

Igambe Ngombe

THARAKA NITHI COUNTY, KENYA



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

average



2 Species diversity
14 No. of food trees

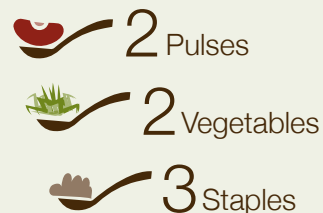
FOOD INSECURITY

83% of households in previous 12 months



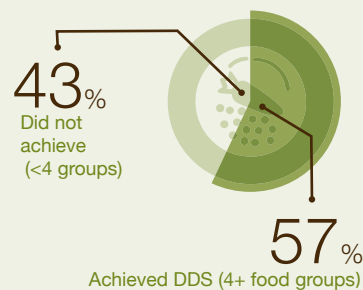
8 months of food provisioning

FOOD CROP DIVERSITY

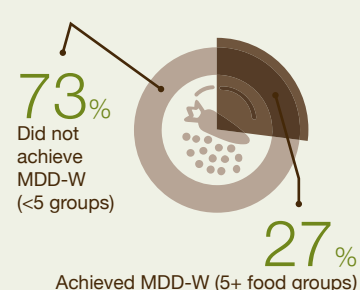


DIETARY DIVERSITY*

Children's Dietary Diversity**



Minimum Dietary Diversity - Women***

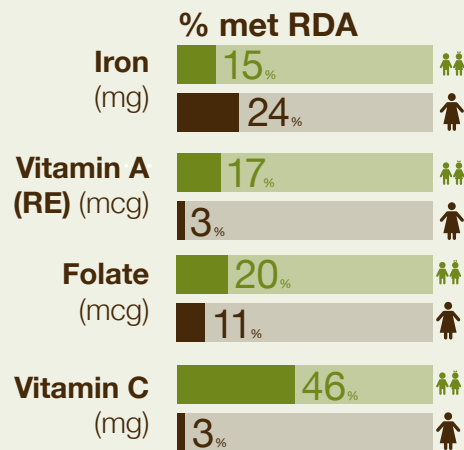


* Dietary diversity assessed at individual level is a proxy indicator of diet quality. It assesses the variety food groups consumed in a specific time period. Higher scores indicate better diet quality.

** 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

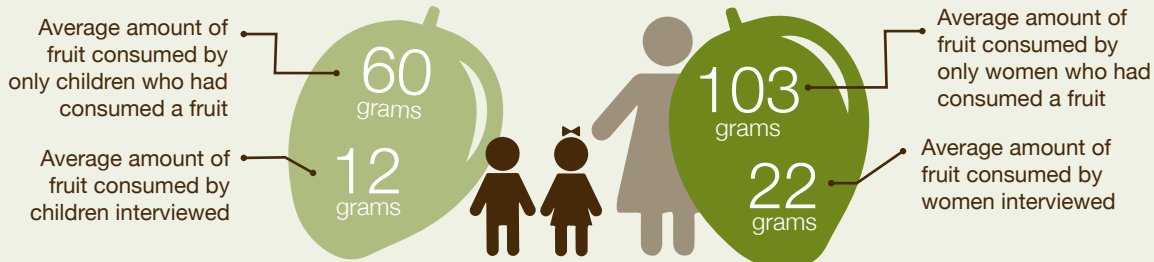


Children Women

RDA: Recommended Daily Allowance

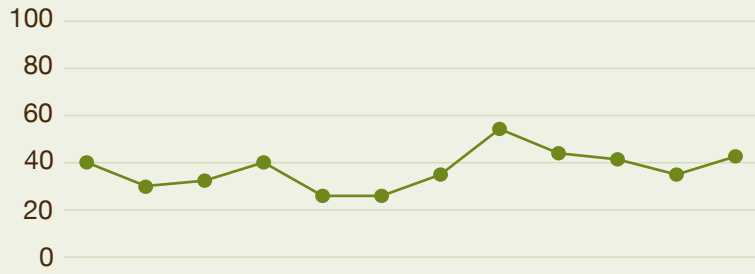
FRUIT INTAKE

based on 24 hour food recall



MONTHS OF FOOD INSECURITY

(identified in households interviewed)



| 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 | PAWPAW/PAPAYA <i>Carica papaya</i> ^{*2} | | | | | | | | | | | | | ~ | ++ | ~ | +++ | |
| | BANANA <i>Musa spp.</i> | | | | | | | | | | | | | | | ~ | ~ | |
| | PASSION FRUIT <i>Passiflora edulis</i> | | | | | | | | | | | | | ~ | ++ | | ++ | |
| | NTUUKA <i>Tennantia sennii</i> | | | | | | | | | | | | | | | | | |
| | GREWIA/MALLOW RAISIN <i>Grewia villosa</i> | | | | | | | | | | | | | ~ | | ~ | ~ | |
| | TAMARIND <i>Tamarindus indica</i> ^{**3, *1} | | | | | | | | | | | | | | ++ | | | ~ |
| | MANGO <i>Mangifera indica</i> ^{**1} | | | | | | | | | | | | | | ~ | +++ | ~ | ++ |
| | BIRD CHERRY <i>Berchemia discolor</i> ^{**2} | | | | | | | | | | | | | | ++ | | | +++ |
| | GUAVA <i>Psidium guajava</i> | | | | | | | | | | | | | | ~ | ~ | | +++ |
| | MOBOLA PLUM <i>Parinari curatellifolia</i> | | | | | | | | | | | | | | ++ | | | +++ |
| | COMMON WILD MEDLAR <i>Vangueria madagascariensis</i> | | | | | | | | | | | | | | | | | |
| | DESERT DATE, fresh <i>Balanites aegyptiaca</i> | | | | | | | | | | | | | | ++ | | | +++ |
| | DESERT DATE, dried <i>Balanites aegyptiaca</i> | | | | | | | | | | | | | | +++ | | ~ | |
| | VEGETABLES | PUMPKIN, leaves <i>Cucurbita maxima</i> | | | | | | | | | | | | | ++ | ++ | ~ | |
| MORINGA, leaves <i>Moringa oleifera</i> | | | | | | | | | | | | | | ++ | +++ | ~ | ++ | |
| COWPEA, leaves <i>Vigna unguiculata</i> | | | | | | | | | | | | | | ++ | +++ | ++ | ++ | |
| AMARANTH, leaves <i>Amaranthus spp.</i> | | | | | | | | | | | | | | +++ | +++ | ~ | ++ | |
| MORINGA, seeds <i>Moringa oleifera</i> | | | | | | | | | | | | | | | | | | |
| STAPLES | PEARL MILLET <i>Pennisetum glaucum</i> ^{*3} | | | | | | | | | | | | | ++ | | | | |
| | SORGHUM <i>Sorghum bicolor</i> | | | | | | | | | | | | | ~ | | | | |
| | MAIZE, sweet, yellow <i>Zea mays</i> ^{**1} | | | | | | | | | | | | | ~ | ~ | | | |
| PULSES | MUNG BEAN/GREEN GRAM <i>Vigna radiata</i> ^{**3, *1} | | | | | | | | | | | | | ~ | | ++ | | |
| | COWPEA <i>Vigna unguiculata</i> ^{*2} | | | | | | | | | | | | | ~ | | ++ | | |
| | BEAN <i>Phaseolus vulgaris</i> ^{**2} | | | | | | | | | | | | | ~ | | ~ | | |
| | GROUNDNUTS <i>Arachis hypogaea</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 | | |