MINIMUM DIETARY DIVERSITY FOR WOMEN (MDD-W) OF REPRODUCTIVE AGE IN COMMUNAL AREAS OF NAMIBIA

MDD-W is a dichotomous indicator that measures whether women of reproductive age (WRA), between 15 and 49 years, consumed at least 5 out of 10 defined food groups the previous day or night (FAO, 2021). The proportion of WRA who achieved minimum dietary diversity (consumed a minimum of 5 out of 10 food groups) is used to demonstrate the micronutrient adequacy of their diets at population or national level. This is crucial, because WRA are nutritionally vulnerable due to their greater micronutrient requirements, particularly during pregnancy and lactation (Custodio et al., 2020).

The 10 food groups are: (1) grains, white roots, tubers and plantains; (2) pulses; (3) nuts and seeds; (4) milk and milk products; (5) meat, poultry and fish; (6) eggs; (7) dark-green leafy vegetables; (8) other fruits and vegetables rich in vitamin A; (9) other vegetables; and (10) other fruits (FAO, 2021; FAO-FHI, 2016).

In 2021, the GIZ Farming for Resilience (F4R) Project in Namibia conducted a quantitative survey in 13 of the country's 14 regions (see map) to assess the MDD-W of WRA in communal areas. In total, 654 randomly selected women were interviewed at more than 18 sites.

General demographic characteristics of participants

- Aged 26-36 (41.1%)
- Single (89%)
- Household size of 5 to 10 people (43.1%)
- Monthly income of less than N\$1,000 (82.3%)
- Secondary-level education (67%)
- Unemployed (78.3%)

Overall Results

- Across all 13 regions, only 28% of WRA achieved the MDD-W; the majority consumed 3 food groups or less, indicating substantial nutritional inadequacy.
- In Oshana and Omusati, more than half of the participants achieved the MDD-W.
- On the contrary, the women in Kunene, ||Kharas and Hardap displayed extremely poor diets, with only 2% of the participants consuming 5 food groups or more.
- Monthly income and employment status significantly determine the number of food groups consumed.

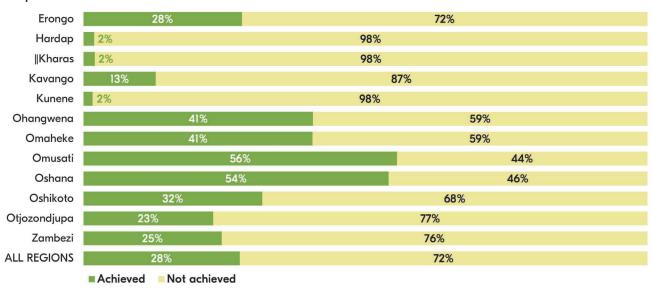
Food Groups

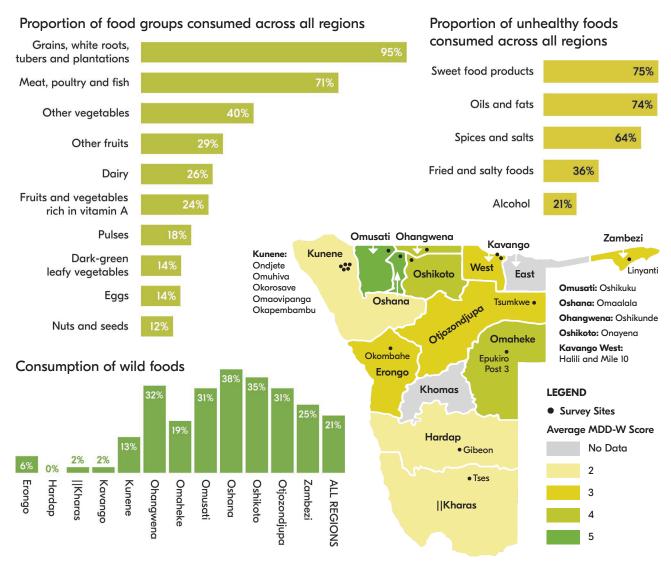
- 95% of women in communal areas consume grains, white roots and tubers, dominated by mahangu (pearl millet) and maize.
- The least-consumed foods are dark-green leafy vegetables, nuts and seeds, eggs and wild-food groups (insects such as grasshoppers, crickets and locusts, and wild plants such as !nara, devil's claw, marula and Kalahari melon).
- The findings suggest that diets generally lack crucial micronutrients such as vitamins A, C, B-6 and B-12, folate, iron and zinc, which are essential for good health.
- Participants consumed high amounts of oils and fats, sweet food, sweetened beverages, condiments and seasoning, which may cause lifestyle diseases (obesity, type-2 diabetes, cardiovascular diseases, etc.).

Recommendations

- Promote gardening at community, school and household level.
- Educate students and adults on nutrition and the importance of eating and growing diverse foods.
- Encourage the plantation of fruit trees to increase micronutrient availability and intake.
- Support the use of home fortification of ready foods with calcium, iron, vitamin A, vitamins B1 (thiamin),
 B2 (riboflavin) and B3 (niacin), and upscale mass food fortification and biofortification of staple foods such as mahangu, maize and cooking oil with vitamins A, D, E and K.
- Increase the use of social marketing (TV, radio, social media) to actively involve and educate community members on nutrition-related matters.
- Explore the influence of other external factors such as seasonality, food availability and culture.

Proportion of WRA who achieved MDD-W





GIZ Namibia — Farming for Resilience (F4R)



Implemented by

GIZ Oputsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Gm

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Registered offices Bonn and Eschborn, Germany Units 4 & 7, Sinclair Park, Sinclair Street, Klein Windhoek P.O. Box 8016, Windhoek, Namibia

Phone: +264 (0)61-215600 Email: tino.hess@giz.de Website: www.giz.de