FOLLOW UP SURVEY

Impacts of FANSER

Food and Nutrition Security, Enhanced Resilience Project Zambia

The FANSER project works towards improving the nutritional situation of vulnerable people, especially women of reproductive age and young children in selected districts of Eastern Province and Luapula Province. The project started 2015 in Eastern province (in Katete, Petauke and Sinda districts) and expanded in 2020 to Luapula province (in Mwense, Kawambwa and Mwansabombwe districts). To produce tangible results, the project has several indicators against which its success is measured. Those indicators are centered around the dietary diversity of women, adequate feeding of children below the age of 2 as well as improved hygiene knowledge and practices. To track progress, the above-mentioned indicators are assessed through a Follow-Up Survey (FUS) every two years. This document provides an insightful overview on the most important outcomes from the last survey which took place in October 2022.

MAIN TAKEAWAYS

Overall

FANSER beneficiaries scored better than the control group in all outcome indicators. **Women empowerment** like membership in groups, receiving help in chores or support in field work **can improve the dietary diversity** of mothers and/or children.

Dietary Diversity

Beneficiaries in both regions are **eating significantly more diverse** compared to the control group. The survey results showed that nutrition sensitive agriculture interventions bear fruits – there is **evidence for a positive influence on dietary diversity.**

Adequate feeding of children below 2 years of age

The **Minimum Acceptable Diet (MAD) for children of the FANSER beneficiaries has increased significantly** and is with 49% much higher than the national average of 13%. **Beneficiary children are better fed** than children of the control group; there has been a positive development since the first Follow-Up Surveys were implemented in 2018.

Hygiene knowledge and practice

Knowledge levels around **important hygiene practices have improved** yet the translation of knowledge into practice remains a bottleneck. **Building and particularly maintaining sanitation facilities** like hand washing stations (tippy taps) as well as improved latrines **represent a challenge**. Nevertheless, the incidence of **diarrhoea in children** showed a remarkable **decrease** in both regions.

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1. The dietary of women is assessed using these two indicators:

Individual Dietary Diversity Score for Women (IDDS-W):
This is a scale indicator that measures the dietary diversity of an individual woman by indicating the mean number of different food group consumed by **women of reproductive age (15 - 49 years)** over a 24-hour period.

Ten food groups (see page 3) are used according to the FAO definition: (1) grains, white roots and tubers, plantains, (2) pulses (beans, peas lentils), (3) nuts and seeds, (4) dairy, (5) meat, poultry and fish, (6) eggs, (7) dark green leafy vegetables, (8) other vitamin A rich fruits and vegetables, (9) other vegetables, (10) other fruits.

Minimum Dietary Diversity for Women (MDD-W):
This indicator is defined as the proportion of women (15 - 49 years) who consume at least **5 out of the 10 defined food groups.**

2. Adequate feeding of children below 2 years of age:

The MAD indicator is a composite of the Minimum Dietary Diversity (MDD) and Minimum Meal Frequency (MMF). MAD is indicating the proportion of **breastfed and non- breastfed children aged 6 to 23 months** who receive in a 24 h dietary recall period:

a) 4 or more out of a maximum of 7 solid, semi-solid or soft food groups (MDD) (for consistency purposes in reporting, FANSER sticks to the old definition of MDD-C)

b) solid, semi-solid or soft foods the minimum number of times or more (MMF)

3. Hygiene knowledge and practices

Under this indicator the project measures the proportion of mothers who **use or know at least 3 out of 4 of promoted hygiene practices.**

These practices are:

1. Knowledge of at least four key moments to wash hands
2. Knowledge of at least four ways to prevent food contamination
3. Use of an improved sanitary facility
4. Treatment of water before drinking

4. Contextual information on experienced food insecurity at household level

In addition to the indicators on dietary diversity and hygiene, the project also collects data on the Household Food Insecurity Scale (HFIES). The HFIES is measured through eight questions focusing on self-reported food-related behaviors and experiences associated with increasing difficulties in accessing food due to resource constraints. It is a direct measure of food insecurity experienced by households.

Why nutrition matters

Nutrition is both, an input and outcome of sustainable development. Malnutrition is not just lack of food
but stems from interacting processes linking health, care, education, sanitation and hygiene, access to resources as well as women´s empowerment.

Zambia has one of the highest malnutrition rates in Africa and the world: **73% of people experience severe or moderate food insecurity (SOFI 2023) and 35% of children below 5 years of age are stunted** which means that they have low height for age as a result of chronic under-nutrition (DHS 2018).

High levels of being stunted in early life - particularly in the first 1000 days from conception until the age of two - have adverse functional consequences on the child. Some of those consequences include **poor cognition and educational performance, low adult wages, lost productivity and, when accompanied by excessive weight gain later in childhood, an increased risk of nutrition-related chronic diseases in adult life. Stunted children lead to stunted economies.**

Recent global and local developments represent an additional burden to the difficult food security situation, particularly for the rural population. Amongst these developments is the COVID-19 pandemic which **worsened the economic situation** of many households, the Russian war against Ukraine, which led to **rising food, energy, and fertilizer prices** as well as increasing **negative effects of climate change** which lead to reduced yields.

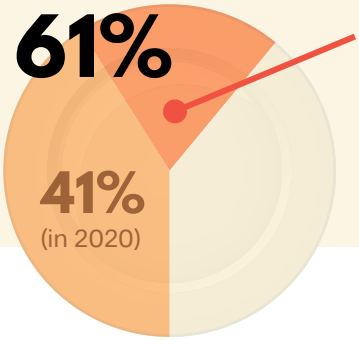
Highlights from the 2022 Follow-Up Survey

Food Security

The 2022 results showed a high prevalence of food insecurity levels in both project regions, Eastern and Luapula provinces. Food security status is necessary for (proper) contextualization of the other indicators In times of increasing food insecurity it becomes even more challenging to improve aspects like dietary diversity or hygiene and sanitation as the focus for most households lies on survival.

Eastern

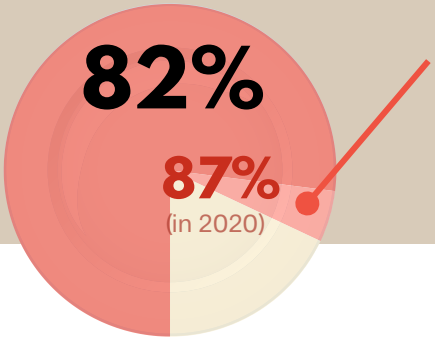
In Eastern, we have observed a **drastic increase in the share of moderately and severely food insecure households** from 41% (2020) to 61%. The trend is similar for both beneficiary and control groups.



+20% increase
compared to 2020 FUS results

Luapula

In Luapula, **food insecurity remains at alarmingly high levels** with 82% of households experiencing moderate and severe food insecurity. However, compared to the 2020 assessment we observed a 5% decrease which represents a slight improvement.



-5% decrease
compared to 2020 FUS results

Dietary diversity of women

The FANSER project **aims at increasing the Individual Dietary Diversity Score for women (IDDS-W) by one food group in both provinces**. The overall target is to increase from the baseline of 4.3 to 5.3 food groups; in the provinces the targets are 5.7 food groups in Eastern province (baseline 2015: 4.7) and 4.8 food groups in Luapula province (baseline 2020: 3.8). In addition, the Minimum Dietary Diversity of women (MDD-W) is also assessed (although there are no direct project indicators and target values under FANSER for the MDD-W).

Ten food groups:


(1) grains, white roots and tubers, plantains


(2) pulses (beans, peas, lentils)


(3) nuts and seeds


(4) dairy


(5) meat, poultry and fish


(6) eggs

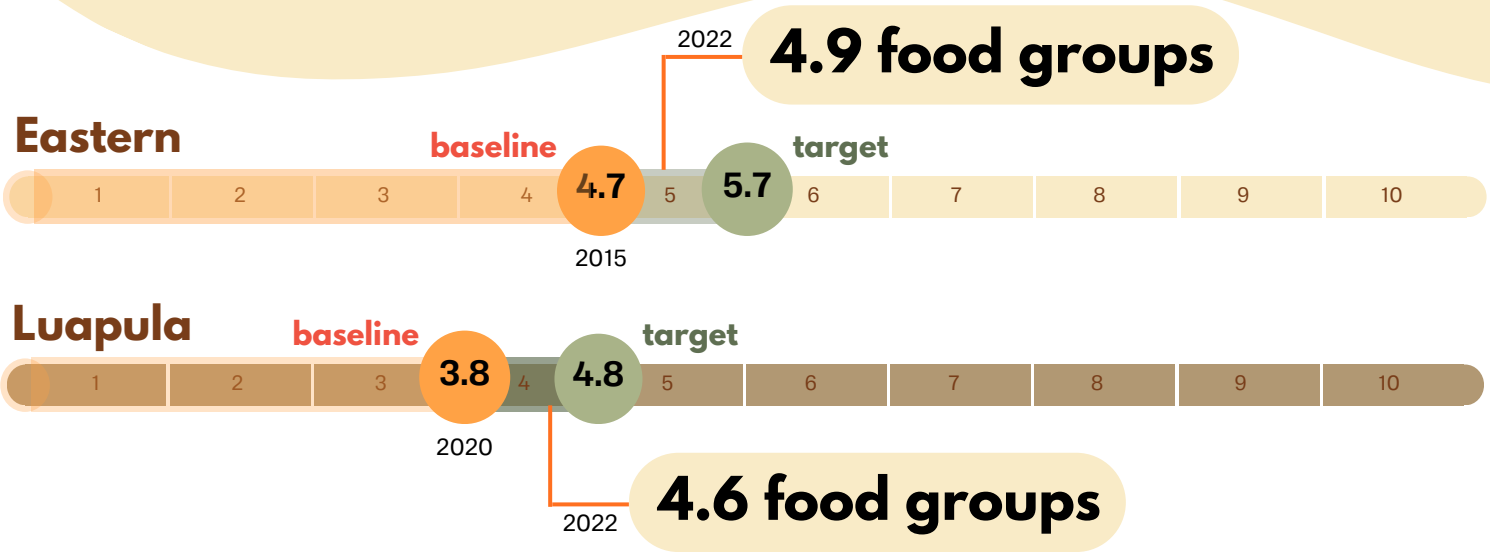

(7) dark green leafy vegetables


(8) other vitamin A rich fruits and vegetables


(9) other vegetables


(10) other fruits

Eastern province: Despite the deterioration in the food security status (see HFIES) the level of 4.9 food groups was maintained compared to the assessment in 2020. Although the very ambitious target of 5.7 food groups is not yet achieved, it is still noticeable that the improvement to 4.9 food groups since 2020 could be maintained. **Control group mothers ate significantly less diverse (0.5 food groups less).** Moreover, **the Minimum Dietary Diversity (MDD-W) among beneficiary mothers saw a significant increase from 59% in 2020 to 67% in 2022.** Analysis showed that the number of women consuming four food groups sharply decreased while the number of women eating five food groups as well as the number consuming six food groups increased, resulting a higher proportion of mothers achieving the MDD-W.



The **dietary diversity** in the Luapula province **significantly improved with an increase from 3.8 to 4.6 food groups.** The target of 4.8 food groups is nearly achieved after 2 years. Mothers from the control group ate with 4.3 food groups significantly less. The number of beneficiary mothers achieving the MDD-W more than doubled since the 2020 assessment from 24% to 53%.

Beneficiaries in both regions are eating significantly more diverse compared to the control group.

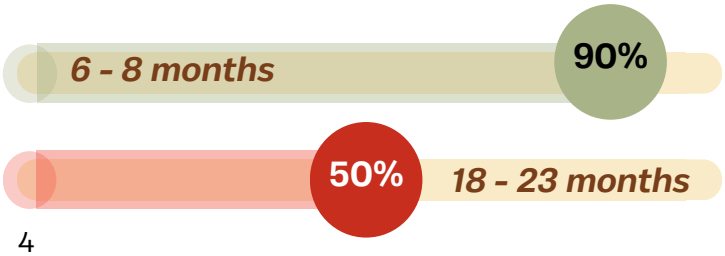
Adequate feeding of children below 2 years of age

The project wants to increase the share of children aged 6-23 months receiving a Minimum Acceptable Diet (MAD) **from the overall baseline of 31% to 46%** in both provinces which is far higher than the national mean of 13%. The MAD of children in the control group also improved, but far less than in beneficiary children.

Eastern

In Eastern province, the **MAD** has remained **stable at a very high level of 64%** (baseline 2015: 34%). When looking at the Minimum Meal Frequency for children (MMF-C) we observed a **drop from 90% at 6-8 months to 50% in the age group 18-23 months** when a lot of mothers stop breastfeeding but do not add an extra meal which would be required.

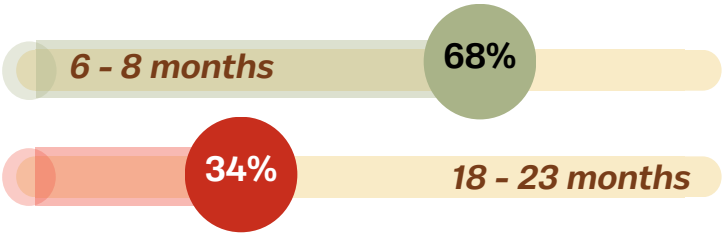
MMF-C



Luapula

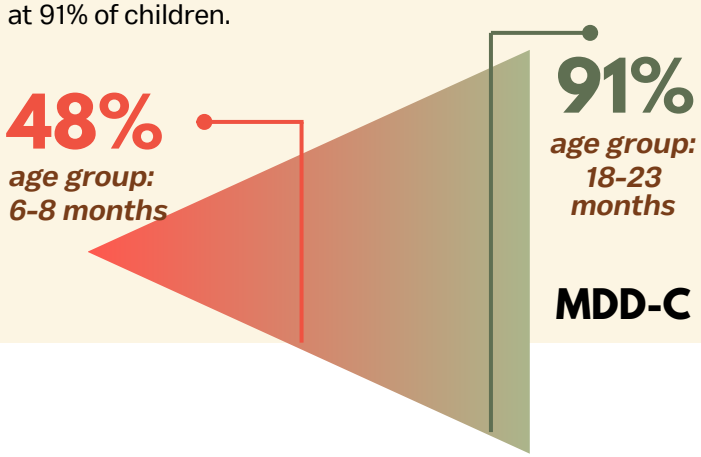
In Luapula province, we have seen a huge improvement in the **MAD** which **increased by 10% to 33%.** Hence, the target of 33% has been achieved in just two years and again we see a significant difference compared to the children of the control group. MMF-C **drops from 68% at 6-8 months to 34% in the age-group 18-23 months** when a lot of mothers stop breastfeeding and do not add an extra meal.

MMF-C



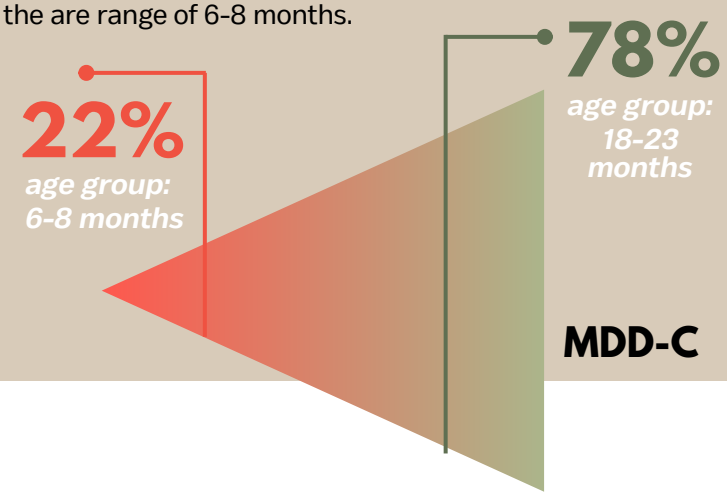
Eastern

The Minimum Dietary Diversity for children (MDD-C) steadily increases with age and is with 48% lowest in the age range of 6-8 months; at 18-23 months it peaks at 91% of children.



Luapula

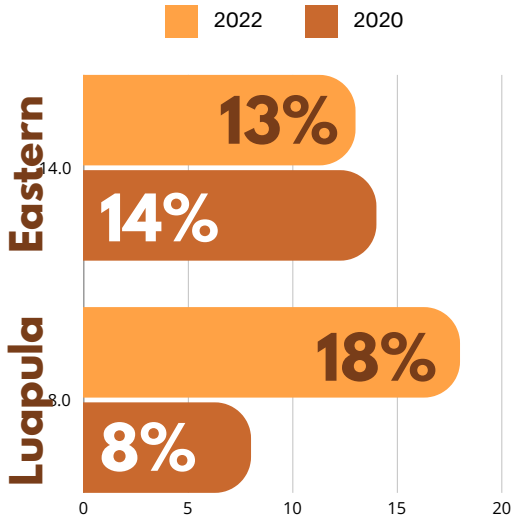
As in Eastern province, the MDD-C steadily increases with age to 78% (18-23 months) and is with 22% lowest in the are range of 6-8 months.



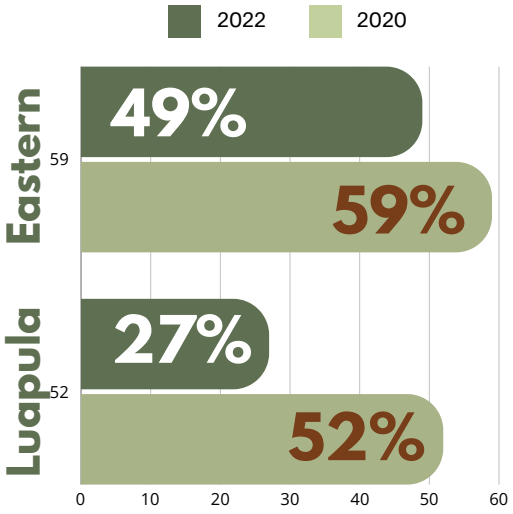
Hygiene knowledge and practices

The FANSER project aims at increasing the proportion of women who know or apply at least 3 out of 4 propagated practices by 23% (baseline overall: 2%). **Improvements in the area of hygiene and sanitation have been challenging for the project.** Overall, the share of women who know or apply 3 out of 4 practices has increased to 16% and is hence still substantially lower than the target of 25%.

In Eastern province, **only 13% of beneficiary women knew or applied the 3 out of 4 practices** (in 2020 it was 14%). In particular the use of an improved sanitary facility (= with a slab) declined from 44% in 2020 to 23% in 2022 (in the control group a decrease from 51% to 19%). During Focus Group Discussions, the women pointed out lacking support from their husbands in building and maintaining the latrines. **The knowledge level on handwashing has increased to 66%.** Similarly, knowledge on treating drinking water and prevention of food contamination have improved but are still relatively low with 28% and 19%, respectively. However, the incidence of diarrhea in children showed a decrease from 59% in 2020 to 49% in 2022.



Women know or apply 3 out of 4 pracitces



Incidence of diarrhea in children

In Luapula province, the **share of women who know the 3 out of 4 practices increased from 8% to 18% in only two years;** at the same time there was no improvement in the control group. The positive development stemmed from improvements in knowledge on how to treat water before drinking (doubled from 26% to 54%) and using an improved sanitary facility (from 8% to 28%). In Focus Group Discussions with men and women (separately), participants pointed out how their hygiene practices had improved including covering pit-latrines and installing tippy taps/hand washing stations. **Water treatment was the major difference in hygiene practice between beneficiaries and control group.** Also the incidence of diarrhoea in children showed a decrease from 52% in 2020 to 27% in 2022. However, the knowledge on the prevention of food contamination decreased drastically from 24% to 12%.

Positive Impacts

- Beneficiaries scored better than the control group in all outcome indicators (IDDS, MAD, hygiene practices and knowledge).
- Food insecurity has negative effects on the impacts of measures – resilience building is essential.
- Nutrition sensitive agriculture interventions bear fruits – there is evidence for a positive influence on dietary diversity.
- Women empowerment like membership in groups, receiving help in chores or support in field work can improve the dietary diversity of mothers and/or children but here no uniform pattern was observed in the FUS

Learning areas:

- Appropriate child feeding practices in specific age groups need to be highlighted more with the beneficiaries (low MMF and MDD), the importance of exclusive breastfeeding in the first 6 months needs to be emphasized.
- Stronger emphasis on continuous breastfeeding until the age of 2 is necessary. Only 56% of beneficiary mothers comply. Even when dietary diversity is higher – beneficiary children are weaned earlier than the control group!
- Improvements in the area of hygiene and sanitation are necessary particularly in the prevention of food contamination (Luapula) and the use of improved latrines (Eastern).

Key facts regarding the methodological approach

The Follow-Up Survey gathers data through a quantitative survey with a standardized questionnaire as well as qualitative data through Focus Group Discussions.

The survey is implemented every two years in late September/early October through an independent consulting firm. For better comparison and contextualization, the survey assesses beneficiaries as well as independent control groups. To have representative results at provincial level, the sample size is set at 200 beneficiaries and 200 control group members for each province (total sample size 800 persons, thereof 400 beneficiaries and 400 control group members).