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Продовольственная и
сельскохозяйственная
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Наций

Organización
de las
Naciones Unidas
para la
Alimentación y la
Agricultura

ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS

TWENTY-SEVENTH SESSION

Nadi, Fiji, 19 – 23 March 2018

Agenda Item 7.3a

PHILIPPINES: FOOD BALANCE SHEETS

Contributed by: Philippine Statistics Authority

OUTLINE OF PRESENTATION

1. BACKGROUND/ACTIVITIES

2. DATA COMPILATION ISSUES AND CHALLENGES

3. FBS OUTPUTS

4. WAY FORWARD

BACKGROUND

SUA of Selected Agricultural Commodities

- 82 agricultural commodities**
- latest publication: 2016, covering the period 2014-2016.**
- Bureau of Agricultural Statistics (BAS)**
- Philippine Statistics Authority (2013-present).**

SUA/FBS of FAO

- Participation in FAO Regional Project (TCP/RAS/3409), “Building Statistical Capacity for Quality Food Security and Nutrition Information in Support of Better Informed Policies”**
- 760 commodities**
- Excel Program**
- 2009-2016 SUA/FBS**

2014-2016 SUA of the Philippines

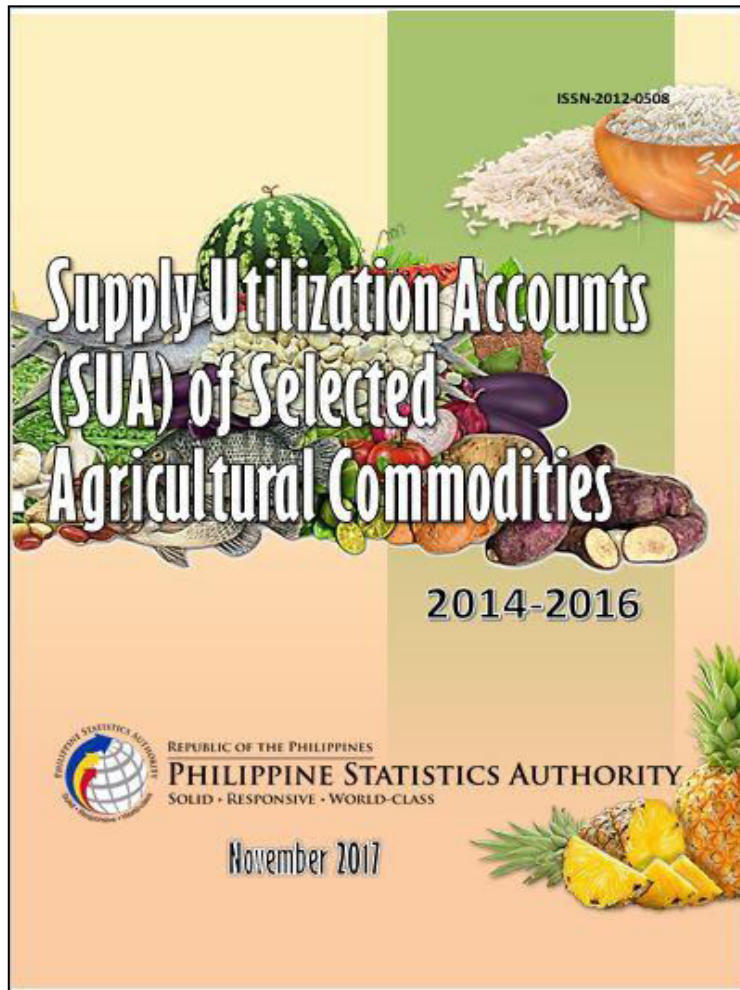


Table 1.1 RICE: Supply Utilization Accounts, Philippines, 2014-2016

Year	SUPPLY				UTILIZATION							
	Beginning Stock	Production	Imports	Gross Supply	Exports	Seeds	Feeds & Waste	Processing	Net Food Disposable			Ending Stock
									Total	Per Capita Kg./Yr.	Grams/Day	
Level (in '000 metric tons)												
2014	2,126	12,405	1,087	15,618	1	232	806	496	11,421	114.35	313.29	2,662
2015	2,662	11,870	1,478	16,010	a/	228	772	475	11,336	111.62	305.81	3,199
2016	3,199	11,528	605	15,332	a/	223	749	461	11,134	107.84	295.45	2,765
Average	2,662	11,934	1,057	15,653	1	228	776	477	11,297	111.27	304.85	2,875
Growth Rate (in percent)												
14-15	25.21	-4.31	35.97	2.51		-1.72	-4.22	-4.23	-0.74	-2.39	-2.39	20.17
15-16	20.17	-2.88	-59.07	-4.23		-2.19	-2.98	-2.95	-1.78	-3.39	-3.39	-13.57
Average	22.69	-3.60	-11.55	-0.86		-1.96	-3.60	-3.59	-1.26	-2.89	-2.89	3.30

a/ - Less than 1 thousand metric tons

From 2014 to 2016, rice production averaged 11.9 million metric tons. It declined by an average rate of 3.60 percent yearly. From 12.4 million metric tons in 2014, it went down to 11.9 million metric tons in 2015 and further dropped to 11.5 million metric tons in 2016. Total supply decreased by an average of 0.86 percent per year. It was highest at 16.0 million metric tons in 2015 and lowest at 15.3 million metric tons in 2016.

Rice imports, which shared an average of 6.75 percent in the total supply, fluctuated during the three-year period. From 1.1 million metric tons in 2014, it rose to 1.5 million metric tons in 2015 but declined to 0.6 million metric tons in 2016. Exports averaged 1 thousand metric ton during the reference period.

The total net food disposable posted a decreasing trend from 11.4 million metric tons in 2014 to 11.1 million metric tons in 2016. It averaged 11.3 million metric tons. Likewise, the per capita net food disposable recorded continuous reduction from 114.35 kilograms in 2014 to 107.84 kilograms in 2016. On the average, the annual per capita net food disposable was estimated at 111.27 kilograms.

Philippine participation in the FAO project, 2013

FAO Regional Project (TCP/RAS/3409), “Building Statistical Capacity for Quality Food Security and Nutrition Information in Support of Better Informed Policies”

To attain the project’s objective of “enhancing the analytical skills of the countries to produce quality and timely food security and nutrition information for the assessment and monitoring progress toward achieving national policy objectives as well as international commitments and goals

First Regional Training/Workshop on Supply Utilization Accounts/Food Balance Sheets (SUA/FBS), March 3-7, 2014, Pattaya, Thailand

Objective

To train national experts in the preparation of the Supply Utilization Accounts for the compilation of country's yearly Food Balance Sheets.

Output

Two (2) national experts were capacitated in the SUA/FBS systems developed by FAO.



*First National Training/Workshop on Supply Utilization Accounts/Food Balance Sheets (SUA/FBS),
June 9-11, 2014, Philippines.*

Objective

To equip the participants in analyzing available food and agriculture data and using standardized methodologies and tools to produce quality and timely food security and nutrition statistics for sound decision making.

Output

Prepared FBS FAO-based system covering the period 2009 to 2012.



*Second National Training/Workshop on Supply Utilization
Accounts/Food Balance Sheets (SUA/FBS),
March 16-20, 2015, Philippines.*

Objective

To provide training on the concepts and definitions of SUA/FBS and their compilation procedures to learn and understand the current SUA and FBS system based on the recommendations of the FAO.

Output

Updated SUA/FBS using the FAO-based system for the years 2009 to 2013.



*Second Regional Training/Workshop on Supply Utilization Accounts/Food Balance Sheets (SUA/FBS),
April 20-24, 2015, Bangkok, Thailand.*

Objective

To train participants in testing the integrity and reliability of food and nutrition data that have been updated, revised and compiled into the SUA for 2009-2013.

Output

Updated and revised SUA/FBS for 2009-2013 based on the comments and statistical discrepancy checks for Nepal, Lao PDR and Philippines.



*Workshop on Validation of the 2009-2013 SUA/FBS,
August 11-12, 2015, Philippines*

Objective

To validate the specific commodities/ items included in the SUA/FBS.

To discuss and resolve issues in the compilation of the preliminary 2009-2013 Food Balance Sheet.

Output

Validated the SUA/FBS list of commodities for crops, livestock, poultry and fisheries vis-à-vis trade commodities.



*Regional Training Workshop on Food Security Statistics,
September 21 to 23, 2015, Bangkok, Thailand.*

Objective

To compile, verify and validate country Supply and Utilization Accounts (SUA) and generate Food Balance Sheets (FBS).

Output

Validated SUA/FBS



*Regional Training Course of Supply Utilization Accounts/
Food Balance Sheet Methodology and Compilation Tool,
November 20-24, 2017, South Korea*

Objective

To provide developing countries with the methodological framework and tools to compile high quality Food Balance Sheets.

Output

Updated and revised SUA/FBS for 2014 to 2016 based on the suggestions/learnings from the training.



ISSUES AND CHALLENGES IN DATA COMPILATION


- **Some local commodities do not fall on the same category with the FAO list.**
- **Data gaps**
 - **No data on production for the processed commodities and some commodities in raw forms**
 - **With production but no corresponding parameters for utilization**
- **FAO data grouping on fisheries (demersal, pelagic, marine, freshwater, crustacean, mollusks, cephalopods, aquatic) while Philippine data by species**

ISSUES AND CHALLENGES IN DATA COMPILATION

- **Matching of commodity items and trade data.**
- **Outdated technical conversion ratios and parameters.**
- **The nutrient factors of some commodities are disaggregated by parts.**
- **For further review of commodities under Not Elsewhere Specified.**
- **Institutionalization of the new SUA/FBS Methodology and Compilation Tool**

Output

**2014-2016
FOOD BALANCE SHEET
of the Philippines**


**REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY
SOLID • RESPONSIVE • WORLD-CLASS**

December 2017

I. FOOD BALANCE SHEET (FBS)

The Food Balance Sheet (FBS) presents a comprehensive picture of the pattern of a country's food supply during a specified reference period. It shows for each food item (primary and processed) the quantity available for human consumption. FBS is also useful for analyzing the country's overall diet and estimates the country's overall Dietary Energy Supply (DES) and micronutrient availability like fats and proteins. DES serves as an indicator if sufficient food is available nationally. Other indicators derived from FBS data include the self-sufficiency ratio, which compares the magnitude of a country's agricultural production to its domestic utilization and the import dependency ratio, which compares the magnitude of a country's imports to its domestic utilization.

The Philippines is one of the beneficiaries and key partners in the Food and Agriculture Organization (FAO) Regional Project (TCP/RAS/3409), "Building Statistical Capacity for Quality Food Security and Nutrition Information in Support of Better Informed Policies". Thru this project, the Philippines participated in the series of capacity building on the compilation of FBS. FAO provided excel-based compiling system in processing the FBS tables. This project generated preliminary estimates which served as benchmark data for the compilation of the 2014-2016 Philippine Food Balance Sheet (PHFBS).

II. FOOD SUPPLY SITUATION IN THE PHILIPPINES

Table 1. Per Capita Supply of Food, Calories, Proteins and Fats, Philippines, 2014-2016

Food Item	PER CAPITA SUPPLY											
	2014		2015		2016		2014		2015		2016	
	kg	g	kg	g	kg	g	g	g	g	g	g	
Grain	217	217	217	217	217	217	217	217	217	217	217	
Meat	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
Fish	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
Protein	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
Energy	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
Fat	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	
...	

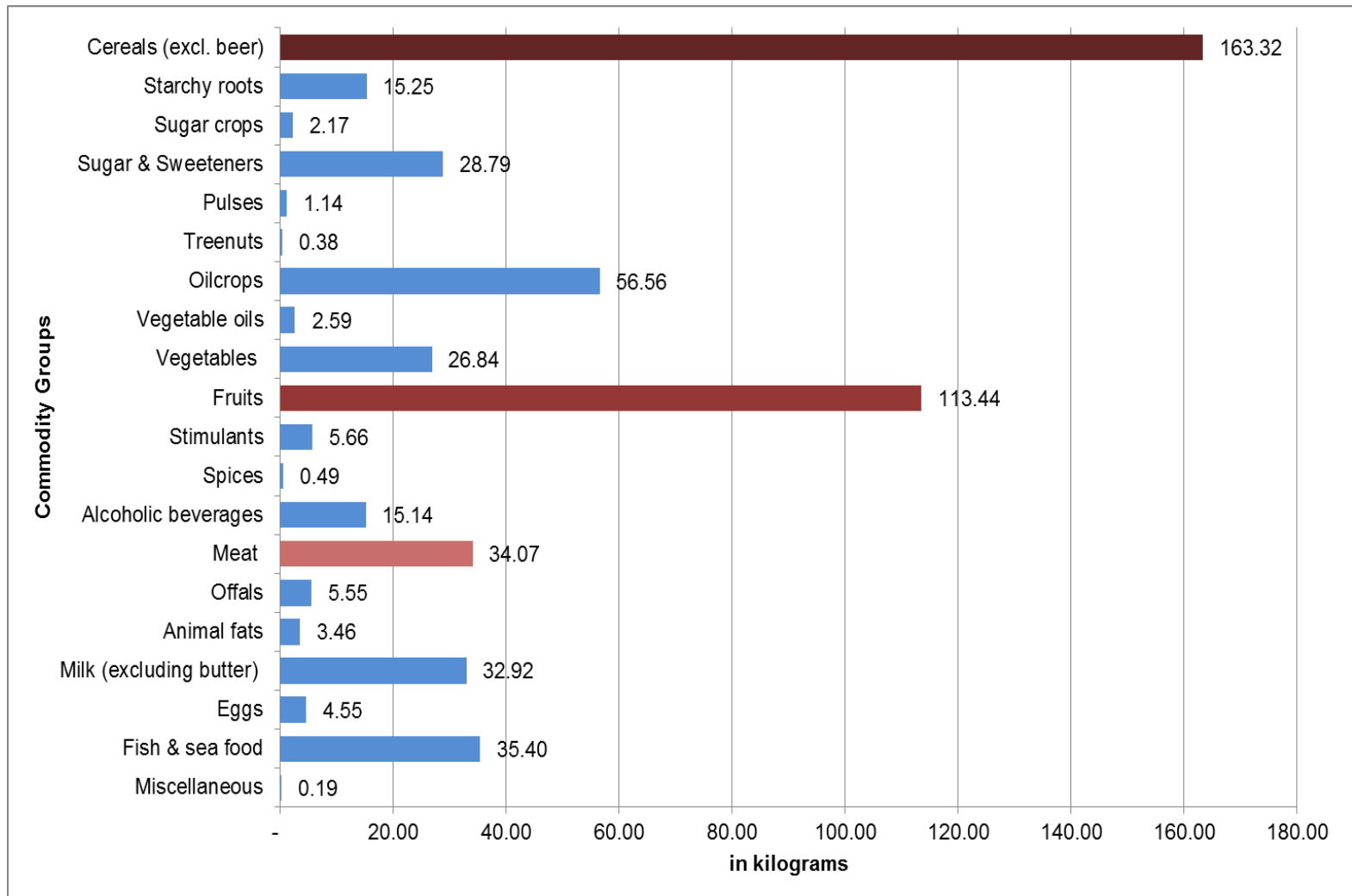
2014-2016 Supply Utilization Accounts/ Food Balance Sheet (SUA/FBS)

	PER CAPITA SUPPLY																			
	Food					Calories					Proteins					Fats				
	2014	2015	2016	2014-2015	2015-2016	2014	2015	2016	2014-2015	2015-2016	2014	2015	2016	2014-2015	2015-2016	2014	2015	2016	2014-2015	2015-2016
Products	kg			GR		k/cal			GR		Grams			GR		Grams			GR	
Grand total				-	-	2787	2934	2811	5.30	(4.20)	81	85	81	4.71	(4.20)	55	61	57	11.66	(6.67)
Vegetable prod.				-	-	2383	2513	2388	5.44	(4.98)	41	43	40	5.25	(6.30)	30	35	31	18.46	(12.36)
Animal prod.				-	-	403	421	424	4.50	0.50	40	42	41	4.17	(2.07)	25	26	26	3.61	1.03
Cereals (excl. beer)	169	171	163	1.35	(4.59)	1589	1624	1522	2.17	(6.28)	34	35	32	2.75	(7.61)	4	5	4	10.57	(19.79)
Starchy roots	15	16	15	5.47	(2.64)	44	46	45	4.75	(2.57)	0	0	0	7.02	(3.27)	0	0	0	1.64	(3.01)
Sugar crops	3	2	2	(9.40)	(4.56)	3	3	3	(9.40)	(4.56)	0	0	0	(9.40)	(4.56)	0	0	0	(9.40)	(4.56)
Sugar & Sweeteners	28	27	29	(5.00)	8.63	269	252	271	(6.58)	7.84	0	0	0	35.48	(20.82)	0	0	0	9.70	179.08
Pulses	1	1	1	1.35	(3.16)	7	7	6	(1.65)	(4.46)	0	0	0	(1.62)	(4.50)	0	0	0	(3.97)	(6.31)
Treenuts	0	0	0	14.28	0.98	3	3	3	12.88	1.89	0	0	0	14.21	2.02	0	0	0	5.18	(1.40)
Oilcrops	61	63	57	3.99	(10.20)	196	205	188	4.89	(8.41)	3	3	3	10.71	1.92	18	19	17	4.85	(9.35)
Vegetable oils	2	3	3	67.35	(19.09)	46	77	63	67.35	(19.09)	0	0	0	-	-	5	9	7	67.35	(19.09)
Vegetables	27	28	27	2.35	(2.79)	29	31	31	6.12	(2.03)	1	1	1	7.63	(3.20)	0	0	0	1.86	(1.39)
Fruits	98	120	113	21.83	(5.16)	145	207	195	42.81	(5.80)	1	2	2	44.67	(5.35)	1	1	1	46.31	(5.64)
Stimulants	3	4	6	37.38	28.57	14	18	20	28.02	13.29	0	0	0	41.14	14.69	1	1	1	24.62	5.92
Spices	0	0	0	4.05	15.31	2	2	2	5.16	2.69	0	0	0	5.90	1.12	0	0	0	3.00	(0.05)
Alcoholic beverages	10	14	15	38.91	11.72	35	36	36	3.71	0.06	0	0	0	67.36	17.55	0	0	0	(0.85)	(1.87)
Meat	33	34	34	3.37	(1.18)	182	188	186	3.27	(0.78)	16	17	17	3.47	(1.33)	13	13	13	3.17	(0.47)
Offals	5	5	6	10.20	11.55	18	20	22	9.47	10.31	2	2	2	10.95	12.92	1	1	1	7.61	6.88
Animal fats	3	3	3	1.59	5.69	63	65	68	2.31	5.48	0	0	0	(0.89)	4.84	7	7	7	2.48	5.52
Milk (excluding butte	19	26	33	36.06	24.65	20	26	31	30.94	22.84	2	2	3	38.77	25.54	0	0	0	20.72	14.28
Eggs	4	4	5	4.69	1.95	19	20	20	4.65	1.90	1	2	2	4.77	1.90	1	1	1	4.62	1.91
Fish & sea food	37	38	35	2.58	(6.99)	102	104	96	2.09	(7.91)	19	19	17	1.19	(8.13)	3	3	3	4.44	(7.36)
Miscellaneous	0	0	0	162.29	90.10	0	1	2	147.44	86.75	0	0	0	179.74	93.59	0	0	0	24.97	28.70

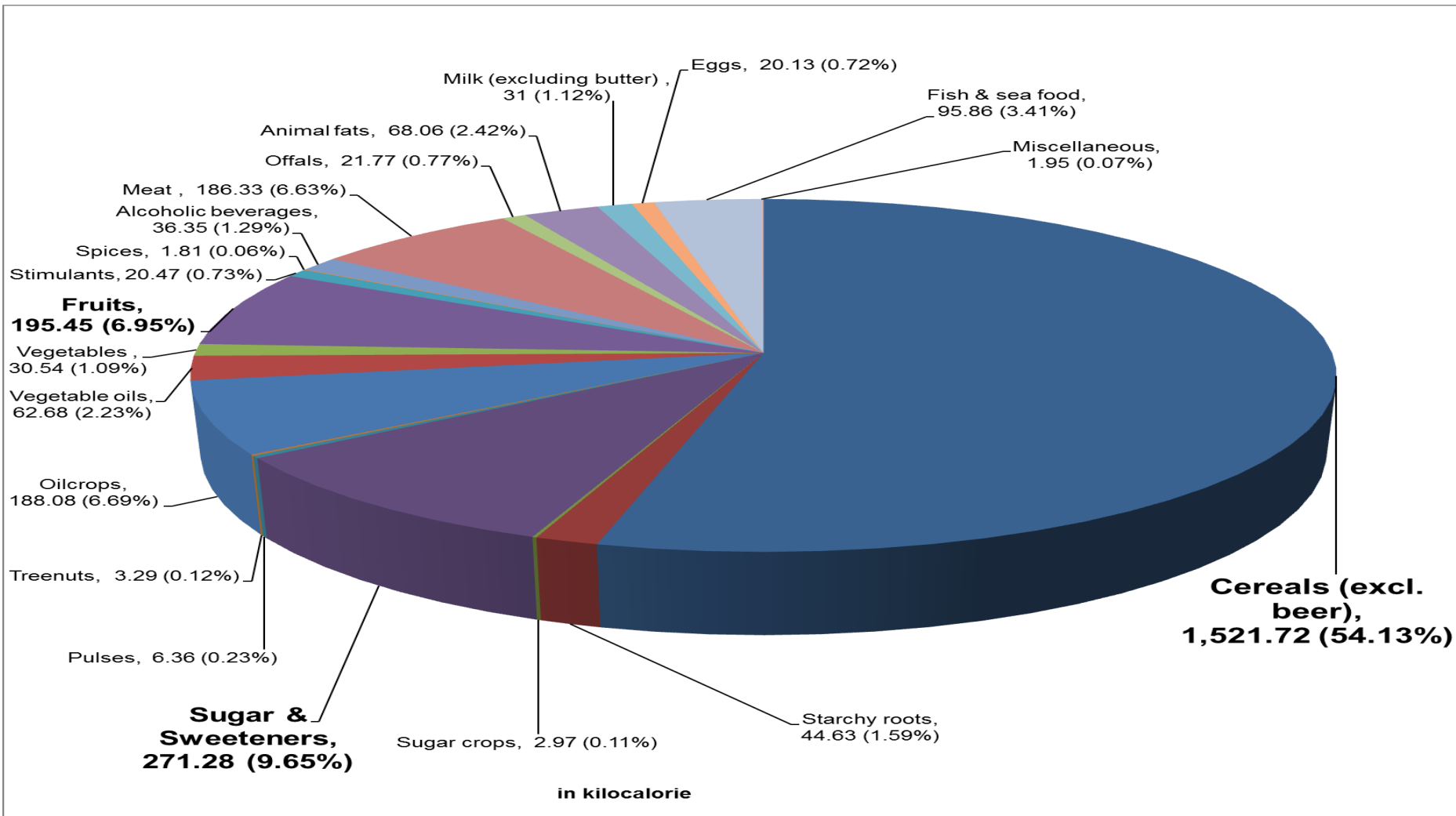
Percentage Distribution of Calories, Proteins and Fats, Philippines, 2014-2016

	PER DAY									
	Calories			Proteins			Fats			
	2014	2015	2016	2014	2015	2016	2014	2015	2016	Average
Grand total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Vegetable prod.	85.53	85.64	84.93	50.13	50.38	49.28	54.20	57.50	53.99	55.23
Animal prod.	14.47	14.36	15.07	49.87	49.62	50.72	45.80	42.50	46.01	44.77
Cereals (excl. beer)	57.03	55.34	54.13	42.00	41.21	39.75	7.76	7.69	6.61	7.35
Starchy roots	1.57	1.56	1.59	0.41	0.42	0.42	0.20	0.18	0.19	0.19
Sugar crops	0.12	0.11	0.11	0.01	0.01	0.01	0.03	0.02	0.02	0.02
Sugar & Sweeteners	9.66	8.57	9.65	0.01	0.02	0.01	0.00	0.00	0.01	0.01
Pulses	0.24	0.23	0.23	0.57	0.53	0.53	0.04	0.04	0.04	0.04
Treenuts	0.10	0.11	0.12	0.09	0.10	0.10	0.37	0.35	0.37	0.37
Oilcrops	7.03	7.00	6.69	3.54	3.75	3.99	32.44	30.47	29.59	30.83
Vegetable oils	1.66	2.64	2.23	-	-	-	9.58	14.36	12.45	12.13
Vegetables	1.05	1.06	1.09	1.30	1.34	1.35	0.40	0.36	0.38	0.38
Fruits	5.21	7.07	6.95	1.73	2.39	2.36	1.49	1.95	1.98	1.81
Stimulants	0.51	0.62	0.73	0.33	0.44	0.53	1.76	1.97	2.23	1.99
Spices	0.06	0.06	0.06	0.07	0.07	0.07	0.10	0.09	0.10	0.10
Alcoholic beverages	1.26	1.24	1.29	0.06	0.09	0.11	0.00	0.00	0.00	0.00
Meat	6.53	6.40	6.63	20.19	19.96	20.55	23.49	21.71	23.15	22.78
Offals	0.65	0.67	0.77	2.40	2.54	3.00	1.79	1.73	1.98	1.83
Animal fats	2.26	2.20	2.42	0.49	0.46	0.51	12.46	11.43	12.93	12.27
Milk (excluding butte	0.70	0.87	1.12	1.97	2.61	3.42	0.63	0.68	0.83	0.71
Eggs	0.68	0.67	0.72	1.78	1.78	1.89	2.38	2.23	2.44	2.35
Fish & sea food	3.66	3.55	3.41	23.05	22.27	21.36	5.05	4.72	4.69	4.82
Miscellaneous	0.02	0.04	0.07	0.01	0.02	0.04	0.02	0.02	0.03	0.02

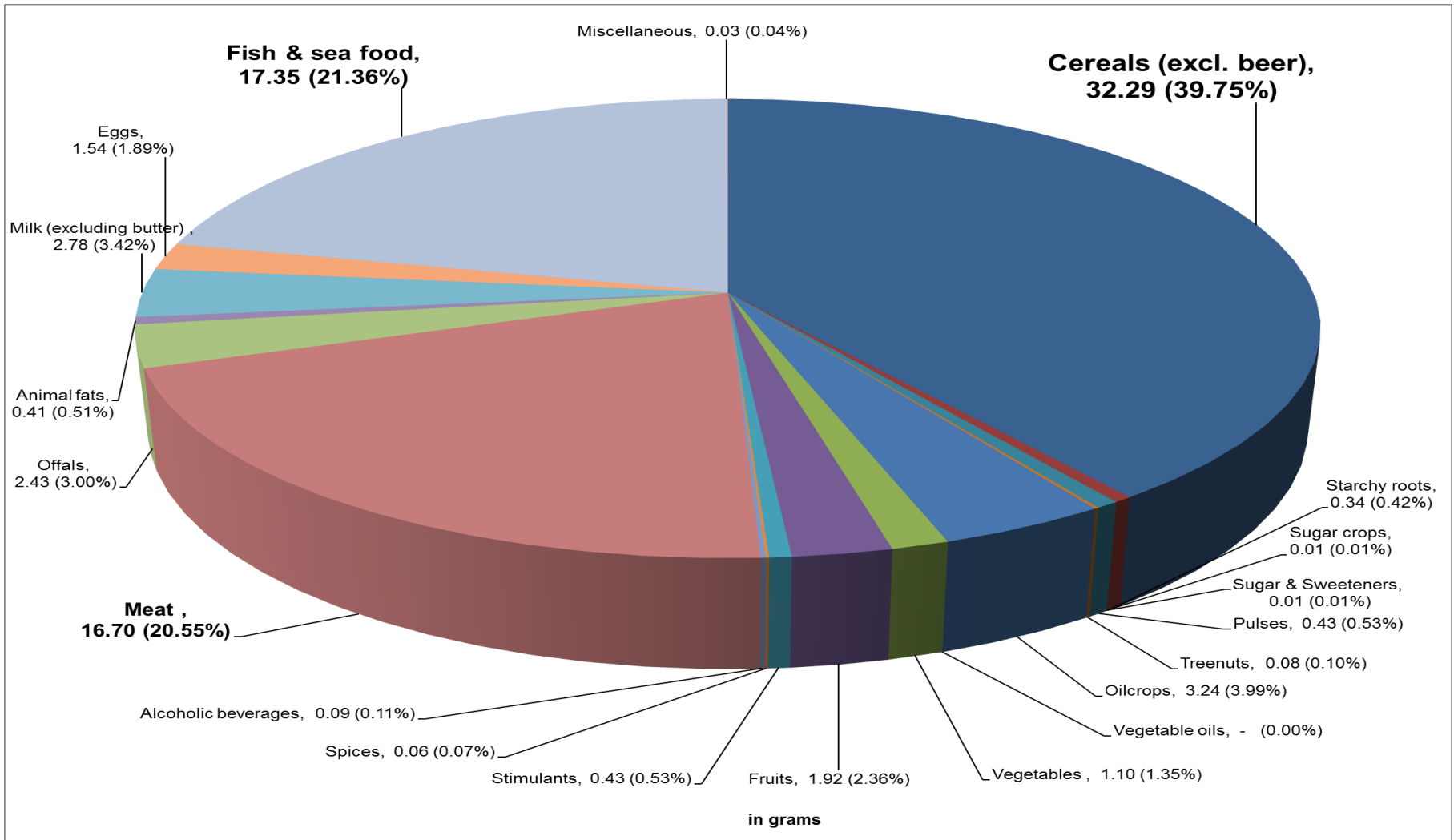
Per Capita Supply of Food



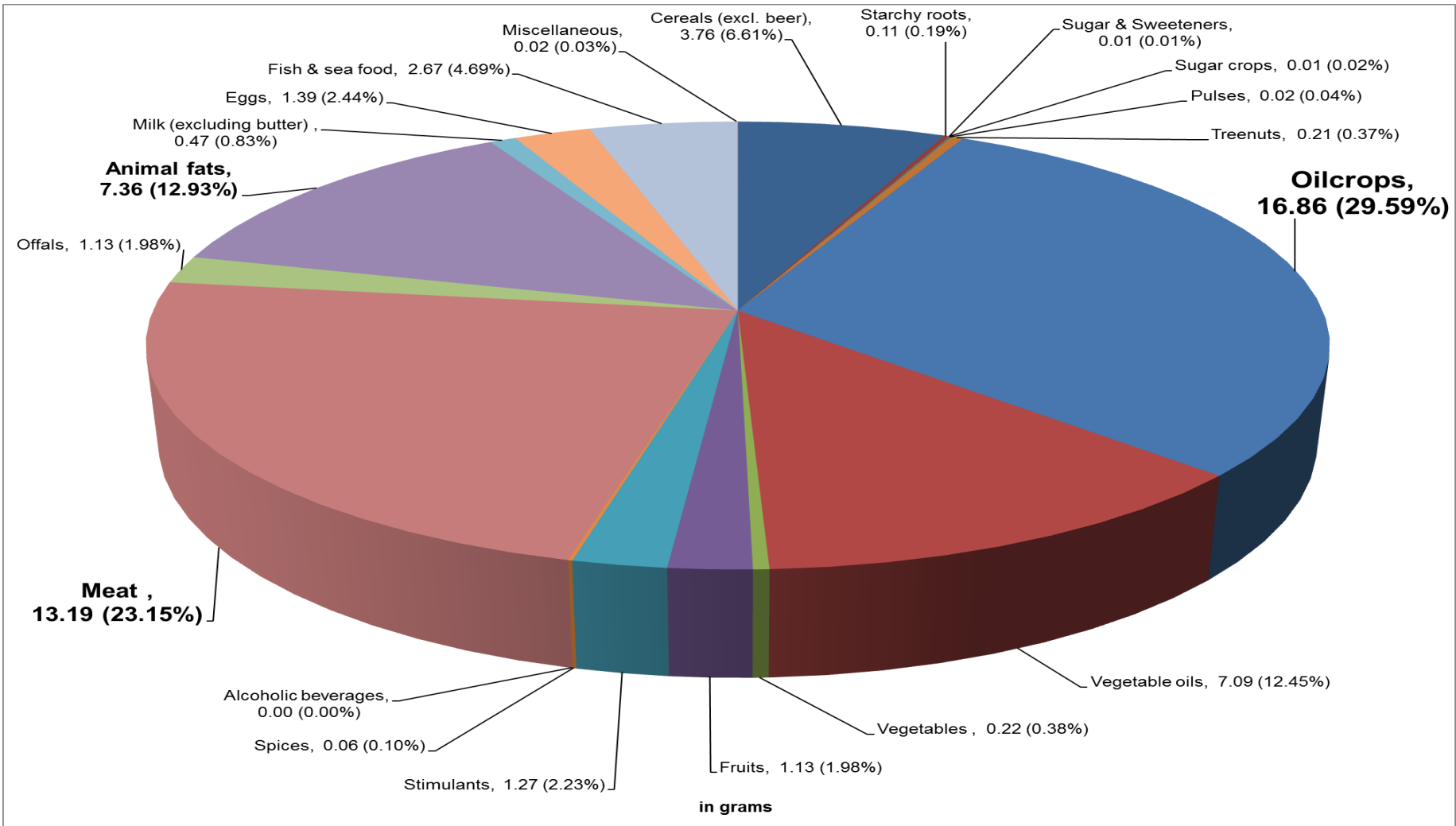
Per Capita Supply of Calories



Per Capita Supply of Protein



Per Capita Supply of Fats



Import Dependency Ratio and Self-Sufficiency Ratio



Way Forward

- Capacity Building (workshop/training) for SUA/FBS compilers.**
- Updating of parameters through field visits and research (desktop and library)**
- Regular compilation of Philippine SUA/FBS developed by FAO.**
- Refinement of FAO FBS Excel based system**
- Advocacy program to promote the usefulness and utility of FBS.**

Thank you