

# Affordable Nutritious Foods for Women (ANF4W) Tanzania

## Improving access to fortified staple foods for women of reproductive age



### The Challenge

Worldwide, two billion people suffer from micronutrient deficiencies. Women of reproductive age and children less than two years of age suffer disproportionately from iron, folic acid, vitamin A and zinc deficiencies. This has serious consequences, since micronutrient deficiencies weaken the immune system, making affected persons more vulnerable to infectious diseases.

In Tanzania, 43% of the population live on less than \$1 per day leaving little household income for purchasing healthy foods. For this reason, Tanzanians suffer from the double burden of undernutrition and obesity with 31% of the population having inadequate caloric intakes and almost 30% of women of reproductive age being overweight or obese. Chronic malnutrition and poor nutrition education and preventative health practices increase maternal, infant and child morbidity and mortality. For example, neural tube defects are a rare but grave birth defect resulting from folate deficiency during pregnancy and affect 13 of 10,000 infants born yearly in Tanzania. Yet only one in three women report folic acid supplementation during pregnancy. Furthermore 60% of pregnant women in Tanzania are anaemic and less than half of all births are attended by a skilled health attendant. Consequently, 49 out of every 1,000 children born in Tanzania die before their fifth birthday from largely preventable, communicable diseases and malnutrition. Children under five are largely affected by anaemia (71% prevalence) while one in three Tanzanian children under five have stunted growth (low height-for-age), a sign of chronic malnutrition leading to permanent cognitive and physical impairment.

For effective prevention and alleviation of micronutrient deficiencies, the World Health Organization recommends food fortification alongside micronutrient supplementation and dietary diversification. Mass food fortification entails adding vitamins and minerals during industrial milling of staple foods and is enacted through mandatory legislation in Tanzania since 2011.

In Tanzania, a staple porridge consisting of maize flour, called *ugali*, and sunflower oil are major constituents of the local diet, especially among poor and rural populations, while meat, dairy products and vegetables, which are good sources of micronutrients, are consumed infrequently due to customer behaviour and financial constraints. The local population is largely unaware of the nutritional benefits of fortified staple foods products and there is little

to no demand for them.

*"Food fortification is one of the least expensive and most effective nutrition interventions to tackle hidden hunger on a huge scale."*

Shawn Baker, Director of Nutrition, Bill and Melinda Gates Foundation

Mass fortification of staple foods like maize flour and edible oil is an effective and economic approach to improve micronutrient intakes in the population without requiring changes in dietary behaviour. In Tanzania, small and medium size mills provide the large majority of domestic oil and maize flour but lack technical and financial capacities to start fortification. Furthermore, quality control and monitoring of fortified staple foods by government authorities at industries and in the marketplace is poorly funded and undergoing devolution from national to district level.

### ANF4W Approach in Tanzania

Affordable Nutritious Foods for Women (ANF4W) in Tanzania is a development partnership with the private sector seeking to improve the micronutrient intakes of women of reproductive age, particularly during the critical window of pregnancy through the first two years postpartum. The ANF4W partnership builds and expands on the Strategic Alliance for the Fortification of Oils (SAFO) implemented by GIZ and BASF since 2008.

ANF4W and partners are testing business models for food fortification at small and medium size oil and flour mills to ensure a sustainable supply of fortified staple foods in rural areas. The project provides technical support to mills willing to start fortification and advises on issues of quality assurance.

In parallel, ANF4W strengthens monitoring of fortified foods in the market place through supporting the devolution process of the Tanzania Food and Drugs Authority and supports dialogue between fortification partners in the public and private sectors and civil society organizations. ANF4W's nutrition communication campaign aims at increasing awareness among the local population for the importance of an adequate micronutrient intake by pregnant and lactating women, educating the public to choose fortified over non-fortified products and encouraging dietary diversity.



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*"Mount Meru Millers, through its Sunola, Singida Oil, and Goldy product lines, produce and market quality nutritious oils to the people of Arusha and across Tanzania. The addition of vitamin A contributes to good nutrition and health of all Tanzanians, in particular mothers and their children."*

Atul Mittal, Executive Director, Mt Meru Group

## Results

- Since mid 2014, an additional 136 metric tons of fortified edible oil per day were produced by a local medium size sunflower oil mill, supplying vital micronutrients to at least **3.2 million women of reproductive age**.
- A medium size oil mill tested the production of a Vitamin A - pre-blend which can be used for fortification by small size sunflower oil producers.
- Fortification solutions for small scale producers are being tested in collaboration with MEDA.
- Building on the efforts of the USAID-funded Tuboresche Chakula project, ANF4W is preparing a nutrition communication campaign in 2016 in the Morogoro Region where **34 small maize flour mills** are fortifying maize flour. Mills are technically supported through innovative business models with SANKU and Mühlenchemie.

Extending fortification to small and medium size mills carries an enormous potential to increase supply and access to micronutrient enriched foods. ANF4W is exploring ways that lower the threshold for these mills to enter into fortification and to build incentives to continue. ANF4W will:

- Technically advise local staple food millers in food fortification.
- Increase demand for fortified staple foods through social marketing.
- Support and increase capacity of local government authorities to monitor compliance of fortified staple foods to meet national standards.

- Support initiatives that allow millers to jointly organize procurement of quality micronutrients, control the quality of their products and share knowledge on fortification technology.

## Outlook

- Awareness and availability of fortified staple foods as one source of micronutrients alongside a diverse diet and supplementation is increased among women of reproductive age in Arusha, Morogoro and Manyara.
- Technical capacity in food fortification is improved among staple food millers.
- The Tanzania Food and Drugs Authority carries out systematic monitoring of fortified staple foods.

## At a glance

<b>Term:</b>	July 2013 until May 2017
<b>Project Regions:</b>	Arusha, Morogoro and Manyara, Tanzania
<b>Target Group:</b>	women of reproductive age
<b>Objective:</b>	To improve access to fortified staple foods for women of reproductive age
<b>Main Partners:</b>	BASF SE Mühlenchemie/Stern Wywiol Group (Stern)
<b>Other Partners:</b>	Hellen Keller International Tanzania Tanzania Food and Drugs Authority Ministry of Health and Social Welfare Mennonite Economic Development Associates Local SME millers of staple foods SANKU



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