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Photovoice as a research method for exploring nutrition and diet quality at a household level: the case of the Mau Narok-Cheragany complex in Kenya

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Photovoice as a research method

- Photovoice is rooted in **problem-based inquiry** and draws from **empowerment education for critical consciousness**, **feminist theory** and **documentary photography** theoretical frameworks.

- Photovoice **democratises** the **research processes** by **acknowledging** the **agency** of research participants.
- Photovoice as a research tool generates **accurate information** and can **catalyse social change** in a community as it facilitates the **sharing of lived experiences** and **generates context-relevant knowledge**.

- Photovoice is a **user-friendly data collection method** that enables **community participation** – most smartphones have cameras.

- It is a **less invasive, extractive research method** – fewer **ethics and privacy-related risks**.

Nutrition and diet quality at a household level

- **Household dietary choices are important for health and nutrition quality**, particularly for children.
- Household **dietary diversity** and **choice** are influenced by **access to food**, **cost, and preparation time** among other factors.
- **Low dietary diversity** in Kenya **causes stunting**, **malnutrition** and **cognitive developmental delay**.
- **Dietary choices** are **linked** to **emerging non-communicable diseases** such as obesity and cardiovascular problems.
- **Improving dietary diversity at household level can contribute to children's health status, reduce disease burdens, and contribute to livelihood sustainability**.

Study area and methodology

- Research conducted in seven counties in Kenya: **Uasin Gishu, Elgeyo-Marakwet, Nandi, Narok, Bomet, Kericho and Trans Nzoia**

- **16 citizen scientists** working for the Prosperity Co-learning Laboratory program (PROCOL-Africa) **identified 70 households**, mainly smallholder farmers.

- Recruited **households took pictures of their meals** including breakfast, lunch, dinner, fruits and snacks and **shared** that **with the research team via WhatsApp**.

- Photographs were printed and **discussions were held** to provide context and understand **drivers of dietary diversity** at **household level**.

- **Focus group discussions** and **key informant interviews** were conducted to gain further insights into household drivers of dietary diversity.

Research objective

- Over **900 photos of foods and meals** were submitted by smallholder farming households to the research team and used to explore the households' dietary diversity and quality.

- Households consumed a **high amount of carbohydrates and vegetables** and **low amounts of proteins and fruits**.

- Due to changes in farming practices, traditional foods particularly vegetables, fruits and tubers were reported to be 'disappearing'.

- Households' dietary choice was influenced by **concerns about nutrition, age, food availability, food prices at the market, food preparation time**, and **off-farm income availability**, among other factors.






Food group based on submitted pictures

	Food Group	(n=962)	%
1	Cereals and breads	784	81.4
2	Roots or tubers	62	6.4
3	Legumes and pulses	177	18.4
4	Fish shellfish seafood	16	1.7
5	Eggs	18	1.9
6	Milk and dairy products	95	9.9
7	Vegetables	372	38.7
8	Fruits	75	7.8
9	Sugar or honey	0	0
10	Meat poultry offal	55	5.7
11	Oil fats	1	0.1
12	Miscellaneous & other foods, such as coffee and tea	414	43.0

Food group consumption based on recall method

	Food Group	Last 24 Hrs (n)	%	Last 7 days.(n)	%
1	Cereals and breads	120	91.6	125	95.4
2	Roots or tubers	63	48.1	101	77.1
3	Legumes and pulses	44	33.6	72	55.0
4	Fish shellfish seafood	10	7.6	36	27.5
5	Eggs	55	42.0	100	76.3
6	Milk and dairy products	177	89.3	125	95.4
7	Vegetables	127	96.9	128	97.7
8	Fruits	66	50.4	113	86.3
9	Sugar or honey	97	74.6	111	84.7
10	Meat poultry offal	20	15.3	76	58.0
11	Oil fats	118	90.1	124	94.7
12	Miscellaneous & other foods, such as coffee and tea	76	58.0	95	72.5

Research objective

- Photovoice **empowers individuals and communities** to **participate and contribute** to the research process.
- **Information collected** through Photovoice can be more **accurate** than classical recall methods.
- **Knowledge and information** collected is **context-specific** and can guide the design of **tailored interventions**.
- There are **challenges** associated with Photovoice, including **fatigue** and **dropouts**, and the **low inclusion of poor households** without access to mobile phones and/or internet access.
- Photovoice **addresses the power imbalance** between **the researcher** and **the researched** and can facilitate **co-learning, empowerment** and **community participation.**

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https://www.procolkenya.com

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