

# Diversifying diets and filling micronutrient gaps through customised food tree and crop portfolios



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## Background & Approach

Food production on smallholder farms in sub-Saharan Africa is dominated by starchy staple crops. The availability of micronutrient rich crops including fruits and vegetables is season-dependent and often lacking in local diets. Consequently, diets can often be characterised by low dietary diversity and inadequate vitamins and minerals.

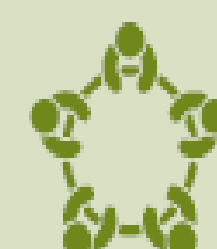
Using participatory research, World Agroforestry (ICRAF) developed the *food tree and crop portfolio* approach to enhance seasonal availability of nutritious foods in local food systems.



Customised recommendations for promoting greater diversity of nutritious foods in local food systems



Portfolios include trees foods (fruits, nuts, seeds), vegetable, pulse and staple crops including indigenous and underutilised species

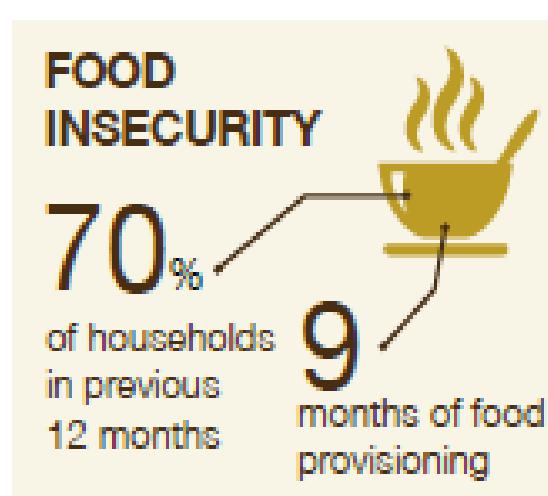
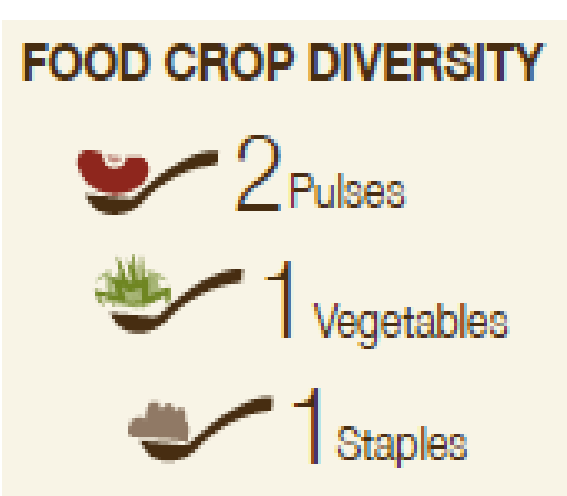
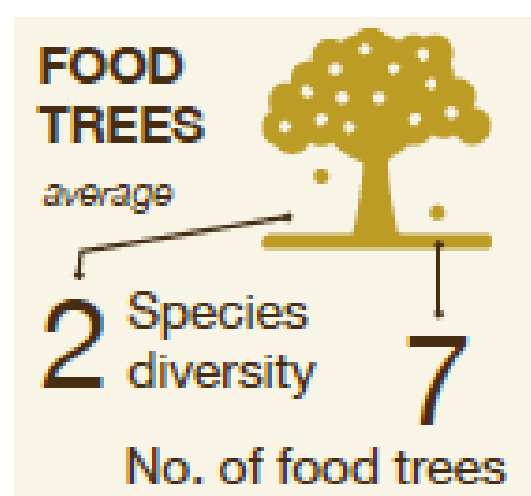


Co-developed with smallholder farmers, and other stakeholders to include priority species for home consumption, and income generation

## Generating evidence

To develop the *Portfolios*, localised information on food production and consumption is generated. Steps 1-3 show an example for data for a site in Kitui County, Kenya.

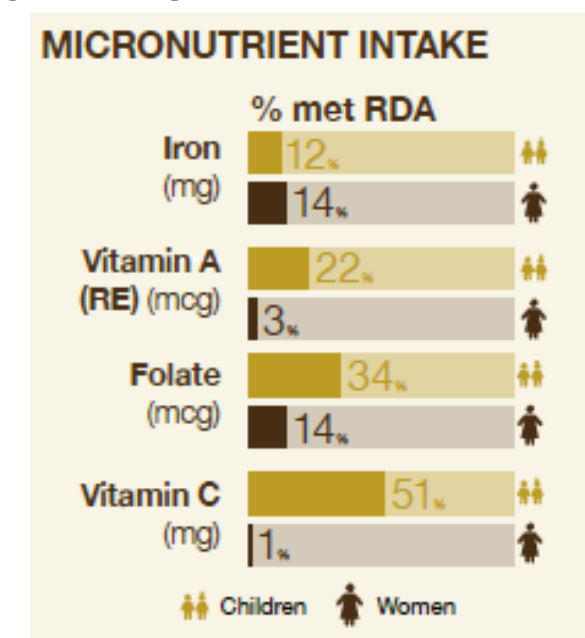
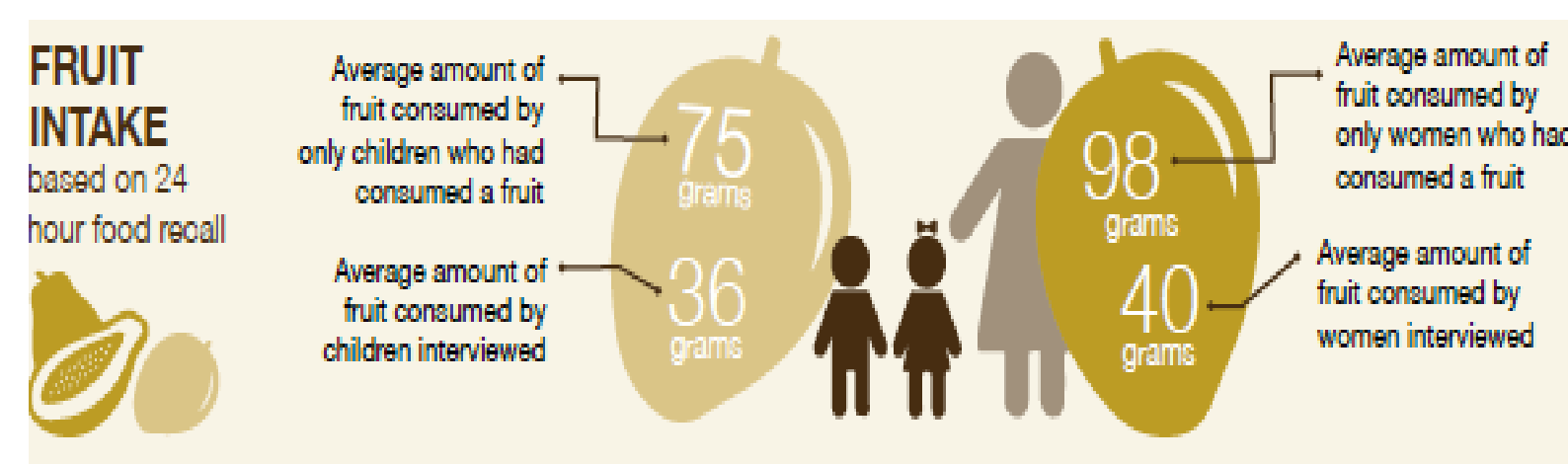
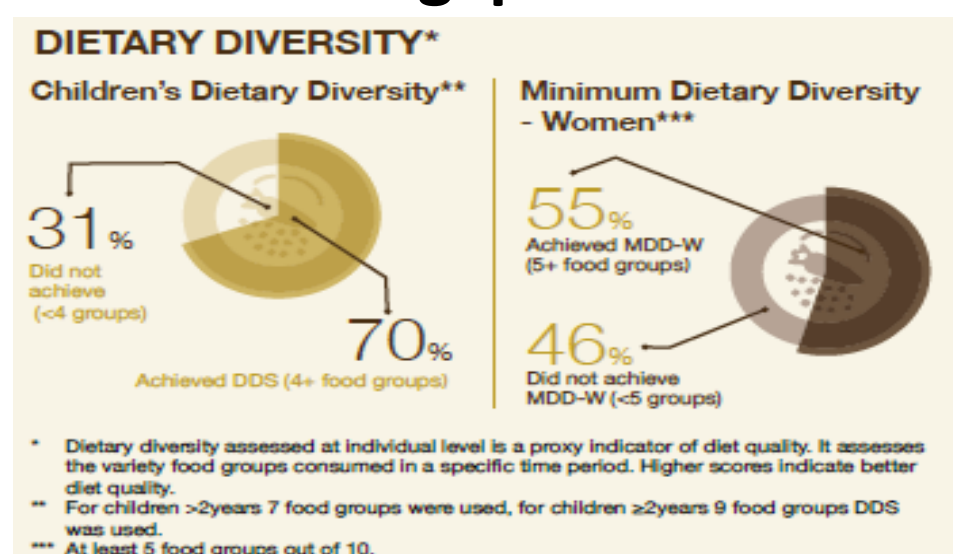
### 1. Farming landscapes characterised – diversity



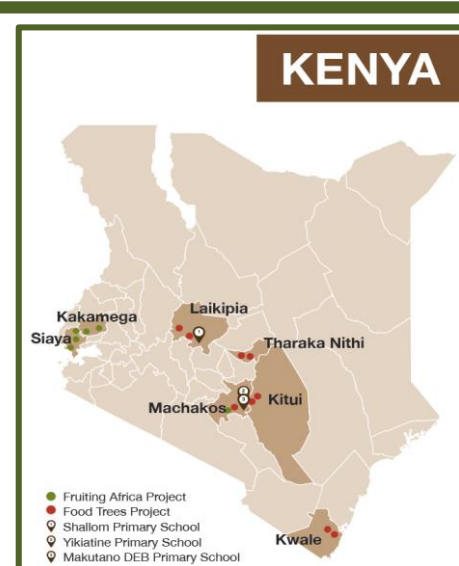
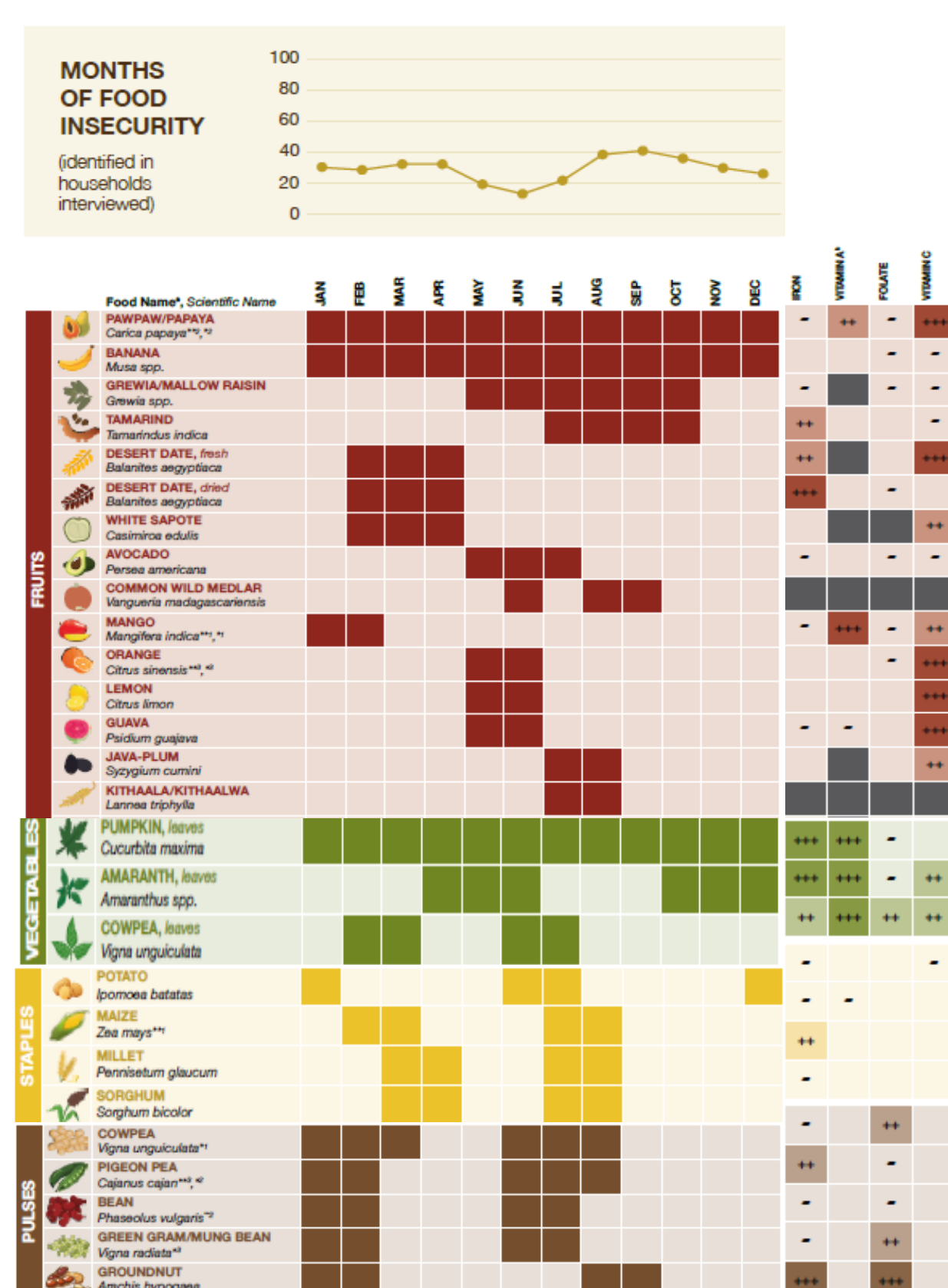
### 2. Communities engaged (with gender and generation considerations) to develop food harvest calendars, capture seasonality and prioritise species for food, income



### 3. Local diets characterised - several indicators including Dietary Diversity - shows diet quality, food intake for identifying micronutrient gaps



## Customised Recommendations



Example of a location specific portfolio for Kitui County in Kenya

## Summary

- Portfolios promote greater diversity of food tree species, and crops on smallholder farms
- Indigenous species are important to fill seasonal gaps in nutritional security and to increase the resilience in current/future food systems
- Decisions for inclusion of species in portfolios supported by a nutrient content database - <http://apps.worldagroforestry.org/products/nutrition/index.php/home>
- Portfolio approach and the database can support decision-making for integrating diverse, nutritious species for food security, nutrition and income, and ecosystem benefits
- Access the 17 location specific portfolios developed for East Africa - <http://www.worldagroforestry.org/project/foodtrees/outputs>

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