



Nutritious Food Portfolios

for targeting year-round food harvest and nutrient gaps

The food tree and crop portfolios are location-specific recommendations for cultivating a greater diversity of foods that could address month-on-month food harvest and micronutrient gaps in local households' diets.

The identification of location-specific portfolios involves the following:

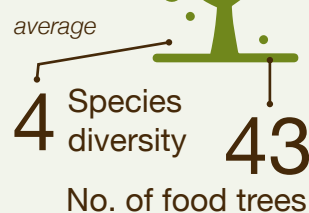
- Determining food production diversity and seasonality.
- Mapping harvest months of foods against periods of food insecurity.
- Capturing individual-level food consumption data, to identify dietary gaps.
- As well as filling food harvest gaps, addressing nutrient gaps by matching prioritized foods with food composition data.

The portfolios provide an example of how agriculture may be used to promote nutritionally rich diets, particularly for rural smallholders who rely predominantly on foods from their own farms.

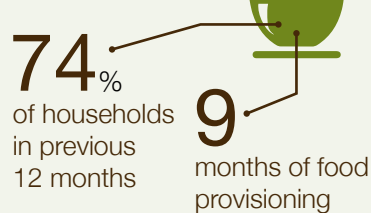
AVERAGE FARM SIZE



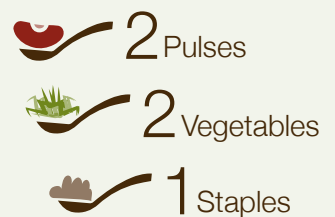
FOOD TREES



FOOD INSECURITY

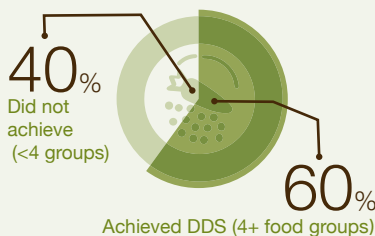


FOOD CROP DIVERSITY

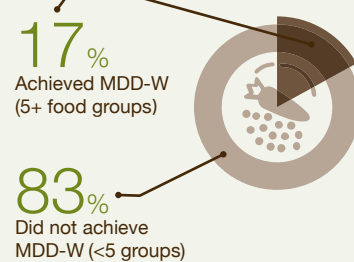


DIETARY DIVERSITY*

Children's Dietary Diversity** (n=65)



Minimum Dietary Diversity - Women*** (n=60)

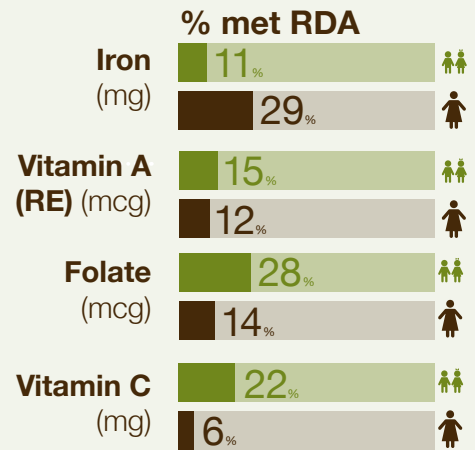


* Dietary diversity assessed at individual level is a proxy indicator of diet quality. It assesses the variety food groups consumed in a specific time period. Higher scores indicate better diet quality.

** For children >2years 7 food groups were used, for children ≥2years 9 food groups DDS was used.

*** At least 5 food groups out of 10.

MICRONUTRIENT INTAKE (n=65)



Children Women

RDA: Recommended Daily Allowance

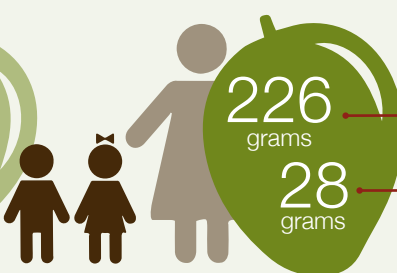
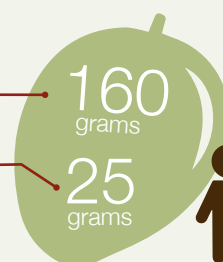
FRUIT INTAKE

based on 24 hour food recall



Average amount of fruit consumed by only children who had consumed a fruit

Average amount of fruit consumed by children interviewed

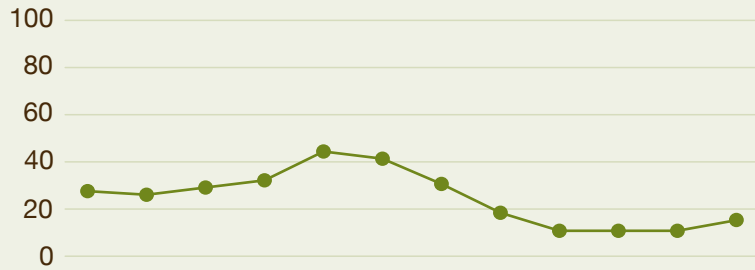


Average amount of fruit consumed by only women who had consumed a fruit

Average amount of fruit consumed by women interviewed

MONTHS OF FOOD INSECURITY

(identified in households interviewed, n=65)



Food Name ^a , Scientific Name		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	IRON	VITAMIN A ^b	FOLATE	VITAMIN C
FRUITS	COCONUT <i>Cocos nucifera</i> ^{**1, *}													++		~	
	BANANA <i>Musa spp.</i>															~	~
	PAWPAW/PAPAYA <i>Carica papaya</i>													~	++	~	+++
	ANNONA/CUSTARD APPLE <i>Annona reticulata</i>													~			++
	BAOBAB <i>Adansonia digitata</i>													+++		~	+++
	MANGO <i>Mangifera indica</i> ^{**2}													~	+++	~	++
	ORANGE <i>Citrus sinensis</i> ^{*2}															~	+++
	LEMON <i>Citrus limon</i> ^{*3}																+++
	GUAVA <i>Psidium guajava</i>													~	~		+++
	TANGERINE <i>Citrus reticulata</i>														~		++
	JACKFRUIT <i>Artocarpus heterophyllus</i>															~	~
	TAMARIND <i>Tamarindus indica</i> ^{**3}													++			~
VEGETABLES	WILD LETTUCE <i>Lactuca virosa</i> ^{**1}																
	PUMPKIN, leaves <i>Cucurbita maxima</i>													~	++		
	BLACK NIGHTSHADE, leaves <i>Solanum nigrum</i> ^{*3}													+++	+++		~
	SPINACH <i>Spinacia oleracea</i> ^{**3, *2}													++	+++	++	~
	KALE <i>Brassica oleracea</i> ^{**2, *1}													~	+++	++	~
	MAIZE, sweet, yellow <i>Zea mays</i> ^{**1, *1}												~	~			
	SORGHUM <i>Sorghum bicolor</i>												~				
	SWEET POTATO, yellow <i>Ipomoea batatas</i>												~	+++	~	~	
	SWEET POTATO, pale <i>Ipomoea batatas</i>												~		~	~	
	RICE, brown <i>Oryza sativa</i> ^{**2, *2}												~				
	RICE, white <i>Oryza sativa</i> ^{**2, *2}																
PULSES	BEAN <i>Phaseolus vulgaris</i> ^{*3}												~		~		
	MUNG BEAN/GREEN GRAM <i>Vigna radiata</i> ^{**3, *3}												~		++		
	COWPEA <i>Vigna unguiculata</i>												~		++		
	PIGEON PEA <i>Cajanus cajan</i>												++		~		
	CASHEW NUT <i>Anacardium occidentale</i>												+++		~		

NOTES:

a Fruits as well as nuts refer to raw foods, whereas staples, pulses and vegetables are represented in their cooked (boiled) form.

b Vitamin A (calculations based on Vitamin A retinol equivalent = retinol + 1/6 beta-carotene + 1/12 alpha-carotene + 1/12 beta-cryptoxanthin). Data are expressed per 100g fresh weight of edible portion.

* most sold

** most consumed

^{1,2,3} as prioritized by farmers (staples and pulses considered together)

KEY:

+++ high source

□ not a source

++ source

■ no data available

~ present, but low source