



Food and Agriculture Organization
of the United Nations

ADePT – Food Security Module

Monitoring Food Security through National
Household Surveys



Introduction

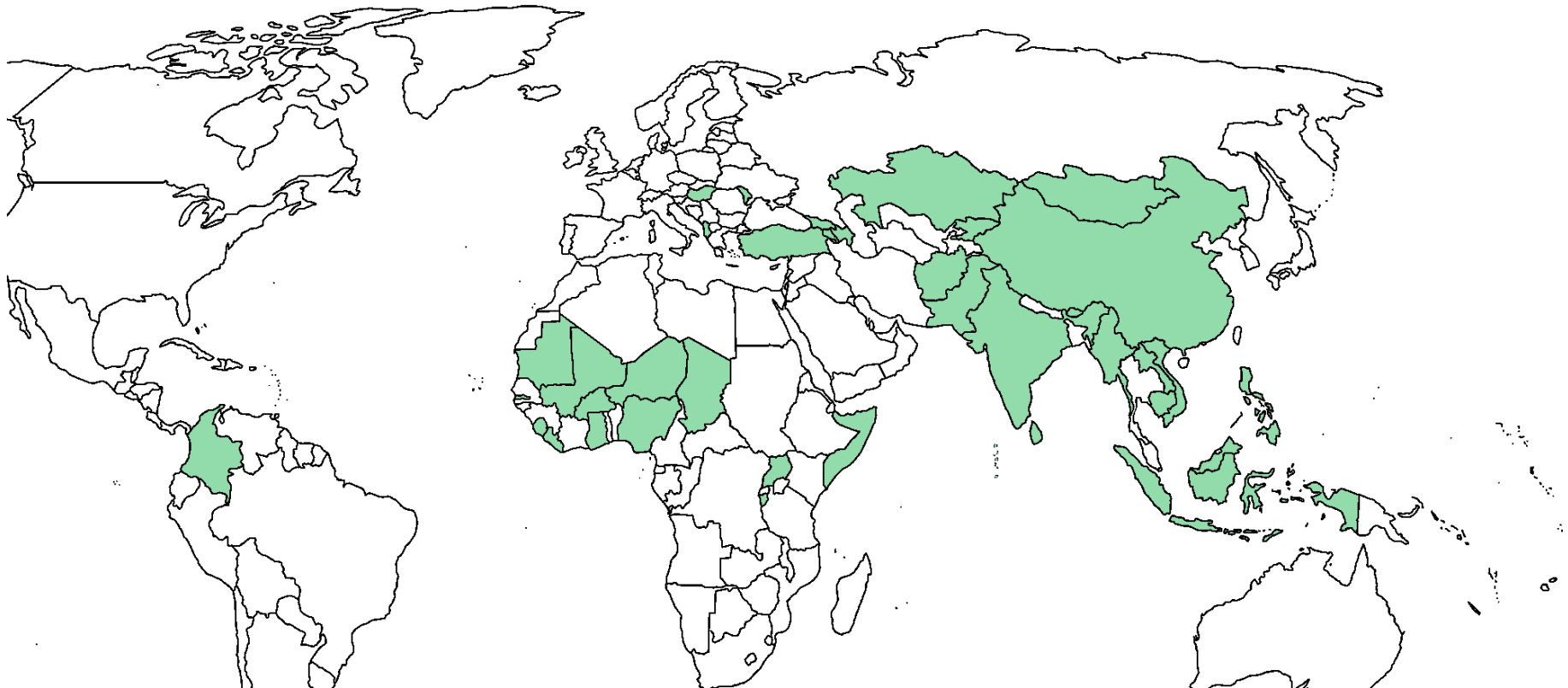
- If the food consumption module inserted into a National Household Survey is properly designed, data can be used to derive a variety of food security and nutrition indicators
- **ADePT – Food Security Module** (ADePT-FSM) is a **free software** developed by FAO in collaboration with the World Bank to support countries in **processing food consumption data** from National Household Surveys and **generating food security indicators.**
- ADePT-FSM provides food security statistics at **national** and **sub national** level
- <http://www.fao.org/economic/ess/ess-fs/fs-methods/adept-fsn/en>



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Capacity Development

- About **40 countries** trained on ADePT-FSM
- Many of them used the food security statistics





How ADePT-FSM works

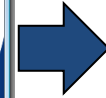
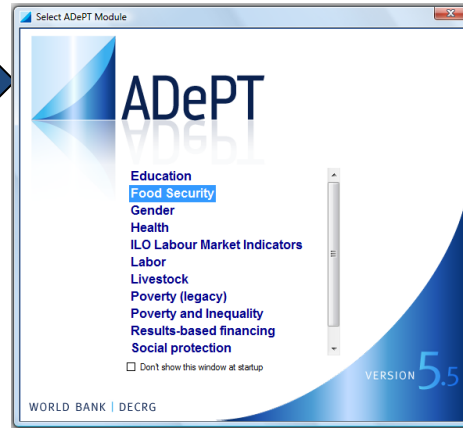
National Household Surveys
(HBS, LSMS, etc.)

Food consumption data (i.e., quantities)

Household characteristics

Demographic and socio-economic characteristics of household members

Nutrient Values for each food item in the survey



65 output tables

4.9 Nutrient contribution to dietary energy consumption						
	Average dietary energy consumption (kcal/person/day)	Share of DEC obtained from protein, %	Share of DEC obtained from fat, %	Share of DEC obtained from carbohydrates, fiber and alcohol, %		
1 Total	2050	12.20	15.88	71.92		
2 Population quintiles						
3 1	1691	11.70	14.07	74.24		
4 2	1917	11.64	14.80	73.56		
5 3	2054	11.79	15.16	73.05		
6 4						
7 5						
8 Urban and Rural						
9 Urban						
10 Rural						

5.1 Prevalence of Undernourishment using multiple survey data								
	Population (000s)	Average dietary energy consumption (kcal/person/day)	Coefficient of variation of dietary energy consumption, %	Measurement of dietary energy requirement, kcal/day	Minimum dietary requirement (kcal/person/day)	Prevalence of undernourishment (%)	Average dietary energy requirement (kcal/person/day)	Depth of Food Deficit
1 Total	11,969.9	2,190.7	30.07	0.92	1,680.0	21.8	1,580.0	148.1
2 Area	5,842.0	2,003.0	30.13	1.23	1,784.0	21.4	1,270.0	514.0
3 Other Africa area	4,408.0	2,179.3	32.18	1.02	1,728.0	21.4	1,193.0	514.0
4 East Asia	22,023.0	2,212.7	29.84	0.92	1,681.0	22.1	1,690.0	198.9
5 Region								
6 Region1	2,778.6	2,401.1	23.84	0.73	1,601.0	6.9	1,261.0	37.4
7 Region2	2,031.7	1,947.0	20.16	0.86	1,607.0	18.8	1,188.0	201.6
8 Region3	1,178.9	2,032.4	31.86	0.86	1,712.0	17.1	1,383.0	228.1
9 Region4	1,987.0	2,182.1	29.30	0.86	1,727.0	28.2	1,498.0	182.1
10 Region5	1,432.9	2,289.9	30.22	0.89	1,718.0	22.7	1,212.1	149.9
11 Region6	761.4	1,997.0	33.70	1.02	1,712.0	31.4	1,248.0	314.0
12 Region7	1,845.9	2,083.0	30.13	1.28	1,764.0	31.4	1,270.0	314.0
13 Region8	912.8	1,977.0	31.72	1.02	1,712.0	31.4	1,248.0	314.0



Food File

hh	Item_cod	f_source	fd_qty	fd_mv
1013000204	Rice	Purchased	.142857	1.99
1013000204	Maize (flour)	Purchased	.142857	1.59
1013000204	Beef	Purchased	.142857	4.77
1013000204	Fresh fish	Own Production	.342857	9.55
1013000204	Cooking oil	Purchased	.013143	1.59
1013000204	Tomatoes	Own Production	.037143	.24
1013000204	Tomatoes	Purchased	.185714	.32
1013000204	ground nuts (pounded)	Purchased	.017857	2.55
1013000204	Sugar	Purchased	.142857	2.39
1013000204	Tea	Purchased	.004464	.24
1013000204	Salt	Purchased	.007937	.48
1013000204	Other alcoholic drinks	Purchased	.020687	.80
1013000204	Food	Away from Home	.	1.59
1013000204	Soda	Away from Home	.	6.37
1013000204	Soda	Purchased	.174857	2.55
1013000204	Green pepper	Purchased	.028571	.32
1013000204	Pumpkins	Purchased	.230476	.64
1013000206	Food	Away from Home	.	3.25
1013000206	Soda	Away from Home	.612000	11.51



Household File

This file contains **characteristics** of the **household** (area of residence, household size, income, share of dependents, etc.) and of the **head of household** (sex, age, education, etc.)

Household characteristics

Head of Household's characteristics

one record per household




	hh_no	district	area	hh_size	hhsizec	thh_inc	sex_head	age_head	marital_head
1	101010160009	Chitipa	rural	6	6 to 8	440.23	Female	hh head 26 ye...	Married
2	101010160033	Chitipa	rural	4	3 to 5	383.05	Male	hh head more ...	Married
3	101010160060	Chitipa	rural	10	9 or more	772.29	Male	hh head more ...	Married
4	101010160068	Chitipa	rural	9	9 or more	577.85	Male	hh head 26 ye...	Married
5	101010160069	Chitipa	rural	1	1 to 2	437.90	Male	hh head 26 ye...	Separated ...
6	101010160070	Chitipa	rural	11	9 or more	1143.65	Male	hh head 41 ye...	Married
7	101010160074	Chitipa	rural	10	9 or more	519.59	Male	hh head 41 ye...	Married
8	101010160086	Chitipa	rural	11	9 or more	1345.49	Male	hh head 41 ye...	Married
9	101010160096	Chitipa	rural	7	6 to 8	1196.86	Male	hh head 26 ye...	Married
10	101010160143	Chitipa	rural	6	6 to 8	353.20	Male	hh head 26 ye...	Married



Individual File

This file contains the **age**, **sex** of each individual and the **median height** of the individual's age and sex group (exogenous info)

One line for each
hh member



	hh_no	sex	age	median_height
1	101010160009	Female	1	73.0
2	101010160009	Female	3	91.0
3	101010160009	Male	6	110.0
4	101010160009	Female	10	126.4
5	101010160009	Female	31	156.0
6	101010160009	Male	35	168.9
7	101010160033	Male	6	110.0
8	101010160033	Male	14	156.1
9	101010160033	Female	62	155.0
10	101010160033	Male	73	166.9
11	101010160060	Male	1	75.0
12	101010160060	Male	1	75.0
13	101010160060	Male	2	84.0



Nutrient Conversion Table

This files indicates the **kilocalories**, **macronutrients** and **micronutrients** contained in 100 grams of each food item in the survey list.

- Information extracted from **Food Composition Tables**
- Necessary to generate food security data from the original food quantities.

	item_cod	kcalories	protein	fat	fiber	alcohol	carbohydrates	calcium	iron	vit_c
1	paddy	356	7.6	2.2	1.7	.0	75.5	29.8	2.3	.0
2	Rice, husked	352	6.4	.5	.9	.0	80.1	14.9	1.3	.0
3	Green maize cob	170	4.4	2.2	3.5	.0	31.4	3.0	1.3	.0
4	Maize, grain	170	4.4	2.2	3.5	.0	31.4	3.0	1.3	.0
5	Maize, flour	354	8.7	3.3	6.9	.0	69.0	13.2	2.6	.0
6	Millet, grain	356	9.9	4.9	8.9	.0	63.7	24.1	8.6	.0
7	Millet, flour	355	7.4	3.2	4.6	.0	72.1	13.4	5.8	.0
8	Sorghum, grain	349	10.1	3.6	9.9	.0	64.0	24.0	3.7	.0
9	Sorghum, flour	348	10.4	1.7	4.6	.0	70.4	12.2	3.8	.0
10	Wheat, grain	326	12.4	2.2	10.8	.0	58.7	30.3	4.7	.0
11	Wheat, flour	351	10.4	1.4	3.2	.0	72.5	18.6	2.0	.0
12	Barley and other ...	351	13.8	3.6	12.3	.0	59.8	36.0	3.3	.0
13	Bread	249	8.4	4.2	3.3	.0	43.0	43.4	1.2	.0
14	Baby foods exclu...	471	12.2	19.3	.0	.0	62.2	565.0	8.5	42.0
15	Biscuits	444	5.7	16.8	2.8	.0	66.4	27.3	5.0	.0
16	Buns, cakes, sm...	287	7.2	3.4	1.5	.0	56.2	94.5	3.0	.0



Steps

**Input
files are
prepared**

**Data
loaded in
ADePT
FSM**

**User
selects
the
desired
tables**

**Output
delivered**



Reporting Levels

National level

geographic domains

- region
- urban/rural

HH characteristics

- size
- composition
- Etc.

Head of HH characteristics

- Sex
- Age
- Education
- Occupation
- Etc.

(Some statistics)
**disaggregated by
food item /food item
group**

- e.g., Amount of calories and protein provided by rice and total cereals



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Thanks !