ANNEX II

Nigeria

LIBRARY OF NONSTANDARD UNIT CONVERSION FACTORS AND REFERENCE PHOTOS

DOCUMENTATION

The Nigeria nonstandard unit library was prepared in conjunction with the third wave of the General Household Survey-Panel (GHS-Panel). All relevant materials were collected during a market survey conducted in June 2015. The components of the library were then utilized during data collection for the third wave of the GHS-Panel which commenced in August 2015. The library consists of the following components:

1. **Tables of valid item-unit and crop-unit combinations**. The lists are not exhaustive and are meant as a general guide. Interviewers for the third wave of the GHS-Panel were provided with this table to guide interviews and prevent use of unreasonable units for particular items. The items/crops are grouped according to common allowable units. All items/crops in a box correspond to the same units listed on the right portion of each box.
2. **Conversion factor tables** that list all available kilogram conversions for nonstandard units. Separate tables are provided for household consumption items and agricultural production. Note that some conversion factors are present in both tables. Each table contains all conversion factors collected during the market survey but does not list all item/crop-unit combinations. Any combinations where conversion factors were not collected have been omitted from the table. Conversion factors are provided for all of Nigeria as well as for each of the 6 geopolitical zones. Where possible, a zonal specific conversion factor is listed. However, if no conversion factor was collected in a particular zone, the national average has been listed in the Zone columns for the sake of completeness. The corresponding item, crop, and unit codes have been provided for use with the GHS-Panel. However, the unit codes will only correspond to wave 3 of the GHS-Panel. The conversion factors can be used with prior waves, but will require aggregation and additional assumptions that are left for the user. The conversion factor tables are provided in excel format in the files accompanying this document. The conversion factor tables in Stata format are included with the GHS-Panel Wave 3 data, available for download here.
3. **A set of reference photos** for use in data collection. Item specific photos are provided for "noncontainer" units: piece, heap, bunch, and stalk. For containers, a single photo is provided for each container but not for each item. The conversion factors for the noncontainers listed in the conversion factor tables directly correspond to the pictured quantity. Interviewers for wave 3 of the GHS-Panel were provided the set of reference photos and utilized them during their interviews for collection of consumption and agricultural production quantities.

These three components are primarily intended for use with the Nigeria GHS-Panel wave 3 data. However, they are also intended as a resource for other surveys conducted in Nigeria that allow respondents to report quantities in nonstandard units. The formatting of the items and units (especially in the conversion factor tables) is specific to the GHS-Panel, but can be adapted to suit other surveys or data.

ALLOWABLE ITEM-UNIT COMBINATIONS

Table A6: Nigeria consumption item-unit combinations

10	Guinea corn/sorghum	**Paint rubber**
11	Millet	**Milk cup**
13	Rice - local	**Cigarette cup**
14	Rice - imported	**Tin**
16	Maize flour	**Congo (S/L)**
17	Yam flour	**Mudu (S/L)**
18	Cassava flour	**Derica (S/M/L/XL)**
19	Wheat flour	**Tiya (S/M/L)**
22	Maize (grains, off the cob)	**Kobiowu (S/M/L)**
23	Other grains and flour	
32	Gari - white	
33	Gari - yellow	
40	Soya beans	
41	Brown beans	
42	White beans	
43	Groundnuts (Unshelled)	**Heap (S/M/L)**
44	Groundnuts (Shelled)	*** ONLY Groundnuts can**
45	Other nuts/seeds/pulses	**use heap**
130	Sugar	
141	Salt	
142	Unground Ogbonno	
143	Ground Ogbonno	
144	Ground pepper	
145	Melon seeds	

25	Bread	**Piece [Loaf] (S/M/L)**

28	Biscuits	**Packet/satchet (S/M/L)**

26	Cake	**Piece (SINGLE SIZE)**
27	Buns/Pofpof/Donuts	
29	Meat Pie/Sausage Roll	

20	Maize (Unshelled/on the cob)	**Piece (S/M/L)**
21	Maize (Shelled/on the cob)	**Heap (S/M/L)**
30	Cassava - roots	
31	Yam - roots	
34	Cocoyam	
64	Pineapples	

36	Sweet potatoes	**Piece (S/M/L)**
37	Potatoes	**Heap (S/M/L)**
38	Other roots and tuber	**Bin/basket**
61	Orange/tangerine	**Bowl (S/M/L)**
62	Mangoes	**Paint Rubber**
63	Avocado pear	
66	Other fruits	
70	Tomatoes	
72	Onions	
73	Egg plants	
74	Okra - fresh	
75	Okra - dried	
76	Fresh Pepper	
77	Dry Pepper	
79	canned)	

60	Bananas	**Piece (S/M/L)**
35	Plantains	**Bunch (S/M/L)**
		Stalk (S/M/L)

71	Tomato puree (canned)	**Derica [Can] (S/M/L)**

78	Leaves (cocoyam, Spinach, etc)	**Mudu (S/L)**
		Bunch (S/M/L)

83	Agricultural eggs	**Piece (SINGLE SIZE)**
84	Local eggs	**Heap [Crate] (SINGLE SIZE)**

101	Fish - frozen	**Piece (S/M/L)**

100	Fish - fresh	**Piece (S/M/L)**
102	Fish - smoked	**Heap (S/M/L)**
103	Fish - dried	
104	Snails	

Table A7: Nigeria agricultural production item-unit combinations

1020	CASSAVA OLD	2192	PUMPKIN FRUIT
1040	COCOYAM	2193	PUMPKIN SEED
1050	COTTON	2200	RIZGA
1051	SEED COTTON	2230	SUGAR CANE
1060	GROUND NUT/PEANUTS	2260	TOMATO
1061	UNSHELLED GROUND NUTS	2270	WALNUT
1062	SHELLED GROUND NUTS	2290	ZOBO
1080	MAIZE	3010	APPLE
1081	UNSHELLED MAIZE(COB)	3080	GRAPE FRUIT
1090	MELON	3090	GUAVA
1091	UNSHELLED MELON	3130	LIME
1092	SHELLED MELON	3150	MANDARIN/TANGERINE
1093	WATER MELON	3160	MANGO
1120	YAM	3170	ORANGE
1121	WHITE YAM	3210	PAWPAW
1122	YELLOW YAM	3220	PEAR
1123	WATER YAM	3221	AVOCADO PEAR
1124	THREE LEAVE YAM	3230	RUBBER
2030	BANANA	3240	CHERRY(AGBALUMO)
2050	CARROT		
2060	CUCUMBER	**ALLOWABLE NONSTANDARD UNITS**	
2070	CABBAGE	**Bin/basket**	
2080	GARDEN EGG	**Paint Rubber**	
2100	GINGER	**Tin**	
2120	OKRO	**Piece (S/M/L)**	
2130	ONION	**Heap (S/M/L)**	
2140	PEPPER	***Bunch (S/M/L)**	
2141	SWEET PEPPER	***Stalk (S/M/L)**	
2142	SMALL PEPPER	**Sack/Bag (S/M/L)**	
2170	PLANTAIN	**Basket (S/M/L)**	
2180	POTATO	**Basin (S/M/L)**	
2181	SWEET POTATO	**Wheelbarrow**	
2190	PUMPKIN	**Pick-up**	
		*** BUNCH AND STALK ONLY VALID FOR BANANAS AND PLANTAINS**	

3180	OIL PALM TREE	**ALLOWABLE NONSTANDARD UNITS**
3183	PALM OIL	**Paint rubber**
		Jerry can (S/M/L/XL)

1010	BEANS/COWPEA	**ALLOWABLE NONSTANDARD UNITS**
1070	GUINEA COURN/SORGHUM	**Bin/basket**
1082	SHELLED MAIZE(GRAIN)	**Paint Rubber**
1083	POP CORN MAIZE	**Milk cup**
1100	MILLET/MAIWA	**Cigarette cup**
1110	RICE	**Tin**
1111	UNSHELLED RICE(PADDY)	**Congo (S/L)**
2020	BAMBARA NUT	**Mudu (S/L)**
2040	BEENI-SEED/SESAME	**Derica (S/M/L/XL)**
2010	ACHA	**Tiya (S/M/L)**
2103	OTHER SPICES/VANILA	**Kobiowu (S/M/L)**
2110	GUM ARABIC	**Bowl (S/M/L)**
2150	PIGEON PEA	**Sack/Bag (S/M/L)**
2160	PINEAPPLE	**Basket (S/M/L)**
2220	SOYA BEANS	**Basin (S/M/L)**
2280	WHEAT	
3020	CASHEW	
3022	CASHEW NUT	
3040	COCOA	
3041	COCOA POD	
3042	COCOA BEANS	
3050	COCONUT	
3060	COFFE	
3110	KOLANUT	
3112	KOLANUT SHELLED	
3113	BITTER KOLA	
3140	LOCUST BEAN	
3190	AGBONO(ORO SEED)	
3200	OIL BEAN	

2071	LETUS	**ALLOWABLE NONSTANDARD UNITS**
2191	PUMPKIN LEAVE	**Bin/basket**
2250	TOBACCO	**Paint Rubber**
3250	ERU	**Tin**
2194	GREEN VEGETABLE	**Heap (S/M/L)**
2195	DRY LEAVES(KUKA)	**Bundle (S/M/L)**
3100	JUTE	**Sack/Bag (S/M/L)**
		Basket (S/M/L)
		Basin (S/M/L)

REFERENCE PHOTOGRAPHS

Table of Contents

Item	Page #
Apple	1
Avocado	1
Banana	1, 2
Bread	2
Cabbage	2
Carrot	2
Cassava root	3
Cucumber	3
Eggs, agricultural	3
Eggs, local	4
Fish - frozen	4
Fish - dried	4
Fish - fresh	4
Fish - smoked	5
Garden egg/eggplant	5
Groundnuts (unshelled)	5
Maize on the cob (shelled)	6
Maize on the cob (unshelled)	6
Mango	6
Okro - dried	7
Okro - fresh	7
Onion	7
Orange	8
Pawpaw	8
Pepper - fresh	8
Pepper - dried	9
Pineapple	9
Plantain	9, 10
Potato	10
Pumpkin fruit	10
Snail	11
Sweet potato	11
Tomato	11
Watermelon	12
Yam	12

Unit (container)	Page #
Basin	16
Basket	16
Bin/basket	13
Bowl	15
Cigarette cup	14
Congo	13
Derica	14
Kobiouwu	15
Milk cup	13
Mudu	14
Packet/sachet	16
Paint Rubber	13
Sack/back	17
Tin	14
Tiya	15

Apple
Piece
Large, medium, small

Apple
Heap
Large, medium, small

Avocado
Piece
Large, medium, small

Apple
Heap
Small, medium, large

Banana
Piece
Small, medium, large

Banana
Bunch
Large, medium, small

Banana
Stalk
Large, medium, small

Bread
Piece (LOAF)
Small, medium, large

Cabbage
Piece
Large, medium, small

Cabbage
Heap
Large, medium, small

Carrot
Piece
Small, medium, large

Carrot
Piece
Small, medium, large

Cassava root
Piece
Small, medium, large

Cassava root
Heap
Large, medium, small

Cucumber
Piece
Large, medium, large

Cucumber
Heap
Large, medium, large

Eggs, Agricultural
Piece
Medium (ONE SIZE)

Eggs, Agricultural
Heap (CRATE)
Medium (ONE SIZE)

Eggs, local
Piece
Medium (ONE SIZE)

Fish - frozen
Piece
Small, medium, large

Fish - dried
Piece
Large, medium, small

Fish - dried
Heap
Large, medium, small

Fish - fresh
Piece
Large, medium, small

Fish - fresh
Heaps
Small, medium, large

Fish - smoked
Piece
Small, medium, large

Fish - smoked
Heap
Large, medium, small

Eggplant/Garden egg
Piece
Small, medium, large

Eggplant/Garden egg
Heap
Small, medium, large

Groundnuts (unshelled)
Heap
Small, medium, large

Maize on the cob (shelled)
Piece
Large, medium, small

Maize on the cob (shelled)
Heap
Small, medium, large

Maize on the cob (unshelled)
Piece
Small, medium, large

Maize on the cob (unshelled)
Heap
Small, medium, large

Mango
Piece
Large, medium, small

Mango
Heap
Small, medium, large

Okro - dried
Heap
Large, medium, small

Okro - fresh
Piece
Small, medium, large

Okro - fresh
Heap
Small, medium, large

Onion
Piece
Large, medium, small

Onion
Heap
Small, medium, large

Orange
Piece
Large, medium, small

Orange
Heap
Small, medium, large

Pawpaw
Piece
Small, medium, large

Pawpaw
Heap
Small, medium, large

Pepper - fresh
Piece
Small, medium, large

Pepper - fresh
Heap
Large, medium, small

Pepper - dried
Heap
Large, medium, small
eva

Pineapple
Heap
Large, medium, small

Pineapple
Piece
Large, medium, small
eva

Plantain
Piece
Large, medium, small

Plantain
Bunch
Large, medium, small

Plantain
Stalk
Large, medium, small

Potato
Piece
Small, medium, large

Pumpkin fruit
Piece
Large, medium, small

Potato
Heap
Large, medium, small

Pumpkin fruit
Heap
Large, medium, small

Snail
Piece
Small, medium, large

Snail
Heap
Large, medium, small

Sweet potato
Piece
Small, medium, large

Sweet potato
Heap
Large, medium, small

Tomato
Piece
Large, medium, small

Tomato
Heap
Small, medium, large

Watermelon
Piece
Large, medium, small

Watermelon
Heap
Small, medium, large

Yam
Piece
Large, medium, small

Yam
Heap
Large, medium, small

Bin/Basket

Paint Rubber

Congo
Small, large

Milk Cup

Cigarette Cup

Tin

Derica
Small, medium, large, very large

Mudu
Small, large

Kobiowu
Large, medium, small

Tiya
Large, medium, small

Bowl
Large, medium, small

Packet/sachet
Small, medium, large

Basket
Small, medium, large

Basin
Small, medium, large

Sack/bag
Small, medium, large