Plan Overview

A Data Management Plan created using DMPonline

Title: Food environment, food choice motives and diet consumption in Pastoralist settings in Kenya

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Template: Data Management Plan | Wageningen University and Research

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Project abstract:

Pastoralists are disproportionately affected by malnutrition. Poor diet intake is a major cause of malnutrition in pastoralist settings in Africa including Kenya. Pastoralists depend on their livestock for livelihood and food yet are vulnerable to shocks such as drought and livestock diseases, which affect food sources, prices, access and affordability. This affects food choice and diet consumption especially among women of reproductive age. We aim to assess the pastoralist food environment, dietary intake, motives of food choice, and effect of shocks (drought/livestock disease) on these and, identify and evaluate feasibility of optimized diets to improve consumption of healthy and affordable diets in these contexts. This four-part thesis will (1) systematically review the food environment and consumption patterns of pastoralists in Africa; (2) assess dietary intakes of Women of Reproductive Age (WRA) in pastoralist Isiolo County, Kenya in two seasons to identify dietary patterns, food and nutrient gaps and to optimize diets for healthiness and cost. This part will also explore the effect of seasonality and livestock disease on diet consumption; (3) assess the motives of food choice and diet consumption among WRA and (4) based on results from the previous three parts to evaluate feasibility of optimized diets. Trials for Improved Practices (TIPs) approach will be used to identify feasibility of implementation of optimized diets. R software will be used for Latent Class Analysis to characterize and identify dietary patterns, multiple logistic and linear regressions to determine factors associated with class membership and linear modelling to optimize for healthiness and cost. Analysis using NVivo software will identify the most salient drivers of food choice among WRA.

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Start date: 15-03-2022

End date: 15-04-2026

Last modified: 26-09-2022

Grant number / URL: N/A

Copyright information:

Food environment, food choice motives and diet consumption in Pastoralist settings in Kenya

A. Describe the research project

1. Describe the organisational context of your research project.

Name researcher	Esther Omosa
DMP version (or date last modified)	19 August 2022
Chair group/Business unit	Global Nutrition
Graduate school (WU only)	VLAG
Supervisor/(co-)promotor(s) (WU only)	Dr. Inge Brouwer
Start date of project	15th March 2022
End date of project	15 March 2026
Project number	
Funding body	USAID

2. Give a short description of your research project.

Title	Food environment, Food choice motives and diet consumption in pastoralists settings in Kenya
Summary	Pastoralists are disproportionately affected by malnutrition. Poor diet intake is a major cause of malnutrition in pastoralist settings in Africa including Kenya. Pastoralists depend on their livestock for livelihood and food yet are vulnerable to shocks such as livestock diseases, which affect food sources, prices, access and affordability. This affects food choice and diet consumption especially among women of reproductive age. We aim to assess the pastoralist food environment, dietary intake, motives of food choice, and effect of livestock disease -Rift Valley Fever (RVF) - on the food environment and, identify and evaluate feasibility of optimized diets to improve consumption of healthy and affordable diets in these contexts. This four-part thesis will (1) systematically review the food environment and consumption patterns of pastoralists in Africa; (2) assess dietary intakes of Women of Reproductive Age (WRA) in pastoralist Isiolo County, Kenya to identify dietary patterns, food and nutrient gaps and to optimize diets for healthiness and cost. This part will also explore the effect of RVF disease on diet consumption; (3) assess the motives of food choice and diet consumption among WRA and (4) based on results from the previous three parts, to evaluate feasibility of optimized diets. Trials for Improved Practices (TIPs) approach will be used to identify feasibility of implementation of the optimized diets. R software will be used for Latent Class Analysis to characterize and identify dietary patterns, multiple logistic and linear regressions to determine factors associated with class membership and linear modelling to optimize for healthiness and cost. Analysis using NVivo software will identify the most salient drivers of food choice among WRA.

3. List the individual(s) responsible for the following data management tasks.

Data collection	Esther Omosa
Data quality	Esther Omosa
Storage and backup	Erick Rutto-ILRI-Research and Methods Groups
Data archiving/publishing	Erick Rutto/Esther Omosa
Data stewardship/support	Jean-Baka Domelevo Entfellner, PhD- Head of Bioinformatics, BecA-ILRI Hub/Head of Data and Research Methods, ILRI
Any other role […]	

4. Name of data management support staff consulted during the preparation of this plan and date of consultation.

Dr. J. (Joeri) Kalter
Data Steward,
Wageningen University & Research
Division of Human Nutrition and Health

B. Describe the data to be collected, software used, file formats and data size

5. Will you re-use existing data for this project?

- No. Please, describe below any constraints to re-using existing data.

6. Will new data be produced?

- Yes

Food data at the market level- Food price data, types of foods sold and food properties, data will be directly reported into the ODK tool.
GPS data points for market outlets and households will be taken directly using tablets-this will be later used to calculate distances between markets and households.
Recalled food intake; assessed with 24-h recalls, data collected using a structured questionnaire and recorded directly into ODK.
Food weight will be taken using food weighing scales
Body weight ; measured by a weighing on a scale collected with typed directly into the ODK tool.
Height of women of reproductive age- measured by a stadiometer and recorded directly in the ODK tool
Photos of foods -purchased, prepared and served will be taken using tablets and uploaded into the ILRI server. About 30-50 photos will be collected.
Food choice data using Food Choice Questionnaire will be collected into the ODK tool
Qualitative data from focus group discussions on drivers of food choice will be recorded using high frequency recorders and stored for transcription.

7. When producing new data, describe the data you expect in terms of type, software and format.

Data type (e.g. numerical, video, etc.)	Software (e.g. Excel)	(Open) file format (e.g. csv)
numerical	excel	read me files
photos	cameras	
audio	recorders	

8. Estimate how much data storage you require in total.

- 10-100 GB

C. Storage of data and data documentation during research

9. Where will the data and accompanying documentation/metadata (see section E.) be stored and backed up during the research project?

- W:drive (WUR network drive)
- Other. Please specify location and back-up frequency below.

At the ILRI server

D. Structuring your data and information

10. Give a representation of the folder structure you intend to use, or the link.

Type of the dataset, author information, date of data collection, location of the data collection site.

11. Describe the file naming conventions you intend to use.

Data type, date (YYYY-MM-DD)

12. Describe the file versioning system you intend to use.

Version (V01, V02, V03 etc)

E. Data documentation and metadata

13. Describe what data documentation and metadata will accompany the data.

Read me files accompanied by: Title of the dataset, creators, contributors, description, keywords and site/coverage

14. Describe what data quality controls will be used.

Regular routine data checks will be conducted. Quantitative 24-hour dietary recall will be repeated twice, the weighing scales will be calibrated and standardize before data collection. Common language will be adopted during training and pretesting for consistency.

F. Working with sensitive data (personal data, ethics), ownership, sharing and access

15. Are there reasons (privacy, ethics, contractual agreement, commercial interests, public security, IP rights) to restrict access to the data or limit which data will be made publicly available?

- No

16. Will you process and/or store personal data during your research project?

- Yes. Please, specify below which measures you will take to ensure data protection and safeguard the privacy of the participants in your project.

Data handling is in compliance with the General Data Protection Regulation (GDPR) which aims to protect the fundamental right of study subjects. This will ensure voluntary participation, prior informed consent is obtained from all participants. Data will remain confidential and anonymized and access is controlled and only to authorized personnel, for intended research objectives only.

17. Is this project registered in SmartPIA?

- No

SmartPIA File not found at the time of filling in this DMP (22nd September 2022).

18. Are there other ethical issues that need to be taken into account?

- No

19. Who has ownership and controls access over the data?

ILRI's Research and Methods Team.
ILRI has open access policy with data and therefore will be available for use by relevant persons.

20. Will there be any intellectual property (IP) rights associated with the data?

- No

ILRI has open data access policy as per its guidelines-
http://library.cgiar.org/bitstream/handle/10947/2875/CGIAR%20OA%20Policy%20-%20October%202%202013%20-%20Approved%20by%20Consortium%20Board.pdf?sequence=1

G. Data archiving and publishing

21. Do you have selection criteria, which allow you to determine which part of the data should be preserved once the project has ended?

- Yes. Please, elaborate below.

All data collected in this project will be preserved for 10 years.

22. What data will be archived internally (e.g. WUR network drive) for a minimum of 10 years?

- All (raw) data produced during the project will be archived internally.

23. What data will be published and made available for re-use via a data repository?

- All data produced during the project will be published in a data repository.

24. When will the data be available for re-use, and for how long will the data be available?

- Data available as soon as the article is published.

25. Which data repository do you intend to use to make the data findable and accessible?

Data repository will be done at the ILRI server as it assigns persistent identfiers to datasets. If necessary, with the help of WUR Library, a copy of the data will be deposited in the repositories DANS-EASY, 4TU.ResearchData and Zenodo

26. Which metadata standard will be used to describe the data during archiving / depositing in a data repository?

Dublin Core standard will be applied to describe data during archiving. Generally, the following metadata elements will be considered

1. Contributor – "An entity responsible for making contributions to the resource".
2. Coverage – "The spatial or temporal topic of the resource, the spatial applicability of the resource, or the jurisdiction under which the resource is relevant".
3. Creator – "An entity primarily responsible for making the resource".
4. Date – "A point or period of time associated with an event in the lifecycle of the resource".
5. Description – "An account of the resource".
6. Format – "The file format, physical medium, or dimensions of the resource".
7. Identifier – "An unambiguous reference to the resource within a given context".
8. Language – "A language of the resource".
9. Publisher – "An entity responsible for making the resource available".
10. Relation – "A related resource".
11. Rights – "Information about rights held in and over the resource".
12. Source – "A related resource from which the described resource is derived".
13. Subject – "The topic of the resource".
14. Title – "A name given to the resource".
15. Type – "The nature or genre of the resource".

27. Which licence/terms of use will be applied to the data?

Creative Commons Licenses will be applied.

28. If analysis software is generated in this project, describe your publishing strategy, below.

R software will be used for quantitative analysis. NVivo Software will be used for qualitative analysis.

H. Data management costs

29. What resources (in time and/or money) will be dedicated to data management and ensuring that data is reusable?

a 0.25% staff time of a member of the Research and Methods Team at ILRI will be dedicated in the data management of this project.

30. If there are additional costs related to preparing the data for reuse, how will these costs be covered?

A project within my institution will cover for the staff time of the Research and Methods Team member involved in this work.