



Food and Agriculture
Organization of the
United Nations

SUSTAINABLE
DEVELOPMENT
GOALS



APCAS/24/9.3

ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS

Agenda Item 9.3

Indicators on the Cost of a healthy diet
and Affordability of a healthy diet:
Concepts and methods

30th Session 19–24 May 2024
Kathmandu (Nepal)



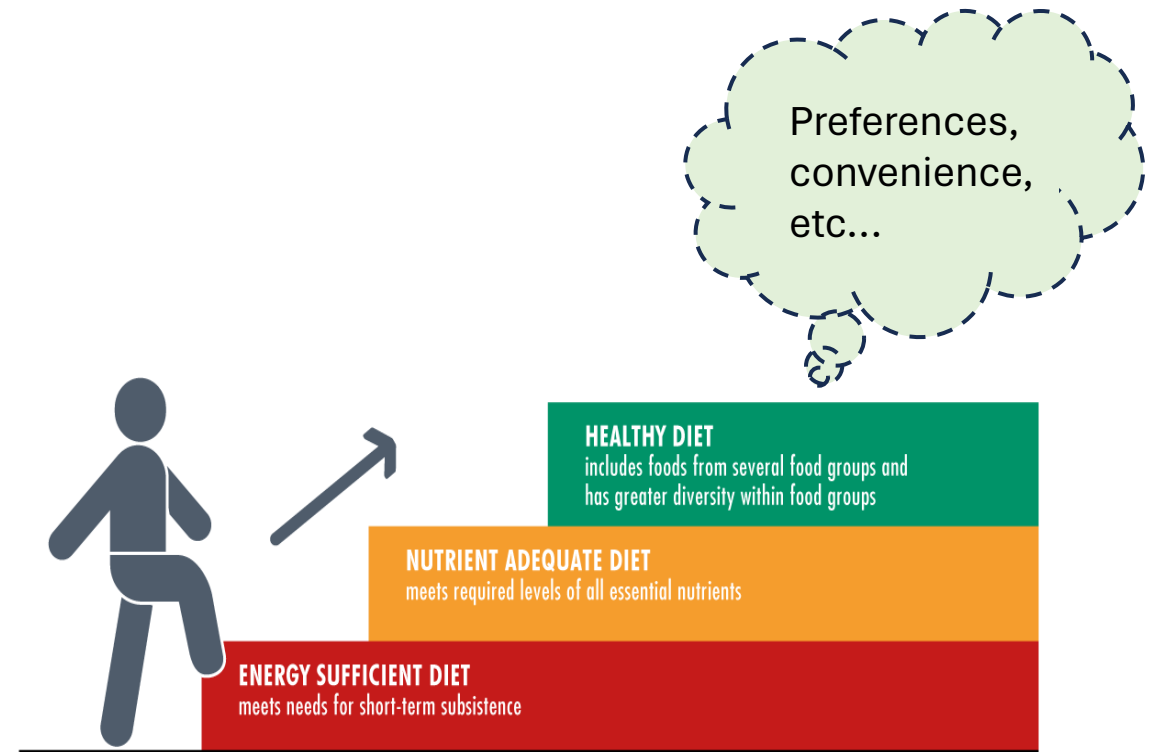
- The cost of healthy diet indicator and the unaffordability indicators have been monitored in the SOFI Report since 2020.
- FAO started the collaboration with TUFTS University and The Food Price for Nutrition Project
- Ongoing collaboration with the World Bank data group to improve the methodology for measuring these three indicators
- Increase awareness on these indicators, present the methodology, and outline the method refinements to be included in the 2024 SOFI report



Why is it important to focus on healthy diets?

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- Incremental levels of diet quality, starting from basic diets up to healthy diets.
- Value added: a healthy diet provides adequate calories and nutrients, and a more diverse intake of foods from several food groups. Helps prevent malnutrition in all its forms.
- Food prices are an important barrier to healthy diet, although the choice of the foods to eat is also determined by other factors (convenience, preferences, etc.)
- **PURPOSE:** How much does it cost to obtain a healthy diet in a country? How many people do **not have enough income** to afford this diet?



How to set a global metric for the cost of a healthy diet?

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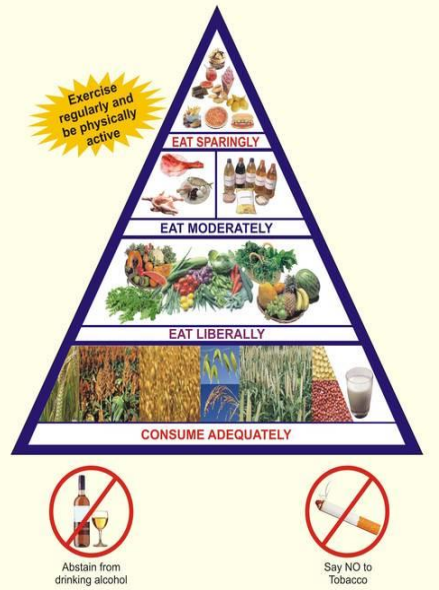
No unique definition of a healthy diet. Countries have developed national food-based dietary guidelines (FBDGs) to reflect their specific cultural context. How to create a **global benchmark** to compute the cost of a healthy diet?

1. **Healthy Diet Basket (HDB)** is the global standard based on the average food group proportions and recommendations across national FBDGs. Ten quantifiable FBDGs across the world are selected.
2. The HDB basket consists of **six food groups**, and it is identified to meet a dietary **energy target of 2330 kcal** person/day
3. Reflects the **minimum cost** to meet FBDGs

	Healthy Diet Basket (HDB)		
FOOD GROUPS	# food items	kcal	Gram content by reference food
Starchy Staples	2	1160	322 g dry rice
Vegetables	3	110	270-400g vegs
Fruits	2	160	230-300g fruits
Animal-sourced foods	2	300	210g eggs
Legumes, nuts, and seeds	1	300	85g dry beans
Oils and fats	1	300	34g oil
	13	2330	

Examples of Food based Dietary Guidelines in Asia and the Pacific

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India



Thailand



Philippines



Cambodia



Afghanistan

How do we measure the cost of a healthy diet indicator?

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- **Data:** International Comparison Programme of the World Bank (ICP) provides retail food prices in local currency units (LCU) for a range of internationally standardized items. LCU converted in International dollars using PPP exchange rates. Last ICP release (2020) informs on 2017 prices. Information on 169 countries.
- **Gap years:** ICP available every five years: to update the cost, Food CPIs and PPPs are applied to the 2017 cost:

$$Cost_t = \frac{Cost_{2017} * \left(\frac{Food\ CPI_t}{Food\ CPI_{2017}} \right)}{PPP_t}$$

- **New ICP round in 2024:** This round will inform on 2021 prices. Will be included in the SOFI Report 2024.
- **Limitation:** change in the cost over year depends on aggregate food CPIs and does not reflect item-specific changes in food prices

- **Definition:** The inability of an individual in a population to pay the necessary amount of money to ensure regular economic access to the least-cost healthy diet obtained from locally available foods, after accounting for a portion of income to be spent on basic needs other than food.
- **Data:** to determine whether a diet is affordable or not we need:
 - ❖ Cost threshold: the cost of a healthy diet plus the cost of basic non-food expenses (e.g., housing, health, education) for a dignified life
 - ❖ Income distributions: sourced from the Poverty and Inequality Platform (PIP) of the World Bank.
- By comparing a cost threshold with income distributions, we obtain two indicators:
 - ❖ Prevalence of unaffordability
 - ❖ Number of people unable to afford a healthy diet

How to quantify the cost of basic non-food needs?

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- People need to reserve a part of their income on basic non-food expenses (e.g., housing, health, education) to conduct a dignified life.
 - ❖ SOFI Report editions 2022-2023: Final cost threshold obtained by augmenting the cost of a healthy diet by a fixed proportion of household disposable income (52%). Example: $3/0.52=5.77$ PPP dollars.
 - ❖ Limitation: this proportion leads to systematic bias and **overestimation**.
- **Change in the method**: account for cross-country differences in the cost of non-food basic needs. Due to lack of data on country-specific non-food spending, we use four World Bank's income classification groups:

$$Cost\ threshold_i = Cost\ healthy\ diet_i + (IntPovLine_j * Nonfood\ Share_j)$$

	Cost of basic non-food (2017 PPP)	International Poverty line	Non-food expenditure share
Low-income	0.80	2.15	0.37
Lower-middle-income	1.61	3.65	0.44
Upper-middle-income	3.70	6.85	0.54
High-income	13.2	24.36	0.54

SOURCE: Bai, Y., Herforth, A., Rissanen, M., and Masters, W.A. (forthcoming)

- First step: correct the overestimation in unaffordability derived from using a fixed share of income.
 - ❖ Attempt to incorporate differences in the non-food spending across income groups.
 - ❖ Results in a downward revision globally in the number of people unable to afford a healthy diet (SOFI Report 2024, forthcoming)
- Second step: the cost to achieve minimally dignified standard of living also varies within each country. Ongoing research on several household surveys to study the variability of costs within a country.

Relevance of monitoring the cost and unaffordability of a healthy diet

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- **Minimum cost** means that people can devote enough money to purchase locally at least the cheapest food items needed to consume a healthy diet. This excludes the possibility of consuming expensive food items if a nutritionally-equivalent, lower-cost option is available.



- ❖ Given this lowest cost, do agrifood systems provide **economic access** to the cheapest healthy diet at acceptable cost in each time and place?
- ❖ How agrifood systems can be **transformed** to improve economic access to healthy diets and promote "nutrition-sensitive" agriculture?
- ❖ The indicators supports efforts within the framework of the Sustainable Development Goals (SDGs) to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture by 2030 (SDG 2).

Thank you

