

j106n. Is the project - %J_nproject% still running?

SINGLE-SELECT j106n

- 01 ○ Yes
- 02 ○ No

j107n. In which year did the project - %J_nproject% end?

E `j106n==2`

E1 `$year`

M1 Please answer in YYYY format or 9997 for do not know

NUMERIC: INTEGER j107n

- -

K. CLIMATE CHANGE

k101. Have you noticed any long-term (last 30 years) shifts in the mean temperature in this region?

SINGLE-SELECT k101

- 01 ○ Yes
- 02 ○ No

k102. What kind of long-term shift in the mean temperature did you notice?

E `k101==1`

SINGLE-SELECT k102

- 01 ○ Highly increasing temperature
- 02 ○ Slightly increasing temperature
- 03 ○ Slightly decreasing temperature
- 04 ○ Highly decreasing temperature

k103.Have you noticed any long-term shifts (last 30 years) in the mean rainfall in this region?

SINGLE-SELECT k103

- 01 ○ Yes
- 02 ○ No

k104. What kind of long-term shift in the mean rainfall did you notice?

E k103==1

SINGLE-SELECT k104

01 ○ Highly decreasing rainfall
02 ○ Slightly decreasing rainfall
03 ○ Slightly increasing rainfall
04 ○ Highly increasing rainfall
05 ○ Erratic (unpredictable) rainfall

k105. Have you noticed any long-term shifts (last 30 years) in the frequency of flooding in this region?

SINGLE-SELECT k105

01 ○ Yes
02 ○ No

k106. What kind of long-term shift in the frequency of flooding did you notice?

E k105==1

SINGLE-SELECT k106

01 ○ Much more frequent flooding
02 ○ Slightly more frequent flooding
03 ○ Slightly less frequent flooding
04 ○ Much less frequent flooding

k107. Have you noticed any long-term shifts (last 30 years) in the frequency of droughts in this region?

SINGLE-SELECT k107

01 ○ Yes
02 ○ No

k108. What kind of long-term shift in the frequency of droughts did you notice?

E k107==1

SINGLE-SELECT k108

01 ○ Much more frequent droughts
02 ○ Slightly more frequent droughts
03 ○ Slightly less frequent droughts
04 ○ Much less frequent droughts

k109. Have you noticed any long-term shifts (last 30 years) in the timing of the onset of the monsoon in this region?

SINGLE-SELECT k109

01 ○ Yes
02 ○ No

k110. What kind of long-term shift in the onset of the monsoon did you notice?

E k109==1

SINGLE-SELECT k110

01 ○ Much earlier onset
02 ○ Slightly earlier onset
03 ○ Slightly later onset
04 ○ Much later onset
05 ○ More erratic (unpredictable) onset

k111. Have you noticed any long-term shifts (last 30 years) in the frequency of storms/cyclones in this region?

SINGLE-SELECT k111

01 ○ Yes
02 ○ No

k112. What kind of long-term shift in the frequency of hailstorms did you notice?

E k111==1

SINGLE-SELECT k112

01 ○ Much more frequent storms/cyclones
02 ○ Slightly more frequent storms/cyclones
03 ○ Slightly less frequent storms/cyclones
04 ○ Much less frequent storms/cyclones

k113. Have you noticed any long-term shifts (last 30 years) in the frequency of cold spells in the region?

SINGLE-SELECT k113

01 ○ Yes
02 ○ No

k114. What kind of long-term shift in the frequency of cold spells did you notice?

E k113==1

SINGLE-SELECT k114

01 ○ Much more frequent cold spells
02 ○ Slightly more frequent cold spells
03 ○ Slightly less frequent cold spells
04 ○ Much less frequent cold spells
05 ○ More erratic cold spells

k200. Which of the following crops were grown in the village within the last 10 years?

MULTI-SELECT k200

01 ☐ Maize
02 ☐ Pigeon Peas
03 ☐ Ya Paddy
04 ☐ Soy bean

K. CLIMATE CHANGE

Roster: K2 CLIMATE AND CROPS

generated by multi-select question k200 K2_ClimateCrops

k201. In the past 10 years, how many years did you grow %rostertitle%?

E1 self.InRange(1,10)
M1 The years of growing should not be more than 10 for past 10 years.

NUMERIC: DECIMAL k201

k202. In %k201% years, what is the average yield per acre of %rostertitle% under good climate conditions?

NUMERIC: DECIMAL k202

k202u. What is the unit of yield for %rostertitle%?

SINGLE-SELECT k202u

01 ○ Viss/acre
02 ○ Baskets/acre
03 ○ Sacks/acre
04 ○ Lan/acre
99 ○ Other unit/acre

k202us. Please specify other unit of yield for crop

E k202u == 99

TEXT k202us

k203. What is the standard unit for %k202u%?

E k202u!=1

SINGLE-SELECT k203

01 ○ Viss
02 ○ Pyi
03 ○ Kilogram
04 ○ Can

k203s. What is the standard unit for %k202us%?

E k202u==99

SINGLE-SELECT k203s

01 ○ Viss
02 ○ Pyi
03 ○ Kilogram
04 ○ Can

k204. How many %k203% are there in one %k202u%?

E IsAnswered(k203) && k203!=99

NUMERIC: DECIMAL k204

k204s. How many %k203% are there in one %k202us%?

E IsAnswered(k203) && k203==99

NUMERIC: DECIMAL k204s

k205. In %k201% years, what is the average yield of %rostertitle% under bad climate conditions?

E1 self <= k202
M1 bad yield cannot be better than average yield. Please check.

NUMERIC: DECIMAL k205

k206. In %k201% years, what is the average yield per acre of %rostertitle% under average climate conditions?

E1 self <= k202
M1 Bad yield cannot be better than good yield. Please check.

NUMERIC: DECIMAL k206

k207. In %k201% years, how many were good years for %rostertitle% in terms of climate conditions?

E1 self <=k201
M1 Please check again

NUMERIC: DECIMAL k207

k208. In %k201% years, how many were bad years for %rostertitle% in terms of climate conditions?

E1 self <=k201
M1 Please check again

NUMERIC: DECIMAL k208

k209. In %k201% years, how many were average years for %rostertitle% in terms of climate conditions?

E1 self <=k201
M1 Please check again
E2 (k207 + k208 +self ==k201)
M2 total nr of years of good, average and bad years must amount to the y ears of growing.

NUMERIC: DECIMAL k209

L. CONFLICT

l101. Has there ever been any armed conflict in this village tract?

SINGLE-SELECT l101
01 ○ Yes
02 ○ No

l102. In which year did the conflict end?

I Please use YYYY format
E l101==1

NUMERIC: INTEGER l102

l103. For how many years was this village tract affected by the conflict?

E l101==1
E1 self<100

NUMERIC: DECIMAL l103

l104. Were households in this village affected by any of the following events during the conflict?

E l1101==1

MULTI-SELECT: YES/NO l1104

01 ☐ / ☐ Households from the village were forced to work as porters or labor
02 ☐ / ☐ Households from the village were forced to relocate to another place
03 ☐ / ☐ Crops destroyed/stolen
04 ☐ / ☐ Livestock killed/stolen
05 ☐ / ☐ Housing damaged/destroyed

l105. How many households from the village were forced to work as porters or labor?

I Please use 9997 for "Do Not Know"
E l1104.Yes.Contains(1)

NUMERIC: INTEGER l1105

l106. How many households were forced to relocate to another place?

I Please use 9997 for "Do Not Know"
E l1104.Yes.Contains(2)

NUMERIC: INTEGER l1106

l107. How may households had crops destroyed or stolen?

I Please use 9997 for "Do Not Know"
E l1104.Yes.Contains(3)

NUMERIC: INTEGER l1107

l108. How many households had livestock killed/stolen?

I Please use 9997 for "Do Not Know"
E l1104.Yes.Contains(4)

NUMERIC: INTEGER l1108

l109. How many households had housing damaged/destroyed?

I Please use 9997 for "Do Not Know"
E l1104.Yes.Contains(5)

NUMERIC: INTEGER l1109

END THE INTERVIEW

STATIC TEXT

Now we can close the interview. I would like to thank you for your participation in the interview.

End time of the interview

DATE: CURRENT TIME end

APPENDIX A — VALIDATION CONDITIONS AND MESSAGES

[1] a102: a102. Enumeration Area (EA) SHARES code

Validation Condition:

```
self.InRange(0,999) && (
(a101==14 && (self.InRange(1,16)|| self.InRange(71,77)))||
(a101==1 && self.InRange(17,20)) ||
(a101==2 && self.InRange(21,32)) ||
(a101==5 && self.InRange(89,96)) ||
(a101==6 && self.InRange(43,58)) ||
(a101==8 && (self.InRange(81,88) || self.InRange(97,100)))||
///(a101==9 && self.InRange(81,90)) ||
(a101==11 && self.InRange(65,70)) ||
(a101==12 && self.InRange(33,42))||
(a101==13 && (self.InRange(59,64) || self.InRange(78,80))))
```

Validation Message: This code does not correspond to an EA in the selected township.

APPENDIX B — OPTIONS

[1]

d303a: d303a. Among the main crops in the village, for which crop were most migrant workers hired in 2017?

Options: 1:Monsoon Paddy, 2:Pre / Post- Monsoon Paddy, 3:Maize, 4:Pigeon Pea, 5:Groundnut, 6:Sesame, 7:Sunflower, 8:Niger, 9:Soy Bea n, 10:Green Gram, 11:Black Gram, 12:Chick Pea, 13:Lab Lab, 199:Other bean, 14:Wheat, 15:Sorghum, 16:Millet,
[2] 17:Sugarcane, 18:Chillies , 19:Ginger, 20:Tumeric, 21:Garlic, 22:Shallot/Onion, 23:Potato, 24:Gamone(Medical Herb), 25:Betel, 26:Tobacco, 27:Cheroot, 28:Cabbag e / Cauliflower, 29:Mustard/ Kailan, 30:Okra, 31:Tomato, 32:Eggplant, 33:Cucumber, 34:Gourd/ Chayote, 35:Pumpkin, 36:Sweetcorn, 37:Ro selle, 38:Watermelon, 39:Musk melon, 299:Other melon, 40:Pineapple/ Strawberry, 41:Ornamental flowers, 42:Banana, 43:Mango, 44:Pap aya, 45:Orange/Lemon/Pomelo, 46:Avocado, 47:Apple/Pear,
[3] 48:Jackfruit/Durian, 49:Coffee, 50:Tea, 51:Bamboo, 52:Eucalyptus, 399:Other tree, 99:Other (specify)

d303b: d303b. Among the main crops in the village, for which crop were most migrant workers hired in 2012?

Options: 1:Monsoon Paddy, 2:Pre / Post- Monsoon Paddy, 3:Maize, 4:Pigeon Pea, 5:Groundnut, 6:Sesame, 7:Sunflower, 8:Niger, 9:Soy Bea n, 10:Green Gram, 11:Black Gram, 12:Chick Pea, 13:Lab Lab, 199:Other bean, 14:Wheat, 15:Sorghum, 16:Millet, 17:Sugarcane, 18:Chillies , 19:Ginger, 20:Tumeric, 21:Garlic, 22:Shallot/Onion, 23:Potato, 24:Gamone(Medical Herb), 25:Betel, 26:Tobacco, 27:Cheroot, 28:Cabbag e / Cauliflower, 29:Mustard/ Kailan, 30:Okra, 31:Tomato, 32:Eggplant, 33:Cucumber, 34:Gourd/ Chayote, 35:Pumpkin, 36:Sweetcorn, 37:Ro selle, 38:Watermelon, 39:Musk melon, 299:Other melon, 40:Pineapple/ Strawberry, 41:Ornamental flowers, 42:Banana, 43:Mango, 44:Pap aya, 45:Orange/Lemon/Pomelo, 46:Avocado, 47:Apple/Pear,
[4] 48:Jackfruit/Durian, 49:Coffee, 50:Tea, 51:Bamboo, 52:Eucalyptus, 399:Other tree, 99:Other (specify)

d303c: d303c. Among the main crops in the village, for which crop were most migrant workers hired in 2007?

Options: 1:Monsoon Paddy, 2:Pre / Post- Monsoon Paddy, 3:Maize, 4:Pigeon Pea, 5:Groundnut, 6:Sesame, 7:Sunflower, 8:Niger, 9:Soy Bea n, 10:Green Gram, 11:Black Gram, 12:Chick Pea, 13:Lab Lab, 199:Other bean, 14:Wheat, 15:Sorghum, 16:Millet, 17:Sugarcane, 18:Chillies , 19:Ginger, 20:Tumeric, 21:Garlic, 22:Shallot/Onion, 23:Potato, 24:Gamone(Medical Herb), 25:Betel, 26:Tobacco, 27:Cheroot, 28:Cabbag e / Cauliflower, 29:Mustard/ Kailan, 30:Okra, 31:Tomato, 32:Eggplant, 33:Cucumber, 34:Gourd/ Chayote, 35:Pumpkin, 36:Sweetcorn, 37:Ro selle, 38:Watermelon, 39:Musk melon, 299:Other melon, 40:Pineapple/ Strawberry, 41:Ornamental flowers, 42:Banana, 43:Mango, 44:Pap aya, 45:Orange/Lemon/Pomelo, 46:Avocado, 47:Apple/Pear,
[5] 48:Jackfruit/Durian, 49:Coffee, 50:Tea, 51:Bamboo, 52:Eucalyptus, 399:Other tree, 99:Other (specify)

[6]

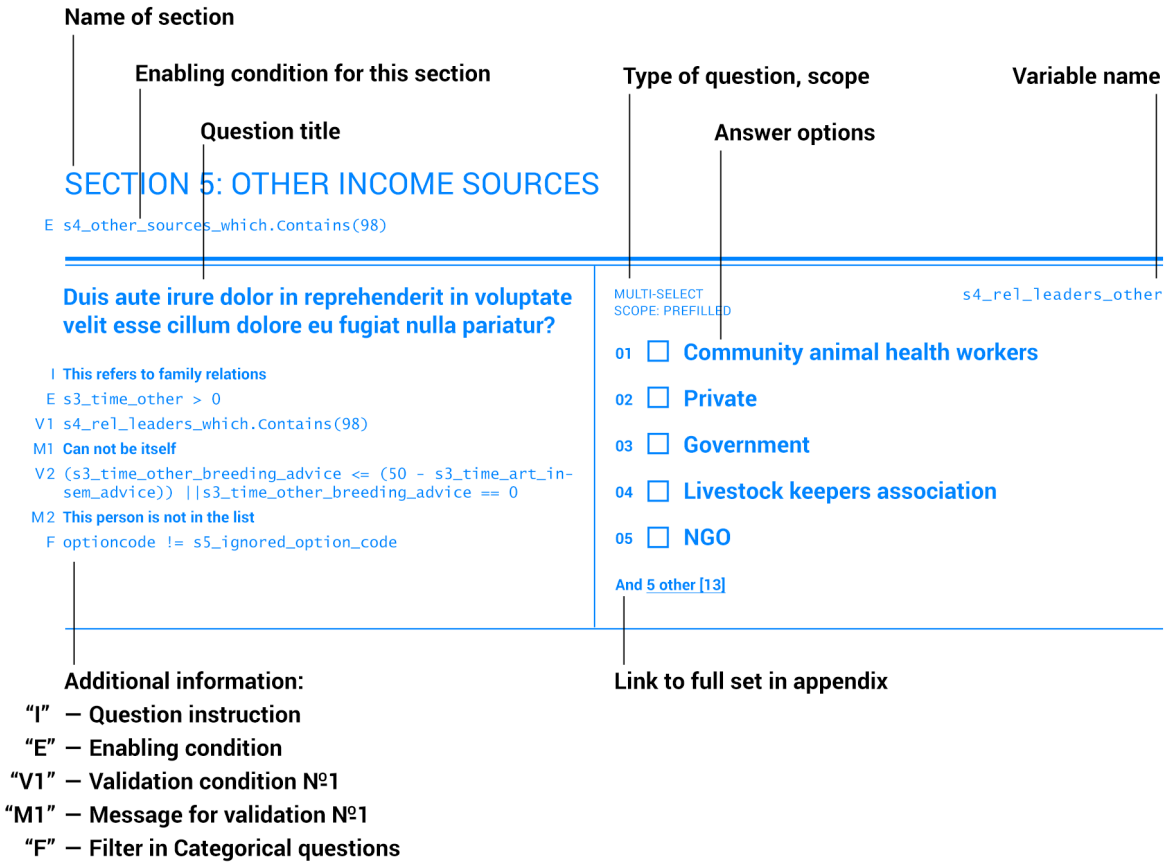
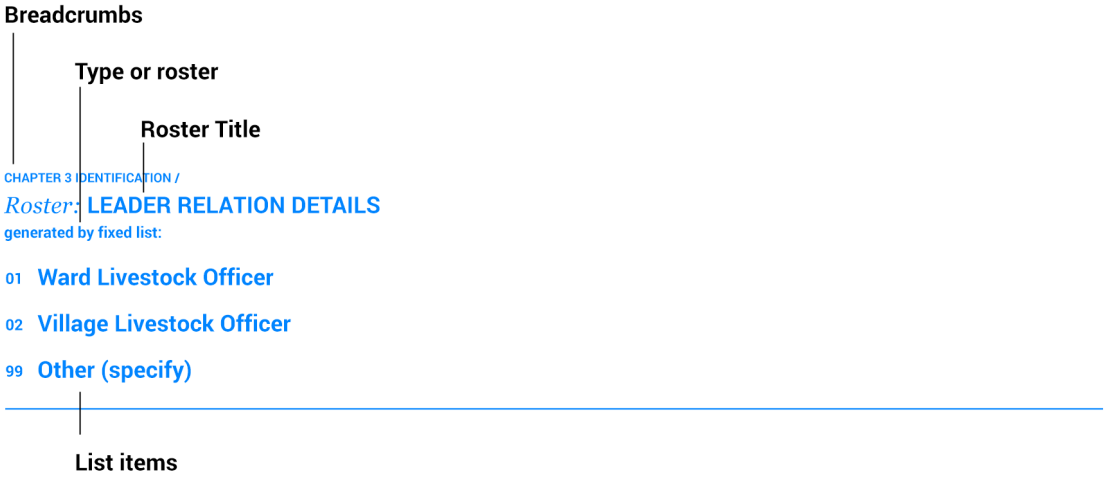
[7]

[8]

APPENDIX C — VARIABLES

[1] c107:

(c106a.HasValue? c106a:0)+ (c106b.HasValue? c106b:0)+ (c106c.HasValue? c106c:0)+ (c106d.HasValue? c106d:0)+ (c106e.HasValue? c106e:0)+ (c106f.HasValue? c106f:0)+ (c106g.HasValue? c106g:0)+ (c106h.HasValue? c106h:0)+ (c106i.HasValue? c106i:0)+ (c106j.HasValue? c106j:0)+ (c106k.HasValue? c106k:0)+ (c106l.HasValue? c106l:0)+ (c106m.HasValue? c106m:0)+ (c106n.HasValue? c106n:0)+ (c106o.HasValue? c106o:0)+ (c106p.HasValue? c106p:0)+ (c106q.HasValue? c106q:0)+ (c106r.HasValue? c106r:0)+ (c106s.HasValue? c106s:0)

LEGEND

Legend and structure of information in this file