

Affordable Nutritious Foods for Women (ANF4W): Overview

Innovative approaches for alleviating micronutrient deficiencies in women of childbearing age

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development of micronutrient fortified food prototypes targeted at women of childbearing age.

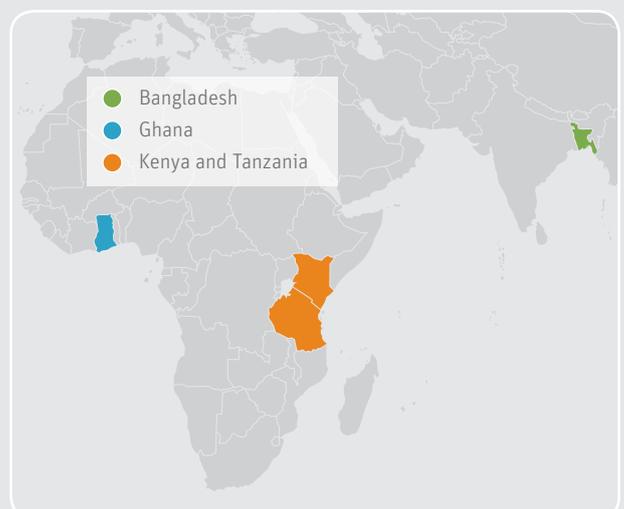
ANF4W is co-funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Bill & Melinda Gates Foundation. It is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, within the framework of development partnerships with the private sector (develoPPP.de).¹ The current project phase runs from February 2013 to May 2017.



ANF4W project description

The Affordable Nutritious Foods for Women (ANF4W) project is an incubator for testing innovative market-based approaches that can create and promote a sustainable supply of, and demand for, affordable micronutrient-rich foods aimed at reducing micronutrient deficiencies in women of childbearing age (15–49 years). The project is currently being implemented in four countries, and its approaches include fortification of supplementary food, agronomic biofortification, and staple food fortification. In Ghana, ANF4W currently supports local food processors in the de-

FIGURE 1: ANF4W partner countries



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“The Affordable Nutritious Foods for Women (ANF4W) project is an incubator for testing innovative market-based approaches”

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The project encompasses three intervention areas:

- a) Increasing **availability** of micronutrient-rich foods.
This intervention area seeks to secure availability of micronutrient-rich food in the partner countries by increasing their local production.
- b) Improving **access** to micronutrient-rich foods.
This intervention area aims at providing better access to micronutrient-rich foods for women of childbearing age by enhancing distribution channels to the local level and ensuring the affordability of the food products, especially in rural areas.
- c) Promoting **utilization** of micronutrient-rich foods.
The first two areas would not be successful if the micronutrient-rich foods provided were not consumed, for whatever reasons. This intervention area therefore promotes appropriate consumption of micronutrients by women of childbearing age through nutrition awareness communication and marketing. It also encourages health behaviors which prevent micronutrient deficiencies or otherwise reduce the burden of deficiencies in the population.

The following section will showcase ANF4W activities in Ghana, describing how availability, access and utilization of micronutrient rich foods are attained.

ANF4W in Ghana: developing new targeted fortified supplementary foods

In Ghana, ANF4W is being implemented in cooperation with *Sight and Life*, Ajinomoto Co. Inc. (headquartered in Japan), McCann Health, and the Global Alliance for Improved Nutrition (GAIN). ANF4W's strategy in Ghana is to develop affordable fortified supplementary food products together with Ghanaian food processors, which will be targeted specifically at women of childbearing age. The project has conducted studies on a range of local conditions or factors that play a role in a local stakeholder's ability to create and supply an affordable nutritious product. These are as follows.

A **focused ethnographic study** assessed women's eating habits and beliefs around food. The study identified feeding and purchasing patterns, as well as beliefs and knowledge about nutrition that inform the potential food concepts that

could be further developed into targeted food products. For example, the study found that pregnant and lactating women spend on average US\$ 3 per week on ready-to-eat foods, and that these foods are likely not to be shared with others.

An **agricultural value-chain analysis** identified affordable and locally available agricultural commodities in Ghana that could be used as ingredients for the supplementary food prototypes. Criteria used for selection included nutritional quality (nutrient content, anti-nutritional factors and contaminants), affordability, availability, accessibility, and value-chain dynamics. Fifteen agricultural commodities were shortlisted, including millet, cowpeas, yam, fruits, plantain, tomatoes and garden eggs.

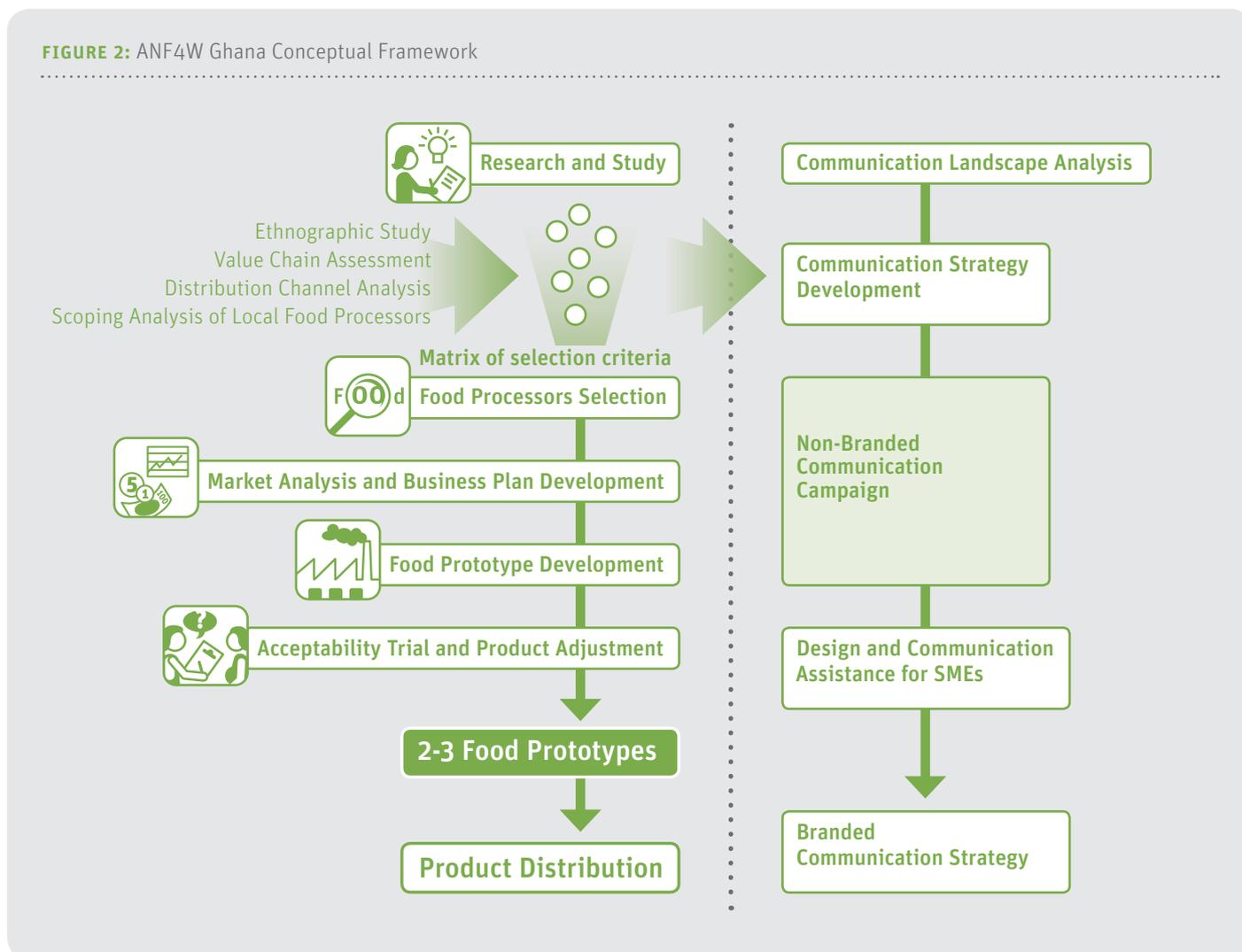
A **distribution channel analysis** reviewed possible delivery channels that could facilitate market penetration and uptake of the food product by the target consumer. The analysis considered factors that drive distribution costs, and ultimately retail and institutional purchase prices were considered. Three main distribution models for ANF4W were identified:

- > **Fast-moving consumer goods distribution models (FMCG).** These rely on extensive marketing and strong brand building.
- > **Direct sales models.** These use direct and personal interaction with the consumer. They provide an opportunity to educate the consumer about product benefits.
- > **The FMCG-pharmaceutical hybrid model.** This uses both product marketing and direct consumer interaction.

The project will also explore beauty salons, where women spend a lot of time, as a potential point of distribution. The fortified food products would be placed in the beauty salons, where ideally the beautician could be an advocate or ambassador for these products.

A scoping analysis of local food processors distinguished suitable Ghanaian food processors that ANF4W could collaborate with to develop targeted fortified supplementary foods. The analysis focused on assessing local food processors' capacities, requirements and expectations regarding targeted fortified food product development, and local food processors' technical and financial capacities. Eight firms were shortlisted, based on their willingness to collaborate with ANF4W, and their readiness (in terms of technical knowledge, available infrastructure, and access to finance) to develop targeted fortified supplementary food products. Engagement with local small and medium-sized enterprises (SMEs) is pivotal in ensuring transfer of knowledge and know-how from the international private-sector firms, thus promoting sustainability of local markets.

Additionally, a communication landscape analysis explored critically important concepts of individual and societal norms

FIGURE 2: ANF4W Ghana Conceptual Framework

around nutrition, which could be used to develop creative and meaningful communication strategies that can fundamentally change behaviors and social norms. The non-product-specific nutrition awareness communication strategy will therefore not only raise awareness of the importance of micronutrients for women of childbearing age, but will also address barriers to successful uptake of future food products by women. **Figure 2** conceptualizes the ANF4W approach in Ghana.

Based on the results from the various studies conducted, a matrix of criteria selection was developed, and potential nutritious and affordable food concepts were ranked accordingly. Criteria included nutrient value, cultural acceptability, local availability of ingredients, required infrastructure (equipment, storage, etc.), costs of production and distribution etc. Food concepts that were identified include a beverage, snack bar and sauce.

Next steps

Before the end of the current project phase, ANF4W will engage with local food processors in developing food prototypes from

the viable food concepts identified. The expected results of this approach include:

- > **Increasing availability of micronutrient-enriched foods.**
Private sector partner companies have provided technical expertise (including quality assurance and quality control measures) to selected local food companies enabling them to produce micronutrient-rich foods.
- > **Improving access to micronutrient-enriched foods.**
Local food processors deliver food products to local vendors via existing distribution channels; local vendors sell new fortified food products; health authorities explore ways of subsidizing food products for women of childbearing age.
- > **Promoting utilization of micronutrient-rich foods.**
Private partners support local food processors in marketing targeted fortified food products; women of childbearing age make informed dietary purchasing decisions.

“ANF4W will engage with local food processors in developing food prototypes from the viable food concepts identified”

The project is currently seeking additional funding to increase its impact. This involves improving evidence of its effect on the nutritional status of women and thereby learning lessons for the potential transfer of the approach to other countries.

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(Figures as at December 31, 2013)