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# Guidelines for measuring DIETARY DIVERSITY

*A simple tool for developing  
and evaluating food and  
nutrition security interventions*

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*Guidelines for measuring  
household and individual  
dietary diversity*



## Content of the guidelines

- How to adapt the questionnaire to the local context
- How to train enumerators and collect data
- How to analyze and get the best out of a simple questionnaire



[http://www.fao.org/docrep/014/i1983e00.pdf](http://www.fao.org/docrep/014/i1983e/i1983e00.pdf)



## Overview of the presentation

- Short technical recap on the tool
- Country case studies
- Available resources: adapted country questionnaires
- How can dietary diversity be useful for FAO programmes?

Short technical recap on  
the tool



## Why was DD developed?

- Quantitative dietary assessment too cumbersome and difficult
- need for a simple proxy of intake

*DD qualitative measure of food consumption*

- Proxy of access to food at household level
- Proxy of micronutrient adequacy of intake at individual level



## From household to individual dietary diversity

- Advantages of the individual level:
  - measures a person's actual intake
  - captures consumption outside of home especially important in urban environments
- Validated for women and young children


**Household DD:**  
*food security indicator  
(measures access to  
food)*

**Individual DD:**  
*nutritional indicator  
(measures quality of  
diets)*

Question number	Food group	Examples	YES=1 NO=0
1	CEREALS	bread, noodles, biscuits, cookies or any other foods made from millet, sorghum, maize, rice, wheat + insert local foods e.g. ugali, nshima, porridge or pastes or other locally available grains	
2	VITAMIN A RICH VEGETABLES AND TUBERS	pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside + other locally available vitamin-A rich vegetables	
3	WHITE TUBERS AND ROOTS	white potatoes, white yams, cassava, or foods made from roots.	
4	DARK GREEN LEAFY VEGETABLES	sweet pepper, dark green leafy vegetables, including wild ones + locally available vitamin-A rich leaves such as cassava leaves etc.	
5	OTHER VEGETABLES	other vegetables, including wild vegetables	
6	VITAMIN A RICH FRUITS	ripe mangoes, papayas + other locally available vitamin A-rich fruits	
7	OTHER FRUITS	other fruits, including wild fruits	
8	ORGAN MEAT (IRON-RICH)	liver, kidney, heart or other organ meats or blood-based foods	
9	FLESH MEATS	beef, pork, lamb, goat, rabbit, wild game, chicken, duck, or other birds	
10	EGGS		
11	FISH	fresh or dried fish or shellfish	
12	LEGUMES, NUTS AND SEEDS	beans, peas, lentils, nuts, seeds or foods made from these	
13	MILK AND MILK PRODUCTS	milk, cheese, yogurt or other milk products	
14	OILS AND FATS	oil, fats or butter added to food or used for cooking	
15	SWEETS	sugar, honey, sweetened soda or sugary foods such as chocolates, sweets or candies	
16	COFFEE/TEA	tea (black, green, herbal) or coffee	
			YES=1 NO=0
B.	Did you eat anything (meal or snack) outside of the home yesterday?		

## The dietary diversity questionnaire

- Open recall of consumption over the previous 24 hours
- 16 standardized food groups
- Probing to capture consumption of any food groups not mentioned in the open recall

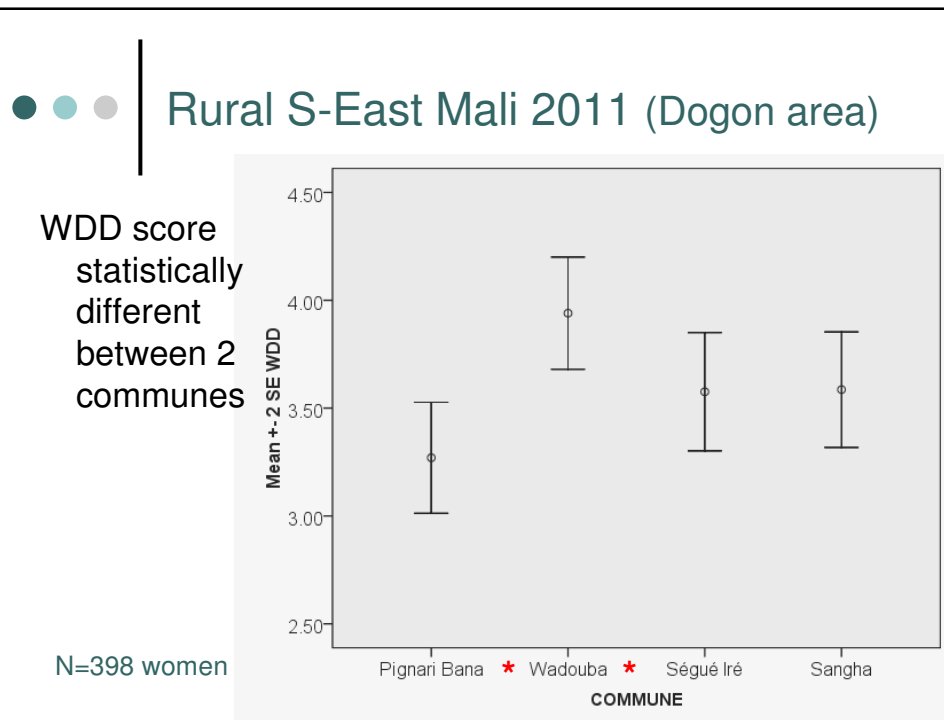


## Strengths of the tool

- simplicity
- timeliness
- standardization
- low cost
  
- For national or decentralized level
- Adapted to both urban & rural areas

→ not stand alone tool, together with other indicators

# Country case studies

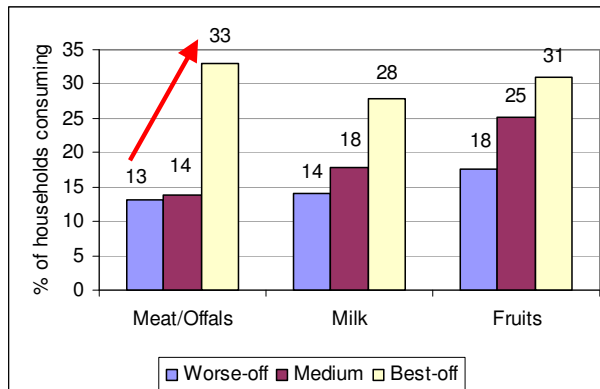




## Urban study Tanzania 2008

Consumption of micronutrient rich food groups differs by wealth tertile

→ consumption in the 3<sup>rd</sup> tertile could be used as a programme target

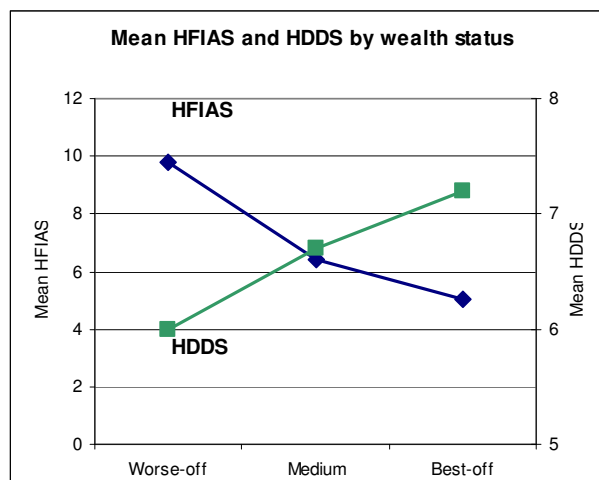


N=628 hh



## Urban study Tanzania 2008

Poorest households have the lowest dietary diversity and are the most food insecure





## Central Mozambique 2006-2007

Dietary profiles: food groups consumed by > 50% of households by DD tertile

Lowest DD <4	Medium DD 4-5	High DD >5
Cereals	Cereals	Cereals
Green leafy vegetables	Green leafy vegetables	Green leafy vegetables
Vitamin A rich fruit	Vitamin A rich fruit	Vitamin A rich fruit
	Oil	Oil
		Other vegetables
		Fish
		Legumes, nuts and seeds

N=300 hh



## Available resources: adapted country questionnaires

- Adapted to the local context and translated into local language in numerous countries
  - Mozambique - Portuguese,
  - Malawi – Chichewa,
  - Kenya – Kiswahili,
  - Mali – Bambara, etc.
- Already adapted and available upon request

*The Guidelines show how to adapt the questionnaire*

HOUSEHOLD DIETARY DIVERSITY (Kiswahili)

*Ningependa kukuuliza juu ya vyakula na vinyuaji ambavyo wewe au yeyote katika nyumba hii alikula au kunywa jana mchana na usiku hapa nyumbani.*

*[maelezo kwa anayeuiliza maswali: usiulize vyakula vilivyoliwa nje ya boma au nyumba hii]*

Je, kuna yeyote katika nyumba hii aliyekunywa au kula vyakula vifuatavyo?

Nambari ya swali	Aina ya chakula	Mifano	NDIO (1)	LA (0)
1	NAFAKA	mkate, tambi (supagetti), biskuti, mandazi, samosa au vyakula vingine vyovyote vilivyotengenezwa kutoka kwa mtama, wimbi, mahindi, mchele au ngano, kwa mfano: ugali, uji n.k.		
2	MBOGA NA VIAZI VILIVYO NA WINGI WA VITAMINI A	matango, karoti, viazi tamu vya manjano + vyakula vingine vipatikanavyo vyenye wingi wa vitamini A		
3	VIAZI VYEUPE NA VYAKULA VYA MIZIZI	viazi vya mboga, viazi vitamu vyeupe, nduma, mhogo au vyakula vilivyo tengenezwa kutokana na mizizi		
4	MBOGA ZA MAJANI ZENYE WINGI WA RANGI YA KIJANI KIBICHI	Sukuma wiki, mchicha, mnavu, mkunde, kigwada, bwere, mchungu, spinach, mzungu, majani ya matango + mboga zingine zozote za majani yenye wingi wa rangi ya kijani kibichi		
5	MBOGA ZINGINE	nyanya, kitunguu maji, hoho, biringanya, kabichi, tunguja, pilipili, mamumunye, n.k.		
6	MATUNDA YENYE WINGI WA VITAMINI A	maembe yaliyoiva, paipai n.k.		

Kenya 2006  
EC/FAO  
programme  
« information  
for action »



## DD as key indicator in international initiatives

- Feed the Future and Food for Peace indicator (USAID)
  - Women's and children's DD mandatory indicators for the European Commission
- to assess the nutritional impact of EC funded food security programs

## How can Dietary Diversity be useful for FAO programmes?



### Relevance of DD for FAO programmes

- For including a nutrition dimension in the work of FAO departments
  - to develop interventions with a nutrition objective
  - to assess the impact of activities on nutrition
- For responding to growing demand to mainstream nutrition across the house, as emphasized in the 2011 Evaluation of Nutrition

*“generate evidence through fieldwork to demonstrate the positive impact of agriculture and food security interventions on nutrition”*



## For which purposes?

- Situation and vulnerability assessments
- Targeting communities for nutrition and food security interventions
- Setting programme targets
- Monitoring e.g. seasonal changes in food consumption
- Assessment of impact of interventions



## Examples of sectoral programmes where DD could be integrated

- Food and nutrition security programmes
  - Food-based nutrition programmes
  - Nutrition education
- Agricultural development programmes
  - Crop diversification
  - Livelihood diversification
  - Promotion of indigenous plant and animal foods
- Fishery, Forestry, Natural Resource programmes/projects that aim to improve diets



*Guidelines for measuring household and individual dietary diversity*



o Available soon in French and Spanish

o Available online in English

<http://www.fao.org/docrep/014/i1983e/i1983e00.pdf>

Thank you !

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